



COMMONWEALTH OF AUSTRALIA

# Official Committee Hansard

## SENATE

ENVIRONMENT AND COMMUNICATIONS  
LEGISLATION COMMITTEE

**Estimates**

MONDAY, 8 APRIL 2019

CANBERRA

BY AUTHORITY OF THE SENATE





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**SENATE**

**ENVIRONMENT AND COMMUNICATIONS LEGISLATION COMMITTEE**

**Monday, 8 April 2019**

**Members in attendance:** Senators Brockman, Chisholm, Duniam, Martin, McAllister, Rice, Spender, Storer, Urquhart, Williams.



## **ENVIRONMENT AND ENERGY PORTFOLIO**

### **In Attendance**

Senator Birmingham, Minister for Trade, Tourism and Investment

Senator Ruston, Assistant Minister for International Development and the Pacific

Senator Seselja, Assistant Minister for Treasury and Finance

### **Department of the Environment and Energy**

#### **Executive**

Mr Finn Pratt, Secretary

Mr Matt Cahill, Deputy Secretary, Strategy and Operations Group

Mr Rob Heferen, Deputy Secretary, Energy Group

Ms Jo Evans, Deputy Secretary, Climate Change and Energy Innovation Group

Mr Dean Knudson, Deputy Secretary, Environment Protection Group

#### **Corporate Strategies**

Ms Helen Bennett, Acting Chief Operating Officer

Ms Giorgina Strangio, Assistant Secretary, People Strategies Branch

Mr Robert Hanlon, Chief Finance Officer, Financial Services Branch

Mr Jonathan Nicholl, Assistant Secretary, Business and Ministerial Branch

#### **General Counsel**

Ms Margaret Tregurtha, General Counsel

#### **Policy Analysis and Implementation Division**

Mr James Chisholm, First Assistant Secretary

Ms Allison Ball, Acting Assistant Secretary, Economics and Analysis Branch

Ms Emma Campbell, Assistant Secretary, Strategy and Governance Branch

Mr Travis Bover, Director, Strategy and Governance Branch

Mr Adam Carlon, Assistant Secretary, Communications and Engagement Branch

#### **Outcome 1**

##### **Biodiversity Conservation Division**

Ms Kylie Jonasson, First Assistant Secretary

Mr Paul Murphy, International Climate Change and Energy Innovation Division, Energy Innovation and Ozone Protection Branch

Ms Tia Stevens, Acting Assistant Secretary, Biodiversity Policy and Water Science Branch

Mr Geoff Richardson, Assistant Secretary, Protected Species and Communities Branch

Dr Sally Box, Threatened Species Commissioner

Mr Steve Costello, Program Deliver Branch

##### **Environment Standards Division**

Mr James Tregurtha, First Assistant Secretary

Mr Bruce Edwards, Assistant Secretary, Policy and Reform Branch

Mr James Barker, Assistant Secretary, Assessments (QLD, VIC, TAS) and Governance Branch

Ms Kim Farrant, Assistant Secretary, Assessments (NSW, ACT) and Waste Branch

Mrs Antonella Bates, Acting Assistant Secretary, Waste Strategy Taskforce

Mr Greg Manning, Assistant Secretary, Assessments (WA, SA, NT) and Post Approvals Branch

Mr Andrew McNee, Assistant Secretary, Chemicals Management Branch

Ms Monica Collins, Assistant Secretary, Office of Compliance

Mr Ed Cram, Assistant Secretary, Chemicals Management Branch

**Knowledge and Technology Division**

Ms Beth Brunoro, First Assistant Secretary

Ms Sarah-Jane Hindmarsh, Acting Assistant Secretary, Environmental Accounts and Science Branch

Mr Sebastian Hood, Assistant Secretary, Information Technology Branch

Mr Greg Terrill, Assistant Secretary, Environmental Resources Information Network

**Heritage, Reef and Marine Division**

Mr Stephen Oxley, First Assistant Secretary, Heritage, Reef and Marine Division

Ms Paula Perrett, Assistant Secretary, Marine and International Heritage Branch

Mr David Williams, Assistant Secretary, Heritage Branch

Ms Deb Callister, Acting Assistant Secretary, Reef Branch

Ms Kate Turner, Acting Assistant Secretary, Supervising Scientist Branch

**Outcome 2**

**Climate Change Division**

Ms Kristin Tilley, First Assistant Secretary

Ms Edwina Johnson, Assistant Secretary, Industrial and Air Quality Branch

Ms Katrina Maguire, Assistant Secretary, Land and Outreach Branch

Mr Chris Johnston, Assistant Secretary, Climate Change Policy Branch

Mr Joe Pryor, Director, Safeguard and Industrial Policy Section

Mr Paul Ryan, Director, Forests Section

**International Climate Change and Energy Innovation Division**

Ms Kushla Munro, First Assistant Secretary

Ms Lesley Dowling, Assistant Secretary, Energy Innovation and Ozone Protection Branch

Mr Rob Sturgiss, Assistant Secretary, National Inventory Systems and International Reporting Branch

**Outcome 3**



**Australian Antarctic Division**

Mr Kim Ellis, Director

Mr David Sumner, Program Support Manager, Antarctic Modernisation Branch

Dr Gwen Fenton, Chief Scientist

Mr Charlton Clark, General manager, Strategies Branch

Dr Rob Wooding, General Manager, Support and Operations Branch

**Outcome 4****Energy Division**

Ms Rachel Parry, First Assistant Secretary

Mr James O'Toole, Assistant Secretary, Electricity Branch

Mr James White, Assistant Secretary, Clean Energy Branch

Mr Stuart Richardson, Acting Assistant Secretary, Gas and Governance Branch

Ms Bronwyn Pollock, Director, Energy Consumer Engagement and Analysis Section

**Energy Security and Efficiency Division**

Mr Sean Sullivan, First Assistant Secretary

Mr Shane Gaddes, Assistant Secretary, International Energy Implementation Branch

Ms Michelle Croker, Assistant Secretary, Appliance and Buildings Energy Efficiency Branch

Mr Tim Wyndham, Acting Assistant Secretary, Energy Security Branch

Mr Richard Miles, Director, Appliance and Buildings Energy Efficiency Branch

Ms Penny Sirault, Director, Appliance and Buildings Energy Efficiency Branch

Ms Fiona Beynon, Director, Energy Security Branch

Ms Dayle Stanley, Director, Energy International Implementation Branch

**Agencies and Statutory Authorities****Australian Renewable Energy Agency**

Mr Darren Miller, Chief Executive Officer

Mr Ian Kay, Chief Financial Officer

**Bureau of Meteorology**

Dr Andrew Johnson, Chief Executive Officer and Director of Meteorology

Ms Jennifer Gale, Group Executive – Corporate Services

Ms Kirsten Garwood, Project Director – Public Services Transformation

**Clean Energy Finance Corporation**

Mr Ian Learmonth, Chief Executive Officer

Mr Andrew Powell, Chief Financial Officer

**Clean Energy Regulator**

Mr David Parker AM, Chair

Ms Shayleen Thompson, Executive General Manager, Scheme Operations Division  
Mr Mark Williamson, Executive General Manager, Scheme Support Division  
Mr Steven Stolk, Acting Chief Operations Officer, Agency Support Division  
Mr Geoff Purvis-Smith, General Counsel

**Climate Change Authority**

Dr Wendy Craik, Chair, Climate Change Authority  
Mr Brad Archer, Acting Chief Executive Officer, Climate Change Authority  
Ms Melanie Ford, Acting General Manager, Climate Change Authority

**Director of National Parks**

Dr James Findlay, Director of National Parks  
Mr Brant Smith, Assistant Secretary, Kakadu and Strategic Policy Branch  
Mr Jason Mundy, Assistant Secretary, Australian Marine Parks Branch

**Great Barrier Reef Marine Park Authority**

Mr Joshua Thomas, General Manager, Acting Chief Executive Officer  
Dr Simon Banks, General Manager, Reef Protection  
Ms Margaret Johnson, General Manager, Reef Strategy  
Ms Anne Leo, General Manager, Corporate Services  
Dr Kirstin Dobbs Acting General Manager, Reef Engagement  
Dr David Wachenfeld, Chief Scientist

**National Wind Farm Commissioner**

Mr Andrew Dyer

**Snowy Hydro Ltd**

Mr Paul Broad, Managing Director and Chief Executive Officer  
Mr Roger Whitby, Chief Operating Officer

**Committee met at 09:00**

**CHAIR (Senator Duniam):** I declare open this meeting of the Senate Environment and Communications Legislation Committee. The Senate has referred to the committee the particulars of proposed expenditure for 2019-20 for the Environment and Energy and Communications and the Arts portfolios and certain other documents. The committee may also examine the annual reports of the departments and agencies appearing before it. The committee is due to report to the Senate on Tuesday 14 May, 2019 and has fixed Friday 14 May as the date for the return of answers to questions taken on notice.

Under standing order 26, the committee must take all evidence in public session. This includes answers to questions taken on notice. Officers and senators are familiar with the rules of the Senate governing estimates hearings. If you need assistance, the secretariat has copies of the rules. The Senate has resolved also that an officer of a department of a Commonwealth shall not be asked to give opinions on matters of policy and shall be given all

reasonable opportunity to refer questions asked of the officer to superior officers or to a minister. This resolution prohibits only questions asking for opinions on matters of policy. It does not preclude questions asking for explanations of policies or factual questions about how or when policies were adopted. I particularly draw to the attention of witnesses an order of the Senate dated 13 May 2009 specifying the process by which a claim of public interest immunity should be raised, which will be incorporated in *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:** Witnesses are specifically reminded a statement that information or a document is confidential or consists of advice to government is not a statement that meets the requirements of the 2009 order; witnesses are instead required to provide some specific indication of the harm to the public interest that could result from the disclosure of the information or the document.

#### **Bureau of Meteorology**

[09:02]

**CHAIR:** Welcome back, Minister Birmingham—it's a pleasure to be with you again—and also Dr Johnson from the bureau. Do you have an opening statement you'd like to make?

**Dr Johnson:** No, I don't, thanks.

**Senator URQUHART:** Given the Treasurer's commitment to transparency, can you advise the committee how much your agency will be spending on government advertising this week? Will you be spending any?

**Dr Johnson:** I'm not aware that we're planning on spending anything on government advertising.

**Senator URQUHART:** None? Thank you. How does the bureau determine where to put new radars?

**Dr Johnson:** That's a complex question. As you know, we have an existing radar footprint. In fact we have the fourth-largest radar fleet in the world. That radar fleet reflects 50-plus years of history. The primary criterion for where new radars go is community impact. We have quite significant gaps in the national radar coverage. We seek to close those gaps through whatever means we possibly can. As you know, in recent times we've partnered with the states to close those gaps. We have installed three new radars in Western Australia. We have one well advanced in Victoria. Recently three radars were announced in partnership with the New South Wales government. We work in partnership with the states to try to close those gaps. Most recently in the budget there was an announcement around closing some further radar gaps in the Barkly Tableland through North West Queensland and some significant gaps that exist on the Darling Downs, south-west of Townsville, and in Wide Bay and Burnett. These were areas where we know we have significant community impact and where we have gaps in spatial coverage, and meteorologically they're important.

**Senator URQUHART:** When you talk about community impact, what sorts of impacts do you look at?

**Dr Johnson:** Let's take for example the radar situation in the Darling Downs. That's a very significant area agriculturally. From a meteorological point of view it's also very significant in providing early warning to capital cities such as Brisbane and population centres in South East Queensland. Having that radar coverage on the Darling Downs delivers quite significant community benefit for those communities on the Darling Downs but also gives us early warning capability for the population centres in South East Queensland.

**Senator URQUHART:** When you talk about community impact you're talking more about the information that is available to that community rather than the impact of a radar being placed in that area—or is it both?

**Dr Johnson:** Clearly it's both, but the primary impact is having that real-time information to help communities and emergency services personnel make decisions.

**Senator URQUHART:** Do you have a list of where the gaps are?

**Dr Johnson:** I'd be happy to provide that to you on notice. We have a map of the country where there are gaps.

**Senator URQUHART:** How many are there?

**Dr Johnson:** I haven't committed to that memory. We still have some gaps.

**Senator URQUHART:** Are we talking a dozen or hundreds?

**Dr Johnson:** It wouldn't be in the hundreds. At the moment our radar provides coverage for about 98 per cent of the population. In a country this large there are some very significant gaps, for example, in Central Australia. I'm happy to provide you with the map. You will be able to infer from that map where those key gaps are and how they relate to population centres and so on.

**Senator URQUHART:** Great. Can you tell me how the bureau determines where to put new rain gauges?

**Dr Johnson:** That's also a complex question. We have many hundreds of rain gauges that we own and operate but we also draw upon a massive national network of equipment that is owned by states, territories and other agencies. We're looking to provide the maximum spatial and temporal coverage in our datasets and, again, prioritise those investments where we think the positive impact for the community will be the highest. It's a similar story to the radar situation.

**Senator URQUHART:** Do you have a list of where the rain gauge gaps are as well?

**Dr Johnson:** I could provide you with coverage. That will be again more difficult to interpret visually, because the rain gauge provides a point coverage, whereas a radar provides a spatial coverage up to 300 or 400 kilometres in some cases.

**Senator URQUHART:** Yes, it's a surface.

**Dr Johnson:** I can give you a spatial representation of where our rain gauge network is. I think it's important to understand that the bureau, for all its observational data, relies on a collaborative approach. Whether it's satellite data, radars, rain gauges, flood gauges or river height monitoring, we draw upon a national and sometimes international network to bring data into the organisation.

**Senator URQUHART:** Yes, you have several different sources.

**Dr Johnson:** We have a number of different modalities that we use to access data.

**Senator URQUHART:** I note the minister's media release said that \$32.1 million would be provided for new radars and rain gauges, but there's \$28 million in the budget. Can you talk me through the difference.

**Dr Johnson:** I don't have that in front of me, but overall I think the package announced was \$92.6 million over 20 years. I don't have next year's forward estimates committed to memory but I can check that for you.

**Senator URQUHART:** You don't know what the difference of \$4 million is?

**Dr Johnson:** I haven't committed it to memory—probably embarrassed that I haven't—but what is in the forward estimates is accurate.

**Senator URQUHART:** Which is the \$28 million.

**Dr Johnson:** Yes.

**Senator URQUHART:** Can you talk us through the budget measure.

**Dr Johnson:** The one in relation to the rain gauges and radars?

**Senator URQUHART:** The \$28 million.

**Dr Johnson:** The budget measure is designed to support, as I said early in my answer to you, closing some significant gaps in our radar coverage through eastern and North West Queensland into the Northern Territory. The proposal will involve us: moving the current Moree radar slightly north-east to Boggabilla, which will close a gap that exists in the southern Darling Downs, in the western part of the New England area; and moving the current Marburg radar up onto a site somewhere in the vicinity of Oakey, up in the eastern Darling Downs, which will provide a—

**Senator URQUHART:** What is the basic cost of moving each of those radars?

**Dr Johnson:** It depends on the type of the radar and what the site location costs are. The costs for shifting from Moree to Boggabilla would be different to what it costs to shift from—

**Senator URQUHART:** What would that one be, then?

**Dr Johnson:** Moree to Boggabilla? I don't have that figure in front of me; it's part of the overall measure. If you want that level of detail, we can give you an estimate of what we think it might be. It reflects differences in energy costs, land costs and telecommunications costs. Each site will be different. Our team will have budgeted at that level of fine detail; I just don't have that in front of me right now.

**Senator URQUHART:** You can provide that.

**Dr Johnson:** The measure will also involve closing a very significant gap in the western part of the Wide Bay area, in the vicinity of the Taroom district. It will also involve closing a gap in the Charters Towers area. We have radar coverage in Townsville and Bowen, but very poor coverage to the west of there. For people living in the Burdekin catchment, the Upper Burdekin catchment and the lower Flinders catchment, it will involve another radar in the vicinity of the town of Maxwellton, which will close a gap between Mount Isa—so those two radars, Charters Towers and Maxwellton, will close the gap.

**Senator URQUHART:** When you talk about closing the gap, are you talking about putting another one in or moving—

**Dr Johnson:** No, we will keep the Mount Isa radar where it is and we will keep the Townsville radar where it is. If you can imagine, right now there's a very significant distance—it would be 800 kilometres, I suppose—where there's no radar coverage. There's coverage at Mornington Island. There's this gap in north-west Queensland that's been there for a long time, and the budget measures will close that gap. Then there's also a gap in the Barkly Tableland—

**Senator URQUHART:** Sorry; just how will that gap be closed?

**Dr Johnson:** Two new radars.

**Senator URQUHART:** Two new ones; okay.

**Dr Johnson:** The spatial coverage of those new radars will close that gap—and then another radar in the vicinity of Tennant Creek, which will close a gap that has existed over the last four years in the Barkly Tableland area. That's effectively the measure. The other dimension of the measure is in the Flinders catchment. We'll also be installing some rain gauges with the radar for the Maxwellton area to cover a gap we have in coverage, which will also help us from a forecasting point of view to calibrate what we're seeing on the radar with what is falling in the rain gauge. The radar only tells you what is falling out of the sky. Until it falls in the gauge or lands on the ground, you don't know it's there. That's effectively the measure.

**Senator URQUHART:** Was that measure determined on advice from the bureau?

**Dr Johnson:** Absolutely, yes.

**Senator URQUHART:** When was that advice provided?

**Dr Johnson:** We've been in discussions with governments for many years around closing these radar gaps. This has been a long-running conversation that the bureau has had with state and federal governments over many years. In terms of when that advice may have been first provided to the Commonwealth government around those gaps, it's 'how long is a piece of string?' It could go back many years, I think.

**Senator URQUHART:** Was it a list of sites in certain states or was it a national list? How were they chosen? How do you determine that?

**Dr Johnson:** It goes back to my answer to your first question. When we look nationally as to where we have key gaps in the spatial coverage of our national network, and where risks and vulnerabilities to communities are, those areas are very high on our priority list and have been for some time.

**Senator URQUHART:** Is that based on the fact that there is no coverage within a radar, or is it more with the changing weather patterns and we're seeing—

**Dr Johnson:** No, it's just historical gaps in the radar coverage and where those gaps intersect with high population centres and areas where we experience severe weather. We know that, for example, the Taroom area is a place where a lot of severe thunderstorm activity generates. Our meteorologists are delighted with the decision because it will give them a greater sense of acuity and fidelity now in terms of severe weather warnings in that part of the world.

**Senator URQUHART:** But that is changing, is it not?

**Dr Johnson:** What is changing?

**Senator URQUHART:** The weather patterns and the frequency of weather—thunderstorms and things like that.

**Dr Johnson:** I don't think we can say anything at this stage around whether the frequency of thunderstorms is changing. As we've canvassed in this committee many times over the last couple of years, there are certainly some macro trends we're seeing in terms of temperature, rainfall in certain parts of the country and fire weather. They're the three big drivers where we feel the science is solid in terms of demonstrating a trend.

**Senator URQUHART:** How often does the bureau provide advice on capital that's needed, such as things like new radars and rain gauges?

**Dr Johnson:** Like all portfolio agencies, we're in regular contact with our portfolio around our capital needs as part of the portfolio budget process.

**Senator URQUHART:** It's part of the budget process each year?

**Dr Johnson:** It's just routine, just part of the portfolio budget process, yes.

**Senator URQUHART:** Is any more investment needed?

**Dr Johnson:** For?

**Senator URQUHART:** For capital.

**Dr Johnson:** The bureau certainly has some capital challenges. We maintain a very large fleet of equipment in the field. That's expensive, and much of that equipment is in harsh environments.

**Senator URQUHART:** But that's more upkeep and maintenance.

**Dr Johnson:** So, yes, it's a never-ending challenge for us to do the best we can with the resources we have to maintain that fleet. It's an ongoing conversation we've had—well before my time here, I'm sure—with governments around an appropriate capital footprint for the bureau. We're managing effectively at the moment but remain in conversation with the portfolio around our capital needs.

**Senator URQUHART:** Where is more investment needed? Where are the pressing points and areas for that, and how much would it cost?

**Dr Johnson:** At the moment, our capital budget sustains the footprint of the organisation, but in the long run we will have some capital gaps that will need to be filled. The exact quanta of those are a matter for ongoing analysis and so on. As I said before, we're working closely with the portfolio in terms of expressing what those needs might be, and the portfolio and the portfolio minister of the day will make some calls on how they see those needs versus all the other needs and calls upon government for capital.

**Senator URQUHART:** But you must have, if you like, a wish list from the bureau about where capital—

**Dr Johnson:** I think every agency head has a wish list.

**Senator URQUHART:** Yes, but predominantly where capital investment is needed now.

**Dr Johnson:** The bureau is a capital-intensive organisation and—

**Senator URQUHART:** But there must be requirements where it's needed.



**Dr Johnson:** as I said before, we prudently manage the footprint we have. We have a good idea of what our future capital needs will be and we're actively engaged with the remainder of the portfolio about how we prioritise those needs vis-a-vis all the other priorities that the portfolio has for its capital.

**Senator URQUHART:** But you haven't got a list of where an investment is needed and how much that would cost?

**Dr Johnson:** We certainly have ideas as to where our priorities lie—

**Senator URQUHART:** So where are they?

**Dr Johnson:** and we rank them from highest priority to low priority. Where that line eventually falls is part of the prioritisation process that goes on, firstly within the bureau and then within the portfolio.

**Senator URQUHART:** But from the bureau's point of view where is that? What does that list look like?

**Dr Johnson:** That list, again, would include gaps in closing the radar coverage, gaps in terms of our flood warning network, gaps in terms of our automatic weather station network, gaps in terms of our ICT infrastructure. But, again, it's a matter of prioritisation. We're managing effectively, in my view, within the budget we've got and we'll continue to monitor that situation as we go forward as part of prudent management.

**Senator URQUHART:** I note that the Bureau of Meteorology is still undertaking a series of changes, with forecasting proposed to be centralised in Brisbane and Melbourne. Have you finalised those changes?

**Dr Johnson:** Firstly, can I just correct the record again. We're not centralising forecasting services to Brisbane and Melbourne. I've been on the record in this chamber many times to make it clear, I hope—again—that we're not doing that. I think when we last met—when did we last meet, Chair?—

**Senator URQUHART:** It was in February—not long ago.

**Dr Johnson:** we released a business case that describes the transformation we want to make in the services we deliver to the general public and to emergency management. We've started that process now. We're in detail planning phase and heavily engaged with our staff and our stakeholders around that. That will see a growth in the bureau's investment in our frontline meteorology services, not a decline. It will see a reinforcement, an absolute commitment to our footprint in all states and territories, including in your state, Senator. I'm extremely positive about those changes, and the feedback we've had from our staff and our stakeholders on the changes we're thinking of making has been overwhelmingly positive.

**Senator URQUHART:** Will any forecasters move?

**Dr Johnson:** We have people moving in the bureau all the time. I can't give you an ironclad guarantee that people may wish to move to different parts of the bureau. To be frank, I'm hoping that we enhance the mobility that we have for our staff in the organisation to give them lots of career opportunities. Will anybody be forcibly relocated? No. Again, I have been on the record in this chamber making that very clear. But, if our staff would like to move or we provide opportunities where movement is something that's attractive to them, this process will support them in that process.

**Senator URQUHART:** Can you go through where Australia's forecasters are based now and how many there are.

**Dr Johnson:** I would probably prefer to use the word 'meteorologists'.

**Senator URQUHART:** Sorry, okay.

**Dr Johnson:** Our meteorologists are based right around Australia. So we have them in Darwin, in Cairns. I might take a step back. Are you asking about our meteorologists that deliver services to the general public and emergency management? We also have meteorologists that deliver services to ADF colleagues. Are you just interested in those who deliver public services or everybody?

**Senator URQUHART:** All of them.

**Dr Johnson:** Well, Darwin, Cairns, Townsville, Brisbane, Sydney, Melbourne, Hobart, Adelaide—

**Senator URQUHART:** How many, though? Can you break it down?

**Dr Johnson:** I can give you that list, yes. That's not a problem.

**Senator URQUHART:** So you're saying there'll be no changes to the numbers—

**Dr Johnson:** There will be no changes to those numbers, except in a couple of locations, where there will be an increase.

**Senator URQUHART:** Which ones?

**Dr Johnson:** Good question. I think we'll be seeing an increase in Perth, an increase in Brisbane and an increase in Melbourne. And all other states—Adelaide, Darwin, Hobart, Canberra, and the other locations—will be the same.

**Senator URQUHART:** If we're talking about forecasters, have any coalition MPs or senators contacted the bureau about the concerns about forecasters? I know I'm getting a lot of emails.

**Dr Johnson:** We have had a lot of dialogue with members of parliament from both houses and from all parts of the parliament—a broad cross-section of the parliament.

**Senator URQUHART:** Is that in relation to the concerns being raised about movement?

**Dr Johnson:** I think unfortunately during 2018 there was some inaccurate press coverage around what we were contemplating doing. Parliamentarians are naturally doing their job and making inquiries on behalf of their constituents. We were doing our job, engaging with those parliamentarians, explaining actually what was going on. I've met with a number of you at this table—probably most recently Senator Chisholm, but also I was in Hobart a couple of weeks ago and met with Senator McKim, the member for Franklin, the Premier of Tasmania's office and so on. So we're engaging widely with both state and Commonwealth parliaments around what we're wanting to do. As I said, overwhelmingly the feedback has been positive once people understand what we're actually doing, or thinking of doing.

**Senator URQUHART:** Are those concerns raised specifically around forecasting jobs?

**Dr Johnson:** Again, these are inaccurate perceptions based on inaccurate coverage in the media that the bureau was—going back to your question—centralising our meteorological functions to Brisbane and Melbourne, which was never going to be the case.

**Senator URQUHART:** That's a big statement—never.

**Dr Johnson:** And also questions have been around the role of what people in those local locations will be doing. So, with my colleagues, I've been pretty much continuously on the road over the last couple of months, talking with our stakeholders, our customers and our partners, right around Australia, around what we're thinking of doing. As I said before, overwhelmingly, people are positive because, with the changes we're making, we're absolutely firmly of the belief that we'll improve the service, not diminish it.

**Senator McALLISTER:** Dr Johnson, I think you indicated there would be an increase in staff numbers in Brisbane, Perth and Melbourne and that staff would remain the same—

**Dr Johnson:** In the other locations.

**Senator McALLISTER:** In the other locations.

**Dr Johnson:** Correct. So there's an uplift of 40-odd staff in terms of our functions in that area.

**Senator McALLISTER:** Can I ask you to be specific about what functions we're talking about. You've referred to meteorological services—

**Dr Johnson:** Yes. These are meteorological, climatologists, hydrologists—

**Senator McALLISTER:** May I finish my question so that you understand what I'm trying to ask.

**Dr Johnson:** Sorry.

**Senator McALLISTER:** The specific concern that's been raised with us is around forecasting jobs. You may say, 'Well, that's not a valid descriptor of what happens,' but can you tell me what functions sit within that meteorological—

**Dr Johnson:** If you're talking about people who make forecasts, they'll be meteorologists, climatologists and hydrologists. For example, in recent severe weather we had in North Queensland, meteorologists and hydrologists were issuing warnings and providing advice to the local community about the weather and the flood situation there. When we're talking about those local services, they apply to our meteorologists, our hydrologists and our climatologists, and our communications specialists. All of those folks come together during times of crisis to provide the community with information on what's going on in their environment. So, as I said before, those concerns that have been raised were founded on inaccurate media reports, and I don't think we can be any clearer than we have been over many months now that we're increasing our services, not diminishing them. When we sit down and talk through with folks what we're actually doing, people understand what we're doing. I just don't think we can be any clearer that we're not exiting it and we're not diminishing it; we're increasing it.

**Senator URQUHART:** Has the bureau received complaints in relation to concerns from the public about exiting?

**Dr Johnson:** We get lots of feedback from the public about our services. Again, at that time, at the back end of last year, when there were these inaccurate reports in the media, members of the public contacted me to share their concerns based on what they perceived to be the situation. Since probably last October, I have only received one piece of correspondence from the public on these matters.

**Senator URQUHART:** So no forecasters will leave the states or move into other roles?

**Dr Johnson:** There will be movement of our people—meteorologists, hydrologists, climatologists—in the bureau, across multiple roles. We're not going to straitjacket our people. But, in terms of the overall meteorological, hydrological and climatological services we're providing into the states and territories, can I be absolutely clear again: there will be an overall increase. In the numbers in each of our states and territories there will be no reductions. In some states there will be an increase overall, but there will be no reduction in our services in any of the states. Again, to reaffirm my strong view, there will be an improvement in the services. By having a more flexible way of operating in the bureau we'll be able to deploy our people much more flexibly than we can now, right across the nation, to where the weather needs us to be and where the community needs us to be. Historically that's been very challenging for us because our practices have been quite rigid. In recent times, we're getting better at it. During the North Queensland flood emergency, we had people from all over Australia working to support that community in Townsville. There were people from Hobart, Adelaide, Perth, Sydney and Melbourne, as well as our team in Brisbane. That's the way we've got to operate in the future, so when we have these emergency situations we have the very best people, wherever they might be in the bureau, applied to the problem, irrespective of the postal code of where they take their pay cheque. It's about having the best of both worlds—having a significant local footprint but the capacity to surge wherever we need to be across the nation. In Tasmania, for example, our footprint will remain the same, but if we get another summer like what we had this summer, where it really stretches our resources—this summer, Tasmanian colleagues received a huge amount of support from folks in Perth, Sydney, Melbourne and Adelaide. We have to get better at that. If we get another summer like we had in Tasmania this summer, we'll continue to support the Tasmanian team with resources from interstate so that the Tasmanian community has the very best people working on the job for them. I would hope that's what the community expects.

**Senator URQUHART:** So the local forecasting services will remain?

**Dr Johnson:** There will be local meteorologists, hydrologists and climatologists, based in Hobart, continuing to—

**Senator URQUHART:** I'm not just talking about Hobart. I'm talking about local.

**Dr Johnson:** deliver services into the Tasmanian community.

**Senator URQUHART:** Sorry, Dr Johnson, I'm talking not just about Tasmania; I'm asking about local—all over.

**Dr Johnson:** I thought you were asking about Tasmania.

**Senator URQUHART:** I am a Tasmanian and I care about it, but I'm actually interested in the lot.

**Dr Johnson:** Again, I don't think I could be any clearer: there will be meteorologists, hydrologists and climatologists in all of our state and territory offices, and they will work very closely with their peers right around the country to deliver the services the community expects.

**Senator Birmingham:** I've been listening accurately: maintained in a good number and increased in others.

**Dr Johnson:** Correct, Minister.

**Senator Birmingham:** Sounds like a good news story.

**Senator URQUHART:** I've received a complaint from a man who lives in Perth who claims that the public phone line for the Perth office transfers to Melbourne. Is that the case?

**Dr Johnson:** I'm not sure. Look, it wouldn't surprise me that at some stage if there was—

**Senator URQUHART:** I'd be interested to know.

**Dr Johnson:** I'd have to check. There may be a volume issue. In other words, there may be people ringing in and, if the colleagues in Perth are unable to answer that call, it may transfer to another number.

**Senator URQUHART:** This complaint says: 'You cannot ring the Perth number and get through to the Perth office. There is no option to do so. All you can do is key in 7 and get through to the Melbourne office.'

**Dr Johnson:** That may be the case. I'd be very surprised if you can't call the Perth office, but I'm happy to check that out.

**Senator URQUHART:** Why would that be?

**Dr Johnson:** I don't know. It is complete news to me. With respect, it's hard to respond to that type of feedback.

**Senator Birmingham:** Are there any details of what sort of service the person was—

**Senator URQUHART:** They were just ringing the bureau office. Obviously in daylight saving, if you press after 3 pm you don't get anyone because Melbourne's shut down.

**Senator McALLISTER:** Dr Johnson, is there anyone who would know?

**Dr Johnson:** I will take the question on notice if that is alright, just so I can give you some accurate information as to what the situation is.

**Senator McALLISTER:** Is there anyone sitting behind you who could provide the information?

**Dr Johnson:** No. I will take the question on notice and make sure I provide you with an accurate answer.

**Senator URQUHART:** I'd be really interested because—

**Dr Johnson:** If you are able to forward to me the actual details of the complaint that might help me as well.

**Senator URQUHART:** It is simply: can you ring Perth and, when this gentleman has tried on a number of occasions, why does it go through to the Melbourne?

**Dr Johnson:** I'd have to take it on notice and investigate it.

**Senator URQUHART:** If it is after 3 pm in daylight saving, you leave a message and then someone from Melbourne might ring you back the next day.

**Dr Johnson:** Again, can I take it on notice and get back to you?

**Senator URQUHART:** Sure. I now want to go to the new IT program. There is a quote in an email that says: 'The bureau is a science and energy organisation that has massive assets distributed around the country with complex systems. I'm not confident that Robust will deliver results.' What is Robust?

**Dr Johnson:** Robust is a major transformation program that the government's invested in to improve the security, stability and resilience—

**Senator URQUHART:** So it's just the name of the program?

**Dr Johnson:** It is a program name, yes.

**Senator URQUHART:** How many staff are working on that?

**Dr Johnson:** On the Robust program?

**Senator URQUHART:** Yes; and how many contractors?

**Dr Johnson:** I'm not sure I have that information in front of me. I can get you an accurate answer. We may be able to get that answer for you quickly, but, if not, I'll take it on notice.

**Senator URQUHART:** Okay. I'm interested in how many staff are working on it and how many contractors.

**Dr Johnson:** There is certainly a mix of bureau staff and contractors working on the program. It is a very large program.

**Senator URQUHART:** What is it going to do?

**Dr Johnson:** It may be worth stepping back through the history of the program. The program was initiated in response to a major security breach in the bureau during 2015. That's on the public record. The government responded with a major investment in the bureau to basically rebuild our underpinning ICT and observing systems. We're implementing the program. It is a five-year program, and we are well into it. Basically, it's about rebuilding our systems so that they're secure, stable and resilient.

**Senator URQUHART:** What's the budget for it?

**Dr Johnson:** I'm not at liberty to discuss that. That's not for publication because of security and commercial-in-confidence reasons. We've been over this in these hearings before with Senator Patrick in relation to the budget.

**Senator URQUHART:** Can you tell me how it compares to the budget for the bureau as a whole?

**Dr Johnson:** It's a very large budget in terms of comparison of the bureau's whole budget.

**Senator URQUHART:** When you say 'very large', is it the same size? Is it larger?

**Dr Johnson:** Well, it's—

**Senator Birmingham:** Dr Johnson did just outline the concept of commercial—

**Senator URQUHART:** He did tell me it wasn't for publication, but, it is larger than the bureau's budget?

**Senator Birmingham:** If you're asking if it is comparable to the bureau's overall budget, then he might as well tell you what the budget is—

**Dr Johnson:** Yes, exactly.

**Senator Birmingham:** which he is not at liberty to do for those security and commercial reasons.

**Dr Johnson:** It's a significant investment.

**Senator URQUHART:** What's the project time line and is it on track?

**Dr Johnson:** It's a five-year program that we currently plan to finish during 2022.

**Senator URQUHART:** So it's on track to finish at that time?

**Dr Johnson:** On current estimations, yes.

**Senator URQUHART:** What risks are being managed?

**Dr Johnson:** There are a lot of risks in this program—technical risks, commercial risks and people risks. Again, without going into huge detail for security reasons, like all major programs that I've been involved in in my career, there are many, many risks with it. They're being very actively managed. To give you some assurance, which is perhaps where you're heading, we have a very, very significant investment in oversight and governance of the program. We have just finished in this week gone our second gateway review that's a process which you're probably familiar with that the Department of Finance oversights. The first gateway review gave us a green-amber rating. I think I'm at liberty to say that the second review that we've just had also gave us a green-amber rating which says it's on track but will require careful monitoring and constant attention, which I think is a very accurate place to be in a program like this. We're tracking along well at the moment, but there are a lot of risks around it.

**Senator URQUHART:** How does the project interact with the bureau as a whole? Is it part of the bureau or is it something separate?

**Dr Johnson:** No, it is absolutely part of the bureau. The program director is a member of the bureau's executive team. The whole design of the program is designed to ensure that it's fully integrated with the bureau's operations, because one of the biggest risks of the program is transitioning from our current state to the future state and, as an operational agency, that is a non-trivial thing to do, as you move from point A to point B.

**Senator URQUHART:** Have any concerns been raised about the project? If so, what and how have you managed them?

**Dr Johnson:** I've had no concerns raised with me from anybody on the project. Outside the bureau, is that what you are asking me?

**Senator URQUHART:** No. Any concerns raised?

**Dr Johnson:** I've had no concerns raised with me.

**Senator URQUHART:** Thank you.

**Senator RICE:** Good morning. I want to start with getting the perspective of the bureau on the current drought and the intensity of the drought compared with historical events.

**Dr Johnson:** Droughts have spatial and temporal coverage—as you well know—but, if you look at the situation through many parts of New South Wales, historically, it's a very significant event. If you look at major droughts that have occurred since, say, 1900—when we have good records—it's in the top three in terms of the significance. Again, how drought manifests, as you know, is not just a weather-related issue. It has interfaces with land use and a whole range of other conditions. From a meteorological perspective, it's a significant event.

**Senator RICE:** In the top three. I'm interested in, over the last summer, how that extent has expanded geographically, particularly the extent of the drought in Victoria?

**Dr Johnson:** As you say, right through eastern Australia, except for the far north-east, it has been extremely dry and hot. I think this is what folks have to take cognisance of: there has been a rainfall deficit and also that rainfall deficit has been exacerbated by very high temperatures and wind, so the landscape is very dry.

**Senator RICE:** What's the drought looking like again after that very hot and dry summer in Victoria?

I understand that, basically, up until the end of last year Victoria was not as affected as New South Wales was, but what are we looking at in Victoria at the moment?

**Dr Johnson:** Our projections for the autumn, unfortunately, are not great: we currently have an El Nino watch out, which says that there is a 50 per cent chance of—twice the background conditions of an El Nino developing. But notwithstanding that projection, we're thinking the autumn will remain warm and dry through eastern Australia.

I also think it's worth understanding that there's been parts of northern Australia that are exceedingly wet, and parts of northern Australia that have been very dry. For example, I believe Darwin's summer rainfall was the second lowest on record this summer. I think if they hadn't had 32 millimetres at the back end of February it would have been very, very dry wet season up there as well. So it's not just through New South Wales and Victoria that we've had dry conditions; parts of the Top End and Kimberley have also been very dry.

**Senator RICE:** You said that that the New South Wales drought is in the top three droughts on record. What are we looking like in Victoria?

**Dr Johnson:** I don't have a historical calibration on Victoria. Parts of southern Victoria have had some rain; glancing blows of weather have come through. Again, if that's of particular interest I could get your some historical analysis of the Victorian situation but, certainly, New South Wales has been very significantly dry.

**Senator RICE:** I understand that the Melbourne region has had the lowest rainfall on record in the start to the year.

**Dr Johnson:** Yes, it's been a very dry start to the year.

**Senator RICE:** Is that also elsewhere? I think that's the case for Melbourne.

**Dr Johnson:** It's been very dry in Melbourne; Sydney has had some reasonable rain. Where I live, in Brisbane, we've had a bit of rain in March, but our summer there was extremely dry, and dam levels are falling. I haven't got the latest data, but I know that at the back end of summer dam levels in Brisbane's main water supply were around 70 per cent, which is starting to move us into territory there where water authorities have to consider taking action in terms of water saving and water management.

**Senator RICE:** Getting back to Melbourne, I was travelling between Melbourne and Geelong yesterday, and I was absolutely struck by how bone dry it was. I had been told that previously there had been some drier January-to-March periods, but they'd all then had rainfall in the first week of April. So the outlook isn't looking good.

**Dr Johnson:** Unfortunately not. I hope we're wrong but, at the moment, the outlook is looking very dry and warm.

**Senator RICE:** And across the country we've had what was the hottest January and hottest March on record?



**Dr Johnson:** Yes—very, very hot; historically hot conditions—record heat during December, January and February.

**Senator RICE:** I think it was the hottest March—wasn't there was recent media coverage of it being the hottest March on record across the country?

**Dr Johnson:** Correct.

**Senator RICE:** The forecasts looking ahead are also not looking good, so could you talk to us about the climate change signal in this?

**Dr Johnson:** Again, it's difficult to attribute individual instances of heat, but we know, as I have said here many times, that there is an overall warming trend. That trend is now inarguable, and these sorts of events that we're seeing are entirely consistent with that warming trend.

**Senator RICE:** In terms of definitively saying that the heat and this drought that we've just experienced—can you talk us through the work that I know is done at the Bureau and CSIRO to attribute climate change signal in it?

**Dr Johnson:** Yes. I'll only speak on what the Bureau does; I'll let other agencies speak for themselves. You're right—we often do this in collaboration with the universities and the CSIRO. The attribution studies focus on the likelihood of a particular event occurring or not occurring as a consequence of an analysis of climate records, and also modelling of different climate scenarios.

So we know that there is a strong climate change signal in the temperature signal, and we know that in some parts of the country there's a strong climate change signal from a rainfall point of view. Probably the most well-known one is in the south-west of Western Australia, but in other parts of the country the signal isn't as strong. We also know that for other phenomena it's hard to attribute individual events on trends to climate change.

I spoke before in relation to Senator Urquhart's question around the incidence and severity of fire weather. We know there is a strong climate change signal in that. We've published extensively on that, including in the *State of the climate* report, which I know you're familiar with.

**Senator RICE:** So you're confident in being able to say that the drought and the record heat that we've experienced over this summer has got a climate change signal?

**Dr Johnson:** Certainly the heat has got a climate signal in it. As I said, I'm not in a position to confirm it, or otherwise, for this particular drought. An attribution study will need to be done to determine that. Just to reaffirm, I also said that drought, as you know, is a manifestation of multiple factors, not just rainfall deficit.

**Senator RICE:** Yes.

**Dr Johnson:** There are land use and other dimensions that combine to create a drought.

**Senator RICE:** And the heat—

**Dr Johnson:** Correct.

**Senator RICE:** because vastly increased evaporation rates, with that, increase temperatures.

**Dr Johnson:** Heat and wind, antecedent conditions and land use—a whole range of things that manifest, yes.

**Senator RICE:** Given the climate change signal in what we have been experiencing, what can you say then about the frequency of such conditions into the future?

**Dr Johnson:** Which conditions?

**Senator RICE:** The hot, dry, summer conditions—what we're experiencing.

**Dr Johnson:** Again, as we've said in *State of the climate*, with all other things being equal, we expect the warming trend to continue and we expect, as a consequence, the sorts of conditions that we have seen in this recent summer to be with us into the future. We expect the drying trend in the south-west and the south-east to continue, and a slight wetting trend in the north-west. Again, all of these things depend on what happens globally, in terms of greenhouse gas emissions and so on. I just want to add a note of caution to what I said—all other things being equal, based on current trajectories. Should they change then obviously—

**Senator RICE:** We'd be in a much better situation if they change.

**Dr Johnson:** our projections will change—our projections of the future.

**Senator RICE:** But on current trends—

**Dr Johnson:** Based on current trends, yes.

**Senator RICE:** we can expect to see conditions like this last summer more frequently and increasing in intensity?

**Dr Johnson:** We will expect to see a warming trend continue.

**Senator RICE:** Reviews are now being conducted into some of the events that have occurred this summer—the Murray-Darling fish kills and the Tasmanian bushfires, in particular. Can you tell us what input the Bureau of Meteorology is having into those reviews?

**Dr Johnson:** Certainly we provided advice into the review—if you are referring to the review Professor Vertessy did? Is that the one you're speaking of, in terms of the Murray-Darling Basin, the review commissioned by Minister Littleproud?

**Senator RICE:** Yes.

**Dr Johnson:** Yes, we have provided support to that review, in terms of climatological and hydrological data. We've supported that review to help them do their work. In terms of the Tasmanian bushfire situation, again, going back to Senator Urquhart's original question, our team in Hobart have done a truly superb job supporting emergency services colleagues in Tasmania to manage what's been a horrible summer in Tasmania. I want to put on the record that the folks at the bureau care a lot about our fellow citizens, and we know that they've been going through a lot down there. Our team in Tasmania, with support from right around the country, has been supporting emergency management colleagues.

We will participate, as we always do, in inquiries into or reviews of severe weather events that state agencies have. Another example would be—in the Queensland government, there is a formal review, as part of a normal process, into the Townsville floods. There's nothing abnormal here. We will contribute our expertise to that review. It's just a normal way of operating for us.

**Senator RICE:** With the input into those three reviews, will you be commenting on or providing evidence again about the climate change signal that's in those events?

**Dr Johnson:** I can't be certain what the nature of that input will be. Often it's determined by the questions and processes that are driven by others. But certainly, if those questions are raised, we will contribute our expertise where we have it.

**Senator RICE:** Again, what is the bureau's view in terms being able to identify the climate change signal in those three events—the Townsville floods, the fish kills in the Murray-Darling, the intensity of the bushfires and the awful summer in Tasmania?

**Dr Johnson:** Again, in terms of the Townsville floods, it's very difficult. There have been no attribution studies, that I'm aware of, of that event. It's obviously a very recent event. It's very difficult, scientifically, to attribute individual severe weather events to a climate change signal. Someone may well do it. I'm not aware that we will do anything in that regard. In terms of the events in the Murray-Darling, again, there's a whole review being conducted on that process. I'm not sure I can add a lot of value around that. I'm sure Professor Vertessy and his team examined all the various factors. In the Tasmanian situation, we know, generally, there's a warming trend, as I said before, and we know that the incidence and severity of severe fire weather is increasing. Again, this is evidence of that.

**Senator RICE:** It's consistent with climate change we're already experiencing?

**Dr Johnson:** It's consistent with what we're seeing. We know that this is happening and that it has been happening for a while.

**Senator RICE:** And on current trends it is only going to get worse.

**Dr Johnson:** On current trends it will continue.

**Senator STORER:** I think my questions may well follow a lot of the answers given to Senator Rice. Has there been a decrease in rainfall in the Murray-Darling Basin catchment area over the last 30 years, and, if so, by how much?

**Dr Johnson:** Yes, there's certainly been an overall signal of drying in the basin. I don't have that figure committed to memory. If you're interested, I can provide it on notice to you.

**Senator STORER:** If you could, yes, please. What would you attribute that decline to?

**Dr Johnson:** Overall we know that in south-eastern Australia there is a drying trend, and we have a high degree of confidence that that drying trend is due to the effects of climate change.

**Senator STORER:** So you're expecting this decline to continue?

**Dr Johnson:** Again, as I said to Senator Rice, all other things being equal, that will continue. But there are a whole range of global settings, in terms of global emissions and scenarios and so on, which are well beyond the control of the bureau, that will determine what happens with the earth's climate.

**Senator STORER:** I think you were discussing the drought and the contributing factors with Senator Rice. Could you run through them again for me. Obviously a decrease in rainfall is a significant—

**Dr Johnson:** Rainfall deficit is only one of a number of factors that drive a drought. Others will be temperature, for example. So, particularly in New South Wales these last

couple of years, the temperature has been a huge driver in the dry conditions. Land use is also important, in terms of how industry and the community utilise the land resource. The water resource will also impact the degree to which the rainfall deficit and temperature anomaly manifest in terms of community impacts. It's quite a complex picture that drives it. There are also the antecedent conditions—in other words, conditions in the previous years. So we're not starting from a blank slate.

**Senator STORER:** That's fine. Thanks.

**CHAIR:** I have one final question about the fantastic BOM app. How many users are there? How successful is it?

**Dr Johnson:** I'm not sure what we are up to. I should know this. The last time I checked it was over three million—

**CHAIR:** Really?

**Dr Johnson:** so we're delighted. In fact, we're going to be updating the new version of our app and, as part of some of the processes we've talked about today, a new website for the bureau. I think you'll be delighted when you see it.

**CHAIR:** I'm sure I will be delighted. I'm easily delighted.

**Dr Johnson:** I've just been handed something from my colleague. The BOM app has been downloaded 3.2 million times. We've got a returning user rate of 99.3 per cent, and the app has been accessed more than 223 million times since it was released, so it has a huge reach and touch into the community. I'm very proud of our team who developed that. We're in the process of updating it. I do get some correspondence about the interface in the app, around the usability of the radar viewer. You'll be pleased to know that I've also given my team some feedback about that, and the next version will have a fully seamless rainfall radar viewer, which will increase its usability. I think we will get some positive customer feedback on it.

**CHAIR:** I'm one happy customer. I've had no issues with the radar. It might be a generational thing, but we won't go there!

**Senator Birmingham:** The beauty is that every time the bureau gets asked about the app in Senate estimates they pick up at least another five downloads—all senators!

**Dr Johnson:** If I may, I want to return to the question from Senator Urquhart. I have been provided information on the staffing for the Robust Program. Currently we have 25 APS staff and 145 contractors working on the Robust Program.

**Senator URQUHART:** Thank you.

**CHAIR:** Dr Johnson and your colleagues from the BOM, thank you very much for your time today. We will now move to Snowy Hydro.

#### **Snowy Hydro Limited**

[09:56]

**CHAIR:** Welcome back Mr Broad and Mr Whitby. Is there an opening statement you'd like to make?

**Mr Broad:** No.

**Senator McALLISTER:** I want to ask some questions, Mr Broad, about Snowy Hydro 2.0. When this was announced by then Prime Minister Turnbull it was described as a four-year project. That's correct?

**Mr Broad:** I can't recall but it would have been in that order, yes.

**Senator McALLISTER:** Can we get a progress report on what's happened? When was the business case completed?

**Mr Broad:** The board reached a final investment decision in December. It was submitted to the government and shareholders and signed off in late January. We signed the final contracts with the contractors last Friday.

**Senator McALLISTER:** When was the business case completed?

**Mr Broad:** As I said, the board signed off—the exact date is probably 20 December.

**Senator McALLISTER:** That is a useful piece of information. It is not the same as having a business case completed. It is the business case being adopted, presumably. When was the business case completed?

**Mr Broad:** The business case is not completed until the board signs off, and the board signed off in December.

**Senator McALLISTER:** How long do you expect construction to take?

**Mr Broad:** The contract position is just on five years.

**Senator McALLISTER:** So it's not a four-year project?

**Mr Broad:** These things evolve over time. When the then Prime Minister announced it, as you might recall it was pre the feasibility study. He announced that we were going to be doing a feasibility study to work out all the details. ARENA was part-funding it and the Prime Minister's original announcement then was about doing that feasibility study, which was completed in December that year. We then started talking more of five years. We had to work out the geology of the rocks and the details of those things. As always in a project this big and complex, when you initiate it you then do the work behind the scenes to get all the relevant experts to work out the time, cost, risk of doing so.

**Senator McALLISTER:** At the time the announcement was a feasibility study expected to be completed before the end of the year—that was in 2017—and construction can commence soon after. When will construction actually commence?

**Mr Broad:** It has already started.

**Senator McALLISTER:** What has actually happened? As I said, we got feasibility by the board, the government signed off in January and we've signed the contracts for the major works. The earlier works, which are the roads and getting things access into Lobs Hole, are the works that have started now. Having signed the contract for the major works, as you would appreciate they are ordering the relevant equipment. The tunnel-boring machines are massive—on world scale. What we are attempting to build here now is probably right up there. The size of these tunnel-boring machines are such that the face of the tunnel-borers themselves are 10 metres in diameter. They are looking at a unique way of adjusting the face of this tunnel-boring machine so that it can bore uphill. The refinement in the design of these things has been quite remarkable. I think it's in everybody's interest to really contemplate the complexity, size and the engineering achievement that sits behind this exercise.

**Senator McALLISTER:** Yes. I am fairly confident that it's a complex project. I think everybody understands that. I'm just really trying to understand some of the process issues. When are the major works going to commence, Mr Broad?

**Mr Broad:** We've signed the contracts now, so it's up to the contractors to order their equipment. The major works can't complete until you get a road that's accessible down to Lobs Hole, and that's been started now.

**Senator McALLISTER:** When do you anticipate major works will commence?

**Mr Broad:** They've started. If you said the early works are part of the major works, it means we've started now.

**Senator McALLISTER:** I see. The thing is: when I ask you this, you draw a distinction between the early works and the major works. You said that the early works had started, but the major works required some preparation time because of the complexity and the machinery required to undertake them.

**Mr Broad:** Yes.

**Senator McALLISTER:** When will they commence?

**Mr Broad:** Let's be clear: the major works can't start until you get access. It doesn't matter what they do in major works, you have to get access to Lobs Hole so they could start. We set up a different contract called 'the early works contract', which builds roads et cetera. We wanted to do that as soon as—

**Senator McALLISTER:** Mr Broad, I'm asking a pretty simple question: when will that be completed so that the major works can commence?

**Mr Broad:** The first time a boring machine will arrive here is May next year.

**Senator McALLISTER:** May 2020.

**Mr Broad:** Yes. I just want to be clear—really clear: the works, until 2020, will be building roads and access down to Lobs Hole. You have to build those things to get access. I'm not sure whether you've visited the site, but it's a very complex, difficult terrain, in the middle of our beautiful national parks. We need to finish the major works' EIS, which is being done now. The EIS was completed in December.

**Senator McALLISTER:** So the major works' EIS hasn't actually been completed?

**Mr Broad:** No.

**Senator McALLISTER:** Who is the approval authority for the EIS?

**Mr Broad:** New South Wales.

**Senator McALLISTER:** When you do imagine that the EIS will be completed?

**Mr Broad:** We're targeting late January.

**Senator McALLISTER:** January 2020?

**Mr Broad:** Yes.

**Senator McALLISTER:** When you say it's a five-year project, what does that imply about the completion date?

**Mr Broad:** It's 2025. The first works might be in October. I think 24 November is when the first bit of power will come on—yes.

**Senator McALLISTER:** You think that on 24 November you'll have some generation capacity?

**Mr Broad:** Yes, we'll start bringing on units.

**Senator McALLISTER:** When you say 'bringing them on', will they be connected to the transmission system at that time?

**Mr Broad:** Yes. You can't generate unless it's connected.

**Senator McALLISTER:** I'm just trying to make sure that we have clarity about what you're actually telling us about the progress of the project, Mr Broad. So 2025: final commissioning?

**Mr Broad:** Yes.

**Senator McALLISTER:** At the beginning or end of 2025?

**Mr Broad:** Again, you don't want to be held up to that. This is complex machinery, so let's not be picky on dates. Pick a date: the middle of 2025? It just depends on commissioning. It is a complex machinery. The size of the head on these things is right up there. We are breaking new ground in every part of this project. I don't want to be misleading to anybody or overpromise. Let's pick a date: middle of 2025.

**Senator McALLISTER:** Mid-2025. So it's a four-year project that was announced in 2017 and it's now going to finish in mid-2025.

**Mr Broad:** No. I go back. We talked about feasibility; we talked about doing a feasibility study. When we did the feasibility study in December, we talked about a five-year project, because of the nature of the rock, the geology. We had started boring et cetera. As you go through feasibility, as you do all the hard work that has to be done, you then refine the dates and times and costing.

**Senator McALLISTER:** Yes—sure. I will say that there were plenty of people in the public domain saying that this was a more complex project than the government seemed to imagine when they first started talking about it. It does seem that it's going to be a little more complex to deliver than then Prime Minister Turnbull suggested.

**Senator Birmingham:** I think the government has taken a cautious and judicious approach, going through a feasibility study first and foremost before getting to the point of making and supporting the investment decisions of the Snowy Hydro board. If you actually look at what the former Prime Minister said, rather than the way you have presented it, it was at the time indicated it would take at least four years.

**Senator McALLISTER:** At least four years. Well it certainly it going to take at least four years. The original budget was \$2 billion—that's correct?

**Mr Broad:** We didn't have a budget; we had a preliminary estimate. Again, if you go back, the original design of the scheme was in 1960, by Sir William Hudson, who build the first scheme. The ideas for this whole concept have been around for an awful long time. There was work done in the 1990s. We came up with indicative numbers. The first preliminary estimates weren't formalised until the feasibility study was done in December of that year. The indicative numbers were put out at that first time. Yes, we got them wrong. That's my responsibility and I take total ownership of that.

**Senator McALLISTER:** So now it's \$3.8 billion—is that correct?

**Mr Broad:** No, the civil work is \$3.8 billion, but you've got to add in the electromechanical work. The total cost is \$3.8 billion to \$4.5 billion in 2017 dollars. When you sign contracts, you've got to then roll those dollars into dollars of the day. That's all part of the process we've been implementing in the last few months.

**Senator McALLISTER:** So the nominal value may be higher again?

**Mr Broad:** The contractors put in a cost escalation of \$450 million—the cost to get it from 2017 to 2025. We like the fact they put in a fixed cost number in there rather than an escalated one, which is always up to debate and argy-bargy over time. The cost escalator over the period is less than the cost escalator applied in the Sydney basin for civil construction work. We're happy with that. We also have to be mindful of the fact the EIS will throw up a cost to us. The EIS process, by its nature, will require adjustments in how we build it to meet the EIS requirements. We need allow for that, so we've got to build in contingencies for that. The final number will be higher than that in dollar-of-the-day terms. We don't know what the EIS will determine, particularly on spoil, and we need to factor all of that in over the next six to nine months.

**Senator McALLISTER:** The contingencies that you're anticipating arising—the contingency fund is presumably broader than the potential for issues to arise in the EIS. What are you budgeting as a contingency?

**Mr Broad:** \$400 million.

**Senator McALLISTER:** Is that in addition to the \$4.5 billion?

**Mr Broad:** Yes.

**Senator McALLISTER:** So it's \$4.5 billion with a contingency of \$400 million to deal with potential issues arising from the EIS.

**Mr Broad:** Hopefully we won't use any of it, but if we do, we have to make sure we finance it. That rolls into a package about how we pay for it. Can we pay for it with all the contingencies and other things rolled in? Does the return of 8.1 per cent still hold? Does our rating as a business still hold? Can we pay it off our balance sheet? I can assure you we can.

**Senator McALLISTER:** So you're confident, just on those metrics, that even if you're required to absorb up to \$400 million in contingency—that will take the overall project to \$4.9 billion as the maximum—that's still a rate of return that is acceptable from a business perspective?

**Mr Broad:** Very much so. Not only us but the banks who want to lend us money. It's very much acceptable. We're getting knocked over in the rush.

**Senator McALLISTER:** On that question about financing, I note the government has said it will provide \$1.4 billion to Snowy Hydro for the project. Is that correct?

**Mr Broad:** Sorry, just to be clear, the government has put an equity injection of \$1.38 billion, and the company will maintain its dividends of \$250 million and maintain its taxes it pays the government of \$200-odd million. We pay to the government in excess of \$400 million, and that will not change. We are a payer to government overall, not a receiver.

**Senator McALLISTER:** Notwithstanding that, you're saying that you're being knocked over in the rush by the banks to provide finance but government is providing an equity injection of \$1.38 billion. Did you ask government for that money?



**Mr Broad:** No. It was a decision by our shareholders. We put options to the shareholders. Ultimately, the structure of that is in the hands of our shareholders.

**Senator McALLISTER:** When you say you had options, was there an option that didn't involve an equity injection this scale?

**Mr Broad:** Yes.

**Senator McALLISTER:** So it's not necessary for the project to proceed?

**Mr Broad:** We can fund it off our own balance sheet. Shareholders look at our balance sheet and say, 'As shareholders we think that's too much leverage. We would rather approach it a different way,' and equity was injected. We are indifferent. In fact, to the banks and others it looks far more secure when you get equity of that nature. As you appreciate, the equity itself gives a sense of confidence from the shareholders, which helps us in a sense of how we approach banks.

**Senator McALLISTER:** Has it been paid?

**Mr Broad:** It's been committed, not paid. It's paid in sums over a period of time. It gets paid in exact amounts, I think, in the order of a couple of hundred million. I will come back to you on exact amounts. It is a staged amount over a two or three-year period. It doesn't start until the EIS has been determined and all those bits. When the EIS is determined and the dollars all flow in it starts from that point, which, as I said, will be about January next year.

**Senator McALLISTER:** The finance minister has said that this capital injection is needed to make this project happen. Is \$1.4 billion from government needed to make this project happen?

**Mr Broad:** As I said, we have work we'll do on our balance sheet. From a shareholder's perspective, which I respect enormously having run private businesses with private equities being involved, the government approached us as the sole shareholders. They look at it and say that's what makes them comfortable. If that's what makes them comfortable I'm very happy.

**Senator McALLISTER:** That's not my question though. Is it needed to make this project happen?

**Mr Broad:** No.

**Senator McALLISTER:** So Minister Cormann is wrong?

**Mr Broad:** I'm not saying that Minister Cormann is wrong. Minister Cormann makes his decision based on shareholders. As I said, I've had lots of them. An 8.1 per cent return investment is a very good investment.

**Senator McALLISTER:** I'm not asking whether or not the equity injection is a good idea; I'm asking whether or not the finance minister's public statement was accurate?

**Senator Birmingham:** From the government's perspective, in making the final investment decision in relation to approving the recommendation from the board of Snowy Hydro, the government believes that that was a necessary aspect of that to provide the best possible outcome for the government, taxpayers and Snowy Hydro.

**Senator McALLISTER:** Does this money increase government debt?

**Senator Birmingham:** Obviously, in terms of the government's net position Snowy Hydro is an asset on our books.

**Senator McALLISTER:** Yes. But does it increase government debt?

**Senator Birmingham:** In terms of the government's net position Snowy Hydro is an asset on our books. In terms of gross factors, the ins and outs of budget balances of course are the factor that drives overall government debt, and by the time these payments are made government debt will be coming down thanks to the surplus budgets our government is delivering.

**Senator McALLISTER:** I will take that as a yes. Presumably, Mr Broad, Snowy will incur debt to finance the project in addition to the equity?

**Mr Broad:** Yes.

**Senator McCARTHY:** But the equity means that Snowy's debt will be smaller?

**Mr Broad:** No, not necessarily. If we'd use our retained earnings rather than pay dividends—it depends on how much retained earnings we'd apply. In its most simple form, again this is a simplistic version of it, with the injection of equity and with retained earnings we'll probably generate \$2 billion in our own money. Then we'll borrow the balance, that's \$3 billion or thereabouts.

**Senator McALLISTER:** So \$3 billion debt on Snowy's books and then presumably additional debt on the government balance sheet to allow for the equity injection?

**Mr Broad:** Yes, and then the asset value. The government pays six for us. Our latest valuation of the company looks like we're worth about 10. We believe that an eight per cent return on IR rail will be accretive to our shareholders, so the enhanced value of our assets and, hence, the government's assets on the balance sheet will be significantly greater than whatever debt they may or may not incur.

**Mr Heferen:** Just to be clear, the budget papers make it clear that there's no extra Commonwealth debt as a result of the \$1.38 billion equity injection, so at an aggregate of level debt doesn't increase. But, following your line of questioning, I think the intricacies of how that's actually accounted for, thinking about the net assets and liabilities of the Commonwealth, is probably an issue best put to the other shareholder department—the Department of Finance, who are expert in that. We look at the energy market side, whereas they're from the financing side. The important thing in the budget is that it's clear that the \$1.38 billion equity injection from the Commonwealth has no direct implication for Commonwealth debt.

**Senator McALLISTER:** Perhaps this is one for you, Minister Birmingham. This just seems an unusual way to proceed. You have the entity saying that they don't need the equity injection. What it looks like is that the finance minister talking a big game and saying that this is necessary for the project to proceed when, in fact, it isn't. Isn't it just a political stunt?

**Senator Birmingham:** No, Senator. I can assure you that the government doesn't choose to—

**Senator McALLISTER:** Don't tell me you don't do political stunts, because that just won't be credible in this week.

**Senator Birmingham:** No—the government doesn't choose to make investments of that scale unnecessarily. In the end, that was a judgement that the government, across the shareholder departments, had to make. Mr Heferen is correct that, in terms of the financial aspects, the Department of Finance and Senator Cormann will be appearing elsewhere this week and perhaps would be best placed to unpack some of those options that were considered and why this pathway was chosen. As Mr Broad has correctly indicated, there is always a judgement as to the extent, as the owners of an asset, you want them to leverage their balance sheet and how far you think that is an appropriate point of leverage. Mr Broad has effectively said, 'Yes, the project could have proceeded with potentially further borrowings or a different configuration in relation to the way it has been structured.' The government's view is that this equity injection was the best way to balance risks for all parties and achieve the optimal outcome.

**Senator McALLISTER:** I'll leave it there, Chair.

**CHAIR:** Thank you, Senator McAllister. Senator Storer.

**Senator STORER:** Mr Broad, we may have covered some of this already, and I'd appreciate it if you could re-clarify it for me. How much will the Snowy 2.0 project cost, including transmission?

**Mr Broad:** Transmission is a separate exercise. Transmission is available to everybody. I'll highlight why I think that's so important. We had blackouts in Melbourne last summer. We had so much power in Snowy that we couldn't get to Melbourne, so people in Melbourne—

**Mr Whitby:** It was 2,200 megawatts.

**Mr Broad:** So 2,200 megawatts were sitting idle in Snowy because we couldn't get it to Melbourne.

**Senator Birmingham:** Current Snowy—

**Mr Broad:** Yes, current Snowy. This is not 2.0. My point is that the current transmission is inadequate to meet today's demand. It needs significant upgrade. It has served us well since the 1940s and 1950s. It needs significant upgrade. Interconnection between the states needs significant upgrade. Transmission is a common good—it's like a highway—and it needs to be upgraded as demand changes. The consequence of not doing so is what we saw in Melbourne, which I think is a tragedy for those consumers and businesses that had to suffer blackouts. That is wrong. We've argued from day one that you can't integrate and change the whole economics that sits behind how generation of the future is going to occur without changing the transmission. The transmission needs to be upgraded. We would argue that the plans that are out there from AEMO now suit the purpose. We argue, though, that the timing needs to be brought forward.

**Senator STORER:** So do you have an understanding of the cost of those requirements?

**Mr Broad:** No, they're matters for AEMO and the transmission companies to determine.

**Senator STORER:** So, when you define Snowy 2.0 costs, you would be looking at excluding transmission?

**Mr Broad:** Yes.

**Senator STORER:** And that's the discussion we've just had.

**Mr Broad:** We should just be clear. We do have a link, so we've got to pay for our bit of the transmission to hook up to the transmission network. That's ours. That's in the costs.

**Senator STORER:** So that's included in your costings that you've discussed?

**Mr Broad:** Yes.

**Senator STORER:** If I follow the line of questioning just before, you were talking about a total, with civil works engineering, of \$3.8 billion to \$4.5 billion but then also contingency.

**Mr Broad:** Contingency costs. They're in real dollars, 2017 dollars. This will be completed in 2025. You've got environmental costs from the EIS to come in, so there are added costs that will occur, and we've budgeted for those within the wider package we put in place. When we go to banks and financiers, they say: 'Well, what risks have you got involved here? How is EIS going to be determined? How is it costed?' So we wrap that into a fundable package that we put to our shareholders and to the banks to make sure everyone clearly understands how we see it, and that's what gets funded.

**Senator STORER:** So that's the costing that you've laid out, and it includes transmission—your part of the transmission, as you describe it. Does the figure for the total cost of connecting Snowy 2.0 include the cost of connecting Snowy 2.0 to new wind power resources in the region?

**Mr Broad:** No.

**Senator STORER:** No, it does not.

**Senator Birmingham:** Snowy 2.0 is a generation asset.

**Senator STORER:** Yes.

**Senator Birmingham:** You wouldn't normally connect a generation asset to other generation assets. That's what the transmission network is for. Those wind assets would connect themselves into the transmission network.

**Senator STORER:** Yes. There's an argument that other resources are needed to provide Snowy 2.0 with the ability to generate.

**Senator Birmingham:** The point of pumped hydro in that sense is that, with the current and anticipated growth in renewable energy generation, there are already and will be in the future points of excess generation, and pumped hydro allows for utilisation of that excess generation, at times when the cost is low, to pump water up the hill so that then, when there is a deficit of generation and prices are high, you can release the water down the hill and, of course, create that generation. So in that sense, yes, you need to have wind or other renewable assets—low-cost generation that is occurring at surplus at times—for the pumped hydro model to work, but there's already that surplus in many cases at times. Projections are that that will increase in the future. All of those projects, yes, have to come into the grid. There are others who can speak to transmission infrastructure better than I, but obviously there is, yes, energy into Snowy for them to be able to run their operations, and then energy out for households and businesses across the NEM.

**Senator STORER:** Has the Snowy 2.0 project, as you understand it, Mr Broad, costed the requirements of those energy inputs?

**Mr Broad:** No.

**Senator STORER:** It's not included in the cost?

**Mr Broad:** No.

**Mr Heferen:** Snowy 2.0 is the extra store of energy, as the minister said. When that's needed, the market operator will tell Snowy, and it's all done digitally. The signal will go for that to be released to connect to the grid, to enable the renewable energy that may be intermittent. It may be a time when the wind is not blowing, and therefore something is needed to make sure a blackout doesn't occur or the security of the system is not harmed. So, in that sense, each generator is usually responsible for its own connection into the transmission system, as wind farms would be. Then, once it's connected, the benefits or otherwise—so the money that then flows to Snowy to repay them for the energy they've dispatched—will occur. So there's no transaction or connection needed between a wind farm and Snowy 2.0. That's the purpose of the transmission line, to connect all of that up.

**Senator Birmingham:** In terms of the cost of such other generation, obviously, the business case for Snowy considers the cost of operating Snowy in the long term. That includes the cost of purchasing that energy required for the operation of Snowy, relative to the cost of selling the energy that Snowy generates back into the grid. In that sense, yes, the costs are considered as part of the overall business case of Snowy, of those recurrent costs of operating the system and the energy it requires.

**Senator STORER:** Has the Snowy Hydro been advocating for Snowy 2.0 to be exempt from the Regulatory Investment Test for Transmission, the RIT-T?

**Mr Broad:** No. We debated a RIT-T as a regulatory test mechanism. I think at the previous Senate estimates inquiry they asked us this same question. I think it's some misunderstanding of what our position is. We think the RIT-T process was designed for days when you look at small incremental changes in transmission. What we argued is, you've got to step back and say, 'Will transmission deliver up the transmission network you need for tomorrow?' So for the blackouts in Victoria, the RIT-T, in a sense, doesn't take that in. It looks at small incremental change, where you've got to step back and make a fundamental change.

Our argument has always been that it needs a body like AEMO or the AER, and those regulatory bodies, independently asked of other players, to sit back and determine that, and then put a process in place to ensure that is the least cost method by which that can be delivered—to make sure the cost on consumers is minimal. That's what we argued. When we put our submissions in, on the RIT-T, they often get quoted by those who, for whatever reason, want to make mischief for us, as we're opposing the RIT-T. We oppose the process that sits behind it.

**Senator STORER:** Have you been advocating for it to be exempt from it?

**Mr Broad:** No. That's just not true. What we advocated for is a different system.

**Senator STORER:** I have some questions for the minister, if I may. I've been pushing for transparency reform and I'd like to ask some quick questions regarding this. Minister, in your capacity, do you regularly meet with lobbyists?

**Senator Birmingham:** In my substantive capacity as Minister for Trade, Tourism, and Investment?

**Senator STORER:** Yes.

**Senator Birmingham:** I wouldn't say regularly but no doubt on occasion, yes.

**Senator STORER:** How would you define a lobbyist, in your—

**Senator Birmingham:** There's a legal definition that relates to the code of practice. In that case, lobbyists are those who are specifically engaged, in an external way, by an organisation to represent on their behalf. I refer you to the act for that definition. You could, in a broader sense, of course, acknowledge that virtually anybody who walks through my office door for a meeting, outside of the officials who advise me, are engaged in lobbying activities on behalf of the organisation they represent, whether it's a commercial or not-for-profit organisation. Industry associations are not themselves captured by the Lobbying Code of Conduct, but they obviously lobby on behalf of their members. And government relations employees of various organisations are not themselves captured by the Lobbying Code of Conduct or relevant legislation. But, again, they're lobbying on behalf of their entities as well.

**Senator STORER:** Yes, that's right. Would you define someone from an organisation's government relations team as a lobbyist?

**Senator Birmingham:** I think I just touched on that. My office has the practices in place, I believe, to manage engagement with lobbyists, as required, under the legal structures. If those in government relations roles solely employed by an organisation are not captured and there's a fair rationalisation for that—the point of the lobbyists code is to ensure there's transparency in whom somebody is advocating on behalf of. With a general lobbying firm with multiple clients, it's a requirement for them to disclose who their clients are and who they're seeking to meet with you on behalf of. That's so that it's transparent as to who they're advocating for. Clearly, when a not-for-profit or a business organisation's government relations person walks in the door as being from that not-for-profit or business, you know fully who they're advocating for, because that's who they're directly employed by.

**Senator STORER:** As a transparency measure, the New South Wales and Queensland state governments publish ministers' diaries on a regular basis. In the Economics Committee last week, Minister Cormann agreed to provide me with a list of lobbyists, both in-house and third-party, he has met with since the start of the year. Are you happy to provide me with the same information—a list of lobbyists, both in-house and third-party, that you have met with since the start of this year?

**Senator Birmingham:** I'll take it on notice and reflect on it, I think. For starters, I don't generally as trade minister take on notice in the Senate estimates environment committee questions that relate to the trade portfolio. I'm here to handle questions for other ministers.

**Senator STORER:** I will come to that.

**Senator Birmingham:** If you're asking me in terms of the portfolios that are before the table, I clearly take that on notice for those ministers, and that would be a matter for them as to what is appropriate out of their diaries to publish. The same answer really applies to me as to whether certain matters may have sensitivities attached to them that may be less appropriate to publish than others. But I'm happy to take it on notice for those ministers and, in a roundabout way, do so for my own portfolio too even though it's not the one under examination today.

**Senator STORER:** Thank you. I just wanted to clarify that. I take it that you as Minister for Trade, Tourism and Investment, are happy to take that on notice to provide me with the list of lobbyists, both in-house and third-party, you've met with since the start of the year.

**Senator Birmingham:** For the formality of things, I can't from the Foreign Affairs and Trade portfolio provide a portfolio response to this estimates committee. So, although it's a little bureaucratic, I encourage you to place that on notice to the Foreign Affairs and Trade portfolio in the relevant estimates committee. I can in this committee take it on notice in relation to the Environment and Energy portfolios.

**Senator STORER:** Yes, that was my point. Can you provide the same information from Minister Price and Minister Taylor?

**Senator Birmingham:** I can take those on notice.

**Senator STORER:** Thank you.

**CHAIR:** I know Senator McAllister has more questions for Snowy Hydro. We'll break now.

**Proceedings suspended from 10:33 to 10:48**

**CHAIR:** We'll kick back off if we can. Secretary, did you have something you'd like to contribute?

**Mr Pratt:** On behalf of Dr Johnson—he wanted me to correct a number he quoted to the committee—staffing numbers for the Robust program are essentially 145 contractors, as Dr Johnson mentioned, and 27 APS, not 25, as stated by Dr Johnson.

**CHAIR:** Thank you very much.

**Mr Pratt:** You're welcome.

**Senator McALLISTER:** I really wanted to pick up where Senator Storer left off in relation to transmission costs. I understand a narrow subset of the transmission cost, the linking part, would be included as part of the project cost that we discussed earlier. I'm interested in the provisioning, from an economic perspective, around the other transmission investment that isn't included in project cost. Is it correct that there's no specific financial support for that transmission investment?

**Mr Broad:** That's right.

**Senator McALLISTER:** So it will be funded through the ordinary cost recovery process, whether that's by a regulated investment test or some other means?

**Mr Broad:** Yes.

**Senator McALLISTER:** Do you have an answer on the 'some other means' proposition yet?

**Mr Broad:** It's not easy. As I said, these things were developed in their time and they worked really well. The mindset was that with the regulated assets, given there was probably a propensity to overinvest in gold plate, there was an argument to pull that back. I think the RIT-T test serves its purpose, and serves its purpose well. I noticed in Rod Sims's report last year that he's still in favour of the RIT-T test as that discipline on capital spends. He's still quite worried about that. Our view has been that you get a lot of that by making sure, once you decide what needs to be built, you get market testing on building it. We're having very

proactive discussions with both the transmission people in New South Wales and separate ones in Victoria. We're seeing whether we can create a bit of competition in some way on the ground in their delivery and delivery mechanisms. A lot of cost goes into the actual route picked, how they get land—all those things that go into the process. Can we get competition in there to ensure that consumers are not left with a big bill? How do you make that happen? That's what we're turning our minds to more and more.

**Senator McALLISTER:** Okay. So it's about—

**Mr Heferen:** Excuse me, Senator. Perhaps I could assist. With a transmission line, the regulatory investment test for transmission, the RIT-T, is needed only when the owner wants to have a regulated return. It's always open for the owner to build it and make it a merchant link. Basslink was an example where the transmission line was built and it was a merchant link, and they entered into an arrangement with Snowy Hydro to deal with the risk. The other one is that the taxpayer builds it, or the government builds it. The original transmission system in Australia was largely built by government. When it goes to the question of the RIT-T being the only way for it to occur, there are still those three ways: it could be a regulated asset, it could be a merchant asset or it could be built by governments.

**Senator McALLISTER:** Okay, but government are not provisioning at this point in time for the construction of the relevant transmission line?

**Mr Heferen:** That's correct.

**Senator McALLISTER:** Do we anticipate that they might? Is that on the table?

**Mr Heferen:** Not that I'm aware of.

**Senator McALLISTER:** So we're back to merchant link or RIT-T or—

**Mr Broad:** Senator, can I throw you a curve ball? I know it's not a day for curve balls but I'll do it just for completeness, so there are no surprises. On the southern link, from Snowy down south, the ISP now has that in 2030-odd—2032, I think—which we think is way too long. So we are investigating investing with the relevant transmission company in Victoria for, effectively, our connection point being not just outside the Snowy region but at the boundary of Melbourne, because we think that we need to have that southern link much, much sooner than what's proposed. So we're introducing an element of competition to the regulator to think differently on their timing.

The way that would work in its simplest form—I like to keep things very simple—is that we would enter into an arrangement with the transmission company to build it. We would pay that transmission company an annuity stream, which would underpin their investment. We would have unfettered access to Melbourne and Victoria, through that line, from our existing Snowy and from Snowy 2.0 and we would allow others to have access to that line.

The point, as I think Senator Storer was saying before, is that, while it's not directly linked to hooking up the renewables, it would go past lots of renewables points in that southern link, which would make them economic. As you know, renewables don't get economic if their loss factors get too high and they're built out west. It changes the economic profile for them.

So we're actively looking at that now. I didn't want to mislead you, because if something comes into the public domain they'll say, 'They didn't say that in estimates.' We are actively looking at that as an option for us. It hasn't been to my board and it hasn't been to my



shareholding ministers, but I wanted to put on the public record that we are deadly serious about it.

The advantage for the consumers of Victoria, as you saw recently, is so transparently obvious that to hold for 2032 does not stack up. The Victorian government, as you know, has built underpinnings—a whole bunch of renewables—up in the north-west of Victoria that can only be delivered if you have back-up storage capacity to deliver it. We think a *prima facie* case for that type of argument to be put is here today and we are going to have it.

**Senator McALLISTER:** In terms of the commercial arrangements for that, I understand that it's probably—I don't imagine that they are finalised, but, in this schema, as you imagine it, it's a kind of hybrid between a merchant link and a consumer funded arrangement?

**Mr Broad:** Yes.

**Senator McALLISTER:** So, practically, from your components then built into the operational costs of Snowy overall. That is how you would see it?

**Mr Broad:** Yes, that's roughly—

**Senator McALLISTER:** Recovered from consumers through the generation price?

**Mr Broad:** We have to deliver it to market. So we would pay the network provider an annuity stream. We still have to compete in that market. So, whether or not that comes to a part of our costs, we have a belief—and obviously it would come back off our margin—so we would wear most of those costs internally because you've still got to compete in the market. It is a market operated system. We are just doing the economics. If the thing doesn't get built until 2033, which is silly—so the discounted cash-flow benefits of getting it earlier as opposed to getting it later do make this look very attractive to us.

**Senator McALLISTER:** What is the time frame for decision-making around this, from your perspective, from a business perspective?

**Mr Broad:** You have to work back from 25 to when you want it delivered to market. We think that the decisions on transmission have got to be sorted by the end of this year. We've got to get the plans at least agreed—time frames agreed—by December this year.

**Senator McALLISTER:** So that particular commercial model needs to be nailed down by the end of this year?

**Mr Broad:** Yes. And, again, I'm in front of my board and shareholders. I'm not trying to say yes. I'm just putting it on the record so that everyone is open and transparent—to understand what our thinking is.

**Senator McALLISTER:** So that's one option. The other option would just be a standard cost-recovery process, where the transmission provider builds the infrastructure and then the consumers of New South Wales and Victoria pay for that through the RIT-T process?

**Mr Broad:** Yes. That's right. Sorry, just to clear, there is the Riverlink one into South Australia. A suite of those things would have to be—which is on the table now.

**Senator McALLISTER:** Right. Okay. Are you in a position to say under that second scenario what proportion of the costs would be borne by New South Wales consumers and what proportion by Victorian consumers?

**Mr Broad:** No. I can't speak to that.

**Senator McALLISTER:** Thanks.

**CHAIR:** Senator Spender.

**Senator SPENDER:** Is Snowy privatisation ready? I know that is not government policy, but can you talk about your structure and any impediments to being arranged in that way?

**Senator Birmingham:** I can confirm that is not government policy. Mr Broad?

**Mr Broad:** We are not up for sale. Let me be very clear. But we operate in a competitive market. The government has a thing called commercial neutrality. It treats us no differently to any other business. As you would appreciate, we are competing against investors in private entities, so we've got to be seen to be neutral in the way we go about our business—and we are and have always been owned by government. So we face exactly the same commercial pressures, the same drivers, as any other business operating in our marketplace.

**Senator SPENDER:** So you are not relying on any future equity injections from government?

**Mr Broad:** No.

**Senator SPENDER:** You don't have any better information flows than any other business at the same stage of supply?

**Mr Broad:** No.

**Senator SPENDER:** So it sounds like you are privatisation ready.

**Senator Birmingham:** It can be the policy of the Liberal Democrats, as I'm sure it already is.

**Senator SPENDER:** It already is. Yes.

**Senator Birmingham:** It is not the government's policy.

**Senator SPENDER:** Could you please elaborate why not?

**Senator Birmingham:** The government believes that Snowy Hydro plays an important and strategic role, particularly a strategic role at present, in relation to transformation of the energy markets. We also acknowledge that there are certain community sensitivities in relation to the location of Snowy Hydro, the resource upon which it draws and that, given those community sensitivities, the social licence attached to Snowy Hydro is best held in government hands.

**Senator SPENDER:** So, if it were in private hands, those community concerns couldn't be reflected. Are you suggesting that private sector energy generators aren't subject to community concerns in their planning decisions?

**Senator Birmingham:** Of course they are. You're asking a hypothetical about if a different structure were in place. I was just outlining the rationale that I think underpins the decision of consecutive governments to maintain Snowy Hydro in public ownership.

**Senator SPENDER:** So your government's default is not to privatise a government business?

**Senator Birmingham:** Our government's default is to stand by our policy position in relation to Snowy Hydro 2.0. We, of course, went through a process of consolidating the shares in Snowy Hydro into federal government ownership. We were express and clear at that

stage about our commitment to maintain it in public ownership and also, importantly, to facilitate Snowy 2.0 proceeding in the smoothest possible way.

**Senator SPENDER:** Just a happy by-product of you consolidating ownership in the one government is that it could potentially be more readily privatised in the future.

**CHAIR:** Thank you, Senator Spender. I think that concludes us for Snowy Hydro. We'll now move to the Clean Energy Finance Corporation.

### **Clean Energy Finance Corporation**

[11:02]

**CHAIR:** Welcome back, Mr Learmonth and Mr Powell. Thanks for joining us. Do you have an opening statement you would like to make?

**Mr Learmonth:** No opening statement.

**CHAIR:** Excellent. We'll go to questions and Senator Rice will kick off.

**Senator RICE:** Good morning, Mr Learmonth and Mr Powell. Good to see you here. I want to start out by setting the scene, confirming the main role of the CEFC is to mainstream and de-risk clean technologies which are pretty much at a commercial stage of development. Is that the case?

**Mr Learmonth:** You'd like me to offer comment on that?

**Senator RICE:** Yes.

**Mr Learmonth:** The CEFC's objective under the act is to facilitate the flows of capital into the clean energy sector. So it is more broad than just renewables. We also invest in energy efficiency and low emissions technologies. But, yes, we play a role and we fill in gaps where the market is failing. We help develop technologies and innovation in this area, and crowd-in private investment to ultimately help the de-carbonisation of the Australian economy.

**Senator RICE:** On your investments, you're filling in the gaps, but you still have to get a commercial rate of return.

**Mr Learmonth:** We do. We're mandated with the ability to invest in both debt and equity in projects and companies. There's an expectation that we would make an appropriate return, based on the risks that we're taking. So, yes, we are making returns. Today the portfolio has a portfolio benchmark return of approximately 4.7 per cent.

**Senator RICE:** What I've been told is that essentially it's a return of about three to four per cent above the government bond rate? Is that accurate?

**Mr Learmonth:** That's the targeted return. We had an investment mandate previously that suggested we seek a return of three to four per cent above the five-year government bond rate. At the moment, we're tracking a bit below that, so 4.7 per cent is probably about one per cent below that range. But we think the return we're making is an adequate reflection of the risks that we're taking across the portfolio.

**Senator RICE:** The government bond rate at the moment is about 1.9, I think. They told me somewhere at estimates last week.

**Mr Powell:** At the end of the March, it was down as low as 1.4.

**Senator RICE:** Okay. So you're still tracking it at two per cent above the government bond rate.

**Mr Learmonth:** That's right.

**Senator RICE:** How much can you invest that doesn't require you to meet this benchmark rate of return?

**Mr Learmonth:** It just depends on what we're investing in. We have a very broad-ranging portfolio. There's everything from senior secured long dated debt into the renewable energy sector—for example, wind and solar projects—and then you might only get two per cent above the five-year government bond rate, very approximately, right through to investments that we might make into higher risk companies and fledgling technology companies in the clean energy sector where we might expect to make a much higher return. It just depends on the sort of investment that we're making. That 4.7 per cent is really an aggregation of all those different investments brought together.

**Senator RICE:** If there were things that were substantially below that return, in order to maintain that aggregate rate you wouldn't be able to invest too much in things that weren't delivering a commercial rate of return. Do you have any metrics as to, in dollar terms, how much you could invest in things that aren't expected to have that rate of return?

**Mr Learmonth:** Once again, the only metrics that we have is that we're required to have 50 per cent of our portfolio invested in renewable energy. We look at each deal as it's presented and assess the risks and what might be the right interest rate or expected equity return from investing in that company or that project. At the moment, if you look at our portfolio, we've got about \$5.6 billion at risk and about \$4 billion is out the door, deployed into the various transactions that we've made. Something like 85 per cent of the portfolio is debt—loans out to various companies. So, by definition, that will have a lower interest rate, a lower return metric compared to the equity investments that we're making, which could return us eight, 12 or 15 per cent. It really reflects the nature of our portfolio.

**Senator RICE:** What sort of return are you expecting on that 85 per cent that's loans?

**Mr Learmonth:** On the debt side of the portfolio?

**Mr Powell:** It's approximately 4.2 per cent.

**Senator RICE:** I want to move on to hydrogen—in particular, a lot of exciting developments in the hydrogen field. There's been quite a bit of media coverage over the weekend. At the moment, in terms of the landscape, what work are you doing in looking at opportunities in renewable hydrogen that could deliver the rate of return that you need?

**Mr Learmonth:** It's a very early stage and early days in the Australian hydrogen market in the sense of investable opportunities. For us, we would only be able to invest in hydrogen where it was classified as a renewable energy technology. The electrolysis would have to take place using renewables. Because of that, we haven't seen any transactions coming our way—any complying transactions. We are researching that market. We've been in touch with and we've had presentations from the Chief Scientist, but to date there haven't been any investable opportunities presented to us.

**Senator RICE:** What you're saying is that converting clean energy into hydrogen is still at its early development stage—

**Mr Learmonth:** It's in a nascent stage. There's no question.

**Senator RICE:** and not at the commercial stage that you're able to invest in.

**Mr Learmonth:** Not that we've seen at this point.

**Senator RICE:** The policy of the Labor Party is to have a billion dollars credited to your debt facility to advance Australia's hydrogen industry. If that's the case, what could you do, practically, with that billion dollars and maintain the returns that you're required to maintain?

**Mr Learmonth:** We won't really speculate on party policy. What I would say is that we can invest both debt and equity. We're not just a debt fund.

**Senator RICE:** But the equity would have to be even more commercial than the debt—

**Mr Learmonth:** Not necessarily. I guess if there are hydrogen projects that are at an early stage that may not support a debt facility it may be incumbent upon us to put equity into that particular project. We can only speculate as to future policies and government. But, to repeat, there is a lot of interest in the hydrogen market and we're staying very close to its development. But we haven't seen any of the projects to date. You look at big markets like Japan and South Korea and you hear Alan Finkel talk about the prospect of Australia potentially addressing those markets, so, down the track, we're optimistic about what could be done. But I wouldn't want to comment specifically on the ALP policy.

**Senator RICE:** Has the ALP had discussions with you about the proposed investment of \$1 billion in the CEFC for renewable hydrogen?

**Mr Learmonth:** No specific conversations about that particular policy.

**Senator RICE:** Given the current stage of hydrogen commercialisation, and looking at the roles of the CEFC versus ARENA, would you feel that that sort of money would be better placed with ARENA rather than the CEFC?

**Mr Learmonth:** We can only speculate. In early stage markets—and we've even seen this in the renewable energy markets, even as recently as a few years ago—ARENA's grant-making capability can be a very powerful tool. It's on the record that they already made an investment, I think to Toyota, as recently as last week to develop some hydrogen. Grant funding is very helpful for early stage fledgling markets like hydrogen, so I'm sure that ARENA could well play a role there. But we can only speculate.

**Senator RICE:** Given that ARENA has that grant capability, would you say that would be more appropriate for the current stage of hydrogen, rather than the CEFC investment, where you've got to get that commercial return on the investment?

**Mr Learmonth:** It really depends on the project. We are speculating. Grant funding is helpful for early-stage unproven technologies. We would all collectively agree that hydrogen is at an early stage, but there may well be an ambitious big project with significant sponsors that could attract our sort of capital. We will just have to wait and see what happens.

**Senator RICE:** But at this stage if we had a Labor government that said 'Here is a billion dollars, CEFC, for your debt facility, to invest on hydrogen projects,' those projects are not there on the horizon ready to give you that commercial rate of return?

**Senator Birmingham:** In fairness to Mr Learmonth, separate the question and you can find in his answers already that he is not going to comment on any particular party political policy, but—

**Senator RICE:** In the hypothetical situation of a new government—

**Senator Birmingham:** But he has been quite clear that there are not commercially ready and viable hydrogen projects that have been presented to CEFC to date, and I'm not aware of any that are about to be.

**Mr Learmonth:** That's right, and thanks, Senator. That is the case.

**Senator RICE:** Can I move onto any role that the CEFC has had with the SolarReserve solar thermal power plant in Port Augusta, and whether you received any application for funding for that?

**Mr Learmonth:** I haven't received an application for funding. We have been in ongoing discussions with the principals of that project and with ARENA and others who have been involved around the Aurora project—the South Australia concentrated solar thermal plant—for some time. But we've not had an application for finance from the sponsors, so we haven't been in active negotiations or conversations for some time.

**Senator RICE:** Has there have been any engagement with SolarReserve?

**Mr Learmonth:** There has, yes. Maybe some of the members of my team might have seen them more recently. I met members of SolarReserve over 12 months ago when the project was still at an early stage—still being negotiated. But they haven't applied to us for financing and the negotiations or conversations haven't really been active for some time.

**Senator RICE:** I understand \$110 million was promised by government for solar thermal developments? Is that the case, Minister?

**Senator Birmingham:** \$110 million was made available in the contingency reserve for the concentrating solar thermal plant in Port Augusta.

**Senator RICE:** Has there have been any engagement with the CEFC through that \$110 million?

**Ms Evans:** When the \$110 million commitment was made, the government asked both the CEFC and ARENA to provide them with advice on how they might go about looking at that investment, and both the CEFC and ARENA provided that advice and it led to the provision of a level of comfort to SolarReserve at the time that that money would be available once they had fulfilled a number of criteria.

**Senator RICE:** What's the current situation? If the CEFC hadn't had much engagement, it may be more appropriately directed to another part of the program.

**Ms Evans:** We've been handling that in collaboration with the Department of Finance and a number of other places, still engaging with ARENA and the CEFC but the lead has really been sitting with the department. I don't know if you want to come back to that at outcome 2, at 7 o'clock tonight.

**Senator Birmingham:** I guess at a headline level, Senator Rice, our commitment hasn't varied. The \$110 million commitment and availability has been there for some time now and remains in place. Notwithstanding that financing avenue from the federal government and the existence of the offtake agreement with the South Australian government, the project proponents last week made their announcement that they were unable to stand up the rest of the financing for the project, notwithstanding those significant areas of government support. My understanding is that South Australian government have indicated that they will be going

back into the market to seek proposals for alternative projects in SA and that that could include, if SolarReserve were inclined to do so, transferal of the IP and even the assets related to this proposal to alternative project proponents. If we were looking at a similar project, then obviously \$110 million is still there and, subject to all the reasonable conditions, I don't see any reason why it couldn't proceed.

**Senator RICE:** Mr Learmonth, in terms of the CEFC, would you see that there would be potential involvement in the SolarReserve project? Are there limitations existing at the moment that have limited your involvement?

**Mr Learmonth:** It's probably worth saying that we're interested in technologies like concentrated solar thermal. If it were to stack up commercially and there was a role for us to play to support a project like that, we would be interested, as we have been over the last 15 months or so. But it will very much depend on the contracting arrangements, the capital structure, the proponents, the cost of construction and so on. So we can only speculate. It will depend upon how this proposition might land in the future.

**Senator RICE:** Has the CEFC's budget been a limitation in consideration of projects like this?

**Mr Learmonth:** As you know, we've got \$10 billion of appropriated funds, and we have only committed \$5.6 billion as we sit today. So we have plenty of capital to invest in all sorts of projects around the country.

**Senator RICE:** So that's not a limitation?

**Mr Learmonth:** We're certainly not constrained by capital at this point.

**Senator Birmingham:** Senator Rice, a point that can be made in relation to your earlier questions about the additional \$1 billion is that not only are the projects not there but also there's plenty of capital currently available if they were.

**Senator RICE:** Thank you.

**Senator CHISHOLM:** Mr Learmonth, is the CEFC familiar with electric vehicles and their potential and challenges to greater take-up in Australia?

**Mr Learmonth:** We've been active in financing electric vehicles for some time. As a form or a means of addressing emissions in the transportation sector, we've have done quite a lot of work in the area, including commissioning a study into the EV market in Australia by Energeia.

**Senator CHISHOLM:** What were the conclusions of that study?

**Mr Learmonth:** We made the study available publicly. There are various scenarios outlined in that particular study. It looks at the uptake of EVs based on particular features. There's a sort of high, medium and low scenario, and it looks at what may be the future proportion of EV sales as well as the overall fleet in here Australia based on their modelling. They would say that some of the key features to stimulate a greater uptake of EVs in Australia would include: more affordable models, of course, being available to Australians; potentially support by governments in terms of duties, taxes and so on; and also potentially addressing the issue of range anxiety for longer distance travel here in Australia. It's a very good, thorough report. I would encourage people to read it.

**Senator CHISHOLM:** How would you describe Australia's position with respect to electric vehicles compared to other countries and, in particular, the other countries that we usually compare ourselves to, such as the US, UK, New Zealand, Canada, France and Germany? Are we behind these countries or are we ahead?

**Mr Learmonth:** It's certainly no secret that we are well behind in terms of the uptake of EVs. I believe there's only something 7,000 EVs on the road today and they are something like 0.1 per cent of new sales. If you look at that relative to particularly Northern European countries, we are significantly behind on the uptake of EVs in this country relative to what we might see as comparative markets.

**Senator CHISHOLM:** Do you think that this poses a risk to the Australian economy, our industry, our motorists and future taxpayers?

**Mr Learmonth:** When you say a risk, maybe you could—

**Senator CHISHOLM:** Given that our take-up rate has been so slow compared to other countries, do you think that presents a long-term risk to Australia from an environmental point of view or from an economic point of view?

**Senator Birmingham:** I think we're in an area that's outside the remit of the CEFC there. If you're asking in terms of an impact on the broader economy or otherwise, that's—

**Mr Learmonth:** That's certainly not something that we are going to speculate on. We're about providing capital and a fertile investment environment for the uptake of EVs, because we see it as important in reducing emissions across the transportation sector.

**Senator CHISHOLM:** Did the report that you commissioned identify any risks?

**Mr Learmonth:** The report is public. It's much more focused on what might be needed to increase the uptake and penetration of electric vehicles. It doesn't speculate about the Australian economy in the way that I think you're looking to get more information on.

**Senator CHISHOLM:** In particular, in terms of trying to ensure that there was a greater uptake, would a national electric vehicle target be helpful?

**Mr Learmonth:** Once again, you're speculating on policy. It's not really my patch.

**Senator CHISHOLM:** What about a governmental fleet electric vehicle target?

**Senator Birmingham:** Again, you're simply asking for an opinion on a policy proposition there. I did intervene earlier when Senator Rice was asking about Labor Party policies in a different context, and I said it's not reasonable to ask officials to run commentary there. I'm just being consistent in that regard. Also, in particular, when you're simply seeking opinions of officials—

**Senator CHISHOLM:** The Clean Energy Finance Corporation have funded proposals around electric vehicles, so surely they have an opinion on what is needed to ensure greater take-up. I don't think that's out of the ordinary in terms of asking questions about what is an important policy subject.

**Senator Birmingham:** Mr Learmonth has identified that there's a public report from the CEFC that talks about some of the infrastructure requirements and so on that are necessary in that regard. You can ask whether that report touches on government procurement targets or the like. That may be a way to get to your question, Senator Chisholm.



**Senator CHISHOLM:** Could you outline what the Clean Energy Finance Corporation has funded in terms of electric vehicle infrastructure and the like?

**Mr Learmonth:** Yes, certainly. To date, between electric vehicles, hybrids and plug-in hybrids, we have financed something like 848 vehicles. We have provided facilities to banks and autofinancers, who have then gone and dealt with the end consumer and helped to assist the uptake of those vehicles with some concessional finance. That's currently probably the most direct role that we've played in the uptake of EVs. We have seen some proposals around EV infrastructure or recharging infrastructure to date. They're all commercial in confidence. There are, of course, entrepreneurs looking at that and the technology involved in charging vehicles. We're active in the market. We continue to try to stimulate projects, companies and proposals to increase EV uptake.

**Senator CHISHOLM:** In terms of that, have any government ministers been involved in CEFC-related events around electric vehicles?

**Mr Learmonth:** We had an EV demonstration day in Melbourne last year. In fact, we're pleased to say we're going to have one in Sydney in August, I believe. There was a raft of fleet buyers, EV OEMs and organisations related to the electric vehicle industry at that gathering. Lily D'Ambrosio briefly attended that EV demonstration day as the Victorian energy minister.

**Senator CHISHOLM:** What about media statements from minister regarding the CEFC's decisions around electric vehicles?

**Mr Learmonth:** I think you would have to leave that for their respective officers.

**Senator CHISHOLM:** Are you aware of a press release from the then Minister for the Environment and Energy, Josh Frydenberg, on the 6 September 2017, where he was talking about the Clean Energy Finance Corporation supporting a new \$100 million asset finance program to encourage Australians to switch to electric vehicles?

**Mr Learmonth:** I'm aware of the transaction, but I can't specifically recall that particular release.

**Senator CHISHOLM:** As part of that, there's a quote from the minister:

Electric vehicles will play a big role in terms of creating more sustainable cities with less pollution and improved health outcomes for our community.

Are you aware of that?

**Senator Birmingham:** I think Mr Learmonth just answered that before. He is aware of the transaction. He doesn't recall the particular media release that you say that you're quoting.

**Senator CHISHOLM:** The minister then went on to say:

By providing discounted finance through the CEFC, it is hoped we can encourage a greater up take of electric vehicles and reduce emissions.

Is that what the aim of the program was?

**Mr Learmonth:** We use concessional debt with a raft of different wholesale financiers around the countryside to stimulate the uptake of electric vehicles, solar PV and energy efficient agricultural equipment. In a broad sense, that is correct.

**Senator CHISHOLM:** Are there any further details you can provide about the \$100 million asset finance program to encourage Australians to switch to electric vehicles?

**Mr Learmonth:** Just from what you say, it's not precisely clear which particular facility that is; but we have provided a number of banks—the major banks, as well as Macquarie—with wholesale debt facilities that include the ability to finance electric vehicles. They're not exclusively provided to these financiers to provide electric vehicles; but it is one of the assets on the white list, if you like, of assets they can finance. The one that Minister Frydenberg, as he was at the time, was referring to was one where we provided a \$100 million facility to the Macquarie Group, because they had been very active financiers of electric vehicles.

**Senator McALLISTER:** Can I get you to talk through those program arrangements? You said it was all of the major banks, plus Macquarie. That's five arrangements?

**Mr Learmonth:** Yes. We have also worked with other what we would call intermediaries—or aggregation partners—including peer-to-peer lending platforms, like RateSetter. We have a raft of different financiers, including autofinancers, Metro Finance and Firstmac. If you take it back a step, in our act, we've been given the ability to use concessional finance to facilitate the flows of capital into the clean energy sector and to address emissions. With providing these wholesale facilities—let's say, with one of the major banks; we may provide a \$200 million facility to a bank at 70 basis points below their cost of funds—that's on the basis they can then use their vast origination teams around the country to reach small and medium enterprises and consumers to allow them to have access to cheaper finance and to take up renewable energy or energy efficient equipment. That's really the purpose of those facilities.

**Senator McALLISTER:** Can we stick with the banks? It is an interesting project. I'm not really asking for a critique of whether it's a good idea or not. I'm just asking about what actual transactions have taken place. It's with the four major banks?

**Mr Learmonth:** The four major banks.

**Senator McALLISTER:** What's the size of the facility for each of the banks?

**Mr Learmonth:** It's possibly best if we take that on notice, otherwise we would be ploughing through a long list, unless you want me to do that. But, for example, people like NAB and CBA have facilities in the order of \$300 million. They're quite large. The NAB, for example, has been very successful in financing the agricultural sector around energy efficiency.

**Senator McALLISTER:** So these facilities aren't exclusively for electric vehicles?

**Mr Learmonth:** Not exclusively.

**Senator McALLISTER:** The structure is that there is a range of products agreed between yourself and the business.

**Mr Learmonth:** Correct.

**Senator McALLISTER:** Do they all include electric vehicles?

**Mr Learmonth:** I would have to take that on notice to come back to you definitively. I believe that many, if not most, do have that ability.

**Senator McALLISTER:** Specifically, does the NAB agreement include a provision for financing electric vehicles?

**Mr Powell:** We might need to take that on notice; but it's fair to say that, if we were approached by one of the banks to finance an electric vehicle in that manner, we would then make it available under the facility.

**Senator McALLISTER:** Can you tell me whether the Commonwealth Bank arrangement—

**Mr Learmonth:** It's in the same position. We believe it is, but we will come back on notice just to confirm that.

**Senator McALLISTER:** It's only that the now Treasurer, and then Minister for the Environment and Energy, was willing to confirm that the arrangements with Macquarie involved facilities for plug-in hybrid electric vehicles, so I was hoping to find out whether those same arrangements were in place with the other major lenders.

**Mr Learmonth:** I believe there are other similar arrangements with, as I say, the other major banks. Just to come back to you, the facility commitment for ANZ is \$150 million, CBA is \$300 million, Westpac is \$200 million and Macquarie is \$100 million.

**Senator McALLISTER:** So that's the scale of the—

**Mr Learmonth:** That's the scale. It gives you a flavour of how much we're talking.

**Mr Powell:** One of my colleagues has confirmed that, indeed, all of the facilities do currently allow for the financing of electric vehicles.

**Senator McALLISTER:** The reason that CEFC money, which is ultimately public money, is applied in this way is—

**Mr Learmonth:** The reason it's applied in this way is—as I say, we are using concessional finance. We're offering submarket finance to these larger banks, which gives them an ability to use their origination capabilities. They can reach farmers in Far North Queensland and can reach small businesses in Western Australia, which we can't. We're really a wholesaler. There's only 100 or so people at the CEFC.

**Senator McALLISTER:** That's why you choose these means, but the overall objective—

**Mr Learmonth:** The objective is to see if someone having the ability to access this form of cost-effective finance would then drive a particular behaviour, where they may then buy an electric vehicle that they couldn't necessarily afford otherwise or they would take up solar panels on the roof of their commercial warehouse, for example. It's using that particular lever to stimulate and drive particular behaviours.

**Senator McALLISTER:** In the case of electric vehicles, part of the policy rationale for government making facilities of this kind available is to familiarise consumers with the product.

**Mr Learmonth:** Yes, that's fair.

**Senator McALLISTER:** Is it also fair to say that that's because it's recognised that a transformation towards electric vehicles would have a significant impact, over time, on Australia's emissions profile?

**Mr Learmonth:** Transportation is a fairly significant contributor to emissions. I believe it's something like 18 per cent.

**Senator RICE:** Nineteen.

**Mr Learmonth:** Nineteen—thank you, Senator Rice. In relation to your comment about preparing Australia or assisting with the market's transformation, it is very important, because the more people on the road with electric vehicles, the more pressure to build recharging infrastructure, the supply chain, with more OEMs getting increasingly interested in the Australian market and bringing out models that are more affordable for Australians, which has been one of the challenges. Most EVs are expensive. So, yes, by us offering cost-effective finance, it is helping this market, even though we all understand that we're in an early stage with this transformation.

**Senator McALLISTER:** Just on the price range, there are more affordable models available internationally, but they don't tend to be made available through the supply chain in Australia at the moment; is that correct?

**Mr Learmonth:** I can only comment on the fact that there are only a limited number of models available here in Australia. I couldn't comment on what's available overseas. Australia is a right-hand drive market and many of the bigger markets in the world are left-hand drive. There's time it'll take for the OEMs to see the attraction and therefore the uptake and then bring out those vehicles and those models to Australia.

**Senator McALLISTER:** Thanks, Senator Chisholm; I'm sorry to interrupt.

**Senator CHISHOLM:** That's all right. It would be fair to say that Minister Frydenberg at the time was quite enthusiastic about the future role of electric vehicles in Australia.

**Mr Learmonth:** I can't possibly read his mind there.

**Senator CHISHOLM:** It wasn't his mind. He put it in a press release.

**Senator Birmingham:** Senator Chisholm, Mr Learmonth has indicated he doesn't recall that particular press release.

**Senator CHISHOLM:** But it would be fair to say that the current minister for energy has been pretty sceptical about EVs lately. Can you explain the sudden dramatic change in the government's lines on this?

**Mr Learmonth:** I don't have any comment on that.

**Senator Birmingham:** Senator Chisholm, you are inviting comment from Mr Learmonth about the thinking of the minister.

**Senator CHISHOLM:** Well, it's a pretty remarkable turnaround, basically, from one minister to the next.

**Senator Birmingham:** That's a characterisation you're making. You've offered no quotes or specifics towards that characterisation.

**Senator CHISHOLM:** I provided the quotes from Minister Frydenberg:  
Electric vehicles will play a big role in terms of creating more sustainable cities with less pollution and improved health outcomes for our community.

**Senator Birmingham:** You have provided no quotes in relation to Minister Price.

**Senator CHISHOLM:** No, I said the energy minister.

**Senator Birmingham:** You haven't provided any quotes in relation to Mr Taylor either.

**Senator CHISHOLM:** Would you agree that, given the evolution of the global car market and technology, the transition to EVs isn't a question of if but when, and in what context is a planned, managed transition or a chaotic or potentially very disruptive transition?

**Senator Birmingham:** Again, I think there's the report that CEFC has done, which Mr Learmonth has referred to. I think that report does indicate that a transition would occur under any scenario. It's a matter of the timing in relation to the transition that occurs.

**Senator CHISHOLM:** What do you think the EV or broader car industry, as well as the finance industry, would like to see from an Australian government in terms of policy in this area?

**Mr Learmonth:** I think there are people much better placed to speculate and comment on that particular point, Senator Chisholm.

**Senator CHISHOLM:** Surely, heading a company that is looking to finance in this area, you would have something that the CEFC would have a view on?

**Senator Birmingham:** CEFC has obviously already responded to proposals from banks and others, as you've heard, in terms of the type of financing solutions that may work in facilitating uptake within the sector. Obviously those are the types of ideas that have been brought to CEFC that sit within their mandate, including their mandate for commercial operations or commercial imperatives to be considered in any financing too.

**Senator CHISHOLM:** Do you think the electric vehicle industry will be one that the CEFC has more of a focus on in coming years?

**Mr Learmonth:** It's obviously a growing market—no question. I think we'd all appreciate the macro trend and the transition to the electrification of transport. We, as I would like to think a key player in the financing of the clean energy market, would like to play big part in that.

**Senator SPENDER:** I think in response to original questioning from Senator Rice, you mentioned, Mr Learmonth, that the CEFC exists because the market is failing. What particular market failures were you referring to?

**Mr Learmonth:** Let me just put it another way. The CEFC is there to play a role where there are gaps in the market, make projects happen that might not otherwise happen, and we use our capital in that way, be it off taking risks that maybe other financiers or investors might not want to take, offering debt terms that will get a project over the line. So, as these technologies evolve, increasingly the banks and institutional capital are starting to come into the market, which is something that we're encouraging. For every dollar that we put out the door, something like \$2.2 of private sector capital has come alongside it. So we are constantly looking to play a role where market gaps exist, and it's very important that we continue to do that.

**Senator SPENDER:** So do you want to withdraw your previous comment that you think the market is failing? You know that market failure means something specific.

**Mr Learmonth:** By definition, if we're filling in a gap or we're trying to assist where there is market failure—not all markets are failing, but there are often situations. Look at when we started off in the solar PV/grid scale PV market. There were very few financiers interested in investing in that market. We, alongside ARENA, came in and really stimulated that market—

we as a financier and ARENA as a grant maker. The supply chain in Australia improved. Prices came down for solar panels, for EPC contractors and so on.

**Senator SPENDER:** But what was the market failure? It's a specific term. If you say that there is a market failure, you are presumably referring to—

**Mr Learmonth:** I think failure in the sense that there were a lack of financiers willing to invest in that market at the time.

**Senator SPENDER:** A lack of financiers willing to finance a particular market is not a market failure. You presumably know that. Right now there are no financiers providing me with millions of dollars to invent the next pencil. There is a gap. That doesn't mean there's a market failure. It is a terrible investment to give me millions of dollars to invent the next pencil. I've got no idea about what the next pencil could be. So do you hold by the view that you know of market failures that you're currently addressing, and, if so, which?

**Mr Learmonth:** I think we've probably got different interpretations of what a market failure might mean. In our minds, a market failure does include a lack of willing investors. It probably sounds like it's coming down to that.

**Senator SPENDER:** Okay, so it comes down to the idea that market failure actually does mean something. Do you believe that you are currently addressing information asymmetries, for instance—that is, a recognised market failure?

**Mr Learmonth:** Part of what we do is share knowledge and learnings throughout the markets and the various markets that we operate in, because we've done a lot of transactions; we've seen a lot of things. So, in the sense of our knowledge and experience and assisting other market participants to become aware of that and helping them develop and stimulate markets, yes.

**Senator SPENDER:** Do you believe that you are addressing issues of monopoly? That's another market failure you could possibly be addressing.

**Mr Learmonth:** We don't have addressing monopolies necessarily on our list of things that we're trying to tackle. We're trying to decarbonise the Australian economy by using debt and equity in companies and projects, and so on.

**Senator SPENDER:** You also said, in response to Senator Rice, that you are 'crowding in'. What specifically do you mean by that?

**Mr Learmonth:** That's where we might play a role in, say, a project—a clean energy project, for example—where we might be a lender in that project, the first one to commit to it, which then gives confidence to other financiers to come in. We might play a role in a capital structure that makes the numbers work: for example, providing some subordinated debt or mezzanine finance that will then allow private sector investors for that project to become economic. There's a couple of examples of how we might create—

**Senator SPENDER:** Do you recognise that that is not the meaning of 'crowding in', in economic terms?

**Mr Learmonth:** There might once again be a disagreement on definitions. If we can cornerstone a particular issuance of a green bond, or if we can provide particular debt term—as in tenor of a debt facility—that brings in other investors, then that, to us, is crowding in.

**Senator SPENDER:** Okay. At the outset you referred to your rate of return being a touch below target, being a reference to government bond rates. How do your rates of return compare with comparable private sector entities?

**Mr Powell:** We can take that on notice, but it's probably an unfair comparison in terms of the restrictions that we have on us as a fund. We are only allowed to invest in primarily Australian-based investments. We can only invest in renewables, low emissions technologies and energy efficient projects, and that is a significant constraint relative to anything that a private sector financier would be faced with.

**Senator SPENDER:** You are not the only Commonwealth Government bank, either. Do you have a better or worse rate of return than the Regional Investment Corporation?

**Mr Learmonth:** Once again, I think that's a bit of an unfair comparison, because if you look at who we are and what we do, we are investing senior debt in projects that you would see institutional banks making those style of investments or financings in. We're also an equity investor in clean technology companies, which is a different comparative point again. We've invested in funds right across all sorts of different sectors—infrastructure, agriculture and the real estate sector, so to make a like-for-like comparison is very, very difficult.

**Senator SPENDER:** Do you have any relationship with the Regional Investment Corporation or the Export Finance and Insurance Corporation?

**Mr Learmonth:** We certainly have a good relationship with Efic, but when you say relationship—

**Senator SPENDER:** The fact that you are all government banks. I would suggest that government banks don't have a great track record, so it might be useful to try to share expertise in carrying out what is, essentially, a private sector function. Do you share expertise so you don't all make separate mistakes, or so you learn from each other's mistakes?

**Mr Learmonth:** We work collaboratively across all relevant agencies—Commonwealth agencies—sharing information where it's relevant. For example, we have a close relationship with NAIF, another Commonwealth financier. I take most of what you've said as a comment, but we definitely share our information and work collaboratively with relevant agencies.

**Senator SPENDER:** In your previous discussion about electric vehicles you referred to a particular report, but I'm not too sure whether that report established the following: do you know how current life-cycle emissions for electric vehicles in Australia compare with the life-cycle emissions of non-electric vehicles in Australia currently?

**Mr Learmonth:** I think we'll have to take that on notice.

**Senator SPENDER:** How can you not know the answer to the question, and still think that investing in electric vehicles currently is a good idea for reducing Australia's emissions?

**Mr Learmonth:** What we know is electric vehicles being powered by an increasingly decarbonised electricity grid will have a far better emissions outcome than internal combustion engine vehicles.

**Senator SPENDER:** In a life-cycle analysis based on current EV technology?

**Mr Learmonth:** I'd have to get detail of exactly what you mean by life-cycle analysis.

**Senator SPENDER:** Okay. I imagine the concept of life-cycle in any sort of emissions analysis is reasonably clear. The life-cycle analysis of EV includes the emissions involved in

producing the vehicle and, at the end of certain projects, the idea of decommissioning assets as well.

**Mr Learmonth:** That's true. If you do a like-for-like comparison of those two cars and we have an electric vehicle that's being powered from a decarbonised electricity grid then we're going to be miles ahead over time.

**Senator SPENDER:** Finally, on EVs do you take into account the fact that EVs are already substantially assisted, irrespective of your interventions, through the fact that a fuel excise equivalent to a roughly \$160-a-tonne carbon tax already applies to non-electric vehicles in this country?

**Mr Learmonth:** I make no comment about that.

**Senator SPENDER:** Okay, so it seems that no amount of subsidy is good enough. That's all I've got.

**CHAIR:** Thank you, Senator Spender. Senator Storer.

**Senator STORER:** I will continue on the hot topic of today, which is electric vehicles. I want to clarify. What interests are you seeing in the private sector for investing in EV charging infrastructure?

**Mr Learmonth:** We have seen some opportunities or propositions that have come our way over the last couple of years. We haven't made an investment in EV recharging infrastructure at this point. It's probably also fair to comment that, over the last year or so, we've seen state governments and the motoring associations starting to invest in EV recharging infrastructure.

**Senator STORER:** You've mentioned the commissioned work by CEFC and ARENA for Energeia's *Australian electric vehicle market study*. That modelled three different EV uptake scenarios based on degrees of government intervention. Under the moderate intervention scenario, 50 per cent of all new car sales are EVs in the year 2030. Is that correct?

**Mr Learmonth:** That's what the report says.

**Senator STORER:** Under that scenario, at that time what percentage of the whole fleet is electric?

**Mr Learmonth:** I have to refer to the report. If we look at it, we see that under moderate it is 15 or 16 per cent.

**Senator STORER:** So it is 15 or 16 per cent of the whole fleet in 2030.

**Mr Learmonth:** Yes.

**Senator STORER:** What sort of actions are you aware are envisaged under this moderate intervention scenario?

**Mr Learmonth:** To paraphrase from the report: this moderate intervention scenario assumes a number of things. There are some exemptions around stamp duty and registration in certain states. There are local and state government fleets pushed to increase their uptake of electric vehicles where there's a comparable electric vehicle in the class that they're looking for. There is removal of restrictions on imports of second-hand electric vehicles, which would drive a larger second-hand market, which of course is important. Preferential parking and use of transit lanes has been assumed in that moderate case. We've assumed that a range of actors,



governments, motoring associations and private companies accelerate the rollout of charging infrastructure, which of course is addressing range anxiety, which, as I mentioned earlier, is potentially an impediment for people buying EVs. The moderate case also assumes that OEMs are reacting to these policies to increase the availability of models in Australia, which is also very important.

**Senator STORER:** If we look at the no-intervention scenario, EVs still make up around 20 per cent of new car sales in 2030. Is that correct?

**Mr Learmonth:** Yes, that's correct.

**Senator STORER:** But the whole fleet level under a no-intervention scenario is down from that 15 per cent; correct?

**Mr Learmonth:** That's right. On the report it looks broadly around five or six per cent.

**Senator STORER:** So what would you see as the risks of inaction if the government doesn't take these moderate interventions? What are the implications of those percentages?

**Senator Birmingham:** I think that, as we reflected before, the report at least outlines the different likely transition time frames that occur under different scenarios. Dependent upon different policy interventions—and there are already policy interventions occurring via the CEFC in terms of financing facilities that have been established—you get a longer transition or a shorter transition in terms of market take-up.

**Senator STORER:** Okay. I want to turn to—

**Senator Birmingham:** I should add that at each of those points there's a cost factor to be weighed, of course, in any such intervention too.

**Senator STORER:** Okay, but would it be clear that the intervention indicates in a cost-benefit analysis that there would be benefits from moderate intervention? Would you have that opinion, Mr Learmonth?

**Mr Learmonth:** I think that's probably beyond the scope of the study that we've currently commissioned.

**Senator STORER:** Okay. The CEFC Act allows the CEFC to pay a dividend to ARENA out of its profits; is that correct?

**Mr Learmonth:** Correct.

**Senator STORER:** How much profit has the CEFC made under that facility to date?

**Mr Powell:** Through 31 December 2018 there was \$271.1 million profit. We release these updates on a quarterly basis.

**Senator STORER:** Is there a payment—

**Senator Birmingham:** To be clear: I think that's of the profit recorded by CEFC. I'm not clear on your question whether you're asking for the CEFC's profit or whether any had been transferred to ARENA.

**Mr Learmonth:** We have made no dividend distribution to ARENA as we sit today.

**Senator STORER:** Yes, that was the next question. Is there one envisaged in the future?

**Mr Learmonth:** We're constantly asked this at Senate estimates, but we haven't had any active conversations. I know ARENA get asked same question. As we sit and stand today,

there haven't been any active conversations about whether we would pay the dividend to ARENA.

**Senator SPENDER:** Very understanding shareholders.

**Mr Learmonth:** ARENA, just to be clear, aren't a shareholder, of course, but they could be, as provided for under the act, the beneficiary of a distribution if that was to take place.

**Senator Birmingham:** Distribution of retained profits would be a matter for the CEFC board.

**Mr Learmonth:** That's right. The way it works under the act is the board would have to recommend that. It would go to the minister. The minister would have to ensure it was in compliance with the request, and then that could happen if that was the case.

**Senator STORER:** Thank you. That's all I have.

**CHAIR:** Senator Spender.

**Senator SPENDER:** One thing I forgot to mention was nuclear. There are various laws that make nuclear impossible in Australia. I am just curious about whether there is anything written into your documentation that would prevent it, because, if some of us are successful in getting rid of all the other constraints on nuclear, I wanted to know whether there was any—

**Mr Learmonth:** It's expressly precluded under the act today.

**Senator SPENDER:** Under your CEFC Act?

**Mr Learmonth:** Under the CEFC Act it is a technology that we cannot invest in.

**Senator SPENDER:** Okay.

**Senator Birmingham:** But if you were bringing forward a private member's bill, you could deal with the EPBC Act, the CEFC Act and any others all at the same time.

**Senator SPENDER:** Yes. If I get re-elected, that'll be my first annoying task for the Clerk! I'll have to add the CEFC Act. On EV: you've done some current investments. Where are they located geographically in Australia at the moment?

**Mr Learmonth:** We'll have to take that on notice. We don't have that information to hand.

**Senator SPENDER:** Was your decision—

**Mr Learmonth:** These programs are all national. But on just precisely the break-up between states and territories, we would have to come back to you.

**Senator SPENDER:** My main target is not the question of where they just happen to be but your decision-making. Is your decision-making about your investments in EV in any way affected by, for instance, differences in grid reliability in various parts of the nation?

**Mr Learmonth:** No. The decisions around electric vehicles and financing programs to stimulate the uptake of EVs are much more about the partners that we have been working with—these intermediaries, the banks and auto financiers and so on. That consideration hasn't featured at this point.

**Senator SPENDER:** So, you haven't taken into account differences in grid reliability. Have you taken into account differences in emissions intensity of the grid in various parts of the country?

**Mr Learmonth:** When you look at how many EVs there are around the country—not very many—and that 80-plus per cent of recharging takes place in the home, and given the scale of our EV financing, you would probably appreciate that has not been a priority consideration.

**Senator SPENDER:** You're focusing on the long term, and I can understand that, but it seems you're not taking into account short-term risks. If you encourage a market in an area where there's very low grid reliability, you're making it more likely that that market will be suffering blackouts.

**Mr Learmonth:** Senator, if we're talking about the EVs in these markets, they're predominantly in metropolitan centres. Today, people are charging them at home, overnight, or in the car parks of Westfield and other places. Today, it's really a question for AEMO or one of the grid operators that they are creating any strain or stress on the grid.

**Senator SPENDER:** Did you have any discussions with AEMO before you decided to finance EVs in various parts of the country?

**Mr Learmonth:** Not specifically on that point. Of course, we have talked to them about the implications of the longer term uptake of EVs and what the implications might be for the grid, but in terms of the relatively modest number of EVs in this country and the even smaller number that we have financed, it hasn't been a relevant conversation to date.

**Senator SPENDER:** It also implies that you wouldn't be currently favouring funding EVs in parts of the grid that are—

**Mr Learmonth:** We'll fund EVs in any part of the country—happily.

**Senator SPENDER:** Even in areas that are currently extremely emissions intensive—for instance, around the Hunter region?

**Mr Learmonth:** We would finance an EV in any part of the country—happily.

**Senator SPENDER:** In Weipa?

**Mr Learmonth:** We would. I'm not sure how many Teslas are up there—but, yes, we would.

**Senator SPENDER:** I'm glad my government bank would fund an EV station in Weipa. A great use of taxpayers' funds!

**Mr Learmonth:** When you say 'EV station', you asked me an EV.

**Senator SPENDER:** Or an EV itself, yes.

**Mr Learmonth:** We would. We've got to be realistic about these things. Cars travel. People travel. With a very small uptake of EVs today, it's not a relevant consideration—

**Senator SPENDER:** The grid reliability or the emissions impact.

**Mr Learmonth:** In that context; but in other contexts, certainly, Senator. But in terms of the number of EVs we're financing, it's not a priority issue.

**Senator SPENDER:** Okay. That is it for me.

**CHAIR:** Thank you, Mr Learmonth and Mr Powell.

**National Wind Farm Commissioner**

[12:04]

**CHAIR:** Welcome, Mr Dyer. Do you have an opening statement?

**Mr Dyer:** I do. I would like to read out an opening statement and then take questions. Thank you for the opportunity to appear before Senate estimates. This is my fourth appearance since commencing in the role in late 2015. I have previously summarised my role for the committee and will assume the role is now well understood. For those members who are new to the committee, my terms of reference, role, and other documents that may be helpful are available on the commission's website, [nwfc.gov.au](http://nwfc.gov.au). The role was recently renewed for a further three-year term, commencing on 1 November 2018, following a review of the role by the Climate Change Authority and acceptance of their recommendations by the government and the minister. Of note is that our scope has been expanded to now include large-scale solar and storage projects.

I would like to commence by updating the committee on our complaints statistics. Overall, wind farm complaints received are predominantly from Victoria, followed by New South Wales and South Australia, with small numbers of complaints from wind farms in Queensland, Tasmania and Western Australia. The clear majority of complaints received are about proposed wind farms, with a decline in complaints being lodged about operating wind farms. As of 31 March 2019, the key complaint statistics since inception of the office are as follows: a total of 297 complaint matters have been received and 286 of these matters have been closed. Of the total complaints received, 65 were about operating wind farms, 199 matters related to proposed wind farms, 29 matters did not specify a wind farm and four matters have been received about proposed solar farms.

**Senator URQUHART:** Sorry, Mr Dyer. I don't want to interrupt you, but was that for 2018?

**Mr Dyer:** This is since scheme.

**Senator URQUHART:** Okay, thanks.

**Mr Dyer:** I just want to give you the higher level numbers; I could go into a ton of detail. The 65 matters about operating wind farms relate to 11 operating wind farms. Seven of these wind farms are in Victoria, two are in New South Wales and two are in South Australia. Of these 65 matters about operating wind farms, 64 have been closed. The 199 matters about proposed wind farms relate to 53 proposed wind farms. Twenty-five of these proposed wind farms are in Victoria, 15 are in New South Wales, three are in Queensland, six are in South Australia, three are in Tasmania and one is in WA. Of the 199 matters about proposed wind farms, 190 have been closed. Of the total of 264 matters received that specified a wind farm, 170 were about wind farms in Victoria, 49 were from New South Wales, 36 were from South Australia, five were from Queensland, three were from Tasmania and one was from Western Australia.

Of note is that, for the 2018 calendar year, we received just eight complaint matters about four operating wind farms. All of these wind farms are in Victoria, and only one of those wind farms had been commissioned since we commenced operations. This result could indicate that, once a wind farm is built and operating and things have settled down post construction, there's a high degree of acceptance of the wind farm. It may also indicate that, with more being invested in effective community engagement and complaint resolution during the development stages, the likely of complaints post construction is low.

The dominant issues cited in complaints raised with our office in 2018 were amenity, community engagement, planning process, noise and environmental issues. Over the three calendar years of our operations, cited issues in complaints received that have dropped considerably include health, from 46 instances to 18; noise, from 55 to 38; and vibration, from 19 to zero. Cited issues that have increased over this time include visual amenity, from 24 instances to 57; lack of community engagement, from 15 to 41; construction, from seven to 14; and planning processes, from 26 to 42.

Moving on to engagement, we continued to place a heavy emphasis on outreach and stakeholder engagement. During 2018, I visited a number of wind farm and solar sites, and I have now visited approximately 52 sites across Australia. We regularly present and meet with community groups, including presentations to project community consultative committees. I'm a regular presenter and session chair at the Clean Energy Council conferences and will present at the CEC's wind and solar forums as well as the summit in 2019. We engage with media on a variety of topics as they arise. As an example, in 2018 I conducted two lengthy interviews in a series on ABC's *Australia Wide* program about wind farm topics of interest to the community.

At the state government level, we are in regular engagement with relevant ministers and departments, particularly in New South Wales and Victoria, where the bulk of our complaint activities occur. At the federal level, we have close working relationships with sister agencies such as the Clean Energy Regulator, the Clean Energy Finance Corporation, ARENA, the AER, AEMO and, of course, the department.

Finally, we continue to proactively engage with the significant and complex stakeholder network required for this role, which constantly changes as people move for whatever reason. Since commencing the role, I've met with over 1,200 stakeholders at all levels of government, community and industry.

I'd also like to mention some of the outcomes resulting from our advocacy and recommendations regarding best practices. These include: the introduction of independent audits for both pre-and post-construction assessment of wind-farm noise; a similar audit regime being adopted for aviation safety assessments; the requirement for transmission lines that connect wind and solar farms to now have a planning permit issued in Victoria; substantive updates to the Australasian Fire and Emergency Service Authorities Council's revised position on wind farms and bushfire operations; material improvements to wind-farm complaint-handling procedures utilised by industry and compliance authorities; the hosting of roundtables to address specific issues, including transportation of longer blades; consistency of aviation safety lighting of turbines; the sharing of best-practice planning approaches across all state based agencies; and progressive adoption of various recommendations that we have made by state and local governments, as well as industry. These outcomes and related recommendations are detailed in our 2018 annual report. Our office will continue to identify and champion improvements to the operation and governance of the industry, particularly arising from systemic issues.

Regarding transparency, I encourage committee members to view our website and let me know of any feedback. The site has come a long way from the temporary website that was initially set up back in early 2016. The upgraded site includes a wide range of documentation with links to improve transparency of information about wind farms, best practices and

complaint handling. It also includes my annual report and links to presentations to various forums and community groups. We're in the process of further revising the website to include appropriate information on solar and storage matters. My office is also constantly working with industry members to identify and encourage improvements in their websites, particularly around contact information, product information and how to lodge a complaint.

In closing, I trust this update has been helpful. I'd particularly like to thank the department for their ongoing support and assistance to our small team. I'd also like to acknowledge the strong support and encouragement we have received from state and local governments, where much of our efforts are expended in the pursuit of improvements and resolutions. I'll now hand back to the chair.

**CHAIR:** Thank you, Mr Dyer. Senator Urquhart.

**Senator URQUHART:** Thanks, Mr Dyer. You did cover a lot of areas there, but I'll probably just go back to some in my questions to seek clarification.

**Mr Dyer:** Sure.

**Senator URQUHART:** First of all, has the agency that you are in charge of spent any money on advertising this week?

**Mr Dyer:** No.

**Senator URQUHART:** Is there any intention to spend any money on advertising this week?

**Mr Dyer:** Not in the budget.

**Senator URQUHART:** What about out of the budget?

**Mr Dyer:** No. We're a low-budget movie!

**Senator URQUHART:** So, given your experience, how would you characterise the evolution of community concerns about wind farms over the last few years? Have they dissipated? And, if they have, why is that the case?

**Mr Dyer:** I think they have dissipated, and I think our statistics show that. I think a lot of work was done to dispel some of the misinformation that was going around about wind farms, by using evidence-based approaches to complaint handling and resolution. I do think the industry has come a long way in their efforts to be more effective at community engagement and complaint handling, and understanding the economic, social and physical impacts that a wind farm makes on a community, and I think being smarter and better at choosing the right sites that will minimise impact on large populated areas. So there's no one single thing; it's a basket of activities that have improved things.

**Senator URQUHART:** It's a package, yes. Do you believe there is more community support for wind energy now than there was, say, three and six years ago?

**Mr Dyer:** I can only answer that on the reverse—by measuring the complaints and the reduction in complaints. As I said in my opening statement, I think it's telling that, as to complaints about operating wind farms, there were a total of eight complaints for the whole of 2018. But we don't have the reverse survey, going out to the community to see what the support is more broadly.

**Senator URQUHART:** Given that you've only had eight complaints on operating wind farms, you would have to think that there is more acceptance in communities around all the things that you're talking about—

**Mr Dyer:** I think that, as I said, once the thing is actually built and is running and operating, people go, 'Actually, that's not as bad as I thought it was going to be.' That makes a big difference.

**Senator URQUHART:** Do you expect that that support will grow over time?

**Mr Dyer:** It will, but I think we do have to be careful about too many cumulative effects of multiple wind farms in specific geographies. There is the work that AEMO is doing to look at the long-term grid. The grid we have is largely built around a coal resource, and augmenting the grid to be around a renewable resource will give us better locations. So I think there's a balance you've got to strike in that regard.

**Senator URQUHART:** What's the commission's total budget for 2018-19?

**Mr Dyer:** I might rely on departmental colleagues.

**Ms Evans:** I don't have that in front of me. We can come back to it in outcome 2. I might have some people here from the division.

**Senator URQUHART:** You can get that for me. Also, could you get it for 2019-20 and into the forward estimates. Mr Dyer, I think, if I heard you correctly—and you speak very fast, so apologies if I don't get the numbers right.

**Mr Dyer:** Sorry, I was trying—

**CHAIR:** It's all right; it's all in *Hansard*.

**Senator URQUHART:** No, it's fine. If I get them wrong, just correct me.

**Mr Dyer:** Sure.

**Senator URQUHART:** In 2018, is it correct that you got 65 complaints relating to wind farms, or did I hear that wrongly?

**Mr Dyer:** Let me clarify that—and I'll speak slowly. Of the complaints we've had since the scheme started, which was in November 2015, we've had 65 complaints in total about operating wind farms.

**Senator URQUHART:** Right. So how many did you receive in 2018?

**Mr Dyer:** Eight, in relation to operating wind farms.

**Senator URQUHART:** How many of those complaints—the eight in 2018—involved people who said that wind turbines were negatively affecting their health?

**Mr Dyer:** Three of the four wind farms—all four of them are in Victoria. Three of the four were pre-existing—

**Senator URQUHART:** That's the highest number of complaints?

**Mr Dyer:** Yes. Victoria is the capital of complaints for wind farms.

**Senator URQUHART:** The capital of complaints?

**Mr Dyer:** Yes—

**CHAIR:** And a number of other things too, I suspect, Mr Dyer. They're a capital for a lot of things, not just complaints about this.

**Mr Dyer:** And good things.

**CHAIR:** There are no Victorian senators here, so we can bag them out all we like!

**Senator URQUHART:** Pay no attention to the chair, Mr Dyer.

**CHAIR:** She doesn't!

**Mr Dyer:** Three of the four wind farms were existing wind farms that were operating before I started in this role. So they are in what I call legacy chapter of wind farms, where, perhaps if time was replayed, they may have done things differently. So there are some hangover complaints about those legacy wind farms.

**Senator URQUHART:** Sorry, included in that eight?

**Mr Dyer:** Yes. We only had one complaint about one wind farm that's been commissioned since we commenced our role. I think that's a very good signal that if you handle the complaints in the development phases—during the proposals, the permitting, through to construction—you're less likely to have complaints once it's built and running.

**Senator URQUHART:** I'm interested in the health complaints. How many have you had? How many complaints involved people who said that wind turbines were negatively affecting their health? Put aside whether they were about a noise thing, a big tower next door or whatever. How many actually said it's affecting their health?

**Mr Dyer:** I've got that data. When someone makes a complaint to our office, they might have a basket of issues. It could be about health, visual amenity, economic loss—a range of things. We track each of those issues that are part of the complaint. In the 2016 year, we had 46 complaints that cited health as one of the issues. In 2017, we had 20 complaints that cited health, and in 2018 we had 18 complaints that cited health. I would say, by mathematics, that most of the complaints in 2018 would've been about proposed wind farms. So, that's a concern about health impacts as opposed to a health issue.

**Senator URQUHART:** Right. But you only had eight complaints in 2018?

**Mr Dyer:** For operating wind farms. You can still make a complaint about health about proposed wind farms.

**Senator URQUHART:** If we take the eight, rather than the 18, for 2018—

**Mr Dyer:** Can I suggest a slightly different construct that may be helpful?

**Senator URQUHART:** No, not at all. I just want to know: how many people complained that wind farms were negatively affecting their health in 2018, and what evidence did those complainants provide to you to support their complaints?

**Mr Dyer:** In the case of 2018, those eight complaints—I will have to double-check, but I would say about half of them may have stated health as an issue.

**Senator URQUHART:** What evidence have they provided to support their claim?

**Mr Dyer:** For those, none.

**Senator URQUHART:** None.

**Mr Dyer:** Where I was going, Senator, was to say that of the 65 complaints I've had in total about operating wind farms—if you make the premise that a wind farm has to be operating to affect your health—about half of those complaints cited health as an issue. Of those half—let's call that about 30 or so complaints—three provided evidence.



**Senator URQUHART:** Was the evidence substantiated?

**Mr Dyer:** In all cases, it turned out not to be the wind farm.

**Senator URQUHART:** So for the three that produced evidence in relation to their health, the causal link was not the wind farm?

**Mr Dyer:** Correct.

**Senator URQUHART:** So, effectively, you've had no people provide evidence to support that the wind farm was the causing link of their health issues. Great.

**Mr Dyer:** I made that very clear in my report.

**Senator URQUHART:** The commission has previously said it's monitoring the progress of the two National Health and Medical Research Council funded studies regarding wind farms and health. The studies are examining impacts wind farms may have on sleep and health. When is that research due to be delivered?

**Mr Dyer:** 2021.

**Senator URQUHART:** What research activity has been carried out so far, and what preliminary results, if any, have you been made aware of?

**Mr Dyer:** In terms of results, none yet, because they're longitudinal studies. That's understandable, given the very nature. There are two different focuses to the studies. The Flinders University study is based on audible noise and the effect of audible noise on human health as a result of the wind farm. The University of New South Wales study is based on inaudible noise, more commonly known as infrasound. That's a combination of lab studies—where you go and have a very enjoyable weekend in the sleep lab in Sydney, in Glebe, for two consecutive weekends, at three days a pop—and the second part is the field study, where they actually put speakers inside people's homes, typically in the bedroom, and the recipient does not know if they're receiving infrasound or not. So it's both a sham study as well as an impact study.

**Senator URQUHART:** So you haven't had any preliminary results at all?

**Mr Dyer:** No, it wouldn't be appropriate for them to report at this stage.

**Senator URQUHART:** Is it your understanding some of the research was delayed due to a lack of suitable participants that were wishing to take part in it?

**Mr Dyer:** I'm aware there's a challenge in the infrasound study in getting volunteers for the field study.

**Senator URQUHART:** Why do you think that is?

**Mr Dyer:** I'd have to speculate that perhaps people don't want speakers in their bedrooms, thumping away with infrasound. I haven't actually interviewed someone who declined to volunteer.

**Senator URQUHART:** How many complaints has the commission received about solar farms and energy storage facilities since that's become part of your responsibility?

**Mr Dyer:** Four for solar or proposed solar forms, and none for storage.

**Senator URQUHART:** None for storage. Four for solar or proposed.

**Mr Dyer:** Yes.

**Senator URQUHART:** What's the general nature of those complaints in terms of the solar? What have people complained about?

**Mr Dyer:** Most of them come with a basket of goods.

**Senator URQUHART:** Is it the same as for wind turbines or different?

**Mr Dyer:** Very similar. It's about visual amenity, setback distances and economic disparity. Loss of agricultural land is a more unique issue to solar, and heat flux and flooding. Those were the general basket of goods there.

**Senator URQUHART:** I think earlier you said you had 65 complaints. Is that since the inception of the commission?

**Mr Dyer:** For operating wind farms.

**Senator URQUHART:** And 64 have been resolved?

**Mr Dyer:** Yes.

**Senator URQUHART:** So there's one outstanding.

**Mr Dyer:** Yes.

**Senator URQUHART:** Is there a likely closure date on that? What's the process?

**Mr Dyer:** That's one of the eight that I mentioned and it's very close to closure.

**Senator URQUHART:** And, in terms of the solar complaints, have they been closed or have they been resolved?

**Mr Dyer:** I don't have that precise information in front of me. There are probably a couple that are still open and a couple in watching brief.

**Senator URQUHART:** So none of them have been closed?

**Mr Dyer:** The watching brief ones would have been closed.

**Senator URQUHART:** None of those solar ones relate to any operations that currently exist—that's correct?

**Mr Dyer:** Correct.

**Senator URQUHART:** That's all I have. Thank you very much.

**Mr Dyer:** Thank you, Senator.

**CHAIR:** Thank you, Senator Urquhart; thank you, Mr Dyer. For a low-budget movie, you're always very entertaining, so thanks for your time today.

**Proceedings suspended from 12:25 to 13:25**

**Office of the Supervising Scientist**

**CHAIR:** Welcome to the Office of the Supervising Scientist. Welcome, Ms Turner. Do you have an opening statement?

**Ms Turner:** No.

**CHAIR:** Okay. Senator Urquhart.

**Senator URQUHART:** Could you tell me whether or not the agency is spending or scheduling any government advertising this week?

**Ms Turner:** No. Our branch isn't.

**Senator URQUHART:** Can you tell me what your budget is over the forward estimates?

**Ms Turner:** The budget for 2019-20 for our branch is \$5.5 million. I think the appropriation in the forward estimates is around that as well.

**Senator URQUHART:** Thank you. Can we get a progress report of the key activities of what you have been doing?

**Ms Turner:** The key activities?

**Senator URQUHART:** Yes.

**Ms Turner:** The Supervising Scientist's main function is to oversee the regulatory activities in relation to Ranger mine and also to undertake a program of monitoring and research to ensure the environment around the mine remains protected from mining activities. Our focus is shifting to oversight of the rehabilitation and restoration of the site. We undertake an annual research program. That research goes towards informing the restoration. We also assess the applications that come to the regulatory authorities from Ranger mine with regards to activities moving forward, and we provide technical advice to the regulatory authorities and the Minister for the Environment on those activities.

**Senator URQUHART:** In terms of the oversight of the rehab and restoration, what is the progress of that?

**Ms Turner:** The progress of the restoration project itself?

**Senator URQUHART:** Yes.

**Ms Turner:** ERA have commenced rehabilitation activities. They have just completed a feasibility level study into their rehabilitation project, which is scheduled to finish in 2026. So, essentially, at a very high level, the tailings need to be returned to the mined-out pits and those pits are back-filled with the waste rock on the site, and then the final land form is contoured and shaped in a way that reflects the regional area, and it is revegetated so that an ecosystem is restored on that site that's similar to the surrounding area. The key activities underway at the moment—we had a couple of assessments that have just been submitted to us from ERA, from Energy Resources of Australia. The pit 1 final land form application is currently under review, which is where they're placing the final layer of waste rock into the pit to back-fill that pit prior to the—

**Senator URQUHART:** When you say pit 1—how many pits are there altogether?

**Ms Turner:** There are two.

**Senator URQUHART:** Okay.

**Ms Turner:** They're also trialling revegetation and planting strategies on the Ranger trial land form, which is a small area where they have constructed a trial land form that is analogous to the final land form and they have been able to demonstrate they can grow plants in that area. So they're using that information now to inform the final restoration strategy.

**Senator URQUHART:** So that has been replanted to some degree from native seeds from around the area?

**Ms Turner:** Correct.

**Senator URQUHART:** We did an inquiry on mining rehab and we saw some of that in the Pilbara and it was quite interesting. So that's progressing quite well. In terms of pit 1, what

is the life plan for planting and all that sort of stuff? Or has that all been done now and it's just about keeping an eye on what's happening?

**Ms Turner:** No, it hasn't been done now. They placed the tailings in Pit 1, then they put the first layer of backfill on Pit 1 to start compressing the tailings and removing the waste water. Now they're starting to construct the final layer of waste rock, which will be the revegetation substrate—so they haven't actually commenced that activity yet; they're waiting for regulatory approval.

**Senator URQUHART:** So the trials are being performed around the area?

**Ms Turner:** Yes. The trial landform is an independent site which has been running for quite a few years now. We do intend to use Pit 1 moving forward to answer some more questions around the suitability of the waste rock as a substrate for revegetation, and also to inform the restoration strategy and the revegetation strategy.

**Senator URQUHART:** What is the time frame on that final layer getting ready for planting?

**Ms Turner:** Pending regulatory approval, we're expecting it to commence this year, and ERA have estimated that it will take around 12 months to complete. At that point they can commence planting trees.

**Senator URQUHART:** Has your role changed in any way?

**Ms Turner:** No.

**Senator URQUHART:** No? Okay.

**Ms Turner:** We've just changed the focus of our research program. Operations have been underway since 1980 and, at the beginning, we had a focus on characterising baseline conditions and having a look at the potential impacts that the mine may cause. Now we're looking at the restoration process, and ensuring that the restoration that's undertaken can achieve the rehabilitation requirements. But in broad terms, no—our function hasn't changed.

**Senator URQUHART:** It's just the focus of what you're actually doing, and that's dependent on the stage where you're at?

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

**Senator URQUHART:** Great. That's all I have. Thank you, Chair.

**CHAIR:** Excellent. Thank you very much, Ms Turner. We'll now move on to the Climate Change Authority.

**Ms Turner:** Thank you.

#### **Climate Change Authority**

[13:33]

**CHAIR:** Welcome back, Doctor, and to your colleagues from the Authority. Do you have an opening statement you'd like to make today?

**Dr Craik:** No.

**CHAIR:** Then we'll go straight to Senator McAllister.

**Senator McALLISTER:** Hello, Dr Craik. Are you aware of the government's climate change policy—the Climate Solutions Package?

**Dr Craik:** We know it's been announced, yes.

**Senator McALLISTER:** Did the government seek input from your organisation prior to its announcement?

**Dr Craik:** Not directly, but they did have the benefit of our reports that we'd provided in the past.

**Senator McALLISTER:** So there was no opportunity to comment on the draft?

**Dr Craik:** No.

**Senator McALLISTER:** Did you have any involvement in calculating the abatement available from the different measures in the package?

**Dr Craik:** No.

**Senator McALLISTER:** Since its release, have you done any analysis on the Climate Solutions Package?

**Dr Craik:** No, we haven't; we haven't had the time. We've been busy on the reports that we're working on.

**Senator McALLISTER:** Has the government asked you to perform any analysis of Labor's climate change policies?

**Dr Craik:** No, Senator.

**Senator McALLISTER:** I think I know the answer to this, Dr Craik, but are you conducting any analysis of Labor's climate change policies?

**Dr Craik:** No, not at the moment.

**Senator McALLISTER:** You mentioned other reports that you're working on. What are you working on at the moment?

**Dr Craik:** Right now we're proposing to update our 2016 advice to the government on policies to meet the Paris targets, so we've put out a stocktake on climate change policies in Australia. That's up on the website and, if people have comments, we're seeking input on that. We've also put up a paper on international policies to meet Paris targets and international progress. Again, we've put that up on the website to seek feedback.

At the moment we're working on what industry's doing in Australia and, as soon as that's completed, we'll put that up on the website and seek comment. Later this year we'll update our 2016 advice, which was all about policies to meet the Paris targets, because a lot has changed in the three years since we gave that advice to the government.

**Senator McALLISTER:** I am intrigued by your lack of involvement in the government's current policies—Climate Solutions—given that your function is to provide advice to government about exactly this question. You've previously provided advice about policies to meet the Paris targets.

**Dr Craik:** Last year, we reviewed the National Greenhouse and Energy Reporting system. We finished that late last year. We also have reviewed, in recent years, the ERF program. These were statutory reviews. We reviewed the Wind Farm Commissioner. We have reviewed some of the major programs and provided advice to the government on those.

**Senator McALLISTER:** Were you aware that Climate Solutions was being prepared prior to its release?

**Dr Craik:** We weren't invited to have input or put advice together, so no.

**Senator McALLISTER:** Thanks, Dr Craik.

**Dr Craik:** Thank you.

**CHAIR:** Thank you very much, Dr Craik. That's it for the Climate Change Authority.

**Senator Birmingham:** Just as they're wrapping up, I congratulate Mr Archer on his permanent appointment as Chief Executive of the CCA.

**Mr Archer:** Thank you, Minister.

**Senator Birmingham:** You've been acting for a while, so it's good to have you locked into the position.

**Dr Craik:** I'll say!

**CHAIR:** A sigh of relief there!

**Dr Craik:** Thanks very much.

**CHAIR:** We will now move to outcome 1 for the department. We'll allow them a couple of minutes to cavalcade in and we'll go from there. We will suspend for just five minutes to enable officers to speed up Commonwealth Avenue or wherever they're coming from. We'll be back.

**Proceedings suspended from 13:37 to 13:50**

**Department of the Environment and Energy**

**CHAIR:** I think we might start.

**Mr Pratt:** The only person we're missing at this stage is Mr Tregurtha, whose arrival is imminent.

**CHAIR:** Does Ms Evans want to provide that additional information? Then we'll go to Senator Moore's questions.

**Mr Pratt:** Yes, that's a very good idea. I might take a moment, though, to just mark a milestone. I've had the privilege and pleasure of being interrogated by Senator Moore for some 17 years, and I realise this may be Senator Moore's last estimates.

**Senator MOORE:** Who knows? This parliament could go on forever!

**CHAIR:** Yes.

**Mr Pratt:** I just wanted to offer my congratulations and say how much I've appreciated working with Senator Moore, on both sides of the table, over many, many years. I wish her well for the future.

**Senator MOORE:** Thank you, Mr Pratt. I appreciate that.

**CHAIR:** Ms Evans, do you have further information?

**Ms Evans:** It's just responding to Senator Urquhart's question earlier about the budget for the Wind Farm Commissioner. For 2018-19, the total budget for the commissioner and his office is \$749,383. In 2019-20, that number is \$769,551. It's the same budget again in 2020-21. Then, because the term will finish in October of 2021, there's a smaller budget in the financial year 2021-22, which is \$257,850.

**Senator URQUHART:** Thank you.

**Senator MOORE:** Mr Pratt, we had some questions to the Office for Women last week about gender analysis of budget and policy developments, and their evidence was that they provide advice, assistance and encouragement to departments and that they'd done a number of sessions with departments in the previous years raising awareness of this issue and how it should be handled. Can you let me know, from your department's point of view, the interaction you've had with the Office for Women and how your department looks at issues of gender analysis in the budget submissions as well as in general policy.

**Mr Pratt:** Okay. I am just trying to recall when I last had dealings with the office. I'm hoping at this stage that my corporate colleagues are coming to the table. I don't recall having had any personal interactions with the office in the last 18 months. I am sure the department has had those sorts of interactions. We spend quite a bit of time looking at diversity in the operation of the department from a number of perspectives, whether it's around gender or our employment of Indigenous people, people with disabilities and so on. Certainly we are regularly scrutinising our own performance in terms of attendance or participation on boards, senior executive appointments and so forth. That is something which we are focused on quite frequently. In terms of our policy proposals, I'm not sure that we have had such a focus in recent times, but I'm just looking at Mr Cahill and Ms Bennett to see whether or not there's anything that they can add to my answer.

**Mr Cahill:** Most of the policy submissions, by our nature, haven't gone specifically to measures that would go to individuals—and, therefore whether female or male or other classifications. I'm not aware of anything we've had to do specific proposals on. Our head of HR is not here today, but we will try to reach out to her and see if we can get an answer back on any specific engagements we've had with the Office for Women.

**Senator MOORE:** Thanks, Mr Cahill. It's just about following up on how it's done. There's a commitment. We had a never-ending discussion in Finance and Public Administration about this issue: how that interaction went from the Office for Women to all the departments. I'm just interested to see what interaction there's been. That'd be great.

**Mr Cahill:** That's fine.

**Senator MOORE:** My other question is again general. It's about the role of the department within the Sustainable Development Goals agenda. We've had that discussion previously. It's just a follow-up. It's my understanding that Environment does have particular roles under the expectation of the STG process. Now that we've done our first voluntary review response, it's about how we maintain the information and the engagement along the way, particularly in domestic policy. Who wants to have a go at that?

**Mr Cahill:** There is a cross-Commonwealth interdepartmental committee of the deputy secretary that I sit on for the Sustainable Development Goals. That is led by Foreign Affairs and Trade. I think we're quite proud of our record in terms of us being one of the agencies that took a strong lead and embraced the SDGs.

**Senator MOORE:** Absolutely.

**Mr Cahill:** And we did the design work for the digital platform and reporting. The commitment from this department is on multiple fronts with SDGs. One is that we've been very focused on keeping out any data or any information we've got up to date. It's not saying, 'Let's do it every six months or every year.' If we've got extra information, when it's available

we'll focus on that. We've also used the SDGs and embedded it in our corporate plan and in a lot of our planning considerations, and it's also being aligned and incorporated into our future environmental reporting and a range of other fronts. I actually think it's been a very good framework, the SDG framework. It's a framework that enables you to look across—regardless of structures of departments—and see how Australia's tracking. So we're making more progress and there are conversations about how we keep this view current rather than just update it every five years.

**Senator MOORE:** Yes, to maintain it. Environment has taken the lead in that space.

**Mr Cahill:** We've done the lead in terms of creating the architecture and the systems and the platforms to do that. I'd like to think we've been very progressive as a portfolio, in terms of making sure that we make clear commitments to gathering data and embedding it into our own planning processes.

**Senator MOORE:** Mr Cahill, on the interaction with the other departments, it is fair to say that not all departments are at the same level of engagement with the SDG agenda—

**Mr Cahill:** It's predominantly through the deputy secretary forum. I can't remember if it happens twice or three times a year.

**Senator MOORE:** There's no set program. That's one of the issues. It's happens as called. It's not a two-times-a-year or three-times-a-year thing, from what I've been told.

**Mr Cahill:** I can't remember, I'm sorry, Senator.

**Senator MOORE:** In terms of that process, we were told also that that is a chance for departments to share best practice and to learn how you can translate what's happened in one department and take it to another. In terms of those discussions, has the work that Environment has done been shared with other departments so that they can see that it does work?

**Mr Cahill:** We were very forward-leaning at the time in terms of particularly the forums that were held in Sydney and during the process. I'm also pleased because the people who were involved in that exercise formed new ways of relating in the workplace. They're still at the lower levels—a lot of exchange of information—but the formal process is more periodic.

**Senator MOORE:** It's in your corporate plan, I know, and that will be reflected in your annual report?

**Mr Cahill:** Yes. We'll incorporate SDGs appropriately in our annual report as well.

**Senator MOORE:** Thank you very much. Thank you, Chair.

**Senator URQUHART:** We have a few questions around electric vehicles. Are they in outcome 2 or outcome 4?

**Mr Pratt:** Outcome 2.

**Senator URQUHART:** Thank you.

**Senator McALLISTER:** The last time we were here—I wasn't in the room—there was some discussion about the Communities Environment Program. I'm just trying to clarify the timing of decision-making around that. Mr Cahill, are you the person to whom I should direct questions?

**Mr Pratt:** No, it is Mr Knudson on outcome 1.



**Mr Knudson:** Thank you, Senators. I was having a lovely lunch and then realised that you had zipped through a few agencies very quickly. It was an impressive performance.

**Senator URQUHART:** It is very unusual in committees.

**Mr Knudson:** In terms of the overall decision-making framework for the Communities Environment Program, obviously that was subject to the cabinet process, so I can't talk about that in great detail. But, if there are specific questions outside of the budget decision that you're looking for clarification on, perhaps we can deal with those.

**Senator McALLISTER:** Okay. The program was announced on 4 March?

**Mr Knudson:** That's correct.

**Senator McALLISTER:** When were the website and the fact sheet developed?

**Mr Costello:** They were developed in the lead-up to that, so they were made available on 4 March.

**Senator McALLISTER:** They also went live on 4 March? Right. The minister has spoken, in answers to questions in question time, about the concept of expressions of interest. Can you explain to me what she means by that?

**Mr Costello:** Yes, the minister is referring to the consultation process that is taking place. Some local members and indeed some potential candidates, having been made aware of the opportunity that will be coming in the next financial year, are talking to their communities to identify potential projects which they might support, given that the process, once the program commences, will be for local members to nominate projects for funding of up to \$150,000 per electorate. So they're starting to have those discussions about what they might put forward.

**Senator McALLISTER:** Mr Costello, you're talking about a consultation process. Am I correct in saying that, from your evidence, you're yet to determine what the formal process is by which submissions will be made to the department?

**Mr Costello:** There will be a formal process once the budget bills are passed and the funding is available in the new financial year. The process will involve members of parliament nominating proposals and the groups to manage those projects, and then those groups will be approached to submit a formal application under the program which will be assessed against guidelines.

**Senator McALLISTER:** So the MPs will nominate the groups, and then the groups will be approached by you or by the department?

**Mr Costello:** By a grants hub. The department of industry runs a Business Grants Hub. We'll be using that service.

**Senator McALLISTER:** So the grants hub will deal with it, and then the groups will make a submission?

**Mr Costello:** The nominated groups will make a submission.

**Senator McALLISTER:** By invitation only?

**Mr Costello:** Yes, based on those that have been nominated by their local member of parliament, and they'll be assessed against guidelines.

**Senator McALLISTER:** They will be assessed against some criteria?

**Mr Costello:** Correct.

**Senator McALLISTER:** And the criteria are yet to be developed?

**Mr Costello:** That's right.

**Senator McALLISTER:** Okay. This idea that there's a process of expressions of interest is not mentioned in any of the documentation, as far as I can see. It's not on the website.

**Mr Costello:** That term is not used on the website, no.

**Senator McALLISTER:** Or on the fact sheet.

**Mr Costello:** No. The website refers to a consultation process being undertaken.

**Senator McALLISTER:** And the announcement doesn't make reference to expressions of interest.

**Mr Costello:** No.

**Senator McALLISTER:** So, when Minister Price refers to expressions of interest, we can't really be certain of what she's talking about, because it's not a part of the formal process as announced.

**Ms Jonasson:** As Mr Costello has outlined, there's expected to be, in every federal electorate, a consultation process, whether it's called a call for expressions of interest or a call for applications, as we discussed at the last hearings, or some other thing. That's how we're interpreting that to be. It's not part of the formal assessment process that the department will run if the money is appropriated and once the guidelines are developed, but it's open for any federal member to determine how they may wish to identify projects that they would wish to put forward for consideration in the formal process.

**Senator McALLISTER:** So it will be up to the member about how they will do it. It may be different in every electorate?

**Ms Jonasson:** That's correct.

**Senator McALLISTER:** I might come back to that process. Can I just ask about its development. When did the idea for the Communities Environment Program first emerge?

**Mr Knudson:** As I mentioned earlier, that was part of the cabinet process. What we can say publicly at this point is—following the Prime Minister's announcement, as you mentioned earlier in your questions—the first public information on this was available on the 4 March.

**Senator McALLISTER:** I see.

**Mr Knudson:** The other thing, if I may, the minister did write to all members of parliament last week, because there is uncertainty over this project, and did indicate that indeed local members are encouraged to consult with community groups about environmental projects ahead of the program opening.

**Senator McALLISTER:** When did that letter go out?

**Mr Knudson:** I don't have the exact date, but I know it was early last week.

**Senator Birmingham:** The third of April.

**Mr Knudson:** There we go: 3 April. That letter went on to talk about the fact that grant guidelines and an application form will be available mid-year for sitting members of parliament to nominate projects for their respective electorates.

**Senator McALLISTER:** I see. Do all of the department's grants programs takes this approach, where the local member of parliament identifies the applicants?

**Mr Knudson:** No.

**Senator McALLISTER:** Do any other grants administered by this department operate in this way?

**Mr Knudson:** I think—as the press release by the Prime Minister talked about—because this was being specifically targeted on each federal electorate, it has been designed that way. But, in terms of our other grant programs, they're run according to the needs of that individual program. Mr Costello happens to be an overseer of a number of those in the biodiversity area, so we can talk through that as well.

**Senator Birmingham:** This program, as was made clear at the time of the announcement, is modelled on the existing Stronger Communities Program, which is administered, I think, by the infrastructure and regional development department and has a history now of operating in a similar model whereby local MPs engage with their local communities.

**Senator McALLISTER:** Sorry. You're trying to say it's analogous to another program?

**Senator Birmingham:** I'm saying that, in terms of the local MP engagement with their communities, it is modelled on a pre-existing program administered by a different department, and that program is the Stronger Communities Program.

**Senator McALLISTER:** Right. But, I mean, environment programs normally have a particular environment outcome—do they not—that they're trying to achieve?

**Mr Knudson:** Yes. And so does this program.

**Senator McALLISTER:** What is it?

**Ms Jonasson:** The intent is that the \$22 million will provide funding to deliver projects that conserve, protect and sustainably manage the environment. It aims to support environmental priorities, the local community and environment groups to not only recover and strengthen our environment but also to build and strengthen their communities.

**Mr Knudson:** If I can add to that, specific things the minister outlined in her letter were that grant funding will be available for environmental priorities such as waste and litter reduction; protecting native animals, including threatened species; addressing weeds and pest animals; restoring and improving coastal wetlands, riverbanks and waterways; and greening parks and urban areas.

**Ms Jonasson:** And there are a number of groups that will be eligible. This includes community groups; not-for-profit organisations, including Indigenous organisations; Landcare groups; other community and conservation groups; and local government bodies as defined by the Local Government Act.

**Senator McALLISTER:** What will happen if you're such a group but your local member does not recommend that you be allowed to make an application?

**Ms Jonasson:** One of the criteria is the local member's support for the proposals put forward. That's a policy decision that has been taken on this program.

**Senator McALLISTER:** Right. So just say your local member doesn't like your organisation because you perhaps advocate for a different approach to greenhouse gas

emissions reduction, for example, to the one preferred by the local member, and the local member decides not to recommend your organisation. Then you just won't be able to apply at all. Notwithstanding your ability or interest in conserving, protecting and managing the environment to support litter or waste reduction or vegetation management, or any of these things, you just won't be able to be considered?

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

**Senator McALLISTER:** I see.

**Senator Birmingham:** In the end, each MP is accountable to their electorate. Just as that is the case with the Stronger Communities Program at present, MPs are expected to administer such programs in a fair way.

**Senator McALLISTER:** Yes. Expected by whom?

**Senator Birmingham:** Well, their electorates, ultimately.

**Senator McALLISTER:** I see. So the recourse available to a group that felt themselves to be excluded would simply be to campaign against the local MP?

**Senator Birmingham:** That's always one option that's available to anybody in our society.

**Senator McALLISTER:** It is. Are there any other options if someone feels they have been dealt with unfairly under this process?

**Senator Birmingham:** I often see people make representations on a whole range of different issues.

**Senator McALLISTER:** To whom would they make a representation in this example?

**Senator Birmingham:** People make representations to ministers, they make representations to opposition members, they make representations in a whole manner of different directions if they feel they have been unfairly treated.

**Senator McALLISTER:** So the only way that you can get a result in this circumstance is to undertake a political campaign, basically. If you're excluded by the terms of this grant process, you can kick up a fuss politically. That's it.

**Senator Birmingham:** I think people should have confidence that these are grants for local environmental outcomes. I'm sure that local MPs will encourage the fair and effective engagement and participation of their local communities.

**Senator McALLISTER:** Is that what Mr Crewther and Ms Price were doing when they were announcing the outcomes of these grants that have not yet opened?

**Senator Birmingham:** As I said the other day to Senator Keneally, I'm sure if Mr Crewther and the government are re-elected those local community environmental organisations will be able to see their applications progressed and funded. It's a matter for, of course, your side of politics if you're not going to support those local community organisations.

**Senator McALLISTER:** The role of the local parliamentarian, as I understand it, is to create a shortlist of organisations that may apply. It's the department that assesses their application against the grant criteria; is it not?

**Senator Birmingham:** Ultimately, the department approves that an application has met the criteria.

**Senator McALLISTER:** Right. So, when Minister Price and Mr Crewther went and told these groups that they would get this funding—and announced it in writing—they were pre-empting the processes of the department.

**Senator Birmingham:** They are obviously confident that the projects proposed by those organisations will fall within the intentions of the program, and of course the grant criteria will reflect the intentions of the program. I think those groups should have every confidence that, if Mr Crewther and the government are re-elected, they will receive their funding.

**Senator McALLISTER:** It doesn't say much for process though, does it? The criteria we have just heard for the allocation of grants is yet to be developed, yet your evidence to us is that Minister Price and Mr Crewther, even in the absence of criteria, can guarantee to local groups that they will be successful. Why would anyone have confidence in a process like that?

**Senator Birmingham:** Minister Price has particularly intrinsic knowledge about the intent of the program, and the guidelines will be established to reflect that intent.

**Senator McALLISTER:** Is this a new standard for government? As long as the minister has knowledge of the intrinsic intent, she may just announce grant winners before grant criteria have been established?

**Senator Birmingham:** No. But I think—

**Senator McALLISTER:** It sounds like a new standard. I've never heard that sort of idea advanced as a standard governance process before. It's quite odd.

**Senator Birmingham:** I'll take that as a comment, Senator.

**CHAIR:** Do you have further questions, Senator?

**Senator McALLISTER:** I do have further questions.

**CHAIR:** Great.

**Senator McALLISTER:** A month after this program is announced—and there's some indication about the expectation that MPs will consult—you write to parliamentarians. Is there any communication in the intervening period between the announcement on 4 March and the letter on 3 April? Do some parliamentarians receive advice that this program is on foot?

**Senator Birmingham:** It was publicly announced, so everybody, in that sense, received advice.

**Senator McALLISTER:** Right. May I ask you, Mr Costello, how many parliamentarians asked for information about this program in the window between 4 March and 3 April.

**Mr Costello:** I don't have that information, but we pointed anybody who did inquire to the fact sheet that was on the website.

**Senator McALLISTER:** That was all that was provided to parliamentarians as they undertook this process of consultation?

**Mr Costello:** From the department, yes, until the letter went out, which essentially cut and paste the information from the website and put it in the form of a letter. I'm aware the minister's office promoted the opportunity to members of their party.

**Senator McALLISTER:** So the minister's office promoted the opportunity to members of their own party.

**Mr Costello:** Yes, they provided the information on the fact sheet, which was on the website, proactively.

**Senator McALLISTER:** They proactively presented the information on the fact sheet on the website to members of their own party.

**Mr Costello:** That's correct.

**Senator McALLISTER:** Did any of the independents get a heads-up?

**Senator Birmingham:** It was on the website, and a media release was issued.

**Senator McALLISTER:** But you didn't go to Ms McGowan, Mr Wilkie or any of the independents in the lower house?

**Senator Birmingham:** I don't know. I'm happy to take it on notice, but it's not like information wasn't publicly available for all to see. There was no exclusive information in that sense.

**Mr Knudson:** It was literally linked to the Prime Minister's media release—the information that's being referred to—on 4 March.

**Senator McALLISTER:** Are you aware that Labor parliamentarians contacted the department and were told there was no information about expressions of interest because the program hadn't opened?

**Ms Jonasson:** I'm not aware of that.

**Mr Costello:** They would have been pointed to the information on the website.

**Senator McALLISTER:** Is the department satisfied that the process so far meets the governance tests that you would establish for yourselves? Mr Pratt, are you satisfied with the program as it's unfolded so far?

**Mr Pratt:** I'm certainly satisfied that everything my colleagues have identified in relation to the program has been implemented and identified as they have discussed at this hearing and last week.

**Senator McALLISTER:** Sorry, you're satisfied the advice they provided the committee is correct—is that your evidence?

**Mr Pratt:** And also that it accurately covers the announcement, the material that was available and the criteria. Essentially everything that has been provided on this program has been accurately covered by the testimony by my colleagues at these committees.

**Senator McALLISTER:** I'm asking a different question, which is whether the administrative arrangements thus outlined by your colleagues meet your own tests for public sector administration.

**Mr Pratt:** Senator, in effect, I think you're asking me to make an assessment of the policy of the government and the design of a program announced in the budget for the budget purposes. I will decline to do that because it is not the role of the public service to provide that sort of commentary about government programs.

**Mr Knudson:** If I can again come back to what I read out earlier on from the minister's letter, which talks about each member of parliament being encouraged to consult with

community groups in advance of the grant guidelines being provided and an application form being assessed mid-year, et cetera, what's happened to date has been utterly consistent with exactly that. There are members of parliament who are engaging with their community groups, that will then come to us once we've developed the grant guidelines for proper assessment. In effect, the Department's role in that formal assessment process hasn't begun, because we haven't put out the guidelines and therefore haven't engaged with the grants up to how the various applications are assessed. To date, everything that's happened from an administrative perspective has been exactly as is outlined in the Minister's letter to all MPs.

**Senator McALLISTER:** Yes, except for the bit where the Minister announced the outcome of the grant process.

**Senator Birmingham:** Senator, that was extensively canvassed last week. In the end, as I've said before, I think those entities should have confidence that if Mr Crewther and the government are re-elected, their funding applications will successfully proceed.

**Senator McALLISTER:** Minister, that's a ridiculous proposition. The idea that we open a grants process, but we already know what the outcome of that grants process will be prior to it opening, is ludicrous and doesn't meet any test of public administration. You can't seriously say that with a straight face.

**Senator Birmingham:** Mr Crewther has obviously sought expressions of interest; he's highly engaged in his local community; he's aware of different project proposals that exist—

**Senator McALLISTER:** All of those things are fine. It's the bit where you confirm that people are going to receive the money that is the problem.

**Senator Birmingham:** Well, Senator, I—

**Senator McALLISTER:** Do you not concede that that's a problem, Minister?

**Senator Birmingham:** I trust that in the time between now and the election campaign, and on election day, we won't see any Labor candidates committing funding under the Stronger Communities Programme, or under this program.

**Senator McALLISTER:** Minister, there is a big difference between a process that is operated by a department, and your Department is here before us, trying to explain what it is they're actually doing to administer this project. Have any coalition parliamentarians provided information to the Department on priority projects or organisations?

**Ms Jonasson:** No, Senator.

**Senator McALLISTER:** Is there going to be any further clarity? I note that a letter was sent on 3 April—do you intend to make any further public clarification about how organisations become involved in this process?

**Mr Knudson:** There will be clarity provided once we're in a position where we're providing the grant guidelines, which will spell out what the process is and what the criteria for assessment will be. As has been said, that'll be in the mid part of the year.

**Senator McALLISTER:** In the mid-part of this year.

**Mr Knudson:** That's correct.

**Senator McALLISTER:** So then the grants will open? I see. Alright. I don't know if we're going to get any further but, Minister, I do think it would have been better just to say,

'Minister Price made a mistake.' The pretence that announcing a grant before the grant opens is acceptable is, frankly, just embarrassing. That is, I guess, an option that is available to you now. Did she make a mistake?

**Senator Birmingham:** That's your commentary. These issues were all extensively canvassed with Senator Keneally last Thursday, and all the information remains the same as it was then.

**Senator McALLISTER:** Well, kind of—except that Minister Price has provided a totally inadequate explanation in Question Time, and there's the opportunity now for Government to put the whole thing away once and for all by explaining it was actually an error, not a perfectly normal part of governance and administration. But you're not going to do that?

**Senator Birmingham:** There's a clear role in this program, as there has been in prior programs, for local MPs in their engagement with the community.

**Senator McALLISTER:** Alright. Thank you, Chair.

**CHAIR:** Thank you. Are there any further questions from Labor senators about Outcome 1?

**Senator URQUHART:** Yes.

**CHAIR:** Senator Urquhart.

**Senator URQUHART:** Does the Department keep a list of the government's election commitments?

**Mr Cahill:** In terms of where there is a policy that was from an election—so from the last election in 2016, I've got to get my elections right—we keep a list of election commitments that we're implementing as part of listing and tracking anything we're implementing for the government of the day.

**Senator URQUHART:** Can you tell me what they are for 2013 and for 2016?

**Mr Cahill:** I'd have to take that on notice. I don't have that with me.

**Senator URQUHART:** Can you get it during the course of—

**Mr Cahill:** I'll see what I can do, Senator. You've got them?

**Ms Campbell:** Yes.

**Senator URQUHART:** Thank you. Do you report progress to the minister?

**Ms Campbell:** We have reported recently to the minister progress on the election commitment, which is one of the reasons—

**Senator URQUHART:** Does the minister ask or do you, as a matter of course, report that progress?

**Ms Campbell:** I'll take that on notice. I can't recall.

**Mr Pratt:** I can answer that question. We do it on a regular basis.

**Senator URQUHART:** Can you tell me what election commitments are outstanding?

**Ms Campbell:** Not now. I'll have a look on notice.

**Senator URQUHART:** That would be in that list.

**Ms Campbell:** Yes.



**Senator URQUHART:** Great. I now turn to the 20 Million Trees Program. It's correct that the government committed to planting 20 million trees, in 2013?

**Mr Knudson:** That's correct, Senator.

**Senator URQUHART:** How many trees have been planted?

**Mr Knudson:** Mr Costello has the most recent information on that.

**Mr Costello:** The answer is 18 million. I can give you a precise answer in a minute. We're on track to plant 20 million by 2020, which was the commitment.

**Senator URQUHART:** Can you tell me how many of the trees have died, or what's the survival rate?

**Mr Costello:** I can't tell you how many have died. Each project has to report on how many have been successfully established.

**Senator URQUHART:** So what's the survival rate?

**Mr Costello:** I don't have the survival rate here.

**Senator URQUHART:** Are you able to get that?

**Mr Costello:** It's not a requirement of the reporting, I don't think, to say what the survival rate is. It's a requirement to confirm that the contracted number of trees have been established.

**Senator URQUHART:** When you say 'established', do you mean planted?

**Senator Birmingham:** And survived.

**Ms Jonasson:** One of the things we should point out is that one of the major contractual requirements of this program is that there must be an acquittal of the plants that have survived and there is a need to make good. If there's been a significant planting and a whole heap of them died, the provider needs to make good and replant to ensure that they meet the intention of the contract.

**Senator URQUHART:** But you don't keep a report on the survival rate?

**Mr Costello:** Not that I'm aware of or can produce here today. I can take it on notice. Certainly, the requirement is to report on the number of trees established and that met the requirement.

**Senator URQUHART:** Are there plans and funding to plant more trees under this program?

**Mr Costello:** The program is fully committed to deliver 20 million trees. There's a small amount remaining, in the order of about \$600,000, I believe, which is a bit of a contingency, just in case, for the final year of the program. At the moment, the contracted number of trees is just over 20 million. If there were some requirement to top that up, we've got a little bit of money left to do that—around \$600,000. Beyond that, there's no further—

**Senator URQUHART:** How many would that be?

**Mr Costello:** How many trees?

**Senator URQUHART:** How many does that equate to?

**Mr Costello:** The average cost per tree is between \$3 and \$4; \$3.10 is the current average cost per tree.

**Ms Jonasson:** The program was to plant 20 million trees. With the funding that was provided, that was successful, or will be. We expect it will be successful. And there's some change left over.

**Senator URQUHART:** Thank you. I want to turn to threatened species. I'll start off with birds. Is it correct that the government committed to turn around the trajectory of 20 priority birds by 2020 in its threatened species election commitments?

**Ms Jonasson:** I'll just ask Sally Box, the Threatened Species Commissioner, to join me at the table.

**Dr Box:** There was a commitment in the 2015 Threatened Species Strategy of the Australian government to improve the trajectories of 20 birds and 20 mammals by 2020.

**Senator URQUHART:** Has this commitment been delivered? I understand that we are eight months out from 2020, but can you tell me: has it been delivered?

**Dr Box:** There's certainly action underway for all of our priority mammals and priority birds in the Threatened Species Strategy, and many of those investments in those priority mammals and birds are delivering some fantastic results on the ground. For example, for the mallee emu-wren in South Australia, we've just reintroduced a population to South Australia, which is really reducing the extinction risk for that species. For the central rock rat, we've undertaken feral cat baiting in the West MacDonnell Ranges, which has really done some great things for that species in reducing the extinction risk there. So there's certainly action underway for all of our species, and we are gathering information from all of our stakeholders about the action underway and the monitoring activity underway for each of those species in order to be able to do a really robust assessment against those trajectory targets.

**Senator URQUHART:** So how far along the pathway are you, in terms of that action that's underway, to being able to deliver that by 2020?

**Dr Box:** We're certainly making some really good progress. Of course, recovery of threatened species is complex and challenging, so of course those targets to improve the trajectories of 20 mammals and 20 birds by 2020 were always ambitious, because recovery is complex and takes time. But we've certainly made some really great inroads for many of our birds and mammals.

**Senator URQUHART:** So are you confident that you will deliver that by 2020?

**Dr Box:** As I mentioned previously, recovery is complex and challenging, but certainly there's every effort going towards those 20 birds and 20 mammals in order to improve their trajectories. We are working very closely with our state colleagues, with our colleagues in the private sector and with bird experts to track how those birds are going so that we can report on those targets in 2020, identify our successes and identify where there might be some more work required.

**Ms Jonasson:** I might point out that, with a number of programs—I might call Mr Costello back to the table, actually, to talk about this for you—where funding has been provided to threatened species specifically, we ask that those actions be consistent with the recovery plans and the conservation advices that we have in train or that we have published so that we can ensure that we're doing everything we can in order to meet the targets that have been identified in the strategy. I'm not sure if Mr Costello wants to expand further on some of the programs where that funding has been provided for those projects.

**Mr Knudson:** Actually, if you don't mind, I wouldn't mind talking about this, because this is a really interesting point that Dr Box was just talking about—improving the trajectories of our species. My understanding is that with the exception of a few whales—the southern right whale being a very good example where we've seen a definite tick-up in the population in the right direction—what the Threatened Species Strategy is putting in place is the level of analysis to be able to demonstrate not only that the species populations are improving but also what interventions were particularly responsible for achieving that. So it's a much more intensive analysis and evaluation of what's actually happening on the ground. But I just want to give credit to Dr Box and her team for the work that they're doing in that space, which has rarely been done in this country and, I think, will be shown to be, quite frankly, very world-leading in that space.

**Dr Box:** We've been working very closely with scientists from the National Environmental Science Program's Threatened Species Recovery Hub over the last six months to go out to many stakeholders around the country who are experts on these species, to gather information about action underway and to gather information about the monitoring that's being done, using a process of this data collection and analysis and then expert elucidation to examine what's happening with the trajectories of these species. So we've kicked off that process already, and that is a process that will continue as we lead up to year 5 and report on our year 5 targets.

**Mr Costello:** Threatened species have become priorities. A particular focus has been brought onto threatened species since we've had a Threatened Species Strategy and a Threatened Species Commissioner. In a number of the programs that we've run since that time, they've been identified as priorities. We make information available to applicants about what threatened species might be in their area. For example, in our Regional Land Partnerships, we provide interactive maps so people can look up, in the area that they're interested in preparing projects for, which species or threatened ecological communities are listed.

Then we point them to the recovery plans and the conservation advices. These are developed when species are listed, and they are intended to guide recovery actions by the Commonwealth but by others as well—so states and non-government organisations. Anybody who's got an interest in the recovery of a species can look at the recovery plans and get the advice on what are the threats to that species—feral predators et cetera—and what are the recommended actions that can be taken. So, when people apply, we point them to those documents and say that they should develop their projects drawing on that information. Then, when we assess applications, we assess them for consistency against those recovery plans. Then, when they're contracted again, we make sure that what we call the MERI plan—the monitoring, evaluation, reporting and improvement plan—aligns with the best science available, which is typically the recovery plan or the conservation advice, when we sign off on those projects. Those MERI plans will also establish what the intended outcome is for that species, what the baseline measure is and then how you would detect change over the life of the project to see whether the project is in fact achieving its intended result for the species. So it's quite a thorough process. It commences with the listing of species and continues with the development of the recovery plans, right through to the selection and then contracting and then monitoring of projects. We follow that right through.

**Dr Box:** As Mr Costello said, through the Regional Land Partnerships Program we have a focus on the priority species in the Threatened Species Strategy, those species for which we're trying to improve their trajectories. We've got some great projects that are rolling out just now for the malleefowl, the red-tailed black cockatoo, the regent honeyeater and the matchstick banksia. These really have been a priority for the Regional Land Partnerships Program.

**Mr Costello:** The plains-wanderer got some media over the weekend as well.

**Dr Box:** That's right. So I'm confident that those additional projects that are rolling out now will assist with improving the trajectory of these species as we head to 2020.

**Senator URQUHART:** Can you tell me how much funding's been invested in the commitment?

**Dr Box:** Since 2014, there's been \$425 million mobilised for projects supporting threatened species outcomes generally. That includes our priority species under the strategy but also a wide range of other species.

**Senator URQUHART:** What about just limited to the trajectory that we're talking about, for 2020?

**Dr Box:** I'd have to take that on notice on a species-by-species basis, but I'd also make the point that the Threatened Species Strategy is about focusing Australian government investment, as we have through the Regional Land Partnerships Program, but it's also about mobilising partnerships and encouraging others to get involved in protecting and recovering these species. There are many partners involved in targeting investment and effort towards recovering these priority species, not just the Australian government.

**Senator URQUHART:** Yes. Who is responsible, then, for delivering it?

**Dr Box:** Certainly the Australian government has taken on the role of implementing and shepherding the implementation of the Threatened Species Strategy, but we do encourage a wide range of partners to be involved in recovering these species, and we do look to try to mobilise the investment from others in those species. For example, we've worked very closely with the Western Australian government on a number of the priority species in that strategy. We mobilised \$1.7 million to integrate feral cat baiting into the Western Shield program, which has had benefits for the woylie, the numbat and a range of other species there. So that's been very much a joined-up effort with the Western Australian government. So we do work very closely with others for these species.

**Senator URQUHART:** Okay. But the ultimate responsibility is on the government, and the department obviously then goes out to other bodies, such as state governments, to deliver the program?

**Dr Box:** We do work with a range of stakeholders to deliver it, but, yes, the Australian government has taken on the responsibility for reporting against those targets in the Threatened Species Strategy. When we report on those targets, we showcase, obviously, the efforts that the Australian government have made towards those targets but also the efforts of the entire conservation community in contributing there. So we are really trying to showcase and celebrate those collective efforts towards meeting those targets. But, yes, we are taking responsibility for coordinating the implementation of that strategy and reporting on those targets.

**Senator URQUHART:** Has the minister raised any concerns in relation to the commitments and the delivery of those commitments?

**Dr Box:** No.

**Senator URQUHART:** How often does the department report or get asked to report on the commitment by the minister?

**Dr Box:** There's annual reporting on the Threatened Species Strategy. So there's a year 1 report and a year 2 report available on the department's website. That is the commissioner's report to the minister and is made available to the public by the department's website.

**Senator URQUHART:** In terms of the funding, you said there was \$425 million but that was not just limited to these programs—is that correct?

**Dr Box:** Just give me one second.

**Mr Knudson:** What Dr Box talked about was that that \$425 million supported outcomes related to threatened species, so it is not limited to the 70 species in the Threatened Species Strategy, just to be clear about that.

**Dr Box:** That support is for projects delivered through a range of programs—through the National Landcare Program, the 20 Million Trees Program, the Threatened Species Recovery Fund, the Green Army, and the National Environmental Science Program. It also most recently includes \$170 million committed through the Regional Land Partnerships Program for projects that are focused on outcomes for threatened species and threatened ecological communities. That funding mobilised is for projects that are supporting outcomes for threatened species. Many of those projects are obviously supporting a range of other outcomes as well. As Mr Knudson said, they are broader than just the Threatened Species Strategy; they go to a range of other species like the corroboree frog et cetera.

**Senator URQUHART:** But that \$425 million is not limited to the 20 priority birds or mammals?

**Dr Box:** Absolutely not.

**Senator URQUHART:** You're not able to break that down for me at all?

**Dr Box:** The \$425 million figure is the total value of all projects identified as supporting threatened species outcomes since 2014.

**Senator URQUHART:** So all threatened species?

**Dr Box:** All threatened species. There are projects, obviously, that are particularly supporting our priority species. There are many projects, of course, which go to habitat restoration which have benefits for multiple threatened species, of course.

**Senator URQUHART:** Yes. Has the minister provided more funding for this program?

**Dr Box:** For which program?

**Senator URQUHART:** For the 20 priority birds?

**Dr Box:** To support the implementation of the Threatened Species Strategy, we are integrating those priorities into Australian government programs. The Regional Land Partnerships Program is the prime example where we have the Threatened Species Strategy, which sets out the policy priorities of government, and those priorities became priorities in the Regional Land Partnerships Program. Threatened Species Strategy species were given priority

under that program. It's really worked by trying to mainstream our Threatened Species Strategy priorities into Australian government programs.

**Senator URQUHART:** I just asked you the questions about the birds and the trajectory of 20 priority birds. There was also a commitment to turn around the trajectory of 20 priority mammals. Has that commitment been delivered or have you captured your answers in what I asked you about birds to mammals as well?

**Dr Box:** The same answers apply to the mammals. These are all species that have been priority species. They've been priorities for investment. We've been working with a range of stakeholders to implement projects for those species. And, similarly, we're working with scientists from the Threatened Species Recovery Hub to gather information from stakeholders around the country in order to track progress of action underway, and monitoring data in order to report on improvements.

**Senator McALLISTER:** If the commitment is to turn around the trajectory of 20 priority birds by 2020, if you still don't have the data in place, has the commitment been delivered? It seems unlikely to me that you can deliver the commitment if you don't even know what the trajectory is, let alone whether you've turned it around.

**Ms Jonasson:** The commitment is to deliver it by 2020, which is next year. As the commissioner mentioned, we know that they're stretched targets. There is absolutely some monitoring that is in place that is looking at how well we're achieving and where we need to adjust our approach or reprioritise our approach over the term of this strategy. I think Ms Box can talk a little bit more about the work that she's doing with the scientists, in terms of the monitoring, and the work that we're going to take forward. She talked about that a little bit earlier.

**Senator McALLISTER:** I guess there's a difference between process and outcomes. You live in the world of program management. The Senator Urquhart is asking you about outcomes and you're telling us a lot about the process.

**Dr Box:** Certainly we've seen some very positive outcomes already. I mentioned earlier the Mallee emu-wren. They were successfully translocated back to South Australia after a fire wiped out their population. The re-establishment of this geographically distinct population has significantly reduced the extinction risk for that species and put it on a better path. The population of Norfolk Island green parrots, which is one of our priority species, has more than doubled compared to its pre-2015 numbers, because of increased efforts by Parks Australia to manage introduced rodents and to secure nest sites. Our support for translocating the Gilbert's potoroo, which is the world's rarest marsupial, to Middle Island in Western Australia, is helping to safeguard that species against extinction. We've funded emergency interventions through feral cat baiting around some of the last refuges of the central rock rat, which has really helped to reduce the extinction risk of that critically endangered mammal. For our plant species, like *Banksia vincentia*, there was a population of only 14 in the wild, and that's grown to over 520 individual plants due to a new in-ground seed orchard at Booderee National Park. Certainly we are tracking outcomes, and there are some really positive outcomes we're seeing from the Threatened Species Strategy investments already.

**Senator McALLISTER:** Will there be a turnaround in the trajectory of 20 priority birds by 2020, though?

**Dr Box:** I guess it's a little bit early to say whether there'll be a turnaround in the trajectory by 2020.

**Senator McALLISTER:** We're eight months away from 2020. It's April.

**Dr Box:** That's right, Senator. As I mentioned before, these are really ambitious targets. Recovery is complex and it does take time.

**Senator McALLISTER:** Sure.

**Dr Box:** I'm confident that we will be seeing some positive changes in many of those species, but, as I said, we're still a way away from June 2020, when we'll need to report on those targets.

**Senator McALLISTER:** We're not a very long way away; we're only eight months away. Look, some of that news is really positive and exciting.

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

**Senator McALLISTER:** It's exciting that it is possible to turn around the trajectory of any animal or bird species. But the government commitment is to turn around the trajectory of 20 priority birds, 20 priority mammals, and 20 priority plants. 'Turn around' is a big statement. What we're asking is whether the government has actually done that. The concern is that there's a lot of talk but actually not a lot of follow-through. And that's not necessarily the department's fault.

**CHAIR:** That's been a very extensive period of time for the Labor Party. Senator Rice, we'll go to you for a period of time.

**Senator RICE:** Thank you. I think this is 1.1, but it might be 1.5.

**Mr Knudson:** We're all here, Senator.

**Senator RICE:** You're all here anyway, so it doesn't matter. Excellent. It's about the CSIRO review of the Adani groundwater dependent ecosystem and management plan.

**Mr Knudson:** We'll just get the right officers to the table, Senator.

**Senator RICE:** When did the department first receive the final CSIRO review of the Adani groundwater management plan?

**Mr Manning:** We received the final report from CSIRO and Geoscience Australia on 22 February.

**Senator RICE:** Was Adani provided with the final CSIRO report or a summary of the final report?

**Mr Manning:** No, we didn't provide a copy of that to Adani.

**Senator RICE:** So Adani didn't see any of that report, then?

**Mr Manning:** No, Senator, that's right. The advice from the science agencies was advice to us as the department, which we called upon to work with the company after that.

**Senator RICE:** Has there been any response from Adani at all or communication with the department post the CSIRO report?

**Mr Manning:** Yes, we have communicated with the company following the receipt of that report. There have been several updated iterations of the plan since that time.

**Senator RICE:** What were they based on, then, if they weren't based on them getting a copy of the CSIRO report?

**Mr Manning:** As I said, the advice we received was advice to the department to inform our regulatory assessment and decisions of those management plans. So we drew upon that advice to inform our conversations with the company as to what was required in relation to those management plans.

**Senator RICE:** So it was the department's version of the issues raised in the CSIRO report?

**Mr Manning:** The department is the regulator and ultimately responsible for ensuring that those management plans satisfy the conditions of approval and all that's entailed. So in that sense, yes, we use the advice to work in that way.

**Senator RICE:** So the issues that were raised in the CSIRO report were, essentially, through you, provided to Adani, and then Adani responded to them. Has CSIRO been granted an opportunity to review Adani's response to these issues?

**Mr Tregurtha:** Yes.

**Senator RICE:** Have you received a response from CSIRO?

**Mr Tregurtha:** Yes, we have.

**Senator RICE:** What exactly was communicated to CSIRO?

**Mr Knudson:** For clarity, I would add that the advice came in from two agencies—CSIRO and Geoscience Australia—just so it's clear that there are actually two agencies that we've been dealing with.

**Senator RICE:** What exactly was communicated to Geoscience Australia and CSIRO?

**Mr Manning:** We gave a verbal briefing to those two agencies in relation to the advice they had given us, the actions we had undertaken in response to that advice, and the adjustments and changes that the company had made in those management plans to that advice. We verbally went through that. We provided a written summary of the issues raised with us from those agencies, and basically the actions we took in response to that and the responses the company has made following it. We also passed on copies of the revised, updated management plans.

**Senator RICE:** You provided them to CSIRO and Geoscience Australia?

**Mr Manning:** That's correct.

**Senator RICE:** Have you then further received any communications back from CSIRO and Geoscience Australia about those revised management plans?

**Mr Tregurtha:** As I said, yes, we have.

**Senator RICE:** Exactly what was communicated with Adani, and are you able to table those communications?

**Mr Manning:** The advice we received from those agencies went to the scientific underpinnings, if you will, of the science in those groundwater plans. We communicated some of the issues that that raised, and some of the areas where we felt changes needed to be made to those management plans as a consequence.



**Senator RICE:** There's a lot of community concern about the issue of groundwater and the use of groundwater by Adani. Are you able to make those communications public?

**Mr Tregurtha:** We'd probably have to take that on notice. We don't have all those communications with us today. As Mr Manning and his team have been working with the company for months, if not years, in order to manage the process of doing the approvals of those management plans, there's a vast amount of communications both before and after the particular advice you're concerned about was received. We can certainly take that on notice.

**Senator RICE:** The final CSIRO report, which I understand was refused—has that been provided to the Queensland government now?

**Mr Tregurtha:** No.

**Senator RICE:** Why not?

**Mr Manning:** At the current time it's a subject that's part of the advice we provide, as we indicated on Monday. We briefed the minister in regard to the management plans, and that's being considered at the current time. I think it's appropriate that the minister and the Commonwealth finish the review of that plan prior to its being provided to Queensland.

**Senator RICE:** Despite numerous requests and the Queensland government obviously being a key player in this, they still do not have a copy of that report as yet? Are you going to give them a copy of that report before the minister makes her recommendation?

**Mr Manning:** That's a matter for the minister at the current time.

**Senator RICE:** It seems that there's an awful lot of information that should be privy to the public, and even to the state governments, that is currently not open and able to be adequately assessed by people.

**Senator Birmingham:** Senator Rice, the decision, as I understand it, to be made rests with Minister Price. All of that advice and information is with the minister—as this committee was informed last week, it reached the minister only last week. The minister is considering that advice and information. Of course, documents that are relevant to be provided to the Queensland government will be provided once the minister has concluded consideration.

**Senator RICE:** When the Australian Conservation Foundation made a freedom of information request for the CSIRO review, it was rejected on the grounds that it would impede the flow of information between the state and federal government. That's correct?

**Mr Tregurtha:** With the decision you're referring to, we found that the request was conditionally exempt, as you say, due to impeded flow of information between the state and Commonwealth government.

**Senator RICE:** But given that the Queensland government had said publicly—and you've just confirmed that—despite their requests, you haven't provided that information to them, surely there's no flow of information to impede. It's not a relevant thing. You're not actually giving the Queensland government the relevant information. How can that be grounds for refusing a FOI request?

**Senator Birmingham:** Senator Rice, the information will be provided to the Queensland government, I'm sure, and, quite rightly, would be provided ahead of it being provided to the ACF or Adani or otherwise.

**Mr Knudson:** Further to that point, it's essential that advice go to the Queensland government, because there are a number of elements that the Queensland government is a sole regulator in this space for. They develop the proposal with us to Geoscience Australia and CSIRO. They require that information for their decision-making.

**Senator RICE:** Exactly. Why haven't they been given access to the CSIRO report before now?

**Senator Birmingham:** The minister only got it last week.

**Senator RICE:** But they've had repeated requests for that since the department has had it.

**Senator Birmingham:** The minister only received the report last week.

**Senator RICE:** But they have made repeated requests. The department has had it.

**Mr Pratt:** It's not at all unusual that, on a major decision of something like this sort, the relevant minister and the relevant level of government looks at the material, considers it and takes a decision before it is then shown to other, albeit very important, stakeholders. That has been the case for, well, my entire career.

**Senator Birmingham:** As Senator Moore noted before, that's a somewhat lengthy career.

**Senator RICE:** Will it go to the Queensland government before the management plan is approved or not approved? Will it go before a decision on the management plan?

**Mr Knudson:** That's a decision for the minister.

**Senator RICE:** So you won't even guarantee it. As you said, they're a very important regulator. There are important things the Queensland government had, but you can't even say that it will necessarily go to the Queensland government before the minister makes her decision?

**Senator Birmingham:** The report will be provided to the Queensland government to enable them to make decisions in relation to the matters that they have to make decisions on. The report is currently with Minister Price to help inform her decision-making in relation to the areas that are her responsibility.

**Senator RICE:** But will she need some feedback from the Queensland government in order to help her make her decision before the management plan is approved?

**Mr Knudson:** No. She has all the information provided to her by the department to inform her decision, and that will be sufficient for her to have a very well-informed decision to make.

**Senator RICE:** So the views of the Queensland government are irrelevant to her decision? The views of the Queensland government and their response to a very important report on the groundwater management plan are not relevant?

**Mr Knudson:** They're separate regulator. They'll have to make their own decision.

**Senator RICE:** How many meetings have Adani representatives and their lobbyists had with the department in relation to the groundwater dependent ecosystems management plan over the last six months?

**Mr Manning:** We'd have to take that on notice. I think we got a question on that at a previous estimates where we provided that up to that particular date. We would have to take it on notice to update it since the information provided at that time.

**Senator RICE:** I'm also interested in meetings with the minister. How many meetings have you had with CSIRO?

**Mr Manning:** Likewise, I couldn't say offhand how many engagements we've had with CSIRO. I'd have to take that on notice.

**Senator RICE:** Thank you. There's a really strong perception of misconduct and there's a huge amount of concern regarding the decision being made on the management plan.

**Mr Pratt:** A perception of misconduct by whom?

**Senator Birmingham:** That's serious. Are you alleging the officers are—

**Senator RICE:** I think the community feel that the issues of groundwater use by Adani are not being properly considered, that there is secrecy and that CSIRO reports aren't being made public.

**CHAIR:** I think senators should be temperate in their language instead of throwing around accusations and claiming there are perceptions around officers at the table. Senator Rice, please be careful with your language.

**Mr Pratt:** I've been scrutinising this process quite closely. I put on record that I have seen no evidence of any misconduct by officials of my department.

**Senator RICE:** Thank you for that. That's good to hear. But given the concerns about the issue of groundwater use by the mine—

**Senator Birmingham:** An apology wouldn't go astray.

**Senator RICE:** what I want to ask is whether the matter will be referred to the independent expert scientific committee to provide advice also.

**Mr Knudson:** No. As I have said previously, from questions in previous Senate estimates, the thing that I was always focused on was making sure there was independent and robust scientific advice provided to inform the department's consideration of its development and the recommendations of the minister. That has already happened through the advice that we've received from CSIRO and GA, acknowledging that those are two of the world-leading experts in exactly these types of issues.

**Senator RICE:** It's been referred, but we don't know what they have said.

**Senator Birmingham:** Their reports have informed the department's analysis and advice and, ultimately, will inform the minister's decision, as is entirely appropriate, Senator Rice. That is independent expert advice going to government to inform these decisions.

**Senator RICE:** In similar circumstances, Minister Hunt referred the water management plan for the Shenhua coalmine to the independent expert scientific committee. Why is the decision not to provide a similar level of scrutiny in this circumstance?

**Mr Tregurtha:** In the department's view, the scrutiny provided by Geoscience Australia and CSIRO is of a similar level to that that could be performed by the independent expert scientific committee. Indeed, while the independent expert scientific committee has a role prior to making an approval decision under the EPBC Act, the act is silent on the gaining of expert advice once an approval decision has been made. In relation to this project, the approval decision has been made and the department determined, in consultation with the government, to seek advice from Geoscience Australia and the CSIRO.

**Senator RICE:** Is there a difference between all the levels of transparency in terms of the recommendations from the independent expert scientific committee compared with the advice that you receive from CSIRO and Geoscience Australia?

**Mr Tregurtha:** As I said, the act is silent on requirements to seek any advice at all in relation to post-approval management plans. With regard to an agency which the department decided to seek expert advice from—and this has happened a number of times in what we call a post-approvals area of the act—there's no obligation in relation to specifically set out in relation to anything like transparency. It would just follow the normal processes of government and be subject to the normal processes.

**Senator RICE:** But my question is, if it was referred to the independent expert scientific committee, would that then require a level of transparency as to their response?

**Mr Tregurtha:** What I'm saying is there's no requirement in the act for post-approval—

**Senator RICE:** But that's not my question. My question is, if it was referred to the independent expert scientific committee, would there be a difference in the level of the transparency for their response compared to you having referred it to CSIRO and GA?

**Senator Birmingham:** I suspect the answer is no, because there is no requirement in the act that would either extend further, or limit further, the level of transparency for the independent expert scientific committee relative to the other independent expert advice that has been sought by the department. I stand to be corrected but—

**Senator RICE:** Can we get some assurance, given this level of concern, that the minister won't be approving the management plan in a rush in the lead-up to the election?

**Mr Tregurtha:** The approval of the management plan is a matter for the minister.

**Senator RICE:** Would you think it appropriate for it to be approved with the election about to be called?

**Senator Birmingham:** That's asking officials for an opinion. The looming election should have no bearing in relation to the decision. The decision should be made based on the legal requirements under the EPBC Act, the conditions placed on the approval for the project and the advice and expert information that has been provided to the minister to inform her decision against the recommendations that have been made. Like any other EPBC Act determination, even though most others may not have people sporting earrings with slogans on them, this should still be made according to the law of the land and by the book and should not be something that is subject to the politics of an election campaign.

In the end, I can assure you, in terms of your transparent questions, that these reports will be provided to the Queensland government and made public. Transparency will be there for all. This information went to the minister last week. It's for the minister to then make a determination based on the information that is before her.

**Senator RICE:** I understand there have been thousands and thousands of submissions made opposing the groundwater dependent ecosystem management plan. Can you tell me how you intend to properly consider those submissions in the next few days, if indeed, from your answer to my question, Minister Birmingham, the option is still there for the minister to make a decision before the election is called?

**Senator RICE:** The submission process—

**Mr Tregurtha:** I think there are a couple of things on that. Again, there is no submissions process provided for under the EPBC Act for a management plan as opposed to the assessment and approvals process under the EPBC Act. Regardless, I'm sure that, if the minister were to get correspondence in relation to any matter, it would be up to the minister how that correspondence was taken into account.

**Senator RICE:** Are you aiding the minister in her consideration of that considerable correspondence that has occurred? I'm told thousands of submissions have been made. I'm not sure whether officially they've gone to the department or they've gone to the minister, but there are a lot of people expressing their concerns about this management plan.

**Senator Birmingham:** The department of course provides advice, information and analysis compiled from the expert agencies in terms of the decision to be made. The department has also usually provided administrative assistance to ministers in relation to correspondence they receive.

**Senator RICE:** So are you providing that assistance?

**Mr Tregurtha:** We're not at this stage aware of any such correspondence as you're referring to, but, as the minister pointed out, it is the general practice of the department, where the minister's office was to receive correspondence, to assist in drafting replies and responses to that. But at this stage we're unaware of the submissions that you're referring to.

**Senator RICE:** Would you be able to consider them in what's likely to be only a four business days before the election given you're not even aware of them yet?

**Mr Tregurtha:** As we told the committee on Thursday, the department provided its briefing on this matter to the minister on Monday last week.

**Senator RICE:** But that was your briefing on the matter. I'm asking your assistance to the minister for replying to the thousands of submissions made about the plan.

**Mr Knudson:** All I would say is that we stand ready to help and serve the minister as is needed. Indeed, again, just to draw a point of contrast, if it's the normal assessment process prior to an approval decision, there is a submission process that's laid out in the act, and absolutely that becomes part of that decision pact for the primary approval. When the Adani coalmine was approved back four or so years ago, that was absolutely central. There isn't such a provision in the act with respect to submissions for a management plan, but nonetheless we'll support the minister as is needed.

**Mr Tregurtha:** If I can add to Mr Knudson's comments: the obligation for the minister in relation to approving a management plan is to ensure that the management plan meets the conditions of approval as set out in the decision Mr Knudson was referring to. Public submissions do not form a part of that process.

**Senator RICE:** But, if they brought up new information, surely they should form part of that process.

**Mr Tregurtha:** There are separate provisions under the EPBC Act if new information is received.

**Senator RICE:** Late last year, the department released a bioregional assessment of the Galilee Basin which modelled potentially greater impacts on the Great Artesian Basin spring wetlands from mining than the Adani water modelling did. It found major data gaps still

existed in relation to the impacts of mining on the springs. What role has that assessment played at this point in your evaluation of the management plan?

**Mr Manning:** We're aware of that particular bioregional assessment, as were the CSIRO and Geosciences Australia in providing their advice to us, so that provided an additional useful scientific context for the work as we were conducting our assessment. They were assisting us in that particular process.

**Senator RICE:** So is the additional research that was to plug the data gaps required for Adani to undertake that?

**Mr Manning:** I'm not quite sure what you mean by—

**Senator RICE:** Basically, the bioregional assessment found major data gaps that still existed in relation to the impact of mining on the springs.

**Mr Manning:** I can't speak exactly to what those data gaps were or how they fit, but I think that, in a general sense, what that assessment also said is that, for each particular mine, you need to take a much closer look at what its particular impacts would be. The bioregional assessment gave a basin-wide view of what of the cumulative impact of multiple mines would be. What we've done in relation to this particular mine is a very detailed look at what its particular impacts would be, given exactly where it sits within the landscape and what is proposed to happen.

**Senator RICE:** But basically the assessment identified data gaps where we don't what impact this one particular mine is going to have. There's not certainty in that. In light of those findings and in light of how precious the Great Artesian Basin springs are, can you guarantee to the community that Adani will be required to conduct additional research that's been recommended by experts, including seismic surveys and deep bores, before the groundwater management plan is approved?

**Mr Manning:** I can tell you that, under their conditions of approval, the company is required to conduct two particular research activities: one is a plan called the *Rewan Formation connectivity research plan* and there's another research requirement for a Great Artesian Basin springs research activity. They were explicit requirements imposed by Minister Hunt when he approved the mine, so the company will absolutely be undertaking research activity in relation to those, the outcomes from which will feed back into future updates and iterations of the management plan.

**Senator RICE:** So you don't need to have the outcomes that that research recommended before the management plan is approved?

**Mr Manning:** No, it's not required before the management plans are approved.

**Senator RICE:** So you've still got this huge uncertainty, but there's the potential of approving the management plan despite that uncertainty. So then you've got the companies putting in massive investment, and you can't tell me that further down the track you suddenly say, once the results of that research are known: 'Oh, well. No, Adani, you can't do ahead.'

**Mr Manning:** At the time at which the mine was approved, there was an acknowledged degree of uncertainty as to the relation of impacts on springs, and therefore there was an imposition of requirements for the groundwater dependant ecosystems management plan and a groundwater management and monitoring plan, which were intended to provide the

measures to mitigate and manage that uncertainty to the appropriate extent. There was also imposed the requirements for two research plans which I've mentioned, which provide a further mechanism over time to reduce the data uncertainty, feed it back into the management plans and ensure that, ultimately, the hard floor on the impacts on the Doongmabulla Springs will be met.

**Senator RICE:** According to the submission that Adani made to the Queensland Department of Environment and Science on 23 January, they plan no further work to pinpoint the source of springs and had not flagged any steps to solve the data gaps that are known. They're not planning additional seismic surveys or drilling more bore holes.

**Mr Tregurtha:** The plans Mr Manning has referred to are obligations under the Commonwealth conditions of approval, which the company will need to meet in order to retain their EPBC approval operating requirements.

**Mr Knudson:** Just to add: the company has given us nothing but indication that they do plan to meet all the requirements of the conditions of approval, including those management plans.

**Senator RICE:** And so, even though they are saying that they had no further—you are basically saying they will have to undertake that research, but there's the potential of approving the management plan before the results of that research are known.

**Mr Knudson:** I think, as Mr Manning laid out—

**Senator RICE:** And these are the critical water sources of our country.

**Mr Knudson:** Right, and there is a sequencing of these management plans according to when the impacts occur on the ground, what science, what monitoring and what evaluation needs to happen at the stages. I'm happy to walk through that in detail, but that is how the original approval was set up, and we're just at one stage in that whole process.

**Senator RICE:** Before the decision was made to send the management plan to Geosciences Australia, were there any discussions between the department and Minister Canavan about sending the management plan to Geosciences?

**Mr Knudson:** Yes. I indicated that in a previous Senate estimates hearing.

**Senator RICE:** What was the nature of the discussions?

**Mr Knudson:** The minister, who is the minister for natural resources, was asking about the status of the management plans and what our options were, because I made it clear that the department would be seeking external additional scientific advice to inform our development of our recommendations to the minister. So I walked the minister through the options of Geosciences Australia and CSIRO potentially providing that advice or also the independent scientific committee or scientists more broadly. That's basically where the discussion went.

**Senator RICE:** Did Minister Canavan express a preference as to where he felt it should go? Did he express a preference for it to go to Geosciences Australia?

**Mr Knudson:** From what I recall, his desire was to make sure that, yes, we did complete a fulsome analysis of the science behind this but did so in as timely a manner as possible.

**Senator RICE:** Was his preference for it to go to Geosciences Australia?

**Mr Knudson:** I don't recall, but I do recall that his main preoccupation was making sure the department was undertaking its regulatory responsibilities in a timely fashion and that a decision would be—

**Senator RICE:** And that it would be more timely if it went to Geoscience Australia rather than the independent expert scientific committee—is that the case?

**Mr Knudson:** What I would say is that I suspect that, when you take a look at the time frame of how long this has been going on, it actually would've been faster if we had gone to the independent expert scientific committee, but that's a point of speculation.

**Senator RICE:** But, at that stage, your view would've been that it was more timely to go to Geoscience Australia rather than the independent expert scientific committee?

**Mr Knudson:** Honestly, it's a hypothetical, because, quite frankly, we didn't know how long it was going to take for CSIRO and GA to develop their advice to us, but we had experience with the independent expert scientific committee.

**Senator RICE:** Can I just clarify—

**Senator Birmingham:** Senator Rice, you're not seeking to imply there's any lack of integrity analysis or skills in the combination of Geoscience Australia and the CSIRO in providing that advice, are you?

**Senator RICE:** I'm just trying to determine whether it was the minister's preference for it to go to Geoscience Australia rather than the independent expert scientific committee and whether Mr Knudson provided advice to the minister—

**Senator Birmingham:** It just sounds like your suggestion is that we rushed or something.

**Senator RICE:** that it would be more timely to go to Geoscience Australia rather than the independent expert scientific committee.

**CHAIR:** On that, we'll come back to you, Senator Rice. We'll go to Senator McAllister.

**Senator Birmingham:** I'm confident the organisations will have done a thorough job.

**Senator McALLISTER:** I want to ask some questions about media reports today in *The Courier-Mail*. Whilst it's a public document, I'll provide a copy of that for the table, if that assists. Minister, are you aware of those media reports?

**Senator Birmingham:** They're getting copies of the report.

**Senator McALLISTER:** I don't really think everyone needs a copy. I really wish to speak to—

**Senator Birmingham:** Why don't you give me the headline? That might help me to know whether I'm aware of media reports in *The Courier-Mail* today.

**Senator McALLISTER:** I hope you will be. It is the report titled 'You'll pay the price: LNP senator warns minister over Adani delays'.

**Senator Birmingham:** Whether I've read the whole story or not, I don't recall, but I've certainly seen something that alludes to that. Let's try your questions.

**Senator McALLISTER:** All right. The report says that Senator James McGrath has threatened to call for the resignation of the Minister for the Environment, Ms Price, if she doesn't treat the Adani project fairly. It suggests that this warning is contained in what is



described in the article as 'terse and blunt correspondence'. Has the minister seen the letter that is mentioned in *The Courier-Mail* story this morning?

**Senator Birmingham:** I have not, and I'm not aware of any correspondence, but Senator McGrath, like Senator Rice—like anybody else—can be confident that any decision made will be made fully in accordance with the EPBC Act and the conditions that have been set down underneath that act.

**Senator McALLISTER:** Mr Pratt, has the department seen the letter?

**Mr Pratt:** Not to my knowledge.

**Senator McALLISTER:** Minister, are you actually saying that you don't know whether or not correspondence that's on the front page of *The Courier-Mail* has or has not been received by Minister Price? Is that your evidence?

**Senator Birmingham:** I have no knowledge of such correspondence, but such correspondence is irrelevant to the fact of the matter, and the fact of the matter is that, in terms of the decision to be made around this plan by Minister Price, that decision will be made consistent with her legal obligations under the EPBC Act, the conditions imposed for the approval of the project, and the advice and expert opinions that the department has provided to her.

**Senator McALLISTER:** Can I ask that the letter be tabled?

**Senator Birmingham:** I'll take that on notice.

**Senator McALLISTER:** Is Senator McGrath the only signatory to the letter or are there other co-signatories?

**Senator Birmingham:** Well, I have no knowledge of such letter, aside from this media story, so I'll take that on notice. It may be a hypothetical question.

**Senator McALLISTER:** You haven't sought to inquire? There was a front page story on *The Courier-Mail* about your colleagues brawling with one another in the portfolio area that you are to represent today at estimates and you haven't sought to inquire whether or not such a letter—did you ask?

**Senator Birmingham:** I'm giving you the relevant assurance to the policy matter that is at hand.

**Senator McALLISTER:** I'm asking about the government's view of this. That reassurance, frankly, is not relevant to my question. Did you ask—

**Senator Birmingham:** It's very relevant to the substance of the matter, though. If you want to dwell on matters that are not relevant to substance, well, that's your business, of course.

**Senator McALLISTER:** Minister, did you ask about the letter? Have you made any inquiries about it today?

**Senator Birmingham:** No, I'm been sitting here today.

**Senator McALLISTER:** So you're aware of the article but you did not make any inquiries about whether this correspondence had been received?

**Senator Birmingham:** I saw something in relation to the story. I don't know that I have seen the clipping as such, and the *Courier Mail* was not sitting on the plane this morning from Adelaide when I came here.

**Senator McALLISTER:** The article says that, in addition to Senator McGrath, Mr Dutton and Mr Canavan were also seeking clarification. Has the minister met with Mr Dutton or Mr Canavan over the course of the budget week?

**Senator Birmingham:** I will take that on notice. I'm sure that Minister Price, like all of us, engages with our colleagues informally and regularly throughout parliamentary sitting weeks, particularly when they're colleagues are in the same chamber, so I would be surprised if she hadn't spoken to Minister Dutton at some stage during the last week; whether it was about this topic, I have no idea.

**Senator McALLISTER:** Mr Pratt, has the department been involved in meetings between Minister Price and Mr Dutton?

**Mr Pratt:** Again, not to my knowledge.

**Senator McALLISTER:** Has the department been involved in meetings between Minister Price and Mr Canavan?

**Mr Pratt:** Not in recent times. Again, to my knowledge, I don't believe so. I'm trying to recall the last time there was a meeting of that sort. It may have been during the budget process late last year, possibly. But beyond that, not to my knowledge.

**Senator McALLISTER:** The article makes reference to other colleagues, specifically to conflict between Mr Joyce and Mr Robert. During budget week, did the department participate in meetings between Minister Price and Mr Joyce?

**Mr Pratt:** No.

**Senator McALLISTER:** What about between Minister Price and Mr Robert?

**Mr Pratt:** No.

**Senator McALLISTER:** Has the minister had meetings with the Prime Minister or his office regarding the approval process of the Adani coal mine?

**Senator Birmingham:** Sorry, Senator?

**Senator McALLISTER:** Has the minister had any meetings with the Prime Minister or his office regarding the approval process for the Adani coal mine?

**Senator Birmingham:** Not to my knowledge.

**Senator McALLISTER:** Mr Pratt?

**Mr Pratt:** I don't know. I would assume that there would be interaction between the minister and the Prime Minister's office on such a major thing but I don't know for sure.

**Senator McALLISTER:** Mr Pratt, has the department supported the minister in any such meeting?

**Mr Pratt:** Again, not to my knowledge, other than to the extent that the extensive briefing that we have provided to the minister around the Adani proposal would underpin any such meeting if it had happened.

**Senator McALLISTER:** I did hear some of your answers to Senator Rice's question. When was that briefing provided?

**Mr Pratt:** The briefing on the plans was provided Monday last week.

**Senator Birmingham:** As this committee was informed last week.

**Senator McALLISTER:** I'm wondering if someone in the department could check to find out whether or not this letter has been received or responded to.

**Senator Birmingham:** I've taken that on notice, and the department could of course check from the departmental perspective but, if there is correspondence to the minister, that may well be a question for the minister's office.

**Mr Pratt:** I will correct this if I am wrong but the first I heard about this alleged correspondence was when I opened my press clips at 5:30 this morning. I would be absolutely surprised if we had correspondence of this nature in the department and I didn't know about it, so I don't think we have this but I will correct that if that is not correct.

**Senator McALLISTER:** Minister, perhaps, you could text the minister that you're representing and come back to the committee?

**Senator Birmingham:** I'm sure the minister's office are tuned in if they're not busy with other decisions and matters to consider, including the very important Geoscience Australia and CSIRO reports that we were discussing before that they might be working their way through.

**Senator McALLISTER:** It sounds to me like the minister is very busy wrangling the differences of opinion between Mr Robert and Mr Joyce and Minister Canavan and Senator McGrath.

**Senator Birmingham:** I'm confident the minister is very busy looking at the expert advice and information provided to her by the department and ensuring that she fulfils her legal obligations in relation to her decision-making.

**Senator McALLISTER:** It doesn't look to me like that's what actually taking up the minister's time, based on the newspaper articles. I do understand why you don't want to release the correspondence but I think it's actually in the public interest to understand just how much conflict there is within your organisation about this set of decisions.

**Senator Birmingham:** What's the Labor Party's position on Adani? Is it what Bill Shorten says in Townsville or Rockhampton or what he says when he's in Melbourne?

**Senator McALLISTER:** Our position has been very clear.

**Senator Birmingham:** Really?

**Senator McALLISTER:** But I think you'll find in any case that the estimates process is for you to answer questions.

**Senator Birmingham:** Sorry; what is that position?

**Senator McALLISTER:** Minister, I've asked you a question. Will you text the minister and find out whether or not the correspondence has been received?

**Senator Birmingham:** I've taken your question on notice.

**Senator McALLISTER:** You've taken it on notice. You don't want to tell people.

**CHAIR:** Senator McAllister, I don't think we should be in the business of characterising answers that are provided by witnesses, including the minister. He's taken it on notice, and we'll just go from there.

**Senator McALLISTER:** The problem is that these things get taken on notice and then, as Senator Birmingham well understands, an answer will not be provided for quite some time. People actually need to know now what is going on.

**CHAIR:** We have conventions and dates set down by this committee. When things are taken on notice, departments and ministers' offices comply. It may not be to everyone's liking, but they're the rules we play by.

**Senator McALLISTER:** And I am pointing out the consequences of Minister Birmingham taking the approach he's taking right now, which is to avoid answering the question.

**Senator Birmingham:** I'll tell you what, Senator McAllister. I'll do you a deal. I'll start texting the minister during estimates proceedings if you want me to give me a straight answer about the Labor Party's position in relation to Adani.

**Senator McALLISTER:** Let's find out, Minister. Just ask.

**Senator Birmingham:** What is the position? You do get the impression that Mr Shorten says something quite different in Gladstone to what he says in Melbourne.

**Senator McALLISTER:** Tell us. Provide the correspondence. It's on the front page of *The Courier-Mail*. At least we could clear this up. I don't have any further questions. If we're not going to get serious responses, then we'll move on.

**Senator RICE:** I'll continue where we left off, Mr Knudson. With regard to your meeting with Minister Canavan as to whether the management plan was going to be referred to the independent expert scientific committee or Geoscience Australia or CSIRO, I ask you again whether the minister expressed a preference.

**Mr Knudson:** As I said, I don't recall. What I do recall is that the minister was quite concerned with making sure that the department was executing its regulatory responsibilities in a timely manner.

**Senator RICE:** So you don't recall?

**Mr Knudson:** I don't recall.

**Senator RICE:** You don't recall it?

**Mr Knudson:** No.

**Senator RICE:** You would think that the minister's preference would have been a factor that you would have recalled in making the department's decision. Was it a department decision to send it to CSIRO and Geoscience Australia rather than the independent expert scientific committee?

**Mr Knudson:** The department absolutely provided the advice that we thought that the CSIRO and GA could provide absolutely top-notch advice on this issue. In particular, the individuals in those organisations were at one point also members of the independent expert scientific committee which was legislatively required to look at the project when it was approved prior to 2015.

**Senator RICE:** But you don't recall the minister's view?

**Mr Knudson:** I don't, I'm sorry.

**Senator RICE:** I find that hard to believe. What's the autonomy of the independent expert scientific committee compared with CSIRO and Geoscience Australia? Where do the various agencies sit?

**Mr Knudson:** I think by the name, 'independent expert scientific committee', that's pretty clear that it provides its advice to the department, which then goes to the minister. I think that the reputations of CSIRO and GA speak for themselves in terms of the calibre of those organisations and the type of advice they would provide.

**Senator RICE:** Is there a difference in where they report to and their independence? If you were requesting information from CSIRO and Geoscience Australia, that is information then provided back to the department, and, as you said, you have not chosen to make that information public, despite the fact that there is huge concern in the Australian community about it. Would it have been a different process if the independent expert scientific committee had undertaken the assessment?

**Mr Knudson:** Again, the process that the IESC goes through is well and truly in the public domain. That being said, it's a question of some speculation, quite frankly, as to what could have happened under what sorts of circumstances.

**Senator RICE:** If it had been the IESC that had made this assessment, would their report still have been secret, as the CSIRO report and the Geoscience Australia report currently are?

**Mr Knudson:** Mr Tregurtha answered this question earlier on. I'm happy to reiterate it if you like.

**Senator RICE:** Did you have discussions with Minister Price about where the plan was going to be referred to?

**Mr Knudson:** Absolutely.

**Senator RICE:** Did you offer Minister Price the same alternatives as to where it should be referred to?

**Mr Knudson:** Again, I did walk through—without getting into the specifics of the advice—those same sorts of considerations of making sure that there was robust scientific expertise brought to bear in terms of our evaluation of the management plan by Adani.

**Senator RICE:** Did Minister Price express a preference as to whether it should go to the Independent Expert Scientific Committee or—

**Mr Pratt:** That would go to the nature of our discussions with the minister.

**Senator RICE:** Mr Knudson was quite happy to answer questions about discussions with Minister Canavan. I think it is very relevant.

**Mr Knudson:** Again, it's very clear that we have pursued this route, and that's because we believe the advice that we're going to get is absolutely sufficient to inform our decision-making.

**Senator RICE:** Did Minister Price express a preference as to whether the plan should go to the Independent Expert Scientific Committee or Geoscience Australia and CSIRO?

**Senator Birmingham:** Senator Rice, I'm still struggling to understand if your questions are seeking to, in some way, impugn the independence and expertise of Geoscience Australia and the CSIRO because I would have—

**Senator RICE:** I'm just asking whether the minister expressed a preference. Are you calling upon public interest immunity to say that you're not going to answer that question? Otherwise, I'd like you to answer the question, please.

**Mr Knudson:** I'm not going to reveal the exact nature of the discussion. What I have said is that I did canvass the exact same set of issues I canvassed in the conversation with Minister Canavan. The minister's preoccupation was, again, that whatever advice we put up was well-informed by scientific advice, and we did that.

**Senator RICE:** But my question is: did the minister express a preference as to whether the groundwater management plan should be assessed by the Independent Expert Scientific Committee or Geoscience Australia and CSIRO?

**Mr Knudson:** To the best of my recollection, the minister was comfortable with either of those options because she certainly, I would say, understood the importance of having robust scientific advice behind this decision. But I do not recall whether she had an express view on—

**Senator RICE:** You don't recall that discussion with Minister Price either. Do you have officers taking notes of these discussions, Mr Knudson?

**Mr Knudson:** Both conversations were telephone calls. And, no, there were no notes.

**Senator RICE:** Was part of your briefing of the options available to Minister Canavan and Minister Price related to the relative autonomy of the Independent Expert Scientific Committee vis-a-vis CSIRO and Geoscience Australia?

**Mr Knudson:** No, because all those organisations stand in incredibly good standing in terms of their independence and the quality of their advice.

**Senator RICE:** I'm not talking about their standards. I'm talking about their autonomy. I have great trust in the expertise—

**Senator Birmingham:** Are you suggesting their advice is, in some way, influenced by their ministers?

**Senator RICE:** No, I'm talking about the autonomy of the organisations.

**Mr Knudson:** As I've said multiple times, the focus was on making sure that we had robust scientific advice provided in a timely fashion to inform the decision-making. That was the sole focus of those discussions.

**Senator RICE:** So it was based on timeliness solely?

**Mr Knudson:** No—

**Senator Birmingham:** Expertise, independence and timeliness. Timeliness is important; timeliness is not something to be swept aside, but the expertise and independence—

**Senator RICE:** What were the criteria? You've talked about timeliness. You've said that there were some relevant people at CSIRO and Geoscience who had previously been at the Independent Expert Scientific Committee.

**Mr Knudson:** I'm very happy to provide, later on today, a sense of the expertise that Geoscience Australia and CSIRO would bring to bear on these issues, which was absolutely front of mind when we considered that.

**Mr Tregurtha:** Mr Manning can probably help in terms of that criteria and what we were seeking with regard to the expert advice.

**Mr Manning:** Yes. What we required from those agencies was a capacity to understand groundwater modelling and all of the inputs that went into that. That was one of the main things we were seeking to understand in this space—that is, is the way that Adani has conceptualised the groundwater in the area the best and most appropriate way? We were looking for scientists with a capacity to delve into that groundwater modelling aspect of what we're talking about. We were also interested in ecology—people with the right understanding of the ecological communities that are protected matters and the particular plant species that we were concerned about in this instance. It was a combination of those kinds of skills that we felt was required in order to help inform our assessments of those management plans.

**Mr Tregurtha:** I might just add that that would be the key criteria that the department would use in evaluating whether or not an expert agency, like Geoscience Australia, CSIRO or the independent expert scientific committee, was able to provide that advice to the department to inform its consideration of the post-approval management plans.

**Senator RICE:** Do you feel that the independent expert scientific committee would also have been able to provide you with that advice?

**Mr Tregurtha:** The independent expert scientific committee has absolutely got that expertise, because they provide that advice during the assessment process for large coal and coal-seam gas projects as an obligation under the EPBC Act.

**Senator RICE:** Going back to the discussions, Mr Knudson, with Minister Price and Minister Canavan, they weren't formal meetings that you had—

**Mr Knudson:** They were telephone calls.

**Senator RICE:** Were they informal, with no notes and no third parties?

**Mr Knudson:** No, it was a telephone call between myself and those two at different points during that day.

**Senator RICE:** Is that a normal way for you to hold briefings with the minister, to seek the minister's advice on issues, with no notes, no third parties, no accountability as to what's been discussed in those conversations?

**Mr Knudson:** I have regular conversations with a range of ministers, MPs, senators et cetera, which sometimes occur through a telephone call. Sometimes it's a corridor conversation, sometimes it's a formal meeting. It really depends on the circumstances.

**Senator RICE:** And no file notes that were written?

**Senator Birmingham:** Senator Rice, I come back to the fact that this is an element of process, in terms of which entities—of whose expertise and independence you don't seem to quibble—were called upon to provide advice to inform this process. So if you don't quibble with the independence and the expertise of Geoscience Australia or of the CSIRO or of the independent expert scientific committee, in the end, I'm not sure quite what conspiracy you're trying to cook up here—

**Senator RICE:** The issue is autonomy.

**Senator Birmingham:** or what criticism there is of the process the department may have followed. When the independence and the expertise of the entities relied upon is not in question, then you are simply seeking—

**Senator RICE:** Critical decisions with different organisations with different autonomies are being made by—

**Senator Birmingham:** Perhaps it would help us to understand your line of questioning if you explain to us what you mean by, 'The issue is autonomy.' What is the problem you are alleging?

**Senator RICE:** It's about autonomy and it's about transparency, and whether the process—if it had gone to the independent expert scientific committee, whether we would have had more transparency than if it had gone to Geoscience Australia and the CSIRO.

**Senator Birmingham:** You've already had that answer, and their response is: there would have been no difference.

**Senator RICE:** And the decision is being made by informal chats, essentially, between the deputy secretary and the minister, rather than a formal process, which is minuted, where there are file notes, where these decisions are being made in a transparent and accountable manner.

**Senator Birmingham:** We are here, transparently, answering your questions about how it is that we came to choose two independent expert entities to provide advice to the government as part of this process. You don't question their independence. You don't question their expertise. You simply, have some process issue as to whether or not there was a file note that documented, 'Yes, the minister and I discussed the fact we were going to get the independent expert advice of Geoscience Australia and the CSIRO to inform this process.'

We're here telling you Mr Knudson and the minister did discuss the various options, and they decided the independence and the expertise of CSIRO and Geoscience Australia could inform this process at earlier stages of this process. The independent expert scientific committee has, indeed, informed earlier approvals. Ultimately, all have played a role in relation to assessment here. I'm sure if we'd gone in the opposite direction you'd probably be sitting here saying, 'Why didn't you get a different voice to the IESC?' who had informed the earlier process, and 'Why didn't you get somebody like the CSIRO and Geoscience Australia?'

Ultimately, Senator Rice, you come to this with a biased, predetermined outlook. So it wouldn't matter what happened. You would be looking to find a criticism in it, and you are desperately scrambling for criticism here. Yet you—thankfully, because you do have certain standards—aren't seeking to question the independence or the integrity or the expertise of Geoscience Australia and the CSIRO. I am really not sure, after this very long process of questioning, quite what the problem actually is.

**Senator RICE:** It's about accountability and transparency and, unfortunately, we have got no further transparency about this very unaccountable, secretive process being undertaken.

**Senator Birmingham:** Those reports will be released publicly.

**Senator RICE:** After the decision has been made.

**Senator Birmingham:** It will be completely transparent.



**Senator RICE:** On this issue, finally, could you please provide me with an updated list of all the federal approvals in relation to the Adani coalmine.

**Mr Tregurtha:** Just to be clear, do you mean in terms of how Adani have met their conditions? There's one approval for the Carmichael coalmine, which is the approval Minister Hunt made a number of years ago. I'm just trying to understand what exactly you mean. Then, in addition to that, Adani have a number of different projects with the Commonwealth, each of which either has or will require an approval. But the conditions for each of those approvals all have obligations that are imposed on the company which require, in some cases, the minister to approve plans after the formal approval's been made. So I'm trying to get a sense of exactly what it is that you're seeking.

**Senator RICE:** All of those.

**Mr Tregurtha:** Every approval?

**Senator RICE:** Yes. I'm happy for you to take it on notice to provide me with written documentation of it.

**Mr Manning:** Whatever you'd prefer, Senator. Otherwise I can step you through it now, if you would like.

**Mr Tregurtha:** Everything?

**Mr Manning:** Oh, everything will take longer.

**Senator RICE:** Would you be able to take it on notice and get it to us by the end of today?

**Mr Tregurtha:** I'm not sure about the end of today. Someone will have to go through each—

**Senator RICE:** In terms of—

**Mr Tregurtha:** That's the Carmichael project that Mr Manning's talking to, which we can certainly give you by the end of the day. In terms of all the other approvals, someone would have to go through the condition sets—

**Senator RICE:** I'm after the Adani Carmichael mine.

**Mr Tregurtha:** Just the Carmichael mine? Yes, absolutely.

**Senator RICE:** Well, that is what the Adani coalmine is, isn't it?

**Mr Tregurtha:** Yes, but I'm saying that Adani have the North Galilee Basin Rail Project. They have a project at Abbot Point. That's what I was trying to clarify before. They have a number of projects. Carmichael is just the mine.

**Senator RICE:** If you can get me as many as you can by the end of the day that would be most appreciated and take the rest of them on notice—

**Mr Tregurtha:** We'll do our best.

**Senator RICE:** Okay.

**CHAIR:** I can see the regret sinking in now!

**Mr Tregurtha:** I'm sure my staff are watching me right now and they're onto it.

**CHAIR:** I'm sure they'll welcome you back in the office!

**Mr Pratt:** Can I just come back to a question that Senator McAllister was asking. I can confirm the department has not received any correspondence of the nature alleged in the article.

**Senator McALLISTER:** Thank you, Mr Pratt.

**Senator URQUHART:** I just want to go back to the 20 priority birds and mammals and the 30 plants. My question was around the fact that the government has committed to turn around the trajectory. Maybe I can put this question to you: how confident are you that you will turn around that trajectory on the 20 birds? How confident are you of success by 2020? We're talking about eight months time. Or is it more likely to be a percentage of the 20 birds?

**Dr Box:** We're defining 'improved trajectory' as whether the species are on a better path since 2015 than they were prior to 2015. As I mentioned previously, we've been working with our colleagues from the Threatened Species Recovery Hub from the National Environmental Science Program to gather data and information from a whole range of stakeholders across the country so we can build a really clear picture of what the trend was prior to 2015 and what the trend has been since 2015.

**Senator URQUHART:** So are you confident that that trajectory will turn around for the 20 birds?

**Dr Box:** I'm very confident that we'll see improvements in some of those species.

**Senator URQUHART:** But not all of them? If you can't answer, I totally understand that, Dr Box.

**Dr Box:** I can't give you an answer as to whether or not all 20 will have improved by mid next year because we're not at mid next year yet.

**Senator URQUHART:** Okay. And the 20 mammals—

**Dr Box:** The same answer applies. We're working very carefully to look at what was a trend prior to 2015 and what's been the trend since. I'm very confident that we'll be seeing some improvements in many of those mammals, but it is not mid-2020 yet so I can't guarantee you that all of them will be on an improved trajectory by mid-2020 because we just have more actions underway, we have more data to collect and more analysis to do when the time comes.

**Senator URQUHART:** And the 30 plants? Is it the same answer?

**Dr Box:** Similarly, we have actions underway for all of those 30 plants. As I mentioned before, with the banksia vincentia, we have positive stories there. We have four Western Australian plants having great results, so we've got some really positive things happening.

**Senator URQUHART:** You've got some data on five, but I'm talking about the whole 30.

**Dr Box:** That's right. We're collecting data on all of these species, and I can certainly tell you there's action underway for all of those 70 species.

**Senator URQUHART:** But you can't give me a categorical response that says that the trajectory for those whole 30 will be positive when we get to 2020?

**Dr Box:** It's too early to say.

**Senator URQUHART:** Okay. I just want to go again to the feral cat free islands. The government committed in 2016 to five feral cat free islands; that's correct, is it?

**Dr Box:** That's right. Those five islands are—

**Senator URQUHART:** Can you tell me how far along you are in that commitment? Has it been delivered?

**Dr Box:** Certainly. As you mentioned, the government committed, under the Threatened Species Strategy, to eradicate feral cats from five priority islands by 2020. Those five islands include Dirk Hartog Island. Dirk Hartog Island was declared feral cat free in October 2018, feral cat eradication has been achieved on that island. Fantastically, there's already been some species reintroduced to that island and they have more translocations underway.

**Senator URQUHART:** That's a good news story.

**Dr Box:** That's a really great news story. There's action underway towards eradication on the other four islands, all with Australian government support. On Kangaroo Island, the island community has successfully eradicated feral deer and feral goats and is currently working towards the eradication of feral cats. The community's on board and eradication's underway. The Australian government's been a significant partner in that eradication program, and we've mobilised—

**Senator URQUHART:** You're reading exactly the fact sheet that I've got in front of me. I've got all that information; I don't need you to go over it. All I'm asking is: in terms of then Kangaroo Island, French Island, Bruny Island and Christmas Island, can you give me whether or not they are cat-free and, if they are not, how confident are you that that will be delivered by 2020?

**Dr Box:** They are not cat-free, but action to eradicate feral cats from all of those islands is well underway.

**Senator URQUHART:** How far along the pathway are you?

**Dr Box:** Well, for example, from Christmas Island, more than 600 cats have been removed since 2015 using a combination of shooting, trapping and baiting. This has been aided by deployment of more than 23,000 feral cat baits. There'll be trials in 2019 to try a range of new methods such as different lures and trap types that could be used to complement current initiatives. That's an example of the sort of progress that has been made on Christmas Island. There's absolutely action underway and there's very strong community momentum and support. All of these projects require really careful planning—as you can imagine, many of these islands are inhabited; it requires getting the community on board and the work—

**Senator URQUHART:** I understand all that. I guess I am not questioning whether there's a commitment to do it. I'm not questioning what you're actually doing because I've got the fact sheets. But my question is how confident are you that those five islands will be cat-free by 2020? Are you very confident? Can't you answer that because you're not there yet?

**Dr Box:** We're certainly not yet there yet. I'm very confident that there's a strong commitment on those islands, strong community engagement and investment towards feral cat eradication. These eradication efforts are complex, and you have to use different tools that are right for the different islands, you have to adaptively manage as you go and try things that might not work and then you have to try something else, so it is a long process. I can't give you a guarantee of certain time frames that these things will happen, but certainly there is really strong engagement and momentum on the four islands that are not yet feral cat free.

**Senator URQUHART:** So there's been a 20 per cent success rate from 2016. We've got eight months left. You can't give me a 100 per cent guarantee on those five islands?

**Ms Jonasson:** Senator, I think this is speculative. We're not there yet, but of course we welcome the questions next year as we get closer to the target.

**Senator URQUHART:** I'm trying to ascertain how successful—and it's a bold statement to say, 'We will eradicate feral cats from five islands.' It's in the fact sheet: if you bring up the fact sheet, it says very clearly:

This is why Australia's Threatened Species Strategy commits to 5 feral-free islands by 2020.

**Ms Jonasson:** That's right, and it is a bold statement, Senator.

**Senator URQUHART:** That's why I'm asking the question—and I know we're not at 2020 yet, but I'm asking how confident you are of success.

**Ms Jonasson:** Senator, I think you're asking us to speculate on the final outcome of the program, which we're really quite unable to do. Ms Box is happy to talk you through the efforts that have been undertaken on the islands and the progress we've made to date—that is data and information that we have so far. We're happy to take you through that, and perhaps we can answer further questions next year once we reach the 2020 deadline on whether we've been successful or not.

**Senator McALLISTER:** I'm assuming, Ms Jonasson, when you set out on a project like this, that the department doesn't just start spending money and hopes that the target will be reached. I'm sure that's not how you'd do it. You'd actually set out a plan that describes the actions that you'll take, the impact you'll expect those actions will have and the outcome. And Senator Urquhart is asking you whether you are on track to reach the outcome. There's a public commitment to have these islands cat-free. At the moment, four of them aren't. Are you on track?

**Ms Jonasson:** Senator, I think, as Ms Box has tried to outline, there are a number of activities that are on the way on the island—

**Senator McALLISTER:** Activities are not the same as an outcome, Ms Jonasson.

**Ms Jonasson:** We can talk about—

**Senator McALLISTER:** I know that you know that and I know that, so can we just stop talking about it?

**Ms Jonasson:** the progress that has been made and the cats that have been culled, which is what Ms Box has been trying to talk through, and we can talk about where we think we're getting to. But, in terms of our ability to hit the target next year, that's not something that we can speculate on at this stage. We do have a range of actions and activities that we step through in order to achieve the outcome that has been announced, and that has been put in the Threatened Species Strategy. We provide yearly reports on the Threatened Species Strategy, and they're published on the website, that show the progress and the approach that we're taking to try to achieve the outcomes that are identified in the strategy. Ms Box can talk through the efforts that are being made and what we've achieved to date in terms of culling cats on each of those islands.

**Senator URQUHART:** I understand that we're not to 2020, but we are talking about trajectories. I would've thought that there would've been a process to measure that.

**Ms Jonasson:** Ms Box can talk you through that.

**Dr Box:** There certainly is a process to measure that, Senator. As I mentioned before, we're working very closely with the National Environmental Science Program's Threatened Species Recovery Hub to measure those trajectories. We've worked with them to clearly define what we mean by an 'improved trajectory' to gather data from species experts from state governments and others involved in species recovery around the country to understand the action underway, and then we've used a process of that data gathering and analysis combined with a process of expert elicitation to look at the trajectories of these species. So we absolutely do have a process in place—a very robust process—with the aid of scientific experts to look at the trajectories of those species so that we can report on those outcomes.

**CHAIR:** Senator Spender has a related question.

**Senator URQUHART:** I haven't quite finished on this yet.

**CHAIR:** That's alright. Senator Spender?

**Senator URQUHART:** Can he come in when I've finished on this topic?

**CHAIR:** It's on this topic. You've had a lot of time today, so Senator Spender, would you like to ask your question?

**Senator SPENDER:** It might be brief. I'm just very interested to hear about one of your feral animal programs. You've mentioned one method being shooting. You might not have these details on hand, in which case could you take it on notice. I'm interested in the types of shooters and the types of firearms. Are these shooters just full-time professional people involved in culling? Are they part-time? With regard to the firearms, I'd be interested in what firearms are being used.

**Dr Box:** So there are a range of different methods that are used to control feral cats. Sometimes it's baiting. Sometimes it's trapping and shooting.

**Senator SPENDER:** And you also mentioned deer, I think, on Kangaroo Island?

**Dr Box:** That was on Kangaroo Island. That's right. There are a range of different methods, and the methods that are used for feral cat control across the country differ depending on the legislative arrangements in the state or territory, what's allowed in that state or territory and what's most appropriate for the particular environment. So there are a range of different methods used. Certainly there are a range of different programs where shooters have been utilised in order to control feral cats. For example, as part of the bringing back of the western quoll to South Australia and the Flinders Ranges, the government there and the Foundation for Australia's Most Endangered Species worked closely with the Sporting Shooters' Association there to control some of the feral cats in the ranges. There are other programs, for example in Western Australia, where the Western Australian government works with local communities to control feral cats around high-value conservation areas. Have no doubt—there are both professional shooters and recreational shooters involved in a variety of programs across the country to control feral cats.

**Senator URQUHART:** I understand that one of the commitments in the election was for the government to cull two million feral cats. Is that correct?

**Dr Box:** That's right—two million by 2020.

**Senator URQUHART:** Has that commitment been delivered?

**Dr Box:** The two million feral cats by 2020 is a 2020 target. We had a target to cull 150,000 feral cats by year 1, and that target was exceeded, with more than 211,000 feral cats culled in that first year of the Threatened Species Strategy. That analysis was undertaken by the Royal Melbourne Institute of Technology, who essentially did an analysis of the national effort for managing feral cats.

**Senator URQUHART:** What about year 2?

**Dr Box:** There wasn't a year 2 target.

**Senator URQUHART:** So that was year 1, which would've been 2017, would it not?

**Dr Box:** It was 2016.

**Senator URQUHART:** Why was there a target set for the first year and not beyond that?

**Dr Box:** There's a target set for the first year, the third year and the fifth year.

**Mr Knudson:** For your edification, the year 3 report hasn't yet been released. That's a matter for the government. But that will give an update on where we're at with respect to the third-year target.

**Senator URQUHART:** In relation to the threatened species plant storage, I understand that there was a commitment to 100 per cent of Australia's known threatened plant species being stored in one or more of Australia's conservation seed banks. Has that been delivered?

**Dr Box:** That, again, is a 2020 target.

**Senator URQUHART:** So how's that going?

**Dr Box:** There is a year 3 target for more than 50 per cent of Australia's threatened plants to be stored in conservation seed banks, and how we're tracking against that target will be in the year 3 report, which Mr Knudson said will be released shortly.

**Senator URQUHART:** Has that got a date for release?

**Mr Knudson:** No, it's a matter for the government. But we're hoping it's fairly soon.

**Senator URQUHART:** How confident are you that we will get to that point of 100 per cent of known threatened plant species seeds being stored?

**Dr Box:** The 100 per cent will be very challenging actually, because research that's come out since we set that target has shown that many threatened plants aren't amenable to seed banking. They're recalcitrant seeds. So that will be very challenging. We'll be aiming for as many as possible of the threatened plants that are amenable to seed banking to be in seed banks by 2020. We are tracking very well against those seed-banking targets in the strategy.

**Senator URQUHART:** Was that not known prior to the commitment being given?

**Dr Box:** I know that research has been published since then. I'm not sure of the extent that that was known prior to the target being set. I'm just not sure.

**Senator URQUHART:** I've got a few more questions around threatened species. It was reported in *The Guardian* from the February 2019 estimates that the department, and the minister, 'does not have data on the total number of conservation plans—recovery plans and conservation advices—being implemented'. Since then has the minister sought this information?

**Ms Jonasson:** I'll just ask Mr Richardson to come to the table.

**Mr G Richardson:** Can I ask you, Senator, to repeat the question?

**Senator URQUHART:** Sure. I'm referring to a report in *The Guardian* from the February 2019 estimates that the department, and the minister, 'does not have data on the total number of conservation plans—recovery plans and conservation advices—being implemented'. My question is: since then has the minister sought this information?

**Ms Jonasson:** No, the minister has not sought that information.

**Senator URQUHART:** Has the minister's office sought this information?

**Ms Jonasson:** No.

**Senator URQUHART:** Has the department sought this information?

**Ms Jonasson:** No.

**CHAIR:** We'll break now.

**Proceedings suspended from 16:00 to 16:17**

**CHAIR:** We'll reconvene with outcome 1. Senator Rice has further questions on the matter she was questioning on before.

**Senator RICE:** It's on a different aspect but continuing on the issue of Adani and its water management plan and referring to another article that was in *The Courier-Mail* this morning, an opinion piece entitled 'Anger over Adani could split Liberal-Nationals coalition'. Are you familiar with that piece this morning?

**Mr Knudson:** I'm not.

**Mr Pratt:** I did see it this morning.

**Senator RICE:** I will read you out the relevant bit.

**Senator Birmingham:** An opinion piece by whom?

**Senator RICE:** It doesn't say on the website. It says 'opinion'. No, actually, it does. It was Renee somebody or other. Let me find it.

**Mr Pratt:** Viellaris.

**Senator RICE:** Anyway, it says:

The Environment Department received Adani's upgraded groundwater management plan on March 15 and, one day before the Budget on April 1, the Department, loaded with anti-mining bureaucrats, handed a report to Price with its recommendations.

The report had a tinge to it that leadership believed could be taken out of context and wanted to address some issues.

Then it goes on to say that that's what precipitated Senator McGrath's concerns. I am interested in your response to 'the report had a tinge to it that leadership believed could be taken out of context and wanted to address some issues'. Are there caveats or concerns expressed in the departmental advice in relation to the groundwater management plan?

**Senator Birmingham:** Senator, I don't think that officials would usually go to the content of the advice that's gone to the minister, in an estimates committee, prior to the minister having a chance to consider that advice fully and make their decision. As I said before, the reports in question will be provided to the Queensland government and will be made public. It will all be quite transparent, and of course the decisions that the minister makes she will make

in accordance with her legal obligations under the EPBC Act and under the conditions of approval granted to the project.

**Senator RICE:** So you're not willing to confirm or deny that there are in fact caveats or concerns that have prompted the reaction by Senator McGrath and other Queensland Liberals?

**Mr Pratt:** Senator, we're not going to talk about the nature of our advice to the minister, but thank you for bringing this article up. Can I say on record that my strong assessment of my colleagues in the department is that they are not anti this or anti that. 'Loaded' is also a loaded term—a bad pun. I would like a few more experts, but we've got plenty of very objective expert officers.

**Senator RICE:** My issue was not focused on that assessment of your officers, Mr Pratt. Has the minister requested that the department edit or amend its advice or any other documents to address perceptions there may be 'tinges' of concern?

**Mr Knudson:** No, Senator.

**Senator Birmingham:** The minister received this information last week, as has been canvassed, and the minister is still considering the information that is before her.

**Senator RICE:** Is it expected that the minister will request any further information from the department prior to making her decision?

**Mr Knudson:** It's a matter for the minister.

**Senator Birmingham:** That will be a matter for the minister. We did a duet!

**Senator RICE:** Between now and when she makes her decision, is there any set process that you expect to be followed, or are you just there awaiting any request for further advice, if the minister so desires?

**Mr Knudson:** The act lays out that, if the minister has additional issues that she wishes to have more information on, she can ask for more information. But otherwise, as has been said many times, we've provided her our advice, and we stand ready so that, if the minister needs anything else from the department, we'll provide it.

**Senator RICE:** And you have not as yet been contacted by the minister for any further information?

**Mr Knudson:** That's correct, Senator.

**Senator RICE:** It was reported in *The Australian*—

**Senator Birmingham:** And that advice includes the full copies, I assume, of the much-discussed independent, expert, Geoscience Australia and CSIRO reports.

**Senator RICE:** It was reported in *The Australian* last week that a number of Queensland coalition MPs met with the Prime Minister to demand approval for the groundwater management plan, and *The Courier-Mail* also reports today that the Adani CEO, Lucas Dow, 'had a frank conversation with Scott Morrison' about the management plan. And then we have these reports that Senator McGrath has threatened to call for Minister Price's resignation unless the management plan is approved. Has the department at any point been contacted by coalition MPs or ministers who are outside the portfolio in relation to the management plan?



**Mr Knudson:** No, other than—we have already talked about—my conversation with Minister Canavan, but beyond that I don't believe so.

**Senator RICE:** No?

**Mr Tregurtha:** No, Senator—

**Senator RICE:** No further?

**Mr Tregurtha:** beyond the testimony Mr Knudson gave earlier.

**Senator RICE:** So we've had coalition MPs contacting the Prime Minister. Has the department had any conversations with the Prime Minister about the plan?

**Mr Pratt:** No.

**Senator RICE:** Are you concerned that the pressure, both privately and publicly, via our national newspapers is pressure on the minister in terms of her deliberations over her decision-making?

**Mr Knudson:** All I would say is that any minister responsible for decisions under the EPBC Act gets an awful lot of input on almost any decision, whether it's from local community groups or their colleagues. That is absolutely part of the role, and I think it stands that we've had a series of ministers over the years that have managed that very well.

**Senator RICE:** We know that administrative law requires the making of any delegated decision not to be an improper exercise of the power conferred by legislation, with an improper exercise of a power including taking an irrelevant consideration into account in the exercise of the power. Are you concerned that, given this pressure, that will in fact be an irrelevant consideration in terms of the exercise of her power?

**Mr Pratt:** No, Senator.

**Senator Birmingham:** As we have made clear and I have particularly made clear, Senator Rice, Minister Price will make her decision in accordance with her legal obligations under the EPBC Act and the conditional approval granted to the project previously, and informed by the expert and independent advice that the department and relevant agencies, Geoscience Australia and CSIRO, have provided her with.

**Senator RICE:** So you're not concerned that the pressure, both publicly and privately, will invalidate any decision by the minister?

**Mr Knudson:** No, Senator.

**Senator Birmingham:** Senator Rice, there's always plenty of pressure in regard to these decisions from you and many, many others. In the end, the minister will stand firm in terms of fulfilling her legal obligations, appropriately informed by expert and independent advice.

**Senator RICE:** So they're not relevant considerations? The threat to your career from a colleague calling for your resignation, as Minister Price has had from Senator McGrath, isn't a relevant consideration in relation to the approval of the management plan?

**Senator Birmingham:** You're sworn as a minister of the Crown and have certain statutes that you are legally responsible for administering. Your responsibility is to effectively administer those statutes in accordance with the law, and I'm sure that's what Minister Price will do.

**Senator RICE:** So these considerations relating to LNP electoral fortunes, considerations of pressure being applied to ministers, saying they're going to call for them to resign their position—you don't feel that they will have an influence on the minister?

**Senator Birmingham:** The only considerations, I'm sure, that the minister will take into account when she makes her decision will be her legal obligations under the EPBC Act, the adherence to the conditions imposed on the approval of the project, and the advice, independent and expert that it is, that will be in front of her at the time, as provided by the department, Geoscience Australia and CSIRO.

**Senator RICE:** So you're not concerned that, if she does decide to approve the groundwater management plan, it may open up the legitimacy of that decision to legal challenge, particularly given the secrecy of the process in this period of time?

**Senator Birmingham:** Senator Rice, I have little doubt that some of your friends in various activist movements will challenge the legitimacy of the decision if it is an approval, as they have with every other decision on this project to date, and that, if they can find any grounds to take a matter to court, they will do so, no matter how frivolous those grounds may be.

**Senator RICE:** I've got more questions on different topics. I've finished with the Adani groundwater management plan.

**CHAIR:** Senator Rice has finished with you. We'll go to Senator McAllister.

**Senator McALLISTER:** Has anyone from the department in the last, say, three years briefed Minister Taylor on land-clearing issues?

**Mr Tregurtha:** Not to my knowledge, Senator, but we would have to take that on notice to check to be absolutely sure.

**Mr Knudson:** It may have come up in terms of its connection with respect to greenhouse gases, but we'll take that on notice.

**Mr Tregurtha:** Mr Knudson makes a good point—certainly not from the perspective of land-clearing projects that have been referred for assessment and approval, which is my area of the department, but certainly my Climate Change colleagues may also want to give their view on that.

**Senator McALLISTER:** Is the department aware of any discussions between Minister Taylor and the environment minister's office in relation to land-clearing issues, specifically the kind you deal with, Mr Tregurtha?

**Mr Tregurtha:** Not that I'm aware of, Senator.

**Senator McALLISTER:** Is the department aware of reports on the ABC in relation to allegations of illegal land clearing or potential breaches of the EPBC Act in Corrowong, in New South Wales?

**Mr Tregurtha:** Whereabouts, sorry?

**Senator McALLISTER:** In Corrowong or near the town of Delegate.

**Mr Knudson:** I'm just going to get the head of our Office of Compliance to the table so we can answer your question.

**Ms Collins:** Yes, the department is aware of allegations of illegal land clearing in the Corrowong area.

**Senator McALLISTER:** I'm referring to the report posted by the journalist Joshua Becker on 9 October 2017, and it may be that there's been other public reporting about it. It reported: An independent ecologist's report, submitted as part of an investigation by the Department of Environment and Energy, stated a 30-hectare paddock sprayed with herbicide had contained a majority of natural temperate grasses.

That's the same matter, Ms Collins?

**Ms Collins:** That is the same matter, and that matter is still currently under investigation.

**Senator McALLISTER:** And what are the potential issues here? What is the allegation?

**Ms Collins:** The allegation—which I think you just read out—was that there was potentially illegal land clearing in the Corrowong area.

**Senator McALLISTER:** And that's a breach of the act?

**Ms Collins:** No, that matter is currently under investigation.

**Senator McALLISTER:** Okay. I'm trying to elicit from you the provisions in the act that would make that spraying or that herbicide use worthy of investigation.

**Ms Collins:** Normally the states and territories regulate land use, including changes in land use such as clearing of vegetation. The Commonwealth has a role specifically where it might involve a matter of national environmental significance and specifically where the clearing would have a significant impact on that matter of national environmental significance. So, for example, native temperate grassland is an endangered ecological community under our act and that would be an area where we would take an interest in that matter.

**Senator McALLISTER:** So that's the trigger for the department's involvement?

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

**Senator McALLISTER:** Okay. I understand that you wouldn't comment on the detail of an investigation of this kind, but where is the investigation up to from a process perspective?

**Ms Collins:** The matter's still under investigation, and we don't talk about the details of an investigation when it's still currently under investigation.

**Senator McALLISTER:** Is the department aware of family connections between these allegations and a current minister in cabinet?

**Mr Knudson:** Again, we won't talk about the specifics of the case while it's under active investigation.

**Senator McALLISTER:** Has Minister Taylor or his staff ever raised the issue of spraying and land clearing with the department or the minister?

**Mr Knudson:** As I think Mr Tregurtha said, no.

**Senator McALLISTER:** Okay. Thank you.

**Senator RICE:** Can I continue on the same issue that Senator McAllister has just been talking about—this compliance matter relating to a company that I believe is called Jam Land Pty Ltd.

**Ms Collins:** That's correct.

**Senator RICE:** What was the nature of the investigation of Jam Land Pty Ltd and their alleged breach of the EPBC Act? We've been talking about the alleged spraying of native grasses.

**Ms Collins:** We've got a compliance policy and, in our compliance policy, for valid reasons where we don't want to jeopardise the integrity of our investigation we don't talk about the details whilst something is currently under investigation.

**Senator RICE:** So you're not able to tell me. Can you tell me, though, what the time line has been with the compliance action so far?

**Ms Collins:** I think the senator mentioned that the allegations were made in 2017 and, as I say, it's still currently under investigation.

**Senator RICE:** Can you give a bit more detail about what 'currently under investigation' means?

**Ms Collins:** We're looking into an allegation of clearing of vegetation by spraying. The allegation is that it significantly impacted on a matter of national environmental significance.

**Senator RICE:** But, in terms of 'under investigation', what has happened up until now?

**Ms Collins:** Investigation can involve a range of things. It can involve site visits. It can involve ecological assessments. It can involve undertaking inspections under warrant. We can, for instance, seek independent expert advice. It can involve a range of things. But, as I said, I'm not in a position to be able to talk about the detail of this matter because it's still currently investigation and we like to ensure the integrity of all of our investigations.

**Senator RICE:** Is the department aware that Richard Taylor, one of the directors of Jam Land Pty Ltd, is the Minister for Energy Angus Taylor's brother?

**Ms Collins:** Yes, the department's aware.

**Senator RICE:** And that Minister Taylor himself is a shareholder of Gufee Pty Ltd, which in itself is a shareholder in Jam Land Pty Ltd?

**Ms Collins:** As I said, we're currently in the process of undertaking an investigation and our normal practice, to ensure the integrity of the investigation, is that we don't discuss details.

**Senator RICE:** But is the department aware that Minister Taylor is a shareholder of a company which is itself a shareholder of Jam Land Pty Ltd?

**Ms Collins:** In the course of investigating a matter, we come across a lot of information. We actively seek expert information. We're very, very thorough in our investigation and, as I've said, I'm not able to talk about the details.

**Senator RICE:** But this isn't about compliance; this is about whether the department has the knowledge that Minister Taylor is a shareholder of a company that's a shareholder of a company that's under investigation.

**Senator Birmingham:** Senator, I think officials have confirmed to both you and, previously, to Senator McAllister their awareness of family connection. I also note that they have already confirmed to Senator McAllister that there have not been discussions, representations or the like from Minister Taylor in relation to this matter.

**Senator RICE:** I just want to confirm whether the department is aware of Minister Taylor's shareholder connection. It's a pretty simple question, and I can't see how it goes to having any impact upon the compliance action.

**Ms Collins:** I guess it goes to our compliance policy, which says that we don't discuss the details of an investigation.

**Senator RICE:** But this isn't an investigation—this is asking whether you have got Jam Land Pty Ltd, that you have confirmed that there is an action against—

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

**Senator RICE:** and it's whether you have an awareness that Minister Taylor is a shareholder of Gufee Pty Ltd, which is a shareholder in Jam Land Pty Ltd. It's not about whether they have done anything; it's just a clear bit of information about the corporate structure of the entity that you were investigating.

**Mr Knudson:** We understand the familial connection, but, with respect to the shareholdings et cetera, the corporation, we don't see how that's been relevant to our investigation to date.

**Senator RICE:** Whether it's relevant or not, I just wanted to know whether you had an awareness of it.

**Mr Knudson:** So, therefore, no, I don't have any knowledge of that.

**Mr Pratt:** Senator, I can be quite explicit about this. I am aware of their relationship. I am not aware that the minister is a shareholder. I do not know that information. And I can be very clear: Minister Taylor has never raised the issue with me.

**Senator RICE:** I have a document that shows that Minister Taylor is a shareholder in Gufee Pty Ltd and a document that shows that Gufee is a shareholder in Jam Land Pty Ltd.

**Senator Birmingham:** You may have such a document, Senator Rice. I'm not hearing any suggestion that Minister Taylor's declarations of interest are not up to date or anything of that sort, so—

**Senator RICE:** No. I would have thought it would have been a fairly straightforward bit of information for the department to have—and of relevance to the department.

**Senator Birmingham:** In terms of the compliance questions the department's dealing with, the shareholding registry of an entity is not necessarily relevant to compliance. We have established the department was aware of a family link, and the department has confirmed that there have been no discussions, nor representations, that touch on such a family link.

**Senator RICE:** It goes, then, to my next question. If you're aware of that family link—and, indeed, I would have thought, even though you're not willing to confirm it, you were probably aware of the shareholder link as well—how are you managing any conflict of interest with one of your department's ministers having a direct interest in the entity that you're acting against, and his brother being a director of that entity?

**Ms Collins:** The investigation is being undertaken by compliance officers within the Department of the Environment and Energy. As we've said previously, there's been no briefing to Minister Taylor's office in relation to our investigation.

**Mr Pratt:** And Minister Taylor has no responsibilities in this area.

**Senator RICE:** No, but he is a minister of the department.

**Mr Pratt:** Correct, but he has no responsibilities in this area.

**Senator RICE:** Has Minister Price been briefed about the compliance action with Jam Land Pty Ltd?

**Ms Collins:** We routinely update the minister's advisers in relation to matters of compliance activity. Certainly I've updated the advisers in relation to a whole range of investigations that we're undertaking, just so that they've got an awareness of the types of projects. But there's been no detailed briefing, and no detailed briefing to the minister's office.

**Senator RICE:** No detailed briefing, but you advised the minister's advisers of a range of actions, so the minister's advisers would know of the action that's been taken against Jam Land Pty Ltd?

**Ms Collins:** I would have to take that on notice in terms of specific advice that has been provided. But, as I say, it's routine practice for us to advise the minister's office on the range of investigations that we're undertaking. It's not routine for us to go into the specifics of the investigation. So, at a high level, I do expect that I would have mentioned this investigation, but I certainly wouldn't have gone into a detailed briefing.

**Senator Birmingham:** Perhaps to help with clarity, Ms Collins, would you describe that as a list or a summary of all of the compliance actions that is provided—

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

**Senator Birmingham:** or advised to the minister's advisers, so all of them in a run-of-the-mill way, but that no specific briefings in relation to this matter have either been provided or sought?

**Ms Collins:** That's correct.

**Senator RICE:** Would that briefing have included that Jam Land Pty Ltd had Minister Taylor's brother having an interest in that?

**Ms Collins:** Again, I don't recall specifically. But it probably would have included an awareness of a family connection, just as something that we were aware of.

**Senator RICE:** And that Minister Taylor himself then had a family interest and/or a shareholder interest?

**Ms Collins:** I doubt we would have gone into shareholder interests. As I say, we're investigating the matter from a native vegetation perspective. We're not investigating broad shareholder interests or anything like that.

**Senator RICE:** No, but you said—

**Ms Collins:** The type of information we look for in an investigation is the information that's relevant to our investigation. So we would be looking for expert ecological advice, we'd be looking for people to go out on the ground and have an assessment of, 'Is it the community in question?', an assessment around, 'Is there a significant impact?' We're looking at the environmental impact in terms of our investigation and how it may or may not have been in compliance or noncompliance with the legislation. We don't seek to unpick all of the—we certainly, very early on, establish who the landholder is. But it's not about going and

unpicking all of that. What we're after is how and whether or not the landholder in that activity has complied or not complied with the legislation.

**Senator RICE:** But, in terms of your briefing with the minister's office, which is what I'm particularly interested in at this stage, what I'm getting to is the minister's awareness that there was an investigation being undertaken against a company where there was a connection with Minister Taylor.

**Ms Collins:** As I said, as part of the routine briefings, I would have included briefings to the minister's advisers at a high level that this was one of the investigations. The briefing would have been no different to the type of information I would have given on any other investigation that we're undertaking. Whilst I can't say specifically whether I did or didn't, it's the type of information that, because I knew that there was a family relationship, I would have mentioned. But it wouldn't have been anything beyond that.

**Senator RICE:** Can you tell me when those briefings would have occurred?

**Ms Collins:** Not specifically; I don't have that information here. But I'd be happy to take that on notice.

**Mr Knudson:** Senator, I think it's important to keep in mind that the compliance office within the department is not subject to ministerial influence. It's run in its own right. It conducts its investigations in its own right. And therefore any briefing that would happen with the minister's office would be in a very high level nature—

**Senator RICE:** I understand what she's getting to.

**Mr Knudson:** and would not go to the substance of the allegation. So I just wanted to make sure that that's utterly clear.

**Senator RICE:** I think you said in response to Senator McAllister's question that it was 2017 that the investigation began.

**Mr Knudson:** That's correct, Senator. That's what we said earlier on.

**Senator RICE:** How often do you brief the minister's office on compliance actions, where you would have included this level of detail?

**Ms Collins:** We have routine meetings with the minister's advisers and, again, just covering—

**Senator RICE:** How frequently do those routine meetings occur?

**Ms Collins:** Usually fortnightly.

**Senator RICE:** At each of those fortnightly meetings, would you go through each of the compliance actions, or only if something had changed?

**Ms Collins:** No, we don't go through compliance actions. As I say, it's about raising awareness at a high level. So it wouldn't be something that I would have discussed every fortnight. Whilst an investigation is underway, as long as there's an awareness, if it warrants an awareness from the minister's office, it's not something that I then mention on a routine basis.

**Senator RICE:** So when did you last have one of those regular routine briefings with the minister's advisers?

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

**Senator RICE:** You said fortnightly—

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

**Senator RICE:** So in the last fortnight?

**Ms Collins:** No, not in the last fortnight, probably not in the last month. But, as I say, I haven't got the dates specifically in front of me. For example, for one of the most recent fortnightly meetings, I was away interstate. So I wasn't at that last fortnightly meeting.

**Senator RICE:** Okay, so it wasn't in the last fortnight, so approximately a month ago?

**Ms Collins:** In terms of whether this particular investigation has been mentioned recently, no, it hasn't.

**Mr Knudson:** The main purpose of those meetings is to go over the full range of EPBC approvals, the management plans that we might be dealing with, such as the Adani management plan. Included in that are any actions that are underway or the sense of what's happening overall within the Office of Compliance. So we cover a fairly large range. Mr Tregurtha is the lead in those meetings and can give an overview, if that's helpful.

**Senator RICE:** The main thing I'm interested to know is when the minister's office—and, from then, presumably the minister—would have been made aware that there was a compliance action underway that involved Minister Taylor, that Minister Taylor had a family involvement with them.

**Senator Birmingham:** It sounds like it was some time ago, Senator Rice, and officials have taken it on notice, to be precise.

**Senator RICE:** Given what you're saying, I just want to clarify that you haven't briefed Minister Price herself—

**Ms Collins:** That's correct.

**Senator RICE:** and she hasn't requested a brief.

**Ms Collins:** That's correct.

**Senator RICE:** As I'm sure you're aware, Mr Richard Taylor, the minister's brother, made a submission to the EPBC agriculture review.

**Ms Collins:** Yes, I'm aware of that.

**Mr Knudson:** Yes.

**Senator RICE:** There were four actions recommended by the Taylor submission, which I can go through. They are:

- The assessment criteria must be simplified and adjusted to target as narrowly as possible the higher conservation value grasslands.  
... ..
- The minimal area threshold must be lifted to a scale that is compatible with broad acre agriculture.  
... ..
- The regulation must be compatible with best practice weed control.  
... ..
- The revised regulation needs to be effectively communicated to the community.

That's a summary.



For each of these reforms to the EPBC Act, has there been any request from the minister for briefs or options directly related to those recommendations?

**Mr Tregurtha:** No. We've provided a briefing to the minister's office in relation to the agriculture review in its entirety.

**Senator RICE:** You have briefed the minister's office about that?

**Mr Tregurtha:** Certainly. We've had a number of briefings with this and the previous minister, in terms of establishing that review, undertaking that review, and then following Dr Craik's finalisation of that and consideration.

**Senator RICE:** Can you tell me when you have briefed the minister on that review?

**Mr Knudson:** I would just say that there is a large systemic issue that the department is trying to work with the farming community on, which is we provide, quite often, fairly technical and scientific advice on what an ecological community might look like et cetera and, quite frankly, to your average citizen that sometimes can be fairly confusing and not easy to understand. I think that's one of the key messages that we've heard through the submissions, through the ag review, and, I suspect, we'll be hearing for years to come, quite frankly, because it's a real challenge.

**Senator RICE:** Thank you, Mr Knudson.

**Senator Birmingham:** Just as Mr Tregurtha or Mr Edwards answered some questions about the timing of briefings of the minister on the review—bearing in mind Mr Tregurtha has already told you that they have not specifically briefed Minister Price nor had any request from Minister Price for specific briefings, in relation to the ideas proposed by Mr Taylor's brother in his submission to the review that was done by Dr Craik.

**Senator RICE:** In terms of the timing of the briefings to the minister on the agricultural review, when were those?

**Mr Edwards:** The minister was provided Dr Craik's final report in November 2018, so late last year. That was a fairly straightforward brief, about transmitting that to the minister for her due consideration, and certainly didn't cover individual submissions or responses to those.

**Senator RICE:** Has the minister requested any further information since that report was given to her?

**Mr Edwards:** In relation to, Senator?

**Senator RICE:** Further detail of what was in your brief and, in particular, anything that would be relevant to the recommendations, as I outlined before, that were in Mr Taylor's submission.

**Mr Edwards:** We've been talking to the minister's office for some time, beyond the period of that, just looking at options to make agriculture's interaction with the act more efficient. That's been the nature, really, of our ongoing conversations. Again, the report itself is with the minister for consideration, but what we've been advising on is what we see as the rub points and what we're hearing directly from the agricultural community at the same time.

**Senator RICE:** Post your providing a report to her in November, what further information has the minister requested from you?

**Mr Edwards:** She hasn't requested further information.

**Senator RICE:** But you've continued to provide her with further details since then?

**Mr Edwards:** We have continued a conversation about ways across the act, not just to do with the agricultural sector. We've had a broad discussion about ways that we could make it an easier act to navigate. A lot of that goes to clarity of requirements and how you reach people effectively on the ground who, in many instances, might have to interact with the act once or maybe twice in their lifetime. They're the types of conversations we've been having.

**Senator RICE:** Have you put forward to the minister reform options that would be relevant or connected to or versions of what Mr Taylor was requesting in his submission?

**Mr Tregurtha:** The briefing Mr Edwards described has provided Dr Craik's report to the minister, which makes a range of recommendations to the minister that are currently under consideration. They are the recommendations the department has put forward to the minister. We haven't been asked for, nor have we provided, any further recommendations or approaches of the nature you're suggesting.

**Senator RICE:** I'm confused, because I thought Mr Edwards just said that they had in fact provided further information to the minister beyond the report in November.

**Mr Tregurtha:** Just to be clear, I meant at the request of the minister. The minister hasn't requested, nor have we provided at her request—because she hasn't requested it—anything further in relation to that. Sorry, that was a bit tongue-tied.

**Senator RICE:** So the minister hasn't requested them, but there has been further information provided to the minister post giving her the Craik report in November. What I want to know is whether any of that further information, post the Craik report in November, goes to the issues that are raised by Mr Taylor in his submission, about the assessment criteria being simplified, the minimum threshold area being lifted to a scale that's compatible with broadacre agriculture, the regulation being compatible with best-practice weed control, and the revised regulation being effectively communicated to the community.

**Mr Edwards:** Again, they haven't specifically related to those suggestions. The broader conversation—we've been having it for some time, not just with Minister Price but with Minister Frydenberg—is looking for opportunity to improve clarity of requirements through the act. That's been a much more generic discussion. It's included, for example, working with the agricultural sector and the agriculture department around simple plain-English fact sheets and that sort of outreach material, through organisations such as local land services organisations in New South Wales, actually breaking down what are pretty complex decision-making rules into things that people can simply understand on the ground. That process has been running in parallel to Dr Craik's review, for example, and certainly in isolation to any recommendations submitted to her by individuals.

**Senator RICE:** Can I take you through that sort of information, with respect to each of those four recommendations, the first one being:

The assessment criteria must be simplified and adjusted to target as narrowly as possible the higher conservation value grasslands.

Have you put forward further information to her of relevance to that?

**Mr Tregurtha:** The assessment criteria that we require in relation to grasslands go directly to the listing of ecological communities under the EPBC Act. Certainly we will continue to exercise our assessment and approval obligations in relation to the obligations required of us in relation to those listed ecological communities, grasslands and otherwise. Any change of those would be something that would be a statutory thing to have to do rather than the types of actions Mr Edwards is talking about, which go more towards simplification and ensuring people understand their obligations when they do arise under the EPBC Act.

**Senator RICE:** So you were not looking at options to simplify and adjust the assessment criteria?

**Mr Tregurtha:** No.

**Mr Knudson:** I think what we've done is we have prepared a document that tries to give visual pictures of, 'This is considered high value; this is considered medium; this is considered low,' because, quite frankly, what we are interested in first and foremost is protecting the highest-value grasslands from an ecological standpoint. So I think we've tried to respond to the intent of a number of farmers who have said, 'Your guidance isn't as clear as it needs to be.'

**Senator RICE:** The second recommendation of Mr Taylor was:

The minimal area threshold must be lifted to a scale that is compatible with broad acre agriculture. This area is likely to be different to that required for higher intensity land use.

Are you looking at options related to that?

**Mr Edwards:** No, Senator.

**Senator RICE:** He recommended:

The regulation must be compatible with best practice weed control. In giving producers back the tools they need to combat invasive weeds, the compliance regime for weed management should be tightened to protect both agricultural and conservation outcomes.

**Mr Edwards:** Again, we haven't provided specific advice about that. As Mr Knudson just commented, we've been working and talking to the office and stakeholders for some time about how you get practical, straightforward advice for people to understand their requirements.

**Mr Knudson:** There has been definite frustration that has been expressed by a number of farmers. Effectively, how they're feeling is that the act is actually holding them back from doing reasonable weed management in an effort to protect something that, quite frankly, might be of marginal ecological value. So there is a real debate happening there, and we're trying to make sure that we're providing as clear advice as possible because we want farmers to do good weeding practices—best practices in weed management—

**Senator RICE:** Which goes to his fourth recommendation:

The revised regulation needs to be effectively communicated to the community.

You're saying you are doing work on that education process.

**Mr Edwards:** Indeed.

**Mr Knudson:** A good portion of that has also been—again, we're a bit removed from these issues on the ground, so working with the local land services in a New South Wales

context has been important, and we're stepping that up to exactly get to this better outreach to communities.

**ACTING CHAIR (Senator Rice):** I can continue or—Senator Urquhart.

**Senator URQUHART:** No, you keep going. I've just got a couple before we go off outcome 1, so I'm happy for you to keep going.

**ACTING CHAIR:** I'm going on to a totally different area now.

**Senator Birmingham:** We've reached the conclusion there is no smoking gun in relation to Mr Taylor's brother.

**ACTING CHAIR:** We will see.

**Senator Birmingham:** It seems as if nobody's paid any attention to any of his submissions.

**Senator RICE:** I think there's still more that may yet be uncovered.

**Senator Birmingham:** I think we have had every assurance to the contrary.

**Senator RICE:** Can you confirm that, according to your own portfolio budget statements, you're not on track for identifying, conserving and protecting Australia's biodiversity?

**Mr Knudson:** We discussed this on the Thursday estimates in some detail. I'm happy to go through that again. It dealt with the heritage matters in the first instance on 1.4, but if you wish to go over some of that—

**ACTING CHAIR (Senator Rice):** What I want to know is what exact criteria you were not meeting.

**Mr Knudson:** I think there's a good amount of detail actually in the PBS. Mr Oxley will provide more detail.

**Mr Oxley:** Just to aid our answering your question, could you please give us a specific point of reference in the PBS so that we are talking about exactly the same thing?

**ACTING CHAIR:** Let me—

**Mr Oxley:** Just while you're doing that, what I can say is that, in estimates last week, we had quite a long discussion in relation to the information which is on page 49 of the PBS.

**ACTING CHAIR:** That's what I was referencing.

**Mr Oxley:** We covered, at some length, that 'not on track' annotation there, and I explained at the time that it was not on track because of the department not meeting four statutory requirements in relation to the heritage functions, not the biodiversity functions, and those are the ones that are set out there as targets.

**Senator RICE:** If you have covered it, I won't take up the time going through it again. Do you feel that you've got sufficient resourcing to meet your core criteria?

**Mr Oxley:** We also covered that question in relation to the heritage functions last week. The high-level answer is that all divisions are given budgets by the secretary within which we have to work, and we have to then prioritise our use of resources towards the highest productivities, consistent with the priorities of the government. For us, what that has meant in practical terms is that one of the statutory breaches that's identified there is that there was no call last year for nominations of places for inclusion on the Commonwealth Heritage List. We

made that hard call because our resources meant that, in consultation with the Australian Heritage Council and its advice, the call was best made in relation to adding places to the National Heritage List as a first priority, not the Commonwealth Heritage List.

**Senator RICE:** Basically, meeting your outcomes is being constrained by insufficient resources, is what I hear you saying. You are having to prioritise.

**Mr Oxley:** We have to always prioritise how we spend taxpayers' resources in pursuit of our outcomes.

**Senator RICE:** If you had more resources, you would be closer to meeting your desired outcomes and statutory time lines and be on track to meet them all?

**Mr Oxley:** I'm taking that as a statement.

**Senator Birmingham:** With the resources, we could all do lots of different things. The economy might do less if we had higher tax.

**Senator RICE:** You're not on track for identifying, conserving and protecting biodiversity, according to your own budget statement.

**Mr Oxley:** In relation to the heritage outcome specifically, they were timing issues. Two of the four were that the five-yearly report to the parliament was not submitted by the due date but now has been tabled in the parliament. One was because of a delay in the completion of the assessment for colonial Sydney, and essentially because other assessments that were being undertaken by the Heritage Council proved to be more complex than we had initially expected them to be, including because, at the Heritage Council's initiative, wherever we have nominations for inclusion on the National Heritage List now, we go through a process of looking at whether there are Indigenous values which also should be brought into the frame as we are making listings of national heritage places. And that has taken us into a very satisfying but inherently much more complex place around consultation with Indigenous peoples before we move to include places on the National Heritage List and that has had a resourcing implication which has surprised us and which we have had to manage within our existing budget at our own initiative.

**Senator RICE:** Okay. That is mostly in reference to cultural heritage stuff. I then want to move to natural environment and threatened species in particular. Drilling down beyond whether you are on track or not with your particular targets, I want to return to a matter discussed in February, where we confirmed that the Bramble Cay melomys is now officially extinct. I want to reflect on a comment you made when we had that discussion, where you said:

I don't want to labour the point but one things we are trying to focus on with the 70 priority species is also trying to look at the effectiveness of our interventions and how that is influencing the trajectory of species. I think that if we get our heads around that in a much more significant way, it would help us be more effective going forward in figuring out what intervention for what species is going to have the greatest positive impact. I just want to flag that because I think that is a real point we have to focus on.

Can you tell me what work is going on in the department to look at the effectiveness of interventions?

**Ms Jonasson:** I will call Mr Steve Costello to the table. I would like him to talk through some work that we are doing through the Regional Land Partnerships Program, where we have set up an extensive monitoring arrangement.

**Mr Costello:** We touched on this earlier in relation to the targeting of threatened species through the Regional Land Partnerships Program and the process that runs from listing development of conservation advices and recovery plans. They identify the best available science in terms of what are the threats and what are the identified recovery actions to recover species. When we promote the opportunity for funding, we promote those recovery plans and actions in them as guidance for the development of projects. When we assess proposals, look at proposals for their alignment with recovery plans and then, when we contract projects under the Regional Land Partnerships and other programs, we require what is called a monitoring evaluation reporting improvement plan. That would set out the intended outcome for an investment which, in many cases, would be to improve the trajectory of a species. That plan would set out the activities of what work would be undertaken. That would be consistent wherever possible with the recovery plan and the conservation advice. That MERI plan would also set out the baseline, so what is the starting point of knowledge for that species, and the monitoring methodology. So how will we track over the life of the project, which is typically five years, whether the project's intended result is achieved for that species.

**Senator RICE:** We have got many species that have got recovery plans that are still on a trajectory of becoming more and more threatened and vulnerable, endangered and critically endangered. In particular, since the extinction of the Bramble Cay melomys was made official on 18 February, what works has the department been doing looking at the effectiveness of interventions, beyond saying, 'Yes, we have recovery plans or conservation advices for species.'?

**Ms Jonasson:** I think Mr Costello was stepping you through that. If he can continue then perhaps he can talk about the evaluation process when we get the information and results and what we intend to do.

**Mr Costello:** As I said, we have got recovery plans and we have investments that align with the recovery plans and conservation advices. We are collecting baseline information, where we are investing, and we have a monitoring methodology for each project to determine whether the intended result was achieved. That really is testing the hypothesis of the science that says, if you undertake the actions, we'd expect to see recovery in terms of the species. But of course, there are many other environmental factors and other factors that can occur with boom-and-bust populations in wet and dry times and various things. It's quite a complex matter to detect just the effective project intervention when there can be many variables, some of which we don't control.

**Ms Jonasson:** I should stress this is very new activity we have undertaken. I've acknowledged myself at previous estimates that monitoring is a big challenge for us, so part of the significant component of the reforms of the Regional Land Partnerships Program was not only to reform the way services were delivered but they were more targeted to matters of national environmental significance but also so we could collect baseline data, track not only activities but, through a detailed program logic arrangement that we have developed with the help of Griffith University, which Mr Costello can talk to, track the activities and data that we collect towards the outcomes that we are looking to achieve. As I said, it is very new. These contracts only started to roll out some months ago but it is absolutely our intention, and this is something never been done before, that this data will enable us to then take an adaptive management approach to provide feedback to the scientists and to the people undertaking

these projects about what may need to be adapted and what may need to be changed to continue to improve the trajectory for some of the species. This is a very new project but it's a significant change to the way things have been done before and it's a significant monitoring effort that's happening and being rolled out through, frankly, the largest program that we have in the environmental portfolio that is spending money on ground for matters of national environmental significance.

**Senator RICE:** When you say it's 'very new', have these evaluations begun?

**Ms Jonasson:** We are building the new contract arrangements now. Mr Costello can talk you through that.

**Mr Costello:** We are in the first year, so the baseline information essentially is being gathered but also the details of the monitoring methods and measures that will be used are mostly in place for those projects now; we are finalising some of the last contracts as we speak. But certainly we've established the framework and the approach that we are adopting to make sure that activities lead to intended results and that we can demonstrate that at the end of the five-year investment.

**Ms Jonasson:** This is building on the data that we already have through various databases like SPRAT and others. When we put out the request for tender last year, we provided to all potential tenderers an interactive map so that in the area they wanted to target, they could drill down and identify what were the matters of national environmental significance in their project area, in their natural resource management area and they could identify what were the threatened species they wanted to target. That link then took them through to the specific recovery plans and conservation advices and they could identify that. We had a strong expectation within the tender process that activities that they would identify, they would undertake, and that they would be consistent with the recovery plans and conservation advices. It's off the back of that that we have built this significant evaluation framework and the monitoring framework that we intend to use going forward.

**Senator RICE:** In this new project, is this just setting up the framework or are you going to be rolling it out?

**Mr Costello:** It is rolling out.

**Senator RICE:** How many species are being covered under this renewed evaluation process?

**Mr Costello:** I would have to take that on notice but it is certainly the majority of the species in the threatened species strategy, if not all of those would be covered by these investments and then some more species as well as the 2020 and 30 identified in the Threatened Species Strategy.

**Ms Jonasson:** And threatened ecological communities.

**Mr Costello:** And ecological.

**Ms Jonasson:** We should stress that this is national, so it's covering all 56 regions across Australia.

**CHAIR:** Senator Rice, sorry to frustrate you, but I would like to inquire how much more time you require on outcome 1. As mentioned privately, the committee has the hope to push on through the dinner break and try to complete our examination of this portfolio ASAP.

Labor senators have indicated they don't have a great deal more for outcome 1. Could you guide me and the rest of the people in this room as to how much more time you require.

**Senator RICE:** I'm almost finished this one then I have two other topics, which are probably 10 minutes each.

**CHAIR:** I will limit you to 20 minutes then we'll come back to Senator Urquhart and finish with outcome 1.

**Senator RICE:** Let's see how I go in my 20 minutes. It depends on the responses I get.

**CHAIR:** No, we're not going to see how you go. I would like to manage the time as best we can and I think all of your colleagues at this table would like to do the same, so the clock starts ticking—fire away!

**Senator RICE:** What is the time line of the framework that is being set up for the monitoring and evaluation of this project, and have extra resources been allocated to it?

**Mr Costello:** Yes, every project investment has some funding that can be committed to establishing the baselines and then the ongoing monitoring for the project. In addition to that there's what we call the program support budget where we have some additional money which we will use to both gather and synthesise the project-level information and/or potentially supplement that with some larger scale evaluation data if we can find it to cross-reference what happens at the project level at a larger scale.

**Senator RICE:** Is there new money being included in the budget this year to cover this new framework?

**Mr Costello:** It was part of the National Landcare Program budget that commenced in the previous year.

**Ms Jonasson:** It was announced last year and funding is over five years—\$90 million a year for five years?

**Mr Costello:** \$450 million.

**Senator RICE:** I'll move to 1.5, back to compliance.

**Mr Knudson:** In the interests of time we'll try to keep our answers straight and to the point.

**Senator RICE:** Is the department aware of any threats of harm or death against department compliance or regulatory staff over the last five years?

**Ms Collins:** Yes, we are.

**Senator RICE:** Can you provide how many people have had such threats.

**Ms Collins:** I don't have a number in front of me.

**Senator RICE:** A lot? It's a bit of a concern.

**Ms Collins:** Any death threat to a staff member is a serious matter.

**Senator RICE:** Absolutely.

**Mr Knudson:** To give some assurance: it's not a large number but, for example, the previous Threatened Species Commissioner received death threats online through his Facebook account et cetera. It does happen and we take them very seriously, but it is a handful of people over the course of the years.



**Senator RICE:** We don't have dozens or a hundred or something?

**Mr Knudson:** No.

**Senator RICE:** Have any of these threats been referred to the police?

**Ms Collins:** Yes, they have.

**Senator RICE:** What process does the department undertake when a threat of harm is made against a compliance officer?

**Ms Collins:** First of all is making sure that our staff are safe. That might involve not engaging that compliance officer with that particular person who made the threat, for instance. We look at reporting. We look at making sure all of our compliance staff have adequate training. That's both in their use of authorised powers and in how to deal with threats and how you can manage to avoid threats as well.

**Senator RICE:** Are all threats referred to the police?

**Ms Collins:** Yes.

**Senator RICE:** Does the department engage Comcare when you are working on supporting the officer?

**Ms Collins:** Normally we work on a case-by-case basis. For instance, an officer might receive threats over the telephone when they are talking to somebody. We always, number one, look to ensure the safety and wellbeing of staff. If that staff member needed additional support then we would look at that. In my time with the office of compliance we haven't engaged that additional support but we make sure there is training and we make sure death threats are referred or reported to the police.

**Senator RICE:** I find that rather extraordinary. Do you offer staff the option of engaging Comcare in providing support to the staff?

**Ms Collins:** Staff know that we have an employee assistance program. That's available to all staff at any time for any issue that they need support with.

**Mr Knudson:** I've stood in front of a group of staff after there was the shooting of a New South Wales compliance officer a few years ago. We have made it very clear the department will do what it can. It's absolutely our first priority to try to support our staff. Even though it didn't happen within our organisation, it had a pretty profound impact on the staff and will continue to do so.

**Senator RICE:** How does the department track these types of threats?

**Ms Collins:** The department has a work health safety system where any work health safety reports are made.

**Senator RICE:** Are you able to track the number of threats that are being made to staff over a period of time?

**Ms Collins:** That information would be available by going into that database.

**Senator RICE:** Are you actively tracking it? Has there been an increase? Are you looking at trends?

**Mr Knudson:** No, we are not seeing an increase. Within the environment protection group I would say an incident like this may happen once every year-and-a-half or so. It's not that frequent but it does happen.

**Senator RICE:** Did that cover all of the threats, such as threats over the phone, threats over Facebook?

**Mr Knudson:** That's correct.

**Senator RICE:** There's only one every year-and-a-half or so?

**Mr Knudson:** Because you talked about broad trends, I'm trying to give you a sense. It isn't like it happens every month. It's far from that, but it's still at a rate we are always going to be focused on ensuring we're tracking.

**Senator RICE:** How large is the compliance division of your office?

**Ms Collins:** Currently we have 57 full-time equivalent staff.

**Senator RICE:** How many compliance actions do these staff do each year?

**Mr Knudson:** While Ms Collins is pulling up the document: all this information is absolutely available on the website. We put out an annual report which talks about all of our compliance actions. I'm happy to make that available if that would be helpful.

**Senator RICE:** That would be helpful. When the department is deciding whether to approve an action, do they consider a person's environmental history?

**Mr Tregurtha:** The text of the EPBC Act says the minister may consider a person's environmental history when determining whether and how to approve a project.

**Senator RICE:** Would the department usually approve a proposal by an entity convicted of serious environmental crimes and continued disregard for federal environment laws?

**Mr Tregurtha:** I'm not aware of an occasion where the department has had to determine that.

**Senator RICE:** I'm referring to the item revealed by the ABC where Scott Alexander Harris and his company had been fined \$450,000 under Queensland law for breaching permit conditions in the illegal clearing of 2,785 hectares of native vegetation. Given Mr Harris's record of noncompliance under federal law is well known to the department, will the department be taking into consideration the 13 charges that he and his company have been found guilty of when deciding whether to approve clearing at his other property, Kingvale Station?

**Mr Tregurtha:** You are aware the Kingvale matter is with the department for assessment at the moment. The department is aware of the legal issues you have raised. That will be a consideration in the department's finalising of that matter and providing its recommendation to the minister or her delegate in relation to decision-making.

**Senator RICE:** Has the department ever approved a proposal where the proponent has been convicted of such serious environmental crimes?

**Mr Tregurtha:** As I said before, not that I'm aware of. I can't give you a guarantee, because (a) I haven't been in this role for the entire time the EPBC Act has been in place and (b) nor have we gone through and comprehensively researched everyone. I can't guarantee that but I'm not aware of any scenario.

**Senator RICE:** Your expectation is that this would be a first then?

**Mr Tregurtha:** I don't have an expectation about how this particular matter will land, as I said in my first answer. The minister may consider a person's environmental history when undertaking consideration for an approval.

**Senator RICE:** It's extraordinary that she only needs to 'may consider it'.

**Senator Birmingham:** It's all about what's written in the EPBC Act. Whoever the environment minister of the day is, they need to operate within the terms of the act.

**Senator RICE:** Yes.

**Senator URQUHART:** Given the Treasurer's commitment to transparency, can the department advise me how much money you will be spending on government advertising this week?

**Mr Chisholm:** For your question in relation to government advertising, in the current financial year the department has spent \$9.854 million on the Powering Forward campaign. That's the only campaign being run in the department at the moment.

**Senator URQUHART:** Can you confirm when the advertising campaign was approved?

**Mr Chisholm:** The Powering Forward campaign has been in place for a couple of years now—or 18 months. It's essentially taken place over a number of phases, or bursts, beginning in September 2017. We're currently in what we would call the fifth phase of that campaign. There have been a number of approvals over that period of time relating to the phases of the campaign.

**Senator URQUHART:** Okay. What was the approval process?

**Mr Chisholm:** The way the process works is the decision to undertake a campaign is considered by the SDCC committee of cabinet, or the Service Delivery and Coordination Committee. While the campaign proposal is being considered and developed, it's also put before a committee called the Independent Communications Committee. The Independent Communications Committee makes an assessment based on compliance of the proposed campaign principles that are contained in the whole-of-government guidelines on campaigns. They make an assessment based on principles 1 to 4 in the guidelines. The last principle, principle 5, is an assessment made by the decision-maker, the chief executive—in this case, the secretary of the department—about compliance with legal requirements.

**Senator URQUHART:** That's Mr Pratt?

**Mr Chisholm:** That's right. Mr Pratt makes that decision based on his assessment of the ICC's advice about compliance with those principles and the department's assessment. That's the certification process that completes the approval process for the campaign.

**Senator URQUHART:** Okay. What are the time lines for current campaigns?

**Mr Chisholm:** As I mentioned, we're currently in the fifth phase of the campaign and it's due to end on 13 April—this month.

**Senator URQUHART:** Do any of the advertising campaigns utilise mobile billboards of some sort?

**Mr Chisholm:** We have a number of mediums for communicating campaign content, including television, radio and social media. We also have stalls in shopping centres, which are based around the campaign message of making a call to your energy service provider to

get a better deal. People can approach representatives in those shopping centres to get advice about how to do that. They're the primary vehicles through which the campaign is being delivered.

**Senator URQUHART:** Can you provide the total expenditure for government as advertising for the current financial year? Is that the 9.854 that you mentioned earlier?

**Mr Chisholm:** That's correct. I might just add, that's the best of our knowledge to date. It's possible that there will be some additional invoices that we haven't received yet in relation to phase 5. We can provide that additional information in due course to complete the story.

**Senator URQUHART:** Thank you. Have any time lines for any campaigns changed since they were originally approved?

**Mr Chisholm:** As I said, there's been a number of phases to the campaign. Phase 5 of the campaign has been approved and will continue up until the 13th April. As I said, the Powering Forward campaign is a campaign that's occurred since that period in 2017 and has continued through various phases. It hasn't been—

**Senator URQUHART:** But the actual date hasn't changed? It has been carried through.

**Mr Chisholm:** The campaign has taken on various stages and at no point during that stage has there been a definitive end date put on the Powering Forward campaign so to speak. It's continued to be adjusted based on the market research we have received about the efficacy of the campaign in getting information to customers—taxpayers.

**Senator URQUHART:** Are you able to provide the total expenditure for government advertising by financial year for the past four years?

**Mr Chisholm:** In summary, for phases 1 to 2 of the campaign, over 2017-18, the actual spend was \$8.229 million. For phases 3 and 4, over 2018-19, it's \$8.671 million. And then for the current phase we are in, phase 5, it's \$1.207 million. It's a smaller number, because we don't have the number of the media invoices yet, which will need to be reconciled, so that will be larger.

**Senator URQUHART:** You haven't got the invoices, but you have a spend amount?

**Mr Chisholm:** We do.

**Senator URQUHART:** So what is the anticipated spend?

**Mr Chisholm:** The administered budget for the current phase is \$11.350 million. We expect that those first two figures will be certainly close to, if not more than, those two figures.

**Senator URQUHART:** Are you able to provide an itemised list of the campaigns for the past four financial years and the funds attributed to each of those campaigns?

**Mr Pratt:** To clarify, this goes beyond Powering Forward, is that right?

**Senator URQUHART:** Yes.

**Mr Pratt:** Or was it just in relation to Powering Forward?

**Senator URQUHART:** No. All campaigns.

**Mr Chisholm:** All campaigns. I don't actually have information about all campaigns. I'm going to suggest that the Powering Forward campaign is certainly the most significant

campaign that we have been running. I'm not aware of other campaigns, but, can I take that on notice to check?

**Senator URQUHART:** Yes. Is somebody behind you able to follow that up?

**Mr Chisholm:** I can certainly get someone to follow-up and we'll be able to find out.

**Mr Pratt:** Can I suggest it might be easier if we were to restrict it to the Department of the Environment and Energy in its current format, because, if we try to go back too much further, we'll be looking at parts of different departments.

**Senator URQUHART:** Okay. Yes.

**Mr Pratt:** We should be able to get configurations.

**Mr Chisholm:** We should be able to get that answer for your fairly quickly.

**Senator URQUHART:** Is the department advertising about the Great Barrier Reef this week?

**Mr Chisholm:** Not that I'm aware of. No.

**Senator URQUHART:** Is the Great Barrier Reef Foundation advertising this week?

**Mr Oxley:** You'll have to ask them. I'm not aware of any—

**Senator URQUHART:** Can you ask them, Mr Oxley?

**Mr Oxley:** Yes, we can do that.

**Senator URQUHART:** What about in the next seven weeks?

**Mr Oxley:** We'll ask them a similar question.

**Senator URQUHART:** Can you answer, then: how much of the funding agreement can be spent on advertising?

**Mr Oxley:** I'll have to take that on notice, but we'll endeavour to come back and answer that before the end of the day.

**Senator URQUHART:** Great. Thank you.

**CHAIR:** I believe that does conclude our consideration of outcome 1. Thank you very much, relevant officers.

[17:31]

**CHAIR:** We will now move to outcome 2.

**Senator McALLISTER:** I wanted to table an op ed published by the former Minister for the Environment and Energy, Minister Frydenberg. I believe the secretariat has copies that can be made available. This is a document that's been discussed a little bit in the last few days, where the former minister, now Treasurer, makes a series of comments about the future of electric vehicles. He says:

Capitalising on a declining cost curve, new investments in recharging infrastructure and significant improvements in battery capacity, the industry has now real momentum in Europe, Asia and North America, which will inevitably be replicated here.

I want to ask the department's view on whether the higher EV take-up is, as the minister wrote, inevitable.

**Senator Birmingham:** What was the last part of that question?

**Senator McALLISTER:** The minister writes that the higher EV take-up 'will inevitably be replicated here'. I want to ask whether the department considers that higher EV take-up is inevitable, based on their analysis.

**Ms Tilley:** I will refer to our emissions projections out to 2030 which look at the key sectors but in particular at the transport sector and what they presume under a business-as-usual scenario for electric vehicle uptake. For context and what the projections show for EV, I can break it down to EV sales and as a proportion of new light vehicle sales as well as total stock in periods of time—2020, 2025 and 2030—to show what the projections assume will happen to EVs over that decade. This analysis was conducted by CSIRO for our 2018 emissions projections. In 2020, it's projected that we'll have 5,000 electric vehicle sales, which would represent 0.5 per cent of a share of new vehicle sales in that year. Moving to 2025, the projections assume that there will be 54,100 electric vehicles sold in that year, and that represents five per cent of new vehicle sales in that year. Then, in 2030, the projections assume that 222,400 electric vehicles would be sold, which represents 18 per cent of all new vehicle sales in that year.

**Senator McALLISTER:** Those are lower than the projections for many other countries with whom we would compare ourselves—I accept that. But the minister went on to say:

"The lack of take-up is not because of a lack of consumer interest. Australian surveys show that about half the people in the market for a new car are prepared to consider purchasing an electric vehicle, with many investigating it," ...

"What holds them back are issues relating to price, range and infrastructure ..."

What's the trajectory for price?

**Ms Tilley:** I don't have that information in front of me. I don't think the department itself has done any analysis on future expectations around price. If any department has, it's probably the department of infrastructure that would have done that analysis. I can ask colleagues who work on our emissions projections to see if there is any underpinning analysis around price that feeds into those, but unfortunately I don't have anything in front of me.

**Senator McALLISTER:** What about range? That's often raised in the Australian context. We're a big continent.

**Ms Tilley:** Again, not specifically in relation to the material I have for the emissions projections. It might in fact have been that article, that op-ed—I was certainly reading something today—that referred to expectations about improvements in the range that vehicles can travel over the coming decade.

**Senator McALLISTER:** So we expect them to improve. The third impediment that the minister identified at that time was infrastructure. I know that the department and some of your partner agencies who appeared before us earlier today are working on infrastructure and charging infrastructure. How is the rollout progressing?

**Ms Tilley:** At the moment, the Commonwealth, and certainly not this department, isn't responsible for a particular rollout of charging infrastructure. But I think we have acknowledged—and we noted this at estimates last Thursday—that there is a range of Commonwealth support that, through the CEFC and ARENA, has supported electric vehicles. I know ARENA and its Chargefox initiative provided \$6 million late last year for an ultrarapid charging network for electric vehicles powered by renewable energy. I don't have

the number of installations that it would lead to, but I can find out and come back with it this evening.

I would just say as well that there are certainly a number of state and territory government initiatives that are looking in particular at supporting charging infrastructure—I have some information on that here, if that would be useful—as well as, of course, private sector investments in charging infrastructure.

**Senator McALLISTER:** Yes, because it doesn't all need to be done by the public sector, does it? Some of the infrastructure is likely to be able to be run on a commercial basis.

**Ms Tilley:** That's correct.

**Senator McALLISTER:** The Prime Minister said this week:

"... if you have an electric car and you live in an apartment, are you going to run the extension cord down from your fourth floor window?..."

I assume that that's not the answer that the department, any of those agencies, state governments or commercial operators would propose for people who live in apartments. There are other options, aren't there?

**Ms Tilley:** I'm not familiar with the comments the Prime Minister made.

**Senator McALLISTER:** That's all right. Can apartment buildings be catered for by extending charging to the basement car parks?

**Ms Tilley:** Again, I'm not familiar with the technical specifications. Perhaps the department of infrastructure might be better placed to answer that.

**Senator McALLISTER:** Okay. Minister Taylor put out a release about the Chargefox initiative, which you mentioned earlier, on 22 October last year. He said:

The ultra-rapid charge will provide a range of up to 400 kilometres in just fifteen minutes, compared to a current charging time of several hours.

I'll table that media release also. There has obviously been a fair bit of other activity. Mr McCormack tweeted some photos of himself, saying:

@NRMA is installing electric vehicle chargers throughout New South Wales, including here in #WestWyalong at the car park on the corner of Shire and Water Streets.

It's very specific. We've got some nice photos of him with the NRMA.

Then, oddly, the current minister seems to contradict his earlier release, which I tabled. He tweeted on 6 April: 'Shorten's plan falls short, but he still wants to control which car you drive'. He got a cheeky reply from a fellow named Tim Washington, who said:

Hi Minister here is a charging station your government funded that can charge a car up in 15 minutes. And 200km in 8 minutes. I know because I'm one of the co-founders you funded.

What's going on here? What is happening with the rollout of rapid charge stations? That project is still ongoing?

**Ms Evans:** That project is run by the Australian Renewable Energy Agency, so they would be the entity to ask about the progress of the project.

**Senator McALLISTER:** But how long do these charge stations take to charge a vehicle? What is the technology like?

**Ms Evans:** I think it depends on the technology. Let me see if we've got the specifics of the Chargefox arrangements. No, I don't have the specifics with me on that particular one. No, sorry, I do. They are expecting to be no more than 200 kilometres apart. I might comment that not all electric vehicles are able to use the ultrarapid charging technology at this point in time, but if they are able to use it then they can add 200 to 400 kilometres of range in 15 minutes.

**Senator McALLISTER:** So it's very quick. You may refer this to another agency, but we were talking just before about the commercial potential for investment in this technology. Obviously in very remote places it might not be commercially viable to run, because the volume or demand might not be there, but it would be in metropolitan environments. Do you have any projections about the likelihood of commercial involvement?

**Ms Evans:** As a department, we haven't looked at that. Again, the Australian Renewable Energy Agency may well have looked at that, as Chargefox is not the only proposal for fast charging and other charging solutions that they've looked at. So I'm sure they would have a view.

**Senator McALLISTER:** Does the National Strategy for Electric Vehicles sit with your department?

**Ms Evans:** It does.

**Senator McALLISTER:** But you don't have a view about metropolitan—

**Ms Evans:** The strategy is yet to be developed. The announcement was to develop a strategy.

**Senator McALLISTER:** I see.

**Ms Evans:** We've been provided with some funding to do that over the next 12 months.

**Senator McALLISTER:** I notice that Minister Andrews, the Minister for Industry, Science and Technology, attended a conference with the Motor Trades Association of Queensland, where she spoke in glowing terms about a vehicle called the ACE Cargo. She said:

What a privilege to be one of the first people to see the ACE Cargo, made in Australia and finished just hours before I spoke at Motor Trades Association of Queensland Carmageddon symposium. This Australian-made vehicle proves the future for our automotive industry is bright.

Can you tell me what the ACE Cargo vehicle is?

**Ms Evans:** I'm afraid I'll have to take it on notice. I'm not familiar with that vehicle.

**Senator McALLISTER:** That's all right. She makes reference to it in this article from *The National Collision Repairer*, which I will also table. It's an Australian-manufactured electric van. Is the department monitoring the market potential of commercial electric vehicles?

**Ms Tilley:** It depends what you mean by 'monitoring the market potential'. From a Climate Change Division's perspective in the department, we're certainly looking at projections of sales and, therefore, what the abatement potential is. Then, in terms of the national strategy, which Ms Evans just indicated the government made a commitment to develop—and we got funding over the next financial year for that through the budget handed down last week—certainly that would be looking at some of the challenges and barriers that are holding up the uptake of electric vehicles. So, in so far as market potential was considered, it's probably in that analysis.



**Senator McALLISTER:** Yes. You're trying to understand what barriers might be there to allow a commercial response to the technology. And there are lots of barriers other than price, aren't there, when you're introducing a new technology?

**Ms Evans:** There are.

**Senator McALLISTER:** Just familiarity from the investment prospective or a supply chain prospective—

**Ms Evans:** I think there are a range of things that need to be explored, and one of the other areas where there has been some work is the CFC, which has been working with a company called SEA Electric in looking at conversion to electric heavier vehicles. So all of those experiences help to de-risk projects so investors understand more what it is they're getting into and give us a better insight into the technology. I have a tweet here from a long time ago—back in 2015—and it's from the environment minister Greg Hunt. He has a picture of himself with the Brightsun electric bus, which he claimed had travelled 1,000 kilometres on one battery charge. Will you be looking at electric buses as part of the electric vehicle strategy?

**Ms Evans:** We will look broadly. We have only just started the work on that strategy, so we're not limited in what we look at, and I would expect buses would be one of the elements of it.

**Senator McALLISTER:** Right. One thousand kilometres on one battery charge, says Greg Hunt. Is the department aware of the tweet the Minister Taylor put up on 6 April? He has now deleted it, so you may not have a copy, but he tweeted a YouTube video from the BBC's *Top Gear* that claimed that electric vehicles run out of charge over a short distance. That video was proven by the car manufacturer, Nissan, to be fraudulent, because the vehicle's monitoring device found the *Top Gear* hosts ran the battery down by driving it round and round in circles until the battery was flat. But Minister Taylor captioned the tweet with a 'welcome to range anxiety' headline. I might just table the *Guardian* article that went through all the problems with that *Top Gear* video. Did Minister Taylor seek advice from the department about the adequacy of the analysis in the *Top Gear* video?

**Ms Evans:** Not from the department.

**Senator McALLISTER:** Has he sought advice from the department on electric vehicle battery capacity?

**Ms Evans:** I'm not sure. We've certainly advised on various times on electric vehicles. I would have to take on notice whether that covered specifically the battery capacity issue.

**Senator McALLISTER:** So he has tweeted this material, but we can't be certain whether or not he sought any actual advice about these issues that are exercising him. This is probably one for you, Minister Birmingham. Are you, Minister Taylor and the government just going round in circles yourselves on electric vehicles? Is this really about election anxiety or is this about the policy issues? It really does seem as though the government and many members of the government had one view about electric vehicles until very recently and now they're pushing a different view publicly. I just wonder how you can reconcile this long history of advocacy for the future of electric vehicles with the current position.

**Senator Birmingham:** I think the government identified in our climate solutions package the contribution that electric vehicles would make to emissions reduction as part of the transition. Obviously, the opposition's announced subsequent more interventionist policies

following on from that. You would expect those interventionist policies to be a matter of public debate between now and the election, as I'm sure they will be. What the opposition has not done is identify, in terms of the abatement task to meet your targets, what contribution any particular aspect of that, including electric vehicles, will make, and the government has identified the contribution we believe that electric vehicles can make to our abatement task.

**Senator McALLISTER:** Isn't that contribution up to 50 per cent for new vehicles? Isn't that a target that's in your plan?

**Senator Birmingham:** No, I don't think that is correct—not in terms of the 2030 abatement task. I stand to be corrected. I'm happy to go and check.

**Senator McALLISTER:** Perhaps you might. The evidence just before was that the national electric vehicle plan has been funded as a plan but is not yet developed. Is it necessarily the case that, if the Labor Party has some policies and you don't have any yet, we're going to have a more activist policy than you by simply by virtue of having a policy? Logically?

**Senator Birmingham:** There is no particular evidence in terms of what your policy is going to achieve towards the abatement task.

**Senator McALLISTER:** I'm sort of asking about your policies.

**Senator Birmingham:** What we've outlined is clear in terms of what we believe can be achieved through electric vehicles to meet the abatement task. We believe that new technologies deserve support through research and development and sometimes in other spaces. You have set a target without a clearly defined strategy in terms of how that target is actually going to be met. We have of our assessment of what we believe, conservatively, will be the transition that occurs and how that can contribute to meeting our abatement task, and that's the important part of this debate.

**Senator McALLISTER:** Yes, except isn't Minister Taylor misleading people by putting out discredited analysis about electric vehicles, asserting that it's not possible to charge vehicles quickly—the Prime Minister has made the same assertion—and asserting that it's not possible to charge vehicles if you live in an apartment, when there is this very long history of a range of senior people in your government saying exactly the opposite?

**Senator Birmingham:** There are also a number of aspects to what you or your party have apparently announced. Seventeen of the 20 most popular new vehicles sold at present would not be able to be sold under your policy proposition, so that is certainly highly interventionist stance that the opposition is taking. That's ripe for debate between now and the election.

**Senator McALLISTER:** I didn't really ask you about that. I asked you about whether Minister Taylor was misleading the Australian public through the information that he and, indeed, the Prime Minister are putting in the public domain about the existing technology for electric vehicles.

**Senator Birmingham:** No.

**Senator McALLISTER:** That's all I've got.

**CHAIR:** Senator Urquhart.

**Senator URQUHART:** I want to go to emissions data. The government's emissions projections are constructed by your team and the department; that's correct?

**Ms Evans:** That's correct.

**Senator URQUHART:** What do the latest publicly available projections data says about Australia's absolute level of emissions to 2030? Will they increase from today's levels?

**Ms Tilley:** If I can respond to your question by showing what the emissions projections show the emissions would be, for example, in 2018 versus 2030, would that address the information you're after?

**Senator URQUHART:** My question was very specific. What do the latest publicly available projections data say about Australia's level of emissions to 2030?

**Ms Tilley:** There is emissions in a particular year. I can give you that or we can talk about the budget, which is the cumulative level of emissions over the decade from 2021 to 2030. Why don't I commence by saying that the 2018 projections, which are the latest government projections on Australia's emissions performance, show that our annual emissions in 2030 are expected to be 563 million tonnes.

**Senator URQUHART:** Will they increase from today's level?

**Ms Tilley:** That has increased from the emissions projections in 2018, which were expected to be 534 million tonnes.

**Senator URQUHART:** What are the national absolute emissions projected to be in 2019?

**Ms Tilley:** The projections indicated that the annual emissions in 2019 would be 541 million tonnes.

**Senator URQUHART:** What about 2030?

**Ms Tilley:** It's 563 million tonnes.

**Senator URQUHART:** What percentage increase is that?

**Ms Tilley:** For between 2018 and 2030, I'll just have to refer to another document. I'll find the number. While I'm finding it, I'll make sure, as we've noted in other estimates, all senators are clear that our performance towards our target—both the 2020 target and 2030 target—are measured on a budget basis. It's the total allowable amount of emissions over that target period. The actual emissions in any particular year don't necessarily impact whether or not—a growth in emissions in a particular year doesn't mean that you can't meet the overall budget target.

**Ms Evans:** The mathematical question was what the percentage increase is. Maybe we will just take that on notice to make sure we get it right.

**Senator URQUHART:** Sorry, I didn't quite catch that.

**Ms Evans:** You asked for the percentage increase between 2030 and 2018. It's just not a period we have precalculated. We will just take it on notice and make sure that we calculate it properly.

**Senator URQUHART:** I thought Ms Tilley said that she had it there.

**Ms Tilley:** I can compare what the projected 2030 emissions would be in a percentage term against the 2005 level of emissions, which is the baseline for the 2030 target. Against the 2005 level of emissions, emissions in 2030 are expected to be seven per cent below 2005 levels.

**Senator URQUHART:** Seven per cent below 2005?

**Ms Tilley:** That's correct.

**Senator URQUHART:** Will emissions rise from 2018 to 2030?

**Ms Tilley:** They undulate on an annual basis, year on year, according to the projections; but show overall growth between 2018 and 2030.

**Senator URQUHART:** What's the government's 2030 emission reduction target?

**Ms Tilley:** A minus 26 to minus 28 per cent emissions reduction compared to 2005 levels.

**Ms Evans:** This is, again, where that target is not a point target for 2030. It is a budget over the period from 2020 to 2030.

**Senator URQUHART:** According to your projections, will Australia reach this target in 2030?

**Ms Tilley:** Our projections that were prepared late last year show that the remaining task to meet the target was 695 million tonnes, or 328 million tonnes when the carryover of Kyoto units was included. Since that time, the government has made further announcements and new measures about how it intends to entirely close that gap.

**Senator URQUHART:** How far short will it fall, as a percentage, on the 2005 levels?

**Senator Birmingham:** That's the point of the Climate Solutions Package that was released and which identifies, step by step, how it is that abatement task will be met. The answer is based on the policies we've released in the lead-up to the budget. We won't fall short.

**Senator URQUHART:** You won't fulfil it?

**Senator Birmingham:** Correct, Senator.

**Senator URQUHART:** But how far short will it fall, as a percentage, on 2005 levels?

**Senator Birmingham:** As officials have sought to explain, it's a budget in the period to 2030. I'm saying, based on the policy settings we've put in place, we won't fall short. We've identified where we believe the contributions to that abatement task will be met. We were just talking about that, in part, with electric vehicles. In other areas, including the Climate Solutions Fund, we will contribute towards meeting that abatement task in the period to 2030.

**Senator URQUHART:** Australia is a signatory to the Paris accords with a 26 to 28 per cent emission reduction target by 2030, based on 2005 levels—that's correct. That was the figure that you went through earlier. That's called our first nationally determination contribution. That's correct, isn't it?

**Ms Evans:** That's correct.

**Senator URQUHART:** The Paris accords include a mechanism for these NDCs, or national targets, to be increased over time—the ratchet mechanism—until they are seen to meet the Paris goal of keeping warming well below two degrees. That's correct, is it not?

**Ms Evans:** Yes.

**Senator URQUHART:** Is it correct that countries are expected to increase their targets in five yearly intervals, with the first increase due by 2030?

**Ms Evans:** I might ask Ms Munro to respond. It is a good opportunity to clarify what our obligations are, because they were slightly misrepresented in the recent *Four Corners* program on climate change. Thank you for the question, and Ms Munro will take the question.

**Ms Munro:** Under the Paris agreement, countries have either put forward 2025 targets or 2030 targets. Australia is part of a group of countries that have put forward 2030 targets. Under the Paris agreement, countries that have 2030 targets are required to confirm and/or recommunicate their existing target in 2020. For countries that have 2025 targets, in 2020 they are required to put in new targets out to 2030 or beyond. What's actually allowed for under the Paris agreement is that there's a global stocktake that occurs in 2023 and then following that, in 2025, countries are expected to put in new targets.

**Senator URQUHART:** Is it correct then that part of our commitments under the Paris agreement are that Australia is meant to increase its official Paris target by next year?

**Ms Munro:** No. Going back to my earlier answer, it's not necessary for Australia to increase its target.

**Senator URQUHART:** Because we've already put it in?

**Ms Munro:** Because we have a target until 2030, unlike other countries that are only to 2025.

**Senator URQUHART:** I take it that it is government policy to comply with the Paris agreement?

**Senator Birmingham:** Yes, Senator.

**Senator URQUHART:** Was that you, Minister Birmingham?

**Senator Birmingham:** It was.

**Senator URQUHART:** You were very quick with that answer.

**Senator Birmingham:** Indeed.

**Senator URQUHART:** Has the government asked the department for any analysis to inform a decision to increase the Paris target?

**Senator Birmingham:** Not at this stage that I'm aware of. It's not that many years ago since we set the target. We have just released the policy mechanisms to meet the target. I can't recall, in terms of the review point.

**Ms Evans:** In the 2017 review of climate policies, there is a commitment to review that policy set every five years. That puts us in line with those obligations under the Paris agreement. That review was in 2017, so the next one would be 2022. That's just ahead of the 2023 timing, when we would start to be expected to participate in the global stocktake then be in a position to make our next target, which would be for 2035. We have not been asked to do any work on a new target for 2030.

**Senator URQUHART:** Does the government then plan to increase its NDC by 2025?

**Ms Evans:** That would be subject to the review of policies and the global stocktake.

**Senator URQUHART:** In 2022?

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

**Senator URQUHART:** Last week, this committee asked about modelling of the government and Labor's climate policies and targets within the department. The department said it was not aware of any such modelling. Is that correct?

**Ms Evans:** Not modelling of Labor's policies; that's correct.

**Senator URQUHART:** Are you aware of any modelling of emission reduction targets being conducted in other government departments and agencies?

**Ms Evans:** We are aware of one modelling exercise that is being run by the Department of Industry, Innovation and Science.

**Senator URQUHART:** Are you aware of any modelling that the government has commissioned from third parties, private modelling firms and such, of emission reduction targets?

**Ms Evans:** That is not a question that I would be in a position to answer. I'm not aware of them commissioning anything else.

**Senator URQUHART:** Would it be unusual for the government to commission third-party modelling on an area such as the economic impact of emission reduction targets and for the department not to be involved in some way, such as providing advice data and due diligence?

**Mr Pratt:** That's a matter for the government of the day.

**Senator URQUHART:** The modelling with the department of industry, when do you expect that to be completed?

**Ms Evans:** That's really a question you would have to put to the department of industry.

**Senator URQUHART:** I think that just about wraps me up.

**Senator McALLISTER:** Miss Evans, you made reference earlier I think, or perhaps Ms Tilley, to the announced policies that the government says changes the trajectory to 2030 and allows us to meet our climate projections. When I look in the brochure that comes with the Climate Solutions Package on the very last page there's a graph that, I think, seems to describe the contribution of the Climate Solutions Package to that task?

**Ms Evans:** Yes, that is correct.

**Senator McCARTHY:** What work was undertaken to generate that graph? What is the analysis that sits behind it?

**Ms Evans:** We answered a number of questions on this last Thursday, but for each of the blocks on that chart we have done a piece of analysis to look at what's the likely impact of the policy and how much abatement would come from it. For example, for the block on the supplementation to the Emissions Reduction Fund through the Climate Solutions Fund, we have analysed what we would expect to be the trajectory of prices under auctions through the Clean Energy Regulator and, therefore, how much abatement would be able to be purchased under that scheme by 2030. So it would continue to go beyond 2030 but by 2030 we would expect the 103 million tonnes that shows up in that graph. A similar analysis of that ilk has been done for each of the blocks that appear in that chart.

**Senator McALLISTER:** Is that publicly available?

**Ms Evans:** The analysis?

**Senator McALLISTER:** Yes.

**Ms Evans:** I don't think we have published a summary piece of work, but certainly we have responded to quite a number of media inquiries about how we have performed that analysis and we are always quite forthcoming with our approach.

**Senator McALLISTER:** Can you just explain to me what the industry department modelling is for? What they are trying to—

**Ms Evans:** Senator, you would really have to ask those questions to the department of industry.

**Senator URQUHART:** What are they actually modelling, can you answer that?

**Ms Evans:** It's a question you would need to direct to the Department of Industry, Innovation and Science.

**Senator McALLISTER:** But there is no whole-of-economy modelling in your department in terms of the impact of the Climate Solutions Package?

**Ms Evans:** No whole-of-economy modelling has been done in our department.

**Senator McALLISTER:** None in Treasury either, because they confirmed that last week. So no real sense about the economic impact of the package on the Australian economy?

**Ms Evans:** As I think we talked through last week as well, for each of the different elements of the Climate Solutions Package we have done some cost-benefit analysis. So we understand what the impacts are generally, but we haven't put those policies into a whole-of-economy, computable, general equilibrium model. Those models aren't really suited to looking at these kinds of granular policy announcements.

**Senator McALLISTER:** When people wave around costs associated with packages, various policy scenarios, and say, 'It will cost the economy this much or it'd hit GDP by this much', they are not government sources are they?

**Ms Evans:** I think, Senator—

**Senator McALLISTER:** We'd have to go back to Garnaut to find that kind of modelling.

**Ms Evans:** Not quite as far back as Garnaut. Certainly in 2015 Warwick McKibbin completed some analysis for the Department of Foreign Affairs and Trade and linked to the task force that was based in the Department of the Prime Minister and Cabinet at the time. That was the basis of selecting Australia's target and that looked at a range of different target levels. It wasn't being prescriptive about exactly which policies would be used to deliver them, but it was looking at what would be the overall impact on the Australian economy of different levels of targets.

**Senator McALLISTER:** Just finally you said we'd need direct questions about the industry department modelling to the industry department—fair enough. Are you involved in it in any way—are you providing advice?

**Ms Evans:** We have been asked for technical advice.

**Senator McALLISTER:** What advice have you been providing?

**Ms Evans:** You're asking me to share with you a matter of policy questions which I'm not prepared to do.

**Senator McALLISTER:** Oh, Ms Evans, I'm afraid you're not allowed to just not answer questions. The standing orders do require you to provide an answer.

**Ms Evans:** We've provided technical advice.

**Senator McALLISTER:** What specific parameters are they seeking advice on?

**Ms Evans:** I'd have to take that on notice.

**Senator McALLISTER:** Has the industry department asked you to provide advice about policies that look a lot like Labor Party policies?

**Ms Evans:** No, Senator, they haven't.

**Senator McALLISTER:** When you said you're providing technical advice, are you providing assumptions around costs for particular kinds of abatement opportunities—you'd have that information based on the work that you've done on the Climate Solutions Package?

**Ms Evans:** Senator, we are not providing any specific assumptions; we're providing technical advice.

**Senator McALLISTER:** What does that mean—about how to do modelling?

**Ms Evans:** In the nature of the modelling they are choosing to use some of the parameters that they're maybe choosing to use as assumptions. We are not defining those; we are providing technical advice on them.

**Senator McALLISTER:** Right. So, they're defining the assumptions—which is fair enough; it's their modelling work—but they're asking for a response to those assumptions from the department?

**Ms Evans:** Yes.

**Senator McALLISTER:** So you're providing policy guidelines based on your knowledge of abatement technology, and they're utilising them to stress test their own assumptions?

**Ms Evans:** We're providing technical advice on their work.

**Senator McALLISTER:** Is it about the cost of abatement?

**Ms Evans:** Our advice?

**Senator McALLISTER:** Yes.

**Ms Evans:** Some of the assumptions would go to abatement costs.

**Senator McALLISTER:** And are they modelling a 45 per cent emission reduction target?

**Ms Evans:** Senator, these are questions you should put to the Department of Industry, Innovation and Science. It's not a product of the Department of the Environment and Energy.

**Senator McALLISTER:** Have they advised you that they're modelling a 45 per cent emission reduction target?

**Ms Evans:** They have a number of scenarios that they are modelling.

**Senator McALLISTER:** Have they advised you that one of those scenarios is a 45 per cent emission reduction target?

**Ms Evans:** I'd rather take it on notice and ask the Department of Industry, Innovation and Science if they're comfortable with us talking about their modelling work.

**Mr Pratt:** Senator, if I could jump in: I don't want to be seeming to be difficult, but if we were providing advice direct to our minister we would of course be very uncomfortable about telling you what policy advice we are currently providing to our minister—the nature of that advice. If we are providing policy advice, even of a technical nature to the industry department, which is doing work which it may use to inform its policy advice to their



minister, then it's an extension of the same issue. That is why we are not able to talk clearly about this. It's not because we are trying to—

**Senator McALLISTER:** Mr Pratt, you will have heard the opening statement by the chair which says that advice to government is not a sufficient reason to refuse to answer a question. Are you claiming public interest immunity in relation to this? If you're not, you need to answer the question.

**Mr Pratt:** What I'm saying, Senator, is that we do not—and this has been a longstanding position under successive governments—provide details about the nature and content of the policy advice that we provide to ministers. That is a longstanding understanding.

**Senator McALLISTER:** The problem with that analysis is that almost nothing that any department does can then be the subject of discussion, which is why the formal advice, read by the chair, is that advice to government is not a sufficient reason; there needs to be some demonstration of actual harm if you wish to claim public interest immunity.

**CHAIR:** If I could assist here: I think Ms Evans did say she was taking the question on notice—am I right?

**Senator McALLISTER:** Actually she did, and then Mr Pratt chose to engage in another discussion about this, which I've had about five times in the last five days.

**CHAIR:** Ms Evans, just to confirm: you are taking that on notice?

**Ms Evans:** I'm happy to take it on notice.

**Senator McALLISTER:** Is the modelling being conducted by the industry department, or is it being commissioned by the industry department to be performed by a third party?

**Ms Evans:** It's a question that you would be best to give to the industry department. It's their modelling.

**Senator McALLISTER:** Have they informed you whether they are doing it in-house or whether they are commissioning a third party to undertake the work?

**Ms Evans:** They have.

**Senator McALLISTER:** What have they told you?

**Ms Evans:** It's a question I would rather you put to the Industry, Innovation and Science portfolio. It is their modelling. I'm happy to take it on notice again to find out and consult with them, if they're comfortable for me to talk about their modelling.

**Senator McALLISTER:** Okay. I'm going to leave it there, Chair, because here, as in other forums, there is an ongoing attempt to hide the extent to which the Public Service is being used to conduct modelling of Labor policies. I concede that there is no point asking any further questions of officials, but—

**CHAIR:** Okay then. Senator Rice.

**Senator RICE:** I want to talk about electric vehicles. I hope I'm not overlapping with questions that were asked when I was out of the room. I want to start with a question to the minister. What's your view, Minister, about electric vehicles and whether they're a good thing?

**Senator Seselja:** My view—I might refer you to one of the answers that were given by Minister Cormann to some similar questioning on this today. There are all sorts of good

things that we'd like to have, and I guess one of the critiques of what's been put out by the opposition is just how much they're going to mandate people to buy certain things. Do I personally think electric vehicles will be a good idea and may take off at some point? It's not something that I've had portfolio responsibility for, so it's probably a little bit irrelevant. Electric vehicles are out there. Some Australians are choosing to purchase them, and that's great. If they believe that they serve their needs, that's fantastic, but in terms of my personal view it's not really relevant.

**Senator RICE:** So would you agree, Minister, that the government seems to have rather a confused position on electric vehicles? On the one hand we've got Minister Taylor spreading memes with pictures of electric vehicles stuck in the outback plugged into a generator; on the other hand we've got many ministers—senior ministers—talking about what a good thing they are and spruiking them in their electorates. I've just been at the Rural and Regional Affairs and Transport hearing, and Minister Scullion in there sounded very lukewarm about electric vehicles, and your response hasn't inspired in me great confidence either that the government is positive about electric vehicles.

**Senator Seselja:** I don't accept the premise of your lengthy question, Senator Rice, but, in terms of anything further I can add to it, I'm not sure where your questioning is going, other than a few assertions that you've made, which I refute.

**Senator RICE:** It just seems to me that, given there's also a lack of clarity about exactly which minister is responsible for electric vehicles, there's not a clear message of support for them. But I will move on and ask the department about the details of what the \$400,000 for the National Strategy on Electric Vehicles is going to be spent on.

**Ms Tilley:** Thanks, Senator. We mentioned briefly last Thursday that the budget handed down last week had \$400,000 coming to this department for the development of the strategy over the next financial year. At a very high level, the intention for that \$400,000 is to have two dedicated staff members working on the development of the strategy and then, with the roughly \$200,000 remaining, to commission any analysis or reports that might be useful as inputs to the strategy.

**Senator RICE:** So it's expected that the strategy would be completed by when?

**Ms Tilley:** We haven't developed a time line per se, other than to say that the funding was for one financial year. So as public servants we probably intend to take that financial year to do an effective job.

**Senator RICE:** And you would expect it to be completed within that financial year?

**Ms Tilley:** That would be our expectation, to do the work over the course of the year, such that it's ready to then be completed around that time frame.

**Senator RICE:** Can you give me some clarity about who is leading, on support for electric vehicles, within the government? It is the environment department that is leading it, isn't it?

**Ms Tilley:** I think that's a good question, which actually goes to the point of developing a national strategy that provides a more coordinated and cohesive overlay between the range of activities that are happening at a Commonwealth level as well as sub-national level, private and public. But at a higher level the environment and energy department is responsible for electric vehicles, insofar as they're an emissions reduction mechanism.

**Senator RICE:** Who is the lead minister?

**Ms Evans:** There is a group of ministers responsible, and you've heard me talk about the Ministerial Forum on Vehicle Emissions before. That is the group of ministers who are leading, among other things, on the electric vehicles strategy, from a ministerial perspective. We have received the appropriation to then lead it at a departmental level. As we have on all of the other matters, where we're dealing with vehicle emissions, we'll work very closely with the department of infrastructure, and other departments, as we take that work forward.

**Senator RICE:** So the strategy is a project of the Ministerial Forum on Vehicle Emissions?

**Ms Evans:** Yes.

**Senator RICE:** And there's not a lead minister?

**Ms Evans:** No, it's a group of ministers who comprise that forum.

**Senator RICE:** So the lack of clarity that the community have on electric vehicles is not surprising, then.

**Ms Evans:** The issues span many portfolios, as we were talking about earlier. There are infrastructure issues, there are the emissions reduction questions, there are impacts on energy, so you need multiple ministers to be involved.

**Senator RICE:** Yes, multiple ministers who appear to have different views upon whether electric vehicles are a good thing, I might add. Can you tell me who the ministers are in the ministerial forum, at the moment?

**Ms Evans:** Yes, Minister Price, Minister Taylor and Minister McCormack.

**Senator RICE:** Certainly Minister Taylor's views don't seem to be very supportive of electric vehicles, given the material he's been sharing on social media.

**Senator Seselja:** I think we've covered this with some of the earlier questioning. You are talking about a debate on Labor Party policy and how much you mandate the uptake of electric vehicles, and what the costs might be associated with mandating that, or how much you allow various market forces to take place and people to choose whether or not they want an electric vehicle. Many will, no doubt—you're inviting us to engage in that debate—

**Senator RICE:** They are, surely, issues that will be considered in the development of strategy.

**Senator Seselja:** but, given the timings expressed by the committee, I won't engage in that debate, as interesting as that might be.

**Senator RICE:** What's the input from the department of infrastructure, then, into the work?

**Ms Evans:** They have a range of responsibilities, obviously, to do with vehicle emissions and registrations and so on. They run the Green Vehicle Guide. They have responsibility for the COAG transport and infrastructure committee, which has already got quite a range of work underway looking at support for electric vehicles. Those are off the top of my head, some of the things they're involved with. They, primarily, have been working with us on things like the Green Vehicle Guide and charging infrastructure and where that might be best

located. Collectively, we have been also talking about the impacts of things like fuel excise, receipts and other issues that are all related to the question of uptake of electric vehicles.

**Senator RICE:** Would you be expecting the department of infrastructure to be bringing information into the ministerial forum and into the strategy on the need or not, as part of that strategy, for light vehicle emissions standards?

**Ms Evans:** The Ministerial Forum on Vehicle Emissions has already been considering the question of vehicle emissions standards.

**Senator RICE:** Will the consideration of light vehicle emissions standards be part of the electric vehicle strategy?

**Ms Evans:** I don't think we can rule anything in or out at this point.

**Ms Tilley:** The two are related, in that a greater uptake of electric vehicles has an impact on average fleet vehicle emissions across the fleet. So, insofar as the strategy looks at increased uptake, that does have an impact. So it may not be a driver of the strategy to look specifically at that, but there might be outputs of the strategy that are relevant for emissions standards.

**Senator RICE:** So you would expect that, coming to a position on a light-vehicle emissions standard, given that connection, would be an important part of the strategy then? Certainly from my perspective I would see it as such.

**Ms Evans:** As I said, the ministerial forum on vehicle emissions has been looking at three areas since it started—so the toxic NO<sub>x</sub> and SO<sub>x</sub> type emissions that go with the fuel efficiency standard and the fuel quality standards. So those things have all been under active consideration.

**Senator RICE:** Yes, for many, many, many years in fact, and we haven't reached any position on them. That is my point: if you are hoping to have an electric strategy within 12 months, would you expect that the government would have to reach a decision on a light-vehicle emissions standard as a component of that strategy because they are intimately related?

**Ms Evans:** That would be a matter for the government to decide.

**Senator RICE:** Can you tell me what components you think will be likely to be in the strategy?

**Ms Evans:** Not at this stage; we need to do the work to flash that out over the coming months.

**Senator RICE:** So you haven't got any thoughts at all as to a procurement strategy, subsidies or charging networks?

**Ms Evans:** These things have all been canvassed in things like the Energeia report and the various studies that entities like ARENA and the CEFC have done. There have even been studies on consumer reaction to electric vehicles. We need to look at all of that information and, from that, we will draw the elements of the strategy.

**Senator RICE:** So the hope is that, at the end of that 12 months, we will then have a plan? So at the moment we have a plan to develop a plan and we have got \$400,000 to develop that plan, but there is actually no money left over, from what you say, to actually implement any strategy. That's correct, isn't it?

**Ms Evans:** The \$400,000 is for the departmental staff and other consultancies and so on that we may need to complete the strategy.

**Senator RICE:** It sounds like we're very much in the slow lane. The next area I wanted to move on to was the Port Augusta solar thermal. Is that outcome 2 or outcome 4?

**Ms Evans:** You can ask those questions here.

**Senator RICE:** Okay. I was asking the CEFC about this this morning. Can you tell me where things are at with the SolarReserve project?

**Ms Evans:** I'll ask Ms Dowling to respond to the question.

**Ms Dowling:** As you would be aware, there was an announcement last week by the South Australian government confirming that SolarReserve had not been able to reach financial close by the South Australian government's deadline and, as such, the South Australian government was re-reproaching the market to find a provider for its electricity project.

**Senator RICE:** What engagement has the department had with SolarReserve beyond the \$110 million concessional loan that was offered?

**Ms Dowling:** The department has been responsible for looking after the government's commitment of \$110 million to SolarReserve. So all of our engagement with SolarReserve has been limited to that proposal.

**Senator RICE:** So restricted to the conditional loan. Did the department do any work to help SolarReserve get the remainder of their capital costs financed?

**Ms Dowling:** The government provided SolarReserve with a letter of comfort in December 2017 which indicated the government's support to finance the project, subject to them reaching financial close.

**Senator RICE:** Did the department do any work investigating what options might be available to the government above and beyond that \$110 million loan that would help support the project proceeding?

**Ms Dowling:** The department, not directly, but I understand that both the Australian Renewable Energy Agency and, as you mentioned this morning, the Clean Energy Finance Corporation had discussions with SolarReserve, but that in neither case it led to a formal application for funds.

**Senator RICE:** That's the CEFC and ARENA. Was there any other work that the department did in terms of other options, other ways that the project could be supported?

**Ms Dowling:** No.

**Senator RICE:** If they don't manage to find extra capital, and the project doesn't proceed, what happens to the \$110 million concessional loan?

**Ms Dowling:** The \$110 million has been included in the 2019-20 contingency reserve and it's available to support a project.

**Senator RICE:** Can you guarantee that it would be available for a different renewable project in the Port Augusta region?

**Mr Pratt:** Ultimately that'll be a decision for government, but the funding is available.

**Ms Evans:** Just to clarify, the commitment was always to a concentrating solar thermal plant in Port Augusta rather than a renewable plant.

**Senator RICE:** But, given it looks like you wouldn't want to be putting money on a concentrated solar thermal project going ahead in Port Augusta in the near future, given where the project is currently at, will the government either guarantee or at least be looking most favourably on a different renewable project in the Port Augusta region?

**Ms Evans:** I think Minister Birmingham indicated earlier that, if the project changes hands or whatever, that funding is still available.

**Senator RICE:** In terms of the department's advice, how much weight will be put upon the fact that we had the closure of the Northern and Playford coal power stations so the community is pretty desperate for new investment opportunities? Will that be a factor in encouraging this \$110 million to be used for a renewable project in the Port Augusta area, whether or not it's a concentrated solar thermal project?

**Ms Evans:** As the secretary has already indicated, that's a question for the government.

**Senator RICE:** Is the department actively looking at any other alternatives—solar thermal with a different project proponent or solar PV plus batteries or solar PV plus pumped hydro? Is there work going on looking at those as options to support the Port Augusta community and support renewables?

**Ms Evans:** The announcement from SolarReserve was only on Friday, so we haven't really had any time, because we've been here today, to do anything further in relation to the SolarReserve project.

**Senator RICE:** Did you have any warning that it was going to fall over?

**Ms Evans:** We were certainly aware that the project was struggling to find financial close, but we didn't know until it was announced that—

**Senator RICE:** When were you aware that it was struggling to find—

**Ms Evans:** We've been in discussions with them over a lengthy period of time.

**Senator RICE:** In that period of time, you could have been seeing that it was looking a bit wobbly, but you haven't taken the opportunity of thinking about what other options there could be for the Port Augusta area?

**Ms Evans:** We continued to work on the project that the government had indicated it was committed to while it was still a live project.

**Senator RICE:** I take your point that the announcement was only made on Friday. So there hasn't been any work done in the department on other potential options for the Port Augusta community?

**Ms Evans:** No.

**Senator STORER:** I want to ask questions regarding ACCUs. How many ACCUs have been contracted under the Emissions Reduction Fund under the 2015 iteration of the landfill gas method?

**Ms Tilley:** I'll have a look and I'll ask a colleague if we have that information. The Clean Energy Regulator, who administers the fund, is responsible for the detail of where we're at with the issuance of ACCUs, but it could be possible that we could quickly try and find that information. Can you just name the particular project, method type, again?

**Senator STORER:** How many ACCUs have been contracted under the Emissions Reduction Fund under the 2015 iteration of the landfill gas method?

**Ms Tilley:** The landfill gas method. Okay. I will do some trawling through my paperwork to see if we have that. I should be able to give you at least project numbers or something like that.

**Senator STORER:** Okay. I will continue then. Is the department aware of the appearance of Ben Sullivan, the New South Wales general manager of Veolia on ABC's *Four Corners* last Monday?

**Ms Tilley:** I watched the program, so I think I can recall the gentleman you're referring to.

**Senator STORER:** He was discussing the woodland energy generation project. Are you aware that Mr Sullivan mentioned that the company would continue its activities regardless of ERF funding?

**Ms Tilley:** I can't remember his exact wording, but I recall some reference to that, yes.

**Senator STORER:** Is the department aware that the project predates the CFI Act, the Carbon Credits (Carbon Farming Initiative) Act, has alternative streams of government funding through the Renewable Energy Target and is legally to capture methane emissions through state and territory laws?

**Ms Tilley:** Without knowing the specifics of that question, I will just point out that when it comes to landfill gas projects under the Emissions Reduction Fund and, as you indicated previously, the Carbon Farming Initiative, some of those projects are longstanding projects that were initiated under a government program. I believe it was Greenhouse Friendly in the early 2000s. As that program ended, in order to ensure that the viability of those projects could continue, they then transitioned into the Carbon Farming Initiative. Similarly, the Carbon Farming Initiative itself transitioned into the Emissions Reduction Fund. So without knowing the specifics of that project, I imagine there would be a number of landfill gas projects that are currently under the Emissions Reduction Fund that have that heritage of transitioning between government programs.

**Senator STORER:** What percentage of projects under the 2015 iteration of the landfill method are electricity generating?

**Ms Tilley:** I'd certainly have to take that one on notice and consult with the Clean Energy Regulator. On your earlier question, a colleague has just handed me some information on the 2015 landfill gas method and the number of projects that are under it. I can give you some details on that, which leads into the contracted and delivered abatement, which is ACCUs, as you asked. There have been 107 different projects registered under that method, and 92 of those have been contracted through the ERF auctions for government to purchase that delivered abatement. Those contracted projects collectively represent 20,869,222 tonnes of abatement. That would equal that number of ACCUs that are currently contracted under those projects. To date, under those projects, 8,695,867 tonnes of abatement have been delivered and, therefore, ACCUs issued to those projects.

**Senator STORER:** Thank you. I'll just return to the next question. What percentage of projects under the 2015 iteration of the landfill method are mutually registered under the Renewable Energy (Electricity) Act?

**Ms Tilley:** I'd have to take that one on notice.

**Senator STORER:** What advice was provided by the Emissions Reduction Assurance Committee in its crediting period extension review?

**Ms Tilley:** Again, I'd have to take that on notice.

**Senator STORER:** If you could, please.

**Ms Tilley:** We don't have colleagues in the room with the in-depth knowledge of that. The outcomes of an ERAC review, once they have finished their report, are made publicly available.

**Senator STORER:** If you could take that on notice with the other questions you said you would as well. Noting that a draft methodology variation is currently open for public consultations, what steps have been taken to address the fact that somewhere in the order of \$140 million has gone to projects that would have happened anyway?

**Ms Tilley:** I don't know the basis for that statement, so I can't respond to that.

**Senator STORER:** Are you aware of this draft methodology variation currently open for public consultation?

**Ms Tilley:** I am aware there is a draft method out for consultation.

**Senator STORER:** But you are unaware of what order of amount has gone to projects that would have happened anyway?

**Ms Tilley:** I haven't heard those claims before, so I'm not sure of the basis for which you make that claim.

**Senator STORER:** What steps have been taken by the department to address the fact that the Emissions Reduction Fund is funding projects that are acknowledged by the independent Emissions Reduction Assurance Committee and its proponents as would have happened anyway?

**Ms Tilley:** If we could take a step back to what the objectives of the ERF are when it was designed and then how we seek to ensure that it funds projects that were unlikely to occur in the normal course of events—we touched on this very briefly with Senator Di Natale last week. But it is always difficult, as a project assessor or somebody designing a government policy, to know what an individual may or may not be thinking in terms of whether or not they'd take a particular action. For a scheme like the ERF, the intention was to incentivise actions beyond what was happening in the ordinary course of events. For an offset scheme, such as the ERF and others around the world, it's broadly been decided at our policy development stage that you simply cannot ever put yourself into the minds of the decision-maker, whether it was a corporate board or an individual, as to whether or not they would have undertaken an activity anyway. In designing the methods that exist, the rules for different projects under the scheme, we try and have general rules of thumb about what is normal business activity, what happens in the ordinary course of events and, therefore, what is the additional action that a project proponent would need to undertake to show that it is likely to be additional to business as usual.

Each method will have a different approach depending on the activity that they're looking at. Generally, for example, if I use energy efficient upgrades of buildings, you'd look at what the average trend in the economy is to improve the efficiency of buildings over time. But, in



the case of the relevant method there, we have an extra hurdle that a company needs to get over. I will use an example just in case I get the specifics wrong. For example, we don't just say you have to beat industry average of what building efficiency is; we say you have to jump by two stars in the energy efficiency star ratings to show that you've gone above and beyond what somebody would do in the normal course of events. You have a range of rules of thumb to try and address that.

**Senator STORER:** These are steps that have been taken by the department?

**Ms Tilley:** I'm sorry?

**Senator STORER:** These are the steps that have been taken by the department to address this?

**Ms Tilley:** These are steps that are taken in the development of methods that then go through the independent Emissions Reduction Assurance Committee to assess if they meet the standards such as going beyond business as usual.

**Senator STORER:** That's projects going forward?

**Ms Tilley:** That's methods, which are the project rules.

**Senator STORER:** Regarding new projects.

**Ms Tilley:** That's correct.

**Senator STORER:** But the concern here is about the previous projects and that there's funding going on that would have gone to projects that were happening anyway.

**Ms Evans:** I think we've said a few times we're not aware of anything that would support the claim that you're making, but we're happy to take it on notice and have a look.

**Senator STORER:** If you could.

**CHAIR:** Mr Pratt, did you have something you wish to—

**Mr Pratt:** I have three comebacks in relation to Senator Urquhart's questioning around the Great Barrier Reef Foundation and advertising. Their advice is they're not planning to do any advertising; they don't have any budget for advertising. Secondly, Chair, with your permission, I had a set of questions about a list of the status of plans for Adani projects and approvals et cetera. I'd like to table those.

**CHAIR:** Are we happy to have them tabled?

**Senator RICE:** Thank you, Mr Pratt.

**CHAIR:** We'll table them, thank you.

**Mr Pratt:** Thirdly, we have a further answer for Senator Urquhart on advertising expenditure in recent years.

**CHAIR:** Mr Chisholm.

**Mr Chisholm:** Chair, in answer to your question earlier about other campaigns over the last four years: there was one other campaign we were able to identify expenditure in relation to, and that was the 2015-16 expenditure on Green Army. That ended on 8 May 2016. The publicly available report that is provided by the Department of Finance—an annual report on campaign advertising by Australian government departments and agencies—identified that \$3 million was spent.

**Proceedings suspended from 18:45 to 18:53**

**CHAIR:** We will now go to outcome 4. And we have a clarification. Mr Heferen.

**Mr Heferen:** Thank you, Chair. I want to clarify a comment that came up in this morning's session in relation to Snowy Hydro. It was in questioning by either Senator McAllister or Senator Urquhart. Mr Broad, the CEO of Snowy Hydro, was asked what further equity was required for Snowy 2.0 and also about the impact on debt arising from an equity subscription. Senator McAllister, I think you asked Mr Broad about the equity injection of \$1.38 billion. The issue was that Mr Broad was hearing that as the request they made for an equity injection, whereas I think the issue was increased overall finance.

As you know, a company can seek extra finance through equity injection, through raising debt or through using retained earnings. The shareholder ministers in this case made a decision that the appropriate way to facilitate 2.0 was to go down the route of the equity injection and not the other two methods. I can confirm that a number of options were considered by shareholder ministers. For all options some level of shareholder support was required, so the decision made by the government was not to go ahead with having Snowy either raise more debt or go down the route of forgoing dividends—in other words, to use their retained earnings—but to go down the route of the equity injection. The equity injection, hopefully as I made clear, does not have a direct impact on the underlying cash or the fiscal balance. Hopefully, when that is mirrored with the *Hansard* from earlier in the day, it makes sense and the seeming misunderstanding from Mr Broad and the committee can be resolved by that.

**Senator McALLISTER:** Mr Heferen, thanks for that. I'm not sure that that changes my understanding of what has happened. I appreciate that there were broadly three policy choices available for the shareholder ministers, but the impact of their particular choice on net government debt perhaps is one, as you suggested, for Finance tomorrow.

**Mr Heferen:** Clearly the net debt position for the Commonwealth hasn't changed. The issue for gross debt I think goes into the realm of accounting treatment and the treatment of Commonwealth government securities on offer. That would best be directed to the Department of Finance. It was more the issue that, for the business case to work, Snowy Hydro Ltd would need extra finance and, on the question of the financing mechanism, I think Mr Broad heard you saying that the extra financing mechanism would have to be equity and he was saying no. There is no doubt that the extra financing was required. I think the debate was about the mechanism of how that financing would be obtained.

**Senator McALLISTER:** Mr Heferen, that is a very elegant way of skating around Minister Cormann's fairly unequivocal statements about the essential nature of the equity injection. I probably have a different view about the significance of Minister Cormann's statements to the one I think you're trying to present, but I'm not sure that us debating that at the table is going to assist.

**Mr Heferen:** I completely agree. The right place for that would be discussion with Minister Cormann and the Department of Finance.

**Senator McALLISTER:** Sounds good.

**CHAIR:** Senator Chisholm?

**Senator CHISHOLM:** I have some hydro questions effectively. The government's Climate Solutions policy allocates an emission reduction of 25 million tonnes by 2030 to the Battery of the Nation project. I want to get a sense of this abatement. Is that resulting from pumped hydro projects as a function of the renewable energy in that it will be stored? Is that how it would be worked out?

**Mr Heferen:** We canvassed this in some detail on Thursday. I took on notice to come back to the committee with the actual calculations. Broadly the issue is with Battery of the Nation and Marinus Link, so if there is more pumped hydro in Tasmania, as long as the Marinus Link is in place, then what would happen in times of high demand, particularly in Victoria, is that the output of gas peakers—so gas-fired power stations—or, indeed, coal-fired power stations in Victoria and possibly South Australia may be reduced. It is that reduction that is the abatement increase.

In other words, looking at the National Electricity Market as a whole, when there is high demand, that's typically when gas fired generators will fire up, but it is also when pumped hydro can be used. So, by Battery of the Nation expanding the hydro and Battery of the Nation and having Marinus Link, so more electricity can be transferred to the mainland, when demand on the mainland is high, it can in effect use the zero-emissions power out of the hydro system in Tasmania to alleviate the need for particularly a gas peaker to operate on the mainland.

**Senator CHISHOLM:** There was an emissions reduction amount put beside that, though, wasn't there?

**Mr Heferen:** That's correct.

**Senator CHISHOLM:** Is that the 25?

**Mr Heferen:** That's correct.

**Senator CHISHOLM:** Okay. I wanted to get a sense of what are the assumptions about renewable energy generation that underpin that abatement number.

**Mr Heferen:** That renewable energy all comes from Battery of the Nation. The expansion of Battery of the Nation, which will be hydro—that extra pumped hydro there is what will flow through to reducing the need for the gas peaker, largely in Victoria. So, when the demand in Victoria goes up—say, on a summer day—there will be more demand for electricity in Victoria. At the moment what would happen is that the coal fired generators would be typically running, and probably would be running as hard as they can, and the extra power will be delivered through gas peakers that come on for a short period of time—because the price of gas is very high and the open cycle systems are designed to run for a short period of time—down through the interconnectors from Snowy Hydro. Then, in the future, it will be through the two interconnectors from Tasmania, Basslink and Marinus. So the renewable energy, if you like, is in the Battery of the Nation; that's the hydro. The emissions abatement comes about through no longer having the need to run a gas peaker as much.

**Senator CHISHOLM:** Yes.

**Mr Heferen:** I took on the calculations about what the demand will be, the time the gas peaker would run and so forth to actually get that figure that was in the climate solution package. They are the things I took on notice to endeavour to go back and provide the detail, the assumptions behind that, for the committee.

**Senator CHISHOLM:** So the abatement allocated to the Battery of the Nation requires the Marinus Link?

**Mr Heferen:** Yes.

**Senator CHISHOLM:** So the Marinus Link itself, according to the initial feasibility study, only has a positive net benefit with renewable investment consistent with the AEMO ISP fast-start scenario; is that correct?

**Mr Gaddes:** That may be one of the early scenarios that ARENA and TasNetworks have looked at for Marinus Link. One of the components of the \$56 million that was announced by the Australian government in recent weeks is to go and do a full feasibility study. I could take it on notice to look at what that scenario was, but that would be only an early feasibility study. The full feasibility study is being done now.

**Senator CHISHOLM:** So a key part of the government's climate solution policy, in terms of emissions reduction, requires the Marinus Link to be done, but there is actually no study that says it stacks up to be done?

**Mr Heferen:** The work done a few years ago led by John Tamblin on the second interconnector was very clear that, subject to a range of conditions being met, there was an economic case to proceed. That really formed the basis of the real interest in Marinus Link. The conditions basically were: if you have increased penetration of renewables in the mainland, if there are sources of reasonably priced opportunities in Tassie hydro for more pumped hydro and if that demand stays relatively flat or at least doesn't come off a cliff. There were some other circumstances as well, but that's basically the set of things that would need to occur. Dr Tamblin provided his report sometime in 2017, I think. Since then, of course, the renewable penetration on the mainland—wind and large-scale solar and roof top—has grown quite rapidly, far faster than the market operator first anticipated.

**Senator CHISHOLM:** The initial Marinus Link feasibility study concluded that the project has a positive net benefit under a business-as-usual renewable energy investment scenario?

**Mr Heferen:** Is that a question?

**Senator CHISHOLM:** Yes. Does the initial feasibility study conclude that the project has a positive net benefit under a business-as-usual renewable energy investment scenario?

**Mr Heferen:** If we are talking about the initial feasibility study, we're talking about Dr Tamblin's report. I think we'd need to take that on notice to ensure you got an accurate answer. It's just that that was a few years ago, I don't have the report in front of me and I don't think my colleagues have Tamblin's report.

**Senator CHISHOLM:** Under what scenario does the project have a positive net benefit?

**Mr Heferen:** The other issue, as Mr Gaddes outlined, is that the money that the Commonwealth has provided to Tasmania to go through the new feasibility study, given that the circumstances now are quite different to those that were in place a few years ago, given the rapid uptake of intermittent renewable energy—wind, large-scale solar and roof-top solar—requires that to be essentially redone to try and get a better sense of the validation.

**Senator McALLISTER:** Has it been redone?

**Mr Heferen:** That is what the money is for.

**Senator CHISHOLM:** But, according to the latest feasibility study, the economic case for the Marinus link only makes sense under a fast-start scenario. Isn't that the case?

**Mr Heferen:** Sorry, I don't think that's correct. When you say 'fast start'—I'm just not familiar with the—

**Senator CHISHOLM:** The integrated system plan, which basically corresponds with 50 per cent renewables by 2030.

**Mr Heferen:** But AEMO's integrated system plan—my colleagues will correct me—but I thought the Marinus Link was one of the stage 3 or 4 projects.

**Ms Parry:** Stage 3.

**Mr Heferen:** Stage 3 project. So the ISP says, yes, this should go ahead, and there are no real contingencies around it, so it's not as if [inaudible] X, Y and Z must occur, this should go ahead. They've said it's one for stage 3. So it's not stage 1. It's not one of the first cabs off the rank. But it's certainly one of the ones AEMO said would be necessary for the future of the NEG. I just might check that with colleagues to make sure.

**Mr Gaddes:** My notes here say that the first version of the integrated system plan recommends commencement in 2033 but this could be brought forward allowing for further modelling. So the very first integrated system plan did envisage the Marinus Link at 2033.

**Senator CHISHOLM:** Okay. The Marinus Link itself requires significant renewable energy investment to stand up to the economic cost-benefit?

**Mr Heferen:** That would be Hydro Tasmania's proposal to expand Tassie hydro—so, yes, a definite increase for renewable. That increased renewable is the increased renewables in the Tasmanian hydro system.

**Mr Gaddes:** Could I add something there. The Marinus Link, as currently described, is two 600 megawatt links. The first link of 600 megawatts would unlock 400 megawatts of constrained power in Tasmania. So they probably don't need too much more renewable energy in Tasmania for the first link, because there's already 400 megawatts that can't get to the mainland peak times because of the Basslink constraints. It's probably the second stage of the 600 megawatts that you would need more generation in Tasmania for to it become viable.

**Senator McALLISTER:** I'm just looking at the feasibility report. Obviously, a number of different reports have been referenced in the conversation so far, but the initial feasibility report released in February 2019 and produced by ARENA and TasNetworks does go very directly to the timing of Marinus. It is really clear about the kinds of assumptions that are necessary to make this a viable investment in the 2020s. I want to make sure that we are all on the same page, because we do seem to have been discussing quite different things, including the ISPs' findings. This document says straight up:

The largest single influencing factor in the economic viability and timing of Marinus Link is the trajectory of coal-fired generation retirement in the NEM. A key value driver for Marinus Link is its ability to supply on-demand renewable power to the NEM as large-scale retirement of coal fired generation occurs.

The study also says that there are 'plausible circumstances' where Marinus Link could be economically feasible from the mid-2020s. It further states:

The benefits of Marinus Link are likely to be greater than costs when approximately 7000 MW of the NEM's present coal-fired generation capacity retires, which could occur from the mid 2020s (with early retirement) to the mid 2030s (with retirement at the end of design life).

That feasibility study is really clear about the sensitivity of the business case to the trajectory. I think that's what Senator Chisholm is trying to ask you about. There are only some scenarios where early construction of this project makes economic sense, and they are scenarios where there is a high penetration of renewables in the NEM generally. Isn't that right?

**Mr Heferen:** Yes, Senator. When I was thinking of the first feasibility study, I was thinking of the original one done by Tamblyn, not this one. But, as I said, the rate of change in the NEM is quite extraordinary with the uptake of renewables on the mainland. I don't know the report in detail but as the report would no doubt show, the more renewables that happen on the mainland, the greater the need for the firming capacity. And the firming capacity is best done through either a gas peaker or pumped hydro, and that would offer the pumped hydro. So as that comes on, the need will be greater; therefore, the viability of Marinus will be increased. So whether it's an Australian Energy Market Operator's ISP, which I think had its schedule around 2033, or whether it be earlier would be a function of the renewable penetration on the mainland.

**Senator McALLISTER:** The earlier dates, the feasibility study, the ARENA Hydro Tasmania one says that it doesn't stack up without what is referred to as a 'fast-start renewable scenario', so that's 50 per cent renewables by 2030.

**Mr Heferen:** The purpose of doing the next feasibility work with TasNetworks is to then tease it out more fully.

**CHAIR:** Senator Chisholm?

**Senator CHISHOLM:** I'm happy to leave it there.

**CHAIR:** Senator Rice, do you have questions?

**Senator RICE:** I do. Thank you. I want to take you to the department's recent interim report on fuel security and liquid fuel security. I understand that the interim report was released just last week?

**Mr Sullivan:** Correct, it has been released.

**Senator RICE:** It states that Australia has only 18 days worth of petrol at any one time, that our fuel needs are growing at a faster rate than most OECD countries and that we are noncompliant with IEA recommendations, which are pretty much the findings when we had a Senate inquiry into fuel security a couple years ago. I recall there being very similar findings. I would like you to comment on how much the uptake of electric vehicles would serve to ameliorate the issue of our poor fuel security?

**Mr Sullivan:** Just before I ask Mr Wyndham to talk about the particulars with respect to EVs, you raise a couple of things there in terms of our noncompliance with IEA and our fuel consumption needs. I just wanted to make it clear that those two things aren't quite separate, in terms of one being a domestic security measure and one being an international security measure. Those average consumption days, at 18 to 20 days across jet fuel, petrol and diesel, have been relatively stable in terms of that consumption cover for decades. I just wanted to put some context around those numbers, which can sometimes be misinterpreted in terms of IEA days versus our domestic days, but also in terms of the compliance issue—that's another

issue about a return to compliance. But that wasn't your question. It was about electric vehicles—

**Senator RICE:** And, regardless, the issue of 18 days of supply is a pretty scary thing in the context of the potential cutting off of supplies.

**Mr Sullivan:** That's what the purpose of the report is. That consumption day coverage hasn't really altered over two decades.

**Senator RICE:** No, but it's still pretty scary. It's two decades in which nothing has gone wrong, but it doesn't mean that it won't in the future.

**Mr Sullivan:** And just to note that we have kept that same level of consumption days when we have been IEA compliant. In fact, at some points we were three times over the compliance levels for IEA days. So, it's just that separation between our international security measure and our domestic security measure. But I've taken you off the track. Mr Wyndham.

**Mr Wyndham:** Could you repeat the question, specifically on electric vehicles.

**Senator RICE:** I must admit that I've skimmed through the report but I haven't read it in detail and what consideration there was of the role of electric vehicles for ameliorating issues with poor fuel supply—and, yes, whether that was considered in the report. And if not, would you like to talk about what the uptake of electric vehicles could do to ameliorating problems with our poor fuel supply?

**Mr Wyndham:** It should be noted first up that the interim report is intended for public consultation purposes. It is a set of interim findings on which we are asking for people's views on whether they agree or disagree. On electric vehicles, that was considered as part of the report, but not in depth I should say. In general terms, looking at transport, around 98 per cent of our transport needs are supported by liquid fuels at this point. So, I guess I would say that any sort of energy alternatives or transport alternatives that move us away from liquid fuels potentially can benefit energy security.

**Senator RICE:** What proportion of our liquid fuels is used in Australia by the sort of vehicles that we are talking about—light vehicles, which the current discussion about electric vehicle targets are addressing?

**Mr Wyndham:** My recollection is that around about 30 per cent of the fuel we use in Australia is petrol. That fuel use is predominantly made up by light vehicles. Any time there is an increase in electric vehicle use, it is potentially decreasing the amount of petrol that we would be using.

**Senator RICE:** You also have light vehicles using diesel. Do you know what proportion of the diesel that's used is for light vehicles?

**Mr Wyndham:** No. I would have to take that on notice.

**Senator RICE:** I don't know what proportion of light vehicles use diesel, as opposed to petrol. It has been increasing in recent years. Conservatively, you have at least 30 per cent of fuel being used by light vehicles, and undoubtedly more, given that that doesn't take diesels into account. You said that you've discussed electric vehicles but not in any detail. Is there a reason why, given the potential of electric vehicles to have a very significant impact on our liquid fuel supply?

**Mr Wyndham:** The report itself is predominantly about our current fuel security arrangements. You've talked about stocks already, but there are a range of other dimensions to fuel security. One of those is the reliability of our supply chains. So we've been canvassing all of the ways that we supply and use fuel in Australia. We've been looking at potential disruptions—what essentially happens if there's an interruption to fuel in some way—and we've started looking at projections for the future for fuel use. Electric vehicles are one dimension of many when it comes to what our future fuel use looks like.

**Senator RICE:** So the work you've done so far hasn't considered those projections, but that's work that you will be doing into the future?

**Mr Wyndham:** It is work in progress, yes.

**Mr Sullivan:** That also includes biofuels, and I imagine that part of the public consultation or part of the focus from some areas—and also some of the groups we've already had consultation with—has been on both EVs and the use of biofuels.

**Senator RICE:** So it's work in progress. Can you tell me what sorts of predictions you are looking at in terms of expected numbers of EVs operating in Australia by 2030?

**Mr Wyndham:** At this point, we don't have any projections beyond those that were discussed by our climate change colleagues earlier in the day. We're essentially seeking to align with those at this point in time. If there's a need to get into electric vehicle projections in further detail, at some point in the future we may do that, but at this stage we're using those same climate change projections.

**Senator RICE:** Between 25 and 50 per cent by 2030 is, I think, what has been discussed both last week and today.

**Mr Sullivan:** That will take into account work on the electric vehicles strategy as well as what's happening with hydrogen. It's not the pre-eminent forecast for those particular areas, but we'll pick up the work of those initiatives inside the Commonwealth.

**Senator RICE:** You will be picking it up—so part of your ongoing work will be looking at the potential decreasing demand for the liquid fuels, given the potential uptake of alternatively fuelled vehicles?

**Mr Sullivan:** I think we've discussed this before. The Liquid Fuel Security Review is the first part of a national energy security assessment, and that's due by the end of the year. And these are repeated over time, so those repeats will then pick up work that's being done in the electric vehicles strategy and other things that are being done. It will also pick up what we're doing in international compliance with IEA, circling back to where we started.

**Senator RICE:** Looking at the work you've done so far and the current situation, if there was to be an emergency regarding fuel security, where shipments of petroleum for one reason or another weren't making it onto our shores, what process would take place?

**Mr Wyndham:** It would depend on the nature of the disruption, and I should say, as part of this work, we've been looking at a range of potential disruptions, starting with quite small-scale things that happen on a really routine basis, such as disruptions at refineries or ships coming late to Australia. In those cases of small-scale disruption, essentially industry manage those things on their own. They access fuel from other locations, they move it to the places



that it's needed and consumers don't see any impact at all. We haven't in Australia seen many disruptions that go beyond that sort of scale.

Stepping up from there, there are what I would describe as small- to medium-scale disruptions. In cases where, say, there's disruption to two fuel companies at the same time, there's more of a likelihood that consumers feel an impact as a consequence of that, but we're still only talking about the sort of scale that would lead to maybe shortages at service stations. We haven't seen any disruption bigger than that in the last 40 years. If we were to go bigger than that, say a disruption in an isolated area of Australia—Darwin and Perth, for example, get much of their fuel from ships, in refined or crude form. If there was a disruption in those locations, in the first instance it would be industry who would be trying to correct that issue. If that didn't resolve it then there's a role for state or territory governments to step in and seek to help with that through rationing and other ways of dealing with problems. When we step into national-scale disruption, affecting multiple states, the Commonwealth has what's called the Liquid Fuel Emergency Act, which allows the minister to step in and start guiding how fuel is used in Australia to work through a situation like that.

**Senator RICE:** And that would include rationing?

**Mr Wyndham:** Yes.

**Senator RICE:** How long would it take before Liquid Fuel Emergency Act measures came into play in the case of having that disruption?

**Mr Wyndham:** One of the findings of the interim report is that at this point it may take between one and three weeks to start rationing—

**Senator RICE:** You've only got 18 days supply and it's going to take up to 21 days to get rationing into place. That doesn't sound like something that I'd look forward to!

**Mr Wyndham:** You would have warning time on this, you'd expect, in most circumstances. But, as I said, that's in the interim report, and the minister has announced—and this is one of the reasons why—that the government will be reviewing the Liquid Fuel Emergency Act.

**Mr Sullivan:** With a view to modernising it, so there isn't that lag time. Mr Wyndham was painting the bleakest picture of three weeks. Obviously, if there's a national crisis, you do want a modern system. The two other things that the government has accepted to act on, coming out of the interim report, are increased transparency and oversight of liquid fuel. Our data is often a month old. In comparison, other OECD countries have much better information on day-to-day information. Those two things coupled together would give greater oversight for those national situations as they arise. The third thing that's been agreed out of the report, in terms of the government, is to continue to push for reform of the rules inside the International Energy Agency, which we've been doing for the last two to three years.

**Senator RICE:** But, given that, the current situation, which you hope will be streamlined, is that we've only got 18 days supply, and it could take all of those 18 days to get action occurring. So we're very vulnerable, given the large proportion of our fuel that is imported.

**Mr Wyndham:** I wouldn't say we're very vulnerable. We have been working through a scenario of what would happen if all ports in Australia were blocked. Essentially, that's the circumstance you would need for stocks to be limited to only 18 days. In any other circumstance, you would see ongoing supply to ports around Australia and you'd see domestic

production and refining continue. It's not a matter of saying there's only 18 days. That figure only applies if you instantaneously cut off all supplies to Australia, which is an incredibly unlikely circumstance, I think you'll agree.

**Senator RICE:** Nonetheless, what proportion of our fuel is currently imported?

**Mr Wyndham:** Around about 90 per cent.

**Senator RICE:** Yes, so it's very significant. With regard to domestic production, how important a strategy do you see new domestic supply being? Is that feasible?

**Mr Wyndham:** There are a couple of points to make first. I said that 90 per cent of the fuel that we use in Australia is derived from overseas. Actually, if we were to start using all domestically produced oil and condensate, we could provide for more than that 10 per cent. We currently export a large amount of oil and condensate. In part that's because the supply of that is off the North West Shelf of Western Australia, so it's cheaper and easier to send it to refineries in the Asian region. So, in a really extreme circumstance like that, there is potentially the opportunity to repurpose that and use it in Australia.

**Senator RICE:** Would we have the refining capacity in Australia to do that in those circumstances?

**Mr Wyndham:** That's a discussion we are currently having, Senator. The refineries that we have in Australia aren't normally set up to use domestic condensate, for example, but in the case of that really extreme circumstance where all imports were cut off, actually that's something that you could look at doing.

**Senator RICE:** How long would it take to reconfigure them to be able to use that?

**Mr Wyndham:** That's a discussion we're currently having with oil companies.

**Senator RICE:** I can't imagine it would be something they would be able to turn around on a dime and do within a couple of weeks.

**Mr Wyndham:** There are various things you can do. Part of the set-up for how oil refineries operate is to produce fuel to a certain quality, a certain standard with a certain set of emissions from that refinery. If you were to relax the fuel quality standards, for example, then that does allow them to produce more fuel from an oil or a condensate that they don't ordinarily use.

**Senator RICE:** That doesn't sound desirable either, to be reducing the standards.

**Mr Sullivan:** In a short-term crisis.

**Mr Wyndham:** No—in a short-term crisis, that's right. And we are talking about the circumstances of what—

**Senator RICE:** Okay. Looking beyond the short-term crisis, in terms of the scenario of expanding domestic oil supply, is that important or would it actually be, at most, a minor part of the scenario of improving our fuel security?

**Mr Wyndham:** If you look at Australia's role in aggregate global terms, we currently use around 1.2 per cent of global oil supply. We currently produce 0.3 per cent and we have got 0.2 per cent of known reserves. So even if you increased the domestic resource quite significantly, you can expect to still be dependent on imports.

**Senator RICE:** So you'd agree then that increasing new supplies would only be a minor part then? It's not going to be a solution to solving fuel security issues?

**Mr Wyndham:** Look, fuel security in general is a complex issue and you need to consider all avenues for supply and demand, and domestic production may be part of, you know, a path to improving fuel security.

**Senator RICE:** Having read bits of it, in your report you're saying that there may be more accessible and lower cost reserves elsewhere in the world, and the issue you point to is that 75 per cent of our domestically produced oil is being exported and that the prospects for oil in the Great Australian Bight and volumes are uncertain and modest in the scale of overall fuel use and won't be available in 2030. Would that oil in the bight or shale oil in the Northern Territory and WA be able to feed into Australia's refineries?

**Mr Wyndham:** I don't know that the oil in the bight is something that has been fully explored, and I couldn't speak to what role that might play in the future.

**Senator RICE:** And so we don't know whether it would be exported rather than being used domestically. Do you see the bight oil playing any serious role in fuel security?

**Mr Wyndham:** Again, it is not a proven resource.

**Mr Sullivan:** I think Mr Wyndham's first comment is right: it's a really complex issue and so the answer is not just EVs or biofuels or increased oil production or the ability for refineries to take on North West Shelf condensate or the capacity, at a regional level, for diesel security in Victoria compared to diesel security in South Australia. It is a global and a national and a regional issue; it has many moving parts to it.

**Senator RICE:** I want to return, in conclusion, back to the discussion we had about electric vehicles at the beginning. Given what you have just been saying about the prospects of increasing domestic production, it seems that increasing electric vehicles is a much more certain way of improving our fuel security, given that we've got 30-plus per cent of fuel that's currently going into light vehicles. Do you agree with that?

**Mr Sullivan:** I'm sure that will be the basis of the hopefully many comments that come in during the public consultation phase. I think there will be similar sorts of comments about increasing our reliance on biofuels, both for diesel and for jet fuel. There will be comments that diesel is much more of an issue in terms of our security than jet fuel and petrol. So I'm not going to necessarily just pick up one point and agree with you, Senator.

**Senator RICE:** Why am I not surprised! But, basically, if we had a target of 100 per cent of all new vehicles being electric vehicles by 2030, like Norway, Sweden, Denmark, Ireland and the Netherlands have, or by 2040, like China and the UK have, that would be a very significant factor in dealing with the issue of the current fuel security that you're considering.

**Mr Wyndham:** One of the things we haven't talked about is the economics of these sorts of options, and it's difficult to forecast what will be the most economically effective way of improving fuel security.

**CHAIR:** And it's one of those things that could be debated till the cows come home. We might just go to Senator Storer.

**Senator STORER:** I have questions regarding the Liquid Fuel Security Review as well. I'll try and move quickly through those, given the conversation we've had to date. I note that the report found that we're far behind many other OECD countries. Is that correct?

**Mr Wyndham:** Sorry, can you repeat that question. Is this on the electric vehicle update?

**Senator STORER:** It's on the Liquid Fuel Security Review. The report found we are behind many other OECD countries in terms of our days of supply. Would you say that's correct—that's what the internal report has shown?

**Mr Wyndham:** In terms of our—I didn't catch those last few words.

**Mr Sullivan:** Our consumption cover.

**Senator STORER:** In terms of our consumption and days of supply, we're behind other OECD countries?

**Mr Wyndham:** In general terms, one of the things the report does is makes comparisons with other countries. Stocks are one dimension of that, but the reliability of fuel supply chains is another—and it's not a matter of just comparing stocks, I don't think.

**Senator STORER:** The report found that South Korea, which is in a similar position to Australia, is taking action by incentivising the uptake of EVs. Will increasing Australia's EV uptake reduce our reliance on oil imports?

**Mr Wyndham:** I think we've covered that already.

**Senator STORER:** The answer would be yes; is that right?

**Mr Wyndham:** Transport is currently 98 per cent dependent on liquid fuels, and so any alternative could potentially to reduce that number.

**Senator STORER:** Okay. Will that increase our fuel security, reducing our reliance on oil imports?

**Mr Sullivan:** It comes back to the question about whether the current level is a problem. The issue with increasing fuel security, compared against the base case at the moment, where for two decades we've had pretty constant levels of consumption cover—unlike other OECD countries, which was your first point—is that Australia doesn't have government legislated reserves in terms of either demanding industry have those or the government owning those.

**Senator STORER:** What is the department's estimate of the cost of establishing a strategic fuel reserve?

**Mr Sullivan:** That varies, depending on what the model is. There are a number of different options, whether that's government owned strategic reserves, whether that's industry stipulated reserves, how much and over what period of time. The department of energy—the previous department and this department—have looked at those relative costs, because one of the options around our IEA return to compliance would be to have strategic reserves. So, basically, the answer to that question is that there a whole range of options.

**Senator STORER:** Okay. Has Australia come close to running out of fuel over the past two years?

**Mr Wyndham:** No.

**Mr Sullivan:** No.

**Senator STORER:** Okay. Why was this review delayed?

**Mr Wyndham:** Like many issues that we dig into, there's sometimes more to find than we expect when we start out on a job like this one. So we have undertaken a range of work and we've sought to move to a consultation step, which has inevitably meant it is later than expected.

**Senator STORER:** When do you expect the final report to be completed?

**Mr Wyndham:** At this point, some time in the second half of 2019 is what we're aiming for.

**Senator STORER:** Australia is lobbying the IEA to change how it calculates the number of days of supply Australia has to 85 days up from 53. How has that figure of 85 been calculated?

**Mr Heferen:** Before we go to the figure of 85, which my colleagues will be able to talk through, you said 'lobbying the IEA'. Australia is a member of the IEA. The IEA has a governing board of which I have the good fortune to be Australia's delegate on and Mr Sullivan is my alternate. So we are not actually lobbying the IEA; we're part of the IEA and we're involved in the ongoing discussion of reform with the IEA to make the fuel security mechanism make sense, because at the moment it's very Euro-centric. It is essentially designed for European countries and has a set of very technical rules that favour countries that are in close proximity to one another and actually don't suit countries where they are a long way away. Obviously Australia is one of those countries in that context. So the word 'lobbying' just pricked my ears because we're actually part of a constructive process to change the rules, as a number of members of the IEA are very keen to do, to modernise them and to bring it into the 20th century and then the 21st century and out of the 19th.

**Mr Sullivan:** Under that modernisation process, we've argued for this along with other countries. This is not just Australia. It is not just because we're noncompliant. In terms of our current measure of IEA days, which is on net imports, we have 55 days. If you count stocks held in tankers in other countries and with association countries to the IEA and stocks on water coming to Australia, we get to 85 days. At the moment if we're buying a tanker of oil from Japan or the US, for example, we can count that when it's at port inside the US and Japan. As soon as it moves into international waters, we can't count it. Even when it moves into Australia's Exclusive Economic Zone, we can't count it. When it comes within three nautical miles of a port, I think we can begin to count it. So these are rules that were designed mainly for European countries. At the moment we have 30 days of stock on water coming to Australia. If you count those stocks on water where it is very clear that those stocks are coming to Australia that's where you get to the 85 days. It is not the only rule change we're looking at with other countries on modernising, but that's where the 85 days comes from.

**Senator STORER:** When was the last time the government held talks with the IEA on this?

**Mr Sullivan:** It is not the government holding talks, as Mr Heferen was saying. The last meeting of the governing board was in February this year. There was one in December and one in February and the next one is in June.

**Mr Gaddes:** Just to add to that, I was in Paris for the standing group on emergency questions which also discussed these issues in March.

**Senator STORER:** Do other IEA members accept Australia's arguments on this?

**Mr Sullivan:** Some countries do; some countries don't. Mr Heferen referred to a relatively Euro-centric view and so Europe as a bloc would prefer not to see some rule changes, but that's part of the negotiation around modernising the IEA, both in terms of the rules and in terms of membership. Australia's position is that significant countries like India should be formal members of the IEA.

**Senator STORER:** Mr Heferen may be the relevant person with regard to questions on Snowy 2.0. But, firstly, Minister, why wasn't a competitive tender process undertaken before the \$1.5 billion investment in Snowy 2.0 was announced?

**Senator Ruston:** I'll take that on notice.

**Senator STORER:** There are a number of pumped hydro projects in South Australia that would have, I'm sure, appreciated an equity investment like this, which I believe would be cheaper and quicker to build. Why weren't they given an opportunity to compete for this investment?

**Senator Ruston:** I'll take that on notice.

**Senator STORER:** Regarding the Underwriting New Generation Investments program, was there an objective metric used to determine which projects made the shortlist?

**Mr Heferen:** We can help with that.

**Mr O'Toole:** I think Ms Parry covered the answer at our hearing on Thursday. There was a government announcement and they released a press release at the time where they stepped out a few of the factors that they took into account. The projects, they made clear, were consistent with the broad objectives which have been set out in both the consultation paper and the registration of interest paper. The government's objective as part of this process was threefold. One is to expand the supply of firm electricity and, through that, increase competition within the wholesale market and bring down electricity prices. The second, given some of the discussion we've had today in relation to increased renewables penetration, is ensuring that there's sufficient firm generation within the market to ensure the lights stay on when the wind isn't blowing and the sun isn't shining et cetera. The third one is another specific issue which was flagged in the ACCC review which went to both commercial and industrial customers in particular but also the smaller retailers who perhaps don't have established generation themselves, like the larger gentailers, ensuring that they have access to competitively priced contracts. They were the three objectives, which the government flagged in their press release at the time, that they were taking into account. Another aspect that they flagged, obviously, was the emissions intensity of the projects in question. They did flag also that, as part of that decision-making process, they excluded a number of projects—some of those came in the ROI, the 66 submissions the minister referred to; some were illegal under Australian law and were excluded for that reason. The other goes back to that competitiveness objective. The larger players were also excluded from the first round. I just add that the government have made clear in this program that it is going to run over multiple phases, so I don't think it's quite right to say that some have been excluded, but the government has focused on those 12 for their shortlist at this stage.

**Senator STORER:** So it's not a dollars-per-megawatt or generation figure that is the objective metric?

**Mr O'Toole:** No. The Prime Minister was very clear on this. They haven't made any decisions in relation to spending. This is a shortlist of projects that they've highlighted that they're interested in, but they do make very clear that, from here on, we'll be working with them closely and that the business case has to stack up for any support.

**Senator STORER:** The department has input in the shortlisting process—is that correct?

**Mr O'Toole:** We provided advice to government on all 66 submissions.

**Senator STORER:** And the decision was made by the government on the shortlist?

**Mr O'Toole:** Yes, Senator.

**Senator STORER:** Quickly, I might ask a question about energy efficiency. It's with regard to measures for carbon abatement. It follows a question that I put in estimates in February. It was about the percentage of carbon abatement being achieved by energy efficiency measures. The answer was that not all energy efficiency measures are able to be quantified. So I want to understand: other than the Climate Solutions package, what energy efficiency measures can be quantified in Australia's emissions projections?

**Ms Croker:** It's actually an issue under outcome 2—for those numbers.

**Senator STORER:** I was advised that I could ask it in this, due to the energy efficiency. I'll have to take it up with them.

**Senator Ruston:** You can always put it on notice, Senator.

**Ms Croker:** Yes, we'll take it on notice.

**Senator STORER:** I'll put it on notice, and read out the question: other than the Climate Solutions Package, what energy efficiency measures can be quantified in Australia's emissions projections? Secondly, what is the estimated percentage of Australia's current and projected carbon abatement being achieved by energy efficiency measures?

**Ms Croker:** We'll take that on notice.

**Senator STORER:** Minister, I'll finish with this question. It's perhaps related to your role as international development minister, and it is to do with transparency. I've been asking some other ministers this, and Minister Cormann agreed to it. It's regarding lobbyists, both in-house and third party. I was wondering if, as a transparency measure—replicating the NSW and Queensland state governments, which publish ministers diaries on a regular basis—you would be able to provide a list of the in-house and third-party lobbyists that you have met with since 1 January this year?

**Senator Ruston:** I'm more than happy to take that on notice.

**Senator STORER:** Thank you.

**Senator CHISHOLM:** I have some documents I want to table which might help provide some clarity on the questions around the ARENA Hydro Tasmania feasibility study. The table below makes clear that the Marinus Link only provides a positive net benefit in scenarios which include a high emissions-reduction target, as you can see from that table. I just wanted to seek a comment on that.

**Mr Heferen:** I'm happy to provide a comment, but I'd need a—

**Senator Ruston:** Without wanting to be antagonistic here, I'm somewhat confused. We are talking about what is, effectively, a project that is a great big battery. It's about renewable

dispatchables. Are you prosecuting an argument to suggest that we shouldn't be investing in renewable dispatchables?

**Senator CHISHOLM:** No, I'm prosecuting an argument that your policy doesn't stack up. That is the argument, because it only actually works if you have a high emissions-reduction target, which is what the study shows. Did you want to answer that one?

**Senator Ruston:** It's interesting that you've backed in the project—the Labor Party has backed in the project.

**Senator CHISHOLM:** Because it would stack up under us, because we've got a high emissions-reduction target.

**Senator Ruston:** I will allow the officials to answer it; I'm just very confused at your argument.

**Senator CHISHOLM:** I'm happy for you to answer it, seeing as you've got a lot to say about it.

**Senator Ruston:** I don't have the detail; I'm just—

**Senator CHISHOLM:** You're happy to comment about it.

**Senator Ruston:** asking you a simple question.

**CHAIR:** Who are you asking your question of, Senator Chisolm?

**Senator CHISHOLM:** The table.

**CHAIR:** An answer will be forthcoming.

**Mr Heferen:** It's a little bit hard with table 10 and not really knowing what table 10 is in response to. I think it would be safest for all if we took this on notice to provide an accurate answer to your question.

**Senator CHISHOLM:** Do you concede that that table says that there's only an economic benefit under a high emissions-reduction target?

**Mr Heferen:** Sorry, on what basis would I read that into that table?

**Senator CHISHOLM:** That the economic worth under a high emissions-reduction target is \$490 million, whereas under a neutral scenario it's negative \$270 million.

**Mr Heferen:** And a 300 megawatt load loss would be \$477 million. I think my point is—I shouldn't have said that because I said I'd take this on notice to make sure an accurate answer is given. On the base, there could be any number of orders of these or issues that table 9 or table 8 or somewhere in the text deals with to provide some qualification around how they've arrived at those numbers, so I think any discussion on that would be, at best, interesting but, at worst, misleading. I'll take it on notice and provide the committee with an accurate answer.

**Senator CHISHOLM:** Did you take into account the ARENA Hydro Tas feasibility study when you were providing advice to the government around the climate solutions policy?

**Mr Heferen:** Sorry, climate solutions is an issue for outcome 2. We're in outcome 4. I think we've finished with outcome 2.

**Senator CHISHOLM:** Surely you can answer it though.



**Mr Heferen:** The Climate Solutions Package comes under outcome 2. The people in the department who are expert on that and who would know what was provided as far as advice goes were in that outcome, not this one.

**Senator CHISHOLM:** Table 10 is the overview of sensitivity results. It:

... summarises the sensitivity studies undertaken, and the difference in economic worth from the neutral scenario. Unless noted otherwise, 600 MW of Marinus Link capacity is commissioned in 2025, with the second 600 MW ... commissioned in 2028.

That's what the table is providing.

**Mr Heferen:** We've taken it on notice so we can provide the committee with an accurate answer. I don't have anything to add to that.

**Senator CHISHOLM:** Did you provide any advice to the government around its climate solutions policy?

**Mr Heferen:** I personally didn't, no.

**Senator CHISHOLM:** Nothing around the emission reduction elements to it?

**Mr Heferen:** That issue would come under outcome 2, not under outcome 4, by and large. Some energy efficiency issues are dealt with in Mr Sullivan's area, and they've being canvassed. The process of the energy efficiency work is done in Mr Sullivan's area. The issue of the CO2 abatement is a climate change issue and belongs in outcome 2.

**Senator CHISHOLM:** Thanks, Chair.

**CHAIR:** That concludes our examination of Environment and Energy for, presumably, this term of parliament. Questions on notice are to be lodged by close of business Thursday, 18 April. Thank you all very much.

**Committee adjourned at 17:57**