COMMONWEALTH OF AUSTRALIA

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SENATE

ENVIRONMENT AND COMMUNICATIONS
LEGISLATION COMMITTEE

Estimates

MONDAY, 21 OCTOBER 2019

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SENATE
ENVIRONMENT AND COMMUNICATIONS LEGISLATION COMMITTEE

Monday, 21 October 2019

Members in attendance: Senators Abetz, Davey, Fawcett, Gallagher, Green, Hanson, Hanson-Young, Lines, McKim, McMahon, Patrick, Roberts, Sheldon, Siewert, Dean Smith, Urquhart, Van, Waters, Whish-Wilson.
ENVIRONMENT AND ENERGY PORTFOLIO

In Attendance

Senator Hume, Assistant Minister for Superannuation, Financial Services and Financial Technology

Department of the Environment and Energy

Executive

Mr Rob Heferen, Acting Secretary
Mr Matt Cahill, Deputy Secretary, Strategy and Operations Group
Mr Sean Sullivan, Acting Deputy Secretary, Energy Group
Ms Jo Evans, Deputy Secretary, Climate Change and Energy Innovation Group
Mr Dean Knudsen, Deputy Secretary, Environment Protection Group

Corporate Strategies

Ms Paula Goodwin, Chief Operating Officer
Ms Giorgina Strangio, Assistant Secretary, People Branch
Mr Robert Hanlon, Chief Finance Officer, Financial Services Branch
Mr Jonathan Nicholl, Assistant Secretary, Business and Ministerial Services Branch

Legal and Compliance Division

Ms Margaret Tregurtha, Acting First Assistant Secretary
Mrs Monica Collins, Chief Compliance Officer, Office of Compliance
Mrs Kate Lalor, Acting General Counsel, General Counsel Branch

Policy Analysis and Implementation Division

Mr James Chisholm, First Assistant Secretary
Ms Allison Ball, Acting Assistant Secretary, Economics and Analysis Branch
Mr Travis Bover, Director, Strategy and Governance Branch
Mr Adam Carlon, Assistant Secretary, Communications and Engagement Branch

Outcome 1

Biodiversity Conservation Division

Ms Emma Campbell, Acting First Assistant Secretary
Ms Tia Stevens, Assistant Secretary, Biodiversity Policy and Water Science Branch
Mr Geoff Richardson, Assistant Secretary, Protected Species and Communities Branch
Dr Sally Box, Assistant Secretary, Threatened Species Commissioner and Biosecurity Branch
Mr Steve Costello, Assistant Secretary, Program Delivery Branch

Environment Approvals Division

Ms Michelle Croker, First Assistant Secretary
Mr Andrew McNee, Assistant Secretary, Assessments and Governance Branch
Mr Greg Manning, Assistant Secretary, Assessments and Post Approvals Branch
Ms Louise Vickery, Assistant Secretary, Environment Approvals and Wildlife Trade Branch
Mr Nathan Sibley, Director, Wildlife Trade Assessments
Ms Sarah Gowlan, Director, Wildlife Trade Regulation
Mr Dane Roberts, Director, Northern New South Wales Assessments
Mr Mike Smith, Director, Southern New South Wales Assessments

Environment Protection Division
Ms Kristin Tilley, First Assistant Secretary
Mr James Tregurtha, First Assistant Secretary
Dr Ilse Kiessling, Assistant Secretary, Waste Strategies Taskforce Branch
Ms Jackie Raynor, Assistant Secretary, Waste Management Branch
Mr Anthony McGregor, Assistant Secretary, Chemicals Management Branch

Environment Protection Reform Taskforce
Mr James Tregurtha, First Assistant Secretary
Mr Bruce Edwards, Assistant Secretary

Knowledge and Technology Division
Ms Beth Brunoro, First Assistant Secretary
Mr Greg Terrill, Assistant Secretary, Environmental Resources Information Network
Dr Nicholas Post, Assistant Secretary, Environmental Accounts and Science Branch
Mr Blake Murphy, Acting Assistant Secretary, Information Technology Branch

Heritage, Reef and Marine Division
Mr Stephen Oxley, First Assistant Secretary
Mr David Williams, Assistant Secretary, Heritage Branch
Ms Mahani Taylor, Acting Assistant Secretary, Marine and International Heritage Branch
Ms Deb Callister, Assistant Secretary, Reef Branch
Mr Keith Tayler, Assistant Secretary, Supervising Scientist Branch

Outcome 2

Climate Change Division
Ms Helen Bennett, 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

International Climate Change and Energy Innovation Division
Ms Kushla Munro, First Assistant Secretary
Ms Kim Farrant, Assistant Secretary, International Branch
Mr Rob Sturgiss, Assistant Secretary, National Inventory Systems and International Reporting Branch

ENVIRONMENT AND COMMUNICATIONS LEGISLATION LEGISLATION COMMITTEE
Mr Paul Murphy, Assistant Secretary, Energy Innovation and Ozone Protection Branch

**Outcome 3**

**Australian Antarctic Division**
- Mr Kim Ellis, Director
- Mr Rob Bryson, General Manager, Antarctic Modernisation Branch
- Dr Tas van Ommen, Acting Chief Scientist
- Mr Charlton Clark, General Manager, Strategies Branch
- Dr Rob Wooding, General Manager, Support and Operations Branch

**Outcome 4**

**Energy Division**
- Mr James White, Acting First Assistant Secretary
- Mr James O'Toole, Assistant Secretary, Electricity Branch
- Ms Kim Collins, Acting Assistant Secretary, Energy Transition Branch
- Ms Lesley Dowling, Assistant Secretary, Gas and Governance Branch

**Energy Security and Efficiency Division**
- Mr Alistair Sherwin, Acting First Assistant Secretary
- Ms Fiona Beynon, Assistant Secretary, Industrial Energy Efficiency Branch
- Mr Tim Wyndham, Assistant Secretary, Energy Security Branch
- Ms Lila Oldmeadow, Acting Assistant Secretary, Residential Energy Efficiency Branch
- Ms Alison Dell, Acting Assistant Secretary, Energy International and Infrastructure 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, and Chief Operating Officer

**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 Geoff Purvis-Smith, General Counsel
- Ms Karen Najjar, Chief Operations Officer, Corporate Branch
Climate Change Authority
  Dr Wendy Craik, Chair, Climate Change Authority
  Mr Brad Archer, Chief Executive Officer, Climate Change Authority
  Ms Eliza Murray, Acting General Manager, Climate Change Authority

Director of National Parks
  Dr Jason Mundy, Acting Director of National Parks
  Dr Brant Smith, Assistant Secretary, Kakadu and Strategic Policy Branch
  Mrs Carlyn Waters, Assistant Secretary, Booderee and Business Services
  Mr Karl Dyason, Assistant Secretary, Uluru and Islands Parks Branch
  Dr Judy West, Assistant Secretary, Australian National Botanic Gardens, Partnerships and Science

Great Barrier Reef Marine Park Authority
  Mr Joshua Thomas, General Manager and 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 David Wachenfeld, Chief Scientist
  Mr Bruce Elliot, General Manager, Reef Engagement

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

Threatened Species Scientific Committee
  Emeritus Professor Helene Marsh, Chairperson

Committee met at 09:00

CHAIR (Senator Fawcett): I declare open this meeting of the Senate Environment and Communications Legislation Committee. These are supplementary budget estimate proceedings, and the agencies heard during these estimates are those which have been nominated by various senators. The committee has fixed Friday 29 November 2019 as the date for the return of answers to questions taken on notice. The committee's proceedings today will begin with general questions to the Department of the Environment and Energy and will then follow the order as set out in the program.

Under standing order 26, the committee must take all evidence in public session; this includes questions 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 also resolved that an officer of a department of the Commonwealth shall not be asked to give opinions on matters of policy and shall be given reasonable opportunities 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 and does not preclude...
questions asking for explanations of policies or factual questions about when and how policies were adopted.

I particularly draw the attention of witnesses to an order of the Senate of 13 May 2009 specifying the process by which a claim of public interest immunity should be raised. Witnesses are specifically reminded that 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. Instead, witnesses are 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. I incorporate the public immunity statement.

*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, pp 124-125)

Department of the Environment and Energy

[09:02]

CHAIR: I welcome Senator the Hon. Jane Hume, Assistant Minister for Superannuation, Financial Services and Financial Technology, representing the Minister for the Environment and the Minister for Energy and Emissions Reduction, and portfolio officers. Minister, would you like to make an opening statement?

Senator Hume: No, thank you.

CHAIR: The committee would like to welcome Mr Rob Heferen, who is currently acting secretary of the department. Before we begin, I'd like to take a moment to express the committee's appreciation for the many years of public service of Mr Finn Pratt, former secretary of the department, and we wish him all the best in his retirement. Mr Heferen, would you like to make an opening statement?

Mr Heferen: If I could, I would just thank you very much for the recognition for Mr Pratt. After, I think, 36 years in the Public Service, 20 as an SES officer and 10 as a secretary, Finn was someone who was loved by all who worked with him. He was admired and respected, and it's very sad to see him go. He leaves a great legacy, both in terms of policy achievements and his connection with everyone he came across as an individual, so we wish him all the best.

CHAIR: Thank you. Before we proceed to questions, we do just need to authorise the presence of the media. Does anyone have any objections to the presence of the media? There being no objections, it is so authorised. We go to questions.

Senator URQUHART: Apologies for my squeaky voice; I hope that you can make out what I'm saying. I just want to go to some questions around the meeting that Mr Taylor requested with Mr Frydenberg when he was the Minister for the Environment and Energy. Can you tell me when the request was made for that meeting in relation to the grasslands?

Mr Heferen: Thank you for the question. I might turn to Mr Knudson, who will have that information.
Mr Knudson: I'm just trying to get the correct document in front of me. If you're talking about Minister Taylor and Minister Frydenberg, obviously that's a matter between the two ministers. We weren't involved in those meetings.

Senator URQUHART: So you weren't requested to organise the meeting?

Mr Knudson: Not myself, no. It would have been organised between the two ministers' offices.

Senator URQUHART: What about the department?

Mr Knudson: The department was involved in a meeting with Minister Taylor to talk about the grasslands listing process.

Senator URQUHART: When was that?

Mr Knudson: Let me pull up the exact date. I know that we canvassed this in great detail in the inquiry into this and we went through all the dates at the specific meetings on this. I don't have that directly at hand, but we're happy to deal with that when we have the officers—Mr Richardson, for example, who was involved in that meeting—later on.

Senator URQUHART: So, as far as you are aware, the department was not involved in the meeting. Mr Taylor requested the meeting with Mr Frydenberg, but that was not through the department; is that correct?

Mr Knudson: That's correct. If it was a meeting of one minister requesting a meeting with another minister, that would have been between the ministers.

Senator GALLAGHER: So that conversation between the two ministers occurs and it doesn't include the department, but then you get a request from Minister Frydenberg's office—is that right—to meet with Minister Taylor?

Mr Knudson: There was a request via Minister Frydenberg's office to meet and discuss the listing process behind the grasslands, and that did occur with departmental officials in the room.

Senator GALLAGHER: Can you just remind me of what date that was?

Mr Knudson: As I was just mentioning, I don't seem to be able to find that information directly. Just give me two seconds, and I'll see if I can find it in a different area. There it is; my colleague has very aptly helped me find that date. The meeting, at the request of Minister Frydenberg's office, occurred on 20 March 2017, to discuss the listing.

Senator GALLAGHER: We're going back to—

CHAIR: I'm sorry, Senator Gallagher, but are you going to take the call?

Senator URQUHART: It's all right.

Senator GALLAGHER: I'm sorry; we're sharing.

CHAIR: Even between colleagues, just to keep order across the committee, perhaps you could seek the call. I'm very happy to give it to you. You can share the time, but I'm just—

Senator GALLAGHER: Do you have a time allocated that you—

CHAIR: I've given you 15 minutes at the moment. If you need more, I'm happy to give you—
Senator GALLAGHER: And then you come back, do you?
CHAIR: If you need more, yes.
Senator GALLAGHER: Right. Can I have the time, Chair?
CHAIR: You have the call.
Senator GALLAGHER: Thank you. This is just to go back to a couple of the issues we went to at a previous committee inquiry. At that meeting on the 20th of the third, with the department, did Minister Taylor directly disclose his interests to your department regarding the investigation that it was conducting into Jam Land?
Mr Knudson: I'd want Mr Richardson at the table—
Senator GALLAGHER: Okay.
Mr Knudson: and he'll be here later on in the morning—to be able to canvas that.
Senator GALLAGHER: Is he not available now?
Mr Knudson: No, I don't believe he is. But, that being said, what we have said before in the inquiry process is that Minister Taylor has disclosed his interest through a statement in the parliament and I'd refer the senators to that statement.
Senator GALLAGHER: My question was whether that occurred in that meeting and my recollection is that that wasn't—
Mr Knudson: That's my recollection as well and we'll just confirm that with Mr Richardson.
Senator GALLAGHER: Okay, so that wasn't declared in the meeting. Could you just tell me when Mr Richardson will be available; do you know? Does he come for a certain section of the program? He's not here for the general bit; is that right?
Mr Knudson: That's correct. He'll be here for outcome 1, which is—
Senator GALLAGHER: This afternoon.
Mr Knudson: after lunch.
Senator GALLAGHER: Okay. We just have a series of questions on this in an overall sense. Is there any chance that he could get here this morning?
Mr Knudson: We can take a look and see whether we can get Mr Richardson up sooner rather than later.
Senator GALLAGHER: I'm happy if other officials can answer the questions but, if people can't answer the questions on this or if he's the best person, it might be useful to see whether he may be available earlier.
Mr Knudson: If it's questions about the specific meeting and what was discussed and what wasn't discussed, such as compliance matters et cetera, then it would be most appropriate to have Mr Richardson here.
Senator GALLAGHER: Okay. It's just going to be hard for us to interpret which ones you're going to refer to Mr Richardson and which ones you're not.
Mr Knudson: I understand. Why don't we undertake to try to get Mr Richardson here sooner rather than later and then go from there?
Senator GALLAGHER: Okay. We'll come back to the meeting and we'll go to just general ones around compliance and operation of the law. Is it fine to deal with those here?

Mr Knudson: Again, we don't have our head of the compliance function here but, that being said, we're happy to answer questions about our overall approach, as a department, to compliance matters.

Senator GALLAGHER: Okay. Are they coming for outcome 1 as well?

Mr Knudson: That is correct.

Senator GALLAGHER: Let's give it a crack. We'll probably run out of time and then we can rework it. Can you tell the committee what the maximum penalty is for a company and an individual found to be in breach of laws relating to the listing of the Monaro natural temperate grasslands as critically endangered?

Mr Knudson: I don't have those numbers off the top of my head. I do believe that they're in the order of $9 million, but we can confirm that with the head of our compliance area.

Senator GALLAGHER: So it is $9 million for a company; I think you're right. Is there a figure for an individual?

Mr Knudson: I don't recall that off the top of my head, I'm sorry, but, again, we can easily confirm that for you.

Senator GALLAGHER: I'm struggling now because we really need the right people in the room. Maybe I could go to the structure of the department.

Mr Knudson: Sure.

Senator GALLAGHER: Can you deal with that one?

Mr Knudson: Yes.

Senator GALLAGHER: As it's structured, the Department of the Environment and Energy is one department; is that right?

Mr Heferen: Yes, that's correct.

Senator GALLAGHER: And it has one departmental secretary?

Mr Heferen: Yes.

Senator GALLAGHER: Under your portfolio, in terms of reporting to the ministers, does the secretary report to both ministers?

Mr Heferen: That's correct. We have three ministers; we have our two cabinet ministers and Assistant Minister Evans.

Senator GALLAGHER: Yes, and they all report to—

Mr Heferen: Formally, the reporting is all through the secretary to the three ministers, as you'd expect when particular issues are dealt with on a more detailed level. Relevant deputies, first assistant secretaries or assistant secretaries would deal with a minister and his or her office directly on a number of issues, but the formal accountability is through the secretary.

Senator GALLAGHER: Is there any hierarchy between the ministers? Do all three ministers within that portfolio have the power to direct the secretary?

Mr Heferen: In relation to directing the secretary, I guess it's important to think about it in respect of what—
Senator GALLAGHER: Okay.

Mr Heferen: As you'd be aware, there are a number of provisions in both the PGPA Act and relevant environment legislation that provide direct responsibilities for the secretary and the secretary can't be directed. There are others which ministers may delegate and, once a minister delegates a function, depending on the relevant rules of administrative law, the delegate is not to act under direction. Sometimes there are other subtleties that can provide some sort of other influence. Of course, when secretaries exercise powers under provisions of the parliament, secretaries would often consult with ministers, particularly when the outcome of that decision may affect them.

Senator GALLAGHER: With all of that context, with the three ministers now, you're saying that they have certain powers when acting within their portfolio responsibilities within the department's structure but that no hierarchy exists between them— although, presumably, the assistant minister would have to go through the cabinet minister, would they?

Mr Heferen: I guess there are two things here. One is that, if you're asking about the hierarchy with the ministers themselves, we have two cabinet ministers and one minister not in cabinet. We have the portfolio minister, who is Mr Taylor.

Mr Cahill: There are three. There are two cabinet ministers and obviously the one who's not a cabinet minister has a portfolio that is more restrained in terms of waste reduction and environmental management. We serve ministers regarding their portfolios as set out and given their responsibilities by the Prime Minister, in terms of one minister being responsible for energy and other matters and another one for the environment. As a result, we serve those ministers on their portfolio subject matters.

Mr Heferen: With the issue of the hierarchy— we're probably verging on the hypothetical a bit— are you interested in a particular power, say, the delegation?

Senator GALLAGHER: No, I'm questioning how it actually operates— having three ministers operating within the one portfolio. Is there a memorandum of understanding about how that works? Is it written down? Certainly, from your point of view, presumably the department would want some structure with respect to ministers wandering around the portfolio area. You could easily move from energy to environment, and where is the line? That's the question.

Mr Heferen: Minister Taylor is the Minister for Energy and Emissions Reduction; so, within the energy group, that reporting goes through the secretary to Minister Taylor. In our climate change group, the reporting is largely to Minister Taylor; some issues will be dealt with by Minister Ley. In our environment protection group, it is largely to Minister Ley, with some specific issues for Assistant Minister Evans. With the strategy and operations group, to the extent that there is reporting there, at least in respect of the policy analysis and implementation division and our corporate function, that goes across the department.

Senator GALLAGHER: Yes, that's a whole-of-department function.

Mr Heferen: AAD and Parks Australia report largely to the environment minister, Minister Ley.

Senator GALLAGHER: Is it written down anywhere for the department to understand the delineation? Do you have a document just to make it clear about who does what when, who reports to whom and how the Public Service should interact with those officers?
Mr Heferen: The key one would be the Administrative Arrangements Order.

Senator GALLAGHER: Do you just rely on that?

Mr Heferen: The Administrative Arrangements Order will make it clear which minister is responsible for which legislation and in which areas; then the department is essentially set up, giving effect to that.

Senator GALLAGHER: You rely on the AAOs, but do you personalise those for the purpose of the operations of the department?

Mr Heferen: I'm sure we do.

Mr Cahill: I would say that 98 per cent of the time it is quite apparently clear that, with a minister asking questions about energy matters, and it is the energy minister, we serve them. If there is any point of ambiguity, the deputy secretaries or secretary make that quite clear.

Senator GALLAGHER: I think this came up at the last hearing—a situation where there's a fair bit of cc-ing of other ministers into what's going on, from the department's point of view. For example, if there's a committee inquiry or something of public note that affects Minister Taylor, the department would often, where relevant, cc in Minister Ley for the purposes of information.

Mr Heferen: Yes, that's correct.

Senator GALLAGHER: This is what I'm trying to get to—how the department operationalises the number of players or ministers within your department.

Mr Heferen: As much as possible, we try to keep all of our ministers informed of issues that they progress. Sometimes there are constraints around that but, in the main, that's what we endeavour to do.

Senator GALLAGHER: As for having a written document that’s provided for the information of the Public Service about how that operates, is there a document that exists; and, if so, can we have a copy of it?

Mr Heferen: Could we take that on notice, so that we’ve got the right document?

Senator GALLAGHER: Okay. I have a final question in this area: you mentioned that ministers may delegate functions to departmental secretaries for the purposes of fulfilling those responsibilities. Do you have a delegations register; and, if so, could we have a copy of that?

Mr Heferen: I’m sure that we do. We'll take that on notice and provide it to the committee.

Senator HANSON-YOUNG: I'd like to start by referring to the growing community concern about emissions rising, climate change getting worse, and watching comparable countries around the world declaring a climate emergency. Has anyone in the department given any thought to briefing the government about the state of the climate emergency that we face?

Ms Evans: We regularly brief the government on the facts of climate science and the nature of the impacts, both for Australia and globally. Your choice of language about how you describe that is yours; we would stick to a factual description.
Senator HANSON-YOUNG: What is the description? What kind of emergency are we in?

Ms Evans: Again, I'm not using the word 'emergency'; you are. If you look at the scientific basis for climate change, in Australia you're already seeing increases in average temperature of around one degree. We've already had eight of Australia's 10 warmest years since 2005. We have evidence here that the sea level around Australia is rising. The Bureau of Meteorology and the CSIRO regularly put out a summary of changes in the climate around Australia. The last one of those was put out at the end of 2018. It's called *State of the climate* and it talks about the frequency and intensity of various different types of extreme weather events. For example, very high monthly maximum temperatures that occurred around two per cent of the time in the past now occur around 12 per cent of the time, based on a time period comparison between 1950 and 1980, for when it was two per cent of the time, and between 2003 and 2017 for 12 per cent of the time. There are a lot of these facts; they are all on the public record. We have briefed the government on those in relation to Australia.

In regard to global impacts, you would be aware that there have recently been a number of special reports by the IPCC, one most recently in relation to the oceans and cryosphere. Before that, there was one on the impacts on land and, prior to that, there was a comparison or a look at what the impacts would be if we were to achieve a 1.5—degree increase in global average temperature compared to two degrees. All of those reports contain a large amount of information about the types of impacts that will happen with different temperature changes, which have impacts on the climate. We have certainly briefed the government on those.

Senator HANSON-YOUNG: Have you briefed the government on those with the clear indication that things are getting worse?

Ms Evans: We simply describe what is happening and what the scientific community says might happen in the future if emissions achieve different levels of outcomes. At that point, they are projections for the future.

Senator HANSON-YOUNG: Does the scientific evidence currently point to the state of the climate getting worse?

Ms Evans: It points to changes in the climate. Certainly, we have seen an increase in the average global temperature and various other changes in the climate that have resulted from the greenhouse effect. We know carbon dioxide in the atmosphere is increasing, and has increased to date. We know that a large part or the substantive part of that increase in the carbon dioxide in the atmosphere is primarily from human activity, and we know that is adding to the natural greenhouse effect. These are the things that we advise the government on.

Senator HANSON-YOUNG: You read these reports and you have to brief the government on them. Is the situation getting worse?

Ms Evans: The climate is definitely changing.

Senator HANSON-YOUNG: For the worse?

Ms Evans: That's a judgement call and it's an opinion. The climate is changing.

Senator HANSON-YOUNG: I'm not asking for an opinion; I'm asking for the scientific evidence.
Ms Evans: The scientific evidence says that the climate is definitely changing. It is changing in a direction that implies that temperatures are increasing. It implies that a range of climatic events that had certain probability levels in the past are likely to get higher in the future. Whether you choose to use terminology to describe that as 'worse' or 'better' depends on where you are on the globe. In some parts of the world, they will find some of those changes working to their advantage and some of them not so much. I don't want to put a label across the whole lot. What I can describe is what the scientific community is saying will happen.

Senator HANSON-YOUNG: Do you believe that we're in a climate crisis?

CHAIR: Order! Senator Hanson-Young—

Senator HANSON-YOUNG: I'll rephrase that. With all of the evidence that we have before us, does the science point to a climate crisis?

Ms Evans: That's not something that the department is going to put a view on. We simply advise on the facts of what is happening and what the view of the scientific community is.

Senator HANSON-YOUNG: What is the view of the scientific community?

Ms Evans: When I say that—

Senator HANSON-YOUNG: Is there a crisis or is there not?

Ms Evans: When I say 'the view of the scientific community', I mean in relation to the scientific facts and evidence.

Senator HANSON-YOUNG: Is the scientific evidence that has been presented—you've referenced the most recent report in relation to oceans as an example—having a damaging impact on biodiversity?

Ms Evans: Certainly, it's been the case in Australia that climate change and the impacts of climate change have been identified as one of the key threatening processes associated with the decline in species and so on, and threatened species in Australia.

Senator HANSON-YOUNG: Is the change in climate, as you've described it from evidence in these reports, a concern for the economy?

Ms Evans: The need to be prepared for a climate that is different from what we have had in the past is certainly very important for our economy. Exactly what the impacts will be depends very much on the nature of our response to the changes that are coming, so it's hard to quantify exactly what the impact could be. Certainly, both the response to the impacts of the change in the climate itself and the need for the economy to adapt to a world in which emissions are constrained compared to what they are today are both important impacts on the economy.

Senator HANSON-YOUNG: Extreme weather events are going to become or are becoming more frequent. Is that a fact?

Ms Evans: That's correct.

Senator HANSON-YOUNG: Does that have an impact on the economy?

Ms Evans: Again, the impact on the economy of those events depends on how well-prepared we are for them and how we respond to them when they occur. The fact that those things are going to become more frequent doesn't, in and of itself, mean that the costs will be
higher, but we do need to have responded in the knowledge that they will become more frequent and be prepared to manage that in a different way than we have in the past.

**Senator HANSON-YOUNG:** Would one of those responses be reducing carbon pollution?

**Ms Evans:** At a global level, certainly the Australian government, like many others, has signed up to the Paris Agreement, which is a global agreement to make sure that we control emissions in such a way that we minimise or keep the temperature increase to well below two degrees and preferably to 1.5. In that global sense, acting to reduce emissions is certainly part of the solution to keeping the costs of the impacts on the economy at their lowest. Australia is an active participant in that process. We have a target, which is quite ambitious, to reduce emissions by 26 to 28 per cent below 2005 levels by 2030, so we are playing our part in that global commitment to keep emissions lower.

**Senator HANSON-YOUNG:** Who defines those targets as 'ambitious'?

**Ms Evans:** The government has described it that way.

**Senator HANSON-YOUNG:** What's the scientific fact that makes them 'ambitious'?

**Ms Evans:** If you look at what other countries have done and compare Australia's target to it, we are certainly among the strongest targets in the OECD. Even if you look at the way that different international agencies report on Australia's challenge—and I might even refer to the recent report by the IMF, and the government has never indicated that it would ever consider putting in a carbon price—the fact is that that report, in comparing Australia and our task to other countries and their tasks, suggests that the cost of the action that we are proposing appears to be higher than for other countries. That's an independent assessment that says that our target is quite challenging. So we take that view that it's an ambitious target from a range of places: by comparing it to other countries; by thinking about the nature of the changes that would need to occur in Australia to achieve that, and they are quite substantial; and by looking at what other reputable agencies say about our target when it's announced.

**Senator HANSON-YOUNG:** But what about what the science requires? Is it ambitious in relation to what the science requires?

**Ms Evans:** The science doesn't specify a specific target for Australia. What the science says is that, if we are to have a good chance of holding temperatures to below two degrees, then at least developed countries need to be at net zero emissions by sometime in the second half of the century. Whether Australia's current target of 26 to 28 per cent below 2005 levels by 2030 is in line with that, I think we are potentially in line with that, especially since it's part of a global solution; it's a collective action problem.

**Senator HANSON-YOUNG:** Yet if we're using carryover targets, how does it make any of this ambitious?

**Ms Evans:** The fact that Australia has overachieved on targets that it has set in the past, and that's always been a part of the international framework—

**Senator HANSON-YOUNG:** Yes, but we did start this conversation with you saying that there have been a number of more recent reports that have said that the climate is changing even more than perhaps previously anticipated. How can using carryover targets fit with the claim that what Australia is proposing to do is ambitious?
Ms Evans: Using carryover fits because the intention always of the structure of the availability of carryover was to ensure that countries did not feel like they were being disadvantaged by overachieving on targets in the past. The whole mechanism of the Paris Agreement is that you ratchet up or you ratchet towards lower emissions over time. These targets for 2030 are the first set of targets that we will set under the Paris Agreement. There will be further targets set by Australia down the track. That's what the intent of the agreement is. So carryover fits in that context, because we wouldn't want any country to feel that they were being penalised for having overachieved any particular target as they consider setting the next one.

Senator HANSON-YOUNG: Is there any other country that has come out and said that Australia is more ambitious than others, as you've claimed today?

Ms Evans: As I've said, I don't know if that language is used but, when they look at Australia and they calculate the cost of the abatement that might have to be taken here, we tend to come out in the higher cost categories and that says that our target is ambitious.

Senator HANSON-YOUNG: What do other countries think about the idea that Australia is being sneaky?

Ms Evans: I'm sorry; what's your question?

Senator HANSON-YOUNG: The carryover target is to alleviate Australia actually doing much more at the moment, isn't it?

Ms Evans: No. The government is committed to the 26 to 28 per cent target, as it always has been.

Senator HANSON-YOUNG: Has there been any concern raised with Australia about the use of the carryover target?

Ms Evans: I'd have to take that on notice or perhaps come back to it when I have my team here who are more deeply involved in the international discussions, but I'm not aware of it being raised formally with Australia at all.

CHAIR: Senator Gallagher.

Senator GALLAGHER: I've got a series of questions about FOI. Do you have the right officers to deal with that?

Mr Heferen: I'm sure that we do.

Senator GALLAGHER: Okay. I just wondered if they were hanging out with Mr Richardson.

Mr Knudson: We also understand that Mr Richardson and Mrs Collins are close to arriving.

Senator GALLAGHER: Thank you very much; I really appreciate that. Can I just begin by asking: in the structure of the department, where does FOI handling sit?

Ms Tregurtha: That sits within the Legal and Compliance Division. That sits in the General Counsel Branch.

Senator GALLAGHER: How many staff do you have in there that would work on FOI?

Ms Tregurtha: In the General Counsel Branch, we have 33 full-time equivalent staff—we have part-time staff—so I'll use that number. And we have a couple of people who
specifically work on FOI. But also, because of the way in which our FOI caseload works, because it does go up and down unpredictably, we arrange our FOI processing so that we can expand and contract as applications come in. So at any one time we might have five people or we might have 10 people working on FOI.

Senator GALLAGHER: Do you know the average number of days it takes to process an FOI in the department? Do you keep those statistics?

Ms Tregurtha: The statutory time frame is set by the legislation. So we make every effort to comply with those statutory time frames.

Senator GALLAGHER: Do you have the details? Presumably there are times when you fall outside of them. What's the average number of days?

Ms Tregurtha: I'd have to take on notice whether we can, in fact, provide that statistic.

Senator GALLAGHER: So you don't track that figure?

Ms Tregurtha: We do report to the Office of Information Commissioner on a range of FOI statistics, including where we might have processed something outside of the statutory time frame. I can come back on that later—

Senator GALLAGHER: You don't have that with you now?

Ms Tregurtha: I'll just check with my colleague.

Mrs Lalor: We can certainly provide details about the date on which applications were made and then decisions that were made with respect to those applications, if that would be useful, but we don't have that here with us today.

Ms Tregurtha: I should just note too that the path that an FOI application can take will depend on whether or not third parties have to be consulted.

Senator GALLAGHER: I understand that but I'm sure that you track the average time and that's just what I'm after. I get the way that it has impacted is not necessarily from things that are all within your control. Obviously FOIs would go out to particular areas of the department but your area is in charge, essentially, of FOI handling across the department?

Ms Tregurtha: That's correct.

Senator GALLAGHER: Do you sign off on the responses or does the secretary do that?

Ms Tregurtha: Decisions that are made under the FOI Act are made by authorised decision makers under the act. And in our department, all of the SES officers are authorised decision makers; so decisions on FOIs are made by the responsible SES officer in the relevant area.

Senator GALLAGHER: So once they're signed off by the authorised decision maker, you wouldn't override those?

Ms Tregurtha: No.

Senator GALLAGHER: Do they come back to you and then go to the department or do they leave from the authorised decision maker?

Ms Tregurtha: Our team performs the administrative function of managing the flow of correspondence with FOI applicants. So once a decision is made, the administrative part of our team makes sure that that is provided to the applicant.
Senator GALLAGHER: Do you know how many FOIs you've had to deal with over the last complete financial year?

Ms Tregurtha: Yes.

Senator GALLAGHER: So you've got that statistic available? Are you sure that you don't have the average time of handling?

Mrs Lalor: We do have it in front of us. For the financial year 2018-19, there were 237 primary requests.

Senator GALLAGHER: Was that a large amount for the department?

Mrs Lalor: Yes. To put that in its context, the statistic for 2017-18 was 127 primary requests.

Senator GALLAGHER: Yes, I think I've seen that reported. What other statistics do you have? You've got those but you don't have the average handling time or processing time. Are you going to be able to get that today?

Ms Tregurtha: I'd have to check with the team to see whether we can provide that, but we will attempt to provide it.

Senator GALLAGHER: Have any FOI requests had the responses changed after consultation with the minister's office?

Ms Tregurtha: We consult with the minister's office, where there are documents that originate in the minister's office, to see where the FOI should be processed. But the decision on the FOI is a matter for the authorised decision maker and, once that decision is made, then it's made.

Senator GALLAGHER: Are FOIs provided to the minister's office, once they are finalised, from the department?

Ms Tregurtha: Yes, we routinely provide the minister's office with a heads-up as to what documents are going to be released so that they can be prepared for any media queries that might arise.

Senator GALLAGHER: Is that all FOIs or just FOIs that the department determines may have an interest from—

Ms Tregurtha: There would be some where, for example, individuals sometimes request personal information from the department, where we wouldn't provide that to the minister's office. But where it's a matter that's likely to generate some public interest, then we would provide that.

Senator GALLAGHER: Just going back to before it's signed off, where you say that you have to consult with the minister's office as perhaps there's a third-party involvement or whatever, within that process is the minister's office able to seek exemptions around certain documents?

Ms Tregurtha: It's a matter of asking what the harm of the particular document might be and then it's a matter for the decision maker to make a decision based on all of the information that they have.
Senator GALLAGHER: So if the minister's office had concerns, they would identify those documents and then it's over to the decision maker to make a decision about whether they fall within the—

Ms Tregurtha: Yes, it's a matter for the decision maker.

Senator GALLAGHER: How many orders for the production of documents has the department handled this year?

Ms Tregurtha: I would have to take that on notice.

Senator GALLAGHER: Is that your area?

Ms Tregurtha: No, it's not.

Mr Cahill: We'd have to take that on notice.

Senator GALLAGHER: Fine. I just want to quickly go, before my time runs out, to the letter of 18 October from you, Ms Kate Lalor, to the Office of Information Commissioner which essentially acknowledges that the department has been non-compliant or breaking the FOI Act of 1982. Can I just start at the beginning of this. When did the department become aware that it was breaking the law?

Ms Tregurtha: If I can take that in the first instance, we have a range of statutory obligations under the FOI Act and we do understand that and we make every effort to make sure that we comply with those. As is set out in the letter, we made a decision last year to change our disclosure log process so that documents were made immediately available so that members of the public didn't have to come back and ask for them. It is apparent that, in doing that, we encountered some difficulties with the website, which then were resolved. But that put us behind our statutory obligation and we're now in a situation where we're making every effort to catch that up.

Senator GALLAGHER: I do understand that from reading the letter about the other issues, but can you answer my question, which was: when did you become aware that you were not compliant with the requirements under section 11C? The letter doesn't go to that point.

Ms Tregurtha: I would say that, at the point in time that we were behind on the disclosure log, we were aware that we were not complying.

Senator GALLAGHER: I do understand that from reading the letter about the other issues, but can you answer my question, which was: when did you become aware that you were not compliant with the requirements under section 11C? The letter doesn't go to that point.

Ms Tregurtha: I would say that, at the point in time that we were behind on the disclosure log, we were aware that we were not complying.

Ms Tregurtha: I'm responsible for the FOI processing area and I was aware. I would have to check on what particular date. But we looked at all of the obligations that we had under the act and made a decision to try to get the disclosure log up to date but to focus primarily on processing FOI applications. We did have, during that March and April time earlier this year, a significant spike in FOI applications; so the focus was on that. But we do accept that that is not up to standard and we're taking steps to resolve that issue.

Senator GALLAGHER: It's still not clear. Basically, you were shifting your processes and, during the shifting of processes, you became aware that you were non-compliant with the law; is that right?

Ms Tregurtha: Yes.
Senator GALLAGHER: But you can't pick a date where that happened?
Ms Tregurtha: I can come back to you.
Senator GALLAGHER: Okay. It was your area that became aware?
Ms Tregurtha: Yes.
Senator GALLAGHER: You're saying that you prioritised the processing of FOIs rather than making yourself compliant with the law that exists?
Ms Tregurtha: Yes. We prioritised processing the FOIs so that we were compliant with the FOI processing requirements. And yes, it is the case that we were then not compliant with the disclosure log obligation.
Senator GALLAGHER: Did you report this at the time to anyone?
Ms Tregurtha: We've been making our relevant executive team members aware of the pressure in relation to the FOI function.
Senator GALLAGHER: It's more than pressure, isn't it? It's not meeting the requirements of the law.
Ms Tregurtha: That's the consequence.
Mr Cahill: Ms Tregurtha and her division report to me. While there is no specific date, I can remember her raising the fact that we had an unprecedented spike in FOI requests. In the general discussion, we agreed to focus on the principles of FOI: people apply for some information and we need to have that as our primary focus in getting the material released to those people. That's where the decision was taken: let's make sure that, at the core of FOI, when people ask for information we go through the process as best and as quickly as we can to release it. That's where the focus was.
Senator GALLAGHER: That is why that average processing time figure would be useful for the discussions we're having this morning.
Mr Cahill: I will flag that, at the time that was raised, Ms Tregurtha did mention the need for extra resources and we did deploy extra resources in that area. That said, there was an unprecedented level of FOI requests.
Senator GALLAGHER: So the rectification plan was to deploy extra resources. Was that your decision, Mr Cahill, on the basis of advice?
Mr Cahill: Ultimately it was Ms Tregurtha's decision, but with my full support. We looked at what money was available and what capacity we had to bring in extra people. We looked, collectively, at bringing in extra people to be able to get on top of the core of going through the thousands of documents that you need to go through for an FOI request and then to release them as quickly as we possibly could.
Senator GALLAGHER: What extra resources did you get to deal with it?
Ms Tregurtha: We put on some extra administrative resources, paralegal assistants, to deal with the administrative tasks and also some contracted legal resources to help with the processing.
Senator GALLAGHER: Going back to the time—I accept that you're coming back with a date—your letter to the Information Commissioner says that your disclosure log currently
covers decisions made up until 17 December 2018. Obviously, you were compliant up to that point; can I take that from there?

Ms Tregurtha: That was brought into compliance this year, so I would have to get you the exact dates for this. But we had a backlog which extended into 2018 and that first part of it was dealt with at a point during this year and now we have the remainder to manage. We set out in our letter to the Information Commissioner our process for diverting further resources to do that as quickly as possible.

Mr Cahill: In conversations, we've deployed extra resources out of another division, administrative and otherwise, and have taken in some more resources to try to get that disclosure log up to speed.

Senator GALLAGHER: In terms of being non-compliant with the law, and particularly the FOI law—which is pretty important in relation to the functioning of government and the transparency of, and overall trust in, our political systems—was this matter elevated to the secretary and to the minister when the department became aware?

Mr Cahill: The executive—the secretary is the chair of the board—was aware, through the standard reporting of the General Counsel to the executive, that we were under pressure with FOI and that FOI requests were unprecedented, and how we were performing. So I, as a member of the executive, was aware.

Senator GALLAGHER: What was the response of the secretary to that advice? Were they then briefed, 'Minister, we are currently breaking the FOI law and we are advising you of this'? Was that briefing made from the secretary to the Minister? It would seem a pretty big deal to me.

Mr Cahill: The management of FOI is a responsibility of the secretary and is delegated, effectively, to me. I was aware of it. I don't know whether we told the minister's office we were in breach of that element of the legislation. We would have, at some point in time, advised the minister's office that we were under pressure with FOI, but I can't recall any specific advice.

CHAIR: Senator Gallagher, how much longer do you require?

Senator GALLAGHER: I have a fair bit more on this, so if our time has finished we'll come back to it.

CHAIR: Sure.

Senator WATERS: I have a few procedural questions first about preparation for the World Heritage Committee meeting on the Great Barrier Reef. Is that in 1.1 or 1.4?

Mr Knudson: We've grouped all of outcome 1 together.

Senator WATERS: That's a revolution; well done.

Mr Knudson: We'll deal with it after lunch.

Senator WATERS: Great; that answers my other question. What is the mandate of the Special Envoy for the Great Barrier Reef?

Mr Knudson: We can come back to that and walk through it in detail.

Senator WATERS: In outcome 1?

Mr Knudson: Yes.
Senator WATERS: And the clean-up of the Shen Neng?

Mr Knudson: Yes, we can talk about that. You have two options there. One is probably, in the first instance, when GBRMPA, the Great Barrier Reef Marine Park Authority, appears.

Senator WATERS: Yes, I will ask them, but I also have questions for the department around that.

Mr Knudson: That would be under outcome 1 as well.

Senator WHISH-WILSON: I want to ask questions of the department more broadly. The Great Barrier Reef Foundation has now settled in. You have various levels of oversight of the foundation, and you may be aware of recent reports in the media that the Queensland Cane Growers Organisation supported a speaking tour in August by Dr Peter Ridd; the topic was, broadly, to challenge the scientific consensus regarding the impact of agricultural run-off and climate change on the reef. The foundation had given taxpayers' funds to the canegrowers to improve water run-off; that was the key understanding I got from a letter from the foundation—essentially, we're giving money to an organisation now sponsoring a speaking tour questioning whether run-off matters. Did the foundation notify the department of any conflict of interest around this grant to the Queensland Cane Growers Organisation? Or did the department initiate any processes seeking information about this grant?

Mr Knudson: We're certainly aware of this issue. I believe that you wrote to Minister Ley raising these concerns.

Senator WHISH-WILSON: I did indeed.

Mr Knudson: As for the specifics regarding what the foundation has done with respect to the concerns that you've raised and also the department's interaction with the foundation, we can deal with that in 1.1, but we are very aware of this issue.

Senator WHISH-WILSON: Why can't you deal with it now? Is someone not available—

Mr Knudson: That's correct. As part of outcome 1, we can go into the details with respect to the relationship with the foundation.

Senator WHISH-WILSON: So, more broadly, following this issue being raised in the media and my writing to you about it, has there been any process between the department at your level and the foundation?

Mr Knudson: On this issue, there hasn't been for myself, personally. But, that being said—because of my own personal circumstances with my Achilles tendon—I was not in the office for a period. That's why there's a gap in there that I would want the officers here to be able to talk about regarding what interactions have happened.

Senator WHISH-WILSON: Would that include any discussions you may have had about how to avoid this kind of thing happening again?

Mr Knudson: Yes.

Senator WHISH-WILSON: There have been no general broader discussions about how to avoid this kind of thing happening again?

Mr Knudson: Yes, absolutely. We can walk through, if it's helpful, the requirements with respect to the grant agreement that was put in place with the foundation on how they should be managing conflicts of interest.
Senator WHISH-WILSON: Could you include what kind of response you've had from the foundation and what kind of oversight you have in relation to that.

Mr Knudson: Understood.

Senator GALLAGHER: Do you have any figures on how long, on average, it takes to upload an FOI document?

Mr Cahill: There are two elements to that. One is that, obviously, you want to review the material you're about to release because in some instances, particularly if it's an FOI about an individual's circumstances, a former employee or such, you don't want that published.

Senator GALLAGHER: But hasn't that been done at the decision-making stage?

Mr Cahill: Not necessarily, no.

Senator GALLAGHER: So it's another process.

Ms Tregurtha: Not necessarily. Just to be clear, the decision on the FOI is as Mr Cahill says. Then for the disclosure log there is an extra step, which is to ask the question whether it would be unreasonable to disclose business information or personal information of third parties on the disclosure log. Ordinarily, for a lot of decisions, that won't be an issue because it isn't a set of documents that's being sought by an individual or a business about their own circumstances. But there will be some like that, and we have to check through and make sure that has been done.

Senator GALLAGHER: You've made the decision and the documents that are going to be released to, say, an individual are released. But then there may be another process. You exempt documents in a secondary process.

Ms Tregurtha: Yes.

Senator GALLAGHER: So the individual might get them—

Ms Tregurtha: That's correct.

Senator GALLAGHER: but you think it's not reasonable to give them to the general public.

Ms Tregurtha: A typical example of that would be a person seeking information about their employment matters with the department.

Senator GALLAGHER: So there's that process. What is the second?

Mr Cahill: Then there's where someone pushes a button and loads them up on the system; there's a control process to make sure you're loading the right documents. Ms Tregurtha referred to the fact that earlier in the year we had to resolve some IT matters to enable us to do that.

Senator GALLAGHER: Do you have an idea of the time it takes, once the FOI has been handled, to then make its way onto the disclosure log?

Ms Tregurtha: I haven't got a particular set of time. That is a smallish task in the scheme of tasks, but it would be one of a number of small tasks that people need to do.

Senator GALLAGHER: This is where I'm trying to get to. You've got the FOIs and they've gone through that process; the next is to put it on the disclosure log. If it's a relatively simple process, why hasn't that occurred? Based on your letter you say you're up to date to December, but that would have you a good nine months behind time at the moment.
Ms Tregurtha: That's correct. Once we had the backlog, it was difficult to get the time to focus on that because, as I've said, we were focusing on processing the primary requests. Our objective is to deal with that backlog so that, when we are up to date—you are right in this sense—it then will be a relatively straightforward and quick process.

Senator GALLAGHER: If it's, say, nine months behind now, what was the delay in the disclosure log at the peak of this breach of the law?

Ms Tregurtha: I would have to take that on notice to give you an accurate figure.

Senator GALLAGHER: Okay.

Mrs Lalor: We set out in the letter that it took some time to migrate the data. So, effectively, we determined that we would pick up the data from 2018 and upload those datasets onto the website or to the disclosure log. That was the first process that went down. What we're embarking on now is a course whereby we put the document up in a more staggered way, picking up the sets that don't require intensive review for that business and personal information. You will have seen that they've already started going up on the disclosure log.

Senator GALLAGHER: Yes.

Mrs Lalor: Our intention is to put up all of those document sets by the end of October, having made people available to assist us to review those sets.

Senator GALLAGHER: So how many documents are still to be released? If you're going to have it done in the next, what, two days, according to this letter—

Mr Cahill: Senator—

Senator GALLAGHER: or three days—

Mr Cahill: They've all been released. It's about publishing them and disclosing them in the broader public domain.

Senator GALLAGHER: you must have an idea of what needs to be uploaded to bring you up to time.

Mrs Lalor: I'd have to look at the actual numbers, but my recollection is that the total number of document sets is around 120. But I'd have to check that.

Mr Cahill: But within those document sets there could be thousands of documents.

Senator GALLAGHER: So that's 120 individual FOIs of varying size?

Ms Tregurtha: Releases. That's correct. Some of those will be small and some of those may contain a large number of pages.

Senator GALLAGHER: Okay. Can you take on notice when the minister became aware or how the minister was briefed on this breach of the law? And, if the minister wasn't briefed, why, and who took that decision at the department not to?

Ms Tregurtha: Yes, I can take that on notice.

Senator GALLAGHER: Unless someone can answer it now?

Mr Cahill: No, Senator. I don't recall actually briefing the minister on these matters—either minister or any minister—at any point in time.
Senator GALLAGHER: Can you explain why? It would seem to me, with a minister in charge of a department and a department knowingly accepting the fact that they had not met the requirements of the FOI Act—that is, they've breached the law—that that would not trigger advice to the minister?

Mr Cahill: We have a broad range of responsibilities.

Senator GALLAGHER: But breaking the law—

Mr Cahill: At the core of the FOI, we've made the ministers' offices over the time aware of the actual pressure under FOI. But ultimately it's the judgement of the department.

Senator GALLAGHER: But pressure is different to breaking the law. The department is using the words 'We were under pressure in FOI', which I get completely—I accept that—but that is a different matter to notifying the executive government that you are not meeting the requirements of the FOI Act.

Mr Cahill: I will check whatever advice we've given. I'm not aware of any brief or anything that we've given specifically. This was a matter of the department not doing something to an acceptable level and we've responded accordingly. I think that letter outlines that the department will bring itself up to standard in the next week.

Senator GALLAGHER: It is extraordinary that a department with a compliance function that enforces law on others doesn't see that breaking the law within their own area would trigger some significant response—that is, even from the secretary to the minister. If I was the minister, I would want to know if my department was breaking the law. But your executive took a different view?

Mr Heferen: I'm not sure we can add to what Mr Cahill has already added, except to say that, given that we are now aware of this issue and we're taking steps to rectify it, it would be reasonable for us to also commit to doing whatever we can within our capability to make sure that—

Senator GALLAGHER: Yes, more than reasonable, I would think.

Mr Heferen: a similar instance doesn't arise again.

Mr Cahill: I advised each of the officers that we did not come up to standard last week and that the department has redeployed resources to be able to bring itself up to standard.

Senator GALLAGHER: So last week you sent that?

Mr Cahill: Last week.

Senator GALLAGHER: Even though this has obviously been known for some time, I presume, because you've had a rectification plan going for some time. That was just held within the executive, was it, before you—

Mr Cahill: With me.

Senator GALLAGHER: You're saying that you put a general broadcast out to others in the department that this has been a problem. Is that what you just said?

Mr Cahill: No. The legal and compliance division, or the legal general counsel, reports to the board every month. I'm aware of our performance against FOI. As I said, I continued to support the priority being 'Let's get the core documents released to those people that are applying to that.' Then it came to some point where we realised that we were far enough
behind that we needed to take some action and I sought to deploy resources out of another division to rectify our performance against the disclosure.

Senator GALLAGHER: Mr Heferen, are you aware of the front pages of all of the major papers today and the campaign Australia's Right to Know, which is essentially about lifting secrecy and openness and transparency of government processes across Australia?

Mr Heferen: I'm aware of the front pages, yes.

Senator GALLAGHER: Do you think FOI is an important part of that transparency and accountability to the Australian community?

Mr Heferen: I think that's a question of opinion.

Senator GALLAGHER: I guess the point I'm trying to make is that I think breaching the FOI Act is a significant issue for the department and I'm concerned that it's taken this long to rectify a fundamental responsibility of the department.

Mr Heferen: We've heard those concerns loud and clear this morning. The department's acknowledged that we—

Senator GALLAGHER: Do you share them?

Mr Heferen: weren't up to standard, and we're doing what we can to make sure we will be up to standard.

Senator GALLAGHER: I've nearly finished with this section and I'll hand over. In terms of the 120 documents that are to be uploaded over the next couple of days—and I note that, unfortunately, that will fall outside of our estimates scrutiny; I don't know if that was convenient timing, but we won't be able to come back to those—how many relate to the grasslands matter that we have been talking about?

Mrs Lalor: I'll just look up some information.

Senator GALLAGHER: Thank you.

Mr Cahill: It is 120 document sets.

Senator GALLAGHER: Sets, sorry; 120 document sets. I'll get my language right.

Mr Cahill: I reject the premise that that was convenient. We have focused on releasing the documents under FOI and they're in the public domain. A lot of them are in the public domain, published by media outlets and such. We've been very open. This was a resourcing and priority issue that we did not do up to the standard and we are now rectifying it.

Senator GALLAGHER: Okay.

Mr Heferen: I think that in some of the discussions we've got to be clear that the FOI is still being made. So the decision to release the material has still to be made. The person who's the recipient of the material has that material. As Mr Cahill said, that was the primary aim of the department—to make sure that was done.

Senator GALLAGHER: Yes.

Mr Heferen: So to the extent that there were FOI requests and they have been processed in a timely way, the recipient of that request has that information.

Senator GALLAGHER: I'm not sure outside how many have been compliant with the time frame because that information hasn't been able to be provided this morning.
Mr Heferen: Which we will take on notice and endeavour to provide.

Senator GALLAGHER: Hopefully we will have it today; I accept that. The point is: the law is the law, though, isn't it? You can't prioritise within the law and say, 'I'm going to rate 11A ahead of 11C for the purposes of my operations in my department.' We do not; community members don't get to choose which part of the law they want to prioritise.

Mr Cahill: But you do make priority decisions about where you're going to focus under the law and our priority was: what was the core of FOI? It was releasing the documents as quickly as we could within the resources that we deployed.

Senator GALLAGHER: Yes.

Mr Cahill: You have to make judgement calls with any piece of legislation you administer about where you deploy your resources. We made a judgement call to focus on what was the core of the FOI, which was releasing the documents.

Senator GALLAGHER: But compliance with the law is a fundamental responsibility of the department, not certain aspects of the law. I'd be concerned if there were other laws that you are prioritising—

Mr Cahill: Yes, that's so, but with every piece of legislation, and every provision passed, you do prioritise. That is the very nature of an administrator. You have to prioritise. You can't do equal effort on every section of a piece of legislation.

Senator GALLAGHER: Well—

Mr Cahill: We did prioritise and we've now concluded in that correspondence that we need to lift our standards on another section, and we are doing that accordingly.

Senator GALLAGHER: Yes, but this was a—

CHAIR: One minute, thanks.

Senator GALLAGHER: Sure. We can get into an argument about it. I have been an administrator. I have been responsible for hundreds of laws and I've always taken the view that if the law is there, you follow the law. You don't choose which part of it is going to be the one you're prioritising, particularly when there is a compliance side to it. But anyway, we can have a longer discussion about this when there is more time. Can you answer how many of those 120 document sets relate to the grasslands matter?

Ms Tregurtha: Yes, Senator; four.

Senator GALLAGHER: Four of them? Okay. And they will be up within the next five days?

Mrs Lalor: By the end of the month, yes.

Senator GALLAGHER: Yes.

CHAIR: Senator Hanson-Young has the call until 10.25, when we'll go to the Bureau of Meteorology.

Senator HANSON-YOUNG: Thank you. I'm just following up on some of the questions I was asking in my previous section. I note today reports that grain production has plummeted and that, of course, as we know, many towns in New South Wales are running dry. We were talking about the economic impact of the changing climate and climate change getting worse. Has this department done any work on the economic impact of drought?
Ms Evans: I think the direct answer is no, not this department, but I wouldn't want to say that that's the case across the Commonwealth. There are other departments that have a stronger responsibility for drought.

Senator HANSON-YOUNG: I understand. But, yes, I'm specifically asking about this department. So, to that point, Ms Evans, there's been no modelling done?

Ms Evans: There's quite a lot of modelling done on the nature of potential climate change on regions in Australia. There's a website called Climate Change in Australia. It's a joint production between the Bureau of Meteorology and the CSIRO and others. It looks at all of the different regions in Australia and what the climate in those regions might be like under different average global temperature increase scenarios. A lot of research has been done there. There is further work being done to update those impact assessments at the moment. We don't do that work inside the department. We work with other departments, other agencies, to have the analysis done.

Senator HANSON-YOUNG: You are the primary department to manage Australia's response to climate change, aren't you?

Ms Evans: Yes, we are. But we facilitate that work through others rather than do it all ourselves.

Senator HANSON-YOUNG: Have you looked at whether the climate crisis will make drought worse?

Ms Evans: Senator, you and many other people would be aware that drought is a feature of Australia's climate and every drought is different. There is a sense that the dry conditions that have been experienced over the last two years, for example, have been exacerbated by high temperatures, and high temperatures are a feature of a climate changed future for Australia. But it's very difficult to specifically say whether each drought, or any particular drought, is connected to climate change.

Senator HANSON-YOUNG: Does the department accept that there's a connection between drought and climate change?

Ms Evans: The conditions in which a drought occurs are more likely in the future because of climate change.

Senator HANSON-YOUNG: And what will the impact be then if this current drought becomes the new normal?

Ms Evans: I don't think I'm in a position to answer that question. I wouldn't, even if we took it on notice.

Senator HANSON-YOUNG: If this department is the primary public agency to deal with climate change—and you accept that there is a connection between drought and climate change—isn't it understandable that the public would expect a drought plan would have to include a plan for climate change?

Ms Evans: The responsibility to formulate actual responses to drought and plan and manage for drought is not in our portfolio. That's potentially a better question to ask either the Department of Agriculture or the department of infrastructure, where Minister Littleproud has responsibility for drought.

Senator HANSON-YOUNG: Do you think there are any gaps there?
Ms Evans: I don't want to offer an opinion.

Senator HANSON-YOUNG: Does this department, which is responsible for Australia's response to climate change, have a response to what the climate crisis means for agricultural production?

Ms Evans: Again, we are the lead in terms of a policy for climate change, but we work through other agencies. That's not just the case for agriculture; it's the case for many other sectors in the Australian economy as well. For example, we work with our colleagues in the industry department to look at what impacts and other things there might be on them. I wanted to make sure you weren't assuming that all of these policies sit within our gift. We work through others to get them done. Having said that, as a whole-of-government response, there is information that we provide through, for example, the Climate Change in Australia website that gives information to regional communities about what the climate might be like in the future, to help them start to plan and adapt for the future. We have already seen examples of that happening, with choices made by some producers to move their production to regions that are more favourable, in terms of the potential future climate, for the kinds of products they want to produce. There are all sorts of things happening as a result of the government making information available for businesses, communities and regions to make their own plans to adapt.

Senator HANSON-YOUNG: Ms Evans, does the department consider that this current drought is simply a one-off or does the climate crisis make these conditions more likely to be endured or repeated? I want a simple answer to that question. Is this drought a one-off?

Ms Evans: I'm not in a position to answer that question. Drought has been a feature of the Australian climate ever since time began.

Senator HANSON-YOUNG: This is a record drought.

Ms Evans: I can't say anything more than that drought has been a feature of the Australian economy.

Senator HANSON-YOUNG: How much work has this department, the peak government agency for climate change, done on the impacts of climate change and drought?

Ms Evans: Specifically on the impacts of climate change and drought, we have been working with the Department of Agriculture, and through the task force on drought, headed up by Major General Stephen Day—

Senator HANSON-YOUNG: Does the department have a position on the impact of climate change on drought?

Ms Evans: We simply summarise the scientific evidence that, as I have already said, the conditions in which drought occur become more likely in a hotter climate future.

Senator HANSON-YOUNG: Where does the government's plan on drought sit?

Ms Evans: I believe that's with Minister Littleproud.

Senator HANSON-YOUNG: Is it agriculture that's making the drought worse or is it climate change?

Ms Evans: That's not a question I can answer.
Senator HANSON-YOUNG: I don't understand why you wouldn't have your own work being done, as the peak government agency for climate change, on the impact of drought, the severity of drought.

Ms Evans: Because we know that that work is being very well and comprehensively done through another portfolio.

Senator HANSON-YOUNG: How many people in your department, Secretary, work on the impact of climate change and drought?

Mr Heferen: I would have to take that on notice.

Senator HANSON-YOUNG: Can you think of one?

Mr Heferen: I'll take it on notice.

Senator HANSON-YOUNG: Ross Garnaut previously forecast that there would be a 92 per cent decline in agricultural productivity in the Murray-Darling Basin if global warming was not got under control. Do you agree with that assessment?

Mr Heferen: I haven't had the opportunity to review Professor Garnaut's work or any advice on that. Ms Evans may have done.

Senator HANSON-YOUNG: Ms Evans, are you aware of that forecast?

Ms Evans: I don't recall that particular forecast, so I would have to take it on notice.

Senator HANSON-YOUNG: Would you agree with that assessment?

Ms Evans: I don't have an answer on that.

Senator HANSON-YOUNG: Do you think that climate change and global warming are going to make productivity in the Murray-Darling Basin harder?

Ms Evans: I'll take it on notice to see what the scientific evidence says on that point.

Senator HANSON-YOUNG: Does the department have any work that has been done to look at the impact of climate change on Australia's agricultural production?

Ms Evans: Work of that nature is generally done through the Agriculture portfolio. I am aware that the Australian Bureau of Agricultural and Resource Economics and Sciences have done quite a lot of work on the impact of climate change on productivity in Australia. Perhaps you could ask them to elaborate.

Senator HANSON-YOUNG: Ms Evans, you've indicated that you understand there is some connection between drought and climate change.

Ms Evans: I've said quite a few times that the conditions in which a drought occur will become more likely. That's consistent with what the Bureau of Meteorology and CSIRO have said, which is that we're likely to spend more time in drought if temperatures continue to rise.

Senator HANSON-YOUNG: Does the department accept that burning coal makes global warming worse?

Ms Evans: Burning coal has greenhouse gas emissions associated with it. Globally, the challenge ahead of us is to control greenhouse gas emissions, but that doesn't necessarily mean there's a direct cause between coal and—

Senator HANSON-YOUNG: Does burning coal make climate change worse? It's a pretty simple question.
Ms Evans: No, it's not a simple question, Senator. You're trying to ask me to answer a global problem with a very specific and potentially small contribution of an—

Senator Hanson-Young: Does burning fossil fuels make climate change worse, and therefore the drought?

CHAIR: Senator Hanson-Young, that was your last question.

Ms Evans: Senator, it depends. If you, for example, attach carbon capture and storage to the burning of a fossil fuel such as coal or gas, you can in fact remove the impact of the increase in emissions. It depends, and it's not possible to give a simple answer to the kind of question you are asking.

CHAIR: Senator Whish-Wilson has the call.

Senator Whish-Wilson: Ms Evans, previously you referenced some adaption measures in rural communities with drought. We've seen in recent weeks plans floated, at least in the media, for more dams, for example. Is it fair to say that your department has been advising the minister on the need for more adaption measures versus mitigation measures?

Mr Heferen: Senator, it goes to the question of advice that we provide to our minister. Like any other department, we want it to stay confidential with our ministers. The other thing is that we've got to be careful about ranging into an opinion on policy. As public servants appearing before this committee, of course, we can't.

Senator Whish-Wilson: You mentioned earlier a specific example, using a website, of providing means for people to adapt to drought, or to better prepare for the future of climate, as you referenced it.

Ms Evans: Yes.

Senator Whish-Wilson: Can you give us some examples of where you've provided similar information about mitigating emissions to avoid climate change in the first place?

Ms Evans: We have provided advice to the government on the types of choices that they have to implement emissions reduction—mitigation measures, as you're calling them. We also provide advice on the kinds of impacts that climate itself might have on Australia, and therefore some of the adaption that might be required over time. We have briefed on both of those topics. We do not present them as a choice. Both of them are part of the solution.

Senator Whish-Wilson: I might have to go back and check Hansard, but with the website that you were talking about that provides that information, I presume you've had some kind of input into that. Is that correct?

Ms Evans: I would have to double-check. Obviously, the Bureau of Meteorology is part of our portfolio, so I was partly talking about us as a portfolio. Our department certainly takes a role in guiding the kind of information that might be useful in the future. These are the kinds of things we talk about through the Australian government resilience reference group that I co-chair.

Senator Whish-Wilson: If I could follow that up, Ms Evans, the reason I raised that was because if you're providing that advice on an adaptation measure, that's fine; people can use that. But a big part of this debate, including advocacy on this debate, is on mitigation.

CHAIR: We'll take that as a comment.
Senator WHISH-WILSON: Have you provided any public information on mitigation?

CHAIR: You can put that on notice. We'll take that as a comment and question on notice. Ms Evans, thank you; that was a good segue to the Bureau of Meteorology.

Bureau of Meteorology

[10:25]

CHAIR: Welcome back to estimates, Dr Johnson. Would you like to make an opening statement?

Dr Johnson: No, thank you, Chair.

CHAIR: We will go to Senator Roberts.

Senator ROBERTS: I thank you all for being here today. According to the Bureau of Meteorology, in which year since 1920 did Australia experience the most number of very hot days above 40 degrees, as the BoM defined it?

Dr Johnson: That's a very detailed question, Senator. I'm happy to take it on notice.

Senator ROBERTS: It certainly is. The answer is 1952, according to a BoM graph. Is 1952 still the year with the maximum number of very hot days?

Dr Johnson: Senator, I will have to take really detailed questions like that on notice. If you have more detailed questions like that, please put them on notice and we'll be happy to reply.

Senator ROBERTS: I'm happy to table this, Chair. This is a graph from the BoM website.

CHAIR: Senator Roberts, please continue.

Senator ROBERTS: Could you also take this on notice: in 1952, what was the level of carbon dioxide? Was it above 0.035 or below?

Dr Johnson: I would have to take that on notice.

Senator ROBERTS: With respect to that graph that I referred to—and I'll let you see it—it shows the average number of very hot days from 1910 to 2015. It was on the BoM website—climate change, trend, extremes and variability maps, and time series graphs. It can no longer be accessed. Do you know why?

Dr Johnson: I actually haven't seen the graph that you're referring to, so it's very difficult to answer that question. Again, if you'd like to place your detailed question on notice, I would be happy to provide you with an answer.

Senator ROBERTS: I'll place it on notice. The point of the questions leading into that was that this graph goes against the narrative of the climate extremists, and it was removed. Would it have been removed—you can take this on notice, too—because it goes against the narrative or was it removed because it was in error?

Dr Johnson: Firstly, I reject the premise of your overarching question, that there's an overarching narrative. The Bureau of Meteorology simply reports on the data which we observe. That's what we do. That data is published on our website and is freely accessible by the community. Again, I'm happy to take the detailed question on notice, but I reject the premise that the data is supporting an overarching narrative.
Senator ROBERTS: We'll talk more about that in future. How can we make solid policy if data is being removed that contradicts the narrative? I'd like to know why—

Dr Johnson: Again, I reject the premise of your question, Senator, which goes to the integrity of the Bureau's data. As we have discussed in this place many times before, the integrity of our data is of the highest order, and I stand absolutely 100 per cent behind it. I reject the question.

Senator ROBERTS: Could you also tell me—take it on notice— which year since 1910 had the fewest number of very hot days above 40 degrees? Was it 2011?

Dr Johnson: I would have to take that question on notice.

Senator ROBERTS: Thank you. Perhaps you could also tell me why, on a graph that shows a flat trend, there is an upward-sloping trend, that would mislead people into thinking—

Dr Johnson: Senator, with respect, you're asking me questions about a graph that I'm not in possession of and I have no knowledge of. Again, I would encourage you, if you wish to ask detailed questions such as the ones you are asking, to put them on notice. I'll respectfully look at it.

Senator ROBERTS: You've got a copy of the graph. There's an upward-sloping trend line but it's flat—

Dr Johnson: Senator, I'm not going to answer a question about a graph that you have put under my nose right now. Again, we'll take the question on notice. We'll answer the question.

Senator ROBERTS: Thank you. Let me ask you: is that trend line—

Dr Johnson: Senator, if the question is about—

Senator ROBERTS: No, I'm asking you on notice.

Dr Johnson: Please place them all on notice.

Senator ROBERTS: I will. The question I'm going to put to you on notice is: is the trend line put on there to help people, to ease people's minds or to lead people to think that there's an increase in the number of very hot days, when that is not the case? Take it on notice; there's no need to answer it now. I'd like to know the answers to those questions.

Dr Johnson: Yes.

Senator ROBERTS: I'd like to know the answer to those questions. The second series of questions is: why do the Bureau of Meteorology and CSIRO only publicly show graphs of temperature from 1910 onwards?

Dr Johnson: We display temperature trends over multiple time periods, not only from 1910; 1910 is a time upon which we have confidence that we have a consistent, coherent record. Clearly, temperatures have been recorded before then but the temperature record is inconsistent and sporadic prior to 1910. So we have used 1910 as a baseline. This is commonly accepted.

CHAIR: Senator Roberts, last question and then you'll have to put them on notice.

Senator ROBERTS: Are you aware that, according to BoM's own data, the 1880s and 1890s were warmer than today?
Dr Johnson: Yes. That's a general statement. If you have got specific examples that you would like to show us, I'd be happy to look into it for you.

Senator ROBERTS: Sure, I can. If you have a look at the GHCN stations that cover all long-term Australian stations in the G8CN network, you'll see that that is the case.

CHAIR: Thanks, Senator Roberts, if you can put the follow-up on notice.

Senator URQUHART: I've got some questions around the Drought Communities Program. Can you tell me: what figures did the government use to determine the funding of the Drought Communities Program? I'm not sure whether you can answer that.

Dr Johnson: No. Senator, if you have questions around that particular program, they're best directed to the department of infrastructure. They administer that program.

Senator URQUHART: I've got a few questions but I'll press on because I think there are some that possibly you might be able to answer. As far as you're aware, is there a difference between data sets between the Drought Communities Program and the Drought Communities Extension Program?

Dr Johnson: I'm not aware of the Drought Communities Extension Program. I can't answer that question, I'm sorry.

Senator URQUHART: Okay. Can you tell me: was BoM aware that Moyne was not in drought?

Dr Johnson: Again, matters around determination of drought are a matter for the department of infrastructure or whoever is administering the relevant program. It is not a matter for the bureau to be making declarations of drought. Our role is to provide colleagues and government agencies with data to support their decision-making processes, and that's exactly what we did with respect to the program administered by the department of infrastructure.

Senator URQUHART: Minister Littleproud said that the data that was used in relation to the Moyne Shire Council was drawn from a BoM drought mapping of each shire as of 30 June. Was there any data collected after 30 June by BoM that would have been more appropriate to use to determine the drought status of the Moyne Shire?

Dr Johnson: Again, Senator, if you have got questions around the administration of the program, I think they should be directed to the department.

Senator URQUHART: No. But I'm asking about the information that BoM provides.

Dr Johnson: Yes. All we've done is respond to a request for information, as we do right across government, for a set of parameters relating to rainfall deficiencies around Australia. The specifications of the data that we were asked for were determined by the department. We've simply responded to their request.

Senator URQUHART: So the forensic audit that Minister Littleproud has requested, is that something under your auspices or is that under the department?

Dr Johnson: I'm not aware of an audit.

Senator URQUHART: You're not aware of an audit?

Dr Johnson: No.

Senator URQUHART: You've heard the minister's—
Dr Johnson: No, I haven't actually. I've been on leave for the last couple of weeks. So I haven't heard of such an audit. Certainly, since I've been back, nothing of that matter has been brought to my attention.

Senator URQUHART: Would that be something that would be brought to your attention?

Dr Johnson: Again, I think you're speculating. It's a hypothetical. If the minister was concerned about the performance of the bureau and wished to commission an audit, that is a matter for them. I met with Minister Littleproud the week before last and we spent nearly an hour and a half together and he didn't mention this matter to me.

Senator URQUHART: He didn't mention an audit at all? That's interesting because I understand the minister is doing a forensic audit in relation to drought in the Moyne Shire. But there is a—

Dr Johnson: That may well be a matter with respect to the administration of the program. So again, I would refer you back to the department that the minister administers.

Senator URQUHART: It is the department of infrastructure.

Dr Johnson: The department of infrastructure administers the program.

Senator URQUHART: I refer to your statement issued on 8 October 2019 on rainfall deficiencies and water availability. In it you describe the rainfall deficiencies that have affected most of New South Wales, Queensland and South Australia, parts of the Murray-Darling Basin since the start of 2017. Can you explain to me the rainfall trend? When did that deficiency start?

Dr Johnson: It depends on which part of the country you're talking about. But I think, as everybody's aware, particularly parts of eastern Australia and particularly parts of New South Wales and southern Queensland have been in very serious rainfall deficit for a number of years. And again, it's a serious situation. I think it's important to understand that the situation isn't entirely contained. About a third of Australia is experiencing serious to severe—serious being as low as five to 10 per cent; severe as low as five per cent—deficiencies over the last 12 months, and at least 20 per cent of every state and territory is in the lowest or in the driest 10 per cent of historic readings over the last year. With the exception of some parts of western Victoria and some parts of Western Australia, most of the country is in a very, very dry state.

Senator URQUHART: And which towns and regions have been most severely affected?

Dr Johnson: As I said, I can't give you every town, because there are lots of towns. But clearly, through central and northern New South Wales into southern Queensland, it is being very severely affected. If you look at particularly the northern part of the Murray-Darling Basin it is in a very, very dry way.

Senator URQUHART: Is the bureau working on any reports or any further statements on the severity of the drought?

Dr Johnson: We'll continue to monitor the situation and, as we do from time to time, if we feel that there are circumstances that necessitate us making a public statement we will. But we have no plans in the short term.

Senator URQUHART: You don't have plans to?

Dr Johnson: Should the issue change, we reserve the right to say something.
Senator URQUHART: The bureau's severe weather outlook for the October to April period was issued on 14 October. Can you confirm that this summer will likely bring increased risk of heatwaves and droughts?

Dr Johnson: Yes, I can. And as you said, the outlook was recently issued and we're expecting bushfire and heatwave activity to be more likely than normal—drought also to continue for the near term—and other related phenomena like dust also will increase. Our outlook also reports on other phenomena. We're expecting the likelihood of widespread flooding to be reduced; similar conditions to average for severe storms and tropical cyclones and, likewise, for marine heatwave. But the outlook from a drought and rainfall temperature point of view is not looking good. I agree.

Senator URQUHART: The statement that you issued also says:

When compared to other 33-month periods commencing in January, the 33 months from January 2017 to September 2019 has been the driest on record averaged over the Murray-Darling Basin.

Dr Johnson: Correct.

Senator URQUHART: And for the state of New South Wales, 34 per cent below average. All three regions have also been the driest on record for 21 months. Can you just flesh out this a bit more, especially the trends of not seeing the dry conditions since the Federation drought?

Dr Johnson: Sorry, I just want to make sure that I understood the very last part of the question. The statistics you summarise are excellent. I'm glad that you've read our outlook report. But if you could just clarify for me exactly what you're looking for in the last part?

Senator URQUHART: Okay. All three regions have been the driest on record for the 21 months from January 2018 to September 2019 whilst the 27 months from July 2017 to September 2019 rank second in all three regions, and only the 1900 to 1902 peak of the Federation drought has been drier. Can you just flesh out the trends of not seeing drier conditions since the Federation drought?

Dr Johnson: Sorry, I'm not trying to be unhelpful but I don't quite understand. It's that last bit of your question that I'm failing to understand. I apologise if I'm a bit slow off the mark this morning.

Senator URQUHART: No, it's all right. I'm very scratchy; so I apologise for that as well.

Dr Johnson: Are you asking us to put the current dry conditions in the context of the Federation drought? Is that what you're asking?

Senator URQUHART: Yes, just flesh it out a bit more so that we can get an understanding of the differences between the—

Dr Johnson: As you said, this current drought that we're seeing through northern New South Wales and southern Queensland, particularly in the northern part of the Murray-Darling Basin, there is no comparison, except in our historical records—and that's going back to Senator Roberts's question—from the early 1900s onwards. There is no comparative with this current event, other than the events experienced during the Federation drought. So it's a very significant event from a European perspective or a modern Australian perspective. But as Ms Evans said actually in response to previous questions by Senator Hanson-Young, rainfall
deficiency has been an omnipresent feature of this continent since time immemorial. But in terms of our modern record, it's a very severe event.

**Senator URQUHART:** Back to the Moyne Council—and I understand your position on that—can you tell me whether the minister for drought or his staff have requested briefings from BoM in relation to the Moyne Council Drought Communities Program?

**Dr Johnson:** Certainly we've been supporting the department of infrastructure since as far back as August in terms of the deployment of our data to assist their decision-making needs. So there have been multiple points of intersection where we've worked to support our colleagues in the department of infrastructure, as we do often right across government, where government is using bureau data to support its decision-making processes.

**Senator URQUHART:** Sorry, my question was quite specific. Has the minister or his staff requested briefings from BoM in relation to it?

**Dr Johnson:** Not to my knowledge, no. As I said, our staff have been working closely with colleagues in the department of infrastructure but I'm not aware of any direct requests from Minister Littleproud on the matter, to us. I would expect that he's asked for briefings from his department, but not from us.

**Senator URQUHART:** From the infrastructure department but not specifically from you?

**Dr Johnson:** I'm certainly not aware of the bureau being asked for a direct briefing on that.

**Senator HANSON-YOUNG:** I'm just following up on some of these questions about the records that are being broken. I just want confirmation, because we've heard this before—and I just want to make sure that this is still based on the bureau's modelling and understanding of watching everything so carefully—the current drought in the Murray-Darling Basin is the most severe on record?

**Dr Johnson:** Certainly, as I said in response to Senator Urquhart, it's comparative to the event experienced in the Federation drought. But again, as Ms Evans also answered in response to your question, every drought is different and I think it's important to understand that there are a range of meteorological and non-meteorological dimensions to the notion of drought. Rainfall deficiency is clearly one in the context of this particular event; temperatures is another; and wind speeds and other land use, soil type, topography which I'm sure you—

**Senator HANSON-YOUNG:** And I would also ask you: mismanagement of the Murray-Darling Basin.

**Dr Johnson:** It's hard to compare specifics because everyone is different. They all have the unique characteristics and they're also distributed over different geographies. But in terms of serious rainfall deficit having a serious impact on the community, this is a very serious event.

**Senator HANSON-YOUNG:** We've obviously seen a number of initiatives that have been announced and money is going to be flowing for, for example, building new dams in New South Wales. The view and the commentary from the government are that these projects won't be for this drought but indeed for the next one. Do we have any sense, Dr Johnson, when the next one will be?
Dr Johnson: If I knew that, I wouldn't be here; I'd be making crystal balls and relaxing. Drought and rainfall deficiencies are, as I said before, an omnipresent part of the climate in this country, have been in the past and will continue to be in the future. The bureau is certainly improving its capacity to provide the community with foresight in terms of dry conditions into the future. Governments of all persuasions have been investing heavily in us in recent years to improve our skill in terms of seasonal forecasting, in terms of climate outlooks, in terms of shorter term weather outlooks to support the community to better prepare itself and respond to dry conditions when they occur, because they will occur. And they have been occurring forever.

Senator HANSON-YOUNG: Can I turn to the issue of bushfires, because obviously it is very concerning to see the bushfires we've already had this year. How much planning work has the BoM been involved in with other government agencies in response to what seems to be a pretty horror fire season coming up?

Dr Johnson: Again, there are a number of dimensions to our support for the relevant authorities who have responsibility for bushfire preparedness and bushfire response. We work closely with the Commonwealth and the states in terms of things like seasonal outlooks, long-term climate projections prior to fire seasons emerging. During fires themselves we provide very significant support to emergency management agencies in responding to fire. And obviously, we also provide longer term climate outlooks which all of the relevant jurisdictions utilise to assist them with their forward planning.

Senator HANSON-YOUNG: Obviously the fires we've already had this year have been pretty out of the ordinary, is it right to say?

Dr Johnson: Certainly the fire season this year has started earlier than historically. Fire weather conditions manifested much earlier this year than they have in the past. And again, no two fires are the same, just like no two droughts are the same and no two floods are the same. But certainly we're seeing a trend of the fire weather starting earlier than it has historically.

Senator HANSON-YOUNG: What does that mean for the length of the fire season? What have you got there?

Dr Johnson: As I just said, the fire season in recent years has started earlier. In New South Wales this year, for example, it started nearly two months earlier than it has in the past. In my own home state of Queensland, the fire season over the last few years has started much earlier in the spring than it has in the past. Again, the length to which the fire season manifests or persists during the summer really depends on how the summer unfolds. If we have a dry summer, the fire season can extend. If we get rain during the summer period, which is for most parts of eastern Australia when we do get our predominant rainfall, the fire season can be shortened. It's a season-by-season issue.

Senator HANSON-YOUNG: What's your prediction for this summer? Is rain going to come?

Dr Johnson: As I said to Senator Urquhart, we're not very optimistic about the summer ahead in terms of rainfall, unfortunately, and we're not very optimistic about temperature—both rainfall and temperature. Some of the pre-conditions that manifest in fire weather—obviously the conditions, the baseload, topography and other things such as human activity and sources of ignition: all of these things determine what the fire season will look like.
Senator HANSON-YOUNG: With all of these records being broken—and I'm also thinking about the hottest wet season in the Northern Territory, for example—your bureau must be busier than ever.

Dr Johnson: Well, there's no shortage of demand for our services, Senator. I think we pride ourselves on being Australia's most trusted source of information on climate weather. So as these matters are important to the public, the demand for our services is increasing.

Senator HANSON-YOUNG: Trust in public institutions is something that is highly sought after at the moment, because it's lacking in many of them. So that's good. You actually pre-empted one of my questions. I was going to ask whether there were any statistics or understanding of the element that the community trust what the BoM says.

Dr Johnson: Yes, there is. I'm embarrassed to say I haven't got them memorised. We regularly, as you would hope that we do, ask our customers how they think we're performing. Obviously, the general community is our biggest customer. We invest a lot of time engaging with our customers, asking them for their views on how we're performing and how we can be better. As part of our process we ask them as well questions and perspectives around their trust in the services we provide. We are one of the most trusted—we are certainly within the top five—public institutions in Australia. It's something that we're very proud of and something that's been earned over 100 years of outstanding service, frankly.

Senator HANSON-YOUNG: What are the personnel numbers looking like at the bureau? Have you had an increase in resources, or is it static or have you had a decrease? I am just thinking: you're busier than ever.

Dr Johnson: Overall, the footprint of the organisation has been growing in recent times, for a whole range of reasons, through both direct government support and also co-investment from industry and other sources of government funding, whether it's Commonwealth funding or state funding.

Senator HANSON-YOUNG: So you don't have any concerns that your budgets might be cut at any point?

Dr Johnson: We're always working hard to make sure that the taxpayers get value for money, so that need to demonstrate value for money is always front of mind for us. Future trajectories for the bureau's budget are a matter for the Commonwealth. The Commonwealth has got a lot of difficult choices to make, and whatever choices government makes in terms of its priorities we'll respond to.

Senator HANSON-YOUNG: Apologies for the ignorance on this, but have you had to manage any reduction in funding over the last six years?

Dr Johnson: Like all Commonwealth agencies, we've been subject to the efficiency dividend. The BoM is no different than any other part of government. We’ve very effectively, I think, managed that decision of government, as have other agencies.

Senator HANSON-YOUNG: And how much does that efficiency dividend cost you?

Dr Johnson: I don't have front of mind the historical trends, but I know that over the forward estimates it will result in around a $5 million reduction to the appropriation to the bureau. I stress that we expect the overall footprint of the bureau to grow, even though the base funding will be impacted by the efficiency dividend.
Senator HANSON-YOUNG: Thank you. I guess from a parochial South Australian perspective, have you got any forecast for the rainfall or, indeed, what the fire season means for our state?

Dr Johnson: I'd like to take that question on notice. I'd be happy to provide you with a detailed answer to that. The trends that I outlined earlier to Senator Urquhart are also manifest in South Australia, unfortunately.

Senator HANSON-YOUNG: We had record heatwaves.

Dr Johnson: Parts of your state, particularly parts of Lake Eyre and Yorke Peninsula, have been the beneficiaries of some of that rainfall that's also fallen on western Victoria that I mentioned earlier. It is one of the few places in the country where there has been some wetness. But the overall trend, particularly for the northern parts of the state from a rainfall point of view, is consistent with the earlier responses. Like the rest of Australia, South Australia is in for a hot summer.

CHAIR: Senator Whish-Wilson, one question.

Senator HANSON-YOUNG: Just to follow up on the question on notice: if you could include the information in relation to heatwaves, that would be very helpful.

Dr Johnson: Sure; I am very happy to. Our—

CHAIR: Dr Johnson, we are running short of time. Senator Whish-Wilson, one question.

Senator WHISH-WILSON: I have a couple to be taken on notice. Are you the right person to ask, Dr Johnson, about an update for sea surface temperature forecasts or should we ask another department?

Dr Johnson: If you want to have a crack now, I will do my best to answer it.

Senator WHISH-WILSON: I would like to, but I don't think that the chair is going to—

CHAIR: This is to go on notice, Dr Johnson.

Dr Johnson: Sure.

Senator WHISH-WILSON: We have mentioned several times in the conversation that new records are being broken and the various metrics. Does the department keep a track of actual broken records?

Dr Johnson: The bureau certainly does; absolutely.

Senator WHISH-WILSON: Where can I access that?

Dr Johnson: Again, I'll take that on notice to give a specific online reference. All of our data is publicly available so I'd be happy to point you in the right direction. If you can write the specific request down, I'll make sure I point you to the specific place.

Senator WHISH-WILSON: Great. Thank you.

CHAIR: Dr Johnson, thank you very much. That completes the examination for the Bureau of Meteorology.

Proceedings suspended from 10:53 to 11:05

Department of the Environment and Energy

CHAIR: The Senate committee will resume with the Department of the Environment and Energy. Senator Gallagher has the call.
Senator GALLAGHER: Thank you very much, Chair. I thank officials for coming over earlier than was intended. Earlier I asked a couple of questions around the grasslands, and that's the focus of my questions this morning. We know that there was a meeting on 20 March. My first question is: on what date did Minister Taylor directly disclose his interests in the investigation to your department?

Mr Richardson: I was present at that meeting on 20 March, and there was no discussion about interests at the commencement of or during that meeting.

Senator GALLAGHER: There was no mention at that meeting, but subsequently to that, or prior to that, had there been any direct disclosure of his interests in the investigation that was underway?

Mr Knudson: As I think I said earlier, the minister provided, I think on 29 July this year, the full recounting of the disclosure of his interests in the property and how that was managed.

Senator GALLAGHER: Yes, I was trying to find that. It's not easy to find it online, but I have now found it.

Mr Knudson: It would be in the Hansard.

Senator GALLAGHER: Yes; I didn't have the date. In the interests of time, I might come back to that when I've read it. For the purposes of the committee today, was there a date on which Minister Taylor directly disclosed his interests in the company in question to the department?

Mr Knudson: I think we answered, in the inquiry into this matter, that the minister laid out the steps that he took, and in effect he fulfilled his responsibilities, as opposed to the code that applies to parliamentarians.

Senator GALLAGHER: The take-out from that is—and I can understand you not wanting to answer it—there was no direct disclosure to the department?

Mr Knudson: Nor would a minister be required to do so.

Senator GALLAGHER: I think it's open for different thoughts on that. Anyway, that didn't occur. With the meeting on 20 March—and I think we covered this in a previous inquiry—I want to confirm that there were no notes taken at this meeting.

Mr Knudson: As was mentioned in that inquiry, what was done was a summary of the outcomes—I think it was sent by Mr Richardson four days after that—which outlined the specific actions that needed to be taken.

Senator GALLAGHER: Has the summary of outcomes been released?

Mr Knudson: They have, Senator, in the original FOI.

Senator GALLAGHER: In terms of the note-taking, though, have you looked at that since, in terms of whether this is an approach that the department takes in general on note-taking, particularly in meetings with ministers, and ministers who may have an interest in something that the department is looking at, to tighten up your processes?

Mr Richardson: I've reflected on the process, Senator, it's fair to say.

Senator GALLAGHER: Faced with that situation again, and noting the guidelines on APS note-taking, would the department require notes to be made of that meeting?
Mr Knudson: Again, as I think I said during the inquiry, often what are the most important elements to capture are those specific actions that are required to be followed up on. If it's something where we have to supplement that then so be it, but we want to make sure that the specific actions are followed up on, and that that summarises accurately the intention of the meeting.

Senator GALLAGHER: Sure; I don't disagree with outcomes being pursued. But from the point of view of defence of the department, independence of the department and appropriateness of the department's actions, that's a big reason why the APS note-taking guidelines are there. I'm interested to know whether the department would require notes to be taken in such circumstances again.

Mr Knudson: The normal practice is that a summary, in essence, of the meeting's outcomes is produced. We believe that's consistent with those guidelines.

Senator GALLAGHER: You're saying that you wouldn't require note-taking in accordance with the APS guidelines on note-taking, which are not about a summary of outcomes; they're actually quite specific about note-taking within meetings, particularly meetings with ministers. Would you change your approach?

Mr Knudson: Perhaps, quite frankly, it's a reflection of my personal focus points, which are to make sure that, in any discussion, we're focused on moving the issue forward.

Senator GALLAGHER: But there are guidelines around—

Mr Knudson: I understand your point, Senator.

Senator GALLAGHER: You're very good at avoiding answering the question, Mr Knudson—directly or indirectly.

Mr Knudson: It's not the intention, Senator.

Senator GALLAGHER: I understand that this is difficult for the department. I get it; you've got to protect your minister. But you've also got a responsibility to the Senate to provide information that assists us with our discussions. My simple question on this is about whether public servants would be required to take notes in meetings such as the one that was held. It's perhaps a question for the secretary—about whether instruction or guidance would be provided that officers should acquaint themselves with the guidelines on APS note-taking in meetings such as these, which are obviously quite sensitive.

Mr Heferen: Senator, I think the current situation is a good reminder for departmental officials, and we will ensure, following on from your suggestion just then, that we issue a reminder.

Senator GALLAGHER: Thank you. I have some questions for the secretary and some which would be for officers. In terms of Minister Frydenberg, perhaps the department can confirm for me the dates on which Minister Frydenberg's office sought advice from the department in relation to the compliance action involving the property which is partly owned by Jam Land.

Mrs Collins: I can confirm that on 28 July 2017 we provided talking points to the minister's office after there was an article in the media. On 3 August 2017 we provided additional notes to the minister's office in relation to that same media. On 12 October 2017 we provided a general update for the investigation. It was very short—one page. The nature of
the talking points was that it's under investigation and we can't comment on it. There was a briefing note prepared for the meeting which occurred on 25 October 2017. That briefing note was also provided to the minister's office.

**Senator GALLAGHER:** Who was the meeting on the 25th with?

**Mrs Collins:** Mr Knudson was at that meeting.

**Mr Knudson:** That was the meeting with a number of the National Party members—

**Senator GALLAGHER:** The roundtable, also where notes weren't taken. There was a media report that had some other dates—15, 16 and 21 February, 7 March, 30 January, and 11 June. They're in addition to the ones that you just nominated, Mrs Collins, and it was indicated that the department had supplied information about the compliance case to Minister Frydenberg's office on all of those dates.

**Mrs Collins:** On 15, 16 and 21 February there was information provided to me, in emails indicating that I was in discussions with the minister's office. Once again, it was very high level in terms of a brief update on the investigation, some information about the grasslands listing—that sort of nature.

**Senator GALLAGHER:** They were more informal? The minister's office had been in contact with you and you had been saying, 'Look, this is where things are up to'?

**Mrs Collins:** Through the email chain, the indications were that there might have been a conversation where the minister's office was after some information. Those emails were drafted but I have a record of them coming to me. I don't think they were forwarded to the minister's office. But some of the content of those earlier emails was certainly within the content of the ones that were provided.

**Senator GALLAGHER:** Have all of those been released under FOI—all of those different times?

**Mrs Collins:** At least some of them have. And, if not, there's a current FOI request.

**Senator GALLAGHER:** I was going to say if they haven't been, they will be; get prepared. Just in terms of the request for urgent talking points, one of the first approaches to the department where Minister Frydenberg's office sought urgent talking points in relation to the compliance action involving a property part owned, as we know now, by Minister Taylor, because the case had been raised in parliament, what was your understanding of why Minister Frydenberg's office requested urgent talking points? Was that request made in person or via email? From a staff member?

**Mrs Collins:** I'm not sure where that request came into the office but my recollection of that document is that it was on the basis of a phone call with somebody. I know that staff also searched *Hansard* and didn't find a direct mention of it in parliament.

**Senator GALLAGHER:** They did, on that date? Around the time the request came in, they did a search to see whether it had been mentioned in the parliament?

**Mrs Collins:** Yes, that's right. Yes.

**Senator GALLAGHER:** And could they find anything?

**Mrs Collins:** No, nothing specific, nothing specific about Jam Land and grasslands. There was generic native vegetation things but nothing specific.
Mr Knudson: But either way, it's completely appropriate for an office to ask for talking points on the status of an individual project. It happens every week several times, whether it is assessments, compliance matters, whatever. The other point that I would say is: the mention from the minister's office of it being raised in parliament, that could very well have been a conversation between two members of the government in a hallway.

Senator GALLAGHER: It may well have been. But I think the linking that it had been raised in parliament and now 'I need urgent talking points' would normally—I think the linking of those two things—would lead, quite rightly, as officials did, to them going and having a look at the Hansard to see what had been mentioned. When you weren't able to find anything that had been mentioned in the parliament, presumably to base your advice back on, did you follow up with Minister Frydenberg's office about exactly what information they were seeking?

Mr Knudson: Sorry, if I can just interject on that. It would have been Mrs Collins or any part of the department's responsibility to come back to the minister's office with a response to their request, regardless, in some ways, of what the origins of it are. You serve the minister of the day with their requests.

Senator GALLAGHER: Yes, I guess so, except, if you're asked for urgent talking points about something that's raised in the parliament, then—

Mr Knudson: Right.

Senator GALLAGHER: surely you'd tailor your urgent talking points on that.

Mr Knudson: Obviously, if you had that content.

Senator GALLAGHER: When that content is not there, how do you draft your urgent talking points? What are they on?

Mr Knudson: You draft your talking points, like we do every week on several projects, which is about, 'This is the status of the project. This is what's happening. These are the next steps.' And that's what the Office of Compliance did in this case.

Senator GALLAGHER: I can see from Minister Frydenberg's office's point of view, they're asking, on 15 February, which is before the 20 March meeting, that out of the blue, without anything on the public record, for urgent talking points on a matter which involves a colleague. And we can't find any reason why those urgent talking points might have originated.

Mr Knudson: If a minister—and this is very much in speculation—meets with a range of private sector interests, NGO groups, a colleague within the parliament et cetera, we get these types of requests for talking points on the status of projects all the time. There is nothing unusual about this.

Senator GALLAGHER: But this is unusual, in a sense that—I can understand this general business stuff you've been asked for urgent talking points after a matter has been raised in the parliament—the matter hasn't been raised in the parliament, on the public record, and it involves two ministers, including one minister who has a business interest in the matter that Mrs Collins's area is investigating. So it is a bit different from an NGO coming and saying, 'We've got this view.' And that's what we're trying, again, to get to the bottom of. This is quite a different set of circumstances. Can you advise the committee when Minister
Frydenberg said that he first became aware of Minister Taylor's interest in the compliance action was when Minister Taylor requested a meeting with the department? Does that accord with the department's knowledge?

Mrs Collins: That's not something that we would be aware of, necessarily, in the department.

Senator GALLAGHER: Did Minister Frydenberg at any stage—and I don't think he has made a statement to clear up his involvement in this—at any point advise the department of a potential for a conflict of interest in relation to this matter?

Mr Knudson: I certainly had no conversations with the minister to that effect. I'm not aware of anyone else having had one.

Senator GALLAGHER: Did the secretary—

Mr Knudson: Again, that would be up to the parliamentarians to ensure that they're in accordance with the appropriate guidelines and codes that guide their actions with respect to interests.

CHAIR: Senator Gallagher, how much longer do you require?

Senator GALLAGHER: A little bit. Do you want me to hand over, do you?

CHAIR: Could we go to Senator Waters for five minutes?

Senator WATERS: On the same issue.

CHAIR: She wants to question the same officials. They will be here after lunch, obviously, in outcome 1. It is just that we have agencies waiting.

Senator GALLAGHER: I'll finish up where I am and then I'll hand over. Is that all right?

CHAIR: Yes.

Senator GALLAGHER: In terms of Minister Frydenberg, there was no record of his advising the department of a potential for a conflict of interest. Maybe if I hand over to you, Larissa, because I've got a little lost in where I'm going. But I'll come back.

Senator WATERS: Okay. Just sticking with this topic, on a slightly different angle has the department at any point since the investigation into Jam Land began drafted a policy that proposed or considered new conditions for thresholds for the natural temperate grasslands of the South Eastern Highlands?

Mr Richardson: Sorry, Senator, I missed the very last bit of that.

Senator WATERS: Just in relation to the grasslands in question, at any time since the investigation into Jam Land began has the department drafted a policy that proposed considering new condition thresholds for the grasslands?

Mr Richardson: No.

Senator WATERS: Have you been asked to do so by anyone?

Mr Richardson: No.

Senator WATERS: Has it been reviewed in any way?

Mr Richardson: That listing of the grasslands? No.

Senator WATERS: On what specific dates have site visits been conducted by department staff to the Jam Land property?

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ENVIRONMENT AND COMMUNICATIONS LEGISLATION LEGISLATION COMMITTEE
Mr Knudson: Mrs Collins would have the history of most of that.

Mrs Collins: Senator, as you know, the matter is still under investigation; so I won't go into details. But I can say that we've been to the property four times during the investigation.

Senator WATERS: Who went on those visits?

Mrs Collins: A range of compliance officers. We also have taken experts out with us as well.

Senator WATERS: Did Jam Land themselves send any representatives?

Mrs Collins: Yes, they did.

Senator WATERS: Who were they?

Mrs Collins: I haven't got that information in front of me and I don't like to go into the details of an investigation that is still under way.

Senator WATERS: But the presence of the person on site surely doesn't impugn the investigation? Are you able to provide those names and perhaps come back to us after the break?

Mrs Collins: There are three directors of the company whom we have been working with as the landowners. And I don't have the information with me as to who was specifically at each site visit.

Senator WATERS: If you would be able to look at that over the break, because I suspect we're coming back to this outcome, that would be really helpful, thank you.

CHAIR: Senator, I think we just need to have a talk about revealing individual names. I'm happy to talk with you after that about how we can facilitate that. But we'll perhaps have a talk about whether individual names are appropriate from the company.

Senator WATERS: All right, we'll have that talk. Hopefully we can still get the information. Were there any ministers or members of the Taylor family present at those site visits?

Mrs Collins: There were no ministers. And certainly, as the director of the company, Richard Taylor, has been—and I can't say how many of them he was there—but he certainly has been there.

Senator WATERS: To at least some of them?

Mrs Collins: Yes.

Senator WATERS: But you're confirming that no ministers attended any of those site visits with departmental staff?

Mrs Collins: That's correct.

Senator WATERS: On what date did the department decide to launch formal proceedings against Jam Land over the land clearing?

Mrs Collins: We have been investigating the allegations which were made in November 2016.

Senator WATERS: The allegations were made in November 2016, but at what date did the department decide to launch formal proceedings against Jam Land?
Mrs Collins: We wrote to the landowners fairly soon after. So we wrote to the landowners in December 2016.

Senator WATERS: What date did you decide to launch formal proceedings against Jam Land?

Mrs Collins: I'm not sure what you mean by 'launch formal proceedings'?

Senator WATERS: Commence the investigation? That was December—

Mrs Collins: I would count that as commencing an investigation.

Senator WATERS: December 2016. Do you know the specific date?

Mrs Collins: Once again, the matter is still under investigation; so I'm reluctant to disclose a lot of the details.

Senator WATERS: Okay, but December. On what other dates have you had contact with Jam Land about the compliance action? Just months will be okay, if that's all you've got to hand.

Mrs Collins: We've had contact right throughout our investigation. It wouldn't have been every single month since then, but sometimes we'll be waiting on a report or waiting on other information. But we have had ongoing communication throughout the term of the investigation.

Senator WATERS: As you rightly remind us, it's still under way. Why is it taking so long?

Mrs Collins: There are a range of reasons why it's taking as long as it's taking. And in a general sense, it depends on the complexity, it depends on the caseload of a case officer. There are all sorts of things that can influence the length.

Senator WATERS: Are those the reasons why this particular investigation is taking what—almost three years?

Mrs Collins: Yes, I would say in this case they are definitely relevant—

CHAIR: Senator Waters—

Senator WATERS: I'm almost finished, Chair. May I have maybe 2½ more minutes?

CHAIR: One minute.

Senator WATERS: Thank you. Is the particular departmental staff member's workload an issue? That's what you have mentioned. I'm just wondering if that is what has happened here.

Mrs Collins: I'm talking about caseload and I'm also talking about if we see correspondence we don't expect them to turn around and respond to it in the next hour. Things do take time. It depends on the availability of experts. There are all sorts of things that influence it.

Senator WATERS: I might come back to that with my 40 seconds left. When will the department conclude the investigation?

Mrs Collins: We're hoping to conclude it very soon.

Senator WATERS: When will the findings be released?

Mrs Collins: What do you mean by 'released'?
Senator WATERS: When you conclude it? When do you tell the world that you've concluded it?

Mrs Collins: When we've concluded it we'll tell the landowner and then we'll make a decision about whether we make any announcement. And if we do, it will be very soon after the conclusion.

Senator WATERS: Is there any reason why you wouldn't reveal the findings of the investigation publicly?

Mrs Collins: It's something that we do but not necessarily in all cases. So, as I say, we would consider it. Obviously we report on it in terms of aggregate, in terms of number of compliance outcomes, but for some cases we think a media release would be part of a general deterrent, and in other cases not necessarily. We haven't completed the case in this circumstance; so it's too early to say.

Mr Knudson: Sorry, just to be very clear, in the case, for example, while they trade you often won't want to reveal—

Senator WATERS: I'm not interested in that right now. I am just interested in this inquiry.

Mr Knudson: I am just saying there are a number of cases where you will not reveal it because you've got a broader set of interests beyond that one individual. So you don't reveal—

CHAIR: Thanks, Mr Knudson. In the interests of time, we'll leave that there.

Senator WATERS: Thank you. I've got a few more. Perhaps I'll come back to that after lunch.

CHAIR: After lunch we will be there. You have one minute, Senator Gallagher.

Senator GALLAGHER: Mrs Collins, I had some questions around the update on the investigation. Do you know when it will be finalised? Did I just miss that with you? It's close to being finalised?

Mrs Collins: It is very close to being finalised.

Senator GALLAGHER: After estimates, will it?

Mrs Collins: After today?

Senator GALLAGHER: Or tomorrow?

Mr Cahill: Concluding a compliance case could take weeks. It's just a matter of how you actually finalise your determination. So it's very difficult to speculate a date. But I could say quite confidently it's not going to be in the next fortnight. It will take a period of time to make sure you finalise it correctly.

Senator GALLAGHER: Minister Frydenberg said that he became first aware of Minister Taylor's interest in the compliance action when Minister Taylor requested a meeting with the department. We are not quite sure on what date that request, because that is between two ministers, occurred. I accept that. But in terms of information that you provided to Minister Frydenberg's office in response to their request for information, which the earliest date we have for that is 15 February, would that have been the date that Minister Frydenberg became aware of the compliance action, from the department's point of view, in terms of your
imparting information to Minister Frydenberg's office? On what date would that have occurred?

Mrs Collins: I can't say specifically, but certainly we first wrote to the land owner in December, and then we were responding to a request in February. Obviously the minister's office was aware of it fairly soon. The nature of the advice provided to the minister's office in February was that the department was investigating an allegation and, as the matter is ongoing, it would be inappropriate to comment further.

Senator GALLAGHER: Okay.

CHAIR: Senator Gallagher, the group will be back after lunch.

Senator GALLAGHER: Yes. So from your point of view, it was around the request in February, 15 February, that you would have confirmed to Minister Frydenberg that there was an investigation underway?

Mr Knudson: The only caveat on that that I would say is that it is a practice of that area that deals with approvals but also compliance to have fairly regular meetings with advisers to update on a range of projects. I suspect that between that initial writing to the land owner and February that you are pointing out in terms of some written correspondence there was probably some advising of the office in general on the range of matters that would have been in Mrs Collins' area.

Senator GALLAGHER: Can you confirm whether that's the case?

CHAIR: If you could take that on notice?

Mrs Collins: We will take that on notice.

Senator GALLAGHER: You will come back to us. Thank you.

CHAIR: Thank you to officers of the department. We'll see you again after lunch.

Great Barrier Reef Marine Park Authority

[11:32]

CHAIR: I now call the Great Barrier Reef Marine Park Authority. Senator Green, we will be kicking off with you. Mr Thomas, welcome back to estimates. Would you like to make an opening statement?

Mr Thomas: I would. Thank you, Chair. I would like to acknowledge the traditional owners of the Great Barrier Reef and their continuing connections to their land and sea country and pay my respects to the traditional owners of the land upon which we meet today, the Ngunnawal people. The Great Barrier Reef is widely recognised as one of the best-managed marine protected areas in the world and, while its World Heritage values remain whole and intact, our 2019 outlook report confirms it continues to be challenged by a range of pressures, most notably climate change and land-based runoff. Given the impacts of bleaching events and cyclones on the reef over the past five years, it is not surprising that the 2019 outlook report finds the long-term outlook for the reef ecosystem to be very poor. The authority remains concerned about this and continues to assert that actions taken now and over the next 10 years can have a significant influence over the future of the Great Barrier Reef.
The most pressing of these actions is the need to reduce global greenhouse gas emissions in parallel with improving reef water quality, managing for improved marine park compliance, controlling crown-of-thorns starfish and reducing marine debris. The outlook report is an assessment of the likely future condition of the reef and what we expect it to become if these threats are not addressed. The reef is a vast estate, and many areas remain vibrant and ecologically robust. It continues to be an extraordinary experience for visitors to the region, supporting beautiful corals and abundant marine life. The authority encourages everyone to continue to visit the reef and take action to protect it.

The authority continues to deliver world-class management systems to improve the health of the reef. A range of actions are underway to improve reef resilience, from ramping up compliance in no-take areas to tackling damaging outbreaks of crown-of-thorns starfish at high value sites to improve coral cover. These and other management actions are having a real, measurable and positive impact on the Great Barrier Reef now, and we continue to invest our resources in these areas.

We also continue working with traditional owners, management partners, researchers, reef-based industries and local communities to deliver actions to improve the outlook for the reef. Later this year, we look forward to the government’s new 24-metre patrol vessel, the Reef Resilience, joining our fleet of field management vessels. The Reef Resilience should be on the water by the end of the calendar year and will focus on the southern region of the reef, complementing the work of our large vessel in the north, the Reef Ranger, and significantly expanding our management capabilities.

In the lead-up to summer, we will be monitoring forecasts from the Bureau of Meteorology to assess the likelihood of extreme weather events, including any significant bleaching events. We will also resume our weekly reef health updates as of November to ensure the public have the latest and most accurate information on the health of the reef. Thank you.

CHAIR: Thank you. Senator Green.

Senator GREEN: Thank you. You’ve summarised the 2019 Great Barrier Reef outlook report in your opening statement, but I was wondering, if we go to the downgrading of the long-term outlook of the reef from poor to very poor, whether you can explain what conclusions you have reached about the health of the reef and how you came to that assessment?

Mr Thomas: Sure. We think that the outlook report findings shouldn’t be particularly surprising to the public, given two successive bleaching events in 2016 and 2017 and some half a dozen cyclones over the intervening period between the last outlook report in 2014 and now. In terms of the particular criteria that led to that outlook, I might throw to our chief scientist.

Dr Wachenfeld: Just to address the part of your question which was about process, first, the outlook report is evidence based. There are more than 1,400 separate scientific citations that the report is based on. The report is essentially a synthesis of those. There are also specific evidence-based processes that underpin the outlook report, such as workshops with scientists and an independent review of management effectiveness. All of those lines of evidence feed into the report. I should stress that the matter that was downgraded from poor to very poor was the long-term outlook for the reef. That matter was largely a consideration of
the impacts of climate change into the future on current greenhouse gas emissions trajectories. If we look across the very complex range of issues considered in the biodiversity and ecosystem health in terms of the current condition of the park, many of those remain in very good or good condition, but some of those, particularly associated with sea temperature, processes around coral reefs and the condition of coral reefs themselves specifically have declined.

Senator GREEN: The Minister for the Environment, Sussan Ley, visited the reef recently and said, 'It gives me great heart and hope that the future of this magnificent part of the world is a good one.' How does that statement sit with your downgrading of the reef from poor to very poor?

Mr Thomas: I think Minister Ley was probably referring to the fact that there are many areas on the Great Barrier Reef that remain vibrant and are worth visiting. We'd support that statement.

Senator GREEN: You'd support that statement?

Mr Thomas: It's also true that the reef over the last five years has been subject to unprecedented changes. Again, those are bleaching events in 2016 and 2017. So it is a vast estate with varied condition.

Senator GREEN: But the assessment based on the scientific assessment that your chief scientist has gone through says that it's been downgraded from poor to very poor. So how can it also be that the reef has a good one, when she referred to the future of the reef?

Mr Thomas: Again, I'm not sure of the exact statement you're referring to there, but Minister Ley, I think at the time, after her visit, was referring to the fact that the parts of the reef she'd visited she had seen vibrant, abundant coral life.

Senator GREEN: So it depends on what parts of the reef you go to?

Mr Thomas: Absolutely. The variation across the reef is significant.

Senator GREEN: Coral reef scientist Professor Terry Hughes, in a most recent paper, found that the production of baby coral on the reef had fallen by 89 per cent after climate change induced mass bleaching in 2016 and 2017. I think you referred to those two bleaching events, Mr Thomas. Has the authority done any of its own analysis to be able to confirm whether that is the case?

Mr Thomas: I don't think we'd challenge the science of Professor Hughes. Again, our chief scientist, Dr Wachenfeld, may have something further to add, but we are aware of that paper.

Dr Wachenfeld: I think it's important to understand that we're not a research organisation in our own right. We're a marine park management agency. We base the management of the marine park on the best available science, which we get from collaborations with scientists at universities and government research institutions. But we don't go out and conduct surveys of coral recruitment ourselves.

Senator GREEN: I just have a couple of questions about the relationship between the Great Barrier Reef Marine Park Authority and the new Special Envoy for the Great Barrier Reef. Warren Entsch, who is the Special Envoy for the Great Barrier Reef, said that bleaching
and climate change was not a new phenomenon and it has been happening for millennia. Do you agree with that statement? I might ask the chief scientist to answer that one as well.

**Dr Wachenfeld:** As a physiological response of corals, bleaching is a stress response. It probably has been happening for as long as there have been corals. I think what is new is severe mass coral bleaching events that lead to substantial mortality and, in particular, events at the scale of 2016 and 2017, where we saw substantial mortality to areas of the reef. We certainly consider that those are new and highly likely driven by climate change.

**Senator GREEN:** We'll come back to that. I just wanted to ask: what is the authority's relationship with the special envoy?

**Mr Thomas:** We're aware that Mr Entsch is the special envoy. We briefed him following his appointment to that position on our role as marine park managers and have had a couple of engagements with him since his time in that role.

**Senator GREEN:** Do you know when you briefed him? Was it a couple of days after the appointment or a bit longer?

**Mr Thomas:** I would say within the first fortnight.

**Senator GREEN:** In terms of the authority's relationship, what's your understanding of the role in respect to the health of the reef of the special envoy?

**Mr Thomas:** We see the special envoy's role—I understand his role to be, rather, as advocating for constructive actions to help its long-term future.

**Senator GREEN:** Advocating for—sorry, what was that?

**Mr Thomas:** Constructive actions, actions by community to improve the health of the reef.

**Mr Heferen:** The relationship of the special envoy is really through the department rather than GBRMPA, so that can be dealt with when they come on.

**Senator GREEN:** I certainly have some questions for the department about that. I was trying to understand what the authority had been told about the relationship, so thank you. If I can just take you back to your comments about climate change. Is human-induced climate change increasing the frequency and severity of coral bleaching on the reef?

**Mr Thomas:** Yes. We base our management on the best available science, and that science tells us that human actions are exacerbating the effects of climate change.

**Senator GREEN:** We know that the reef supports about 64,000 jobs and that it injects about $6.4 billion into the economy every year. Is climate change the greatest single threat to the health of the reef, and thereby those jobs and the impact to the economy?

**Mr Thomas:** Climate change is absolutely the greatest threat to the Great Barrier Reef, and the Marine Park Authority has stated that quite clearly in our climate change position statement and again through the 2019 outlook report. The direct consequential impacts to economy, jobs and communities of a reef in decline we would need to assess further, but it's a reasonable statement to make.

**Senator GREEN:** I know it's hard to prioritise, but given that climate change is the single greatest threat, where do plastics—plastic and rubbish, in terms of waste in the reef—sit in terms of priorities?
Mr Thomas: It's certainly a significant impact. We have a marine debris position statement highlighting the impacts that marine debris pose in the marine environment. Again, it is referred to in the 2019 outlook report as a key pressure.

Senator GREEN: It's certainly a threat. But if you're not taking into consideration climate change in terms of the greatest threat, it's hard to get an overall outlook of the reef.

Mr Thomas: Sorry, could you just state that question again?

Senator GREEN: I think there's been an increased focus on plastics and trying to draw the focus away from climate change. So I'm just wondering, in your view, if climate change is the greatest threat, and plastics is a threat, what is the priority in terms of those two?

Mr Thomas: I think we see them as not mutually exclusive. We need strong, ongoing global action on climate change to alleviate pressures on the reef, but we also need ongoing strong management actions of the region. Alleviating pressures on the reef—whether it's marine debris, culling crown-of-thorns starfish or restoration activities on islands or in the water—is also important to improve the reef's resilience in the long term.

Senator GREEN: But you certainly need both; that is what I'm asking about.

Mr Thomas: Absolutely.

Senator GREEN: When did you commence your role as CEO of GBRMPA?

Mr Thomas: 18 March this year.

Senator GREEN: When did you stop working for the former Liberal Minister for the Environment?

Mr Thomas: I believe it was late January or early February.

Senator GREEN: Were you employed as an adviser to the environment minister when you expressed your interest in the CEO position?

Mr Thomas: Yes, I was.

Senator GREEN: Did any minister recommend that you apply for that position?

Mr Thomas: No, that was a decision I took.

Senator GREEN: On what date did you stop advising on reef affairs in the department?

Mr Thomas: I believe it was effectively the same day that I decided to apply. I sought to notify the then chief of staff, who sought advice from the department on how best to handle that particular situation. It was decided that a firewall should be established between me and all reef matters.

Senator GREEN: Can you take us through that firewall?

Mr Thomas: Sure. Prior to that, I had the responsibility in the office day to day of providing advice to the minister, and back to the department, for that matter, on matters pertaining to reef policy and programs. From the time I decided to apply, it was decided that I'd no longer have oversight of that work.

Senator GREEN: What was your involvement in the decision to hand the money to the Great Barrier Reef Foundation?
Mr Thomas: I provided advice on that process, prior to deciding to apply for the Great Barrier Reef Marine Park Authority position, in a routine fashion, the way that advisers advise on anything within their ambit.

Senator GREEN: Given you now work as the CEO of GBRMPA, did you advocate for the policy of delivering reef protection money, when you were an adviser, to the Great Barrier Reef Foundation or a similar entity?

Mr Thomas: I didn't advocate for things. I worked in a routine fashion, as any adviser does, to provide advice to the government of the day on approaches that could be taken to best protect the reef.

Senator GREEN: Did you think that the current arrangement with the Great Barrier Reef Foundation would improve the health of the reef? What evidence do you have to support that?

Mr Thomas: I think the reef needs as much effort and elbow grease, if you like, as possible to improve its long-term outlook. In the sense that there's additional funding coming through the Great Barrier Reef Foundation, I think that the authority certainly supports that. The authority has a strong relationship with the Great Barrier Reef Foundation and has had cooperative partnerships with that organisation for many years prior to the reef trust partnership grant, to which I believe you're referring, and we expect that to continue.

Senator GREEN: Are there any other former Liberal and National Party minister advisers now working at the Great Barrier Reef Marine Park Authority?

Mr Thomas: I'm aware of one, yes.

Senator GREEN: Just one?

Mr Thomas: Yes.

Senator GREEN: What role do they have?

Mr Thomas: That's one of our general managers.

Senator GREEN: Who were they an adviser to?

Mr Thomas: I believe they worked under the former Howard government. As for the exact dates and who they worked for, I would need to ask them.

Senator GREEN: That's fine; thank you.

Mr Thomas: I should add that that particular staff member has been at the authority for about a decade and serves the authority with great professionalism.

Senator GREEN: What do you think is the biggest—I know this is a hard question to answer—failing of the Great Barrier Reef Marine Park Authority at the moment?

Mr Thomas: The greatest failing?

Senator GREEN: Yes.

Mr Thomas: I'm not aware of any particular failings. I think that the staff at the authority, the leadership in the authority, are very well placed to help the reef within the resources that we have allocated to us.

Senator GREEN: You wouldn't change anything?

Mr Thomas: We could always use more funding to do our job and do more to help the Great Barrier Reef, but with the resources we have available to us at the moment, the
established lines of work across community, with traditional owners, and running an expanding field management program over the next few years, I think we're very well placed to make a real difference to the reef.

Senator WHISH-WILSON: I have two questions on sharks. The Great Barrier Reef outlook report recognised the importance of sharks and other top predators as being crucial to the health and resilience of the Great Barrier Reef, yet the recent outlook report defined their outlook as 'poor'. There was quantitative information lacking in terms of the number and species of sharks and rays in the region. The information that was available was that some species had declined, others had recovered, and trends for most species were unknown. It said that fishing and climate change were the primary threats to sharks and rays, with at least 17 species considered to be highly vulnerable to exploitation and 30 species at risk from climate change. What actions has the authority taken to ensure that targeted commercial fishing for sharks in the marine park is not detrimental to sharks and the health of the reef?

Mr Thomas: I might need to ask the relevant general manager to answer those particular questions. At the higher level, the Queensland government is undertaking a significant reform to its fisheries—the Queensland Sustainable Fisheries Strategy—and we're wholly supportive of that approach. But in terms of the particulars under that strategy, I'll ask Mr Elliot to comment.

Mr Elliot: As I'm sure you're aware, management of the fisheries in the marine park is the responsibility of the Queensland government, particularly Fisheries Queensland. We work very closely with Fisheries Queensland in terms of addressing the risks to the reef, and the particular risk from fishing is articulated in the outlook report. The biggest initiative probably in the time that I've been with the authority is the new fisheries strategy from Queensland, which is a step change in the management of fisheries in Queensland, and we are very supportive of that activity.

Senator WHISH-WILSON: I'm particularly interested in sharks, Mr Elliot.

Mr Elliot: In terms of sharks, specifically, we've been working with fisheries managers in Queensland to identify how we can improve management of fisheries more generally, and that includes protection of sharks.

Senator WHISH-WILSON: How have you been doing that?

Mr Elliot: Particular initiatives that we've been working with Queensland around are the inclusion of 60 per cent virgin biomass for targeted species within the strategy, which will certainly go a long way to improving all of the targeted species. I note, of course, that our zoning plan contributes significantly to the protection of any species, given that a significant amount of the marine park is closed to fishing and even more of the marine park is closed to particular types of fishing, such as net fishing.

Senator WHISH-WILSON: On that particular point, the data has only just become available. The 2018 data from the Queensland department of fisheries database showed that 3,359 endangered scalloped hammerhead sharks were caught in the actual marine park itself, and more than half of those—1,967—were thrown back, dead. What actions have you taken to protect a species that's been identified by the Australian threatened species committee as endangered?
Mr Thomas: The marine park authority is very concerned about any species that is in rapid decline, and that includes any number of shark species. As Mr Elliot highlighted, we are supportive of the fishing strategy of the Queensland government, the responsible government.

Senator WHISH-WILSON: Does that sound responsible to you—nearly 2,000 endangered sharks being thrown back over the side of the boat, dead? I've raised the question consistently for three years about scalloped hammerhead sharks. I want to know what changes are happening.

Mr Thomas: We hope that the reforms through the Queensland government's fisheries policy will make a difference to those species. We manage a strict compliance program in the marine park to ensure that the zoning arrangements in the marine park are adhered to. Through our permitting system, which is a key element of managing the marine park, we try to ensure that any activity undertaken in the marine park is as sustainable as possible.

Senator WHISH-WILSON: Has there been any more momentum to remove industrial-scale gillnets from the marine park? In terms of your discussions with the Queensland government, has there been any push to do that?

Mr Elliot: In our discussions with Queensland, as part of the working group structure around the implementation of fishing strategies, there is a working group which deals specifically with bycatch, but that would include effects of nets on any non-targeted species, which would also mean effects from non-targeted effort on sharks, as in incidental catch of sharks. That's probably one of the primary mechanisms by which we do that. Senator, you made the statement that the scalloped hammerhead shark was listed as endangered. It is actually listed as 'conservation dependent'.

Senator WHISH-WILSON: I'll certainly be asking some questions about how that happened, given that the committee very clearly recognised and recommended that it be considered as endangered. I'm not quite sure why that was never considered 'endangered', considering very clear advice. I'll ask about that later.

Senator WATERS: On funding, how much is it at the moment? Has it gone up or down since the grant of almost half a billion dollars to the foundation?

Mr Thomas: This year the authority has a budget of just over $74 million for the 2019-20 financial year.

Senator WATERS: How does that compare with previous years?

Mr Thomas: It's within the same vicinity that it has been in since about 2016, when we received funding through the MYEFO process to even out our funding profile.

Senator WATERS: Would you mind taking on notice for me looking back, say, 10 years, because $74 million seems significantly less than I recall? I am happy to be informed otherwise. What are your overall staffing numbers at the moment—full-time equivalents?

Mr Thomas: Full-time equivalents are in the order of 220, I believe.

Senator WATERS: Again, has that gone up or down in the last decade or so?

Ms Leo: It has been increasing. We had an ASL of 210 assigned in 2017-18, it increased to 222 in 2018-19, and now we are up to 224. Against that, we were operating at around 219 at the end of September.

Senator WATERS: What was it prior to 2016?
Ms Leo: I'd need to take that on notice.

Senator Waters: Thank you. I want to build on some questions that Senator Green asked about the reef envoy. How does the reef envoy interact with the workflow of GBRMPA?

Mr Thomas: If we were aware that the reef envoy was attending an event on the reef and we thought we were best placed to provide advice on that event and the stakeholders attending it, we would certainly do that. I said at the start that we provided a briefing to him on his appointment, and on a handful of other matters in the intervening period.

Senator Waters: At his request or at your suggestion?

Mr Thomas: Both, I believe.

Senator Waters: You said there was an initial briefing and you have had a couple of engagements; I think that is what you said. Does that mean that you bumped into him at a function?

Mr Thomas: No, we provided support during an engagement recently at the reef aquarium around marine debris, the launch of a project. That is one instance.

Senator Waters: I too share the concerns expressed about him not accepting the science of climate change and yet being a reef envoy. Has there been any specific briefing to the envoy about climate change being real and being driven by human activity, and the actual impact it's having on the reef?

Mr Thomas: Certainly in our introductory briefings with Mr Entsch we provided him with a comprehensive overview of the authority and what we do to manage the park, as well as all of the pressures on it, particularly climate change, water quality, crown-of-thorns etcetera.

Senator Waters: What was his reaction to that advice?

Mr Thomas: He took on all of that advice.

Senator Waters: He didn't question the science in your presence?

Mr Thomas: Not in my presence.

Senator Waters: Just publicly. Do you know if the special envoy has met with the foundation?

Mr Thomas: I'm not sure.

Senator Waters: We would take it up with them but we can't because they don't come to estimates.

Mr Thomas: I believe they're known to each other but I can't comment as to when they have met or otherwise.

Senator Waters: Can I move now to your climate change position statement which you put out in July, which was, in my view, very strong. I'm sure Dr Wachenfeld can confirm it is based on the best science. Some of the statements are, 'Only the strongest and fastest possible actions to decrease global greenhouse gas emissions will reduce the risks and limit the impacts of climate change on the reef.' It also says, 'The required reduction in greenhouse gas emissions demands an international and national response to secure a better future for the
reef.' What was the response from the government in relation to this strong, and appropriately strong, statement from GBRMPA?

**Mr Thomas:** I can't comment on the particular statements at the time but there was certainly no opposition to the statement that I'm aware of.

**Senator WATERS:** Can you expand on the urgent need for greenhouse gas mitigation by the Australian government to protect the reef's future?

**Mr Thomas:** The authority's position is that we think the strongest possible global action on climate change should be taken to ensure the reef's future. Climate change is obviously a global pressure affecting reefs and other critical habitats worldwide. As to particular settings around climate policy, they are questions that need to be directed to the department.

**Senator WATERS:** Are you resiling from your earlier statement where you said it demanded an international and national response?

**Mr Thomas:** No, not at all. All parties internationally, all nations, right down to the individual, we would say, people should be trying to reduce their carbon footprint.

**Senator WATERS:** I think the chair is giving me the wind-up. I do have probably quite a few more questions, Chair. Can you come back to me, please?

**CHAIR:** We are already pushing against time, Senator Waters. Can you put those on notice?

**Senator WATERS:** No.

**CHAIR:** Okay. We'll have a chat. We'll go to Senator Hanson now for five minutes.

**Senator HANSON:** The reef is very important to Australia, for the tourism that we have here, and what has been said about the fact that the reef is dying has a big impact on our tourism. You're talking about climate change and it is the greatest threat to the Great Barrier Reef. In what way, in your opinion?

**Mr Thomas:** In 2016-17, we saw significant bleaching events on the reef. Actually, I should first start by saying we absolutely acknowledge the importance of the reef to the tourism industry. We see them as a key partner in actually helping us to manage the reef, and we work cheek by jowl with them to make sure that people understand the real health of the reef. The authority has never said that the 'reef is dead'—quite the opposite, in fact.

**Senator HANSON:** I've only got five minutes; so I just want precise answers from you, if I could, please. You talk about the bleaching. How long has bleaching been happening on the reef?

**Mr Thomas:** I might have to ask Dr Wachenfeld to comment on that.

**Dr Wachenfeld:** As we discussed just a few minutes ago, bleaching is a stress response of corals. It's probably been a stress response of corals for as long as there have been corals. What is different is that we are now seeing severe mass coral bleaching events in which very large amounts of coral become severely stressed and then die. In particular and specifically, the events of 2016 and 2017 were very unusual and we do not have records of events like those before. And the heatwaves that caused those events, again, were very unusual.
Senator HANSON: Is it true that bleaching occurred in the 1930s and Sir Charles Maurice Yonge actually recorded it? There had been 26 records of coral bleaching before 1982 but it was not discovered by scientists until the 1960s?

Dr Wachenfeld: I'll take that on notice. But I'd point out that Sir Maurice Yonge was a scientist, so just that position—

Senator HANSON: You say that coral bleaching is affected by the water temperatures, yet up around Indonesia and Thailand, closer to the equator, where the water temperatures are at 29 degrees, it's a known fact that coral actually grows faster and more prolific in warmer temperatures, as it does up around the equator.

Mr Thomas: I think the experience internationally will vary. Certain corals will do differently in different climates, for a range of reasons: local conditions and others—

Senator HANSON: We're talking about water temperature. It's not true what you're saying, that it is based on water temperature, as the gentleman just said here, based on water temperature?

Dr Wachenfeld: Corals all over the world live in waters of quite different temperatures. Even on the Great Barrier Reef the southern end is substantially cooler than the northern end. The coral bleaching problem is that corals are adapted to their local temperatures. And so when they experience unusually hot temperatures, they get stressed, they bleach. If the stress lasts long enough, they die.

Senator HANSON: Is it not true—

Dr Wachenfeld: The fact that corals in Indonesia could withstand higher temperatures than corals in the central Great Barrier Reef is of no benefit to the corals of the central Great Barrier Reef when they die.

Senator HANSON: Is it not true that coral species that tend to bleach are the naturally short-lived species which have algae within the organisms of it and which actually bleach, but then again the symbionts actually re-adapt to water temperatures? Professor Peter Ridd actually commented that the reef is growing 10 per cent faster than it did in the 1940s.

Mr Thomas: On the susceptibility of any given coral—the climate will vary wildly—and according to the species, as to particular species and their lifespan, we would have to come back to you on notice if you've got examples of those particular species.

Senator HANSON: And I'll put to you then: don't you think it is in your interests, because a lot of money, hundreds of millions of dollars, has been put into the Great Barrier Reef—and where this is going—that the true science has not been told? A lot of it's based on laboratory experiments to do with the water and the pH of the water, and it's not true science that's being told to the people of Australia with regards to the Great Barrier Reef? I'll add another thing: is it not true that it is the amount of fresh water that is left after cyclones or storms on the coast that does have the impact on the Great Barrier Reef trying to cope with the fresh water that's released out into the oceans, into the Great Barrier Reef?

Mr Thomas: Just to start, I referred earlier to our 2019 outlook report. We certainly stand by that as what we think is the best synthesis of all available scientific information on the reef. That comes from multiple lines of evidence, whether it's from peer-reviewed science at the tertiary level, from academic journals, from databases across relevant government institutions.
We pull all that together to have the best understanding we can at any one time of the health of the reef and how we should manage it better.

Senator HANSON: And one last question, then—

CHAIR: Senator Hanson, this is your last question.

Senator HANSON: Yes, it is my last question. With the amount of money that you have been given by the taxpayers to address the Great Barrier Reef, how do you intend to address the water temperatures which, as you say, have an impact on the coral? And how do you intend to stop the bleaching, which I believe is a natural occurrence?

Mr Thomas: As the marine park managers, we're managing the reef to make it as resilient as possible into the future, such that any future pressures, whether it's climate change or any other, are less able to cause damage to it. So we try to alleviate those pressures that are within our bounds to manage immediately, such as crown-of-thorns starfish, or improving water quality in catchments, for instance. Beyond that, as I've said before, we are seeking global action on climate change, on an ongoing basis, to relieve pressure on the Great Barrier Reef.

CHAIR: Senator Waters, you have the call for five minutes and then we go to the Snowy Hydro.

Senator WATERS: Has the government discussed the outcome of the World Heritage Committee meeting with you, Mr Thomas, or anyone else in the authority?

Mr Thomas: Yes, we've had discussions with the department about the World Heritage Committee meeting coming up next year.

Senator WATERS: And what is the nature of those discussions? Have any requests been made of the authority?

Mr Thomas: The authority is a key contributor to the state party report that will ultimately go to the World Heritage Committee. We're providing factual information through to the department as part of that process.

Senator WATERS: Have there been any requests for you to have meetings with other nations represented on the World Heritage Committee or their counterpart scientific organisations, for example?

Mr Thomas: Yes. There are two instances where we've had engagement with other parties recently following the 2019 outlook report. Staff and I attended a meeting in Alaska with other World Heritage marine property managers and provided advice to them on the state of the Great Barrier Reef. At that engagement there were members from the World Heritage Centre in attendance and we spoke to them quite frankly about the state of the reef. And separately our Chief Scientist recently went abroad with the department to engage with the World Heritage Centre as well.

Senator WATERS: I'm conscious of the time. Could you provide me, on notice, some more details about those engagements? What documents were provided or what was the nature of the verbal briefings that were given? And what the cost was that was associated with those visits and whether that's something that the authority normally undertakes, conscious of the fact that prior to the last World Heritage Committee meeting five-odd years ago there was a massive spend by the department to send people everywhere to try and convince the world that everything was fine. I'm seeking to establish if this is a repeat pattern and whether the
government is now trying to get GBRMPA to do that. I'm sure you understand the context there.

Mr Thomas: It's certainly not an exercise of that magnitude. This is just us providing support, particularly in light of the 2019 outlook report.

Senator WATERS: Just on that report, I think it was released on 30 August this year. What date was the report given to the minister?

Mr Thomas: In late June. It's due under legislation to be tabled by the end of June. And we gave it to the minister a week or two prior.

Senator WATERS: What was the reason for the delay in the public release?

Mr Thomas: I'm not sure there was a significant delay once we—

Senator WATERS: It was a good maybe six weeks, by my calculation, maybe eight. Hang on, end of August, a good almost three months.

Mr Thomas: They're questions for the minister, I think. We provided the outlook report to government and it's for them when to release it.

Senator WATERS: Perhaps, Mr Heferen, if you could quickly respond what the reason for the delay was?

Mr Heferen: I'm not aware specifically. We can come to that in outcome 1.

Mr Thomas: Actually, secretary, if I may, the minister is obliged to table it within 15 sitting days, and I understand that duty was fulfilled.

Senator WATERS: I'd like an update on the Shen Neng. I understand the award of $35 million was finally granted by the court in February. Have you received that money yet? Has it begun to be spent yet? Is it going to be enough? I thought previous estimates were that you needed about $50 million, not $35 million. Is there going to be a request to government to make up the shortfall? Can you just give me a general update on all of these things, please?

Mr Thomas: Sure. There's quite a lot of planning afoot with respect to that funding. As you appreciate, it's in a remote, challenging environment. But we think it's one of the most ambitious reef restoration projects in the world at the moment. But if Mr Elliot could perhaps comment further.

Mr Elliot: To answer your questions, yes, we do have that money. It is now with the Marine Park Authority. As part of our planning for guiding the remediation, field work has been undertaken just in the last 12 months to help us identify specifically where we need to target and what we need to target. That has been extremely beneficial and the consultants we've engaged are turning that into their final report, which will form the basis of our approach to the market in early next year for the main remediation.

Senator WATERS: For someone else to do the work? It hasn't started yet?

Mr Elliot: The actual remediation itself, no, because we felt that it was extremely important to do the work we've just undertaken so that we could be very targeted in the way we use the money, making sure that we were doing the right remediation at the right place.

Senator WATERS: What's not going to get cleaned up, given that you don't have enough money to do the job?
Mr Elliot: Given the work we've just done, I think that we will get an extremely good outcome in terms of our remediation. And we will address all of the key issues.

Senator WATERS: With respect, that doesn't answer my question. Is there a shortfall of funds or is there not? And if there is, what's not going to get done?

CHAIR: Senator Waters, that is your last question.

Mr Elliot: Until we've actually done the approach to market for the main remediation, I wouldn't be able to answer that question in terms of what might or might not get done.

Senator WATERS: I'll have some more questions on notice.

CHAIR: Mr Thomas, thank you very much.

Snowy Hydro Limited

[12:14]

CHAIR: Mr Broad, welcome to you and your staff. Would you like to make an opening statement?

Mr Broad: No.

CHAIR: Senator Smith.

Senator MARIELLE SMITH: I'm going straight to the business case of Snowy Hydro. Can you confirm to me that Snowy Hydro supported the National Energy Guarantee?

Mr Broad: Sorry, I couldn't hear your question; apologies.

Senator MARIELLE SMITH: I'm talking about the business case of Snowy Hydro. Has Snowy Hydro supported the National Energy Guarantee?

Mr Broad: Yes.

Senator MARIELLE SMITH: Given that there's nothing in place of that, has Snowy 2.0's viability been negatively affected by the continued void in energy policy in Australia, in your opinion?

Mr Broad: No.

Senator MARIELLE SMITH: No impact at all?

Mr Broad: No.

Senator MARIELLE SMITH: So, if there weren't to be a policy put in place of the NEG, your view is that Snowy 2.0 would maintain its viability?

Mr Broad: Yes.

Senator MARIELLE SMITH: Can you expand on that?

Mr Broad: The government's clear target is to meet Paris, and we're part of that. The massive renewables coming into the market will demand eight times of Snowy 2.0. If my colleague Roger Whitby can give you an update on the amount of renewables in the market last Friday, it might give you some order of the magnitude of what we're talking about.

Mr Whitby: Last Friday, the total across the National Electricity Market output from all sources of renewables was approximately 11,500 megawatts. Later that evening, when the sun went down and the wind died down, the output of the renewables was something like 2,500 megawatts. Hence there was a 9,000-megawatt swing, depending on what the wind was doing and how the sun was shining across that day. That gives you a sense of the scale of the
challenge we have in balancing the output of renewables, and hence the viability of Snowy 2 going forward to balance the swing we are seeing.

**Senator MARIELLE SMITH:** Snowy 2.0 is intended to be a stabilising force in the electricity market; is that correct?

**Mr Broad:** Yes. It will fill in the gaps, as Snowy 1 does.

**Senator MARIELLE SMITH:** Barnaby Joyce has described Snowy as a net energy user which would reduce supply. Would you agree with that statement?

**Mr Broad:** To pump water uphill you use more energy than what you gain by running downhill, yes.

**CHAIR:** Senator Smith, I remind you to use the correct titles of members in the other place.

**Senator MARIELLE SMITH:** Sorry—Mr Barnaby Joyce. Would you agree with that statement from Mr Joyce?

**Mr Broad:** Yes. I think his maths are wrong, but the point he's making is that it takes more energy to pump the water uphill than what you generate coming downhill.

**Senator MARIELLE SMITH:** You say his maths are wrong?

**Mr Broad:** The efficiency lost on 2.0—

**Mr Whitby:** It's about 25 per cent; worst case.

**Senator MARIELLE SMITH:** Mr Joyce has further stated that we should prioritise coal; that Australia needs baseload power. Is that your view?

**CHAIR:** Senator Smith, I remind you that you're not able to ask officials for views. You can ask them for facts or explanations, but not for views.

**Mr Broad:** I can't comment on what Mr Joyce may or may not have said.

**Senator MARIELLE SMITH:** This is a storage project whose purpose is provide the storage capacity needed to ensure system reliability in the context of continued growth in renewable energy investment. Is that correct?

**Mr Broad:** Yes.

**Senator MARIELLE SMITH:** So, in order to be viable or achieve its purpose, Snowy would need continued investment in renewable energy; would that be correct?

**Mr Broad:** As my colleague just said, Snowy 2 is required today. With a swing of 9,000 megawatts, and Snowy 2.0 is 2,000 megawatts, we're underdone already. As the market operator has pointed out, with the transition that's going on in the marketplace, the investment in renewables, you're going to need many more 2.0s.

**Senator MARIELLE SMITH:** So, back on the question about coal that I was asking before, is it correct that significant investment in new coal generation is inconsistent with the viability of Snowy 2.0?

**Mr Broad:** No.

**Senator MARIELLE SMITH:** And is it your view that significant new coal-fired power capacity should be built, rather than renewables, over the next 10 years? To replace existing coal-fired power capacity would Snowy 2.0 continue to be needed and viable?
Mr Broad: I can't comment on what others might do. I can tell you that we believe Snowy 2.0 to be viable and it will continue to be viable, as is Snowy 1.0.

Senator MARIELLE SMITH: Is it true that a significant amount of new transmission investment is needed to deliver the benefits and viability of Snowy 2.0?

Mr Broad: There is a significant amount of transmission required to bring renewables to market, and there is existing transmission required for existing Snowy. To give you context, when the blackouts occurred in Victoria last summer, we had 1,500 megawatts sitting in New South Wales that we were unable to get to Victoria.

Senator URQUHART: But we're talking about Snowy 2.0, Mr Broad, not Snowy now. The question related to Snowy 2.0.

Mr Broad: Yes, and I'm pointing out that transmission is required today.

Senator URQUHART: Yes. So is there a significant amount of new transmission, or is there enough?

Mr Broad: No; the transmission today is not enough for existing, so it obviously won't be enough for 2.0.

Senator URQUHART: Okay.

Senator MARIELLE SMITH: Can you provide an update on progress towards this new investment, including what the federal government's role has been in securing it?

Mr Broad: The project got approvals through final investment decision last December. Contracts have been awarded. The early works have started. The federal government, as the owner, has been very supportive. They have invested $1.38 billion in equity in the business. So, they have been very constructive and supportive of 2.0.

Senator MARIELLE SMITH: So a more active role from federal government in supporting this transmission investment is not required?

Mr Broad: The transmission is delivered through the AEMO process. There's a process within the electricity industry for which these things are considered. That's where the transmission matter is being sorted.

Mr Heferen: Senator, Mr Broad was talking about the investment in 2.0 itself. If your question was about what the federal government is doing in relation to transmission investment—

Senator MARIELLE SMITH: To transmission, yes.

Mr Heferen: I am probably best placed to deal with that. As Mr Broad said, AEMO, the Australian Energy Market Operator, which operates the energy market, releases an integrated system plan, often abbreviated to ISP, which outlines the transmission needs for the NEM, the National Electricity Market. AEMO has released one ISP and is scheduled to release another; I think a draft comes out relatively soon. In that it looks to the future and at issues that Mr Broad has raised, the key one being the increase in penetration of variable renewable energy, largely wind and solar, and because of that, what extra transmission might be necessary in the system. The government is then working with relevant jurisdictions, given AEMO's plan of transmission, to decide whether there is any separate action that governments need to take. Normally AEMO would put out the plan, and the transmission owners would then say, 'We need to build this,' and they go through the regular investment tests for transmission, which
provide the costs over a period for consumers. Then the proposition would be, 'Does something else need to happen to bring forward some of that in a shorter period than what AEMO would ordinarily recommend?' The government set up a priority transmission task force. Money was provided in the last budget. Officers who deal with the detail of that aren't present; they'll be here under outcome 4 later this evening. If there are detailed questions, that's probably the best place to have it.

Senator HANSON-YOUNG: Thank you. Just on the funding issues, is that $1.38 billion, as you've referenced, over four years? That's correct?

Mr Broad: The equity will stay in the business. I think the contribution might be over four years. I'll double-check.

Senator HANSON-YOUNG: Yes, could you? Thank you. Does that come out of the Climate Solutions Fund or out of consolidated revenue? Perhaps the secretary is best placed—

Mr Heferen: As an equity injection, it's not like an outlay or like a grant. The commonwealth government will put $1.38 billion into Snowy. Then there's an increase in the asset. So, from a net budget underlying cash point of view, the effect is largely immaterial because the asset has increased and so the ownership has increased, together with there being an asset on the other side.

Senator HANSON-YOUNG: So, is there any impact on the balance of the Climate Solutions Fund?

Mr Heferen: No.

Senator HANSON-YOUNG: Mr Broad, will you keep paying dividends to the Treasurer as 2.0 is being built, or have you been given some type of reprieve?

Mr Broad: We plan to still pay dividends, yes. The project we finance through a combination of equity, debt, and retained earnings. We'll maintain a return on investment of about eight per cent, which should allow us to maintain our current dividend policy, which is 70 per cent of after-tax profits.

Senator HANSON-YOUNG: And there's been no conversation about whether that should be reduced or discounted?

Mr Broad: There have been lots of conversations over the last two years, but that was where we all got to in the end, yes.

Senator HANSON-YOUNG: So an agreement that dividends would continue to be paid at the current rate?

Mr Broad: Yes.

Senator HANSON-YOUNG: So you're suggesting that there's no reduction of any other government fund in order to provide this equity? Or is it that the way you've budgeted means that, over time, it will come back?

Mr Heferen: The former is correct.

Senator HANSON-YOUNG: Okay. Can I go back to some of the broader concerns that have been recently raised about the project? You would know that a number of concerns have been raised about the environmental impacts, as well as the cost-effectiveness, of the project.
Are you looking at various options of size, or are you seeking environmental approval in relation to the EIS on just one model, one blueprint?

Mr Broad: The EIS is for 2.0. Any other change would be a separate EIS.

Senator HANSON-YOUNG: The EIS requires alternative versions to be looked at, doesn't it?

Mr Broad: I'm not sure what you mean by that. Alternative construction methods? Yes, we've done all that. We have significantly altered from our original, particularly to stay away from some of the most sensitive environmental areas in the high plains. We originally had an access point on the high plains, which we do not have now. Most of the work is being done in a place called Lobs Hole. Lobs Hole is not pristine national park; it's an old ex-copper mine, which has heavy amounts of contaminated land about it. It is part of a park that will be rehabilitated post-2.0. So we've gone to lengths to minimise impact, and when operational it will have a 0.01 per cent impact on the park.

Senator HANSON-YOUNG: So, you haven't come up with any other options that you would submit under the EIS for consideration, whether they are larger or smaller?

Mr Broad: No. Prior to 2.0 we did. I'm getting advice here, and it says: 'We looked at other project option sites as required'.

Senator HANSON-YOUNG: The project area is one-third of the entire Kosciuszko national park, 17 square kilometres. That's a pretty big area.

Mr Broad: I'm not sure where one-third comes from. The impact will be, for the construction, 0.025 per cent. Once operational, it's 0.01 per cent; that's one-hundredth of the park.

Senator HANSON-YOUNG: So how many square kilometres?

Mr Broad: In the construction phase, it's 16 square kilometres of impact and in the operation phase—

Mr Whitby: It's under one square kilometre.

Senator HANSON-YOUNG: And at this point you have no other plans for either a larger project or a smaller project?

Mr Broad: We always have lots of plans, but we have not submitted any other plan for approval, no.

Senator HANSON-YOUNG: Are there any plans to collect equity for a smaller or a larger project?

Mr Broad: No.

Senator HANSON-YOUNG: What would you do if you had to scale down the project? Would that be feasible?

Mr Broad: I think that would be a poor outcome for the environment and for the economy.

Senator HANSON-YOUNG: The environment, how so?

Mr Broad: Because the amount of renewables you can get into the market would be significantly reduced.
Senator HANSON-YOUNG: Right. Not the physical environment. Just to be clear, you're not talking about the physical environment?

Mr Whitby: Just to be clear, you would have something like the same level of impact on the park to build a smaller screen as you would as to what's proposed for Snowy 2.0.

Senator HANSON-YOUNG: There were some questions being asked by Senator Smith earlier in relation to comments made by Mr Joyce. The project will, presumably, buy wholesale power when it is at its cheapest, right?

Mr Broad: Yes.

Senator HANSON-YOUNG: Would you, and do you, expect Snowy to enter into contracts to buy it regularly at a fixed time or simply to rely on the spot market?

Mr Broad: Primarily the spot market.

Senator HANSON-YOUNG: Okay. When do you expect the most consistently cheapest time to buy power in 2028 will be?

Mr Broad: To give you some feel, we are pumping significantly in existing Snowy now with prices, particularly in the middle of the day, being driven by solar.

Senator HANSON-YOUNG: Driven by solar. Do you think that that is going to be consistent in nine or so years?

Mr Broad: With the amount of renewables penetrating the market, you'd expect that that would be the case.

Senator HANSON-YOUNG: Okay. Can I just go back to some of the issues of the storage capacity. Tumut 3 already has pump storage capacity; correct?

Mr Broad: Yes.

Senator HANSON-YOUNG: And what is that?

Mr Broad: My colleague will go through the technical details.

Mr Whitby: There's 600 megawatts of pumping capability. I think that's the easiest way to define it.

Senator HANSON-YOUNG: I've got here some notes saying that it's averaged over 1.5 per cent over the past decade. Would that be—

Mr Whitby: No. That's presumably some sort of measure, what historically has been used for pumping capability. But I can happily give you some update on those figures, if you like.

Senator HANSON-YOUNG: That would be helpful. Do you need to take that on notice?

Mr Whitby: I'm happy to do that now.

CHAIR: Is there time?

Senator HANSON-YOUNG: Let's just see how long it takes, first, Chair. Sorry, continue.

Mr Whitby: Just to give you an example of the increase in pumping, over the beginning of the year to the end of September, we've pumped three times the quantity at Tumut 3 that we did in the preceding period. The quantity has gone up threefold in the last year alone.

Senator HANSON-YOUNG: So you're saying that the utilisation of it has increased?

Mr Whitby: Significantly.
Senator HANSON-YOUNG: In the last six to 12 months.

Mr Whitby: Correct.

Mr Broad: And by the drought as much as anything else, too. We are in the most severe drought, and the forecasts are that the drought is going to continue on. So we're right up there in terms of the really severe end of the drought. To maintain power, we then re-circulate the water down to T3 to keep the lights on when demand is high.

Senator HANSON-YOUNG: What do you expect will change over the next five or so years—and I guess I'm thinking towards the 2028 deadline—where you need to jump from the current storage capacity at the moment to what would be set for 2025-28?

Mr Broad: That's a very good question. The market is unfolding very quickly, I can tell you that much. The amount of renewables coming into the market, as my colleague said last Friday, is at a point where it is the amount of storage capacity you're going to need. So we're looking forward to seeing Tassie Hydro storage capacity come to market. We know that Shoalhaven is being invested significantly from Origin and other projects in South Australia that are being invested. So there's a significant amount of that coming on. Plus batteries are coming on more and more. The home installation of solar with batteries is increasing rapidly. As all of those things unfold, the question is what you need post-25, because we do think Snowy 2.0 will be probably at its peak by the mid- to late 20s. So not long after it's in operation, it will be used flat out.

Senator HANSON-YOUNG: In relation to the $5.1 billion contract, is there anything that isn't covered in that, then, in order to make sure that that the best business case is the most robust?

Mr Broad: On the financing, as we said at feasibility, in 2017 dollars, the construction costs, the capital cost, was 3.8 billion to 4.5 billion, in nominal dollars, so it was rolled up to 5.1, which was the cost escalators the contractors had. All of the costs associated with the contract are in that 5.1. There will be additional costs associated with the EIS approval. There will be additional costs with the RAP contract, and we are building contingencies into those numbers for uncertainties that will come given the nature and size of this project.

Senator HANSON-YOUNG: I know that we were asking some questions about transmission earlier. What do you think the current estimate of transmission expenditure will be?

Mr Broad: I'd have to defer to my colleagues in the department.

Senator HANSON-YOUNG: You haven't had to factor that into your current forecast?

Mr Broad: No. We do know—and it was the point I was trying to make—that the transmission was built for a point in time and has served us well. It needs to change, and those things are being considered, as the department explained, through a proper process, and they will be determined accordingly.

Senator HANSON-YOUNG: My final question: why was the investment decision made on the basis of a cost of 3.8 to 4.5 billion and now we're talking about 5.1 billion? Can you explain what is the difference there, and why?

Mr Broad: One is in 2017 dollars and the other one is in 2025 dollars.

Senator HANSON-YOUNG: So it is simply inflation?
Mr Whitby: Cost escalation.

Mr Broad: Escalation in costs. What we try to do with the contract—

Senator HANSON-YOUNG: Is there a particular element that had a higher cost increase than other parts?

Mr Broad: We try to lock down with the contractor an all-up cost. We don't want to be subjected to escalation during the course of construction. In the contract, obviously, there will be some risks that we share between us and the contractor on rocks and other things, but we lock down the full cost escalator so we don't get caught in whatever the CPI is, so whether wages go up or whether other things and costs go up.

Senator HANSON-YOUNG: So is this a buffer, effectively?

Mr Broad: No, this is their cost. We've locked it in and signed a contract so they can't come back to us for any more.

Senator HANSON-YOUNG: So you have no expectation that in 12 months, 18 months, three years time, you're going to be back at this table telling us that it's increased again?

Mr Broad: I'm saying that we put a contingency on top of those numbers in case there is something like an environmental issue or something of that nature which we have to cover. As part of contract negotiations, you don't want to signal to the contractor what you might have in your own contingency, because they'll want to come back. It's in their interests to come back.

Senator HANSON-YOUNG: How much is that contingency worth?

CHAIR: Senator Hanson-Young, you've had your last question.

Senator HANSON-YOUNG: How much is that contingency worth?

Mr Broad: As I said, I don't like to signal. I could give it to you in confidence, but I don't want to signal it to the wider public.

Senator HANSON-YOUNG: I would appreciate it in confidence, if you could take that on notice. Thank you.

CHAIR: Senator Davey, you have a maximum of five minutes.

Senator DAVEY: Thank you. I have a couple of brief questions. Just to throw a spanner in the works, I'm actually going to ask some questions about your water storage, not your power storage, given that you haven't been called to attend on Friday with the other water agencies, which is interesting. Firstly, Snowy Hydro was originally constructed as a dual purpose system for both water reliability as well as power generation. Can you, for the benefit of the committee, give us a very quick overview of how you achieve those dual objectives?

Mr Broad: Yes. I'll let my colleague go to that in detail, except to say to you that we grew out of a need for water. Don't lose sight of that. Our number one is to move water to our farmers. The hydro came so that the farmers didn't have to pay for that water, and the hydro came as a secondary thought because a little town called Canberra was emerging and they needed power. So the concept of creating the food basin of the nation goes back to the 1860s. Our forefathers dreamed big, and I'd ask everybody to stop for a second and think what it would be like if we didn't have Snowy, given that in these very dry times in the Murray and the Murrumbidgee we're making up between 30 per cent and 60 per cent of the flow today.
All our requirements for water releases are determined in our water licence, which is gold for us. We don't have the ability to move outside of it.

**Senator DAVEY:** Thank you. My understanding of your water licence is that it is a New South Wales water licence; am I correct?

**Mr Broad:** Yes.

**Senator DAVEY:** And you have a set requirement of how much you have to release into the Murray and the Murrumbidgee?

**Mr Broad:** It is a bit more complicated than that. If you would like me to go into some detail? You and I might think about it that way, but my good colleague here will go into the intricacies. At the time, as you would imagine, between New South Wales and Victoria there was a lot of argy-bargy as to how that might work.

**Mr Whitby:** And indeed South Australia.

**Mr Broad:** And South Australia. The technical requirements and the reporting of all of that are incredibly complex, including audited checks. Water is gold, as you and I know, and the balance between different parts of the scheme are very closely watched by everyone involved.

**Senator DAVEY:** I couldn't agree more. However, of interest today, in particular, you mentioned earlier that the use of Tumut 3 this year has gone up and you said the drought is pushing up the use of your pumped hydro storage. Can you just explain the concept as to why the drought is making the pumped hydro component of the business more beneficial?

**Mr Whitby:** That is a very good question. When there's drought, and particularly accumulated drought, that reduces the quantity of water that we have available to release. We get less storage hydro production. So, simply, we make up that shortfall by utilising pumped capability rather than the storage capability.

**Mr Broad:** I should say, just so we're clear, that that doesn't mean a reduction in any way, shape or form of how much water we release to our farmers—none.

**Mr Whitby:** That's regulated, obviously, by the water licence.

**Senator DAVEY:** I look forward to seeing you out there. Thank you very much.

**CHAIR:** Mr Broad and Mr Whitby, thank you very much.

**Threatened Species Scientific Committee**

[12:43]

**CHAIR:** Can I call for the Threatened Species Scientific Committee, please. We will go through until one o'clock to be fair to Broadcasting and Hansard, to give them a break. So I'll
ask people to keep questions short and answers short. Professor Marsh, welcome. I understand that this is your first appearance as a committee and individually before estimates. Do you wish to make an opening statement at all?

Prof. Marsh: Yes. I understand that I've been invited to appear before the committee because of issues around the time that the committee has taken with regard to the listing assessment for the Australian sea lion. I would like to explain that the time taken by the committee—

Senator HANSON-YOUNG: That's probably one of my biggest bugbears, so thank you.

Prof. Marsh: Sea lions are good. Okay. The time taken by the TSSC to reconsider the listing status of the Australian sea lion reflects the complexity of the modelling process required to determine whether or not this species meets the EPBC Act criteria for uplisting its status from vulnerable to endangered. The complexity of this process has been compounded by serious concerns about the appropriateness of the modelling that was cited in the nomination document that proposed the change. These concerns were raised by experts in the public consultation process and have since been reinforced in correspondence with the International Union for Conservation of Nature. Meanwhile, I want to assure the committee that the species continues to be protected as a matter of national environmental significance under the EPBC Act because it's been listed as vulnerable on the threatened species list since 2004 and has a recovery plan in place.

CHAIR: Thank you very much. Senator Urquhart.

Senator URQUHART: I've only got about four questions, and they're in relation to the listings and upgraded listings of species. Can you tell me whether or not those listings and upgraded listings have resulted in improvements to threatened species, and where and how?

Mr Richardson: Part of the responsibilities of my branch is for the secretariat to the threatened species scientific committee. Potentially, we could go through the role of the committee. They have statutory responsibilities under the EPBC Act to advise on—

Senator URQUHART: Do you want me to ask this after lunch?

Mr Richardson: I think that would be more appropriate. It is more likely that the department would be able to respond to that, rather than the committee.

Senator URQUHART: I'll ask a couple of questions. Are you able to tell me where any recommendations that come from the committee are not resulting in improvements to species?

Prof. Marsh: The committee makes recommendations to the minister and there are subsequent decisions about planning instruments that may be put in place. That can affect the expenditure of Commonwealth money in terms of the support of such plans.

Senator URQUHART: As the committee puts recommendations to the minister, and if there aren't improvements, is that linked to a budgetary issue?

Prof. Marsh: It's largely a budgetary issue, I believe, but that's not part of the committee's responsibility.

Senator URQUHART: No, of course; I understand that.

Prof. Marsh: The committee's responsibility is to make listing assessments against scientific criteria, and to make recommendations with regard to planning instruments, particularly recovery plans.
Senator URQUHART: You said that you provide advice to the minister. The website says that you provide advice to the minister for the environment and energy. Can you clarify which minister?

Prof. Marsh: We make recommendations to the Minister for the Environment.

Senator HANSON-YOUNG: Minister Ley?

Prof. Marsh: Yes.

Senator URQUHART: Are there instances where your recommendations have not been accepted?

Prof. Marsh: No. Our recommendations for listing have always been accepted, in my time. There were two ecological communities where the recommendations for listing accepted by Mr Butler were subsequently disallowed in the parliament, but the recommendations for listing have, as far as I can remember, always been accepted by the minister.

Senator HANSON-YOUNG: In relation to your opening statement, and somewhat of an explanation about the sea lions, when will we expect a decision as to whether the sea lions will be uplisted or not?

Prof. Marsh: After the experts, two experts, queried the modelling approach that was used in the nomination document, the committee, as is required under the act, investigated the matter further. We investigated an alternative modelling approach, which we have decided didn't provide very useful information. We now have a revised draft listing advice, which we have referred back, as is appropriate under the common assessment method, to the governments of South Australia and Western Australia, and invited them to undertake more modelling. We have asked, and been granted by the minister, extra time, until October 2020, for this modelling to be completed and peer reviewed. The modelling is really complicated, largely because the data that are available are inadequate. This species is extremely difficult to monitor. It occurs in a very large number of very remote and inaccessible places. The period over which the modelling has to take is hindcasting for 38 years—back to 1981. Actually, there are very few data collected for that time. To be honest with you, we are very uncertain about what the most appropriate modelling to deal with this data can be. That's why, with some advice, we have invited the experts in South Australia and Western Australia to redo the modelling.

Senator HANSON-YOUNG: Could you outline the current workload that you have, as a committee? It's not just the Australian sea lions; there have been significant delays. In the information that I've been given, it is not just in terms of species but also no critical habitat has been listed since 2007, with only five places on the register. There is clearly a breadth of work. What is the problem? Is it a lack of resourcing? Is it disputes amongst the committee? What is the problem, and why aren't we getting some answers?

Prof. Marsh: Currently, there are nearly 100 species and ecological communities on our work plan. The speed of the work is largely constrained by resources, in terms of both the committee and the department. Actually, I can't think of a single species or ecological community, in my time since 2011, when I've been on the committee where the speed at which we can address these assessments has been in any way held up by differences within the committee.

Senator HANSON-YOUNG: So it's all resources?
Prof. Marsh: It's largely resources.

Senator HANSON-YOUNG: Would you be able to take on notice the work plan that you currently have? I'd like to know what species we're talking about, what habitats, the status, and, of course, the reasons for delay.

Prof. Marsh: I'd have to ask for that question to be taken on notice.

Senator HANSON-YOUNG: Yes, I understand that. Take it on notice.

Prof. Marsh: Certainly, we can give you the details of the species on our work plan.

Mr Richardson: There is a requirement under the act to publish the final assessment list, which is all of the species and ecological community and key threatening process listing assessments that are on the books for the committee. That's published and was updated about a month ago.

Senator HANSON-YOUNG: What I'm asking for is this: between the list of the things that you've got to work on and the blow-out in time, I want to understand what it is. We don't want to have to get you back for every 101 species, like we've done with the sea lions, to get you to outline that. We want a bit more information than what is currently available.

Prof. Marsh: I can certainly advise you about the species that are particularly challenging, like this one, in terms of the complexity of the modelling et cetera that is required.

CHAIR: Professor Marsh, could you take, as part of your answer on notice, to provide that information? We are very pushed for time.

Prof. Marsh: Okay.

Senator PATRICK: My questions also go to the sea lions, and some have been answered in the answers that you've given to Senator Hanson-Young. The decision was initially due on 30 September 2018. The first extension occurred, to 20 March 2019, 'to allow for technical analysis and consultation with state and territory governments'. It seems from your answer, if I heard it correctly, that we're back in the same spot now. In terms of process, I understand you're saying that you're doing some modelling. I presume these are mathematical models that are produced—that they are international or national models used for species; or are they developed specifically for each species?

Prof. Marsh: The initial modelling that was done in the nomination document was modelling that was suggested by the International Union for Conservation of Nature. When the queries were raised in the public consultation process by two experts about the veracity or the appropriateness of this modelling, we went back to the International Union for Conservation of Nature, who, when they saw the details, said they thought that it wasn't the most appropriate modelling. We have subsequently looked at a couple of other modelling approaches, and they haven't really provided useful information of the nature that we need to make a determination. The modelling that will be required for this species is certainly not off the shelf, because the particular problems with the data are very unusual. This species breeds at many different place and they're not synchronised, and the data are really uneven. It is very difficult.

Senator PATRICK: To be clear, you're not seeking from the South Australian government any additional data?

Prof. Marsh: No.
Senator PATRICK: You're satisfied that you have all of the data that you can get; it's simply a case of someone being contracted to produce a model that resolves the problems that were referred to by the two experts? Is that where we're up to?

Prof. Marsh: That is correct.

Senator PATRICK: Who has been tasked to do that modelling?

Prof. Marsh: We have recently written to the South Australian and the Western Australian governments, inviting them to seek specific specialised statistical advice on this. We haven't had a response.

Senator PATRICK: When did you write?

Prof. Marsh: We wrote initially—

Mr Richardson: I can't remember.

Prof. Marsh: I can't remember either; I'm sorry.

Senator PATRICK: Order of magnitude?

Prof. Marsh: Over the last few months. We've written again, actually, just last week, with some additional suggestions from one member of the committee, who is an expert modeller, who has been thinking about it and has made some additional suggestions to what was in our first letter.

Senator PATRICK: If I hear you correctly, the South Australian government is not responding?

Prof. Marsh: We haven't yet heard in response.

Senator PATRICK: You've identified a problem with the modelling; who will actually do the modelling? Will that be someone who is contracted? Will it be someone within the federal Public service, a mathematician, will it be contracted by the Commonwealth, or are you expecting it to be contracted by the South Australian government?

Prof. Marsh: We've suggested it would be appropriate for the South Australian government to consult with a professional statistician. If they want to come back to us and if there's a financial problem about that—but we haven't heard anything about that.

Senator PATRICK: Why aren't you in a position to simply consult with that expert yourselves?

Prof. Marsh: I think it's always better to have the modelling done by close collaboration between the scientist who has collected the data and the expert modeller. The reason I say that is that every model has underlying assumptions, and it is very important that the biologist is working with the modeller to see which of those assumptions is appropriate or not.

Senator PATRICK: I have one last question. The third extension is to 30 October, 2020. Are you confident you'll hit that deadline?

Prof. Marsh: I think that, if it isn't possible for the extra modelling to provide a clear answer, we will recommend to the minister that the species remain listed as vulnerable under another criterion under the EPBC Act which doesn't require such detailed estimates of a population decline. And we know that the species continues to be eligible, as a matter of national environmental significance, to be listed as vulnerable under that criterion. What we
are trying to establish is whether it is eligible to be listed as endangered and, if that is the case, that needs to be done by the additional modelling.

**Senator HANSON-YOUNG:** Drilling in the Great Australian Bight wouldn't help.

**CHAIR:** Senator Hanson-Young, you do not have the call. Senator McMahon, a question on notice.

**Senator McMAHON:** Yes, a very quick question on notice. I understand that there's a commitment of $100 million to the Environment Restoration Fund to contribute to feral cat management. Could I get details of what that money is to be spent on?

**Prof. Marsh:** I think that's a question for the department.

**CHAIR:** Senator, that's a question for outcome 1, which is just after lunch.

**Senator McMAHON:** Okay.

**Senator WHISH-WILSON:** Can I ask a question to be taken on notice.

**CHAIR:** On notice, yes.

**Senator WHISH-WILSON:** It is on Tasmania's giant kelp forests. Hello again, Professor. I'll probably be able to hear you today, unlike last time we caught up. The giant kelp forests in 2012 was listed as a threatened ecological community but I understand that there is some funding at the moment to look at regrowing those kelp forests, which have largely been lost in Tasmania, and I was just wondering if you could take on notice if there's any program that the department are working on with IMAS or any research institutions in that regard.

**Prof. Marsh:** We can take it on notice to the department.

**Senator WHISH-WILSON:** Or I can have a chat to you as well. Secondly, just in relation to the scalloped hammerhead shark, I can ask some questions in the next segment but I understand that you gave advice regarding the listing of the scalloped hammerhead shark and the Queensland and the Northern Territory governments would implement certain measures 'without alteration and in force under law prior to the species being listed as conservation dependent'. Could you take on notice: firstly, did the Queensland and Northern Territory governments do this? Secondly, has the committee discussed the non-implementation of these measures with the government? And has the committee further evaluated or has any new evidence come forward regarding the stock of scalloped hammerhead sharks?

**Prof. Marsh:** I can answer that question now if you like.

**CHAIR:** No, on notice, please.

**Prof. Marsh:** You'd like it on notice?

**CHAIR:** Yes, Professor. Thank you for your evidence.

**Proceedings suspended from 13:03 to 13:45**

**CHAIR:** The committee will resume its examination of the Department of the Environment and Energy with outcome 1. We will commence with Senator Abetz, for five minutes.

**Senator ABETZ:** My question relates to the Biodiversity Fund: from that I understand a grant was issued to remove 218 hectares of eucalyptus nitens from the 2013 minor boundary
modification to the Tasmanian Wilderness World Heritage area. Who can give us a progress report as to how much of the plantation has been removed, and if any remains?

Ms Campbell: I would have to take on notice the specific details of the Biodiversity Fund project, so we will do that.

Senator ABETZ: Okay. There was another project where a grant recipient was funded to deliver 24,000 trees in former forestry coupe Arve 009B. I'm assuming nobody is able to tell me about that, either.

Ms Campbell: That's correct. We will take that on notice as well.

Senator ABETZ: If that's correct, I will take my leave and provide those questions to you on notice. Chair, can we record that it was under five minutes?

CHAIR: Senator Urquhart will be eternally grateful, I'm sure.

Senator URQUHART: Mr Heferen, can you tell me what the department's budget is? I mean departmental funding as separate to administrative funding.

Mr Heferen: I might call the chief operating officer.

Ms Goodwin: The appropriation is $441,902 million.

Senator URQUHART: Is that a change from last year?

Ms Goodwin: Yes; it is an increase of $37,963,000.

Senator URQUHART: What programs have been increased as a result of that extra $37 million?

Ms Goodwin: In terms of changes published since the PBS, we have an action plan to reduce power prices, supporting Australia's participation in the high-level panel on sustainable oceans, the Copper String 2.0 project, expediting the Antarctic runway business case, the Powering Forward campaign, reprofiling ARENA, and the transfer of responsibility of the registered environmental organisations.

Senator URQUHART: I'm happy for you to take that on notice, but can you give me a breakdown of how that $37 million fits into each of the categories?

Ms Goodwin: Yes, I'll take that on notice.

Senator URQUHART: What about the administered funding? What is that budget?

Ms Goodwin: Sorry, we had our CFO here during the general questions available to answer all of those questions, and he has now left when we've closed off the general questions. Can I take that on notice?

Senator URQUHART: You can; but do you know if there's a change from last year?

Mr Knudson: Almost by definition I'm sure there has been.

Senator URQUHART: Has it been an increase or a decrease, Mr Knudson?

Mr Knudson: We can certainly come back to you on that.

Senator URQUHART: You can take it on notice. Can I have the total spend on all environmental programs for each year since 2013? I am happy for you to take that on notice.

Ms Goodwin: We will take that on notice. I will note, though, that there is change across that period. Since 2013 we've had multiple machinery-of-government changes and internal restructures, so it's hard to have a comparable number, but we'll definitely take that on notice.
Senator URQUHART: I know that it will be difficult, but can you also supply the total spend on programs related to each outcome for each year since 2013?

Ms Goodwin: Yes, I can do that now if you like.

Senator URQUHART: Terrific.

Ms Goodwin: Would you like me to do 2014-15, and then 2019-20? Or would you like it across that period?

Senator URQUHART: If you can do it across that period, that would be useful.

Ms Goodwin: In millions: for outcome 1, in 2014-15 it is $650,680; for 2015-16 it is $661,850; for 2016-17 it is $668,953; for 2017-18 it is $1,045,470; for 2018-19 it is $548,953; and for 2019-20 it is $629,902. For outcome 2: in 2014-15 it is $58,944; for 2015-16 it is $57,846; for 2016-17 it is $57,846; for 2017-18 it is $57,456; for 2018-19 it is $52,298 and for 2019-20 it is $51,373. For outcome 3: in 2014-15 it is $135,154; for 2015-16 it is $217,487; for 2016-17 it is $213,621; for 2017-18 it is $240,442; for 2018-19 it is $234,589; and for 2019-20 it is $280,514. For outcome 4: in 2014-15 it is $247,054; in 2015-16 it is $88,382; for 2016-17 it is $45,376; for 2017-18 it is $87,700; for 2018-19 it is $129,319; and for 2019-20 it is $126,420. So, reiterating, it has been influenced by a range of factors, including the changes in the department's outcome structure. For example, due to machinery-of-government changes, most water functions moved from the department in 2015-16 and energy functions moved into the department in 2016-17. In 2014-15 and 2015-16, outcome 4 figures represent funding for water functions. From 2016-17, outcome 4 represents funding to support the reliable, sustainable and secure operations of energy markets. The water functions remaining with the department are included in outcome 1 from 2016-17. In 2017-18, outcome 1 figures peaked due to the Great Barrier Reef Foundation Partnership commitment.

Senator URQUHART: I haven't done the maths, but has funding for environmental programs increased or decreased overall since 2013—bearing in mind that there have been changes?

Ms Goodwin: According to the figures that I've just given you, they're about the same. They have decreased a little, noting the factors I have just explained to you, which have varied those numbers. It's hard to do a direct comparison.

Senator URQUHART: I understand that. That's all I have on budget, but we have some more on Great Barrier Reef.

CHAIR: Do you have any on budget-type outcomes?

Senator HANSON-YOUNG: Possibly; some of the questions I have about the EPBC review might have some budgetary impacts.

Senator URQUHART: We have some questions linked to other things around budget, but on direct budget that's all I have.

CHAIR: If there's nothing on direct budget, do you want to continue for the next eight minutes, then we will go to the Greens?

Senator GREEN: Thank you. We spoke about this earlier today, but you've indicated that this is the best time to talk about the role of the special envoy. I have an article here dated 8 October from the Cairns Post. I have a few copies, and I'm happy to provide them. It says,
'How I'll fix the reef'. It's an article about Warren Entsch and his role as the special envoy. If you want, we can table that. In the article Mr Entsch is quoted as saying in reference to the special envoy role, 'Of course it's a PR job, making sure people acknowledge what is being done. We are the best reef managers in the world and we also do the same thing with plastics. People will come to us to learn how to do it.' That was in response to being asked whether this is just a PR stunt. Mr Entsch's reply was, 'Of course it's a PR job.' My question is: what is the job of the special envoy for the reef? Is it just a PR job?

Mr Heferen: Not wanting to be pedantic, but you went from a PR 'stunt' to a PR 'job'. A public relations 'stunt' and a public relations 'job' are quite different things.

Mr Oxley: Mr Entsch's core responsibility is to support Minister Ley and work with Assistant Minister Evans in implementation of the Reef 2050 Plan. Part of those responsibilities is to go out and actively engage with the public and members of the community across the full length of the Great Barrier Reef Marine Park catchment and all of the industries and interest sectors. As part of that role, Mr Entsch is expected to make sure that, as best he can, there is a good public understanding of the comprehensive set of programs and initiatives being implemented by the government under the Reef 2050 Plan to improve the health and resilience of the Great Barrier Reef.

Senator GREEN: Is that information available in a document somewhere? Has the government made that publicly available?

Mr Oxley: I will have to take on notice—

Senator GREEN: The description of the role.

Mr Oxley: a public description of the envoy's role. I'll take that on notice. I don't know whether that's public.

Senator GREEN: Okay, we'll take that on notice. What kind of brief did Mr Entsch receive for his role as the reef envoy, and how is that brief provided?

Mr Oxley: I'm trying to think back as to whether we shared elements of the incoming government brief with Mr Entsch. In terms of a written briefing, I'll take that on notice. But certainly there was, early in Mr Entsch's engagement as the reef envoy, a series of verbal briefings with the department.

Senator GREEN: Any text messages?

Mr Oxley: Senator, you asked about briefings. Text messages—I don't know. I don't recall having had a text exchange with Mr Entsch.

Senator GREEN: How many staff have been allocated to Mr Entsch as reef envoy?

Mr Oxley: I think the allocation of staff is a matter for the Prime Minister to determine.

Senator GREEN: The article refers to two extra staff. I think that information was given by Mr Entsch himself. Have any other resources been allocated to Mr Entsch?

Mr Knudson: No. As Mr Oxley just mentioned, there is an allocation to members of the Cabinet and the envoy. That's all done by the Department of the Prime Minister and Cabinet; they made that allocation. But no staff, I believe, have been allocated towards supporting Mr Entsch directly from the department.

Senator GREEN: So none from the department?
Mr Knudson: Correct.

Senator GREEN: Do you know how Mr Entsch is planning on reporting to the minister or to the department about his role?

Mr Oxley: It wouldn't be a common occurrence for a minister or someone in the role of envoy to be reporting to the department, given that it's an appointment by the government. But in terms of the reporting, so to speak, to Minister Ley, that's something that we would need to seek advice from the minister on.

Senator GREEN: In the briefings that you've had verbally there's been no discussion about what the responsibilities or requirements are of Mr Entsch in terms of output in his role.

Mr Oxley: We haven't said that. We have had a series of discussions with Mr Entsch about the set of interests that he has, those matters that he is particularly interested in pursuing as the reef envoy, as well as providing to him a general overview of the Reef 2050 Plan and how it operates. I don't know whether Ms Callister would like to add to that.

Ms Callister: I think the verbal briefing that we've provided is very similar to what Mr Oxley said. There was also briefing provided by officials in our waste area. As you would be aware, that's a particular interest of the special envoy. There were verbal briefings provided on the work that we have underway in relation to waste.

Senator WHISH-WILSON: Can I seek a point of clarification from Mr Oxley?

CHAIR: Are you seeking the call?

Senator WHISH-WILSON: Yes, I am seeking the call, Chair. Mr Oxley, you mentioned that the envoy conversed with you about what his priorities were. Are you able to tell us what they were?

Mr Oxley: The conversations we've had with Mr Entsch align with what he's indicated publicly his interests are. He has a particular focus on plastics and marine pollution. It is something that he is driven to deal with, as I think the public record would show. But we also had a wider discussion around implementation of the Reef 2050 Plan and priorities under that.

Senator GREEN: During those verbal briefings did you provide advice around the importance of dealing with climate change and its impact on the reef?

Mr Oxley: In any discussion we have in relation to the Great Barrier Reef the key point we always make is that there are sort of three critical things that need to be done if we are to sustain the Great Barrier Reef over the long term. The first of those—as you heard extensively from the Great Barrier Reef Marine Park Authority this morning—is to address the global problem of climate change. From our perspective—and this is covered primarily by the Reef 2050 Plan—it is managing the health and resilience of the reef by dealing with all of those other pressures that it faces. Then the third sphere of activity is around adaptation to climate change.

CHAIR: Senator Green, how many more questions do you have on this topic?

Senator GREEN: Three more questions.

CHAIR: Three more and then we'll go to the Greens.

Senator Hume: Can I make some clarifications on the government's position regarding Mr Entsch's role?
CHAIR: Sure, Minister.

Senator Hume: Thank you. As you'd know, Senator Green, the Hon. Warren Entsch was appointed Special Envoy to the Great Barrier Reef because of not just his geographical location but obviously a longstanding interest since his election in 1996 to the preservation of the Great Barrier Reef. My understanding is that his role as special envoy is to provide advice on options to reduce marine plastic waste pollution in the reef for consideration by the Minister for the Environment and the Assistant Minister for Waste Reduction and Environmental Management, to work with the community, with industry and with other groups to gather on-the-ground perspectives and information about the risks and opportunities facing the reef, to inform the Minister for the Environment on policy development and implementation, to establish and support mechanisms with the minister and the assistant minister to raise awareness and outreach about a range of issues, including the impact of pollution on the reef, and to help strengthen community and industry partnerships, including, for example, through the establishment of initiatives such as the parliamentary friendship group. In addition, his role involves advocacy and community engagement in support of the government's policies and programs, including supporting the implementation of the jointly managed Reef 2050 Long-Term Sustainability Plan with the Queensland government, engagement with the Great Barrier Reef Marine Park Authority's local marine advisory committees and reef guardians program and also to provide biannual updates in the form of written reports to the minister and assistant minister to support decision-making and convey community and industry views to government, as well as supporting Minister Ley on other any matters, as requested from time to time.

Senator GREEN: Those biannual reports will be provided to the minister? Will they be tabled in parliament?

Senator Hume: I can take that on notice.

Senator GREEN: Thank you for that longer response. Since the special envoy has been appointed, what has been reported in terms of what he's been able to do has been to invite the minister to Cairns, form a parliamentary friendship group and relaunch a previous program that had already been in place around a volunteer program called ReefClean. I'm just wondering, in terms of what you've just described, Senator Hume—maybe you're best placed to answer this question—what is different from the role of a special envoy to the reef and the member for Leichhardt whose constituency is based on the reef? Why does Mr Entsch need a special title to do what is essentially part of his job as a member for Leichhardt?

Senator Hume: I think it demonstrates the government's commitments towards maintaining and enhancing the reef and also demonstrates and recognises Mr Entsch's long-term commitment to this issue as the member for Leichhardt since his election in 1996, over more than 23 years in parliament.

Senator GREEN: You can't really tell me what the difference is between what he should be doing as the member for Leichhardt and what he is going to be doing, with the exception of maybe that biannual report?

Mr Knudson: If I can just add, the minister has laid out a pretty extensive list of responsibilities and the reporting requirement or expectations associated with that. My expectation, based on that, would be that Mr Entsch, as the envoy, would be spelling out in
much more graphic detail than we can sitting here at the table what he's achieving at each six-
monthly interval. There are a number of very specific expectations laid out than what the
minister just read onto the record.

**Senator GREEN:** Sure. This is my last question. What I'm getting from today is that
regarding the role that the special envoy has there are some particular responsibilities that
you've laid out and hopefully, now that you've got that information and don't need to take it
on notice, you can possibly make that information public—

**Mr Knudson:** It has effectively been made public.

**Senator GREEN:** so people can find it easily—I think that would be helpful—on the
minister's website. Apart from the title and the list of responsibilities that you have outlined,
how is this not a PR role? This seems like something that (1) Mr Entsch should already be
doing as the member for Leichhardt and (2) it is more about the government signalling their
commitment rather than actually doing anything to show their commitment to improving the
reef.

**Senator Hume:** I think that's more a reflection of your opinion than it is of the
government's.

**Senator GREEN:** So there's no—

**Senator Hume:** I think we've outlined quite clearly exactly what Mr Entsch's role is as
special envoy and the extent to which it goes above and beyond a local member's role.
Anything further than that suggests that it's your opinion on what the role is as opposed to the
government's opinion.

**Senator GREEN:** One last question.

**Mr Knudson:** If I may, there's one thing I'd say in terms of the extensive reporting and
commitment in these two areas. I think we've said a number of times in previous estimates
that ourselves and the Queensland government are investing about $2 billion—more than $2
billion—over a decade period on exactly trying to improve the outcomes for the reef,
following the lines of implementing the Reef 2050 Plan. You combine that also with all
governments in Australia having agreed a waste action plan which then will have a number of
reporting elements in behind that. Those two pieces—this isn't fluff, in other words—is really
serious work that's being undertaken both in the context of the reef but then in waste as well,
which the special envoy will have a connection to. In terms of the substance of the—

**Senator GREEN:** I guess we'll find out biannually whether that's true or not.

**Mr Knudson:** What I was saying is that it is also through the reporting on the
implementation of the Reef 2050 Plan and the implementation of the National Waste plan.

**Senator GREEN:** I was asking specifically about the special envoy, though, so I
appreciate that. Thank you.

**CHAIR:** Senator Hanson-Young.

**Senator HANSON-YOUNG:** Thank you. Can I go to the EPBC Act and get some
information from you about the anticipated review. When is it going to start? An exact date
would be good.
Mr Knudson: This is a relatively simple one. The legislation requires that the review of the act commence within a 10-year time frame. That 10-year time frame ends at the end of this month. So the review needs to start by the end of October.

CHAIR: Senator Hanson-Young, that's in outcome 1.5.

Senator HANSON-YOUNG: I thought we just got told that we were going to do all of outcome 1 together.

Mr Knudson: That's correct. Sorry. That's what I understood.

CHAIR: Okay. That's fine. We will go ahead then.

Mr Knudson: So by the end of this month.

Senator HANSON-YOUNG: So the end of October?

Mr Knudson: That's correct.

Senator HANSON-YOUNG: It's the 21st now, so within the next 10 days.

Mr Knudson: The next 10 days; correct.

Senator URQUHART: Can I just clarify something. I take it that it means to commence, not finalise; is that correct?

Mr Knudson: That's correct. It will commence within the next 10 days, then it's a matter of how long it takes to complete the review.

Senator HANSON-YOUNG: How long are you anticipating it will take?

Mr Knudson: The last review took about a year. I would expect that this will be of a similar length.

Senator HANSON-YOUNG: You've budgeted for a year?

Mr Knudson: Internally, yes, we're budgeting for however long it takes, including beyond a year, if need be.

Senator HANSON-YOUNG: Is there a team dedicated specifically to the review?

Mr Knudson: There is indeed.

Senator HANSON-YOUNG: How many people have you got working on that?

Mr Knudson: I will turn to Mr Tregurtha who is heading up the team that is undertaking the review.

Mr Tregurtha: At the moment the secretariat support currently consists of 13.4 full-time equivalent staff.

Senator HANSON-YOUNG: All based in Canberra?

Mr Tregurtha: Yes.

Senator HANSON-YOUNG: They've already commenced—or the team is in place?

Mr Tregurtha: Yes.

Senator HANSON-YOUNG: Even though the review hasn't technically commenced?

Mr Tregurtha: Yes. With an initiative of this nature, clearly the department needs to do some preparatory work and get ready for the government to formally announce the commencement of a review and for the thing to get underway. So we're doing preparatory work at the moment.
Senator HANSON-YOUNG: Is there a terms of reference that you're going to be using to conduct the review?

Mr Tregurtha: The terms of reference would be a matter for government. However, it's usual for a review of this type to have a terms of reference. I would expect there to be a terms of reference announced when the review itself is announced.

Senator HANSON-YOUNG: Have you seen a draft terms of reference?

Mr Tregurtha: Yes, I have.

Senator HANSON-YOUNG: A draft terms of reference exists?

Mr Tregurtha: The department has certainly prepared material like that.

Senator HANSON-YOUNG: It has to commence by 31 October.

Mr Knudson: We're certainly aware of that date.

Senator HANSON-YOUNG: That's 10 days away. Do you expect it will be 5 pm on 31 October?

Mr Knudson: I actually don't think it will be at five o'clock on that afternoon.

Senator HANSON-YOUNG: The terms of reference must be pretty finalised then if it's going to be announced any day.

Mr Tregurtha: The announcement of the review and any accompanying terms of reference are a matter for government.

Senator HANSON-YOUNG: Who did you consult in drafting a terms of reference in giving that advice to government? Were there external stakeholders or was it just internally done within the department? Can you give me a sense of that?

Mr Tregurtha: The department regularly consults with a range of stakeholders in relation to its operations concerning the EPBC Act. That would include groups both in regard to the environment and also in regard to business and community groups; certainly through the work done by a range of divisions of the department. The forthcoming review has been raised across a range of different business areas of the department. So I'd say that the department has taken a range of views from a range of different stakeholders into our, if you like, development of our advice to government.

Senator HANSON-YOUNG: Is there a briefing document that has been prepared about what the current pitfalls or issues that have already been flagged in relation to the EPBC Act are that have helped draft that terms of reference?

Mr Tregurtha: Certainly the last review of the EPBC Act, when it was announced, was accompanied by a discussion paper of issues around the act. That's something that the department has given some thought to in relation to how we might help expose the issues that will inevitability form part of a conversation around a review of the act. I'm very aware of a range of information in the public domain, both, as I said, from a range of those stakeholders I mentioned earlier, which has also already been put into the public domain around issues perceived by both business and environment groups with the operation of the act.

Senator HANSON-YOUNG: Do you anticipate that there will be a discussion paper released at the point of which the review commences or is that something that will happen after?
Mr Tregurtha: Again, the final nature of the release of a discussion paper is not something I'd want to speculate on without an announcement.

Senator HANSON-YOUNG: But there will be a release of a discussion paper?

Mr Tregurtha: I'm not in a position to guarantee that. That's a matter for the government and a reviewer, once appointed.

Senator HANSON-YOUNG: That is what I'm trying to ascertain. The decision on a discussion paper will be at some point, after the review commences?

Mr Tregurtha: From the department's perspective, it's more likely that a decision around a discussion paper would rely on the independent reviewer providing us with their advice on how that process might be kicked off and proceed.

Senator HANSON-YOUNG: Who will conduct the review?

Mr Tregurtha: That announcement has not yet been made by government.

Senator HANSON-YOUNG: When you say 'independent reviewer', do you mean somebody independent of the department or broadly independent of government?

Mr Tregurtha: The relevant section of the EPBC Act requires the review to be an independent review. It's certainly our view that the person undertaking that review would be independent of both the department and government.

Senator HANSON-YOUNG: Does there need to be a panel or just a person?

Mr Tregurtha: The act doesn't specify that. It could be either.

Mr Knudson: The last review was undertaken by Allan Hawke, individually.

Senator HANSON-YOUNG: Based on what you know, are you able to tell us whether it will be a panel or an individual?

Mr Tregurtha: Again, the announcement of the composition of an independent reviewer and whether that's an individual or a panel is really a matter for government.

Senator HANSON-YOUNG: What's the budget that's been put aside for the review?

Mr Edwards: At the moment we have a nominal operating budget. Earlier in the year we started to set up a small task force to support the process. We anticipate that, once the review is officially announced and the reviewer is on board, we will work with the reviewer and our chief financial officer to confirm an approach. From that point we'll be able to advise our executive board and confirm a budget for the full process.

Senator HANSON-YOUNG: You haven't been given a specific figure to work within—a funding envelope?

Mr Edwards: No. Again, it's about designing the process and seeking appropriate funds within the department to support that process.

Senator HANSON-YOUNG: How much did the Hawke review cost?

Mr Knudson: About a million dollars. That was 10 years ago. This will be significantly more than that; that is my expectation.

Senator HANSON-YOUNG: We expect to find out a few more details then. Is there an expectation of how regularly the reviewer will give updates to the government and/or the department?
Mr Tregurtha: The process of the review, if you like, is something that the department will work with the reviewer on, but we would hope to be in a position early on in that process to be publicising a time frame around things like consultations—whether or not, akin to other reviews, there would be interim reports or particular research pieces released along the way. As I said earlier, that's a matter for agreement by an independent reviewer.

Senator URQUHART: You indicated that it was a matter for government, in relation to who the reviewer is—whether it's a panel or whatever. Can you tell me what criteria would be used to select the reviewer?

Mr Tregurtha: The EPBC Act doesn't specify any criteria beyond the reviewer being independent.

Senator URQUHART: Does the department have a—

Mr Tregurtha: Certainly, in advising the government, the department would proffer its own view around the types of attributes that a reviewer would require—indeed in the main independent being foremost among those. Certainly, this is primarily a review of a piece of legislation. From our perspective, experience with and capacity to interpret legislation and understand how regulatory instruments work would be key among those.

Senator URQUHART: What kind of vetting process would be undertaken to ensure the independence of the reviewer?

Mr Tregurtha: As I said there is no prescribed process around a vetting process. The fact is that the government will need to announce an independent reviewer. Certainly, from our perspective, it would need to be a person, presumably, of good standing within the community and a person who didn't have any demonstrable links to the department or the operation of the EPBC Act, in so far as they would have an interest one way or another.

Senator URQUHART: Is there a process as to how the department might manage any conflicts of interest in relation to the independent reviewer?

Mr Edwards: Any appointments of this type are accompanied by potential nominees completing personal interest disclosures. That material is put forward by a nominee and that material, together with other information, is considered by government.

Senator URQUHART: If there was a personal interest disclosure that indicated there might be a conflict of interest, who then has the say about whether or not that person is a suitable reviewer? Is it the minister or is it the department?

Mr Edwards: Again, it is a matter for government.

Senator URQUHART: Can you tell me how many briefs have been requested or provided to the minister in relation to the review?

Mr Edwards: We'd have to take that on notice. We have certainly provided, obviously, more than one brief around the process to support the government in that respect, but we also provide a regular briefing for when there are stakeholder meetings and they'd like to discuss the upcoming review. It's touched on in a number of briefings.

Senator URQUHART: Has the minister indicated what she would like to see happen with the review?

Mr Edwards: Not beyond the requirements of the act. As Mr Tregurtha mentioned, they're pretty broad. The reviewer needs to look at the operation of the act and the degree to
which its objects have been met. Terms of reference would clearly focus on that; then it's up to the government to set specific areas of inquiry that they would like—

Senator URQUHART: The minister hasn't clearly told the department what she would like to see happen with the review?

Mr Tregurtha: No. It's worth noting as well that, further to the discussion we had just recently, we would expect there to be terms of reference that the government would issue for an independent reviewer, which will set out the areas beyond the statutory obligations that the government would seek to have the reviewer investigate. Indeed that's how the Hawke review proceeded 10 years ago. As Mr Edwards has pointed out, the act requires consideration of the objects and the degree to which those have been agreed, but beyond that, terms of reference did give more colour and light, for want of a better term, around where the various areas of inquiry might be.

Senator URQUHART: How will the Craik review on the interactions between the EPBC Act and the agriculture sector feed into this review?

Mr Tregurtha: Mr Edwards can talk in more detail about that review. A range of reviews and inquiries have happened in the past, and are certainly happening now, that are of relevance to an EPBC review. The Craik review is one of those. Certainly, for example, the Productivity Commission's current inquiry into the resource sector would be another one of those. There's a range of those. Certainly, those processes are things that the department would draw to a reviewer's attention as inputs to their consideration and thinking about what might happen in the review.

Mr Edwards: Clearly, the Hawke review, which was conducted 10 years ago, will be one of those starting points to see what conclusion Dr Hawke came to and the relevance of those recommendations. As Mr Tregurtha mentioned, there's a range of things, and we'd expect any review of this sort to look at the last 10 years and the different inquiries that have occurred.

Senator URQUHART: Has the Minister for Energy and Emissions Reduction, Mr Taylor, had any meetings with departmental staff in relation to the review?

Mr Edwards: No.

Senator URQUHART: Will the Minister for Energy and Emissions Reduction play a role in establishing the act review, as in selecting the independent reviewer?

Mr Tregurtha: The selection of the independent reviewer is a matter for government. I wouldn't—

Senator URQUHART: You don't know?

Mr Tregurtha: No.

Senator URQUHART: Has the Treasurer made any representations to departmental staff about the review?

Mr Tregurtha: Not to my knowledge.

Senator URQUHART: Does the department have any concerns about the operation of the EPBC Act?

Mr Tregurtha: It's a very broad question.

Senator URQUHART: It is a very broad question.
Mr Tregurtha: Certainly, the department considers that there are a range of areas of the EPBC Act that warrant attention and could be either improved or modified to improve its operation. The department will provide its own considerations to the independent reviewer. As I indicated previously, we expect the independent reviewer to take their information from a range of different sources and from across different community and stakeholder groups, some of whom presumably would agree with the department and others of whom presumably won't.

Senator URQUHART: Can you tell me how many staff work on assessing applications under the act?

Mr Tregurtha: It's in the order of 60.

Mr Knudson: The last figure I saw was 56.

Senator URQUHART: How many staff were there last year? There are about 60 now?

Mr Knudson: I'm bringing the appropriate person to the table.

Ms Croker: Senator, your question was about how many staff we have working on assessments?

Senator URQUHART: Yes. Mr Knudson said it was about 60. I'm interested to find out how many there were last year and the year before, and whether you can provide that figure for each year since 2013. If you don't have it, I'm happy for you to take it on notice.

Ms Croker: As of August 2019 we had 63.7 full-time equivalent staff. I only have the numbers going back to December 2018. The total number of staff working on assessments, full-time equivalent, was 56.6. As for those remaining numbers, I'll take them on notice.

Mr Oxley: I think there's another point that needs to be made in relation to your response; whether that results in further answers on notice, I don't know. We're talking specifically here about assessments and the EPBC Act—where there are matters referred where there is a potential impact on matters of national environmental significance. The department does quite a wide range of assessment tasks under the EPBC Act that go to assessment of wildlife trade permits and fisheries. The list goes on—as well as staff in line areas, such as mine, providing advice into the assessment process in relation to matters of national environmental significance, such as the Great Barrier Reef, World Heritage and national heritage. It is quite a comprehensive and complex picture, depending on what information you are seeking.

Senator URQUHART: Can you tell me what the average number of applications each year is?

Ms Croker: The number of referrals that we received under the EPBC Act in 2018-19 was 220. I can go back to 2017-18. We had 240 referrals received. In 2016-17 we had 249. In 2015-16 we had 209, and in 2014-15 we had 225.

Senator URQUHART: So it's around that similar number each year. Has the number of staff assessing the applications gone up or down?

Ms Croker: I'd have to take that on notice.

Senator URQUHART: Can you tell me what the staff turnover rate in the act assessment area is, each year?

Ms Croker: I'd have to take it on notice.
Mr Knudson: I used to run that area; Mr Tregurtha used to run it after that. There's a number who are very long serving, dedicated staff. They're very demanding jobs, so we find that there's a decent level of turnover. That's a good thing, quite frankly, because you want that mixture of skill sets. We'll come back on the numbers behind that as well.

Senator URQUHART: Thank you. That's all I have in relation to the EPBC Act.

Senator WHISH-WILSON: Mr Knudson, I mentioned earlier the concept that the Great Barrier Reef Foundation had given $1.4 million to the Queensland Cane Growers Association in a cane changer program. I wrote to the minister; the minister responded that she didn't believe it was a conflict of interest. My question is: if the cane changer program is designed to target behavioural change in an industry that is part of the problem and can be part of the solution, how is it not a conflict of interest that that same industry group is sponsoring a speaking tour by a scientist who is clearly trying to undermine the science? It underpins the whole need for behavioural change in the first place. How is that not a conflict of interest?

Mr Knudson: What I would say is that—and I am going to turn to Mr Oxley and Ms Callister shortly—there is always a range of views, as you would know. Those should be well exhausted in the public domain and debated for their rigour et cetera. That being said, to the more specific question about the money for the CANEGROWERS fund work, I will turn to—Mr Oxley, are you going to take that?

Senator WHISH-WILSON: Sorry, before you do respond or add to that, could I just highlight what I did write to the minister, just for your information, if you don't have it in front of you. Clause 16 of the Reef Trust Partnership Grant Agreement requires the foundation to notify the department of any conflicts of interest and take steps to address any conflicts of interest. This includes any matter, circumstance, interest or activity involving or affecting the foundation, its personnel or subcontractors, which may or may not appear to impair the ability of the foundation to perform any part of the activity diligently and independently. We have established the reason for this activity is to drive behavioural change in an industry that's part of the problem. How can it not be a conflict of interest that that same industry is actually trying to undermine action and the science that underpins the whole need for action in the first place?

Ms Callister: I think the issue here is fundamentally this is about a conflict of interest for the foundation. We looked at this quite carefully when we got your letter and we provided advice through to the minister and the minister responded to you indicating that she didn't think it was a conflict of interest. In that instance it's not a conflict of interest for the foundation itself. The foundation has a subcontract with Canegrowers and it is up to Canegrowers to ensure that they meet the obligations of that grant agreement. But you have raised some interesting and, I think, quite relevant points. The foundation, we understand, has actually contacted Canegrowers to seek some assurances around this, particularly assurances to ensure none of the funds that they have had provided to them are being used to support some of these speaking arrangements by Professor Ridd. If that was the case, that would be outside of what they have been contracted to do. So they are seeking assurances around that to ensure that Canegrowers itself isn't conflicted or isn't undertaking activities under that grant agreement that are outside the provisions of what they were provided the funding for.

Senator WHISH-WILSON: Will they be at least expressing the sentiment that it's not helpful for them to be undermining the whole need for that in the first place?
Ms Callister: My understanding is that the letter that was provided to Canegrowers did have some quite strong wording around that sort of matter and that they are seeking some further advice from Canegrowers, but that response is yet to be received.

Senator WHISH-WILSON: Because I note that the Reef 2050 Advisory Committee said in the strongest possible terms in a very high-profile letter that Professor Ridd was up to no good in this matter and that it was a very serious matter of concern that he was providing different advice, or seen to be providing different advice, and undermining the consensus science on this point.

Ms Callister: The letter that you are referring to, which was provided to all members of the Great Barrier Reef Ministerial Forum, went more broadly than necessarily talking about Professor Ridd but was more broadly talking about their confidence in the veracity of reef science and their confidence in the general processes that underpin reef science and science more broadly.

Senator WHISH-WILSON: I would like to ask a lot more questions. I will put them on notice. I don't have a lot of time. Can I ask one question in relation to Mr Warren Entsch that was raised earlier in terms of him providing a regular summary. Is anyone auditing that? Or will anyone be reviewing the summary or checking the veracity of the information that's provided in that report?

Mr Oxley: It's a report to the minister. Certainly the department wouldn't be auditing or testing the veracity of those things. We would have awareness of quite a number of the activities in which the Special Envoy is engaged because of our role in providing some advice and support to him.

Senator WHISH-WILSON: In relation to that advice and support, Mr Oxley, I know about your longstanding commitment to the Barrier Reef and years of policy around the reef. Mr Entsch has been very clear in public statements, in speeches to the House. For example, he consistently attacks Green groups for conspiracy theories around the damage that's already been done to the reef and he says in very clear language, 'The reef doesn't require saving; it requires good management.' In terms of what we know about the impact, for example, of warming oceans, the impact of climate change on the reef, do you at least technically agree that we can manage our way out of mass coral bleachings without addressing the root cause of this issue, which is rising emissions? Do you agree with Mr Entsch on that?

Mr Oxley: It depends entirely on how you define 'management'. From my perspective, management is dealing effectively with all of the pressures facing the Great Barrier Reef of which climate change, as you've heard from the Great Barrier Reef Marine Park Authority this morning, is the most significant.

Senator WHISH-WILSON: He also says that—and I will quote from—

Senator GREEN: Can I just follow up on that?

CHAIR: Senator Green.

Senator GREEN: Does that long list of responsibilities that you read out, Senator Hume, include the words 'climate change'? Maybe you can take that on notice.

Senator Hume: I don't actually think it says the words 'climate change' in his list of responsibilities. He's not personally responsible for fixing climate change.

Senator WHISH-WILSON: I would have been very surprised if Mr Entsch had signed up to it, saying 'climate change'. He also said in a speech recently in parliament—I can give you a copy:

We talk about coral bleaching—it's not something we do here in Australia that causes the coral bleaching. It comes from hot currents that come across the waters from South America. It's what happens in China, in India, in the US, in the Northern Hemisphere, that impacts on that—

referring to the Great Barrier Reef. He is also very pro developing fossil fuels. Has any of this come up in discussions, his strong views? Of course he is entitled to his views. Has this come up in discussions about what he will and won't be advocating for?

Mr Oxley: From my recollection of the discussions that I've been involved in with Mr Entsch, those discussions have been focused on the issues that he has been particularly charged with responsibility for engaging in, as outlined earlier by the minister.

Senator WHISH-WILSON: I will move on to waste now. I just want to get on record that I think this whole thing just is colossal bullshit and a distraction from the issue that we actually have to deal with here. I want to get that on the record.

Senator URQUHART: Hear, hear!

Senator WHISH-WILSON: Can I ask some questions on waste, on which I must say I'm pleased—I'm also very pleased with Mr Entsch's focus on plastics, because this is an issue I've been raising for the seven years I have been in the Senate—to see the Prime Minister's announcement about an export ban and the COAG agreement in August 2019.

Mr Knudson: Yes, please.

Senator WHISH-WILSON: Can you tell me exactly what recycled materials will be banned from export and whether it will be just unprocessed material banned or whether it will be all non-virgin material?

Mr Knudson: At this point, what's been announced at COAG are the four streams of waste, that is, paper, plastics, glass and tyres. The specific definition of what constitutes 'recycled waste' is yet to be settled between governments. That is something that is actively being pursued. The first step on that will be the meeting of environment ministers which is happening in a little over two weeks.

Senator WHISH-WILSON: Will you actually be consulting with the recycling industry about that?

Mr Knudson: Absolutely. Yes.

Senator WHISH-WILSON: Could I ask, Mr Knudson: did you consult with them before the Prime Minister made the announcement?

Mr Knudson: Absolutely. There was a large amount of consultation happening. I mentioned earlier about the waste action plan that was agreed at last MEM in December that had a number of pieces of input. And Ms Kiessling can talk in great detail about that. I can assure you industry—

CHAIR: How much longer do you want on waste? We have other questions on waste.

Senator WHISH-WILSON: I have got heaps. It depends on what everyone wants to do.
CHAIR: One more minute then we will go to someone else.

Senator WHISH-WILSON: Could I get another five minutes? I've probably only had five minutes, haven't I?

CHAIR: No, you have had 10.

Senator WHISH-WILSON: You can come back to me. I just want to establish this one thing. It is really important.

CHAIR: Go for one more and then we will come back.

Senator WHISH-WILSON: If it hasn't been decided what kinds of materials are going to be exported and whether, for example, non-virgin material will or won't be left out, we're not actually going to ban the export of all recycled materials, are we? That's the way it's been announced.

Mr Knudson: As I mentioned, the definitions are part of what needs to be settled through an agreement between governments, and with extensive input from industry. But I will turn to my colleagues if they would wish to add anything beyond that.

Ms Tilley: As Deputy Secretary Knudson said, the COAG commitment referenced introducing an export been on waste plastic paper, glass and tyres.

Senator WHISH-WILSON: But not what kind of waste?

Ms Tilley: We're working with states and territories and industry and have already been consulting with them to understand what is in scope within those broad categories and then final decisions, noting it is a COAG decision.

Senator WHISH-WILSON: Whether a palletised plastic will be exported still hasn't been decided yet—that kind of detail?

Ms Tilley: No. It is a COAG decision. So the actual agreement to specific definitions in scope is a matter for states and territories and the Commonwealth.

Senator WHISH-WILSON: Fundamentally, would you agree the problem in this country, though, is not necessarily that we are exporting waste, it's that we have low-quality waste? Was consideration given to actually improving the quality of our waste streams, rather than putting an export ban in place?

Mr Knudson: Part of this is that there are so many different elements to this problem.

Senator WHISH-WILSON: I understand that very well.

Mr Knudson: You're absolutely right. Contamination of recycled streams is one of the key issues that we have to try and get at; so is making sure that recycled product had a secondary market for usage; so is making sure that we're dealing with our waste in as efficient, cost-effective way as possible. There are so many facts at play. That's why it requires that broad engagement of industry as well as states and territories.

Senator WHISH-WILSON: It would be fair to say that at this stage—just to be clear before I hand on—we can't say with any certainty we are going to ban the export of recyclable material? It will be some but it won't be all?

Mr Knudson: I think COAG was very clear in their strength of their ambition. Now it's over to environment ministers to figure out what's the path forward to deliver on COAG's
announcement. But there will have to be consideration of, like I said, definitions and what makes sense for Australia to deal with its waste.

**Senator WHISH-WILSON:** There are plenty of buyers of good-quality waste everywhere, including in this country.

**Mr Knudson:** It definitely drives up the value.

**CHAIR:** Senator Van for five minutes on waste.

**Senator VAN:** What inroads is the government making on tackling Australia's waste and recycling?

**Ms Tilley:** I think at a high level, following on from the meeting of environment ministers last year where an update to the national waste policy was agreed, what we, leading for the Commonwealth, along with our state and territory counterparts and industry, have been working on this year is the commitments and actions that will fall out from that policy. Effectively the National Waste Policy Action Plan is what we intend to take to the meeting of environment ministers in a few weeks time.

**Senator VAN:** When do you expect the waste export ban to take effect?

**Ms Tilley:** Both the Prime Minister and the environment minister, Minister Lee, have indicated that they would hope that the ban would be in place from next year. And as I indicated before, it was a COAG commitment to the ban; so that will of course require agreement across all states and territories.

**Senator VAN:** Around product stewardship, what steps is the government taken on promoting product stewardship?

**Ms Tilley:** I might turn to my colleagues, Mr Tregurtha and Ms Raynor, to answer that.

**Mr Tregurtha:** At the moment, clearly the government already has a product stewardship plan underway through the National Television and Computer Recycling Scheme but also you may be aware that the Product Stewardship Act is currently under review. The government has certainly been out consulting widely on that particular review. Public consultation has now closed. And the department's currently finalising the preparation of a report, which we would then put back to government

**Mr Knudson:** But there was also a commitment by the government during the election of $20 million to provide grants to deliver the product stewardship initiatives. Often you are working with a peak body to collect back waste streams. And that will be a central piece of our work going forward.

**Senator WHISH-WILSON:** Are they going to be exported as well?

Sorry, I'm being facetious.

**Senator VAN:** We'd rather keep the grants in Australia thanks, Peter.

**Senator WHISH-WILSON:** I'm very happy if you do.

**Senator VAN:** What practical steps is the government taking to support local communities to help clean up their local environments?

**Mr Knudson:** The government also announced two funds before the election. There was the Communities Environment Program, which is a program aimed at all 151 electorates across the country—$23 million—and that is well and truly underway. I think we've received
applications from 149 of the two electorates, whoever the two electorates are; they may want to come on in fairly soon. In addition to that fund, there was the Environment Restoration Fund, which is a $100 million grant program aimed at a range of issues, from waste to coastal issues to species protection. As I recall, about $70-odd million has been identified under that program.

**Senator VAN:** Why has COAG decided to ban the export of waste plastic, paper, tyres and glass?

**Mr Knudson:** That's a matter for the COAG ministers who made that decision. But it's clear that, as a country, we have a large waste challenge ahead of us. Waste per capita has been going up for a number of years and, with the decisions by China and several other countries in South-East Asia about not accepting waste exports going forward, that seems to be the trend. Then we have to figure out domestic solutions to those types of challenges.

**Senator VAN:** Following on from that, what policies does the government have to support the Prime Minister's export ban on waste plastics, paper, tyres and glass and to grow our domestic recycling industry?

**Mr Knudson:** I've already mentioned the product stewardship fund. There is also $100 million set aside under the Clean Energy Finance Corporation to provide funding—commercial funding, mostly—to industries that will boost our recycling industry and our capacity to generate secondary products out of our recycled waste. In addition to that, from a policy standpoint, we have the action plan which, as we've mentioned, is going to the meeting of Environment Ministers in a few weeks, which will take us further than where we went last December. But to bring in the bans themselves we expect will require a legislative program behind it as well as a range of other efforts to make sure that those bans are effectively implemented.

**CHAIR:** We have a point of clarification from Senator Whish-Wilson and then the call will go to Senator Smith.

**Senator WHISH-WILSON:** In relation to the answer you have given, does the Clean Energy Finance Corporation financing of different initiatives include waste-to-energy projects?

**Mr Knudson:** Before the government made that announcement, the Clean Energy Finance Corporation was doing investment in waste-to-energy projects. Certainly they can continue to make those types of investments—that's within their mandate. But this was a specific $100 million—my colleagues will get the exact language—that was additional.

**Ms Tilley:** It's specifically to support the manufacture of lower emissions and energy-efficient recycled products.

**Senator WHISH-WILSON:** This is not a Trojan horse for more incinerators for burning stuff that would go to landfill; are you confident about that?

**Mr Knudson:** The Clean Energy Finance Corporation has invested in waste-to-energy previously and they can certainly continue to do so going forward.

**Senator MARIELLE SMITH:** On 13 October this year, media reports indicated that the Prime Minister had cancelled the December meeting of COAG; the reason cited in those
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reports was that the national recycling agreement wasn't ready. Was your department aware of that decision prior to the news report on 13 October?

**Mr Knudson:** Fundamentally, the timing and decision around a COAG agreement or a meeting would have been a decision for the Prime Minister and his department.

**Senator MARIELLE SMITH:** So you learned about it in the media; is that correct?

**Ms Tilley:** To my knowledge, there hadn't been a date set for a COAG meeting and so, effectively, there wasn't one cancelled. But as Mr Knudson has said, decisions around the setting of COAG meetings are a matter for the Prime Minister.

**Senator MARIELLE SMITH:** Would COAG reasonably be expected to meet in December each year; was there an expectation that there would be a meeting at the end of the year?

**Mr Knudson:** That's a question for the Prime Minister's department as opposed to this area, as they support the Prime Minister in making those decisions.

**Senator MARIELLE SMITH:** So you're not aware of COAG routinely meeting to any particular schedule?

**Mr Knudson:** It is outside of our remit.

**Senator MARIELLE SMITH:** With reference to the comment that the national recycling agreement wasn't ready, can you add anything to that? Beyond the question of why COAG was cancelled and the agreement not being ready, was that a decision made on the advice of the department?

**Ms Tilley:** Certainly from my perspective, COAG in August made the commitment and tasked Environment Ministers to advise on indicative timetables and response strategies for the ban. Environment Ministers haven't yet convened; the next time they will do that is early in November. So there hasn't yet been an opportunity to take any further decisions.

**Senator MARIELLE SMITH:** So it's a question of when those environment ministers are able to meet?

**Senator Hume:** It's scheduled for next month; that's my understanding.

**Mr Knudson:** November 8, to be exact.

**Senator MARIELLE SMITH:** So there are no other issues that you are aware of which caused that delay?

**Mr Knudson:** Again, that's a question for the Prime Minister's Department.

**Senator WATERS:** I've got questions that normally would belong in 1.1 and 1.4. Kicking off on reef, has there been any expenditure in relation to the World Heritage Committee and the Great Barrier Reef, including on the World Heritage Centre, on diplomatic relationships and on meetings with members of the committee and their representatives since the 43rd meeting of the World Heritage Committee in July this year?

**Mr Oxley:** Yes.

**Senator WATERS:** What is that expenditure?

**Mr Oxley:** It would be in the order of $10,000. It's whatever the cost is for me to do a trip to Europe and back in a week.
Senator WATERS: Was it just you, Mr Oxley?

Mr Oxley: I was accompanied by the Chief Scientist of the Great Barrier Reef Marine Park Authority.

Senator WATERS: When we spoke with the authority earlier, reference was made to a trip to Alaska; are you factoring that cost into your $10,000 estimate?

Mr Oxley: No, I'm not. That trip to Alaska is for a meeting that is convened by the marine program of the World Heritage Centre, where they bring together the managers of all of the marine world heritage areas around the globe to talk about management and management challenges and share good practice. I'm not including that forum in that estimate.

Senator WATERS: What trips have you got planned prior to the next meeting of the committee?

Mr Oxley: The only trip that I have planned is returning to Paris at the end of November for the General Assembly of States Parties to the World Heritage Convention, which is held every two years. The primary purpose of that meeting is to elect new members to the committee.

Senator WATERS: Will other personnel accompany you on that trip?

Mr Oxley: I expect that it will just be me.

Senator WATERS: Likewise, will any other departmental bods or ministerial folk go on trips prior to the decision on whether the reef gets listed as being in danger?

Mr Oxley: Firstly, there is no decision that I'm aware of as to whether the reef is listed as being in danger. Where we are at the moment, in terms of the World Heritage Committee's consideration of the reef, is that we were asked to return to the World Heritage Committee next year with a report on the state of conservation of the Great Barrier Reef. We are due to lodge what's called our state party report by 1 December. From there, that report will be assessed by the IUCN and the World Heritage Centre together with whatever other information they have at their disposal, including things like the Outlook Report and engagement with other interested parties. My expectation is that, probably at some point before the committee considers the state of conservation, we would be seeking an opportunity for a dialogue with IUCN and the World Heritage Centre around our report.

Senator WATERS: Have you got a date set for that?

Mr Oxley: No.

Senator WATERS: Are you anticipating having just the one meeting—or pre-meeting, if you like?

Mr Oxley: Based on the last cycle, when we provided our report on the progress of the implementation of the Reef 2050 Plan back in 2017, we had one meeting; we had a day engagement with the IUCN and World Heritage Centre together on that occasion. That would seem about the right formula this time.

Senator WATERS: But that wasn't in advance of their considering whether to list the reef as being in danger. I think the more appropriate comparator is the five-year-ago meetings, where there was quite a lot of diplomatic activity, to put it diplomatically.
Mr Oxley: As I've already indicated, I'm not aware of the World Heritage Committee being in a position where it is considering whether to include the Great Barrier Reef on the list of World Heritage Sites in Danger. That is something that will evolve over the coming months, as the advisors to the World Heritage Committee turn their minds to the state of the reef and our performance and delivery of the Reef 2050 Plan.

Senator WATERS: But five years ago they gave us five years and then they would reconsider that question. So I think we all know that they will consider that question. Sure, nobody knows the answer yet, but I don't think it's in debate that that is the question at hand. Am I misunderstanding you?

Mr Oxley: No. If you look at the history of consideration of the Great Barrier Reef and the World Heritage Committee, in 2012, 2013 and 2014—each year—it made decisions which made calls on Australia to increase its effort towards the protection and conservation of the Great Barrier Reef and it gave very clear advice that, if we didn't lift our game, so to speak, we faced the 'in danger' listing of the reef. In 2015, it was a completely different environment, where the World Heritage Committee embraced the Reef 2050 Plan and the Australian and Queensland governments' efforts in improving the conservation and protection of the reef in dealing with all of the pressures it faced. It made a decision that welcomed that Reef 2050 Report and the commitment of resources by the governments to its implementation and asked us to come back in 2017 with a progress update on early implementation and then to come back in for consideration in 2020 with an update on the state of conservation. So I don't think it's necessarily the case that the 'in danger' listing is on the agenda for next year on the basis of that analysis.

Senator WATERS: That's the first time I have heard that view expressed; but thank you for outlining it so comprehensively. You mentioned earlier that the next meeting would be to change the country membership on the committee. Do we know anything about who's putting their hand up and is there a view on whether that would make an 'in danger' listing more likely or less likely?

Mr Oxley: There would be no view about the likelihood or otherwise of 'in danger' listing, including for the reasons I have already outlined. But in terms of the composition of the committee, there are 12 committee members, including Australia, who continue on for another two years and there are nine new committee members to be elected. The candidates are readily available on the World Heritage Committee's website. There is a sort of geographic voting as well as some generally available seats. At the moment there is one candidate for the Asia-Pacific region, Thailand, for the one vacancy. Egypt is a candidate, Russia is a candidate and Oman is a candidate—that's two from the Arab countries—and my recollection is that four African nations have put their hands up at this point in time.

Senator WATERS: My understanding is that at the last meeting of the World Heritage Committee, the 43rd session, it was reported that you, heading our country's delegation, made an intervention on climate change. It's reported that you stated, 'We would not expect to see propositions that climate change threats would form the basis of an 'in danger' listing because this is a global problem not amenable to site-specific intervention. Did you say that, Mr Oxley?'

Mr Oxley: Yes, I did, as part of a wider intervention in relation to the lack of progress in the World Heritage Committee in the revision of the World Heritage Committee's 2007
climate policy. The previous year, at the committee meeting in Bahrain, Australia made an intervention to ask that that climate policy be updated, including through consultation with states parties—the countries that are signatories to the convention and civil society, so NGOs and other interested parties—for consideration at the meeting in Baku this year. In a sort of colloquial assessment, the World Heritage Centre spun its wheels for 12 months in processing and the review wasn't done. So I was expressing some frustration at the lack of progress on that climate policy review and, absent progress, I set out some of the questions, issues and considerations that I thought should be taken into account in the process of reviewing that policy. I'd be happy, if it's helpful for the committee, either to provide on notice or to table the full text of my intervention.

Senator WATERS: Certainly I'll be happy to receive that, because it was reported as Australia arguing that climate change wasn't relevant for the status of World Heritage sites. Certainly that is how many folk have interpreted it.

Mr Oxley: If I may say, at no stage did I indicate that climate change was not relevant to the status of World Heritage sites. I did make the comment that we would not want to see circumstances where the World Heritage Committee focus went down onto considering an individual country's performance in solving a global problem in the case of climate change—which wasn't amenable to dealing with a situation where an individual country's actions were not capable of changing the course of what we face with climate change. But I then went on to make the point very clearly that, in spite of that observation, it was critical for the World Heritage system to grapple with the significant challenge that we face across so many of our World Heritage properties posed by climate change.

CHAIR: Senator Waters, I will come back to you, but can you just wind up on this now?

Senator WATERS: Could I just finish with two more little questions? I do have lots more.

CHAIR: Yes.

Senator WATERS: Thank you. Is it the case that, if the reef were to be listed as in danger on the basis of the very real danger that the climate crisis poses to its long-term future, all global coral reefs, in fact, would have to be listed as in danger, given, as you say, it's a global phenomenon?

Mr Oxley: We are in hypothetical territory somewhat but I think, if a case was made that the Great Barrier Reef should be included on the List of World Heritage in Danger on the basis of the climate impacts and risks that it faces, that case would apply equally and potentially more so to the other 28 World Heritage listed coral reefs around the world.

Senator WATERS: Indeed. Can I ask, Mr Oxley: were you instructed by any minister to take the view that the effects of climate should not be considered specifically in relation to whether a particular site be listed as 'in danger'?

Mr Oxley: No, I was not.

Senator WATERS: That was just a view of your own that you took to a global body on behalf of our nation?

Mr Oxley: That was the position that I took as the head of the delegation and elected member of the World Heritage Committee. In the context of the way that the operational
guidelines for the World Heritage convention are constructed, essentially the core purpose of in danger listing is to identify where you've got World Heritage properties that are facing some serious conservation challenges. The intention is to then identify what's called a desired state of conservation and then to identify a program of corrective measures. In the framing of the World Heritage convention, the problem has to be able to be dealt with by human intervention and it's got to be capable of being dealt with by the actions of the state party itself, sometimes with support from other nations.

Senator WATERS: Do you think that Australia's being the world's largest coal exporter is possibly something that the government could, in fact, intervene with and alter to, therefore, reduce the pressure on the reef and the likelihood of it being on the in danger list?

CHAIR: Senator Waters, that is verging on an opinion as opposed to a question of fact.

Mr Oxley: Senator, I'm outlining to you the process that the World Heritage Committee uses to make its decisions around inclusion of properties on the List of World Heritage in Danger. As for the considerations that I brought to forming a view on how that climate policy could most usefully be reviewed, I'm not going to go to questions about policy beyond saying that the clear position and, I would suggest, understanding in the World Heritage Committee—essentially, it's outlined in the existing policy—is that the World Heritage Committee needs to focus on the areas of its comparative advantage, which is in the area of management of World Heritage sites and, in that context, managing for resilience and assisting with adaptation to climate change. Questions of climate emissions mitigation are the business of the UNFCCC and the Paris Agreement and that's where those things should be prosecuted and not in the World Heritage Committee.

Senator WATERS: I have just one final question, Chair, and then I am done with this section. Given the grim outlook painted by the outlook report and the report card by GBRMPA earlier in the year, what is being done to prevent the reef being placed on the in danger list at the meeting next year?

Mr Oxley: I don't actually know how to answer that question, beyond saying that we are doing everything that we possibly can through the implementation of the Reef 2050 Plan to help improve the health and the resilience of the Great Barrier Reef so that it is best able to deal with the pressures that come from climate change.

Senator WATERS: That's a 30-year-away plan that was really criticised for not having a mention of climate change—I think there was one paragraph in the whole document—so surely something further is being done.

CHAIR: Senator Waters—

Mr Oxley: You would also be aware that the Reef 2050 Plan was updated last year and the update of that plan has a much more substantial focus on articulating the challenges that the reef faces because of climate change.

CHAIR: Thank you, Mr Oxley.

Senator WATERS: Articulating the challenges is one thing, but what we do about them is the point.

CHAIR: Senator McMahon, you now have the call for five minutes on the PFAS.
Senator McMAHON: My question is: why doesn't the government table the response to recommendations from the Joint Standing Committee on Foreign Affairs, Defence and Trade inquiry?

Mr McGregor: The government welcomed the recommendations of that inquiry, and the PFAS Taskforce, which sits within the department, has been working across other relevant agencies to prepare a response for the government's consideration.

Senator McMAHON: When will that response be available?

Mr McGregor: It will be a matter for the government as to when the response is tabled, but we're working to have a draft available for the government's consideration as soon as possible.

Senator McMAHON: The joint standing committee's report recommended that the government consider land buybacks as part of the government's response to the PFAS contamination. Is the government going to offer land buybacks?

Mr McGregor: The government has a range of responses in place to PFAS contamination on Commonwealth land, as you'd be aware, but land buybacks are not part of that suite of measures.

Senator McMAHON: Is any other compensation being considered for affected residents?

Mr McGregor: Individual agencies who have responsibility for sites where PFAS contamination is an issue are in regular contact with affected communities and I understand that, in those conversations, financial recompense is one of the issues that comes up. I think Defence has a regular dialogue with some communities around that, but you'd have to raise those issues with the relevant agencies.

Mr Tregurtha: Certainly Defence have rolled out a drinking water program in some communities where they have deemed that to be appropriate. I think the other thing to say there is that the government continues to monitor the situation with PFAS around the nation and certainly continues to keep its policy responses to the implications of PFAS under review.

Senator McMAHON: That flows on to my next question. What other support has been or is available to affected people?

Mr Tregurtha: I've mentioned the drinking water program; that's a $55 million program being overseen by the department but rolled out by the Department of Defence. I might turn to Mr McGregor to give you an indication of some other measures.

Mr McGregor: There's a range of measures; as you'd be aware, the drinking water program is one. Another roughly $55 million has been made available to affected communities in Williamtown in New South Wales and Oakey in Queensland to reduce exposure, manage environmental impacts at PFAS and provide services such as dedicated mental health and other counselling services. There was also some dedicated funding provided for the Katherine community along similar lines. There's a range of research programs that are underway to investigate options for addressing PFAS contamination as well. You'd be aware also that money has been invested previously in voluntary blood testing programs.

Mr Knudson: Perhaps I can add one of the other things that we've been pretty focused on there. The heads of environment protection agencies and ourselves have come together over
the last year or so. We're now at the point where we've got a second version of our guidelines on how to manage PFAS with respect to impacts on the environment. That's pretty important in enabling people to understand what those potential vectors of exposure look like, how best to manage them and, basically, what levels you need to be attuned to. Also, we've been working with the health department to make sure that similar advice is provided with respect to more direct impacts on human health. I just wanted to note that that's another significant piece of work that we've been doing.

CHAIR: The last question, please.

Senator McMAHON: Yes. I understand that there's $12.5 million for a national research program into the human health side of it. As part of that, are there any plans to do any retrospective studies on clusters of health issues or problems in these areas?

Mr McGregor: That program is administered by the health portfolio, so that's a question that they'd be best placed to answer.

Senator WHISH-WILSON: Chair, I have a very quick follow-up question.

CHAIR: One minute.

Senator WHISH-WILSON: It was a surprise to many people in my home town of Launceston just a few months ago when ABC Radio ran the story that PFAS contamination levels in the Tamar River were quite high and they were investigating the source of that. I presume that it was the local government that was doing that testing. Are you involved with that and can you give us any updated information?

Mr McGregor: Not directly. I'm aware of those issues, but they're being managed at the state government level primarily in collaboration with our infrastructure and—

Senator WHISH-WILSON: Could you take on notice who I should contact to get that relevant information, please.

Mr McGregor: Certainly.

Senator URQUHART: I have about half a dozen questions back on the grasslands issue that we canvassed this morning. I'll look at you, Mr Heferen, and you'll direct where we need to go, I guess.

Mr Heferen: Yes.

Senator URQUHART: Thank you.

Mr Heferen: It won't be to me.

Senator URQUHART: It won't be you? Okay. I'm sure you'll direct me to the appropriate official. Can you tell me has Minister Taylor or his office contacted the department directly about the investigation into Jam Land?

Mr Heferen: From my perspective, no. I might pass to Mr Knudson.

Mr Knudson: No.

Senator URQUHART: So there's been no contact with the department from Minister Taylor?

Mr Knudson: Neither Minister Taylor nor his office.
Senator URQUHART: Did Minister Taylor at any point attempt to meet with or, indeed, meet with compliance staff at the department regarding the investigation?

Mr Knudson: No. I think, as we've said, he did meet with respect to the grasslands listing process and there was a compliance officer in the room; however, no questions were raised with respect to the compliance matter and no issues associated with compliance were discussed.

Senator URQUHART: What was the date of that meeting?

Mr Knudson: That meeting—was it the 20th?

Senator URQUHART: It was 20 March; that was the meeting that you talked about this morning. When and where was that meeting held?

Mr Richardson: That meeting was held here in the office in Parliament House.

Senator URQUHART: In Mr Taylor's office?

Mr Richardson: I believe it was Minister Taylor's office. I will confirm that.

Senator URQUHART: You'll confirm that?

Mr Richardson: Yes.

Senator URQUHART: Thank you. Has anyone else contacted you about the grasslands? I think we understand that the National Farmers Federation and the New South Wales Farmers Federation have, but has anyone else contacted you about those specific grasslands?

Mr Knudson: There will be two different areas. We were going through the listing process and that one would be in Mr Richardson's area, but also I just want to check with Mrs Collins about whether any other referrals were in the compliance area.

Senator URQUHART: Okay, great. So maybe if we go to Mr Richardson and then—

Mr Richardson: We will start there and then—

Mr Richardson: In the process of conducting the reassessment during the 2014, 2015 and 2016 period, there were a number of submissions and there were a number of meetings held with stakeholders et cetera. That was leading up to the 2016 listing advice from the Threatened Species Scientific Committee going to then Minister Hunt, who made that listing decision in, I believe, early 2017—sorry, 2016. Post that—we had several discussions prior to that as well—we had discussions with the National Farmers Federation about finalising some guidance material for the agriculture sector, so there were those conversations being held as well.

Senator URQUHART: I know that the National Farmers Federation contacted you, and I understand the New South Wales Farmers Federation did. I am interested as to other personnel or groups who may have contacted you—private farmers.

Mr Richardson: I don't believe there were private farmers. I would have to take that question on notice about who else sent—

Mr Knudson: There would have been a list of submissions that were provided for the listing process and we can certainly give you an accounting of all of the individuals or organisations that contacted us during that listing process.
Senator URQUHART: Okay, great. I am interested in who and also what dates and what the—

Mr Richardson: Just to clarify, during the listing reassessment there is a public comment period which is required under the act. We had a number of submissions come in and I am certainly happy to share the list of those. Post the listing outcome is I thought where your question was going—about who had contacted the department following the listing coming into effect. I have outlined the NFF. I don't believe the New South Wales Farmers Federation at the time, post listing, contacted us. I'll take on notice who else has contacted us about that.

Senator URQUHART: So from your point of view it was just the NFF?

Mr Richardson: We initiated a conversation with the NFF in order to finalise that post-listing information guide for farmers. That was in that period of a few months of that listing taking effect.

Senator URQUHART: So you're not aware that there were any individual farmers that contacted the department about the grasslands listing?

Mr Richardson: Sorry—that contacted my area of the department. I can't talk on behalf of the whole department.

Senator URQUHART: Maybe Ms Collins can assist as well.

Ms Collins: Separately the department became aware of changes to New South Wales legislation. In response to that we've been doing quite a large engagement program right across New South Wales and also working with the New South Wales regulators, who are the land services, just to make sure that landowners, in their attempts to comply with New South Wales legislation, weren't inadvertently going to be non-compliant with the Commonwealth legislation. Right across New South Wales the statewide priorities are around clearing of paddock trees, treatment of invasive species and continuing use from an agricultural perspective. In the Monaro region the priority for us to look at was how the EPBC Act applies to grasslands specifically. So, in undertaking that engagement program, we've been talking, as I said, to the New South Wales local land services and to landowners in the Monaro region.

Senator URQUHART: So local farmers?

Ms Collins: That's right, and, as well as that, consulting with experts in grasslands management.

Senator URQUHART: Did those local farmers contact your part of the department or did you go out?

Ms Collins: Those local farmers were put in touch with us through the New South Wales government.

Senator URQUHART: Do you know when that was?

Ms Collins: We commenced the broader engagement program in August 2017 in line with the new legislation in New South Wales, and it was in early 2018 that we were in touch with landowners in the Monaro area.

Senator URQUHART: Thank you. Since late 2016 has anyone asked to be transferred out of, or left, the compliance division?

Ms Collins: In terms of staff?
Senator URQUHART: Yes.
Ms Collins: We've had the normal level of staff turnover in the compliance area, yes.
Senator URQUHART: How many would have left?
Ms Collins: I would have to take that number specifically on notice.
Mr Knudson: Senator, did you say since 2015?
Mr Knudson: I would imagine that almost all of the staff at one point or another would have turned over—a good portion of it given it's been three or four years. Anyway, we'll come back on that.
Senator URQUHART: And did they give a reason? What was the reason?
Ms Collins: Lots of reasons. People have been promoted. People have been gone to other jobs in other jurisdictions. People take temporary reassignments of duties or ongoing reassignments of duties. People want to move interstate. So there is a very broad variety of reasons.
Senator URQUHART: Maybe you can provide us with a bit more detail on notice.
Ms Collins: I'll see if I can, but I'm not sure—
Mr Knudson: We probably will not have that data. All we're going to have is anecdotal data. I can tell you that Ms Collins's predecessor is now heading up part of our energy area. People move for very different reasons, and we just don't keep track of that.
Senator URQUHART: Okay. Did any staff in Compliance or elsewhere in the department raise concerns about contact from Mr Taylor and Mr Frydenberg or their officers about the Jam Land case and their interest in the natural temperate grassland—of the South Eastern Highlands listing?
Mr Knudson: Not that I'm aware of.
Senator URQUHART: So you're not aware of any concerns? Mr Richardson or Ms Collins?
Mr Knudson: No.
Mr Richardson: No.
Ms Collins: No.
Senator URQUHART: Do you have any advice that you've provided to Minister Frydenberg in relation to the grasslands—the compliance section? I think we talked about the dates of 15 February, 28 July and 12 October.
Ms Collins: You're after details?
Senator URQUHART: I'm just wondering if you're able to provide that.
Ms Collins: If we can provide that. We do currently have a freedom of information request specifically to provide that, so—
Senator URQUHART: That's part of the documents that will be finalised by the end of October—is that correct?
Ms Collins: I think that one is due by early November.
Ms Tilley: I think Ms Collins is referring to a current FOI application, which would have a due date—

Ms Collins: It's early November. So there's a new FOI specifically requesting those documents.

Senator URQUHART: Okay. The department stated previously in response to a question on notice that the department became aware of Minister Taylor's interest after seeing a Weekly Times article. Was this information included in the advice provided to Mr Frydenberg's office?

Ms Collins: I'm not sure. Can you repeat the question?

Senator URQUHART: You've stated previously in response to a question on notice—I'm sorry, I don't have that question number—that the department became aware of Minister Taylor's interest after seeing a Weekly Times article. Was that included in the advice provided to Mr Frydenberg's office?

Ms Collins: I think that relates to—we became aware that there was the familial relationship. I don't think specifically we've advised the minister's office of that.

Senator URQUHART: You don't think, but can you check that, please.

Mr Knudson: I'm pretty certain it's not necessarily material how we became informed by an article. I've got the question on notice sitting in front of me, and it refers to it. The 27 May article—2015. So I can't see how that would have been material, but we will confirm that on notice.

Senator URQUHART: If you could confirm that, that would be great.

Senator WATERS: Just staying with this matter, we were speaking before the break about the length of the ongoing investigation. I note that in relation to a previous question on notice you said there were eight ongoing compliance actions that had begun in the same year that the Jam Land investigation had begun. How many of those are still ongoing?

Ms Collins: I know that at least one of those was closed. There are a few more of those where we're close to compliance outcomes. But specifically I would have to take that on notice.

Senator WATERS: How many compliance cases are on foot in toto at the moment?

Ms Collins: We, just for clarity, do compliance across a range of different pieces of legislation—so for instance—

Senator WATERS: Just EPBC compliance.

Ms Collins: Okay, just EPBC. I can say that—I will just find the right number for you—

Mr Knudson: While Ms Collins is looking for this, one of the things I would say is that Ms Collins's area has been working on an annual report that says, just at a very high level, 'Here are some of the outcomes that have happened in this space.' As you can imagine, they go all the way from criminal prosecutions down to infringement notices et cetera. If that's helpful, just to give you an overall scope of what activities the office has been involved in, I'm happy to provide that and then the specific question hopefully we can answer now.

Senator WATERS: Yes, that general information is useful for the context, but the specific question would be more—
Ms Collins: What I can say is that at the moment—in terms of monitoring of current EPBC Act approvals, so far this financial year we've monitored against 23 EPBC Act approvals. Five of those were monitored based on allegations of noncompliance. In addition to that, we've had 14 allegations associated with native vegetation clearing without approval under the EPBC Act.

Senator WATERS: I'm just trying to establish whether or not it's unusually long, for an investigation that's a couple of weeks shy of three years still on foot and open, compared to how long they normally take in other compliance cases.

Ms Collins: As I said earlier, the amount of time would change depending on a whole range of different factors, but we do like to—and one of the things we're trying to target is making sure that we only take on the number of compliance cases that we can actively manage through to a conclusion in a faster amount of time. So I suppose there is always going to be a balance between—if you have a lot more cases on your books, it might take longer to finish them or if you've got fewer cases—

Senator WATERS: Does that mean you're not investigating breaches because you haven't been given the resources to do your job properly?

Ms Collins: With the resources we've got we've always got to prioritise, and we do a risk based approach to which compliance activities we take on.

Senator WATERS: Okay. That's a whole other area of questioning that I won't do at the minute. This is my last question. You mentioned prior to the break that there were a number of reasons why this particular investigation or investigations generally might take so long. I'm really interested in why this particular Jam Land investigation has taken so long. You talked about an exchange of letters. Why do you need so many exchanges of letters for a single illegal clearing case? What are the specific reasons why this one is taking so long?

Ms Collins: As I said, the matter is still under investigation, so I can't discuss the details. But, as I said, we've undertaken site inspections, we've had expert reports and I'm waiting on another final report before we finish off the case. I've indicated that we're close to finishing off this particular case, but, as the matter is still under investigation, I can't go into the details.

Senator WATERS: What are the possible further actions that can be taken once your report is finished?

Ms Collins: The act allows for a whole range of compliance outcomes—anything from a warning letter through to remediation, directions or enforceable undertakings through to criminal or civil prosecutions.

Senator WATERS: Who decides what to recommend to the minister? Who decides which of that spectrum of possible further actions should be taken and does that happen by way of a recommendation to the minister?

Ms Collins: The minister's powers are delegated to officers within the department. There is a range of things we would take into consideration—things like the Australian government investigation guidelines and our own public compliance policy. We also take into consideration the seriousness of environmental harm, any compliance history, any possibility—obviously, as the Department of the Environment, if there's a possibility of environmental repair, that's a factor that we consider in determining the outcome.
Mr Cahill: I think earlier in the day we took a question on notice about the delegation powers under the EPBC Act. There is power specifically for compliance and enforcement. Depending on the severity of the actual sanction or action or decision, that will go to a different level of SES officer. The deputy secretaries usually hold the sanctions when financial penalties of a certain significance are involved.

Senator WATERS: I have more questions, but I don't want to risk the chair's ire.

CHAIR: You will not indeed!

Senator HANSON-YOUNG: I have some questions specifically in relation to biodiversity. I don't know if you need to swap some people at the table. Can I ask why we're waiting so long for the sixth national report to the UN Convention on Biological Diversity—why it hasn't been released when I understand it was due almost 12 months ago?

Ms Campbell: Yes, the report is overdue. We are working to finish that and our aim is to finish it by the end of this calendar year—so in December. We are amongst—out of the 196 countries, 81 have not yet submitted their reports on time and we are one of those countries.

Senator HANSON-YOUNG: What's the reason for the delay from Australia?

Ms Stevens: As I indicated earlier in the year, it's quite a comprehensive report and we've had to do a number of consultations with states, territories and external stakeholders. It's taken us quite a while to pull that information together. Unfortunately, it's taken longer than we had anticipated, but, as I indicated earlier in the year, we were aiming to have it released by the end of the year and we are still working towards that time frame.

Senator HANSON-YOUNG: Have you had to ask your department secretary for more resources?

Ms Stevens: No, I haven't had to ask the secretary of the department, but we have diverted resources to finalise the process.

Senator HANSON-YOUNG: When did that occur? When did you finally get some resources to get the job done?

Ms Stevens: We've had resources for quite a while now. Unfortunately, again, it has taken us quite a while, but we've had dedicated resources this year.

Senator HANSON-YOUNG: How many—

Mr Knudson: Senator, if I can just add to that. Part of the reason is what is going on within that area of the department. We've got a new national Strategy for Nature, which is going to go to the Meeting of Environment Ministers in a couple of weeks. We've had the Threatened Species Strategy and its implementation happening and we've talked a number of times about how we've renewed the Landcare Program, which is going to see $450 million invested over a number of years. All of those are pretty large reforms and very resource-intensive to pull off. We feel we've now got a number of those building blocks in place that allow us to focus on this, and that's what Ms Stevens was laying out. But there are very legitimate reasons why we've been focused where we have and we think we're actually putting some pretty big markers on the board now.

Senator HANSON-YOUNG: How many staff have you had working on the UN report?

Ms Stevens: Dedicated resources—we've had probably one FTE.
Senator HANSON-YOUNG: Is that you, Ms Stevens, or somebody else?

Ms Stevens: No, someone from within my branch.

Senator HANSON-YOUNG: Could you give me a schedule—and I'm happy for you to take it on notice—of which stakeholders and which states and territories have been consulted in preparing the report?

Ms Stevens: I can outline that now if you like. Earlier—at the end of 2018 we opened for stakeholder public submissions. That was over the period of 30 November to 21 January 2019. Following that open submission we also sent out a targeted email. We have a list of stakeholders who are interested in the Convention on Biological Diversity, so we also follow that up with an email to those entities. Internally we've had a number of requests across the department for input and other relevant departments across the Australian government. Across June and August this year we've also had a follow-up request across all state, territory and local governments for information as well.

Senator HANSON-YOUNG: How much input has the issue of climate change played into the report and the commentary in the report?

Ms Stevens: Sorry, Senator, I don't have the information on the number of submissions and what they've outlined.

Mr Knudson: What I would say, though, is that generally it's well accepted that there are a few key drivers of pressures on species. Climate change is absolutely one of them and so is habitat loss et cetera. It's well regarded as one of the top three.

Senator HANSON-YOUNG: And in our report will there be a specific section that deals with the threat of climate change?

Ms Campbell: I would say it's probably too early to say—we're still working through that report. We'll have to wait until the report is finalised.

Ms Stevens: I would also outline that the convention secretariat set a template that we need to compile and respond to. The template is quite prescriptive in how you structure it. I suspect throughout that template you will find commentary around climate change. As to whether it's a specific section, I'm not familiar if that's how they've structured it this year.

Senator HANSON-YOUNG: Thanks. If there's any other detail you can give me about the submissions I'm happy for you to take that on notice in terms of how many, the topics they covered, consultation meetings—

Ms Stevens: In terms of the sixth national report submissions, the approval of the submitter would be made public at the time of the report.

Senator HANSON-YOUNG: Can I go to the national biodiversity strategy. Is this what you were referring to before in terms of national—you called it the national Strategy for Nature. Are they the same thing or are they separate?

Mr Knudson: The Strategy for Nature is effectively the name that we've worked on with the states and territories. I'll turn to my colleagues to expand further on that.

Senator HANSON-YOUNG: But, just to be clear, is that the name for the national biodiversity strategy?

Ms Stevens: Yes, Senator. Under the convention—
Senator HANSON-YOUNG: We’re not talking about two different things? They’re the same?

Ms Stevens: Different names, same thing.

Mr Knudson: Different purposes.

Ms Stevens: Under the Convention on Biological Diversity each country has to have a national biodiversity action plan. For Australia it's been Australia's Biodiversity Conservation Strategy, and that's been in place since 2010. As you would be aware, there's been a process to revise and update the strategy following a review in 2015. That strategy that you referred to, when it went out for consultation, was drafted as Australia's Strategy for Nature. It is still the same document. That's due to go to ministers at their meeting next month for—

Senator HANSON-YOUNG: Can you just remind me of the date of that?

Mr Knudson: It is 8 November.

Senator HANSON-YOUNG: So it's finished and it'll be discussed there. Will they get it ahead of time or will it be released on the day?

Ms Campbell: Ministers will consider that—the draft Strategy for Nature. How they treat that will be up to the ministers.

Senator HANSON-YOUNG: So it won't actually be released on that day?

Ms Campbell: That'll be a matter for the Meeting of Environment Ministers.

Senator HANSON-YOUNG: Is there an anticipated release date?

Ms Campbell: Again, it's a matter for the Meeting of Environment Ministers and I wouldn't want to prejudge their discussions next month.

Senator HANSON-YOUNG: When you're saying it's in a draft form when it goes on the eighth, has your department worked on it to a point at which you think it's pretty much complete and all you're asking—what you're trying to seek is an agreement on the recommendations?

Ms Campbell: We prepared advice that we're comfortable with for ministers, but how they respond to those recommendations and what they wish to do with those recommendations and with that draft is ultimately for them.

Senator HANSON-YOUNG: What's been the process so far for engaging with—you said it's taken some time. Have state and territory ministers been given draft versions up until now?

Mr Knudson: There is a biodiversity working group that's been extensively involved. Ms Stevens is our lead representative on that. Do you want to talk through that process?

Ms Stevens: The Strategy for Nature is not a Commonwealth only document. It is a shared document by all governments and it has been since the mid-1990s, when the first iteration was established. Underneath the Meeting of Environment Ministers they established a dedicated working group that's been working on the review and subsequently the revision since about 2014.

Senator HANSON-YOUNG: Does every state and territory—do they have a rep on that working group?
Ms Stevens: Correct—every state and territory. There's also a representative from the Australian Local Government Association as well. So we have representation from all jurisdictions and they have been working throughout this period to develop a draft for consultation, which was subsequently put out and we received a number of submissions. On the back of that advice the working group have been working closely together to develop the version that will go to ministers next month.

Senator HANSON-YOUNG: Has the strategy at this point been approved by the federal minister? Has she seen it?

Ms Campbell: The minister has agreed to put it to her colleagues at the Meeting of Environment Ministers.

Senator HANSON-YOUNG: So it's in a form that she's happy with?

Mr Knudson: I don't think it's final until that meeting says it's final, but she is happy for it to be prosecuted there.

Senator HANSON-YOUNG: Okay. Can I go to the UN Convention on Biological Diversity and the meeting in China next year. Who are we sending? Do we know who we will be sending yet?

Mr Knudson: The delegation hasn't been determined yet, Senator.

Senator HANSON-YOUNG: How many people would we normally send?

Ms Campbell: If you're referring to the decision meetings of the convention, usually most recently the delegation has been around the number of about five to six delegates.

Mr Knudson: It's a pretty significant meeting, as you would know, because the Aichi targets are coming up for renegotiation—

Senator HANSON-YOUNG: Exactly.

Mr Knudson: and the new framework will need to be put in place. So my anticipation, based on experience, would be that the delegation will need to be that size, if not larger.

Senator HANSON-YOUNG: Will it be led by your department? How much will involve the foreign minister and foreign affairs department?

Mr Knudson: That'll be determined through the process of consulting with government to figure out what they want to do in terms of the engagement in the meeting.

Senator HANSON-YOUNG: And that conversation hasn't happened as yet?

Mr Knudson: No.

Ms Campbell: Although I would say that this department is the lead agency for the Convention on Biological Diversity, so I think—

Ms Stevens: Historically our department has led on the negotiations.

Senator HANSON-YOUNG: When we come back in February for estimates and I go to that meeting specifically to ask some questions of you in relation to it, do you feel as though by that point you'll have a bit more information and clarity about how we will be engaging with it?

Ms Campbell: I think because the meeting is in October we probably won't have set the delegation in February and the people. We'll need to see how meetings in the lead-up to the
October COP fold out. I believe there's a meeting in February. We'll look at the agenda, the range of issues and the personnel we have in place to go, and we'll decide closer to the October meeting about who we'd recommend to go to that meeting.

**Senator HANSON-YOUNG:** Will there be a plan for public consultation ahead of the meeting? Is there any draft work being done on that that I can see? Are you able to table anything?

**Ms Stevens:** There have been a number of meetings, because it is such a big—the first open-ended working group, which is the group that is basically a subgroup of the convention, have three dedicated meetings outside of regular business meetings. They had their first meeting in August. In terms of meetings or work that's happening in Australia, yes, we have undertaken consultation. We've been attending forums. The Australian Committee for the International Union for Conservation of Nature earlier this year held a forum on the matter and we had department representatives at that. But the department has also conducted four dedicated consultations across the country over the course of the last couple of months—Perth, Brisbane, Sydney and Melbourne. We had close to I think about 130 or 140 representatives at those consultations. This is the start of consultations. It is a long process—it's not a one-off. We've commenced a dialogue with interested stakeholders domestically.

**Senator HANSON-YOUNG:** This is going to be on notice—there are two parts, though, so I can wrap up this part of the questioning and come to a different topic when it comes back to me. Could you provide for me a schedule of all of the domestic and international forums, meetings, workshops and conferences that relate to the post-2020 biodiversity framework. I'm happy for you to take that on notice. Could you also give me an outline as to what the engagement with Indigenous people will be, seeing the very particular engagement they have with biodiversity here in Australia. Thank you.

**Senator VAN:** As my colleagues will know, I have an interest in environment and science, especially where they intersect. I've got a couple of questions about the National Environmental Science Program. I note that 271 projects have previously been approved through that program, with 78 projects completed. Are you able to give me an example of one of those projects?

**Dr Post:** I certainly can give you an example. Our Northern Australia Environmental Research Hub has completed a project on mapping to underpin the management of littoral rainforest. They've also completed a number of projects in Kakadu, including investigating the role of feral cats in small mammal declines in Kakadu National Park. The list goes on. I can provide those if required.

**Senator VAN:** Has that led to a reduction of feral cats in the park or is it too soon?

**Dr Post:** I'll perhaps let one of my colleagues answer that specifically.

**Senator VAN:** You can take that on notice. Have any projects for this financial year been approved?

**Dr Post:** There are a number of new projects that we're working through right now with our final revision for the research plan, so, yes, there have been. That's in the final stages of completion.

**Senator VAN:** Thank you.
Senator GREEN: I just have some questions about the Great Barrier Reef Foundation. These questions are in regard to the $443.3 million partnership with the Great Barrier Reef Foundation. First of all, the department's annual report says that the partnership has an investment target of between $300 and $400 million. How many funds have actually been raised? How much has been raised?

Ms Callister: To date—the information we've received from the foundation about their fundraising comes in their six-monthly reports. So, to date, the amount that we've been advised of is that they've raised more than $21 million as in-kind contributions from their projects. We're also aware that they're actively seeking to fundraise more broadly towards their very ambitious targets. I think it will come as no surprise to senators that some of the uncertainty around the future of the partnership that arose around the election—when there was the potential, depending on the outcome of the election, as to whether the partnership would continue—has impacted on their ability to participate more actively in the fundraising sphere. Now that that outcome is known and their future is known, they're moving much more actively to engage with potential donors.

Senator GREEN: What do you mean by in-kind contributions?

Ms Callister: It's a pretty standard approach. It means that when they give money to people that they're delivering programs with—so they give grant funding, for example, to organisations or community groups—they also co-contribute to it. Sometimes it can be in terms of, say, staffing; it can be in terms of office facilities; it can actually be cash as well. So there can be a whole range of different ways that they can co-contribute to make the projects larger. Basically, these projects don't happen just simply on the basis of the money that's being provided through the Reef Trust partnership.

Senator GREEN: Have they broken it down in the report to you about what type of in-kind investment they received?

Ms Callister: I haven't got those details with me, so I'd have to look at their reports and give you more information if they have broken it down.

Senator GREEN: You might take that one on notice. Of the grant money, how much has been spent and how much of the $440 million has been spent on start-up costs?

Ms Callister: It's probably worthwhile just taking a little step back. They've released their annual report on what they're proposing to spend over the coming financial year. They've made some initial investments in the first year—in the vicinity of around $25 million worth of projects. Also to date they've advised us that their administrative costs have been just under $8 million. They anticipated that the early stages of the partnership would have proportionally higher start-up costs and that's been the case. They've also indicated in their first annual work plan for 2019-20 that they anticipate spending I think around $58 million. That is not administration—that's on projects.

Senator GREEN: Sorry—I'll just take you back to my question. How much has been spent on start-up costs? Are you referring to that as administration costs?

Ms Callister: That's right, Senator.

Mr Oxley: Which is inclusive of start-up costs.

Mr Knudson: Exactly—administration costs are broader.
Senator GREEN: Okay. How many people have commenced work since the foundation received the grant funds?

Ms Callister: Our advice is that as of 30 June 2019, which is when we received the latest report on employee status, they had 27 employees.

Senator GREEN: Do you know what the staff turnover has been?

Ms Callister: No, I don't, but I'm aware that they had some staff redundancies around the time of the election.

Mr Knudson: Just before the election, to be clear. There were people with uncertainty over the foundation's future and obviously a number of people chose to move on.

Senator GREEN: Sure. Are you aware that the former chief of staff and deputy chief of staff to the former Queensland LNP premier Campbell Newman both have senior roles at the Great Barrier Reef Foundation?

Ms Callister: No, I'm not aware of that, Senator. I am aware of reports in relation to the husband of the head of the Great Barrier Reef Foundation that have been made in the media. But that's all I'm aware of.

Senator GREEN: Do you know how the foundation advertises for positions?

Ms Callister: I think they use a range of standard processes to advertise for positions, including things such as Seek and other standard processes for recruiting.

Mr Knudson: If it's helpful, we can come back on notice and give you an answer informed by a discussion with the foundation directly on that question.

Senator GREEN: Do you agree with the findings from the Auditor-General that the government had failed to comply fully with the rules designed to ensure transparency and value for money when administering the grants?

Ms Callister: I think the department's response to the Auditor-General's report was made public in the Auditor-General's report.

Mr Knudson: And, to be clear, no, we don't agree with that assertion by the Auditor-General.

Senator GREEN: You don't agree with that?

Mr Knudson: No, we believe that we did everything reasonable to test value for money. Indeed, one of the key things—and your questions have gone to that—is about the administrative costs associated with the grant. As we've said previously, the administration of grants within the department runs at around 20 per cent quite regularly and the administration of grants by the foundation will be significantly less than that. The Auditor-General didn't agree with our views on that and thought we should have gone further in terms of analysis on that point, but we made the argument that we physically couldn't. There wasn't a way to test it beyond the guidelines that were put in place through the grant agreement.

Senator GREEN: Okay. I do have some questions about the Auditor-General report, but I might just—this question relates to that value for money question, so I might skip down to this one. The Auditor-General found that the reasons given by the department in its advice to the minister for concluding that the proposal represented value for money differ in important respects from the matters the program guidelines required that the proposal address. So they
differ from the guidelines that the proposal addresses. Why was that the case? Why was there a difference between what the Auditor-General found in terms of the reasons and the difference between that and the matters the program guidelines required?

Mr Knudson: What the department failed to do, and my colleagues will correct me on this, was that we didn't put the exact title that was used previously in documentation on the guidelines. Because of that, the Auditor-General looked and said, 'Hold on—something looks different here'. But I will let Mr Oxley—

Mr Oxley: The key matter that Mr Knudson is referring to is that the ANAO provided a critique that the department did not have assessment criteria against which it assessed the proposal from the foundation. We do not agree with that at all. There were very clear assessment criteria set out in the grant guidelines. What we didn't do was put a headline above them that said 'Assessment criteria'. But we had a comprehensive and objective basis for undertaking the assessment of the application and that was done diligently and comprehensively.

Senator GREEN: Based on the recommendations made by the Auditor-General, have you made changes, then, to that process for grants going forward?

Mr Oxley: This is a one-off—it was a one-off grant to the Great Barrier Reef Foundation. We, as a consequence of the recommendations of the Auditor-General, have reflected on whether there are ways that we can improve the way we administer grants in the department and we've done that. Certainly, in reef branch, we've gone back and looked at how we approach the making of grants, the development of guidelines and other matters that were raised by the Auditor-General in putting in place a stronger framework for doing those things around the operation of the Reef Trust and the other reef funding we have responsibility for administering.

Senator GREEN: Okay. Thank you for that. The Minister for the Environment described the Great Barrier Reef Foundation as about everyone talking to everyone. What does that mean?

Mr Oxley: You'd have to ask the minister that, Senator.

Mr Knudson: The one thing I would say is that obviously you have a whole range of stakeholders—and we've heard it through different questions around the table—whether it's environmental groups, tourism organisations, farmers et cetera. Certainly one of the key things with the foundation having to do not only some very applied work with respect to water quality and control programs et cetera but also community engagement is to help people to understand what they can do in terms of their part to protect the reef. I think there is definitely an element which is within the foundation's remit.

Senator GREEN: Does everyone talking to everyone include former JCU academic Dr Peter Ridd?

Mr Knudson: Again, as Mr Oxley said, to have a robust answer to your question you'd have to put that to the minister. I've just given an overview of how complex the operating environment is for the foundation and who they need to engage.

Mr Oxley: So what we—
Senator GREEN: Sorry, I will ask this question then if that is not an appropriate question—

Mr Oxley: Sorry, if we may, we might just add a little more to Mr Knudson's answer. The Great Barrier Reef Foundation has been very clear that it understands and accepts the science in relation to the Great Barrier Reef, including the scientific consensus statement on reef water quality. I think a reasonable characterisation here is that the foundation has been drawn into an issue that is not theirs and it's not of their making. They have got a very clear position around the veracity of the science in relation to the Great Barrier Reef.

Senator GREEN: What is the interaction, then, between the foundation and Dr Peter Ridd?

Mr Oxley: I'm not aware of any, Senator.

Senator GREEN: You're not aware of any interactions?

Mr Knudson: We can take that on notice and go back to the foundation to provide whatever answer we can to that question.

Senator GREEN: Thank you. I just have one more question about the foundation. I think it comes in the context of the conversation and the media reporting happening today. I know the answer to this question, but I think it's very important to get it on the record. The Great Barrier Reef Foundation—in terms of being subject to public scrutiny, you've spoken about the six-monthly reports. But they won't be appearing at estimates today—I think we all know the answer is no to that—and they're not subject to FOI requirements?

Mr Oxley: I can't—

Ms Callister: Certainly any interactions that the department has with them are subject to FOI and they are also subject to auditing requirements by the Auditor-General. Our understanding is that scrutiny of this grant agreement is on the tentative list of performance audits by the Audit Office.

Mr Oxley: I'd also add to that, Senator, that each time—they have appeared before the Senate and answered questions that have been asked of them in relation to the making of the grant to the foundation. I think they appeared before the Senate committee on two occasions and I understand they've been invited to give testimony to the current inquiry on the reef water quality science.

Senator GREEN: Sure. But, in regard to the ongoing administration of that grant funding, I can only ask you questions about the information that they've given you—I can't ask them those questions directly or FOI that information, yet it's $443 million?

Mr Oxley: That would be the same of any entity anywhere in Australia that received a grant from the Australian government.

Senator GREEN: I think that's the problem. I think that's what we're talking about today. Thank you.

Senator WHISH-WILSON: I think that committee which I chaired explored that, Mr Oxley. I don't think we need to go down that road again. Can I ask a supplementary question on the same topic. We asked—I'd ask you to confirm this, Mr Knudson, but I missed following the second question up. The Auditor-General established that an email from the department is what set the whole process off around the grant. I'm happy to put this in more
detail to you on notice if you don't remember. You confirmed that was the case at the last
estimates. Can you tell us who sent that email from the department?

**Mr Knudson:** I'm having difficulty recalling my answer at last estimates, so I'm probably
wise to take that on notice.

**Senator WHISH-WILSON:** All right—I'll put it in writing. The Auditor-General set out
a timeline which basically said that the email from the department said basically 'You need to
do something to avoid an endangered listing'—a world heritage endangered listing. I asked
them that and they confirmed that. I've asked you and I'll get that transcript, but I would just
be interested in who actually sent that email.

**Mr Knudson:** I will take that on notice.

**Senator WHISH-WILSON:** Was it you, Mr Oxley, who sent that email?

**Mr Oxley:** I'm just trying to recall what the Senate report was. Are you referring to a table
that had timelines in it?

**Senator WHISH-WILSON:** That's correct.

**Mr Oxley:** And that was—

**Senator WHISH-WILSON:** I'm not sure if that was the one.

**Mr Oxley:** We'll take it on notice. I don't even know that that context was precise.

**Senator WHISH-WILSON:** It would be separate evidence to what we have already
received.

**Mr Oxley:** I accept that was published, but—

**Senator WHISH-WILSON:** They asked them about the email and they said they had
sighted it personally. We'll sort it out. You can take it on notice.

**Senator URQUHART:** I just have a couple of questions around coastal erosion. Is there
someone in the room for that—Ms Campbell?

**Ms Campbell:** Potentially—it depends on whether it's—

**Senator URQUHART:** They're quite broad. There are just a couple of issues that I want
to raise. The federal government has committed $4.8 million towards a coastal pathways
project in north-west Tasmania. However, there is a serious coastal erosion issue that could
derail that project and actually undermine the Bass Highway itself. There is also another
example in the Newcastle suburb of Stockton, which recently lost its childcare centre and 2.5
metres of beach sand height in a week as a result of coastal erosion. I'm just wondering if you
can give me some sort of picture about what national planning efforts are underway to prepare
for or respond to coastal erosion and what the government's plan is to assist state or local
governments to remediate and manage coastal erosion that is related to climate change.

**Ms Campbell:** Thank you, Senator. I think that question is probably best directed to the
climate change outcome later this afternoon—outcome 2.

**Senator URQUHART:** Okay. I just have a couple on threatened species. I just want to
look at the funding for threatened species. Could you just tell me whether it is a fair
characterisation that the majority of the funding for threatened species is delivered from the
Natural Heritage Trust special account?
Ms Campbell: I think that's a fair characterisation. The Natural Heritage Trust, which funds the National Landcare Program, is our largest investment in this area.

Senator URQUHART: Can you outline the forward trajectory of funding to the Natural Heritage Trust special account? When I looked at it, it looks like it's in decline, but I just want to confirm that because I may be reading it wrong.

Ms Campbell: In 2019-20 the NHT has appropriation of $177.2 million. In 2020-21 it goes to 169.7 and then in 2021-22 it is 147.1 and 149.2.

Senator URQUHART: So it actually is going—

Ms Campbell: That's based on current appropriations.

Senator URQUHART: But it is reducing?

Ms Campbell: As a standing appropriation, yes.

Senator URQUHART: Can you outline what has been the trend in the Natural Heritage Trust special account from 2013, when the government took office, through to the forward estimates?

Ms Campbell: I don't have the numbers back to 2013. I flipped over the page—if we look forward to 2028, it gradually goes up again. In 2023-24 it is 186.32. In 2024 it's 186.154 and then up to 196.708 in 2028-29. So it is increasing again. Part of the reason for those ebbs and flows, I guess, is that some funds have been removed from the NHT to other appropriations—for example, some funds got transferred to Prime Minister and Cabinet for the Indigenous Protected Areas funds, which were historically within the NHT and those funds have moved around. While remaining relatively stable, they're in a different appropriation.

Senator URQUHART: Okay. So are you able to take on notice that trend from 2013 and provide that to us?

Ms Campbell: Yes.

Senator URQUHART: Thank you.

Senator HANSON-YOUNG: Can I just go to some questions in relation to the new dams proposal by the New South Wales government. I've got some questions in relation to the environmental exemptions for that. Can you please outline what discussion has been had with the New South Wales government in relation to the new dam proposal?

Ms Vickery: We have a bilateral with the New South Wales government, so we are in regular conversation about projects that are coming down the track. We've been aware of the legislation that they're proposing to introduce.

Senator HANSON-YOUNG: Has there been specific conversation in relation to fast-tracking environmental approval?

Ms Vickery: They have been talking about what to do in terms of their dams and assessing of dams, because their processes take a little bit longer. So we have talked about it.

Senator HANSON-YOUNG: The minister was quoted last week as saying that she would be doing whatever she could to fast-track the process from a federal perspective. Did you brief the minister in relation to this?

Mr Knudson: I've had conversations with the minister on this. What we've talked through, which is very consistent with this, is making sure that the time frames are very clear.
for each of these projects. We'll do that in a joined-up way with New South Wales so that it's very clear to the proponent and to the two regulatory bodies, both in New South Wales and ourselves, in terms of the time frames for assessments to be completed.

Senator HANSON-YOUNG: Have you briefed the minister that it is able to—that your department is able to fast-track proposals for the New South Wales government?

Mr Knudson: That's a matter, obviously, for the New South Wales government as to what process they use. What we've talked to is making sure that the time frames are clear and that we meet those time frames for our assessment.

Senator HANSON-YOUNG: I just want to be clear, because the federal minister was quoted in relation to fast-tracking environmental approvals that are needed at the federal end. Is there any suggestion that specifically any of these proposals will be fast-tracked?

Mr Knudson: The expectation that's very clear out of the minister is that we will meet the statutory requirements of the act and not be late in our approvals—which, sadly, is fast-tracking for us these days.

Senator HANSON-YOUNG: Sticking by the appropriate process. How will the department handle the proposals under the EPBC Act? Will you have a particular person assigned to it? Is that how you are going to get the fast-track happening?

Mr Knudson: We'll make sure that there are resources allocated to these projects. At this point I'd say there are no referrals yet for these projects to us. As soon as they come in then we'll make sure there is appropriate resourcing put behind them.

Senator HANSON-YOUNG: Are there other examples of projects where you'd like to fast-track them if you had the opportunity?

Mr Knudson: I'd like to see every project approved within the statutory time frames.

Senator HANSON-YOUNG: Okay. You've indicated already that there is a delay or there is a lengthy process. Why do these get special treatment?

Mr Knudson: Like I said, I've made a commitment to the minister that these will be approved within the statutory time frames.

Senator HANSON-YOUNG: What could 'unnecessary hold-ups' be? The environment minister indicated that she intends to deal directly with these proposals so there are no unnecessary hold-ups. What is an unnecessary hold-up?

Mr Knudson: Obviously we're keen to make sure that these projects meet the statutory time frames. Sometimes, for reasons of staff moving around et cetera, we lose some days in transitioning projects et cetera, so we're going to very actively case manage these projects to ensure that they have all of the attention that they require from the department.

Senator HANSON-YOUNG: Has the minister asked you to cut any corners?

Mr Knudson: As I said, the only undertaking I have made, which is consistent with where the minister's head is at, is to make sure these meet the statutory time frames.

Senator HANSON-YOUNG: In the briefing with the minister, have you raised any concerns about the environmental impact that these dams might have on—

Mr Knudson: No, because that'll only become clear through the assessment process. We're obviously aware that, if we get a referral and it triggers consideration under the act,
we'll obviously take a look at the impacts on species and anything else that might be impacted by the construction of the dams.

**Senator HANSON-YOUNG:** How do you guarantee that the assessment of these projects, given the minister has said she wants them fast-tracked, aren't going to be compromised because of the political pressure?

**Mr Knudson:** The commitment that has been made is to make sure that these are assessed within the statutory time frames. My experience is that the minister always expects that we will robustly assess any project according to what is required under the act.

**Senator HANSON-YOUNG:** What happens if you can't meet the time frame?

**Mr Knudson:** That would then be something that I would be answering for.

**Senator HANSON-YOUNG:** At that point do you start cutting corners?

**Mr Knudson:** No, Senator. There are very specific requirements under the act and that is the ultimate responsibility. Sometimes that means that we miss our time frames and that's not a desirable outcome—that does happen. But we cannot put up a decision pack to the minister that does not comprehensively deal with the impacts.

**Senator HANSON-YOUNG:** Has there been any request from the minister or others in the department or, indeed, New South Wales to amend the legislative requirements?

**Mr Knudson:** No, Senator.

**Senator HANSON-YOUNG:** The minister has not asked you to consider this in the context of the EPBC review?

**Mr Knudson:** No, Senator.

**Senator HANSON-YOUNG:** I am swapping topics; hopefully this can be quick. I'd like to know what the response is to Dr Wendy Craik's $1 billion over four years proposal to establish the national biodiversity conservation trust in her recent review into the interaction of the EPBC Act and the agriculture section. Are you aware of that report?

**Mr Knudson:** Very much so. We're just bringing the right officials to the table for this.

**Mr Edwards:** The response to those recommendations—largely where they were much bigger considerations involving funding or broader stakeholders—has been put forward into the main EPBC review. The government took a decision there to say they're pretty big changes, so they're worth testing in a much bigger process.

**Senator HANSON-YOUNG:** When do we expect a response to those recommendations?

**Mr Edwards:** There won't be a response.

**Senator HANSON-YOUNG:** At all?

**Mr Edwards:** The minister acknowledged the publication of the report and, as I just suggested, said that those larger cost-cutting recommendations would have to be tested further.

**Senator HANSON-YOUNG:** Do we know if there—has the department been asked to draft any briefings in relation to the recommendations for the minister or for any of the ministers impacted?
Mr Edwards: Certainly at the time we received the report we would have provided a briefing to the minister. In forwarding Dr Craik's recommendations, we certainly briefed at that time.

Senator HANSON-YOUNG: Has there been any work done on the design of such a scheme—a conservation trust?

Mr Edwards: No, Senator.

Senator HANSON-YOUNG: No-one's given you any direction to look at the practicality of doing that?

Mr Edwards: No.

Senator HANSON-YOUNG: Is there any more information you can give me about the length and thoroughness of any of the briefings you have given to ministers? You're saying you imagine; I'd like to know if there actually is anything.

Mr Edwards: I think what I said is that we provided a briefing in transmitting Dr Craik's report. Again, that provided the report and it provided a view in terms of summarising the recommendations put forward by Dr Craik. The government considered that report and took a decision about whether to respond immediately or, in this case, whether some items needed to be tested further.

Senator HANSON-YOUNG: Has there been any request for the department to do any follow-up work in relation to these recommendations?

Mr Edwards: There were some actions taken. For example, an expert who had natural resources management background and experience was appointed to the Threatened Species Committee. That was certainly one of the recommendations. We've also, through our normal regulatory engagement, tried to take on board Dr Craik's suggestion of improving the material in the reference guides that proponents need to draw on. I think Ms Collins talked previously about working with farmers, for example, to produce practical material that would make sense to them. That's been something we've been continuing to progress as well.

Senator HANSON-YOUNG: Will any of this work go into the deliberations over the overall review of the EPBC Act?

Mr Tregurtha: As I mentioned earlier, there are a range of inputs, and the findings and recommendations of the Craik review would certainly be a piece of information, or a document, that we would draw to the attention of an independent reviewer.

Senator HANSON-YOUNG: I want to go back to the original briefing that you gave when you transmitted the report to the minister. Which minister are we talking about—the environment minister or the agriculture minister or both?

Mr Edwards: It was the environment minister—Minister Price at that time.

Senator HANSON-YOUNG: Was that a verbal briefing or a written briefing?

Mr Edwards: It was a written briefing.

Senator HANSON-YOUNG: So there's a briefing document?

Mr Edwards: We're required to transmit that to the minister. It was a report that the minister commissioned, so we receipted it from Dr Craik and formally transmitted it to the office.
Senator HANSON-YOUNG: Are you able to table the corresponding information?

Mr Edwards: I'd have to take that on notice. I certainly don't have it with me.

Senator HANSON-YOUNG: Okay. All right.

Senator WATERS: I have some questions for 1.5, starting off with the North Galilee Water Scheme—the new referral, the 2019 one. I understand public comment is now closed. When is the controlled action decision for that due?

Mr Knudson: We'll call that officer to the table, Senator.

Mr McNee: Could you repeat that question, Senator?

Senator WATERS: For Adani's water pipeline, the North Galilee Water Scheme—the fresh referral, after the court action, public comment for which has just finished—when is the controlled action decision due?

Mr McNee: The decision was due on 15 October. We received 6,500 submissions within the period and we've subsequently received another 500 submissions. So we have to work through those submissions, but we intend to do that over the coming weeks.

Senator WATERS: Have you made a recommendation to the minister or the delegated decision-maker about whether it should be a controlled action?

Mr McNee: Not at this stage. We're still analysing the submissions.

Senator WATERS: Do you have an estimated date for when the recommendation will be made?

Mr McNee: I don't have a specific date, because it will depend, obviously, on what comes out of the analysis of the submissions.

Senator WATERS: Will you take a different approach to applying the water trigger, given the court case?

Mr McNee: I don't want to speculate yet. As I said, we haven't undertaken that kind of consideration.

Senator WATERS: Well I suggest that you do, but do that as you may.

Mr Knudson: We'll take that under advisement, Senator.

Senator WATERS: Yes, thank you. I'll go to some specific matters now. Since 18 May—the election, obviously—how many meetings has the minister or her advisers had with representatives of Adani regarding the North Galilee Water Scheme referral? What were the dates and who went along to those meetings?

Mr McNee: I'll have to take that on notice. I've only recently been in the role.

Senator WATERS: Okay. I have the same question for meetings that the department may have had.

Mr Knudson: On that—

Senator WATERS: On that particular referral.

Mr Knudson: Mr McNee, do you know?

Mr McNee: I'm not sure of that.

Senator WATERS: For example, have you had any yourself, Mr McNee?
Mr McNee: Sorry, I might have misunderstood your question. We've had a number of meetings with representatives from Adani that relate to the North Galilee Water Scheme.

Senator WATERS: A number? Could you let me know, roughly, the dates of those.

Mr McNee: I don't have those dates with me but I'd be happy to provide them on notice.

Senator WATERS: Okay, if you could take that on notice. Did the minister, her advisers or officers from the department meet with the Adani CEO, Lucas Dow, between 14 and 18 October this year? It was only last week, so hopefully your memories can serve you okay.

Mr Knudson: Thank you for that. I was thinking, 'God, that was a long time ago.' Okay, it was only last week, so I certainly haven't. I don't know whether anyone else has. No? So we'll just confirm about the minister and the minister's office, but departmental officials haven't.

Senator WATERS: Thank you. That would be great. If the answer is yes, I'm interested in the purpose of the meeting and the agenda, minutes and anything else that can be provided.

Mr Knudson: I understand.

Senator WATERS: Could I ask you to take on notice a list of the status of all of the management plans and strategies required under the EPBC Act approval conditions for the mine.

Mr Knudson: For the mine, yes.

Senator WATERS: Thank you. I'll move now to compliance condition 8 of Adani's approval for the mine, which requires the company to secure offsets within two years of the commencement of various works, including securing 72 hectares of threatened brigalow. Given that the notice for the railway works was made on 13 October 2017, basically that's due now. It was due on 13 October. Has the company provided evidence that the required area of brigalow scrub has been secured?

Mr Manning: I gather it's in relation to brigalow offset, but could you repeat specifically what you were asking.

Senator WATERS: Brigalow offset was due within two years. That time is now up. Have they said they've got it yet?

Mr Manning: Earlier this year Adani applied to the department for a variation for the time period—

Senator WATERS: Imagine!

Mr Manning: to secure a component of the offset required for the mine.

Senator WATERS: For brigalow specifically?

Mr Manning: The offsets for the Adani mine are broken into six components—the stages at which they're required to be delivered, the time frames—according to stages of the mine. They applied for a variation to the time frame associated with the commencement of the rail west component of that project, which is the component that includes—

Senator WATERS: So the brigalow, yes. What was the variation they sought and what were they given?

Mr Manning: There were a couple of components to the variation. One was for an extension to the time frame to get the legal security over the brigalow component. I notice the
rail west component also includes a very small area, 46 hectares, for the black-throated finch and 11 hectares for the yakka skink.

Senator WATERS: Is this all on the referrals website? Can I look it up?

Mr Manning: The variation notice will be published, yes.

Senator WATERS: Okay. I'll look that up. Have they secured any of the offsets they were meant to secure or have they just asked for more time?

Mr Manning: It's about 97-odd per cent of the offsets required. They are covered off by the Moray Downs west property. That has been owned by Adani for quite a number of years and they are managing it in accordance with the offset requirements already.

Senator WATERS: Is the three per cent that's outstanding the bit they need to get legal security over?

Mr Manning: Yes, that's right, and there's also the other Adani projects—the North Galilee Basin Rail et cetera. There is a number of residual bits of offsets required.

Senator WATERS: Can you provide me all of that detail on notice for all of the approvals or permits required.

Mr Knudson: Everything related to offsets?

Senator WATERS: Related to offsets and where they've been secured.

Mr Manning: We can do that.

Senator WATERS: On the issue of security, has Adani paid any financial security to the department under any of its approval requirements?

Mr Knudson: Not that I recall.

Senator WATERS: Usually to the state, that's right. Adani permit conditions 16 and 17 require a biodiversity fund to be established and evidence of $100,000 being deposited before commencement of operations. Was the department consulted regarding the structure and operation of the fund, and has there been any evidence provided that the $100,000 has been deposited and, if so, when?

Mr Manning: We worked quite thoroughly with the company in relation to the requirements of that fund prior to approving it as meeting the requirements of those conditions. We put quite a lot of effort into that with the company and since we approved the fund, as satisfying those requirements, they have provided a notification that they have made that first payment to the department.

Senator WATERS: Of the full amount?

Mr Manning: Yes, the $100,000 for the first year.

Senator WATERS: When did they do that?

Mr Manning: I would have to take that on notice. It was much earlier this year; six months ago approximately.
**Senator WATERS:** Through a QON that you responded to we were advised Adani had commenced mining operations on 15 June this year and that that work consisted of clearing, fencing and the development of new tracks on the mining lease. The Commonwealth and Queensland governments have both previously declined to prosecute Adani for bore drilling, vegetation clearing and track works on the basis that those things did not constitute the commencement of mining operations. Can you explain how the works described in Adani’s notice of commencement somehow are now considered commencement of mining? How do they differ from work previously undertaken on site that was investigated in October 2018 and January 2019?

**Mr Manning:** I'm not sure about the compliance elements of it, but Adani's approval conditions have quite a specific definition of what commencement of operations actually means. So any decision in relation to what constitutes pre or early works versus actually commencement of mining operations would be a judgement made in relation to the wording of that condition—

**Senator WATERS:** It seems the same wording has been used but that's been applied differently. I'm interested in why that's the case?

**Ms Collins:** Specifically, the allegations we looked at earlier this year were in relation to those activities that had to do with exploration drilling. That is specifically excluded from the definition of commencement of mining in the approval.

**Senator WATERS:** Okay. If I could ask for a follow-up on an earlier question. I had asked for the details of who had been at the site investigations for the four site visits? Did you have a chance to get those details?

**Ms Collins:** I will take it on notice because I do want to check in to the issue of providing persons' names publicly.

**Senator WATERS:** Okay. Mr Heferen, I want to ask about the delay on the outlook report here in outcome 1. Why was there a 10-week delay in GBRMPA giving the outlook report to the minister/department and it then being tabled? What's explanation for that?

**Mr Heferen:** I'm sorry, I thought that had been dealt with via the 15 sitting days.

**Mr Knudson:** It had to be tabled within 15 sitting days and that task was met.

**Mr Heferen:** Fifteen sitting days of the parliament.

**Senator WATERS:** Why did you need all 15? What was the delay?

**Mr Knudson:** Officials from GBRMPA pointed out that that was the legislative requirement and that it was met. Beyond that, it's a matter for the minister and the government on the timing of release of any report, as long as it met the legislative requirements, which it did.

**Senator WATERS:** Thank you.

**CHAIR:** For the information of the secretary, we have had requests for further questions in areas 1.1, 1.5 and 1.6. Could you please make sure officials of those areas remain. Anyone else is released to go. We will then move on to outcome 2 and others after that.

**Proceedings suspended from 16:28 to 16:45**
CHAIR: The committee will resume its examination of the Department of the Environment and Energy, outcome 1, with areas of 1.1, 1.5 and 1.6.

Senator WHISH-WILSON: I want to start by asking follow-up questions on scalloped hammerhead sharks, which I mentioned earlier. I will put some questions on notice on the threatened species committee. The Threatened Species Scientific Committee determined that scalloped hammerheads were eligible for an endangered listing based on the level of stock depletion, but in March 2018 a conservation dependent listing was recommended and made based on undertakings from the Queensland and Northern Territory governments around management measures that they would implement to allow fishing to continue. You may have seen recently that the Australian Marine Conservation Society put out a report that found Queensland and the Northern Territory governments didn't implement all of the management measures that were expected to be implemented when the species was listed, and the report says they still haven't done so. Were all the undertakings made by the Queensland and the NT governments implemented prior to the listing of the species, or did you confer with the AMCS that they weren't?

Mr Richardson: At the time the Threatened Species Scientific Committee concluded their assessment and made their recommendation to the minister, the committee and the department were satisfied that the fishery management arrangements that the committee expected to be put in place were put in place. In that period after the recommendation went up from the committee but before the minister made the decision those fishery management arrangements were put in place.

Senator WHISH-WILSON: All of them?

Mr Richardson: The ones that the committee required to be put in place, yes.

Senator WHISH-WILSON: Have you read the AMCS report? Do you have any comments on the veracity of their information?

Mr Richardson: I have read the report. I haven't read it recently, but I have read the report, as has, I might add, the Threatened Species Scientific Committee. At the time that the committee put forward the recommendation to list the species as conservation dependent they also undertook to review the fishery management arrangements 12 months later. That review has just commenced.

Senator WHISH-WILSON: Why was the species listed as conservation dependent against the explicit advice of the Threatened Species Scientific Committee?

Mr Richardson: The scientific committee recommended the species be listed as conservation dependent.

Senator WHISH-WILSON: They recommended that? It was not an internal decision?

Mr Richardson: That is correct. Their listing assessment, which is taking the form of a conservation advice for that species, is published on the website.

Senator WHISH-WILSON: Can you tell us whether all of the undertakings have been subsequently implemented? Are you saying there is a subset of those undertakings that were and then a subset that weren't?

Mr Richardson: The ones that the committee required to be in place in order to support the conservation dependent listing were put in place, and that was the basis for the minister
making the decision to list it as conservation dependent. The committee is subsequently conducting a review of the fishery management arrangements and has had a workshop quite recently involving the Queensland and Northern Territory government representatives here in Canberra with the whole Threatened Species Scientific Committee to go through the fishery management arrangements and to see where the Queensland and NT governments have got to specifically in light of that AMCS report.

**Senator WHISH-WILSON:** Are you reviewing the conservation dependent listing? Could I take that as what you're actually reviewing?

**Mr Richardson:** The committee has undertaken, as they said in their conservation advice, to review the management arrangements that were put in place to see whether they were sufficient to support an ongoing conservation dependent listing.

**Senator WHISH-WILSON:** Do you have any idea when that process will be finished or how long it will take?

**Mr Richardson:** As I said, they have had a workshop involving the Queensland and Northern Territory governments. The committee is looking to conclude that by the middle of next year.

**Senator WHISH-WILSON:** The middle of next year?

**Mr Richardson:** The middle of 2020.

**Senator WHISH-WILSON:** Thank you. I have a couple of quick questions. I understand I have only got 10 minutes all-up. As to CITES and the status of the scalloped, great and smooth hammerhead sharks, they are listed under Appendix 2 of the Convention on International Trade in Endangered Species. Apparently Appendix 2 includes species not necessarily threatened with extinction but for which trade must be controlled in order to preserve populations. I understand the Australian CITES scientific authority undertook an assessment of the hammerhead shark harvest and export levels in September 2014, and a non-detriment finding was made so long as specified catch limits were adhered to. The Threatened Species Committee recommended a review of the non-detriment finding for hammerhead sharks additional to that. Has the department committed to a review of the non-detrimental finding?

**Ms Croker:** I will have to take that question on notice.

**Senator WHISH-WILSON:** Can you tell us when the Threatened Species Scientific Committee did recommend the non-detriment finding for hammerhead sharks?

**Ms Croker:** I am sorry. I don't have that information. I will have to take that on notice.

**Mr Richardson:** The Threatened Species Scientific Committee does not recommend or make a non-detriment finding. That is a task—

**Senator WHISH-WILSON:** No, it recommended a review of that. You don't know when that recommendation was made?

**Ms Vickery:** No, I don't.

**Senator WHISH-WILSON:** Can I ask a couple of questions on wildlife trade? Can you take those ones on notice? The *Guardian* recently reported that 30 hammerhead sharks captured on the Great Barrier Reef and exported to a French aquarium over an eight-year period had all died in captivity. Are you aware of that media report?
Ms Vickery: No.

Senator WHISH-WILSON: You are not aware of that? Are you aware of that issue?

Ms Vickery: I'm not aware of it. I've just been in the job literally a couple of weeks. Our previous general manager moved on. I would have to take that on notice. I apologise.

Senator WHISH-WILSON: I have about nine questions, but I will put them to you on notice. Just to finish, I want to ask a couple of quick questions on waste.

Mr Knudson: Thank you for your understanding.

Senator WHISH-WILSON: That is no problem. I wanted to ask a couple of quick questions on the Australian Packaging Covenant. I will put the more detailed ones on notice to you. Correct me if I'm wrong, but the Australian Packaging Covenant itself operates under the umbrella of the National Environmental Protection Measure. Since 1999, support for the covenant has been successive governments' primary way of measuring the environmental impacts of packaging. Would that be a reasonable assumption?

Mr Knudson: They have certainly been the peak body that we've worked with to understand the packaging industry. They are the ones that have led a very broad engagement of industry. I think they now have 800 or so companies that are affiliated. They are also the ones that led the work that led to a number of targets being held for waste packaging.

Senator WHISH-WILSON: That is where I was leading with this. Have you formally assessed the effectiveness of the covenant over the past 20 years?

Mr Knudson: What I would say is that APCO is coming back as a result of some of the work done last year with some baseline analysis against each of the targets. That will help inform our progression going forward. In terms of a review of the scheme more broadly, I'm not sure that that has been done.

Mr Tregurtha: There may have been one review, but it would have been a number of years ago. I would have to take that on notice.

Senator WHISH-WILSON: If you could find anything, I would be interested. I'm pleased that you are upgrading your targets for packaging recycling, for example. These are the types of numbers that the Prime Minister has been talking about recently. I understand the current rate of plastic packaging recycling is around 30 per cent. The covenant has now set a target of 70 per cent for plastic packaging recycled by 2025. Given the targets have not been met in the past 20 years, what types of measures will be taken to make sure that 70 per cent is achieved in the next five and a half years?

Mr Knudson: What I would say is that the baseline analysis done by APCO is essential to understanding the current state of play but also to track progress towards their targets being met. The other thing that I think is really essential is that broadening of their membership. The larger these schemes are in terms of capturing the full industry—in this case the packaging industry—the more effective they are going to be for a national outcome. I will turn to my colleagues and see if they have anything they want to add beyond that.

Ms Tilley: If I can just sort of broaden it slightly into assessments of how we're tracking against targets in waste, I was mentioning earlier in the session today that coming forward to the meeting of environment ministers next month is the National Action Plan, which sits under the National Waste Policy. That has a series of targets, actions and commitments from
state and territory, Commonwealth governments, local governments and industry. The APCO work is referenced in that plan.

Senator WHISH-WILSON: Is that a self-review essentially?

Ms Tilley: I am not talking about a review, I'm just talking about the targets and the actions. APCO's targets are referenced in that plan. All going well at the meeting of environment ministers, if that action plan is adopted by all ministers the intention is to regularly review the actions and commitments under that plan. There will be a regular review of progress against those targets, should that plan be adopted.

CHAIR: That is your time. Can you put other questions on notice?

Senator WHISH-WILSON: Could I ask one last question? What is fundamentally different about what will happen in the next five years versus what has happened in the last five years under this voluntary scheme? I make no secret that I think it needs to be a mandatory scheme. A Senate inquiry into this issue recommended that as well. What is going to be different in the next five years, considering we have more than doubled our targets?

Mr Knudson: I would start with some analysis. For better or for worse, the China Sword policy has caused well over 100 countries that used to export waste to pause and think about their approaches. That has very heavily influenced the behaviour of companies as well, realising that there is a social licence question at play as well. I think the global dynamics make this a much more solvable problem than they would have been five years ago. Australia as a relatively small market would have had a very difficult time getting across the line. But you have global pressure building not only from governments but also from industry, from civil society and so on, and that is within the last two-three years. The tide has changed fairly dramatically on issues around waste. I think that is significant. That doesn't mean that we won't have to back it in with a number of key actions. The action plan is definitely one of those elements. But there will need to be more to deliver on the aspirations.

Senator WHISH-WILSON: I applaud the targets set by industry. They are ambitious and they are exactly what we need to do. Would you agree that, if industry is prepared to sign up to voluntary targets and governments are as well, they shouldn't have a problem with parliament mandating them in legislation? What would be the issue with us simply passing them into law to make sure they happen?

Mr Knudson: I think that would be a matter for government to figure out which way it wants to approach the issue.

Senator WHISH-WILSON: I will put the other ones on notice.

Senator McKIM: I wanted to ask some questions in relation to the Tasmanian Wilderness World Heritage area and specifically a proposal for a cable car to Dove Lake inside the Cradle Mountain-Lake St Clair National Park and also as I said inside the TWWHA. I'll just start by asking whether the department is formally aware of the proposal for a cable car to Dove Lake?

Mr Oxley: The answer to that question is, yes.

Senator McKIM: How did the department become formally aware of that proposal?

Mr Oxley: I couldn't off the top of my head remember now how we became aware, but we are aware of it.
**Senator McKIM:** Perhaps if you could take that on notice, Mr Oxley, that would be much appreciated.

**Mr Oxley:** Certainly.

**Senator McKIM:** And also the date on which the department became aware. Was the department consulted during the development of the Cradle Mountain Master Plan?

**Mr Oxley:** I'd have to take that on notice. We were advised that officers involved in outcome 1.4, which would be where this is probably to be addressed, weren't required after the afternoon tea break.

**Senator McKIM:** My apologies. Given that, perhaps if Mr Knudsen is happy, I'll put the questions anyway. If the relevant officers are not here, I'm very relaxed about you taking them on notice.

**Mr Knudsen:** It's either that or we can just take them on notice, whichever way you want to do it.

**Senator McKIM:** I suspect some of them may cross over. I'll keep asking, if that's all right. So, you're going to take on notice whether you were consulted during the development of the Cradle Mountain Master Plan. Is anyone at the table aware of the transportation study that's being conducted by the Tasmanian Office of Coordinator General? That's a study into transportation options for visitors to the Cradle Mountain-Lake St Clair National Park inside the TWWHA.

**Mr Oxley:** I'd say broadly aware, but not to the level of specific detail. We understand the competing options and the rationale of wanting to get regular vehicle traffic potentially off the road to Dove Lake, in order to improve the amenity and visitor experience. I believe they have transitioned to an electric bus fleet at the moment or some kind of bus.

**Senator McKIM:** I think there is some kind of bus fleet.

**Mr Knudsen:** Having been on that just a few months ago, I'd say there is also probably a safety issue, especially if the weather conditions are not great when it goes down to one lane.

**Senator McKIM:** Is the department aware, though, that the proposal for the cable car does not follow the route of the road and in fact goes through a different part of the park which currently has no built infrastructure in it, apart from I guess a pad or a track?

**Mr Oxley:** I think we'll take that one on notice.

**Senator McKIM:** Are you aware as to the timeframes of the transportation study? My advice is that it was due last year but still hasn't been completed. I guess a corollary to that question is: is the department involved in any way in that transportation study?

**Mr Oxley:** Again, on notice.

**Senator McKIM:** The Cradle Mountain Master Plan has been supported through $60 million worth of commitments—$30 million from the Tasmanian government and $30 million from the federal government. That was committed to by former Prime Minister Turnbull during the Braddon by-election caused by section 44 issues for the member for Braddon. Is the department aware of the criteria around that $30 million commitment from the federal government? Are there are any caveats on that?

**Mr Knudsen:** I do not believe we had anything to do with that.
Mr Oxley: We'll take the awareness question on notice. If we have visibility of the criteria, we will indicate that.

Senator McKIM: It's a community development grant, which obviously your department does not administer; that's correct, is it not?

Mr Knudson: That is correct. Other than the community environment program, which is of a significantly smaller scale. It's a different department.

Senator McKIM: Yes, that's right. I'll put the rest of those questions on notice.

Mr Oxley: I might just give one very quick indication to say that a proposal of the significance that that cable car will constitute is a project that would need to be referred and assessed under the EPBC Act.

Senator McKIM: Can I just confirm that that has not happened to date?

Mr Oxley: No.

Mr McNee: I'm not aware of a referral for that cable car at this stage.

Mr Knudson: We will come back to you on notice.

Senator McKIM: I appreciate that.

CHAIR: We will move on to outcome 2. You have 10 minutes.

Senator HANSON-YOUNG: Could the department please outline how it tracks the biodiversity offsets? Is there a comprehensive process for that?

Mr Knudson: The offsets are all individually laid out in the conditions of approval. Once approvals are put in place it goes to our post-approvals area, which needs to acquit the requirements or the conditions through a post-approvals plan. Usually there is a plan specifically devoted to offsets. It's done by project on an individual basis.

Senator HANSON-YOUNG: How do you monitor them? How do you make sure what was in the plan is actually what's happening?

Mr Knudson: There's a program out of the Office of Compliance which then goes back and does a varied set of actions, whether it's individual site visits or it's audits of individual approvals, and that's the method that we use to ensure that we've got overall compliance.

Senator HANSON-YOUNG: Where can we access this information?

Mr Knudson: That information would have come through the conditions of approval and the post-approval management plans that are prepared by the departments. If you're asking, do we keep an individual website with all of the offsets categorised and sorted? No, we don't. We do it on a project-by-project basis.

Senator HANSON-YOUNG: Are you 100 per cent sure that the offsets that you have agreed to under any given plan are then being monitored enough to ensure that, if you had to put it on the table today, there would be no discrepancies?

Mr Knudson: As you can imagine, I think we've now got about 2,000 projects assessed under the act. We do not keep an individual record keeping of every single offset for every single project at every single moment in time. Instead what we do is a risk based approach where we will look at a sample of those projects to ensure their overall compliance with conditions including offsets.
Senator HANSON-YOUNG: You've said there's no website. Do you have one place inside the department where you can look up any project and see whether that offset as agreed is actually being complied with?

Mr Knudson: It's a bit laborious, because it will be project approval by project approval and there will be the management plan by management underneath those projects. But those all exist within our databases within the department.

Senator HANSON-YOUNG: The EPBC offset policy was scheduled to be reviewed in 2017. Did that review happen?

Mr Knudson: Good question. I know obviously offsets will be a significant part of the consideration with respect to the review of the act.

Mr Tregurtha: That review didn't happen. Basically, where the department got to was it was determined that the forthcoming review of the EPBC Act, given that it was basically a year and a half away from when we were going to start that project, would be a more efficient way of dealing with offsets at the same time we were looking at the policy as a whole.

Senator HANSON-YOUNG: So, that will be part of the terms of reference, I imagine?

Mr Tregurtha: Certainly biodiversity offsets I expect to be a major focus of all of the submissions and the review itself.

Senator HANSON-YOUNG: Can I ask you some questions on notice in relation to this? Are you able to provide a list of all projects that have biodiversity offsets attached to them and the general location of where those offsets are?

Mr Knudson: As I said, that's about 2,000 projects and we'll have to sift through and find those for each individual assessment. I think we're just going to have to take that on notice, because that's potentially an incredibly laborious thing. I want to see whether we can find an efficient way to answer your question. I'm just not convinced that we will be able to.

Senator HANSON-YOUNG: Perhaps this narrows it down as well, but I'm happy to have a conversation offline about how we can save time. I'm really interested to see what the broad scope is. I'm happy to talk about that. Perhaps this also can narrow the scope. Can the department provide a list of all offsets that have been inspected by compliance or monitoring staff? Surely that's a smaller list?

Mr Knudson: On notice; it seems like that is possible.

Senator HANSON-YOUNG: While I've still got a bit more time, can I go to the environmental offsets for Glencore in relation to their coalmine in the Hunter Valley?

Ms Vickery: So is it their current referral?

Senator HANSON-YOUNG: The number I have here is EPBC approval 2009/5252.

Mr Knudson: That certainly sounds like a post-approval one from a decade ago.

Senator HANSON-YOUNG: Yes, some nine years ago. I would like to know whether there has been any compliance or monitoring of this offset historically or recently?

Mr Knudson: Certainly we can deal with that one in the previous question we took on notice. We'll make sure that we highlight that one in particular.

Senator HANSON-YOUNG: Am I able to get a yes or a no just to that question now, if anyone has the answer to it without going into detail?
Mr Knudson: I'm just checking. Unfortunately we don't have that information here at the table.

Senator HANSON-YOUNG: Is it normal to give extensions for requirements to comply with offsets? How often would that occur?

Mr Manning: It's a question in a post-approval space. Conditions are set. Proponents will often approach us to seek a variation to those conditions for a whole range of operational reasons that just transpire over the course of projects getting underway. That will on occasion include offsets, yes.

Senator HANSON-YOUNG: Do you know whether this particular project has been given extensions or variations?

Mr Manning: I don't. I'm sorry. That one is not on my radar specifically.

Senator HANSON-YOUNG: Can you take that on notice?

Mr Manning: Yes, happy to.

Senator HANSON-YOUNG: Could you also take on notice as to whether the department is aware of Glencore mining underneath their biodiversity offsets?

Mr Manning: Yes, I can take that on notice.

Senator HANSON-YOUNG: It seems that that would be a problem if it was the case.

Mr Manning: It may be. Not necessarily, but it may be.

Mr Knudson: Just to be clear, if that impacted on the ecological values that are embedded in that offset, that is an issue. If it isn't, if it's an underground mine that doesn't impact the trees on the surface, for example, that's not an issue.

Senator HANSON-YOUNG: What is the timeframe for when an offset can be calculated? This has been a project from nine years ago. Is it usual for a proponent to take up to nine years to secure their offsets?

Mr Manning: The usual practice is that offsets are calculated as part of the assessment or soon thereafter and determined. So, that is when the offset requirement could be established. Then, depending upon the nature of the project, there will be various stages or elements of rolling or implementing an offsets program. So, identifying a property if they're going down that route to secure offsets. Developing an offset management plan as to what they are going to do in relation to that property. Then there might be another timeframe in relation to how long it takes to actually get some sort of legal protection or security over that property. There's various elements to an offsets program normally.

Senator HANSON-YOUNG: A nine-year process where a company is still trying to negotiate the offset post assessment seems a bit strange, then?

Mr Manning: I'd have to look into the details of the specific one to know what was going on in relation to that project?

Senator HANSON-YOUNG: I have a long list of questions in relation to this specific case. In addition to the other questions I have given you on notice I will submit this, and I'd really like some fulsome responses. Everything else I'll put on notice. Sorry. There's one more.
Mr Knudson: Your main issue is the length of time between the offsets being required and being put in place, correct?

Senator HANSON-YOUNG: Why? Whether these have ecological impacts on the offsets. Whether there have been any variations made to this specific project? You can see where I'm going?

Mr Knudson: Yes. Thank you.

Senator HANSON-YOUNG: I have a final question and then I'm happy to put other things on notice. I am just wondering whether the Commonwealth government is doing an assessment of World Heritage values for the Great Australian Bight?

Mr Oxley: The answer is, so far as I'm aware, no, but we can take that on notice to make that a definitive no, if you like?

Senator HANSON-YOUNG: Please do. I'd also like to know, if not, why not? It's a pretty special place.

Mr Oxley: We'll take that on notice as well.

CHAIR: We are moving on to outcome 2. Anyone who is uniquely required for outcome 1 may depart.

Senator URQUHART: I'll just go back to the couple of coastal erosion questions that I had and I was directed to come back to outcome 2. I cited a couple of areas—and I'm sure it's replicated around the country—but my question was specifically around what's the government's plan to assist state and local governments to remediate and manage coastal erosion issues that are related to climate change?

Ms Evans: I will ask Ms Bennett to talk through the actions that we have in relation to adaptation.

Ms Bennett: The government has the National Climate Resilience and Adaptation Strategy. That was released in 2015. It contains a set of principles to effectively guide adaptation across Australia and, more importantly, it outlines the roles of the various levels of government—the states and territories, the Commonwealth and also local governments. Coastal erosion is very much an issue that the states and territories are primarily involved in or responsible for.

Senator URQUHART: Can you briefly tell me what are the planning efforts under way in relation to that adaptation scheme? What practical assistance is available from the federal government for communities that are facing the loss of homes, businesses and community assets?

Mr Johnston: Across the department there are some programs in the biodiversity space that look at coastal erosion and dune vegetation, but they are managed under another outcome. In the Climate Change Division we don't run any administered programs.

Senator URQUHART: Where are those programs run from, sorry?

Mr Johnston: I think the main thing that we've done in the Climate Change Division in the last few years is we've funded an online planning tool, CoastAdapt, which was funded through the National Climate Change Adaptation Research Facility. That's a comprehensive website with a lot of information about coastal hazard, coastal risk, state planning laws, flood...
maps and so on. People can use that to ascertain their potential risk and look at potential ways to mitigate that risk.

**Senator URQUHART:** Is it fair to say there are actually no programs that are available for, say, local governments to access funds to assist with coastal erosion? Is that what I'm hearing?

**Mr Johnston:** That's not to say there aren't in other portfolios programs that might be relevant, but the Climate Change Division does not run—

**Senator URQUHART:** So, climate change doesn't have any programs at all?

**Ms Evans:** We don't have any administered programs now, as Mr Johnston said, but we have previously had them, and this was about building the information base that was available through CoastAdapt. That was consistent with the adaptation strategy that Ms Bennett was describing where the role of the Commonwealth has been to provide information, and it's really up to the states and territories to have their plans for coastal management.

**Senator URQUHART:** Okay. They have their plans; under this portfolio, Environment, there are no funds available to assist state or local governments to cover the costs of some of those plans?

**Ms Evans:** I might see if we can come back with a confirmation. I think we do have a small program in another part of the department that is available to help to some degree with coastal related infrastructure and so on. But those officials aren't here.

**Senator URQUHART:** I just want to go to some areas around emissions. Can you tell me when the last update on emissions was released?

**Ms Evans:** I might get Rob Sturgiss to come to the table. But the last quarterly update of Australia's National Greenhouse Gas Inventory, which was to the end of March, I think was released at the end of August, 31 August.

**Senator URQUHART:** Thank you. Have emissions increased or decreased over the last year that you have published data for?

**Ms Evans:** The quarterly report showed that in the quarter to March emissions had decreased slightly, but in the year to March 2019 there had been a small increase. I think the number is 0.6 per cent.

**Senator URQUHART:** Overall, then, Australia's emissions have been increasing? How long has that been the case?

**Ms Evans:** I might ask Mr Sturgiss to pick that up. It's all relative to when. Obviously our emissions are a lot lower than they were in 1990, where we have a baseline. In fact, our emissions on a per capita basis have nearly halved and similarly on emissions per dollar of GDP. It all depends on which perspective you're taking. We can have a look at when was the last time there was a fall in annual emissions.

**Senator URQUHART:** Effectively, for how long have emissions been increasing? Since when?
**Mr Sturgiss:** In the quarterly update we provide a time series of emissions data back to the year 2000. Yes, the data is presented both in quarterly and in trend terms. It depends a bit on which variable you look at, but I can see from figure 3 in the quarterly update that the emissions were at a low point at around March 2015. I'm just eyeballing the chart. We know that since that time there's been very strong growth in emissions associated with LNG exports.

**Senator Urquhart:** Since March 2015?

**Mr Sturgiss:** Yes.

**Senator Urquhart:** Okay.

**Ms Evans:** If I can just clarify and check that you heard Mr Sturgiss's last remark, which was about the growth in the LNG industry. The main driver has been the growth in the export industry associated with liquid natural gas.

**Senator Urquhart:** The emissions projections released by the department in December 2018 showed that Australia would not meet our Paris commitment by 2030 and would in fact increase our emissions by 29 megatonnes of CO2 between 2018 and 2030. The department has previously advised estimates that it is the department's view that with technologies and policies not yet in place Australia will meet the targets. Have any of these technologies or policies been put in place yet?

**Ms Evans:** Since that particular publication, which was, as you say, in December 2018, there have been a number of policies announced. In particular, the government announced the Climate Solutions Package, which adds quite a substantial amount of abatement to those projections. That included additional funding through the Climate Solutions Fund. It included investment in Snowy Hydro and in Marinus Link. It included some additional energy efficiency measures. Those are the main ones. And then there's an additional acknowledgment that the government, similarly to the department, expects further abatement to come from technological improvements and other abatement things that might come up through states and territories and the like.

**Senator Urquhart:** Are those policies you talk about—climate solutions, Marinus, et cetera—sufficient to deliver the planned abatement?

**Ms Bennett:** In order to meet the 2030 emissions reduction target we need cumulative emissions. You have to remember that it is calculated over a budget period. We need to reduce our emissions between 695 and 762 megatonnes. Taking into account the overachievement that we have to date, we then need to account for 328 to 395 million tonnes. When you go through the individual measures that the Climate Solutions Package outlined—and I'm happy to give the abatement per measure—it shows that we can achieve that target. We expect to get 103 million tonnes from the Climate Solutions Fund, 63 million tonnes from energy efficiency measures, 25 million tonnes from the Battery of the Nation and Marinus Link, up to 10 million tonnes from the National Electric Vehicle Strategy, 35 million tonnes from performance measures in refrigerators and air conditioners, 92 million tonnes from technological improvements, and then there was also some funding set aside for Snowy 2.0, but that was already captured in the 2018 projections.

**Senator Urquhart:** Is the department already accounting for the use of Kyoto carryover credits?
Ms Bennett: The government has said that it will use the overachievement to the extent necessary.

Senator URQUHART: So, you're accounting for that?

Ms Bennett: Yes, we are.

Senator URQUHART: What are the risks to achieving the required amount of abatement? Are there risks?

Ms Evans: There are always risks when you're looking forward this sort of length of time. We're talking 11-12 years into the future. So, we can't be sure.

Senator URQUHART: Can you characterise what they might be?

Ms Evans: The economy might grow faster than we are currently expecting it to in the projections. While that is a risk to the projections, it's got other benefits from other perspectives. It's possible that with some of the measures that we are expecting to happen—the purchases of abatement through the Climate Solutions Fund, for example—our assumptions could have assumed a lower price than what is actually going to be necessary to secure that abatement. That could change things a little, but I think those estimates will be at the margins. I think the big risks are more around the pace at which the economy is growing or changing.

 Senator URQUHART: In terms of a progress report on meeting the Paris targets, how far away from meeting them are we?

Ms Evans: I think Ms Bennett just walked you through the numbers before in terms of the projections. That's how far in megatonnes, but the government has a plan to close that gap.

Senator URQUHART: In terms of time?

Ms Evans: The next target that is relevant in terms of time is the Kyoto Protocol second commitment period target, and that finishes in 2020. We will know mid-next year exactly how we have performed against that target. Obviously we won't know the final outcome of how we have tracked on 2030 until 2030.

Senator URQUHART: Are you confident that the government's announced policies will deliver the achievement of the government's 2030 target?

Ms Evans: Yes, we are.

Senator URQUHART: Will the department's next emission projections show Australia's domestic emissions meeting the government's 2030 target?

Ms Evans: We have a very competent team working very diligently on the next round of projections, but they are not expected until the end of the year, and then it will be up to the government when they finally put those into the public domain. I wouldn't want to pre-empt the content of that work.

Senator URQUHART: The government's talking points circulated on Monday last week characterised the progress as 'nearly halfway', despite the department's projections from 2018 showing that we would miss the target. Is the characterisation of 'nearly halfway' consistent with the departmental view?

Ms Evans: I'm not familiar with the comment that was made, but I think once you have factored in the overachievement then that's essentially closed the gap. The actual abatement
numbers are already halfway, and the overachievement takes care of the other half at this point. There are still 11 more years to go in terms of achieving more and reducing emissions.

**Senator URQUHART:** So the department's view that we are nearly halfway is correct?

**Ms Evans:** I don't know the quote and I wouldn't want to agree with it without seeing it. So, if I can leave my answer as it was.

**Senator URQUHART:** Mr Sturgiss, you talked about LNG earlier. Is that the only area of emissions growth as opposed to decline? Are there any other areas of emissions that are increasing or is it only those associated with LNG?

**Mr Sturgiss:** We provide in the quarterly update an analysis by different emission processes. Perhaps I could highlight some of those. You talked about areas of emissions growth. We talk in the report about growth of LNG exports, also some growth in steel and aluminium exports just recently, which has put upward pressure on emissions. Also, the consumption of diesel fuel is very strong and that is putting upward pressure on emissions. On the flipside, there are reductions of course in the electricity sector. In the year to March emissions from the electricity sector were down 2.1 per cent and emissions were also down in the agriculture sector, 4.8 per cent.

**Senator URQUHART:** Have increases in land clearing contributed to the growth of emissions for the year?

**Mr Sturgiss:** In the department we are still processing the satellite imagery for our annual imagery cycle. The next update to our land clearing estimates will be available in the new year, consistent with our annual imagery preparation. It's not something we do on a quarterly basis.

**Senator URQUHART:** So, it's a yearly thing?

**Mr Sturgiss:** Yes.

**Senator URQUHART:** What did the last year show?

**Mr Sturgiss:** The last year showed that emissions were—

**Senator URQUHART:** From land clearing?

**Mr Sturgiss:** Around about 50 million tonnes.

**Senator URQUHART:** What about transport emissions, waste or industrial processes?

**Mr Sturgiss:** Industrial processes were up in the year to March by 1.3 per cent. I talked earlier about aluminium and steel. That would be captured in that number. We also have some growth in emissions of hydrofluorocarbon emissions as well in that sector. The waste emissions are up 0.6 per cent, and that reflects a variation in probably the amounts of waste capture going on in that sector. It's not a trend, I don't think.

**Senator URQUHART:** And transport? You mentioned diesel.

**Mr Sturgiss:** Transport is up, the year to March, 1.3 per cent again. That is driven strongly by diesel consumption. Consumption of petrol is actually down.

**Senator URQUHART:** Since 2015 what proportion of the ERF has been spent on vegetation programs?

**Mr Evans:** That's not a question for Mr Sturgiss. I will see if Ms Bennett—
Ms Bennett: I think we might have to take that on notice.

Mr Evans: It is fair to say that a large proportion of the Emissions Reduction Fund has been spent on vegetation and land related projects. It's the largest sector.

Senator URQUHART: The *Guardian* reported that it was 1.5 billion.

Ms Bennett: I can give it to you in millions of tonnes. Vegetation accounts for 125.7 million tonnes out of the 192 million tonnes that has been contracted.

Mr Evans: That probably would indicate that it's a relatively large proportion.

Senator URQUHART: The *Guardian* reported that it was 1.5 billion.

Ms Bennett: I can give it to you in millions of tonnes. Vegetation accounts for 125.7 million tonnes out of the 192 million tonnes that has been contracted.

Mr Evans: That probably would indicate that it's a relatively large proportion.

Senator URQUHART: We will have to come back with the actual number.

Mr Evans: We will have to come back with the actual number.

Senator URQUHART: The dollar figures?

Mr Evans: Yes.

Senator URQUHART: What level of carbon abatement have those products been funded on the basis of?

Mr Evans: I think the figure that Ms Bennett just read out.

Senator URQUHART: So, 125.7 million tonnes?

Ms Bennett: Yes.

Senator URQUHART: Okay. How long does the abatement compare to the lost abatement capacity that has occurred through land clearing?

Mr Evans: I'm not sure. That is sort of an apples and oranges comparison. Actually, it is very difficult to compare, because they are not even in the same time period. I'm not sure whether we can give you that.

Senator URQUHART: So, you don't do a comparison?

Mr Evans: No, we don't. All of the abatement that is purchased under the Emissions Reduction Fund needs to be genuinely additional, and so we are making sure that it is land that could have been potentially cleared, and has genuinely been protected, through the Emissions Reduction Fund. Then we also put quite a number of conditions on the contracts to make sure that that abatement is secured as permanent.

Senator URQUHART: The *Guardian* reported on 17 August 2019 that the land clearing emissions projections from the department would match the level abated through ERF funded vegetation projects in just over two years, effectively wiping out the benefit of the $1.5 billion ERF spending. Has there been any work done on how land clearing is interacting with projects funded under the ERF?

Ms Evans: Only to the extent, as I said, that we are making sure that the ERF projects are genuinely on land that was otherwise at risk of being cleared. I guess we would say all of the Emissions Reduction Fund purchased abatement has genuinely prevented some additional land clearing. Maybe comparing the Emissions Reduction Fund abatement to the base level of land clearing is an unfair comparison when what we're actually trying to do is reduce the overall number, which has been done successfully to the tune of 125 million tonnes over the contracting periods.
Senator URQUHART: I want to go back to LNG. I refer again to those talking points from the government that were circulated on 14 October. They suggest that LNG exports have potentially reduced global emissions by up to 28 per cent of Australia's annual emissions by displacing coal generation in importing countries. Is the department aware of the source of that advice?

Mr Heferen: As to the talking points you are referring to—I don't think any staff have those talking points.

Senator URQUHART: Really? Everyone else does.

Mr Heferen: I think we move in different circles. We weren't privy to those.

Senator URQUHART: You're not aware of them?

Mr Heferen: I was aware of reports about them, but I'm not actually aware of the things themselves.

Senator URQUHART: You haven't seen them?

Mr Heferen: Maybe if we could help answer the question just as a question in relation to the export of LNGs and what contribution that would make to overall emissions reduction?

Senator URQUHART: That is all right. We will put it on notice. Has the department done any work on the impact of Australian LNG emissions globally?

Ms Evans: Yes, we have.

Senator URQUHART: Can you tell me what work has been done on that?

Mr Sturgiss: We did some analysis of the implications of global export of gas, which would be assumed to displace coal exports. That calculation can be done in very simple terms. I think we have answered some questions on notice in writing on this before. Because coal is around 43 per cent more emissions intensive than gas, there is a calculation that can be made that can translate the emissions associated with an equivalent amount of energy consumed. The calculations we have made reflect that difference in the intrinsic emissions intensity of the two different kinds of fuels.

Senator URQUHART: That's it. Thank you, Chair.

Senator VAN: Can you repeat that multiplier, the difference between coal and gas, that you just mentioned?

Ms Evans: It's 43 per cent.

Senator VAN: So, 43 per cent?

Mr Sturgiss: Yes, a 43 per cent difference.

Senator VAN: Gas has 43 per cent less emissions than coal?

Mr Sturgiss: That's correct; from the combustion of those fuels, yes.

Senator HANSON-YOUNG: I have a stack of questions. I just want to start by getting some of the numbers on the record in relation to the Kyoto carryover. Ms Evans, you and I were speaking about this earlier today. There have been news reports that the effect of using the carryover credits equates to the current 26-28 per cent target being reduced to effectively a 15-17 per cent reduction below the 2005 levels of actual abatement. Put another way, I think you have already put the figure on the table to Senator Urquhart today in relation to it being
328 million tonnes of abatement over a decade. Can you confirm that they are the same figures?

**Ms Evans:** The total amount of abatement that we have currently projected that's necessary to meet the 26-28 per cent target by 2030 is 695 million tonnes. The amount that Australia has overachieved on previous targets is 367 million tonnes, based on our last projections, which leaves 328 million tonnes that is required to close the gap to the target. As we've worked through before, the government has announced through the Climate Solutions Package all of the measures it intends to use.

**Senator HANSON-YOUNG:** I am going to come to that. I have some questions on that. I want to get to what that means in terms of the actual effect of new emission targets. If it's effectively half, 328 million tonnes, which is what the gap is, versus 695 million, do you agree that this is a target reduction of 15-17 per cent?

**Ms Evans:** No. Our target remains 26-28 per cent below 2005 levels by 2030. That's the target and it hasn't changed.

**Senator HANSON-YOUNG:** Yes, but you are already suggesting half of that work has been done, that it exists and you don't have to do it anymore?

**Ms Evans:** It's certainly the government's policy that it intends to use the carryover amounts if it's required. But that's a legitimate approach to achieving the target, which is 26-28 per cent below 2005 levels.

**Senator HANSON-YOUNG:** So, you accept that you're effectively halving the emission reduction amount in terms of tonnes of emissions, but you won't allow that to be reflected in terms of a percentage? That seems a bit disingenuous?

**Ms Evans:** I've answered the question from my perspective, and that is that the target is 26-28 per cent. The government has quite clearly indicated its set of policies to achieve that target, which includes using the carryover if required.

**Senator HANSON-YOUNG:** What does 'if required' mean?

**Ms Evans:** If you have been following our projections over time, we genuinely tend to revise them downwards as better information becomes available. In particular in the electricity sector we have seen that sector outperform our projections year on year for a variety of reasons. There is some probability—and I don't want to yet disclose the numbers, because we're still, as I said, very actively working on the next set of projections. There is a good probability that the baseline level of projected emissions will actually be coming down in any case. It's quite possible that not all, or if any, of that carryover will even be needed to meet the target in the end.

**Senator HANSON-YOUNG:** Is there any other country in the world that is using carryover targets in this way to justify their Paris targets?

**Ms Evans:** I might ask Ms Munro to step in on that one.
Ms Munro: At this stage we're not aware of other countries that are intending to use carryover.

Senator HANSON-YOUNG: So, just Australia?

Ms Munro: At this stage, yes.

Senator HANSON-YOUNG: Putting aside my cynicism around the Kyoto carryover credits, and the fact that Australia is the only country doing this kind of tricky accounting, I will take the commitment of the $328 million tonnes emissions. You went through this with Senator Urquhart. Is this the Climate Solutions Package that you were referring to?

Ms Munro: Yes.

Senator HANSON-YOUNG: Can you go to the back page, page 8. You have the different steps down here. These are the different solutions that make up the package?

Ms Evans: That's correct.

Senator HANSON-YOUNG: Just because it's hard to see on this graph, because it doesn't have the numbers, can I ask you: how much reduction in pollution are you planning on banking from the electric car strategy?

Ms Bennett: It's up to 10 million tonnes. You have to remember the 2018 projections, which is the bar on the far left did also include some uptake of electric vehicles. So, this is over and above what was included in the projections.

Senator HANSON-YOUNG: The Morrison government has committed themselves to reduce carbon pollution by 10 million tonnes from electric cars?

Ms Bennett: Up to 10 million tonnes.

Senator HANSON-YOUNG: Up to 10 million. You wouldn't want to go over that, would you?

Ms Bennett: It's a matter of opinion.

Senator HANSON-YOUNG: What's the plan for electric cars? How are we going to get 10 million tonnes of carbon pollution reduced?

Ms Bennett: We're developing an electric vehicle strategy, which is underway, and I will ask Ms Johnson to outline the process for developing that.

Ms E Johnson: As Ms Bennett said, over this financial year the government is developing an electric vehicle strategy. It's building on the work already underway. Things like finance from the Clean Energy Finance Corporation and grants from ARENA. You may be aware that the Transport Infrastructure Council, the COAG grouping in the transport space, is developing a work program. The strategy will build on all of those bodies of work. Currently the team has been undertaking consultation with a range of industry parties. That's people like car makers, energy groups, manufacturers, corporate stakeholders and others such as Climate Work. So, there has been a range of discussions, and we expect—

Senator HANSON-YOUNG: You are building a strategy. When do you actually start seeing electric cars rolled out to such an extent that we start reducing carbon pollution by 10 million tonnes?

Ms E Johnson: As Ms Bennett said, that is based on assumptions of car sales in 2030. We expect that they will build over that period.
Senator HANSON-YOUNG: How many electric cars will be on the road by 2030 to reduce carbon pollution by 10 million tonnes?

Ms Evans: While Ms Johnson is looking for that number—it's assumed that 50 per cent of new light vehicle sales would be electric by 2030.

Senator HANSON-YOUNG: Have you had to advise the government that this won't kill the weekend?

CHAIR: I think you can take that as a comment.

Ms Evans: We might take that as a comment, yes. Thank you.

Senator HANSON-YOUNG: Who in government is responsible for the electric car strategy? Is it the energy minister? Who is responsible?

Ms E Johnson: Minister Taylor, as the Minister for Energy and Emissions Reduction, is the responsible minister but working closely with his colleagues such as the transport industry minister.

Senator HANSON-YOUNG: I turn to the next area, energy efficiency measures. What's being done there? Where is the plan for that?

Ms Bennett: I can talk through that. Again, the energy efficiency measures where I mentioned the 63 million tonnes is in addition. That is new measures. That is in addition to work that is already underway. I can talk through that at a fairly high level, but some of the detail may need to go into outcome 4. In terms of the 63 million tonnes of abatement coming from that, we have the Energy Efficient Communities program, 3 million tonnes. We have the Improving the Energy Efficiency of Australian Buildings, 45 million tonnes. We have the Energy Rating Label for Space Heating Appliances, 15 million tonnes. That makes up the 63 million.

Senator HANSON-YOUNG: You have your funds. What are you doing to actually make that happen?

Ms Bennett: I think that's going to have to be a question for outcome 4.

Mr Heferen: Maybe I can assist. With buildings there are both commercial buildings and residential buildings. There is work done through the COAG Energy Council with the building ministers on changing standards and having improved building processes. There is a lot around the appliances, such as space heating. There is better labelling and better information for consumers so they are more aware, as is done now with refrigeration.

Senator HANSON-YOUNG: So, we are going to print labels to reduce carbon pollution?

Mr Heferen: With fridges at the moment, when people buy a fridge it is marked as to its energy efficiency.

Senator HANSON-YOUNG: How is this program going to be above and beyond that?

Mr Heferen: This deals with space heating, not with fridges. Fridges are already there. Space heating will be a new one.

Senator HANSON-YOUNG: So, we get sticker on space heaters?

Mr Heferen: Better information to consumers to know how they can save money by reducing their power bills is actually a very useful thing. It's been proven to be very effective on the appliances it has been used. So, whilst they may be stickers for space heating, I would
prefer to call it better information for consumers. Finding out how to lower their power bills and in addition having reduced emissions is critical.

**Senator HANSON-YOUNG:** Do we think this is going to account for 63 million tonnes reduction by 2030?

**Mr Heferen:** As Ms Bennett said this evening, under outcome 4, where the energy efficiency programs are dealt with, we will have officers who can talk you through more about how that's calculated. As you will see with that, it's a relatively conservative calculation. If anything, these will be probably underestimates rather than overestimates.

**Senator HANSON-YOUNG:** How will you deliver this information to the consumers, beyond stickers? Is there going to be an education campaign?

**Mr Heferen:** That will be a matter for the government of the day.

**Senator HANSON-YOUNG:** That hasn't been planned? Is there an actual strategy document for how this particular part will be rolled out—the budget, where it will start and who is going to manage it? All I'm hearing is that it would be really good if people could lower their power bills, be a bit more energy efficient and somehow hopefully, fingers crossed, that reduces carbon pollution by 63 million tonnes. It seems a bit like a motherhood statement. What is the plan?

**Mr Heferen:** Sorry. I mentioned before that the officers who deal with this in detail will be here this evening for outcome 4, and that would be the time to speak with them.

**Senator HANSON-YOUNG:** We will come back to that. What is 'technology improvements and other sources of abatement'? How much is that meant to make up?

**Ms Bennett:** That is approximately 92 million tonnes. The bar above the line is 92 million tonnes, and it could be more than that.

**Senator HANSON-YOUNG:** That's just under a third of the total reduction that you're trying to get out of this Climate Solutions Package? What does it mean? What is 'technology improvements and other sources of abatement'? What are we talking about here?

**Ms Bennett:** It's basically improvements in the technology. What we've found with the benefit of hindsight is that technology often moves more rapidly than government programs or government funding, et cetera. It takes into account the fact that there will be new technologies that will drive some abatement potential.

**Senator HANSON-YOUNG:** But it's effectively a third of what you're banking on needing. Can you name any of these technologies?

**Ms Bennett:** We can take that on notice, I think. Thanks.

**Senator HANSON-YOUNG:** You're not serious? This is a third of your emission reduction policy, and you can't tell me what technology improvements you're banking on in order to produce the outcome?

**Ms Evans:** When we produced the document and gave the advice to the government, it is a general concept of technological improvements that will happen over time.

**Senator HANSON-YOUNG:** In what sector?

**Ms Evans:** If we were able to make them specific, we would have done that.

**Senator HANSON-YOUNG:** So there is nothing specific?
Ms Evans: It's based on our experience of technological improvements. Our experience has been that they continue to occur and they occur at a rate that's faster than we ever anticipate them to occur, and so that is a genuine reflection of that expectation.

Senator HANSON-YOUNG: Has any more work been put into this?

Ms Evans: We continue to work with industry and with state and territory governments and other stakeholders about what other actions could we be using to reduce emissions. Those conversations continue and will continue.

Senator HANSON-YOUNG: I find it extraordinary that a third of the Carbon Pollution Reduction Program is based on something that you can't articulate?

Ms Evans: I think we have articulated it. It is the rate at which technology is likely to improve over time. It is a long time between now and 2030. We're expecting to see substantial contributions from technologies; we don't actually know yet what they will come from.

Senator HANSON-YOUNG: Magic happens?

Ms Evans: No. It's a fairly standard process of technological improvement. In fact, many models have an autonomous energy efficiency improvement coefficient in them, for example, and it's a fairly well understood sense of general improvement over time.

Senator HANSON-YOUNG: But what is your department doing to help this happen? Is it just fingers crossed, pray to the unicorn fairy god and hope that it happens?

Ms Evans: No. As I have already said, we are in conversations with a range of stakeholders. We are working with an expert panel at the moment in relation to the Climate Solutions Fund itself and whether there is additional abatement that we could unlock through that process. There is work underway through the Electric Vehicle Strategy and other things as well. I think we are having active conversations about how to generate other ways of incentivising abatement. Even the improvements that we have underway for the safeguard mechanism are likely to create incentives that have never been there before for the industrial sector as well. We have a number of things underway. It is just not possible yet to quantify them.

Senator HANSON-YOUNG: Who's in charge of delivering this 92 million tonnes reduction?

Mr Heferen: If I could give an example—because, as I think Ms Evans has pointed out, it's not a technological change to a specific area—electricity generation would be a good example. The dramatic emissions reduction that's occurred in electricity generation over the past 10 years or so has been facilitated by the Renewable Energy Target. There's no doubt that the technological innovation has occurred at such a rate that, as Ms Evans mentioned before, the projections for emissions continually get downgraded. That is reduced emissions, and a lot of it's driven through that technological innovation. Ten years ago, if people were sitting here saying, 'We think the uptake of large-scale solar PV will be probably the fastest in the world—certainly per head,' I don't think it would have been accepted. Fifteen years ago, the idea of electricity generation from wind wouldn't have been thought of. So saying, 'Well, actually, we anticipate technology will provide these opportunities in the future,' is completely reasonable.
Senator HANSON-YOUNG: But how can you factor in that this has to be a third? You're banking on this being a third of your carbon pollution target.

Ms Evans: Actually, we're anticipating it might be even more than a third.

Senator HANSON-YOUNG: Except that you can't articulate where in particular this will come from except that you just hope that it does.

Mr Heferen: I don't think it is a question of hope.

Senator HANSON-YOUNG: It doesn't seem very certain.

Mr Heferen: It is talking about what might happen between now and 11 or 12 years away. By nature, it's uncertain. When the Clean Energy Regulator people are here this evening, they'll probably talk to you about uptake of renewable energy which people didn’t anticipate, and there we're only talking about one or two years away. So, if we're talking about five, six or 10 years away, if anything a lot of people look at this and say, 'Well, that's a pretty miserly sort of assumption; surely it should be higher than that.'

Senator HANSON-YOUNG: But you have no actual plan as to how you're going to tap into that?

Mr Heferen: Tap into the technology?

Senator HANSON-YOUNG: Yes.

Mr Heferen: The technological innovation will occur.

Senator HANSON-YOUNG: You don't have to lift a finger?

Mr Heferen: When I say it will occur, I mean that individuals and firms will find more creative ways of doing things, particularly when it comes to reducing emissions, given the importance that individuals and firms attach to it.

CHAIR: Senator Hanson-Young, you've got another five minutes if you want, but any time you want to wrap it up we can go to the Australian Renewable Energy Agency.

Senator HANSON-YOUNG: I have more questions in relation to the Climate Solutions Package, so I'm happy to take a break and come back to it after dinner.

CHAIR: If you're happy to take a break now, we will go to the Australian Renewable Energy Agency.

Australian Renewable Energy Agency

[18:03]

CHAIR: Mr Miller, welcome back. Do you wish to make an opening statement?

Mr Miller: No, I don't.

Senator MARIELLE SMITH: Mr Miller, my first question is on ARENA’s remaining budget allocation. Can you tell me what that is?

Mr Miller: Our remaining funds available to commit to new projects are around $200 million. The actual budget allocation, per the statutory table, is about our ability to draw down funds, which is a different number to what we have available to commit to new projects. That's just the way that our pipeline works. So I'd have to clarify if you're asking specifically about the amount of cash available to spend, which is a higher number than the amount that we have available in terms of projects we can commit to.
Senator MARIELLE SMITH: Could you provide both figures to me?

Mr Miller: I could provide the budget number—probably on notice, because I'd need to add up a bunch of numbers. But the thing we're focused on is how much we have available for committing to new projects, and, as I said, that's around $200 million that we have left.

Senator MARIELLE SMITH: Is that an allocated budget which is available to new projects, or is that a budget which is already put against projects?

Mr Miller: That's unallocated.

Senator MARIELLE SMITH: Are you aware of any projects that otherwise would have been support worthy for ARENA but have been refused support because of a lack of financial capacity?

Mr Miller: No.

Senator MARIELLE SMITH: So there are no projects that have come across your path which you think could have been worthy of funding but which you haven't been able to fund because of the funds available?

Mr Miller: No, not at this stage.

Senator MARIELLE SMITH: Would you characterise ARENA's current funding levels as adequate to meet your remit?

Mr Miller: Our remit is to spend up to the amount that's in our budget tables, and that's what we intend to do.

Senator MARIELLE SMITH: The Department of the Environment and Energy has listed, among strategies under development, a hydrogen strategy and an electric vehicle strategy. Is it ARENA's understanding that your agency would be part of the implementation of any such strategies?

Mr Miller: One of our key priorities is accelerating hydrogen in the domestic economy and for export, so we're already, and have been for a while, focused on hydrogen opportunities. We've also been working on electric vehicle opportunities. We've funded a number of projects in that space, and we continue to be interested in electric vehicles. I am aware that the department, with some assistance from ARENA, is working on an electric vehicle strategy, and the hydrogen strategy task force is working on a hydrogen strategy, and we're involved in that process too.

Senator MARIELLE SMITH: Do you as an agency require any additional funding to be part of these strategies and to help implement these strategies?

Mr Miller: As I said before, it's not about requiring additional funding. We have funding and we will allocate it to those areas, amongst others.

Senator MARIELLE SMITH: Is that funding, the $200 million you have left, sufficient to participate in those two strategies?

Mr Miller: To the extent that that money lasts and is available to us, we will participate, yes.

Senator URQUHART: So you have $200 million worth.

Mr Miller: That $200 million is our full envelope, and hydrogen and electric vehicles are some of the content areas that we're interested in at ARENA, amongst others.
Senator MARIELLE SMITH: Have you had any assurances from government or any indication from government that you will be receiving additional funding to participate in projects like this or others?

Mr Miller: No.

Senator MARIELLE SMITH: That's all from me.

Senator HANSON-YOUNG: I have a follow-up question for ARENA. Were you just here before when I was asking the department about their Climate Solutions Package?

Mr Miller: No, I wasn't.

Senator HANSON-YOUNG: Are you familiar with this policy of the government, the Climate Solutions Package?

Mr Miller: I'm not overly familiar, but I'm aware of it, yes.

Senator HANSON-YOUNG: There is a section in here where they have listed 10 million tonnes of carbon pollution reduction as a target that they're going to get from electric vehicles, and they've just said that ARENA would be involved in making that happen. Have they spoken to you about that, Mr Miller?

Mr Miller: Not specifically in relation to that document, but, as I said before, we've been involved in a number of EV projects and continue to be interested in supporting electric vehicles, specifically in how they get integrated into the electricity system.

Senator HANSON-YOUNG: Do you think that, without extra funding or policy settings, we could reduce carbon pollution by 10 million tonnes from electric vehicles by 2030?

Mr Miller: I couldn't comment on that. I haven't been involved in coming up with those numbers.

Senator HANSON-YOUNG: There has been no conversation with ARENA about funding you to do this work?

Mr Miller: Not to my knowledge.

Senator HANSON-YOUNG: No extra money has come through the door?

Mr Miller: Our money has been set in our act, and that's what we have available. There is nothing more than that.

CHAIR: Senator Hanson-Young, can you confirm you still have more questions for outcome 2?

Senator HANSON-YOUNG: I do.

CHAIR: In that case, we will break now and come back to continue the examination of the department under outcome 2.

Proceedings suspended from 18:09 to 19:15

Department of the Environment and Energy

CHAIR: We resume with the examination of the department and outcome 2.

Senator HANSON-YOUNG: I want to return to the Climate Solutions Package please. I'm particularly interested in the Climate Solutions Fund. How much abatement is that fund meant to account for?

Ms Bennett: 103 million tonnes.
Ms Evans: If I can just clarify that, that's the abatement up until 2030. Like the Emissions Reduction Fund that was originally designed to deliver abatement to 2030, there's more abatement that follows 2030 as well, so I think our overall estimate is around 130 million tonnes, but that goes out beyond 2030.

Senator HANSON-YOUNG: This is just to 2030.

Ms Evans: To 2030. The contribution is the 103 million tonnes that Ms Bennett mentioned.

Senator HANSON-YOUNG: What makes up the Climate Solutions Fund?

Ms Bennett: It's $2 billion that has been provided to achieve that 103 million tonnes of abatement.

Senator HANSON-YOUNG: How much money?

Ms Bennett: It's $2 billion over 15 years. It was based on modelling undertaken by the department using data from projects that were commissioned under the Emissions Reduction Fund.

Senator HANSON-YOUNG: Has this type of modelling been used anywhere else in the world?

Ms Bennett: I presume it's our projections modelling.

Ms Evans: This is a specific estimate of purchases of abatement by the Clean Energy Regulator following the same model that has been used by the Emissions Reduction Fund. I think this is probably the only program of its kind and certainly of this magnitude, so I wouldn't expect anyone else to be using the same—

Senator HANSON-YOUNG: Type of model.

Ms Evans: We say 'model', but it's more analytics by the department that has done it.

Senator HANSON-YOUNG: According to data from the Clean Energy Regulator, the fund has delivered 44.8 million tonnes of reduction over nine auctions taking place over 4½ years; is that right?

Ms Bennett: That's how much has been delivered, but they've contracted 192 million tonnes.

Senator HANSON-YOUNG: If we take that 44.8 million tonnes over the nine auctions, that's an average of five million tonnes per auction.

Ms Bennett: I don't know that you can calculate it that way. It's probably a question best put to the regulator later today. The auctions have contracted 192 million tonnes, of which the 44.8 million tonnes you mentioned have actually delivered the abatement.

Senator HANSON-YOUNG: So have the 44.8 million tonnes delivered so far been counted in the Kyoto period or is that in addition?

Ms Evans: All of the amount that has been delivered so far would be in the second Kyoto commitment period. That's right; it would already be included there.

Senator HANSON-YOUNG: Sorry, can you explain that?

Ms Evans: It's all about when the abatement happened. So the 192 million tonnes is over a period of time. The 44.8 million tonnes is abatement that has actually already been delivered.
in one of the years since one of the auctions and all of those years are in the second commitment period of the Kyoto protocol, so we would be counting that towards our overachievement of the Kyoto protocol second commitment period target.

Senator HANSON-YOUNG: Is it, or is it not, relevant to the Paris target?

Ms Evans: It’s relevant overall. We will overachieve on the Kyoto commitment period, so that overachievement is partially contributing towards the achievement of the Paris goal. There are 192 million tonnes contracted. This year and next year, 44.8 million tonnes—a little more—will be paid out and delivered. But then we are into the Paris commitment period. So some of that 192 million tonnes—arguably, quite a large portion of the 192 million tonnes—will actually be going towards meeting our Paris commitments. The original aim of the ERF was all about 2020, but it will in fact deliver towards Paris as well.

Senator HANSON-YOUNG: Some of it will. Do we know how much? How much are you banking on? You are saying that the Climate Solutions Fund—this is being rolled in together—is meant to account for 103 million tonnes up to 2030.

Ms Evans: The 103 million tonnes is over and above everything that will have been already factored into the projections under the existing Emissions Reduction Fund. The 192 million tonnes is already in the projections from the Emissions Reduction Fund, the pre-existing one. And then the Climate Solutions Fund adds another $2 billion to the commitment from the government to purchase abatement. And we are expecting the Climate Solutions Fund additional funding to contribute another 103 million tonnes towards the Paris target.

Senator HANSON-YOUNG: From where do you expect these remaining tonnes will be delivered, if it is above what is currently being projected for?

Ms Evans: Geographically?

Senator HANSON-YOUNG: Yes.

Ms Evans: I suspect the spread of projects will be similar to what we've already been seeing under the Emissions Reduction Fund. Some states have been a little slower coming on board. For example, there have been fewer projects in WA than in Queensland or New South Wales. So you might get a little more take-up in WA over time. But, generally speaking, I think the geographic spread will be consistent with what we've already seen. Pretty much all states and territories have made some kind of contribution—not much in the ACT but pretty much everywhere else.

Senator HANSON-YOUNG: Do you expect that you will actually be able to spent all that extra money under this current regime?

Ms Evans: That's the intention. As I mentioned before, we are working with industry partners and so on to talk through with them whether we need to do anything different to get that. But essentially yes, we think we can do it through the mechanisms we have been using to date.

Senator HANSON-YOUNG: According to the Clean Energy Regulator, the last auction contracted 49,000 tonnes of abatement for three projects. That sounds minuscule compared to the work we’ve got to do. How do you explain for that?

Ms Evans: It might be better if you ask the Clean Energy Regulator when they are on later this evening. But it is worth saying now that that auction happened at an unusual point in
time. The auction had been announced prior to the election and then it happened not long after the election. So I think there was a lot of uncertainty at the time around what was happening. So it was, understandably, a relatively small auction. But, as I said, the Clean Energy Regulator will appear later. They administer that program, so they would be better placed than we are to give you some insight into why that was a relatively small outcome.

**Senator HANSON-YOUNG:** Have you had to brief the government at all about whether things need to be tweaked to get the remaining 147.3 million tonnes? That has to be delivered over 11 years if you are going to meet—

**Ms Evans:** That's right. That's the amount of abatement that still remains under the existing contracts of the existing Emissions Reduction Fund. All of those projects already know exactly what they have signed up to do and over what time period. With all programs, there is always some risk of some projects failing and so on—and that has happened. But because the Emissions Reduction Fund is a payment-on-delivery program, to the extent that any of these projects don't go ahead, that funding becomes available for purchases from other sources.

**Senator HANSON-YOUNG:** What's your 'worst case scenario' contingency plan if that's the case?

**Ms Evans:** We're expecting for all of that abatement to be delivered, so we don't have an alternative.

**Senator HANSON-YOUNG:** But you've just said to me that you can't bank on that happening and there will be projects that don't deliver.

**Ms Evans:** Yes. But I also said that, if that happens—and there have been some contracts that had to be terminated for one reason or another—that funding goes back into the pool of available funding to purchase additional abatement so it is replaced.

**Senator HANSON-YOUNG:** By 2030?

**Ms Evans:** Yes.

**Senator HANSON-YOUNG:** How often are you having to review and go with a different project?

**Ms Evans:** That would be a question for the Clean Energy Regulator. It's all on the public record. The list of active projects is on the web; and, whenever a project is terminated, it's publicly notified there.

**Senator HANSON-YOUNG:** It seems as though, again, there are a lot of fingers crossed hoping that this all delivers what is on the little brochure here.

**Ms Evans:** I disagree with that assessment. We based all of the estimates that are in that brochure on our experience with similar programs, so I think they are all very reasonable estimates.

**Senator HANSON-YOUNG:** Do you have a list from the companies that have contracted this remaining abatement as to when they are actually going to abate the emissions?

**Ms Evans:** Again, that question would be better asked of the regulator because they are the ones that make the contracts with the individual companies, and they do have a track of exactly when the abatement is due to be delivered.
Senator HANSON-YOUNG: But surely it is essential for you to know on an ongoing basis whether you are matching the government's own graph.

Ms Evans: We do keep an eye on it. Based on our conversations with them, we are comfortable with the way that that graph is represented. I don't have the detail of those things with me tonight. So if you want to explore that further, it would be better to do it with the Clean Energy Regulator.

Senator HANSON-YOUNG: What about the energy performance section of this climate solutions package—how much does that account for?

Ms Bennett: Senator, which bar are you referring to?

Senator HANSON-YOUNG: The first one here—'Energy performance: refrigeration and air conditioning'.

Ms Bennett: It's in relation to refrigeration and air conditioning—the 35 million tonnes. That's largely in relation to the phase-down of the HFC imports.

Ms Evans: It's about training and providing guidance so that people who work in the refrigeration and air-conditioning industries are better able to manage these very potent greenhouse gases. Hydrofluorocarbons are very high in terms of their global warming potential, so you can make significant gains by improving practices in that industry. The plan is to make sure that happens over the next period of time.

Senator HANSON-YOUNG: This accounting to make it add up to the overall abatement figure is that this measure would account for 35 million tonnes by 2030?

Ms Evans: That's correct.

Senator HANSON-YOUNG: So you are going to get a reduction of 35 million tonnes by training people to use their fridges better?

Ms Evans: It is training mostly the technicians who work with this equipment, replacing gases and so on, and also working with the industries that use them to help them use them more efficiently. As I said, because these particular gases have such a high global warming potential—this is the thing that changes them into an equivalent of carbon dioxide—you can make some really significant savings.

Senator HANSON-YOUNG: Who is designing the training program?

Ms Evans: That's us. Mr Murphy might elaborate.

Mr Murphy: We are working with the refrigeration and air-conditioning industry to design a package that would do two things, encourage consumers to install refrigeration and air-conditioning equipment that optimises the energy efficiency and to regularly service that equipment. You get savings not only from reduced refrigeration emissions, in terms of minimising leakage, but also from the improved energy performance of having the equipment running better. We also want to run an information program, as Ms Evans said, with the equipment owners, facility managers and technicians. This will all go to focusing on the cost savings and environmental benefits of maintaining the equipment.

Senator HANSON-YOUNG: Someone in your department, in consultation with industry bodies, is going to write this training manual? Is it going to be online training manual? Are we going to regulate that every technician needs this training? How is this actually going to be rolled out?
Mr Murphy: We are still designing it. We're not anticipating it to be a regulatory measure. It is in terms of an awareness and education campaign.

Senator HANSON-YOUNG: How much money has been put aside to run this campaign?

Mr Murphy: We haven't got an estimate yet for the amount of money it would cost, but we can design it from funds that are collected under our cost recovery arrangements that come from licensing the importers of refrigerants and the technicians that service the equipment.

Senator HANSON-YOUNG: How many technicians are going to be trained?

Mr Murphy: I don't know that. In Australia there are approximately 100,000 licence holders—but that covers the entire industry—so the technicians but also the companies that import it, anyone who handles the gasses.

Senator HANSON-YOUNG: Thirty-five million tonnes is a fair whack considering you're only expecting emissions reductions from electric vehicles by 10 million tonnes. It is threefold, isn't it?

Mr Murphy: There are lots of statistics around this, but refrigeration and air-conditioning equipment accounts for something like a quarter of all electricity produced and it accounts for, I think, about 12 per cent of Australia's greenhouse gas emissions. So you can make a very small change in terms of efficiency and have a big impact.

Senator HANSON-YOUNG: How are you going to measure this? How are you going to measure the impact this has had—whether training some of these technicians means more efficient use of refrigeration, better maintenance, and, therefore, reduced carbon pollution?

Mr Murphy: It is difficult. It will have to be estimates—and built into the design of the program—but I think things can be measured through equipment sales and, I guess, the servicing and feedback from industry. We will have to design the collection of that data.

Senator HANSON-YOUNG: When's the deadline for this program to be finished in its design and ready to be rolled out?

Mr Murphy: We don't have a deadline, but we are working on it now.

Senator HANSON-YOUNG: Okay. Over what period of time have you modelled that training? With these hundred thousand technicians and the flow-on effect, at what point are we going to see, under this program, carbon pollution reduced to meet 35 million tonnes by 2030?

Mr Murphy: I think, if I understand the question, it will be by 2030. So our target—

Senator HANSON-YOUNG: But surely you're not going to get to 2030 and all of a sudden 35 million tonnes just reduces? I mean, that's just lunacy.

Mr Murphy: No. Again, there are estimates that a very small percentage of change can result in that 35 megatonnes.

Senator HANSON-YOUNG: Has the department modelled, based on this initiative, when you expect to see carbon pollution reduce as a result of training technicians?

Mr Murphy: There was an estimate made in a report provided to the department that looked at the environmental impacts from ozone protection and synthetic greenhouse gasses. It found that, through emissions abatement and costs savings from reduction in energy use,
achieving only a one per cent improvement in energy efficiency could deliver the 35 megatonnes.

Senator HANSON-YOUNG: How many fridges is that?

Mr Murphy: I don't know.

Senator HANSON-YOUNG: You must have to know how many fridges so that you know how many technicians to train so that you’ve got something to measure this against?

Mr Murphy: The volume of different types of equipment and technology involved is huge.

Senator HANSON-YOUNG: Okay. It's a bit awkward, isn't it? Surely you have been given a deadline as to when you need to start rolling this out—or not?

Mr Murphy: No. I don't have a deadline.

Senator HANSON-YOUNG: Has the minister asked for a briefing on how the fridges program is going?

Mr Murphy: Not specifically, no.

Senator HANSON-YOUNG: At what point, Ms Evans, will there be a review of this policy to make sure this graph is on track? We haven't today been able to ascertain any real detail as to how any of this is going to happen?

Ms Evans: We will do a projections exercise towards the end of the year. That would be the first time any sort of additional analysis that we might have done around those measures could be available. From the perspective of broader policy review, in the 2017 review of climate change policies, the government made a commitment to review policies every five years, and to do that lined up with our commitments under the Paris agreement. I’m just quickly trying to do the maths in my head. I think the next Paris commitment is due to begin in 2025. So we would make sure that the first one of those five yearly reviews was done in advance of that.

Senator HANSON-YOUNG: So we might not know that this is on track for another five years, realistically?

Ms Bennett: We still produce our annual projections. The 2019 projections will be in December, so in December 2020 there will be further projections—

Senator HANSON-YOUNG: Will they be released on time?

Ms Bennett: They are required, I think, by the UNFCCC to be by the end of the year.

Ms Evans: Sorry, on the projections, there is no required timing. So it is up to the government whether and when to release any new projections.

Senator HANSON-YOUNG: They may just decide not to because this isn't tracking very well?

Ms Evans: That's a hypothetical question.

Senator HANSON-YOUNG: The government doesn't actually have to update us on how they are tracking until 2025?

Ms Evans: No. I think you're misinterpreting what we're saying. You asked specifically when would be the next policy review. That's the answer I gave you: around 2025. We've also
separately said that the projections will come out—our expectation is—as they have done for the last several years; they will be annual projections. I was just clarifying that there is no requirement for that; it just is something that is done. Then, finally, we would always keep a general continuing review of progress on these things. So you will certainly start to see on the Climate Solutions Fund the largest contribution there. We'll be able to see in the results of auctions and other activity under the Clean Energy Regulator over time whether that appears to be on track or not.

Senator HANSON-YOUNG: Okay. I'm just going to change tack. I have some questions in relation to corporate emissions data. I will also put some of these questions to the Clean Energy Regulator, but while I have your team here, Ms Evans, I'd like to know about this. If a member of the public looks up the corporate emissions data, it shows that Amazon was able to keep its emissions data secret. Are you aware of that?

Ms Evans: I'm not aware of what you are referring to, because the emissions data that we collect and we publish at a corporation level is all done through the National Greenhouse and Energy Reporting system. I don't know if Amazon reports through our system or not. I'm looking at Mr Sturgiss to see if he knows.

Mr Sturgiss: Just to confirm that the management of the publication of company data under the NGER Scheme is managed by the Clean Energy Regulator, so decisions made about publication are made by the Clean Energy Regulator.

Senator HANSON-YOUNG: You're not informed as a matter of course as to whether a big corporation like Amazon wants to keep its emissions data secret?

Ms Evans: I don't think we are informed. This is a matter of administration of the legislation, which the Clean Energy Regulator is responsible for.

Senator HANSON-YOUNG: Do you get a report from the Clean Energy Regulator saying how companies are reporting?

Ms Evans: In a general sense, yes. We get reports from them about how things have progressed. We use the data to build our national inventory reporting and so on, but to my knowledge we haven't asked for, and I don't think we have received, any notification about why any specific or particular businesses that we haven't asked about aren't reporting publicly.

Senator HANSON-YOUNG: It hasn't been brought to your attention at all that a big global giant like Amazon is keeping its data secret from the Australian people?

Ms Evans: No. It hasn't been brought to my attention in that way. If they are subject to the regulation in Australia they would be need to be complying with that, and there would need to be reasons why their data had been allowed to be excluded from the public.

Senator HANSON-YOUNG: I will ask the regulator about that. I will put the rest of my questions for this section on notice.

CHAIR: Thank you. Senator Waters, you have five minutes maximum before we go to the Antarctic.
Senator WATERS: I hope I've got the right people at the table. I'm interested in the climate implications of fracking the Beetaloo Basin. I understand there's been an arrangement made between the NT government and the Commonwealth for scope 1 and 2 emissions to be offset. I'm interested to know a little bit more about that arrangement. Do we have the right folk here?

Ms Evans: It is my group. There was a commitment that was made by the Northern Territory government to offset the emissions from their fracking, and the Commonwealth is working with them to figure out how they might approach that.

Senator WATERS: How will you approach it?

Ms Evans: We are talking to them. We don't have the answers yet on how they're going to do that. It's a large amount.

Senator WATERS: Indeed. What sort of quantum?

Ms Evans: I'd have to take that on notice, I'm afraid.

Senator WATERS: I'm interested in how you will even measure and work out the quantum, given that a lot of those scope 1 and 2 emissions are fugitive emissions. How are we measuring those?

Ms Evans: We have pretty good approaches to measuring fugitive emissions. If you want us to answer that now, we can.

Senator WATERS: If you can do so in a really succinct way, otherwise provide it to me on notice, because I have a few small follow-up questions and I don't want to test everyone's patience.

CHAIR: On notice would be wonderful.

Senator WATERS: Not that it's not fascinating; I'm sure it is.

Ms Evans: We'll take it on notice.

Senator WATERS: Thank you. Sorry to those officers—your brief moment in the sun has come to an end!

Ms Evans: I do want to make sure it's not left hanging that that's something that would be too difficult for us to do. We manage to measure fugitive emissions all the time.

Senator WATERS: I understand. I will look forward to the detail—I really will, genuinely. If we had time to go through it now, I would love to. If the emissions are not able to be offset or are not offset, what will be the impact on Australia's emissions?

Ms Evans: We will have to take that on notice, similar to your first question about the quantum. I just don't have those figures with me.

Senator WATERS: Has any analysis been undertaken of the impact of the Beetaloo project—and other projects, for that matter, throughout the NT and WA—on our capacity to meet our Paris targets?

Ms Evans: I think, again, I will need to take that on notice. I have to take it on notice because I'm not sure what's in and what's not in our projections.

Senator WATERS: Okay, as much information as you possibly can. To cover off on all angles here, what assistance is being provided to the NT government by the Commonwealth in relation to this matter?
Ms Evans: We will take it on notice to give you more detail. At the moment we're really just talking to them about options and approaches.

Senator WATERS: Great. One final question on this also, but it might not be you—

CHAIR: I will hold you to that, Senator Waters.

Senator WATERS: This time I really mean it! Which Commonwealth agency, if any, will have oversight into the free, prior and informed consent issue for First Nations people? It's an extremely controversial project. I don't think it will be your department, but who should I follow that up with, to the best of your knowledge?

Ms Evans: I don't know that I can answer that. I would have to take that on notice as well.

Senator WATERS: Thank you.

CHAIR: That concludes the examination of outcome 2.

[19:45]

CHAIR: We will move to outcome 3, partly via videoconference. Those in Hobart, welcome. I will pass the call to Senator Urquhart.

Senator URQUHART: I just have a couple of questions, first of all in respect to the delivery and operational commencement of the RSV Nuyina. Is it right to expect that the preparation of the vessel is on track to replace the Aurora Australis in December 2020?

Mr Ellis: The Nuyina is currently under construction in Romania and we are working very closely with both Serco Defence, who will be the operator, and Damen, who are the contractor responsible for building the ship. We've been formally advised that the ship will be 13 weeks late. I will hand over to my colleague, Rob Bryson, who is the general manager of our modernisation program, to talk about the progress of the ship project.

Mr Bryson: Currently the ship is in the process of undertaking harbour acceptance trials in Romania. At this stage, we are anticipating undertaking sea acceptance trials in January next year. Going back to your original question on the anticipated date, we believe the vessel will be in Australia and ready to undertake operations in October to November 2020.

Senator URQUHART: So that's the 13 weeks later than you expected. Is that right?

Mr Bryson: That's correct.

Senator URQUHART: Are there contingency plans in place if, for some reason, there is a delay in the commencement of the operational service of RSV Nuyina?

Mr Ellis: We've undertaken an appropriate regime of contingency management, commencing with a request for information from a number of international companies that can provide contingent shipping. So we're interested in providing ships that might be suitable to supplement the Nuyina, providing ice-strengthened cargo capabilities. We'll continue to assess that process through to a request for tender as we continue to assess the risk—

Senator URQUHART: Sorry, I missed the last bit.

Mr Ellis: We will continue to assess that process—the movement from a request for information to a request for tender—as we assess the risk of late delivery being realised.

Senator URQUHART: Okay. But you're comfortable that the 13 weeks will not create too much of a difficulty. Step me through the process: what is the plan for the 13 weeks that
it's going to be late? If it then becomes later, beyond that, you obviously can't just pull a large ship out of the air.

Mr Ellis: No. Absolutely. So the process to date is that we are working very closely with Serco and our own project management team to continue to monitor the progress of the ship's delivery. There are series of milestones to assess progress of the ship's delivery and we have staff on-site in Romania ensuring quality control and working directly with the teams there on the ship's construction. So we have a very good picture of the progress of the ship and, as I said, we have been formally advised it's 13 weeks late. We are continually monitoring that to ensure that, if it's going to be later, we will be aware of it well before it happens. The request for information has given us a very good sounding of the international market for shipping. We will make a decision before the end of this calendar year as to our assessment of the delivery of the ship and we will then proceed with obtaining supplementary shipping for the 2020-21 season to support the potential late delivery of the Nuyina.

Senator URQUHART: The fact that it's 13 weeks late now, what's been the reason for that?

Mr Bryson: The main reason for that has been the complexity of the design. It's a bespoke vessel. When we initially started, we had an initial design put forward in the tender process. But when we got into the detailed design process that involved the ship designer trying to meet 1,343 different requirements, that design had to be extended. That resulted in an extension of the design process as well. Then, when we came to the construction phase, there were certain complexities about dealing with high-tensile steel at that thickness and that actually caused us some delays in the welding process as well. That contributed to and compounded the design delay, plus the construction delay as well.

I must say it's been a pretty challenging build process along the way when you are talking about pretty much combining a silent icebreaker with probably one of the biggest propulsion plants operating in the southern hemisphere as well. It's a very complex design and a very complex construction process. In the build process itself, 13 weeks at the moment is a pretty good outcome facing that kind of challenge.

Mr Ellis: In the construction of a major ship delivery and what will be the most capable research vessel in the Southern Ocean when it arrives and representing the very latest in technology—the broad context is that it's 40 times more complicated than the existing ship, the Aurora—the 13 weeks represents about a six per cent delay in the total project time, which really is very good progress of that construction. Our focus is always on quality.

Mr Cahill: It's still being built to quality and within the cost and below.

Senator URQUHART: My final question is just in relation to the milestones for the delivery. You're measuring those and checking them. Are they available publicly? How do we get information about how it's measuring up to the—

Senator PATRICK: That's a question on notice.

Senator URQUHART: But are they available publicly? What's the process for us getting that information available for workers et cetera?

Mr Bryson: As Senator Patrick's highlighted, those milestones were part of a question on notice. They have been published. I'm happy to put those out again, if you—
Senator URQUHART: No. I'm asking: how do you measure against those milestones? You have the milestones there. How do we know that everything's keeping up to those, other than coming and asking you at estimates?

Mr Bryson: We provide regular updates on our website about the—

Senator URQUHART: Okay—so they are on the website.

Mr Bryson: Yes—not the actual milestones, but documenting where we are in the construction process is available on there. I could put those on the website with—

Senator URQUHART: I'm asking directly about the milestones and where we will get information about whether or not those milestones are being met. Can we get that information?

Mr Cahill: That can be provided. What's on the website at the moment is saying where the stage of the ship is at and what we expect the delay to be. But we don't have 'here is the target milestone' and 'here is how we performed against it'. That's managed very closely and very tightly. But we're happy to provide that information to this committee.

Senator URQUHART: That's great. Thank you very much.

Senator PATRICK: I'm a bit confused. I thought I heard you saying that the ship will have final acceptance in October 2020. Is that right?

Mr Bryson: No, I said delivery into Hobart would be October 2020.

Senator PATRICK: Okay, so you're still expecting final acceptance on 30 July?

Mr Bryson: Around that time, at this stage.

Senator PATRICK: As you know, we've been following this ever since the commencement of the project in terms of milestones. Commencement of harbour acceptance tests was originally scheduled for 15 May. Your last estimate was 5 June. Did you commence the harbour acceptance testing on 5 June?

Mr Bryson: We actually commenced a series of harbour acceptance trials in late May. We haven't formally recognised the milestone, because we're waiting on 17 test procedures out of the 194 to be greenlit. We actually commenced the first harbour acceptance trials in late May, which was the accommodation ladder and the demineralised water system on the ship. We've been doing harbour acceptance trials since that date, but formal acceptance of that milestone hasn't been recognised, because the test protocols haven't been finalised.

Mr Cahill: And it's very important where you might have, say, 98 per cent of tests passed, but when we have very material payments due we're very careful with the contract to make sure all tests are met before we actually recognise the milestone to complete and then obviously make a payment.

Senator PATRICK: Sorry—this milestone was the commencement of harbour acceptance testing, not the completion of. So, propeller rotation on PTI power was due to commence on the sixth of last month. Did that occur?

Mr Bryson: No, it didn't. It's due to happen in December.

Senator PATRICK: That's a three-month slippage for that particular milestone. I remember we had a discussion at the very start of this where I said that projects rarely come left. I'm wondering whether you could update this milestone schedule. Obviously this is an
answer from April, and now you've had something over the period of four or five months slip by three or four months.

Mr Bryson: Yes.

Senator PATRICK: Now, I'm interested in the idea that it's still within budget. The project had a contingency of $8.2 million. It's not possible to have a schedule slippage without a cost impact. I know you might say, Mr Cahill, that it's within budget. Does that mean you are eating into that contingency?

Mr Cahill: I might get Mr Bryson to answer that. What I am clear on, though, is that it's a fixed-price contract, so if it costs extra effort for the shipbuilder to deploy extra resources then the shipbuilder wears that, not the Commonwealth.

Senator PATRICK: Do they also deal with any liquidated damages—for example, the hiring of *Aurora Australis*?

Mr Cahill: The contract has written into it clauses of liquidated damages for every day it's late.

Senator PATRICK: Will that cover the hiring of the ship, as a rough estimate?

Mr Cahill: I'm just careful as to how to answer that in the public domain—

Senator PATRICK: Sure.

Mr Cahill: because we want to protect the Commonwealth's interest.

Senator PATRICK: I understand the sensitivity—I don't want to put you in that position—

Mr Cahill: But the contract was very well-written, and I might ask Mr Bryson to correct the amount. It's in the contract in the public domain, but as to how we actually manage that, we've been very careful to protect the Commonwealth's interest. Do Mr Ellis or Mr Bryson have anything to add to that?

Mr Bryson: I'll just add that the contract is very mechanical. A final acceptance date was written into the original contract and has not been changed, and as soon as that date is reached then liquidated damages start accruing. They're based on a formula which—

Senator PATRICK: Just in respect of commencing sea trials. The sea acceptance trials will start in, I think, February next year, and special sea trials in April next year. I presume they're related to the special equipment onboard the vessel: the sonars and so forth. Is that what's meant by special sea trials?

Mr Bryson: The special sea trials involve icebreaking trials and also going across the sound range of the Norwegian navy, I believe, and testing out the acoustic signature of the ship.

Senator PATRICK: I'm familiar with the sound range. I'll just make another prediction, having run a few of these projects before. I note the complexity, and I do accept that it's a very complex ship. I did read the documents that were provided under FOI to me; it looks very impressive, and I do accept that the delay is not significant compared to some of the defence delays we see. So in some sense, well done. But, often, when sea trials commence you find that there are lots of things you didn't expect, particularly noting all of the special
features of your vessel. I just wonder whether or not you've really factored in what you don't know about what's going to happen at sea trials?

**Mr Cahill:** My only comment there is that's why we're looking at our contingencies. We are very active with corrective action plans; myself and Kim and Mr Bryson have had various phone hooks internationally with the executive, both the shipbuilder and Serco. That's why you look at contingencies. Mr Ellis?

**Mr Ellis:** We certainly recognise that at the moment the delay is 13 weeks. That's what we've been formally advised. We bring experience to the project and we see the same things you see: the challenges at the length of cable pulling and the delay in some of these acceptance points. The contingency shipping program is really about that. It's ensuring that our resupply of the stations aren't interrupted and ensuring that if this ship does arrive later than the 13 weeks we have the capability of loading fuel, food and people onto the ship and doing their resupply. We have some good protections in that: we have the liquidated damages that we've discussed, we have contingency in the budget and we have a strong RFI RFT program to ensure that we get the right ship in sufficient time to be able to manage the delivery of the *Nuyina*.

**Senator PATRICK:** Thank you for your honesty. I will leave you with one parting comment, which is: if only you'd built it in South Australia!

**Chair:** You say that with every closing, Senator.

**Senator WHISH-WILSON:** Taxpayer money being rorted in South Australia! At least this one—

**Senator PATRICK:** It would have filled the valley of death—

**Senator WHISH-WILSON:** In relation to the ice breaker: will you be charging researchers to travel on the ship? Scientific researchers?

**Mr Cahill:** I will ask Mr Ellis to answer that. But, in essence, it depends on which researchers.

**Senator WHISH-WILSON:** Okay, I might go into that detail, if that's okay?

**Mr Cahill:** I might ask Mr Ellis.

**Mr Ellis:** We don't have a policy of charging researchers to operate in the Australian Antarctic Program. Part of this program is providing a logistics capability and a research capability that gets not just our own scientists but scientists from a broad range of disciplines to join our program.

Under the current funding initiatives, there is capability in the Special Research Initiative in Excellence in Antarctic Science for elements of the logistics cost to be contributed to some of the programs. But these aren't charges for the research positions, they're just to help offset some of the costs of running larger and more complex research programs.

**Senator WHISH-WILSON:** So capital and accommodation costs are going to be covered for the new icebreaker in your budget?

**Mr Ellis:** Yes, the positions on the ship, the beds, the berths, the cargo capability and the research programs on a very broad scale, particularly when this ship arrives. We will have an additional 90 days a year for potential Southern Ocean research. That's much more than we as
a research facility in the Antarctic Division can provide. So our aim will be to open that up to a broader range of researchers to take advantage of those berths on the ship.

Senator WHISH-WILSON: But just to be clear, you, the AAD, provide logistical support to a variety of university researchers at the moment who travel to Antarctica who, for example, might hitch a ride on the *Aurora Australis*. You don't currently charge them to go on the boat and for accommodation and other support when they get to Antarctica, do you?

Mr Ellis: No.

Senator WHISH-WILSON: This is a change in policy, then? Would that be fair to say?

Mr Ellis: No. Let me just clarify. We don't charge them for their accommodation or their berth on the ship. What we did under the previous research grants program was seek reimbursement for the logistics costs for some of their programs. Some programs, for example, require movement of heavy equipment out into field research stations. They require additional equipment to be loaded on the ship. We sought reimbursement of some of those logistic costs. That's not charging them for their berth or their accommodation on the station.

Under the new funding arrangements through the Australian Antarctic partnership and through the ARC special research initiative, those researchers will continue to come to the Antarctic. Under the special research initiative, there is a provision for us to continue to recover unique shipment costs associated with those research projects, but it is not charging them for their bed, food or berth on the ship.

Senator WHISH-WILSON: So you are not charging them a daily rate, then, to be stationed at remote field camps, for example?

Mr Ellis: No.

Senator WHISH-WILSON: Or a daily rate for field safety officers?

Mr Ellis: No.

Senator WHISH-WILSON: Who's driving this change in policy to recoup these costs?

Mr Cahill: It's been a normal practice for a number of years, when there is something uniquely required by a researcher that is not standard to how we operate, to have a sensible conversation. If there is an extra expense of deploying something that is a unique piece of equipment that we have to configure then there is a conversation with the research program to say, 'This is beyond what we normally provide.' At the core we support research. That is why we exist.

Senator WHISH-WILSON: That is the currency of the Antarctic Treaty, right?

Mr Cahill: Yes. That's why we exist.

Senator WHISH-WILSON: Just to be clear, then, under your definition you wouldn't be charging anyone travel costs per se. It is special costs that you would be looking at in terms of the configuration of the kind of projects that they're running and whether that meets your current capability. If it is outside those capabilities, you are charging?

Mr Cahill: Not to my knowledge. Kim?

Mr Ellis: No, we don't charge people travel costs for their journey to the Antarctic. We don't charge them food costs or for accommodation. If someone is—
Senator WHISH-WILSON: You don't now. I understand that. But, for example, you mentioned the ARC special research initiative in excellence. You referred to that. Going forward for that, as researchers working under that program, you won't have any different operating charges or systems to what you have now?

Mr Ellis: Under the previous funding regime we were always able to recover logistics costs for specialist equipment associated with research projects. It was not all of the costs, but it was a contribution to those costs. Going forward, that policy will continue under the special research initiative.

Senator WHISH-WILSON: Just for specialist equipment and nothing else?

Mr Ellis: Yes.

Senator WHISH-WILSON: I will just give you the background. The reason I asked the questions is that under this government we have seen in the last five years moves within CSIRO and various organisations to try and recoup costs. I don't want to see public good research—for the good of the planet I don't want to see us going down the road of privatised—

CHAIR: I think that was a very clear answer from the officials there.

Senator ROBERTS: Thank you all for being here. Perhaps I could set the scene with a question to you, Minister, because it does involve an opinion. Is the Australian government concerned that China now owns ten times the amount of Australian land than it did this time last year, representing 25 per cent of all foreign-owned land in Australia?

Senator Hume: I don't know whether that is a relevant question for this portfolio, Senator Roberts.

Senator ROBERTS: I take that as an answer. My question is now to the department. How many scientific bases have been built by the Chinese government within the boundaries of the Australian Antarctic Territory?

Mr Ellis: I'm happy to leap into that. There are currently three Chinese bases in the Australian Antarctic Territory: Zhongshan, Kunlun and Taishan. A fourth base is being built outside the Australian Antarctic Territory in the Ross Sea dependency on Inexpressible Island.

Senator ROBERTS: What is the Australian government position on further Chinese bases being built within the Australian Antarctic Territory?

Mr Ellis: I can't answer on a policy basis. We are not aware of any additional bases being considered at this stage beyond those that I've discussed.

Mr Cahill: I will say that Australia is a strong advocate and supporter of the Antarctic Treaty System. The Antarctic Treaty System governs what bases are built within Antarctica. So from the perspective of the department we continue to support the Antarctic Treaty System.

Senator ROBERTS: What are the conditions or obligations in that relevant to this question? Can you give us some understanding?

Mr Cahill: Mr Clark should be able to answer that.
Mr Clark: By way of context, the Antarctic Treaty System sets aside and preserves Antarctica as a place for peace and science. That freedom of scientific inquiry allows countries to establish research facilities throughout the continent. That's what the current state is at the moment, where we see bases established throughout the region, obviously established for scientific inquiry. The treaty system establishes a process by which any new proposal or large-scale infrastructure, such as a station, goes through an environmental assessment process where that proposal, if it triggers a certain level, would go to an annual Antarctic treaty meeting. The Committee for Environmental Protection would consider a draft comprehensive environmental evaluation for the construction of that station. All countries are able to comment on the proposal, and in that proposal not only would it outline the environmental implications of the construction of the station, but also countries are asked to establish the scientific rationale and the support that the station provides.

Senator ROBERTS: Let me check my understanding then. We don't make the decision; we have some input into a committee decision?

Mr Clark: Ultimately it's a decision for each nation whether to proceed with a station in Antarctica, just as it is for Australia and for other countries. The proposal is commented on by other countries at the Antarctic treaty meeting, and countries who are putting forward a proposal are obliged to respond to the issues raised by each of the countries who might make inquiries or make comments on the proposal.

Senator ROBERTS: But as to whether or not a base is built by any country in our territory or the territory we oversee, then that is not our decision; it is a committee decision as to whether or not it goes ahead?

Mr Clark: Ultimately it is a decision for the country proposing the construction of the research facility, taking into account the input from all the other countries in the treaty.

Senator ROBERTS: So it is free for anyone to do it so long as they follow the advice of the other countries on the committee?

Mr Clark: I wouldn't characterise it as countries are 'free to' in those words. There is quite an established process for dealing with all of the requirements and assessment. It is not as simple as saying here is a proposal, make some comments and then we will reflect on it. It is quite a deliberative process, just as any other country, including Australia, would go through before they put in place any new infrastructure in Antarctica.

Senator ROBERTS: Are military activities being undertaken by the Chinese on Chinese bases in the Australian Antarctic Territory?

Mr Clark: We have no evidence to suggest that that's the case. There has been reporting of dual-use technologies in Antarctica.

Senator ROBERTS: Sorry, what was that?

Mr Clark: I said there has been media reporting of the dual-use technologies that are sometimes described as being used in Antarctica. That's not uncommon where facilities such as satellites are used for scientific purposes to provide accurate information for scientific instrumentation. A number of programs in Antarctica are using that sort of technology.

Senator ROBERTS: So it is not being monitored as such by the Australian government?
Mr Clark: The Australian Antarctic Division doesn't monitor those sorts of activities in Antarctica.

Senator ROBERTS: What is planned, if anything, by Australia to monitor the Chinese bases?

Mr Clark: We have a long-established collaboration with Chinese research colleagues, where at an operational level, a scientific level and a policy level we are frequently undertaking exchanges of personnel visiting each other's stations and collaborating in logistic support, where Australian researchers would fly on Chinese aircraft and vice versa. So through that program we have a long-established understanding of elements of the Chinese program. In addition to that, we freely undertake visits to Chinese bases and, as has been discussed at previous estimates, we have an inspection program in that from time to time we conduct more formal inspections of other countries’ operations in Antarctica. We don't comment in advance of undertaking those inspections.

Senator ROBERTS: Perhaps my ignorance of the nature of the treaty may be an impediment here, but what is the strategy of Australia to ensure its claim to the Australian Antarctic Territory is not diminished by the activities of China or any other nation?

Mr Ellis: There are a series of pillars that support our maintenance and care of the Australian Antarctic Territory and the preservation of our long-standing claims on that, regardless of the fact that the treaty has put those claims aside during its operation. We maintain three permanent bases in the Australian Antarctic Territory and we use those for a rigorous regime of scientific research. We have a summer base at Wilkins air base, which operates throughout the summer season. The ongoing investment driven through the 20-year Australian Antarctic Strategy and Action Plan ensures that there is a continuous level of investment and activity in the Antarctic. That is the best way for us to maintain a presence on site. That, combined with the inspection regime that Mr Clark outlined—that's a planned inspection regime that will put both Australian Antarctic Division staff and foreign affairs staff on the Antarctic visiting areas within the Australian Antarctic Territory—then the third leg of it is our presence and support for the Antarctic Treaty System. So we are a significant player, punching well above our national size in the Antarctic Treaty System. That allows us to ensure that environmental standards are being met, that nations are complying with the rules and guidelines of the Australian Antarctic Treaty System and that our influence in the Antarctic Treaty System is strong, rigorous and sustained.

Senator ROBERTS: What is the expenditure on scientific projects within the Australian Antarctic Territory by Australia compared with that of China, if you have some rough estimate or idea?

Mr Ellis: Firstly, we don't have clarity on China's expenditure, so doing a comparison of Chinese science expenditure and ours would be difficult, if not impossible.

Mr Cahill: We can take on notice the level of investment this government has announced over the past two years into the Antarctic science. We'll take that on notice and provide that.

Senator ROBERTS: Thank you.

Senator WHISH-WILSON: A lot of that is climate science too, isn't it?

Mr Cahill: Yes. A portion of that is climate science.
Senator WHISH-WILSON: You might want to look at that information too, Senator Roberts.

Senator ROBERTS: Sure. I'm sure the Chinese are.

Senator WHISH-WILSON: Well someone has too.

CHAIR: Any further questions for the Antarctic Division? No? Mr Ellis, to you and your staff, thank you very much. We appreciate the work you do in the Antarctic on behalf of our nation and beyond.

Senator WHISH-WILSON: Hear, Hear!

CHAIR: With that we will move to outcome 4.

Senator SHELDON: Good evening to Mr Heferen and Minister Hume. First of all, I just want to ask, regarding international per capita levels of renewable energy investment, where does Australia rank with other nations?

Mr Heferen: I might ask my colleague Mr White to assist with that. I think, if I'm not mistaken, the IEA has put out a report quite recently. It certainly goes into per capita PV investment, in which we are very high—I think we're probably, by far and away, the highest in the world. So that I don't go down the path of giving too many facts and figures that are a little misplaced, Mr White may be able to assist.

Senator SHELDON: Of the international per capita levels of renewable energy investment, where does Australia rank against other nations?

Mr White: The department doesn't actually collect statistics on international renewable energy investment, but there are a number of external sources. For example, the Australian National University makes its assessment and Bloomberg New Energy Finance has made an assessment. There has been a set of statistics released by BNEF with the United Nations environment program in September.

Senator SHELDON: Are they all the external sources that the department uses?

Mr White: Typically we'll use Bloomberg New Energy Finance as an available source to us.

Senator SHELDON: Previously the department cited BNEF's clean energy investment trends data for a claim that Australia had the highest per capita investment of clean energy in 2014 out of the 14 countries. Is that still the case?

Mr White: In terms of the citation that we previously made that you've just referred to, Bloomberg New Energy Finance at that time identified the 14 largest spending countries in the world individually and then grouped all remaining countries under a category of 'other'. Australia, based on the department's calculations, using international population figures, assessed that for 2018 Australia was the highest renewable energy per capita investor in the world.

Senator SHELDON: You're putting it to me that that was using the 14 countries?

Mr White: That was using the 14 countries and the highest expenditure—that's the highest absolute expenditure, not the per capita expenditure—and then Bloomberg didn't disaggregate the remaining countries.
Senator SHELDON: You are saying how many of the other countries were involved, if you were to include all the countries in this report that you're—

Mr White: The figures that I'm referring to related to 2018. We accessed those in June 2019. Bloomberg did not disaggregate the other countries.

Senator SHELDON: I understand that the report for 2018 cited 23 countries, and Australia was third, behind Sweden and Denmark.

Mr Heferen: We might need to take that on notice, just to clarify.

Senator SHELDON: The department further cited the Frankfurt School-UNEP Centre-BNEF Global trends in renewable energy investment 2019 for a claim that Australia had the second-highest per capita investment in renewable energy in 2018, out of 30 countries. The Australia Institute review of that data showed that it was a reference to investment over the decade, not per year, and that Australia was ranked fifth. Can you explain the discrepancy?

Mr Heferen: One of the issues when different data sets might be at cross-purposes is that, when one talks about renewable energy, there is an issue of whether hydro is included. A lot of people say hydro is renewable. Sometimes 'renewable' is used as a shortcut for intermittent renewable—so wind and solar. For argument's sake, Norway is a country which has a lot of hydro but very little wind and solar. There's a question, when people talk about renewable energy, of what that renewable energy measure is. The other one is whether rooftop solar is included. In our system, rooftop solar is typically not looked at on the generation side; it's looked at on the demand side, where the consumers or the businesses have already drawn their energy from the grid and they're using some themselves. Some data sets will have rooftop solar being included in renewable energy. Some will just talk about generation. We've had three sets of numbers, and they're all slightly different as to where Australia might rank—whether it's first, third or somewhere else. Maybe it would be safest if we took that on notice and provided the committee with that disaggregation to the extent that we can.

Senator SHELDON: Thank you for taking this question and the other question on notice. I just want to be really clear. In the previous report that I mentioned, which was the BNEF's Clean energy investment trends, I wanted you to look at the 23 countries, Australia being the third ranking, below Sweden and Denmark. You told me you haven't got that information at hand. You're going to take that on notice if you haven't got it at hand.

Mr Heferen: No, we don't have it.

Senator SHELDON: The second report is the Frankfurt School-UNEP Centre-BNEF's Global trends in renewable energy investment 2019. I understand that report looks at renewable energy in 2018 in 30 countries. Please look at that aspect of it—not a recalibrated aspect of it but those reports and how they actually explain it.

Mr White: I might just have to correct something I said before. When I was referring to the 14 countries, that was clean energy investment, not renewable energy investment.

Senator SHELDON: So, with renewable energy investment, where does the ranking go? Have you got the answer on the 23 countries if it's renewable energy?

Mr White: No. We'll have to take that on notice. I'm sorry.

Senator SHELDON: The Australia Institute reviewed the Frankfurt School of Finance & Management, United Nations Environment Program and BNEF report cited by the department
as showing that Australia is investing $470 per person and could only find per capita investment of $368 per person. Can you explain the discrepancy between those two reports?

Mr White: No, sorry. I'm not aware of the Australia Institute figures that you just mentioned, so, no, I'm sorry, I can't explain the discrepancy.

Senator SHELDON: The Australia Institute figures came from a publication called *Rank hypocrisy*, on 21/10/2019, which looked at these claims and other data sets that were used.

Mr White: Just to confirm: that's today?

Senator SHELDON: That's right.

Mr White: Sorry, I haven't seen that report.

Senator SHELDON: Tuvalu's investment of $6.5 million translates to $401 per person, higher than the $380 per person of Australia, as in the Frankfurt School data. Is there a reason close neighbours, like Tuvalu, were not included in the assessment? I understand that Tuvalu has not been included in that assessment—the earlier assessments.

Mr Heferen: Sorry, in the Australia Institute assessment?

Senator SHELDON: As I understand it, in the earlier assessment from the United Nations Environment Program and the BNEF report, which was cited by the department.

Mr Heferen: To be clear, the BNEF and the other one didn't include Tuvalu.

Senator SHELDON: That's right.

Mr Heferen: So the question is: do we know why BNEF didn't include Tuvalu?

Senator SHELDON: That's correct.

Mr Heferen: You could direct that to BNEF. We could try and be a facilitator—a middle-person approach—and approach them.

Senator SHELDON: I'm putting the position of the department that they're our close neighbour and that's the amount of money that they're investing, and the reports that we're comparing with—I'm suggesting should be comparing also with our close neighbours. I'm happy for you to take it on notice about why Tuvalu wasn't included. That's really the question I'm raising.

Mr Heferen: Sorry, the issue is why Bloomberg New Energy Finance didn't include Tuvalu.

Senator SHELDON: No, I'm saying something slightly different from that. Yes, the BNEF report didn't include Tuvalu, but the department's been using that report when it's been equating the amount of money spent per capita. The point I'm making is: why is the department relying on that information when it doesn't include countries such as Tuvalu?

Mr Heferen: Just to round it out, the Tuvalu number was included in which report?

Senator SHELDON: The Frankfurt school data.

Mr Heferen: I think that goes in that set of things we're taking on notice, to try and provide the committee with an update.

Senator SHELDON: To clarify that a bit further—my apologies—the department didn't include the Tuvalu figures, even though the BNEF and UNEP did have the Tuvalu numbers. The department has received a report from BNEF and UNEP, and the department excluded
the Tuvalu numbers when doing a comparison. I'm wondering whether you can explain why
the department did not include the Tuvalu numbers.

Mr White: I think we'll take that on notice.

Senator URQUHART: You don't know why the department didn't include Tuvalu
numbers?

Mr Heferen: When you say 'the department', the bit I missed the department's publication
of what?

Senator URQUHART: The BNEF and the UNEP had the Tuvalu numbers in it, but the
department didn't include those numbers.

Senator Hume: In what publication?

Senator URQUHART: In the previous publication—I'm sorry, I don't have that. Take it
on notice. We'll provide a more detailed question on notice, but the question was quite simple.
The department didn't include Tuvalu, even though BNEF and UNEP did have the Tuvalu
numbers in their report. The department used a group of countries not including Tuvalu, so
the question was very simply why didn't the department include Tuvalu.

Mr Heferen: I understood that part, but why didn't the department include in what? That's
the bit, the publication that we have provided where we didn't do it. You'll appreciate that we
do a range of—

Senator URQUHART: Sorry, we'll put in a more detailed question on notice.

Senator SHELDON: Is there any evidence that you're aware of that renewable energy
investment has slowed in Australia in 2019?

Mr White: Investment figures get tracked by different organisations using different
criteria. Bloomberg New Energy Finance, for example, has produced figures that indicate, for
the first half-year of calendar 2019, in Bloomberg's assessment the invest in Australian
renewables is lower than for the first half-year of 2018. If you doubled the 2019 half-year
figure you would get a lower number than for 2018. We have asked Bloomberg New Energy
Finance about that. Their view was that you need to wait for the full set of figures to be
comparable, and the view they put to us when we quizzed them on it was that, in their view,
the federal election campaign had some impact on decision-making at the time.

Senator SHELDON: Are you aware of any alternative sources for the statement
'Australia has the highest per capita investment in clean or renewable energy'?

Mr White: Earlier, I referred to the Australian National University, which also produces
figures. They don't produce pure dollar investment figures per se, they produce figures on
what's deployed of renewable energy.

Senator SHELDON: Coming back to your earlier answer, that there has been some
reduction in investment, and if I understand it you're saying since the election, are you aware
that Bloomberg New Energy Finance has stated that investment has fallen by 50 per cent this
year, and is that correct?

Mr White: Just going back to the basis of your question, I didn't say 'since the election'.
What I said was that when we spoke to Bloomberg they said that they thought the election
campaign and election were a factor. In terms of the figures I mentioned before, those are
broadly consistent with what you were just saying, I think.
Senator SHELDON: So Bloomberg New Energy Finance is correct, in the statement they've made, that there has been a 50 per cent reduction.

Mr Heferen: Later this evening the CER, the Clean Energy Regulator, will be appearing. They keep a much closer track on investments. They record that as part of their role. So that's a place where they'd probably provide more detailed information.

Senator SHELDON: There are a couple of other questions I want to ask, and I appreciate that you might refer me there. I understand that. I'm just making the point about the Bloomberg New Energy Finance and the statement regarding the investment, that they've said there's been a 50 per cent reduction. I'm just ascertaining you've heard that. I understand Mr White answered, to that effect, that that's correct.

Mr White: Sorry, I should probably clarify. I think Bloomberg has made that statement.

Senator SHELDON: Thank you.

Senator SHELDON: The next question is, are you aware—

Mr White: But I don't know about the accuracy of that statement. Bloomberg may have made that statement. They have shown figures that earlier on in the year, when we saw them, what we saw at that time, at the half year, if you'd doubled the figures it would have given a lower result than for 2018. But, as I said, Bloomberg New Energy Finance themselves, when we spoke to them about that, said that they thought there had been confounding factors.

Senator SHELDON: Thank you. That was leading up to the election and since the election period?

Mr White: Bloomberg New Energy Finance produced the figures for the half-year 2019 and they produced that after 30 June. When we spoke to them about the half-year figures, they said that they thought the half-year figures were confounded by the election campaign.

Mr Heferen: And, as Mr White said, I think, Bloomberg then said that to make sure you compare like with like wait for the full year, don't go off the half year and double it. Wait for the full year to be in a better position.

Senator SHELDON: Are you aware that the Clean Energy Council has indicated publicly that, according to their analysis, renewable energy investment in 2019 may have already fallen by more than 50 per cent compared to 2018?

Mr White: No, I'm not aware of that statement by the Clean Energy Council.

Senator SHELDON: Does the department stand by the claim that Australia currently has the highest per capita investment in renewable energy of any country in the world?

Mr Heferen: So that statement is one that the department has made? I'm just checking.

Senator SHELDON: I'm saying this with regard to the department, that it's the highest per capita investment in renewable energy of any country in the world.

Mr Heferen: I'm sure if we've said that we would stand by it. I think the answer to the questions on notice that we spoke about earlier will draw that out.

Senator SHELDON: So, regardless of the Clean Energy Council, you're standing by that statement?

Mr Heferen: To the extent we made that statement, yes, we're standing by it. Now, it may be that it was for 2018—
Senator SHELDON: I'm sorry, Mr Heferen, is that still your view—or the department's view?

Mr Heferen: We'll need to get to the bottom of some of the data. I think that the Clean Energy Regulator, which is coming in afterwards, will be able to elucidate some of that.

The other thing in the renewable energy world is that there has been, as Mr White said, a number of compounding factors. One is the whole issue of large-scale wind and large-scale solar being able to be connected to the grid. And so the market operator came out with an adjustment to the marginal loss factors, or the MLFs, as they are known in the system. That has an effect, there is no doubt about that. I think that to deal with these things, particularly, as you raised, when we're looking at a few different reports that are probably using slightly different datasets, and to do the committee justice, we need to go away and have a good examination of those and put them together to make sure that we're comparing like with like and then track down the publication where we had those numbers that we're comparing against. I'm still not quite sure which that one is. I think that when we do that we can bring it together in a way that will provide the committee with the relevant analysis for the claim.

Senator SHELDON: I'll just make it a bit clearer: I am saying this in referring purely to the Bloomberg New Energy Finance, which stated that investment has fallen by 50 per cent this year. You've explained to me the discussions that you've had with regard to that, the reasons for that 50 per cent reduction and why they've come up with those figures. I've asked you about the Clean Energy Council. As indicated publicly, according to their analysis renewable energy investment in 2019 may have fallen by 50 per cent compared to 2018. If I understand it correctly, you're taking that on notice because you're not aware of that. Is that still correct?

Mr Heferen: That's right.

Senator SHELDON: So based on the Bloomberg New Energy Finance statement, does the department stand by the claim that Australia currently has the highest per capita investment in renewable energy of any country in the world?

Mr Heferen: I think I've answered that.

Senator SHELDON: Righto—

Senator URQUHART: You've said it, you've said it, you've said it—

Senator SHELDON: Yes.

Senator URQUHART: and the Prime Minister and the ministers have also said it, and the department backed the minister.

Mr Heferen: Well, more importantly—

Senator Hume: Sorry, what was the question on notice that had more to do with Tuvalu?

Senator URQUHART: We'll provide it in more detail.

Senator SHELDON: We'll provide it.

Senator URQUHART: Can you provide an update on where the UNGI program is up to? In particular, how the program is being administered, how current projects under consideration were decided and what their status is? Who is going to do that? Mr O'Toole?
Mr O'Toole: Yes. Senator, you will recall that I think it was in March of this year there was an announcement by the government of a short list of 12 projects involving a mix of pumped hydro, gas and one small coal upgrade. Post the election the department has been busy working with a range of stakeholders, including consultants and the proponents of the short-listed projects themselves, as well as a range of consultants—CEFC, ARENA et cetera—in order to get a better understanding of the projects, particularly in relation to their financials, where they are up to in terms of connection agreements and approvals, and also the benefit or otherwise that they might provide to the market. You would have seen that there was some media reporting on Friday where, I think, Minister Taylor was quoted as saying that detailed analysis on a subset of those projects—the most advanced ones, which we've been most focused on—was nearing completion and that his expectation was that negotiations with at least some of those in that subset might be completed by the end of the year.

Senator URQUHART: Did you say 'the end of the year'?

Mr O'Toole: That's right.

Senator URQUHART: Okay. Could you tell me how the current projects that are under consideration were decided.

Mr O'Toole: As to the factors which were flagged, which I just touched on briefly, the minister has made it very clear that the project has to be economically viable—I think he uses the language 'stack up'—and this goes to the genesis of the program. If you'll recall, it came out of the ACCC report, where the focus was very much on underwriting debt, not on underwriting equity, so the project has to be economic. Other factors which were taken into account were how advanced the projects were; the status of the proponents themselves and whether there was an expectation that they could deliver; and, importantly—given the objectives of the program itself in terms of increasing competition, driving down price and improving reliability—what contribution those projects would make to either the region or the market more broadly or both. Obviously, as part of this assessment we spoke not only to consultants and financial experts but to AEMO to get advice on those factors.

Senator URQUHART: You said there were 12 under consideration in March?

Mr O'Toole: The short list was 12. The minister flagged, I think, in the press that there might have been six. I might just add that—

Senator URQUHART: So how many are there?

Mr O'Toole: Sorry?

Senator URQUHART: Are there 12 or six?

Mr O'Toole: There are 12 on the short list, but in terms of the ones that he was suggesting were being considered as an immediate priority because of their status, he flagged six.

Senator URQUHART: So when you talked about the subsets you were talking about six.

Mr O'Toole: Of the 12, yes; that's right.

Senator URQUHART: Okay—six out of 12.

Mr O'Toole: I might just add, not to confuse matters but just to complete the picture, that ARENA, as you may be aware, is running a $40 million project down in South Australia, which is targeting pumped hydro projects. A few of those that have been short-listed by ARENA are also UNGI projects.
Senator URQUHART: Are the six subsets all nearing completion by the end of the year, or are they at varying levels?

Mr O'Toole: We have to be careful with language here. We're not talking about completion. I think the minister was talking in the context—

Senator URQUHART: I thought you said 'nearing completion'.

Mr O'Toole: In terms of the negotiations. I just don't want you to think that we're going to have generators up and running by Christmas.

Senator URQUHART: I took it to mean nearing completion of the project. That's not what you meant?

Mr O'Toole: The situation—and the minister has made it clear in the press—is that they're not going to be building more generation than a state needs or the NEM needs. So, to the extent that those projects might double up, you would expect that not all of them will get up. At the end of the day it may be the case that what the government is offering in terms of being consistent with the ACCC recommendation is not enough for the proponent, and so there may not be an agreement there too. So I won't say that all six will get up. I think the minister just said that he's hopeful that some will get up by Christmas.

Senator URQUHART: Just so that I'm very clear: when you talk about nearing completion by the end of the year, you're not talking about the projects; you're talking about the negotiations—

Mr O'Toole: I'm talking about the government coming to—

Senator URQUHART: for the finalisation—

Mr O'Toole: Exactly.

Senator URQUHART: of the agreement as to how many of those subsets will actually—

Mr O'Toole: Yes. The government will be in a position to actually enter into an agreement with those projects so they can proceed.

Senator URQUHART: Yes. Are you aware of any concerns from the energy industry about the program? In particular, are you aware whether there are any concerns regarding the lack of transparency undermining private sector investment in new generation?

Mr O'Toole: It's fair to say I'm certainly aware of some concerns being raised. Probably the most recent one I've seen is the Grattan report, which was released in the last month or so. The broad thrust of those concerns tends to be that government involvement in the market is undermining the incentives, or introducing uncertainty, for private sector investment. I think the point that you have to take into account here—and I think it's a point which has been well made by the minister—is that in the last few years there has been a significant amount of investment in the National Electricity Market, and by far the majority of that has been in renewables. I think only about two per cent in the last three or so years has actually been in the firm generation. You would be aware that the minister and the government were very concerned, in terms of the introduction of significant amounts of renewable, that it needs firm, dispatchable fast-start generation to support that. That is what this program is about. So I am aware of the concerns. I think the minister has made clear that he would like nothing more than for the private sector to step up. I think he signalled that then the government would step back.
Senator URQUHART: My question is then: are industry concerns valid? Isn't it the case that, if private industry is unsure about the timing and the size of government-backed new generation projects, it creates uncertainty about the viability of private generation projects?

Mr O'Toole: I don't mean to be obtuse but I suspect government action in all of these creates some uncertainty, to a greater or lesser degree. How much that is and how much it affects private investment decisions, I really couldn't say. The point I would make is that the last substantial gas generator built was in Mortlake in 2012. We have been waiting a long time for the private sector to step forward.

Senator URQUHART: Has the department settled on a set of selection criteria for projects under the program?

Mr O'Toole: In terms of final ones?

Senator URQUHART: Yes.

Mr O'Toole: You will recall there was a number—the ones which I covered off—which were released both in the registration of interest process and flagged initially in the consultation papers.

Senator URQUHART: Can you provide what the set of selection criteria is?

Mr O'Toole: We can take that on notice.

Senator URQUHART: Have they been published?

Mr O'Toole: Not the final ones; I don't think so.

Senator URQUHART: Okay. Why not?

Mr O'Toole: I will take it on notice.

Senator URQUHART: Why hasn't it been published?

Mr O'Toole: It is an issue for government. It would be a question for the minister.

Senator URQUHART: Can you confirm the program will include loans, grants, contract for difference or other derivative-type mechanisms?

Mr O'Toole: We will take that on notice, but I think it is fair to say that the thrust of the program is very much in line with where the ACCC was coming from, in terms of underwriting debt as opposed to potentially other instruments.

Senator URQUHART: Does the government need to legislate to deliver the UNGI program?

Mr O'Toole: In terms of individual support for programs, no. But, as with any sort of government expenditure which is outside the norm, you would need some sort of legislative instrument underneath an existing piece of legislation.

Senator URQUHART: Do you know when that legislation would be introduced?

Mr O'Toole: As I said, it depends ultimately on the government. But, if they were to do it on a project-by-project basis, it would be legislative instruments which would presumably be introduced once the government reached agreement with the proponents and was prepared to proceed.

Senator URQUHART: You're not sure whether it will be piecemeal or a whole package?

Mr O'Toole: That's right.
Senator URQUHART: You don't know that?

Mr O'Toole: At least with these, the short list and the ones before Christmas, I would expect they would be proceeding on a project-by-project basis.

Senator URQUHART: Thank you.

CHAIR: Senator Hanson-Young.

Senator HANSON-YOUNG: Following on from some of those questions in relation to underwriting, can you clarify: are you acknowledging there that you will have to have some legislative changes to give you authority to move ahead with some of those? The six pumped hydro renewable projects can obviously funded through the CEFC and ARENA; put them aside. But the others—you are confirming that we will need legislative authority to allow them to be funded?

Mr O'Toole: It's much the same as with many grants that the government provides, in that you need some sort of legislative support. Typically, the way that is provided is underneath another piece of legislation with a subordinate legislative instrument.

Senator HANSON-YOUNG: Is that piece of legislation the public governance and public administration act?

Mr O'Toole: It could be a couple of legislative heads.

Senator HANSON-YOUNG: What else, aside from that act, would you be relying on?

Mr O'Toole: You would only rely on one, but another option would potentially be, say, the Industry Research and Development Act, for instance. That's one that is often used.

Senator HANSON-YOUNG: Okay. Are you aware of any concerns of legal uncertainty without specific legislation?

Mr O'Toole: In terms of these initial projects, if they go forward as bespoke projects then my suspicion is no. But, if it is rolled out as a broader program, which is the government's intention, then I would expect you would need some sort of legislation. It has been flagged in the media that potentially the CEFC could look after it, could be potentially the body which has carriage of it in the longer run, but, if that were to occur, then you would need some sort of legislative change.

Senator HANSON-YOUNG: You couldn't be using the CEFC to prop up—

Mr O'Toole: Coal? No.

Senator HANSON-YOUNG: a clunker of a coal plant, could you?

Mr O'Toole: No. That's correct. And I don't think the government would ever intend to do that.

Senator HANSON-YOUNG: What sort of legislative instrument would you envisage for an individual project or as a suite of programs? Are we talking an amendment bill, a regulation, a disallowable instrument? Surely you've had to canvass all these options?

Mr O'Toole: Yes. We certainly have, but I don't have the specific details. At least for the projects, you would expect it to be a legislative instrument. It is just the question of whether it disallowable or not which has stumped me. I think it would be. But I will have to take that on notice and confirm.
Senator HANSON-YOUNG: If anyone perhaps behind you has the answer to that, it would be interesting to have that feedback tonight.

Mr O'Toole: Yes. We'll take it on notice.

Senator URQUHART: I would be interested to know what legislation those instruments sit under.

Mr O'Toole: I am happy to take it on notice.

Senator HANSON-YOUNG: Mr Heferen, I just had a follow-up question for Ms Evans before she goes. I can see her sitting at the back there. It's just a clarification in relation to some questions earlier.

Mr Heferen: I'm sure Ms Evans would be very happy to help.

Senator HANSON-YOUNG: Thank you. Ms Evans, you recall that earlier this morning we were having a conversation around the impact of climate change on drought and other aspects—the economy, environment, agriculture?

Ms Evans: Yes.

Senator HANSON-YOUNG: Isn't saying that the climate isn't changing for the worse some form of climate change denialism?

Ms Evans: I think you have taken a very small part of what I was talking about. I also said quite a number of other things about climate science, including the fact that we know carbon dioxide levels in the atmosphere are increasing, that we know that has primarily come from human activities, that the extra carbon dioxide from burning fossil fuels is adding to the natural greenhouse effect, and that there are other consequences of that that are already being seen in Australia and around the world. I already ran through quite a number of those impacts. So your implication that my comment implies that that's denialism is quite out of order, I think.

Senator HANSON-YOUNG: I would like to give you an opportunity to reflect on what you said earlier today, specifically in relation to the changing climate, and human induced climate change making things worse. Would you like a chance to reflect on the answers that you did give?

Ms Evans: I am happy to continue to explain that the changes in climate that we are seeing include increases in temperature, increases in ocean heat content, increases in ocean acidification, changes in the frequency and intensity of extreme weather events, rising global sea levels and so on. I don't feel a need to put a judgement word on to those factual descriptions.

Senator HANSON-YOUNG: You said to me that it wasn't necessarily making things worse.

Ms Evans: I'd need to check the Hansard whether I actually said that.

Senator HANSON-YOUNG: Do you think those impacts from human induced climate change are making the world more unsafe?

Ms Evans: Australia is part of the global effort to reduce the potential for those impacts to occur, so it's clear that there is an overall view, shared by the Australian government, that it would be preferable to keep the impact of global warming to below two degrees or, in fact, to
well below two degrees and preferably to 1.5 degrees because of the understanding of the seriousness of the consequences of it being more extreme than that.

Senator HANSON-YOUNG: I'm just going to ask the question one more time very clearly, and you can answer yes or no—

Ms Evans: I can answer in the way that I am allowed—as I prefer.

Senator HANSON-YOUNG: I'm giving you an opportunity to clarify your comments, which have alarmed people, so that's why I'm giving you an opportunity. Is saying that the climate isn't changing for the worst wrong?

CHAIR: Senator, the official is answering in a factual manner based on the facts of the science before her. Just because the form of your words doesn't accord with how you would express it doesn't make her answer wrong, and I don't know that it's appropriate to try and force her to answer in a way that you approve of.

Senator HANSON-YOUNG: It's not about my approval. I'm trying to understand why we would have a senior bureaucrat in this committee tell us that the way climate is changing is not making things worse.

Mr Heferen: Chair, Ms Evans has made it clear that Australia is part of the international effort to try to limit the increase in temperature. Australia commits significant resources to that. In the absence of that committed global effort, there is a chance that temperatures would rise to an extent to cause a range of things, which Ms Evans has pointed out. I think it's appropriate for officials, public servants, appearing before a committee like this to stick to what we understand to be the science and the facts and make an observation of that, which Ms Evans has done clearly and consistently. I think it's not the role of a public servant appearing before a committee such as this.

Senator HANSON-YOUNG: Mr Heferen, I'm simply trying to give Ms Evans an opportunity to clarify and reflect on whether she wants to retract her comments from earlier today.

Mr Heferen: I don't think it's a question of retracting. Ms Evans was asked questions. She answered them thoroughly with the best available information. I think it's others who may be putting some kind of hue on the objective information put before the committee for the committee's consideration. It's not the role of us on this side to enter into a debate about the value judgements or the politics. It's our role to assist the committee to explain government policy and to provide information and facts to enable the committee to make their own judgements and own conclusions.

Senator HANSON-YOUNG: I'm not asking for a value judgement; I'm asking for an assessment of the state of the climate given the scientific fact. Is it getting worse or not?

Mr Heferen: She's made the point: it is getting warmer on a range of things.

Senator HANSON-YOUNG: I've given Ms Evans an opportunity to retract. If she doesn't want to, that's fine, It can stand.

Ms Evans: Again, I'll repeat what I said earlier, and I've described it a number of times. The impacts of increases in greenhouse gas emissions include consequences that we're already seeing now and, depending on what happens in the future, they could become more extreme.
They are: warming temperatures in the atmosphere, the ocean getting warmer, the ocean getting more acidic, changes in the frequency and intensity of extreme weather events, rising global sea levels, and long-term sustained and widespread reduction in polar snow and ice cover. All of these things are factual results of changes in the climate. I will leave it to others to put their judgement on how to describe that in a single word. I think you need to actually understand all of the consequences rather than reduce it to a single word.

Senator HANSON-YOUNG: Thank you, Chair.

CHAIR: If there are no other questions on outcome 4, the committee will suspend till 9.20 pm, when we will commence with the Director of National Parks.

Proceedings suspended from 21:05 to 21:20

Director of National Parks

CHAIR: The committee will now resume estimates for the examination of the Director of National Parks. Welcome, Dr Mundy. Do you wish to make an opening statement?

Dr Mundy: Thank you. There is no opening statement from us, thanks.

Senator URQUHART: I want to go through the Auditor-General's report and the performance audit that was undertaken by the Auditor-General into the management of Commonwealth national parks. I understand that the audit report found to it be ineffective and inadequately planned, as well as poorly reported. So it probably wasn't a ten out of ten. Did you anticipate this outcome from the Auditor-General, or was it a surprise?

Dr Mundy: It was certainly a welcome exercise for Parks Australia. Like every area, we are keen to understand how we can improve our operations, and the recommendations from the Auditor-General were useful. We've accepted them all in full, and there's a reasonably strong work program underway already to follow up the recommendations from the Auditor-General's report.

Senator URQUHART: Okay, but did you anticipate that outcome?

Dr Mundy: I don't think we went in with expectations. I think we went in with an open mind about how the process would go, and we welcome the scrutiny and the recommendations that the Auditor-General provided.

Mr Cahill: The ANAO has a policy of no surprises, so, obviously, throughout the whole year of them conducting the audit there was a very constructive engagement.

Senator URQUHART: So it wasn't a surprise?

Mr Cahill: When we got the draft report we weren't surprised, and it was a very constructive engagement.

Senator URQUHART: Dr Mundy, you said that you've accepted the recommendations in full. Have you commenced implementing those recommendations?

Dr Mundy: We have. We've got work underway on addressing each of the recommendations. We are actively strengthening our management of risk; we're reviewing planning frameworks and monitoring processes; we're improving procedural consistency across our national parks estates, which is, of course, a challenge, because we manage a diverse range of areas; and we're committed to improving performance reporting and transparency. So we do have steps commenced against each of the recommendations.
Senator URQUHART: Do you have time frames against those steps?

Dr Mundy: Not that I have to hand, but I can provide further advice on notice, if there's anything further to report.

Senator URQUHART: That would be great, thank you. Do you have an adequate number of staff to be able to carry out the successful implementation of the recommendations, or are you going to be seeking assistance?

Dr Mundy: We have adequate staff to pursue the recommendations.

Senator URQUHART: Thank you.

Senator SIEWERT: I had concerns reading the report, of course, but I had particular concerns with the comments about traditional owners and issues raised by the traditional owners, including:

- deficiencies in communication, consultation, and the provision of information;
- lack of employment pathways and training for Aboriginal and Torres Strait Islander people to assist them to progress beyond entry level positions; and
- failure to implement park management plans, decisions of boards of management, and lease obligations.

Does part of your work program address these specific issues, and have you done an audit now of these specific points?

Dr Mundy: We haven't done an audit on the audit, but we certainly take very seriously the part of our mission which relates to multiple benefits for traditional owners and communities. It is a core part of the Parks Australia work program. As you know, we have three main goals, and multiple benefits for traditional owners are one of those goals. We're working to perfect our engagement with traditional owners on park and through the boards of management. So that is a work in progress for us, as you'd expect.

Senator SIEWERT: Can you articulate what specific actions you are taking in your work plan to drill down into these concerns and find out more specific details, and what the timelines are?

Dr Mundy: I'd need to take that on notice.

Senator SIEWERT: Can you give us the headlines of the work plan? Most of these national parks are very important to First Nations people, two of them particularly. I'm quite shocked to read the findings.

Mr Cahill: One thing that the Director of National Parks has done—working with the department because the staff in national parks are departmental staff—is that he has strengthened his leadership team. In the past there was one senior executive that oversaw the three terrestrial parks on mainland Australia—in fact all parks, including the three island parks plus Kakadu, Uluru and Booderee. Now there is a chief executive dedicated to each of those parks to strengthen our leadership and engagement with traditional owners and all stakeholders in those parks. That is a strong change that has been led by the director.

Mr Dyason: If I could add to that, the director has recently held a meeting of the joint boards for the first time since the Director of National Parks office has been established. At that meeting, which was attended by the boards of management of Booderee, Uluru and
Kakadu, a number of actions were identified by the boards. The director has taken on their requests. They include things like establishing pathways for local employment of Indigenous people, developing comprehensive business plans and transition strategies for the Booderee National Park, among a number of other actions.

**Senator SIEWERT:** Can you take on notice what those actions are?

**Mr Dyason:** Certainly.

**Senator SIEWERT:** Why weren't Pathways to Employment there? What's been the problem, when that was one of the whole—not only of course having input to decision-making, but making sure people were employed on country?

**Mr Dyason:** I have only been employed by Parks Australia relatively recently and I'm not sure of the history of why they weren't taken on previously. I will say there are high levels of Indigenous employment in the jointly managed parks.

**Dr Mundy:** I can expand on that if it is helpful. I think the parks story of traditional owner employment and Indigenous employment is a strong one. Over one-third of parks employees identify as Aboriginal or Torres Strait Islander people. Within jointly managed parks almost two-thirds of all employees identify as Aboriginal or Torres Strait Islander people. We have been undertaking internally an Indigenous employment pathways project to help build Indigenous employment programs to provide greater employment opportunities, including mentoring, training and on-the-job support for traditional owners.

**Mr Cahill:** It's something that we can get better at. The executive board of the department—again, the staff and the employment arrangements are all through the department—met for the first time and had its first board meeting at Uluru—that's the executive of the department—then travelled to Kakadu. We sat down and met with all the Indigenous staff and various stakeholders to hear directly from them about the areas they would like to improve on. That has been fed into our reconciliation action plan and a range of things that we want to strengthen in terms of employment outcomes.

**Senator SIEWERT:** The more you say the more questions I have. Why would you feed that through to the reconciliation action plan? Why would that not just be straight up management of the board?

**Mr Cahill:** There are also Indigenous employment strategies arranged with some of the reconciliation action plans, which pick up how you go about things, being culturally respectful. But then there are a range of programs where we are just supporting the Director of National Parks to be able to get better pathways for people from local communities.

**Senator SIEWERT:** I might need you to take this on notice: have you done an audit for the issues that were raised in terms of failure to implement park management plans, decisions of boards of management and lease obligations? I for one have been pursuing issues around some lease obligations in Kakadu, which has been a long and painful process. Have you done any audits of that, or does the work plan contain audits of those things that haven't been done that have been promised to be done, and also implementation of actual park management plans?

**Mr Dyason:** We do have an audit on our work plan this year to audit our lease obligations for the jointly managed parks. That's the first one off the rank.
Senator SIEWERT: Okay, but you haven't done an audit of decisions of the various boards of management that haven't been implemented.

Mr Dyason: We haven't done an audit of that, but there has been a review of board decisions and documents have been put together outlining board decisions and where the actions are at—at least for Uluru.

Senator SIEWERT: What about for all of the parks?

Mr Dyason: I'm not aware of what's happening in the other parks.

Senator SIEWERT: Just Uluru?

Mr Dyason: No, no; it may be for other parks as well.

Senator SIEWERT: Can you take that on notice please?

Mr Dyason: Sure.

Senator SIEWERT: Can you also take on notice how many haven't been implemented and what's their status? Are they partially or fully implemented?

Mr Dyason: Certainly, Senator.

Senator SIEWERT: I have some more questions, but I'll put them on notice and I'll cede to Senator Hanson-Young.

Senator HANSON-YOUNG: Thank you. I've got some questions in relation to what assessments have been done by National Parks for the proposed development in Flinders Chase. I imagine, Mr Mundy, you're aware of that project?

Dr Mundy: Parks Australia has no properties that we manage on Kangaroo Island.

Senator HANSON-YOUNG: So you have no involvement in it at all?

Dr Mundy: None whatsoever.

Senator HANSON-YOUNG: Would you be concerned at all? This is a national park, but you're saying if there's no physical construction then you're not involved in it.

Dr Mundy: No. So the Director of National Parks' remit extends to 59 Commonwealth marine parks, plus the seven terrestrial parks, the jointly managed ones, that we were discussing a moment ago: Uluru, Kakadu, Booderee, the Australian National Botanical Gardens, Norfolk Island, Christmas Island and Pulu Keeling. That's us. The remainder—

Senator HANSON-YOUNG: So there's no federal link with Flinders Chase?

Dr Mundy: None, we don't have responsibility.

Senator HANSON-YOUNG: Okay; that's good to know. That is all I had questions for.

CHAIR: As there are no other questions for the Director of National Parks, Dr Mundy, thank you very much for appearing.

Dr Mundy: Thank you.
Climate Change Authority

[21:33]

CHAIR: I call officials from the Climate Change Authority. Welcome. It's good see you in a different context to the last time the committee had you before it for one of our inquiries. Would you like to make an opening statement?

Dr Craik: No, thank you.

Senator SHELDON: What is the Climate Change Authority's current budget allocation over the next four years?

Dr Craik: It's around $1.5 million, but I'll ask Brad to give you the details on that.

Mr Archer: The figure for this financial year, 2019-20, is $1.553 million; over the next three years it's $1.556, $1.579 and $1.589.

Senator SHELDON: Thank you. How many staff does the authority currently have?

Mr Archer: We have an average staffing level of nine, which is the number of people we have in the team at the moment, and that includes me.

Senator SHELDON: Thank you. As a result of the budget increases, how many staff do you expect to be engaged over the coming period?

Mr Archer: I don't expect that we will increase our staffing level.

Senator SHELDON: Over the next four years?

Mr Archer: No.

Senator SHELDON: What areas have the additional funds been allocated to?

Mr Archer: The additional funds are fairly modest, and I expect that they will really do no more than support our continuing our current levels of activity.

Senator SHELDON: What is the current schedule for publications and reports from the authority?

Dr Craik: We're currently doing a review of the report we did in 2016 on strategies to meet Australia's Paris targets, and we're looking at finalising that and putting it out early next year.

Senator SHELDON: Thank you. The authority's report output has significantly decreased since 2014. At that time it published four research reports and three reviews. It's down now to an average of one research report and one to two reviews a year. Has the lack of funding slowed the output of reports?

Dr Craik: Yes. With the level of funding and the smaller number of staff that we have, there's a limit to what we can do.

Senator SHELDON: You've mentioned the reports that you have in the pipeline. Can you provide an outline of the authority's future work program?

Dr Craik: After putting out a review of the strategies to meet Australia's Paris targets early next year, we have a statutory review of the Emissions Reduction Fund, or the carbon farming, late next year; it has to be done by the end of 2020. Then, I think, within the next year or two after that we have to review the National Greenhouse and Energy Reporting system again.
Senator SHELDON: Is the authority slated to provide advice on the 2050 strategy the government has signed onto as part of the Pacific Islands Forum’s recent agreement to develop such a strategy?

Dr Craik: No.

Senator SHELDON: Will the authority do work on Australia's first future emission reduction targets post 2030?

Dr Craik: We haven't been asked to do that. We haven't considered it. We're just about to start thinking about what work we might do next year.

Senator SHELDON: In light of your report on emission reduction targets of 2014, does the authority view cutting domestic emissions to 26 per cent below 2005 levels by 2030 as consistent with a realistic trajectory to deliver on Australia's obligations to deliver on the goals of the Paris Agreement?

Dr Craik: That advice was given by the authority to the government in 2014 or 2015. It was before I joined. The government chose a different target from the one the authority recommended, and the authority hasn't considered the issue since then.

CHAIR: No other questions for the Climate Change Authority? In that case, thank you for your patient waiting this evening for a short but effective appearance.

Clean Energy Regulator

[21:38]

CHAIR: Mr Parker, welcome to you and your team. Do you have an opening statement?

Mr Parker: No, Chair. We're at your disposal.

Senator GREEN: I want to ask a few questions. I haven't had the opportunity to ask the Clean Energy Regulator questions before, so I just want to double-check: you manage a few pieces of legislation, including the Renewable Energy Target? Is that right?

Mr Parker: Yes, that's right.

Senator GREEN: So I can ask some questions about renewable energy and our investment in that space?

Mr Parker: Indeed.

Senator GREEN: Do you keep records on investment in renewable energy?

Mr Parker: Yes, we do.

Senator GREEN: Great. Of what dates are your most recent figures for renewable energy investment inclusive?

Mr Parker: You mean our most recent published numbers?

Senator GREEN: Yes.

Mr Parker: I might get my colleague Mr Mark Williamson to answer that question.

Mr Williamson: We've got figures up until very recently, the end of September. Are you interested in the top-level numbers?

Senator GREEN: Yes, which I can ask you if that's easier. Have those figures shown an increase or a decrease in the renewable energy investment in 2019?
Mr Williamson: It depends on what you mean by 'investment'. In 2019 we're expecting 6.4 gigawatts of total capacity to be added. Last year it was approximately five gigawatts. That's small and large scale. If you are talking purely about utility scale, there has been a slight slow-up this year so far when compared to the same period last year. But it's too early to call a trend. Large-scale investment tends to be quite lumpy, and we do think the next two quarters are likely to kick up again.

Senator GREEN: So, just to be clear, are you saying that investment has slightly gone down?

Mr Williamson: What I'm saying is that investment is lumpy, if you look at it quarter by quarter. These are people trying to get to financial close. There's no coordination. So it tends to be lumpy. If you compare to last year so far, there appears to have been a bit of a decline in projects getting to financial close. But the next two quarters I expect it will kick up again.

Senator GREEN: What is that expectation based on?

Mr Williamson: We publish every month our data of the pipeline of projects we're tracking. Apart from projects that are under construction or already being commissioned, we're tracking about 1,500 megawatts—that's 1.5 gigawatts—of projects which are in a power purchase agreement stage between strong counterparties. All the projects we've tracked on those announcements as lead indicators have gone onto financial close. In addition to that, we have information from some very large participants who don't need traditional financing. These are large renewables companies who typically go off equity, and we have some intelligence about projects they will go ahead with in addition to that 1,500 megawatts.

Senator GREEN: So, compared to last year, investment is down?

Mr Williamson: So far, if we compare year to date and last year, in terms of the capacity reaching financial close, yes, there has been a reduction.

Mr Parker: Can I clarify one element there. Mark is currently talking about the outlook for investment, in 2020 and beyond. What we're currently seeing in terms of the actual level of investment that's happening right now is that's continuing at very, very high levels. This year will be a record and there is still a very, very large pipeline of projects which are past the financial close or are under construction. Just to give you an indication of that, we announced a month ago, effectively, that the Renewable Energy Target—which we thought needed about 6.4 gigawatts of generation installed to meet that target by 2020—was being met earlier with a very high level of investment. Since that point in time, we've had another 0.9 of a gigawatt go past the investment point. So it's coming on right now at an extraordinarily high level.

Senator GREEN: Just to be clear, it sounds like there are some different ways of measuring investment—

Mr Parker: Exactly.

Senator GREEN: and we might be talking about different ways of measuring investment. I'm referring to few different reports. I will just go through them for you. The Clean Energy Council said that their early analysis shows investment in renewables has fallen by more than 50 per cent this calendar year. Bloomberg New Energy Finance have indicated that investment in renewables has fallen 50 per cent. I'm not sure if you're privy to the way that those figures were brought about, but are these figures consistent with what you're telling me
now based on a different way of working? You're saying investment in one scheme, but they're talking about investment in the calendar year.

**Mr Parker:** They are effectively talking about announcements of investment to be made in the future. Mark was beginning to get into that story. We can give you further details in a second. What I was talking about is what is actually happening right now, the investment underway, which is putting generation in on the ground.

Broadly speaking, let me make an observation which applies across all of the measurements about the outlook for the future. The first point to observe is predicting the future is very difficult, and there are a fairly wide range of views in this space. We have, if you like, been at the top of the market over the last several years in terms of the amount of investment that's coming through. Unfortunately, we have been wrong; we have been too conservative. So although we are sort of making the highest levels of prediction, the actual amount of investment that was coming through was even higher than we were saying.

We are effectively still at the top of the market. There are a range of things going on where if you look at some of the numbers, which have been put out by CEC and Bloomberg and others, they might be talking about financial close. That's a reference to, effectively, an investment decision point where debt is needed to undertake the investment. We're seeing quite a lot of investment coming in to place which is effectively just being purely equity financed off the balance sheets of very large corporates, and some of those measures are not really picking that up. Sometimes we will only see that when it gets very close to actually being built. So it's not an easy thing to sort of unpick all of the different numbers—they measure different things, and so forth. But I will pass back to Mark to take you through the Clean Energy Council stuff, because we have been talking to them at some length and there are some areas of disagreement that we have with them in terms of the way that we track the pipeline. Mark can tell you something about that.

**Mr Williamson:** Particularly in relation to the Clean Energy Council's publication, they had Q4 in 2018 as 4.5 gigawatts reaching financial close. We had in that quarter around about 1,600 megawatts, 1.6 gigawatts. So there's a big disparity. We work very strictly on the commercial definition of financial close. Some of those projects we believe they had on their list back then as reaching financial close have still not started construction. Typically construction starts fairly soon after financial close. There are differences in that. As Mr Parker says, if you look at total renewables under construction this year, it will be a record year at 6.4 gigawatts. That includes rooftop. While there may have seemed so far this year to have been a decline in investment of projects reaching financial close at utility scale, small scale capacity last year—this is rooftop solar PV—was at about 1.6 gigawatts; this year we think that will reach 2.4 gigawatts.

**Senator GREEN:** Is that the difference? Is one figure about large scale and the figure that you are using include roofs and wind farms and everything?

**Mr Williamson:** We track rooftop solar in both the small scale renewable energy scheme and the large scale scheme and we track utility scale in the large scale scheme. When you look at those things together, rooftop solar continues to grow rapidly year on year in terms of capacity added. As I said, for the last few years, announcements—if you are talking about purely financial close—it is a bit lumpy. It appears large scale is down a bit. But we think there are prospects that it kicks up again in the next couple of quarters.
Senator GREEN: Prospects based on?

Mr Williamson: Prospects, as I said before, based on firstly in our published pipeline that we publish every month, we've got more than 1.5 gigawatts of projects in a power purchase agreement stage between strong counterparties. Every project we have tracked at that stage has gone on to financial close. So it's that, plus there are a number of big projects from large companies who don't need debt financing, who have indicated they will go ahead with some very large projects in the next six months. If you look at those two things together, I believe there are good prospects that we will see that early investment stage kick up again.

Senator GREEN: What about the next year, two years, three years? Does it look a little bit different if we look long term, particularly now that that target has been met?

Mr Williamson: As Mr Parker has said, looking further out is much harder to predict. To give some context to the target, we said 6.4 gigawatts needed to be commissioned between 2017 and 2019 to meet the target. Most people thought that things would flatten out there. We've currently got a total pipeline that we believe could go ahead of over 13 gigawatts, so there is a lot more to come. Looking out beyond that, we said in our annual statement to parliament earlier this year that the potential headwinds, looking out on the horizon you're talking about, are more to do with the grid—in other words, the grid capacity. It's getting much harder to connect projects. It takes longer and costs more, and there are a lot of swings in the marginal loss factors that make it more difficult for renewables developers. We called those out as the potential headwinds looking forward.

Senator GREEN: Are those headwinds part of your planning in terms of increasing investment? Are you talking to government about those headwinds and how they need to be resolved?

Mr Parker: We have an ongoing, collaborative, very productive relationship with the relevant other bodies that are involved in the electricity sector. They include AEMO and AEMC, the Australian Energy Market Operator and the Australian Energy Market Commission. Together with the Australian Energy Regulator, they are what are called the electricity market bodies or the energy market bodies. We are not part of that group, if you like. We are not substantively involved in regulating the electricity market—we have much more to do with the carbon programs that the government runs—but we do keep up strong liaison with those bodies, and we are involved in a conversation with them about what we're seeing in terms of the investment pipeline and so forth.

Senator GREEN: On the character of those conversations, have they been received positively, that, if we're going to have more renewable energy come online, there are some things that would prevent that investment continuing?

Mr Parker: I think they are all actively looking at those issues. There are a whole range of things which are being looked at. One of the key things that are necessary to, if you like, balance the intermittency of renewable energy is storage. There are a number of lines of work on that relating to Snowy 2 and Marinus Link, the Battery of the Nation arrangement, plus the government is underwriting new generation investment, which has a range of pumped hydro things in it. If you want details of that, then it is probably best to refer those kinds of questions to the department. We're not directly involved in transmission links and so forth, but there are
lines of work going on to accelerate the regulatory process there and batteries and so forth. There's a cloud of work, if you like.

**Senator GREEN:** That's long-term investment. I've heard the renewable energy market referred to as being overinvested. We're not at overinvestment yet, are we?

**Mr Parker:** It's a label. It's a bit hard to know exactly what it means, I think.

**Senator GREEN:** You don't want to answer that question, I'm assuming?

**Mr Parker:** It's just that labelling it 'overinvestment' or 'underinvestment'—what does that mean?

**Senator GREEN:** I think it's a comment that's tried to characterise that as 'we should stop investing in renewable energy'. That's not my view, but you're talking about headwinds. Is that something that has been discussed?

**Mr Heferen:** Mr Parker mentioned AEMO, the Australian Energy Market Operator. They do have concerns about the rate at which the variable renewable penetration is coming into the system, in terms of large-scale wind and solar and also rooftop. The more that comes in, the more the system will rely on those things, but of course the large-scale utility of solar on the rooftop means that demand through the day is quite hollowed out, so often there are zero prices through the day, even negative prices through the day. That in turn has an effect of putting pressure on coal fired generators, because they're not designed to ramp up and down; they're designed to stay at a constant level. Clearly if the demand is pretty close to zero because of all the rooftop solar, they will just be burning money, so the concern from the market operator is that the pressure that's putting on particularly the coal generation fleet but also gas fired generation might mean they prove to be uneconomic and would need to retire earlier than otherwise planned.

The benefit of those machines in the system is that they provide a lot of system strength and inertia. Of course, they're higher in emissions. So, from an emissions point of view, the early exit is beneficial, but, from the point of view of system strength and the frequency control to make sure the lights still stay on, they, or something that replaces them that is very like that, is very important to stay. The market operator looks at it and says: 'Oh gee, there's a lot coming in. We have to manage this very carefully, and it's very difficult.' The AEMC would take the same view.

At the same time, as Mr Williamson pointed out, there is a lot of investment coming into the system particularly in small-scale solar—that is, rooftop—which will exacerbate the downwards pressure through the middle of the day in the system so that pressure remains on the system. I haven't heard AEMO talk about overinvestment, but clearly the rate of investment from variable renewables is a matter of some concern to them, and they've been on the public record advocating for ministers to ensure that that's understood and taken into account. Indeed, the Commonwealth minister is agitating for work to be done by the council to make sure that, with this increased investment in renewable energy, the other elements that are necessary for the frequency of the system to be maintained are brought to the forefront.

**Senator SHELDON:** You were talking before about the measurements, in megawatts, that are coming online and saying what that's projecting for the future. What are the measurements if you look at the investments measured in dollars? How does it compare from year to year?
Mr Williamson: We don't track it in dollar investments. We think a better metric in relation to the target is the actual capacity.

Senator SHELDON: Do you track dollars at all? I appreciate you're saying to me that there's a way you prefer to describe it, and I respect that, but do you track it in dollars at all?

Mr Williamson: We don't directly track it in dollars. We use some kinds of crude averages for different costs, and we can deduce it. Certainly we can take on notice any questions around dollars and we can come back with some approximate estimates.

Senator SHELDON: Are you aware that Bloomberg New Energy Finance have estimated that there's been a 50 per cent fall in cash investments, monetary investments?

Mr Williamson: I'm not familiar with that particular publication you've referred to. As Mr Parker said, it depends on what they're specifically talking about. If they're talking about projects that have reached financial close so far this year compared to last year, then, as I said before, that could be the case. But that doesn't necessarily predict what's going forward, and I don't think it's reasonable to expect you're going to get a consistent level of financial close quarter by quarter. It's not the way financing works.

Senator SHELDON: Please take it on notice regarding Bloomberg and the investment amounts and get back to us.

Mr Williamson: Certainly.

Senator HANSON-YOUNG: I have some questions in relation to the emissions data for Amazon. I'm not sure, Mr Parker, whether you heard me asking the department about this. They said that it was better placed for you.

Obviously, a number of the different corporates, depending on how big their emissions are, are meant to participate in publishing their data. Amazon has opted to keep their emissions data secret; is that correct?

Mr Parker: I didn't have the benefit of hearing your earlier discussion, I'm afraid, but Shayleen Thompson may be able to give you a better indication.

Ms Thompson: The issue you are asking us about relates to the national greenhouse and energy reporting legislation. As you say, it does require facilities and corporations over certain thresholds to report every year. The legislation does contain a provision—section 25—that allows corporations or facilities to apply to us to have part or all of their reported greenhouse gas emissions withheld. We publish the emissions reporting every year in February, and the current register does indicate that Amazon had requested that their data be withheld. So we're currently in the process of assessing their application for their data to be withheld. The NGER Act makes it clear that, if companies are seeking to have their data withheld, it has to be because of trade secrets or commercial-in-confidence reasons. The company would then make an application and then we assess it. In some cases we seek further information from the company. In fact, it's a process that we take very seriously.

Senator HANSON-YOUNG: How long has this application been on foot? How long have you been assessing this, and when do we expect a final determination?

Ms Thompson: I'm advised that we're looking for a decision very soon. In fact, we have had the application since, I believe, 12 October 2018.
Senator HANSON-YOUNG: So it is roughly the last 12 months. So they obviously didn't participate in this year's publishing, and you'd want to get this sorted so that you know for next February. Is that a correct understanding?

Ms Thompson: We also publish in February for the financial year before, so they would still be going through the process of compiling their reporting to give us for the current reporting year.

Senator HANSON-YOUNG: That would be for 2018-19.

Ms Thompson: That's right.

Senator HANSON-YOUNG: 'Trade secrets' seems a pretty broad definition or reason for keeping this kind of data secret. What's so special about Amazon versus, perhaps, some of the other big data companies such as IBM or NextDC, who have participated, been more transparent and not sought to keep their data secret?

Ms Thompson: As I said, the act refers to trade secrets or commercial-in-confidence information. Given that we're still assessing this application, in the interests of being fair to the company I would prefer not to talk too much about what reasons they might be giving for their request for the exemption.

Senator HANSON-YOUNG: How many corporations have asked for an exemption?

Ms Thompson: Under the NGER Act, I believe Amazon is the only company that's seeking an exemption at the moment.

Senator HANSON-YOUNG: Amazon is the only company?

Ms Thompson: I believe so, yes.

Senator HANSON-YOUNG: Extraordinary.

Ms Thompson: Sorry; I should add that there are a number of corporations or safeguard reporters, as we call them, that have requested their data not be made available under the safeguard legislation. I understand there are four corporations covering eight facilities in that category.

Senator HANSON-YOUNG: Do you have the names of those? Have you got it written there?

Ms Thompson: No, I don't.

Senator HANSON-YOUNG: Could you take that on notice for me?

Ms Thompson: We can have a look on notice, yes.

Senator HANSON-YOUNG: Have you seen the data from Amazon?

Ms Thompson: I haven't reviewed it personally, no. People who work with me—

Senator HANSON-YOUNG: But it is in the possession of the regulator? You do have the data?

Ms Thompson: They do report the data to us, and then they apply to have it—

Senator HANSON-YOUNG: Kept secret?

Ms Thompson: To have this exemption under section 25. As I say, we assess that very carefully.
Senator HANSON-YOUNG: Is there a review mechanism? So, if you were to say, 'No, everybody else has published it, IBM and others,' including their commercial competitors, are they able to apply for a review of that decision?

Ms Thompson: At the moment we're still going through the process of assessing their original application.

Senator HANSON-YOUNG: If you were to reject that application, do they have a second bite of the cherry?

Ms Thompson: They could request an internal review, I believe, or they could apply to the Administrative Appeals Tribunal, but, if you don't mind, I might just test that with my colleague.

Mr Purvis-Smith: Ms Thompson is correct. It's an internal review and then the AAT. Senator Hanson-Young, the way you have posed the question isn't exactly the way that the process goes. They report their emissions, and we publish those emissions unless we've received a section 25 application to withhold that information. So it's not about Amazon publishing their information; we do that.

Senator HANSON-YOUNG: Yes, sorry. I understood that was the process. I apologise if that was confusing. Yes, I understand. They're asking for the data not to be published?

Mr Purvis-Smith: That's correct.

Senator HANSON-YOUNG: Do we know—and, Mr Heferen, I don't know whether this is something you could answer—as to whether there have been any representations from Amazon to the department about making sure that their data is kept secret? Sorry, Mr Heferen. I'm asking whether you're aware of any representations from Amazon to the department or the minister's office that they are able to keep their data secret?

Mr Heferen: I'm not aware of any, and the department's not aware—

Senator HANSON-YOUNG: Just for clarity's sake, could you take that on notice as to whether there's been any type of representation from Amazon directly.

Mr Heferen: We will take that on notice.

Senator HANSON-YOUNG: Thank you. Ms Thompson, when are you expecting a decision to be made?

Ms Thompson: Very soon.

Senator HANSON-YOUNG: If Amazon requests, as they have, for their data to be kept secret, and let's just say Ms Thompson's colleagues say: 'Okay, you've got a good enough excuse, tick,' is there any opportunity to have that decision reviewed? In the reverse—you took the question as if whether Amazon had an opportunity to have the decision reviewed—could, in the public interest, that decision be reviewed?

Mr Purvis-Smith: In theory, yes, but that goes to the jurisdiction of the Administrative Appeals Tribunal, or there may be something that is able to be taken through the courts, but it's a theoretical question. Somebody would need to bring a case who has standing, and whether they have standing or not is something I can't say at this stage.
Senator HANSON-YOUNG: Of course the Senate can ask for documentation to be tabled, and there's an FOI process. Surely there would be an opportunity for people to FOI that data if we know that the Clean Energy Regulator actually has it.

Ms Thompson: Yes, you're exactly right, there's FOI legislation that the Clean Energy Regulator takes very seriously.

Senator HANSON-YOUNG: I look forward to seeing what the decision is very soon, Ms Thompson. Thank you.

CHAIR: Thank you very much. There being no further questions, Mr Parker, for you and your team, thank you for being here. Goodnight.

Clean Energy Finance Corporation

[22:10]

CHAIR: Good evening, Mr Learmonth. Do you wish to make an opening statement?

Mr Learmonth: I do, Chair, if that's okay by you.

CHAIR: You have the floor.

Mr Learmonth: I thank the committee for allowing me to make a brief opening statement. In June this year the CEFC issued its figures for financial year 19. In the 12 months to 30 June, we made commitments of almost $1.5 billion, including almost $1 billion in renewable energy and almost $500 million in energy efficiency projects, and deployed capital of $1.3 billion of our finance. Since inception, the CEFC has deployed more than $5 billion into investments and projects around Australia. Our success in drawing private investment into clean energy can be measured by the rate by which we leverage additional private capital into the sector. In 2018-19, every CEFC dollar invested was matched by more than $3 in private finance, up from $1.80 in the prior year.

We recognise that there are complex grid storage, transmission and distributed energy challenges ahead as Australia continues the clean energy transition. Increasingly, we are targeting complementary projects and technologies to improve the security and reliability of our electricity system, including large-scale batteries, pumped hydro and potential grid related infrastructure. Storage projects rely on a range of small and emerging markets or predictions on price arbitrage opportunities, so these are not easy revenue models, and one of our challenges is to make them more investable. New technologies and emerging sectors also take time to develop their full potential. As the CEFC evolves to meet new challenges, we consider where our resources are best placed to make the most of these possibilities. We are investigating areas where investable opportunities are still emerging and where such opportunities can sometimes be commercially challenging. These opportunities include hydrogen and biofuels, and our work is done whilst collaborating with key market participants, including the market operator, AEMO; ARENA; governments; and private investors.

The CEFC was created as a specialist investor to catalyse change. We invest, stay ahead of the market, put our capital to work in new areas and build investor confidence to accelerate solutions to difficult problems. We were recently described by the Prime Minister, Scott Morrison, as the world's most successful green bank. We value this reputation preciously and we are determined to uphold such high standards in the future. Thank you.
Senator URQUHART: What is the current capital available to the CEFC for new investments?

Mr Learmonth: The CEFC's available capital—it's probably best to put it this way: we've currently got, as you know, $10 billion in total, effectively, at our disposal to invest in the clean energy sector. We have $6.2 billion of funds effectively committed today, with $4.5 billion deployed. Whilst that might suggest that therefore there is $3.8 billion of uncommitted funds, it's a very dynamic portfolio. We're receiving back capital all the time, to the tune, I think, over the course of the last financial year, of half a billion dollars or so. We are starting to recycle our capital. That's a bit of a picture of what might be left.

Senator URQUHART: What's the total asset base?

Mr Learmonth: When you say the total asset base—our assets are effectively a reflection of the investments that we've made. As at 30 June last year, year end 2019, we had an asset base of $4.891 billion.

Senator URQUHART: Is the CEFC considering increasing its available capital by selling any of those assets?

Mr Learmonth: As mentioned, we are constantly reviewing our portfolio and the assets that we have. We are looking at recycling our capital from time to time. We have assets that are very marketable in secondary markets. Yes, we are considering the recycling of assets at all times.

Senator URQUHART: How developed are those plans?

Mr Learmonth: In fact, we have implemented some of those plans already. We have probably recycled—I will refer to my CFO—something like $150 million.

Mr Powell: That's approximately correct in terms of the numbers that we have actively recycled. In total, though, since incorporation, $718 million has come back to us either through the active involvement of the CEFC or just through their natural term.

Senator URQUHART: There have been concerns raised that the government may wish to sell the CEFC as an entity. There are media reports that you've no doubt seen. Has there been any work done on this proposal?

Mr Learmonth: We're not aware of any work nor any plans for the government to sell the CEFC.

Senator URQUHART: Mr Heferen, has the department done any work or have any plans?

Mr Heferen: No, this is the first I have heard anything of that nature.

Senator URQUHART: There are media reports. You don't read the paper?

Mr Heferen: I do read the papers. I read some. Front pages where they have all sorts of things blacked out. No, I haven't read any media report on that.

Mr Learmonth: On that, Senator: the media report I think you're referring to was a Fairfax Media report by Eryk Bagshaw, who referred to a quote of mine where I said that it was entirely up to the government. I quote:

It is completely up to the government whether they want to sell us or not, but it's probably well documented that the government sees us as a critical lever in helping with this transition …
I think that through the subediting process there was a headline that suggested people were thinking about that. I would describe that as certainly not something that came out of that interview whatsoever.

Senator URQUHART: Okay. That's the article I was referring to.

Mr Learmonth: I know precisely what you were referring to.

Senator URQUHART: If the CEFC were to be sold as an entity, would that require a change to the CEFC Act?

Mr Learmonth: It's not something I could comment on. That's entirely up to government.

Senator URQUHART: Mr Heferen, if the government were to sell the CEFC as an entity, would that require a change to the CEFC Act?

Mr Heferen: I have no idea. That's not an issue that I know anyone has looked at. I think Mr Learmonth has outlined how that came about by someone's subediting.

Senator URQUHART: The question is: if that were to happen, would that require a change to the act?

Mr Heferen: I don't know.

Senator URQUHART: Can you take that on notice?

Mr Heferen: We can take that on notice.

Senator URQUHART: Mr Learmonth, if there were a sale and a change to the act, would that have a positive or detrimental effect on meeting the objectives of the CEFC to fill investment gaps in the new clean energy and technology sectors?

Mr Learmonth: That's such a speculative proposition that I really couldn't comment on it.

Senator URQUHART: Are you aware of any other matters that concern the CEFC's status as an independent statutory body?

Mr Learmonth: I have nothing that I have concern about as to our capacity as an independent statutory corporation.

Senator URQUHART: That's all I have. Thank you.

CHAIR: Mr Learmonth, you have done well. That concludes the committee's examination of the Environment and Energy portfolio. Senators are reminded that written questions on notice should be provided to the secretariat by the close of business on Friday 1 November 2019. I thank the minister and officers for their attendance. I also thank the secretariat staff, broadcasting and Hansard officers. The committee will reconvene tomorrow morning and commence its examination of the Communications and the Arts portfolio.

Committee adjourned at 22:19