



COMMONWEALTH OF AUSTRALIA

Official Committee Hansard

SENATE

ENVIRONMENT AND COMMUNICATIONS LEGISLATION
COMMITTEE

Estimates

Public

TUESDAY, 23 MAY 2023

CANBERRA

BY AUTHORITY OF THE SENATE

ENVIRONMENT AND COMMUNICATIONS LEGISLATION COMMITTEE

Tuesday, 23 May 2023

Members in attendance: Senators Allman-Payne, Cadell, Cox, Davey, Duniam, Grogan, Hanson-Young, Hughes, McAllister, McCarthy, McKim, Payman, David Pocock, Rennick, Rice, Roberts, Thorpe, Van, Waters and Wish-Wilson

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

Senator McAllister, Assistant Minister for Climate Change and Energy

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

Mr David Fredericks PSM, Secretary

Ms Jo Evans PSM, Deputy Secretary

Mr Simon Duggan, Deputy Secretary

Ms Cassandra Kennedy, Acting Deputy Secretary

Mr Dean Knudson, Deputy Secretary

Mr Sean Sullivan, Deputy Secretary

Ms Lyn O'Connell PSM, Deputy Secretary

Ms Luise McCulloch, Deputy Secretary

Corporate**Finance Division**

Mr Robert Hanlon, Chief Finance Officer

Ms Michelle Crowther, Branch Head, Financial Management Branch

IT Services

Mr Timothy Spackman, Chief Information Officer

Legal (Chief Counsel)

Ms Kate Lalor, Chief Counsel

Mr Graeme Grosse, Branch Head, Environment Compliance Branch

Operations Division

Ms Linda Ward, Chief People Officer

Mr Nathan Hannigan, Branch Head, People

Portfolio Strategy Division

Mr Andrew McNee, Division Head

Ms Michelle Croker, Division Head

Mr Adam McKissack, Branch Head, Policy and Portfolio Strategy Branch

Mr Chris Johnston, Branch Head, International Strategy and Engagement Branch

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

Ms Juanita Pettit, Branch Head, Data and Analysis Branch

Ms Jeanette Corbitt, Acting Branch Head, First Nations Branch

Outcome 1**Adaptation and New Industries Division**

Mr Shane Gaddes, Division Head

Mr Paul Murphy, Branch Head, Offshore Renewables Branch

Mr Chris Johnston, Branch Head, Climate Risks and Impacts Branch

Ms Nicole Mitchell, Branch Head, Climate Policy Branch

Ms Catherine Zerger, Branch Head, Hydrogen Branch

Ms Kathryn Smith, Branch Head, National Adaptation Policy Office

Emissions Reduction Division

Ms Kath Rowley, Division Head

Ms Melanie Ford, Branch Head, National Inventory Systems and International Reporting Branch

Ms Alannah Pentony, Branch Head, Land and Climate Active Branch

Mr Matthew Ryan, Branch Head, Transport and Regions Branch

Electricity Division

Ms Kirsty Gowans, Division Head

Mr Geoff Whelan, Branch Head, Electricity Markets Branch

Ms Melissa Pang, Branch Head, Market Reform Branch

Mr James White, Branch Head, Renewables and Distributed Energy Branch

Mr Salim Mazouz, Branch Head, Firming Mechanisms Taskforce

Mr Paul Johnson, Principal Adviser, Rewiring the Nation Office

Energy Division

Ms Clare McLaughlin, Division Head

Mr Martin Squire, Branch Head, Energy Security and International Branch

Ms Penelope Sirault, Branch Head, Residential Energy Efficiency Branch

Dr Peta Derham, Branch Head, Energy Performance Strategy

Ms Nicole Thomas, Branch Head, Energy Governance

Gas and Liquid Fuels Division

Mr Chris Videroni, Acting Division Head

Ms Miranda Lello, Branch Head, Liquid Fuels Branch

Mr Stuart Richardson, Branch Head, Gas Markets Branch

Mr Andrew Pankowski, Acting Branch Head, Gas Security Branch

International Climate and Net Zero Pathways

Ms Kushla Munro, Division Head

Dr Sally Box, Branch Head, Climate Negotiations and Engagement Branch

Mr David Higgins, Branch Head, International Net Zero Branch

Ms Gaia Puleston, Branch Head, Net Zero Innovation and Partnerships Branch

Outcome 2

Biodiversity Conservation Division

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

Mr Steve Costello, Branch Head, Program Delivery Branch

Dr Alison McMorrow, Branch Head, Biodiversity Policy and Water Science Branch

Dr Fiona Fraser, Threatened Species Commissioner, Office of the Threatened Species Commissioner

Mr Glenn Block, Branch Head, Strategy and Programs Branch

Commonwealth Environmental Water Office

Dr Simon Banks, Division Head

Ms Hilary Johnson, Branch Head, Engagement, Monitoring and Southern Basin

Ms Liz Rodway, Acting Branch Head, Policy, Aquatic Ecosystems and Northern Basin

Biodiversity Markets, Economics and Environmental Sciences Division

Mr Jeremy Thomas, Acting Branch Head, Biodiversity Markets Branch

Ms Sonia Fedorow-Spry, Acting Branch Head, Environmental Science and Nature Based Solutions Branch

Ms Lisa Bambic, Director, Environmental Science and Nature-Based Solutions Branch

Environment Approvals Division

Mr Bruce Edwards, Division Head

Ms Kate Gowland, Branch Head, Environment Assessments NSW and ACT

Ms Kylie Calhoun, Branch Head, Environment Assessments WEST

Mr Brendan Linton-Smith, Acting Branch Head, Environment Assessments VIC and TAS and Post Approvals

Mr Declan O'Connor-Cox, Branch Head, Environment Assessments QLD

Ms Tharani Vithanage, Branch Head, Governance and Reform Branch

Environment Protection Division

Ms Kate Lynch, Division Head

Ms Chloë Bird, Branch Head, Waste Regulation and Stewardship Branch

Ms Rachel Burgess, Branch Head, Waste Policy and Planning

First Nations, Heritage, Wildlife and Planning Division

Dr Melissa McEwen, Division Head

Ms Kat Miller, Acting Branch Head, First Nations Heritage Office

Heritage, Reef and Ocean Division

Ms Michelle Dumazel, Division Head, Heritage

Ms Katrina Maguire, Division Head

Ms Suzi Heaton, Acting Branch Head, World and National Heritage Branch

Ms Belinda Jago, Acting Branch Head, Oceans and Wildlife Branch

Mr John Foster, Branch Head, Great Barrier Reef

Taskforce for Environmental Legislative Reform and establishment of an EPA

Mr James Tregurtha, Head of Taskforce

Environmental Policy Integration

Mr Greg Manning, Division Head, Nature Positive Integration

Outcome 3

Australian Antarctic Division

Ms Emma Campbell, Division Head

Professor Nicole Webster, Chief Scientist

Agencies and Statutory Authorities

Australian Energy Infrastructure Commissioner

Mr Andrew Dyer, Commissioner

Australian Energy Regulator

Ms Clare Savage, Chair

Ms Anthea Harris, Chief Executive Officer

Ms Stephanie Jolly, Executive General Manager, Consumers, Policy and Markets

Australian Institute of Marine Science

Dr Paul Hardisty, Chief Executive Officer,

Mr Basil Ahyick, Chief Finance Officer

Australian Renewable Energy Agency

Mr Darren Miller, Chief Executive Officer

Mr Chris Faris, Chief Operating Officer

Mr Ian Kay, Chief Financial Officer

Bureau of Meteorology

Dr Andrew Johnson, Chief Executive Officer and Director of Meteorology

Dr Peter Stone, Group Executive, Business Solutions

Ms Paula Goodwin, Chief Operating Officer, Group Executive Enterprise Services

Ms Joanna Stone, Chief Financial Officer

Climate Change Authority

Mr Brad Archer, Chief Executive Officer

Ms Eliza Murray, General Manager

Dr Matt Searson, Acting General Manager
Ms Samantha MacCready, Acting General Manager

Clean Energy Finance Corporation

Mr Ian Learmonth, Chief Executive Officer
Mr Andrew Powell, Chief Finance Officer
Mr Simon Every, Head of Government and Stakeholder Relations

Clean Energy Regulator

Mr David Parker AM, Chair
Mr Mark Williamson, Executive General Manager
Ms Karen Najjar, Chief Operations Officer
Ms Bronwen Shelley, General Counsel
Ms Jane Wardlaw, General Manager
Ms Michelle Crosbie, General Manager

Director of National Parks

Ms Jody Swirepik PSM, Director of National Parks
Mr Jason Mundy, Division Head
Mr Ranga Parimala, Branch Head

Great Barrier Reef Marine Park Authority

Mr Josh Thomas, Chief Executive Officer
Mr Richard Quincey, General Manager, Reef Protection Branch
Ms Jameelie Fletchett, Chief Operating Officer
Mr Ian Walker, General Manager, Major Projects
Ms Margaret Johnson, General Manager, Strategic Policy and Partnerships
Dr Roger Beeden, Acting Chief Scientist

Snowy Hydro Limited

Mr Dennis Barnes, Managing Director and Chief Executive Officer
Mr Roger Whitby, Chief Operating Officer

Threatened Species Scientific Committee

Emeritus Professor Helene Marsh, Chair [by video link]

North Queensland Water Infrastructure Authority

Mr Matthew Squire, Acting Chief Executive Officer
Dr Peter Wallbrink, Chief Scientist

Committee met at 9:02

CHAIR (Senator Grogan): I declare open this hearing of the Environment and Communications Legislation Committee into the 2023-24 budget estimates. I begin by acknowledging the traditional owners of the land on which we meet, and pay our respects to elders past, present and emerging. The committee has fixed Friday 7 July as the date for the return of answers to questions taken on notice. The committee's proceedings today will begin with the Australian Energy Infrastructure Commissioner. Under standing order 26, the committee must take all evidence in public session. This includes answers to questions on notice. I remind all witnesses that in giving evidence to the committee they are protected by parliamentary privilege. It is unlawful for anyone to threaten or disadvantage a witness on account of evidence given to a committee, and such action may be treated by the Senate as a contempt. It is also a contempt to give false or misleading evidence.

The Senate has endorsed the following test of relevance for questions at estimates hearing. Any questions going to the operation or financial position of the departments and agencies which are seeking funds in estimates are relevant questions for the purposes of estimates hearings. I remind officers that the Senate has resolved that there are no areas in connection with the expenditure of public funds where any person has a discretion to withhold details or explanations from the parliament or its committees unless the parliament has expressly provided otherwise.

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

Witnesses are reminded of the Senate order specifying the processes by which a claim of public interest immunity should be raised, and I incorporate the public immunity statement into *Hansard*.

The extract read as follows—

Public interest immunity claims

That the Senate—

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

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

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

(1) If:

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

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

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

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

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

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

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

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

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

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

(13 May 2009 J.1941)

(Extract, Senate Standing Orders)

CHAIR: I remind all senators that, as we continue our work implementing the *Set the standard* report, as chair I will ensure that proceedings are conducted in an orderly, respectful and courteous way.

Australian Energy Infrastructure Commissioner

[09:04]

CHAIR: I now welcome Senator the Hon. Jenny McAllister, Assistant Minister for Climate Change and Energy, representing the Minister for Climate Change and Energy and the Minister for the Environment and Water. Minister, do you have an opening statement?

Senator McAllister: No, thank you.

CHAIR: I now welcome the Australian Energy Infrastructure Commissioner, Mr Andrew Dyer. You've provided us with your opening statement. I would like to table that at this point. It was circulated yesterday to committee members. Have you got it? There are copies coming around now. Mr Dyer, is there anything you wish to say before we kick off?

Mr Dyer: No. I'd just like to thank the committee for being flexible today on the timing. Given the 45-minute slot, I figured you wanted to ask me some questions, and so I thought it would be better to table the report as an opening statement, and we can delve into the questions.

CHAIR: Senator Van.

Senator VAN: Mr Dyer, thank you very much for appearing. I know how busy you are. Having you here in person is greatly appreciated. I have questions about some of the transmission projects that you're currently involved with. Can you give the committee a very brief overview of where you're hitting hurdles and which projects are moving reasonably smoothly and which ones are hitting speed bumps?

Mr Dyer: Would it be helpful to the committee if I sketched out VNI West and WRL as to what they actually are proposed to be? I realise they're just acronyms that float around the place.

Senator VAN: I'm relatively aware and so I don't need it, but as long as the chair gives me the bandwidth to ask my questions?

CHAIR: Of course.

Senator VAN: Thank you.

Mr Dyer: Just briefly and for context, VNI West is really a combination of three projects that need to come together to provide the second interconnect between Victoria and New South Wales. The first leg of the journey starts at Dinawan in New South Wales, which is located along the Project EnergyConnect powerline that's being built by Transgrid from Robertstown, South Australia, across to Wagga. Its journey was to go down through Kerang in Victoria and then on to north of Ballarat via Bendigo. Those of you who have been following this would note that AEMO is now proposing to relocate that line to go down to Bulgana, which is near Stawell in Victoria. This is a 500-kilovolt line. It's a big line with big capacity, and it would allow many projects that generate power to connect to the grid to get their power away. The Western Renewables Link was to be a 500-kilovolt line from Ballarat, or north of Ballarat, down to Sydenham, which is on the northwest outskirts of Melbourne, and it was then to be 220 kilovolts up to Bulgana. With the change of VNI West to go to Bulgana direct from Kerang, rather than to North Ballarat, that requires an upgrading of the WRL line from 220 to 500 kilovolts between Bulgana and north of Ballarat, and then continuing on that journey into Melbourne. So they're the three pieces. You've got VNI West in New South Wales, VNI West in Victoria, and WRL, and they'll need to happen simultaneously to move the electrons from the New South Wales grid to the Melbourne grid.

Senator VAN: Will it be a one-way flow, in your opinion, or two-way flow?

Mr Dyer: It just depends on what's generating at what point in time and where the demand is. It would certainly be designed to be two-way, and the market and the weather and demand will then drive the flow.

Senator VAN: Given we heard from Mr Duggan yesterday that, according to the ESU—and I can translate that if anyone needs me to—there aren't going to be any shortfalls, which is not quite my reading of the ESU or the update, given these projects will have no impact on the current projections in the ESU, what's your view of their utility in the system?

Mr Dyer: Transmission, in my view, has two very important purposes. One is to unlock capacity, and that's where you have capacity in the states on the network. It might be connected to the grid but not able to get its power away when it needs to because of other constraints of capacity on the existing lines. So unlocking capacity is a very important thing for our future. A big part of the Western Renewables Link, WRL, is unlocking capacity of generators that are hooked on but can't always get their power away. The second most important point is unlocking geography, which is to open up new parts of Australia that do not currently have or are serviced by no or minimal powerlines to then create opportunities for renewable generation and storage in those areas.

Senator VAN: That raises two very important points, which were canvassed broadly across various witnesses yesterday. You're right about what it can do; it's a matter of whether it should do it or not. Given that effectively those projects are to rescue financially distressed assets up in the rhombus of regret, as it's known, and to try to find a home for those electrons in a place where there's a load, and given that there are uses for those electrons where they sit, that is, put the load where the generation is, would you agree with me that there are ways to avoid

having to go through this expense or the social licence to operate issues that you deal with day in/day out, or could there be a better way than running transmission across the landscape?

Mr Dyer: I actually deal with the problems that this generates, rather than the policy that drives it. I was out last week on the Marinus Link line, from Tasmania to the La Trobe Valley, inspecting the Victorian component of that project. We drove by Loy Yang Power Station. Years ago I was a consultant down there fixing up maintenance problems and all sorts of weird and wonderful things. It was just surreal to look at this huge hole that's now there which is the mine and the creaky conveyor belts that get the coal in real time to the power station, and realising that is something of yesterday. I think we have a big job ahead of us over the next two-three decades to replace that, and it's a lot of power to replace. Therefore, you need a diversity of geography to have access to the different wind and solar attributes, and you need a diversity of resource to balance the supply side.

Senator VAN: Or different technologies to solve for that same problem?

Mr Dyer: Yes. If you tried to design the telephone network of today 30 years ago, you probably wouldn't get it right.

Senator VAN: Yes.

Mr Dyer: But you had to do something.

Senator VAN: I'll come back to VNI West and VRL. But on the Marinus Link, obviously that's still a projected project. It's a work-in-progress. What's your view on where it's coming ashore and the stakeholder issues that you might face there? I'll declare that one of my first ever jobs was doing the stakeholder management for where Basslink was coming ashore. I'm fairly well aware of the history and the issues of bringing ashore such a link.

Mr Dyer: It's relevant experience. Basslink, as you would know, is an above-ground DC powerline that goes from the coast into La Trobe Valley. In the case of Marinus Link, they are going to build it underground. I'll say it's ambitious, because it's a lot of hills and the Strzelecki Ranges. Undergrounding tends to work best when you're on flat ground, when you trench it. You need a 36 metre wide easement to construct. If you're trying to do that on the side of a hill, it could be a bit perilous. But they've done a very good job of working with the landholders. There are plenty of things still to work out.

Senator VAN: Given that they're looking at these better ways of handling these issues, do you think—I know my learned friend next to me is probably going to ask this question so I shouldn't steal his thunder—is there any utility from a social licence to operate for undergrounding VNI and WRL? It would make your life easier, wouldn't it?

Mr Dyer: Undergrounding is the panacea to solve for over ground. It would be interesting to compare the two solutions particularly when you get through the hills. Undergrounding does tend to limit the need to consult with the landholders directly affected, but that may change the mix over time. We were briefed on the fact that many landholders have had four or five iterations of the route so far, and as soon as you point a different way off the property it affects the downstream landholder and the upstream landholder. A lot of work has to be done to get that right. It probably reduces the amount of work you need to do with the neighbour, because the neighbour, unless they're part of the route, is largely unaffected, save construction activities. Then you have the broader community that you need to work with very carefully because of the impacts, fears and the perceptions that need to be properly addressed.

Senator VAN: Can you now give us a quick view on stakeholder reactions to the new route and what sentiment is out there with this new change?

Mr Dyer: 'New change' being?

Senator VAN: The Bulgana route.

Mr Dyer: We're back to VNI West?

Senator VAN: Sorry. Treating it, as you said—

Mr Dyer: Interestingly, I got a call from a farmer last night in the Bulgana area. He is concerned that his neighbours might benefit from a wind farm that will be built as a result of the transmission line going through that area, which is a good result from a generation point of view, but it will open up a new tranche of people who are not complaining about the powerline per se but have concerns about the wind or solar farms that will be built because of the powerline and may oppose the powerline as a result. It's a complex beast to work through, but that's the fun of my job.

Senator VAN: How long have you been working on these projects so far?

Mr Dyer: I was extended to transmission in March 2021—so roughly two and a bit years.

Senator VAN: Finally, in your view, despite the Victorian government's duck-shoving this in and around you and AER, what's the probable time frame before all of these issues are resolved and construction might even start?

Mr Dyer: For VNI West, it's currently looking to energise or commence energising in 2029, complete that process in 2030, and then hand over to an O&M asset in 2031. That assumes early works and what are called the spring surveys, where you get out and look for all sorts of things in the paddocks, commencing in 2024. So there is an opportunity to bring it forward with some funding for early works to accelerate that timetable. But I must emphasise that it's critical you have WRL and VNI West New South Wales in sync and in tandem with that if you're going to move the power from Dinawan to Sydenham.

Senator VAN: If you want to solve the problems of rhombus of regret in that particular pathway?

Mr Dyer: Yes.

CHAIR: Senator Payman.

Senator PAYMAN: Just going back to VNI West, how is AEMO working to engage communities in VNI West?

Mr Dyer: It's commenced that process. I think it's done a lot of good work to engage the councils and they're an important stakeholder; they're not the only stakeholder, but they have done good work there and have regular forums to keep people up to date. I think the tricky bit at the moment is that, when the powerline was going to run down through Bendigo, which would cause all sorts of angst when people figured that out, it wasn't a very public item at that point in time. When they announced they were looking to go from Kerang to Bulgana that lifted the lid on Pandora's box, and people got very interested for all the reasons I mentioned just prior in terms of wind farms being built. It now requires some careful work, but it has generated a long list of questions and concerns, which the VFF, the Victorian Farmers' Federation, and us and AEMO have collated. The reason I'm here at 9 o'clock this morning is to co-host the meeting with the VFF president at 2 o'clock to lay out the plan to address these concerns. They're all addressable. Some are in the 'it depends' category and some are in the 'we need more information' category, but you have to work through these things.

Senator PAYMAN: What will the Victorian government pay for landholders whose properties host transmission lines?

Mr Dyer: Ultimately the consumer pays the bill just to advertise that. People like the Victorian government, Transgrid, AEMO and AusNet are intermediaries in that process. The compensation work is a complex thing to work out. It's based on the payment for the easement on the land that is required for the transmission line, various compensatory mechanisms for agricultural loss of production, construction impacts, other impairments that might occur. There is quite a process to work through. That hadn't been perhaps properly baked in the oven before they went out to have those discussions. That's still a bit of a work in progress. Transgrid is probably the most advanced in that model, and AEMO is working on that for VNI West, and it's nearly launchable at AusNet. On top of that, which I think is where your question is coming from, is the new strategic benefit payment scheme, which was launched in New South Wales at the rate of \$200,000 per kilometre over a 20-year period, paid at \$10,000 in the first year, indexed thereafter. The Victorian scheme that was announced more recently is \$8,000 per kilometre per year for 25 years, indexed annually, which if you do the math works out to be about the same thing. It was just packaged differently. But that is in addition to the normal compensation that would be paid to a landholder who grants an easement.

Senator PAYMAN: Can you describe the work you're doing on landholder payment guides?

Mr Dyer: We are the most popular editor in the country. People send me all sorts of stuff to review. We've reviewed the Transgrid documents, the AusNet documents, and the AEMO documents. They don't always take my advice, but hopefully some of it has sunk in.

Senator PAYMAN: Has the number of complaints gone up or down in the last 12 months?

Mr Dyer: Down. We're tracking at about 40 or so cases per quarter. There are a few things in those numbers. There's wind and solar and pumped storage. About 10 of those, or one quarter, relate to transmission.

Senator PAYMAN: Why do you think there's been a downward trend?

Mr Dyer: Just in the volumes? I think that you get to a point where people want to move on and they want certainty, and there are now some issues as to how we get that certainty in these projects. We've got sore situations where there are alternative routes being considered, and that creates friction between route A versus route B. So there's some work to do there, but they're nicer problems to have than people saying flat out, 'We don't want these things,' and a few expletives added into the mix.

CHAIR: Senator Cadell.

Senator CADELL: You mentioned the value in New South Wales and Victoria. Do you see Queensland now talking about \$300,000 in compensation as a thing? And also neighbouring properties?

Mr Dyer: Yes.

Senator CADELL: Do you have any visibility of that or is that just a talking point? Have you had engagement with that process at the moment?

Mr Dyer: No. We knew it was in the works and have been in touch with Powerlink on various things. That was a pleasing announcement that follows New South Wales, Victoria, Queensland, and perhaps Tasmania might consider that approach. As you point out, the inclusion of neighbours, I think, is very important, and we are doing work with the New South Wales planning and Victorian planning schemes to look at how we get that into the planning guidelines, similar to what is in place for wind farms. But neighbours are impacted with transmission lines as they are with wind turbines and solar farms. There needs to be some mechanism. Powerlink in Queensland has gone down the compensatory path within the compensation program, which I think is fine as long as it's done well. We'll look for either that solution or a planning solution in the other states.

Senator CADELL: Are you aware of what the economic argument was on Marinus Link versus something like HumeLink, where the undergrounding took place? I've had meetings with a couple of transmission lines. The ground you're going through on Marinus Link is more challenging than some of the stuff on HumeLink, where it's an easy-to-moderate grade. What was the argument that the hill based stuff was underground versus places where it would be relatively easy and they don't do it?

Mr Dyer: The unique thing about the Marinus Link is DC coming out of Tasmania. It was just easier and less invasive to the community and the environment to keep going underground. It comes with some challenges, and lots of drilling and going down slopes like that.

Senator CADELL: It would be a difficult grade, wouldn't it? That wouldn't be easy or moderate? That would be a difficult grade of undergrounding?

Mr Dyer: Yes. I was in the back seat of the bus. It was quite steep. I held on to my seat.

Senator CADELL: Ended up in the front seat!

Mr Dyer: Nearly. HumeLink starts out as an AC proposition. Every time you go underground, if you're going to DC, you need to build what's called a converter box. They're the size of a large Bunnings store and they have more kit than you can imagine. They cost a boot-load of money. You can't buy them at Bunnings. There's a lot of work to make undergrounding work if you're doing it in sections.

Senator CADELL: Yes. I think you include in your statement that it's time to stop studying social licence and start implementing social licence. I think that's a key thing. With all of the processes you go through, is it really boiling down in a lot of places to how much can I get for my social licence? Are we looking at just buying it off? Is that what these companies are doing?

Mr Dyer: It's just more fundamental things, which I tried to allude to in my opening statement. It's about doing things properly. I was at a site last week where the powerlines will go over the pony club, and that means the pony club facilities need to be relocated. This is a normal thing that happens when you're doing overhead powerlines. But when I still looked around the room to see who's accountable for making this happen, people are sitting on their hands. That gives the community uncertainty about the pony club and that understandably creates angst. So to me social licence is about nailing those things properly, because the community are actually saying: 'We know you're going to proceed. We need to solve these problems.' They're fair problems to be solved. No-one is disputing that, but who does the work and how it all happens needs to be sorted.

Senator CADELL: A lot of the complaints we're getting in our office are that no-one wants an electricity line through their home; it's not that great. Hillsborough Junior Cricket Club is where I played. It's interesting to hear about a pony club. We had one across our ground. It didn't do too much to me! But no-one wants this. It always has to go somewhere. It's critical infrastructure. You talked about planning laws in New South Wales and looking at neighbours. How far are we away from these things really being taken seriously? Some of these really beautiful places, the orchards and down around the HumeLink area in the south, are of concern to me. I think some of the arguments they put up are not necessarily the greatest; some are right and some are wrong and you have to deal with all of that. What are we doing to get a nice standard planning set that people can abide by and agree with?

Mr Dyer: There are a few things there. You've hit a big nail on the head. You want to get the route right. If you avoid going through highly populated areas that have pony clubs, mosques, Christian colleges and airports,

you save yourself a lot of headache. We have been having discussions with proponents about the route and opening up the thinking on alternatives, because that would save us a lot of time.

But, if you do have to build a line, you need to be backed by good legislation that's fair and reasonable and has the right protocols to protect the landholder, and you need the right planning scheme that is set for the modern era. Remember that planning schemes don't exist, because in the good old days, in Victoria, for example, the SECV was the government owned, end-to-end electricity provider, so they had their own laws, rules and procedures, and that was it. There are huge gaps that we're still filling.

Senator CADELL: I think you mentioned a 36-metre easement for underground; is that correct?

Mr Dyer: Construction easement. This is for DC?

Senator CADELL: Yes.

Mr Dyer: That goes back to a 25-metre easement for the long term. There are certain things you can't do in that easement. You couldn't get out a deep ripper and put in a vineyard.

Senator CADELL: What's the easement for overhead powerlines?

Mr Dyer: It depends on the scale, but a 500 kilovolt, which is the product being trotted out these days, is around 70 metres.

Senator CADELL: Between double and triple the size?

Mr Dyer: Yes. But the flip side is that you can usually continue, if not always continue, your farming practice.

Senator CADELL: I brought this up last time. Has there been any electricity infrastructure, wind farms or solar panels where those businesses come into difficulty, no longer operate or go broke?

Mr Dyer: Yes, decommissioning.

Senator CADELL: Has there been any work on making that the responsibility of government or someone who may have money, rather than bankrupt companies and farmers?

Mr Dyer: There are a couple of things. We put out a guideline, which I think I sent to the committee to have a look through, which highlights decommissioning as something that, as a landholder, you want to make sure is well covered. The other thing to look at is the model we have for offshore wind. In that context, the Commonwealth is the landlord, the legislator, the regulator and the enforcement agency, so we've got lots of tools in the cupboard. But one of those tools is to require a licensed operator to obtain a feasibility licence, an operating licence. A condition of the licence is that you must provide the security bond for the decommissioning, which is in place in the mining industry. It's just that, for whatever reason, it was an oversight for wind and solar farms.

Senator CADELL: I think I'm misunderstanding you. Are you saying that, where the Commonwealth is going to do it, we're going to have a commissioning bond, but it doesn't exist for private land holders?

Mr Dyer: That's right, because, with onshore wind and solar, the landlord is the farmer.

Senator CADELL: So there'll be no commissioning bond for new wind farms?

Mr Dyer: No, we're suggesting that if you're a farmer or landholder you need to sign a contract that has that properly provisioned for. Industry is coming around to that. If they could avoid paying a bond, they would, and they did, because the landholder was ignorant to the risk.

Senator CADELL: Thank you.

Mr Dyer: So we've highlighted that.

CHAIR: Senator Roberts.

Senator ROBERTS: Thank you for being here this morning. I understand one of my staff called you yesterday?

Mr Dyer: Yes.

Senator ROBERTS: He had a very pleasant talk. Thank you very much for opening the door. Is it accurate to say that you are the national commissioner for complaints about wind and solar projects?

Mr Dyer: I'd like to characterise it as the ombudsman of first and last resort. If you have a concern about a powerline, a wind farm or whatever that might be in our jurisdiction and you don't know how to get it solved, you can come to us and we'll figure out the right process to get the concern addressed.

Senator ROBERTS: When you say 'you', that was used in a colloquial sense. This is open to any citizen in Australia?

Mr Dyer: Yes. We're a national service and we get complaints from around the country.

Senator ROBERTS: That's wonderful to hear. So anyone who has a complaint about wind projects, solar projects, batteries or transmission can make a complaint to you?

Mr Dyer: Yes. If you go to our website, which is aeic.gov.au, the second or third tab along says 'making a complaint'. There's the process, the form and the policy. You can call us, you can mail us, you can email us or you can arrange to meet with us.

Senator ROBERTS: How many are in your office? I understand you have a small office.

Mr Dyer: We're a very efficient team.

Senator ROBERTS: I wasn't being critical.

Mr Dyer: We have, I think, five people.

Senator ROBERTS: And you're meant to take care of people's complaints about solar and wind. And you work with the state government, with the federal government, with private entities?

Mr Dyer: Yes.

Senator ROBERTS: Thank you.

Mr Dyer: The respondent is usually the developer to a concern. But sometimes it's a planning process or an EPBC issue. It's not always the developer, but usually that's the case.

Senator ROBERTS: So it could get pretty complex?

Mr Dyer: Yes. We've had some of them going for a long time, but we get through them.

Senator ROBERTS: Can you perhaps talk a bit more about what you can do for someone who has a complaint that you can look at, because people are not aware. Talk to everyday Australians.

Mr Dyer: I don't have the budget for a front page ad in the *Sydney Morning Herald*. But people do find us. If you've got constituents who have concerns, we should talk about how they can come to us. The best thing to do is promote our website, and that has all of the details. Typically our process is that, if we get a complaint, we'll do some research on the project and the proponent, and what is going on. If we don't already know the proponent, and in many cases we do, we will go and get a briefing or open the door, and sometimes the complainant is known to the proponent. Often they're not known, and so we're able to build and bridge a relationship between the complainant and the proponent to work through whatever the concerns are. Many concerns are solved by just provision of factual information. It's often a misunderstanding or misperception that has caused them to come to us.

Senator ROBERTS: I certainly agree with that. I would like to ask whether you've received any complaints in relation to the proposed Eungella or Burdekin Pioneer pumped hydro project in the hinterland near Mackay and the proposed Borumba Dam pumped hydro and the transmission lines around Widgee, which is near Gympie in Queensland.

Mr Dyer: No.

Senator ROBERTS: Not any?

Mr Dyer: No.

Senator ROBERTS: There's a massive community movement in both cases.

Mr Dyer: Then feel free to connect them to us and we'll work through it.

Senator ROBERTS: Okay. It's shocking to me that, in both of those projects, it appears there has been an appalling level of community consultation. This is entirely from the Queensland government. In Eungella, for example, people who were going to have their houses compulsorily resumed and flooded for the new pumped hydro dam found out via media release. Then they found out that they couldn't get loans for their business, renovations or sell their house, because their land is now jeopardised. Transmission lines for the Borumba project near Gympie are currently proposed over prime agricultural land, which would be again compulsorily resumed despite the community pointing out that there are state-owned land corridors available nearby. Does this lack of consultation sound like it meets the needs for best practice that your office would recommend?

Mr Dyer: We find that most proponents need help in some way, shape or form. I did have a look last night at the Queensland hydro website, and it didn't jump out to me how you might make a complaint, for example. So, it's possible that we may need to help them get their complaint process in place. We've had to do that with all the TNSPs, and help them get that in place, and the policies put in place, make it transparent on the project website, and away they go.

Senator ROBERTS: Thank you. What does the best practice consultation look like?

Mr Dyer: It's a long topic, but it's about knowing who your stakeholders are and being fairly well advanced in your thinking about what you're trying to do. If I reflect on a call I had last night, it's don't go about it in secret. We often get developers that want to have one-on-one discussions with the landholder to sign them up for hosting the wind farm or the solar farm and say, 'This is very confidential. We can't let you talk to your neighbours.' Before the developers leave the front gate, the whole street knows what the deal is.

Senator ROBERTS: And they know that these guys are wanting to cover it up?

Mr Dyer: Yes.

Senator ROBERTS: Which doesn't build trust.

Mr Dyer: Yes.

Senator ROBERTS: To build trust, developers need to listen first and then talk once they understand people's needs?

Mr Dyer: Yes. It's, for want of a better word, not a crude word, it's a professional sales role that they're in. But it's got to be done with ethics and transparency and thinking like a landholder will think—how you go about matters.

Senator ROBERTS: I've been up to both projects, but already there are many constituents who are saying that this will never be built. It's just going to do enormous damage. It's just the Queensland government diverting attention in the media and in the community from serious problems like the Mackay Base Hospital. That straightaway has destroyed any trust in that community.

Mr Dyer: It sounds like they might need some help, so I'll approach the chair and we'll start the process.

Senator ROBERTS: We'll get your website and your name and we'll send it to—

Mr Dyer: I've got a card here for you. You can take that after the session.

Senator ROBERTS: I'm intrigued about bonds on solar and wind generators. In the coal industry, for every acre that a surface mine uncovers the coal company has to provide a bond to the government, and then it doesn't get that bond back until the land is fully reclaimed. Sometimes the reclaimed land is far more productive and far cleaner than the original scrub. What is the bond on solar and wind generators?

Mr Dyer: It's up to the commercial arrangement between the landholder and the proponent. It's no different from you owning the milk bar as a commercial landlord down the main street of town. If the tenant defaults and leaves the building, you're stuck with the bain-marie.

Senator ROBERTS: So, without a bond, at the end of life, solar and wind generators can just walk away from it? Where are the funds to ensure remediation?

Mr Dyer: Some landholders are quite savvy, and I have seen everything from bank guarantees to bonds being in place, but it's not across the board. That's not to say it's not happening and not being done, but it needs to be a standard practice.

Senator ROBERTS: There is a standard in the coalmining industry, but there's no standard in the solar and wind industry?

Mr Dyer: It's something I've advocated for a long time. It's in section 8 of my report in appendix A, that is, the need to have licensed developers accredited to have the skills to carry out the process, as we are doing in offshore wind, and also that the area being prospected has been sanctioned ahead of time.

Senator ROBERTS: I want to put on the record that I appreciate Mr Dyer's frank and complete comments and his openness. It's much appreciated. Thank you.

CHAIR: I think we would all agree.

Mr Dyer: Thank you.

Senator HUGHES: Mr Dyer, if I could just pick up on a couple of points that you made, you can maybe just clarify them for me. One of the comments you made was about loss of production when it came to agricultural land. One of the reasons for the compensation is around that, and the issues and objections from landholders. Has any analysis been done on how much land is going to be impacted and what the loss of production will be, and any impact that might then have on costs down the line?

Mr Dyer: Yes. That's not something that my shop would do, but I'll give you a couple of perspectives that might be helpful. There are about 43,000 kilometres of transmission line in the NEM as we sit here today. I think the ISP proposal of AEMO is an additional 10,000 kilometres out to 2050. So it's about a 22 per cent increase in

the grid, but it delivers more than a 100 per cent increase in the generation capacity that can be delivered and needs to be delivered. I think the point is that you don't look at the 10,000 kilometres just in isolation. The 10,000 kilometres would represent 70,000 hectares, if you measured out the land. Not all that will be farming land. It will be desert, national park and ocean, Bass Strait and what have you. It's probably more like half that. Relative to the agricultural production of Australia, it's a very small number.

Senator HUGHES: Do we know what type of farming land it is? Obviously some farming land produces niche products. You've got very arable, broadacre, and rocky with sheep.

Mr Dyer: I've seen everything—vineyards, horticulture, as you mentioned. It will be a whole mix. But usually you try to avoid horticultural type activities when you're planning a new powerline. If you go to the King Valley in Victoria and have a glass of wine at Chrismont Wines overlooking the valley you'll see powerlines running around the place. There's even a powerline right through the middle of the vineyard. And you go, 'How could this happen?' The answer is that the wires were there first. But if you try and do it now—

Senator HUGHES: It's like people moving into Kings Cross and complaining about the noise at night.

Mr Dyer: Exactly.

Senator HUGHES: The other point that you made—and you were talking about Victoria but I think more broadly—is that the consumer pays the bill. Is that in reference to when there's compensation having to be paid? I think you said there's the 200 or 300 kilometres in addition to what's normally paid?

Mr Dyer: Yes. Through the AER process, the RIT-T and the NEVA process, whichever particular hammer you wish to use, the cost eventually goes to the consumer or the customer of the power. Whilst the money might be upfront and by the state government or the proponent, it does find its way back to our credit card cost.

Senator HUGHES: So the \$100 billion that's been estimated for the cost of rewiring the nation will ultimately land back in consumers' bills?

Mr Dyer: Yes, it may not be all of it, but I would think a good proportion of that. It's charged out over many years as part of keeping the lights on.

Senator HUGHES: Has that been part of the consideration when these assets are being looked at or when these transmission lines and routes that are being taken, namely, the compensation that's having to be paid and the additional costs on top of that and what inflationary impact this might have? We know there's a gender lens that goes over every policy. What inflation lens goes over this? What productivity lens goes over this? How is this going to boost the Australian economy without impacting and putting inflationary pressures on the consumer?

Mr Dyer: This is more of a personal comment, but you have to believe that you need a good power and energy system to have an economy.

Senator HUGHES: So you guys are just going to pay more for a renewable power grid?

Mr Dyer: Yes. But the trick is to do it smarter and more efficiently. One of the things that is still problematic is that the RIT-T process, as it's called, which was really designed around augmentations and extensions to the current grid. It's to stop gold plating. I see Senator Van nodding his head. We need a better mousetrap for long-distance, large-scale transmission lines so we get the right outcome from day one and are not chasing our tail.

Senator McAllister: Senator Hughes, I think the reform processes associated with the problem that Mr Dyer is alluding to were canvassed in some of the evidence provided yesterday when the department.

Senator HUGHES: That's okay. I'm just talking about the asset and how that cost is going to come back to the consumer. That cost is going to come back to the consumer. I think it's important that every consumer understands that this cheap electricity they're being promised is going to come with ongoing payments around building this entire new distribution network. I know we're running short of time. I just wanted to ask you—and this might not be in your bailiwick. I live in Sydney.

Mr Dyer: Yes.

Senator HUGHES: I represent New South Wales. We have a number of seats around in particular metropolitan Sydney very close to the CBD that are very driven, one might say, by climate issues and were so driven that they elected teals. However, for two of those teal seats, because of the solar energy being provided off their solar rooftops, there is a requirement for a storage battery to go into the area. These seats voted heavily in favour of renewable energy, and we all have to move to these huge reductions of emissions to the 1.3 per cent that Australia produces globally, yet there is massive objection to a storage battery about the size of a container in Waverley, I believe, or Bondi, which is in the seat of Wentworth, and one in I think it's Cammeray, in the seat of North Sydney. Is that something your office deals with, complaints around storage batteries, or having to get the social licence from those in the city; it's not just rural and regional areas that are going to be impacted by big

transmission lines? If you want renewable power in the city you're going to have to have storage facilities/batteries in your local area?

Mr Dyer: I have a couple of comments. The answer to your question is, yes, for the big battery; we don't do the ones in the garage. That would be a big ask. The trick with batteries, in my view, is you need to get it close to the load.

Senator HUGHES: It needs to be close to the source.

Mr Dyer: When they first started in Australia they put them next to a wind farm, because it looked good with a wind farm and a battery. In my view, that is the wrong place to put it. You need to put it next to the load, but there are implications with doing that. We haven't had any complaints of that nature, but that is within jurisdiction.

Senator HUGHES: It's been quite widely reported in terms of complaints about those two batteries, that they can't go in their area. It would seem to be extreme NIMBYism and quite hypocritical; 'We all need renewable energy, but don't put the storage in my seat.'

Mr Dyer: Who's the proponent? Do you know?

Senator HUGHES: To be honest, I don't know. I won't say because I'd probably be wrong.

Mr Dyer: Let me know.

Senator HUGHES: Yes. Anyway, we'll find out and let you know.

CHAIR: Senator Waters.

Senator WATERS: Good morning, Commissioner. Thank you for joining us. I have one question, because a lot of the issues that I was interested in have already been raised while I had to be in another committee. I'm interested in your views on the fact that we obviously need to build a lot of transmission and generation infrastructure to as quickly as possible stay below 1.5 degrees of warming. What's your advice to the government and to the public at large about how this urgent task can be done in a way that respects community wishes, amenity and crucially biodiversity protection?

Mr Dyer: That's a very comprehensive question. My opening statement goes to that, to a fair degree, as does my annual report. A lot is about doing things properly, treating people with respect, building effective relationships, explaining facts and information and dispelling the myths and the fiction that gets out there. We did this with wind and, to some extent, with solar. Solar was not as complicated as wind. I've said that we don't want to keep studying social licence, we need to get on and do it. As an example of that, we've worked with TasNetworks, which is the TNSP in Tasmania, and in June of this year we're jointly delivering a training program for the frontline staff who have to work with landholders in exploring and securing a transmission route and project, because it's a very difficult role. You can imagine that when you first knock on the landholder's door and say that you want to build a powerline through their back paddock the .22 might come out, and they're not happy. You have to have a way to deal with that. I've seen a lot of folks struggle with that ability to deal with questions/objections. You've got to back up the frontline people with good supporting collateral, fact sheets, information that they can convey factually to the recipient, and build the base going forward.

We're doing a lot of work with the TNSPs, which I highlighted in our opening statement, around equipping them to be much better at their jobs and equipping landholders and community members to be more vigilant and know what questions they need to ask as well. So, to that end we put out an updated guideline in January this year to help landholders ask the right questions before they sign a document. There are some questionable agreements out there that were not balanced, in our view, and so we've given the community and the landholders a helping hand.

Senator WATERS: I'll take a look at that. I wasn't aware of that guideline. I have no doubt that will be really useful for a bunch of communities that I'm sure want the climate crisis addressed but also love biodiversity and might need to balance considerations of their own private interests with others.

Mr Dyer: I'll send it to you.

CHAIR: I commend the commissioner on the information you circulated for the committee yesterday, which was very informative. I'll make sure that you receive that.

Senator WATERS: Thank you.

CHAIR: Senator Rennick.

Senator RENNICK: Just to be clear, you say that agreements must be fair and reasonable to the landholders. Who is responsible for the clean-up of the renewable project at the end of its life? Is it the landowner or the renewable energy company?

Mr Dyer: Under law it will default to the landlord. It's up to the landlord to make sure that they have—and this is the point I was making with Senator Waters—a really good contract in place and you get the appropriate bond set-ups to cover the costs. It costs more money to pull a turbine down than it does to put it up, and that probably makes sense when you think about it. The costs of pulling down a turbine may exceed the revenue you get for 25 years. That's not a good outcome. In the case of a turbine in Queensland where the bed plate cracked and you couldn't go near the turbine because it could fall on your head, that cost millions of dollars to take down with robots and explosives. You could be stuck with some big bills.

Senator RENNICK: I did not know that. Thank you. That's very informative.

Mr Dyer: Senator Cadell had a very good discussion, which will be in the *Hansard*, on that topic with me.

Senator RENNICK: That's good to know. I'll come back to you, Senator Cadell. That's very good work. Do the same regulations apply to renewable companies when they go to build as apply to coal-fired power stations, for example? I was in North Queensland last week at the proposed site of the Chalumbin wind farm. At the base of it there are enormous lakes with lots of birdlife. I would have thought—not that I'm an expert—that this birdlife is going to be under threat if there are windmills sitting along the ridgeline. What steps are taken—and I know Senator Waters touched on this—to protect biodiversity?

Mr Dyer: My view is that you need to pre-sanction an area for development, as we're doing with offshore wind. The federal energy minister designates an area that is appropriate for offshore wind development and, by default, what's not appropriate. We don't have that same concept yet, with some exceptions. You can't build a wind farm on the Great Ocean Road, for example. There are some carve-outs. We've got a lot to build; we need a more proactive licensing and site pre-approval approach.

Senator RENNICK: Lastly, there was a lot of erosion at the Kaban wind farm last week up in North Queensland.

Mr Dyer: At Kaban?

Senator RENNICK: Yes, a lot of erosion on the hillside.

Mr Dyer: Yes.

Senator RENNICK: I note farmers in the Great Barrier Reef basin are required to prevent erosion. Are there rules and regulations in place around wind farms being built on the side of hilltops? Obviously, they have to knock out part of the mountain to make sure the wind turbine is vertical. Are there steps to make sure that the erosion from building renewable projects in the Great Barrier Reef basin do not produce run-off into the Great Barrier Reef? I know farmers are expected to prevent erosion. Do those same rules apply to renewable energy companies?

Mr Dyer: It should be dealt with in the planning scheme. An important aspect there is that there'll be a consultant who designed the road and would have said, hand on heart, it's not going to erode, 'Here's the plan.' You must get those reports audited, checked and peer reviewed. I've seen so many times where there have been errors in those reports that have led to not only fines and the like but cancellations and suspensions of projects. It costs millions of dollars, not including the damage that's done to the environment. Again, if you were sitting looking top down on a map you'd probably say that's not the right place to build a project.

Senator RENNICK: Excellent. That's very informative.

CHAIR: Mr Dyer, thank you so much for coming. We do appreciate the juggle to make sure we had you here. We really appreciate your time.

Clean Energy Regulator

[10:01]

CHAIR: I welcome officers from the Clean Energy Regulator and welcome Mr David Parker. Do you have an opening statement for us?

Mr Parker: No, I don't have an opening statement other than to inform the committee that Shayleen Thompson, who's one of our experts on ACCU project matters, is an apology for today. She is in New Zealand organising the affairs of her mother, who sadly passed away recently.

CHAIR: That's terribly sad. She's always an excellent contributor to this process. Please pass on our condolences.

Mr Parker: I'll pass on your regards.

CHAIR: Senator Hughes.

Senator HUGHES: Can I have an update with regard to development of CBAM, and particularly our export exposed emissions intensive businesses? How will the Safeguard Mechanism, once it comes into place, impact these businesses? There'll be competitive disadvantage for them in markets that don't have a carbon tax such as this.

Mr Parker: We're in the process of standing up the implementation arrangements for the Safeguard Mechanism. There are a number of features of that have been purposefully designed to take into account the very issue that you talked about, the potential for carbon leakage and for competitive disadvantage. They broadly fall into two categories. For trade exposed industries there is the potential for them to apply for a slower decline of their baselines, which means that the liability or requirement to reduce or offset their emissions does not apply to the same extent as for other companies. I'm happy, if you like, to go into the details of that. There is also a range of funding available through the department to help with investment needs to drive down emissions. Obviously I'll leave it to the department to talk about the funding arrangements, but the patterns that apply for baseline declines depend on to what extent the costs from offsetting your emissions increase vis-a-vis the revenue or profit coming from your entity. It can also be affected by whether you are a value-added manufacturer as opposed to some other form of business.

Senator HUGHES: Has any modelling been done on the likelihood without a CBAM in place before this regime starts with regard to what is the expected leakage, and what movement of those industries will mean for jobs in these organisations? What likely economic impact is going to be felt by emissions-intensive export businesses? We heard yesterday there's a 12-18 month review over a CBAM. That's a considerable period for those businesses to be without some sort of safety net in compensation for competing in markets without carbon taxes. Has there been any modelling done? To date, the government certainly hasn't presented any modelling around the Safeguard Mechanism program.

Senator McAllister: The CER has an implementation role, not a policy design role. Mr Parker may provide information about work done by their agency, but the opportunity to ask questions to the department was, of course, yesterday. Mr Parker.

Mr Parker: We don't do that kind of modelling work. It's effectively not our business, it's more in the policy design process, and it has been foreshadowed that the government will consult on a possible CBAM arrangement, and no doubt that issue, as you have flagged, will be taken up in that process. Ms Evans, do you wish to add anything at this point?

Ms Evans: We answered the questions yesterday. There is \$3.9 million allocated in the budget to have a look at this. As you said, it's the work that we'll conduct over the next 12-18 months looking in detail at these questions. I think previously modelling that we had done even under the previous government had indicated that, unless there was clear action by Australian businesses to take account of emissions and emissions reductions, there was a high chance of retaliatory action globally, and so there was an economic benefit overall from making sure that these things were in place.

Senator HUGHES: Is that modelling available for us to have a look at? We have been provided with no modelling around this.

Ms Evans: That modelling was done in the public domain last year.

Senator HUGHES: What about modelling for this Safeguard Mechanism? This Safeguard Mechanism is very different from what the previous government had proposed.

Ms Evans: We've explained before that we've done modelling in conjunction with the Treasury and that is subject to the public immunity interest claim that has already been made.

Senator HUGHES: It's obviously so great no-one wants to show it to anyone.

Senator McAllister: Senator Hughes, that's not the grounds on which a public interest immunity claim was made. The claim was made on the grounds, firstly, that it was cabinet-in-confidence and, secondly, that it was subject to commercial sensitivities.

Senator HUGHES: There's that transparency again that businesses are so certain of. With regard to this 18-month lag for the CBAM or anything that's going to happen around that—and \$3.9 million to look into it apparently—there's going to be additional costs that businesses will have to pass on to the consumer. How does this all come together? We have middle Australians who are excluded from budget bill relief and they're going to be impacted. Intensive emissions businesses are going to pass their costs on to the consumer. We've just heard

from Infrastructure that those new transmission line costs are going to be passed on to the consumer. At what stage does the government include you or any agency—obviously you're here—in looking at these policies, in looking at how business is going to be impacted and say, 'But we know it's going to overall be beneficial for the productivity of Australia. Overall we know that there's going to be downward pressure on inflation'? We don't seem to be able to say to the Australian people anything other than it's going to cost a lot of money, no modelling is going to be made public to you, and we have policies being put in place with reviews still taking place; policies being put in that are going to have additional costs for business and reviews but, 'We'll figure out over the next 18 months how to maybe work around it in a global sense, an information sense.' What can we say to the Australian people who aren't benefitting from bill relief, and are finding everyday economic pressures and the cost-of-living crisis unbearable? How do we say to them that this is a government that is now delivering not only clean, cheaper energy for you, but energy that's going to overall boost our economy so you're not going to be stuck in middle Australia, as opposed to this welfare budget that's only benefitting those on payments?

Senator McAllister: Chair, the standing orders don't allow questions around opinion. I wonder if—

Senator HUGHES: I'd just like to know: has a productivity lens been put over any of this work?

Senator McAllister: Excuse me, Chair. I'm providing an answer and seeking your advice. I wonder if Senator Hughes might consider rephrasing her question in a way that doesn't ask Mr Parker to provide advice or reflect on government policy. He, of course, is here to answer your questions, but I think the way you phrased the question doesn't leave him with much latitude to assist. I wonder if you could think of a different way of approaching it?

Senator HUGHES: Mr Parker, has a productivity lens been put over any of the policies you were meant to implement and the way that you implement them?

Mr Parker: That precise framing of your question is not really a question we can answer. What I can say is that we take cost regulation very seriously. We are deliberately implementing and designing the systems that people will interact with. These are large-scale, externally-facing, high-volume and hopefully secure IT systems. It's not bits of paper.

Senator HUGHES: You'd hope so.

Mr Parker: It's not bits of paper flying all over the place and lots of wasted effort. We are very deliberately designing these systems so that the regulatory overload, if you like, the time taken, the need to gather information, and just the difficulty of interacting with governments is minimised to the greatest extent that we possibly can. We take that I wouldn't say as a sacred pledge. I don't mean it at that level, but we do take it very seriously. And can I say, we have a strong reputation in this place.

Senator HUGHES: So, have you already—

CHAIR: Last question.

Senator HUGHES: defined which businesses are emissions-intensive, trade-exposed or trade-exposed baseline adjusted; has that already been determined? Since this is all about to roll out, do those businesses know that they're going to fall into these categories?

Mr Parker: Yes, that is in the process of being determined. This new regime comes into place from 1 July.

Senator HUGHES: It's not that far away.

Mr Parker: No, it's not. Then, in terms of the regulatory calendar, if you like, it can ultimately lead to a liability arising in the earlyish part of 2025. The calendar runs from 1 July of this year to 30 June 2024. Then there is a process to ensure and true up, if you like, all of the emissions information and data. Then the obligation, if it does arise, to surrender ACCUs or Safeguard Mechanism credits arises in the early part of 2025. We're working with all due dispatch to get all the work done. The new system builds on existing arrangements, that is, there are safeguard arrangements in place, of course, although under the current arrangements the baseline doesn't decline. That is a broadly mature system. And then the information reporting systems which underlie that, the so-called NGERs, National Greenhouse and Energy Reporting Scheme, are long mature. People are very used to engaging with and reporting under that system.

Senator HUGHES: But with these businesses it hasn't been determined yet?

Mr Parker: I said, yes, we are working on it.

Senator HUGHES: You're working on it, but it hasn't been determined?

Mr Parker: It can change.

Senator HUGHES: Yes.

Mr Parker: We won't give you a final list at this point in time.

Senator HUGHES: Businesses need a reasonable lead time to prepare for these things.

Mr Parker: Correct.

Senator HUGHES: Yet they're flying blind. It would seem that this has been put in place. We still don't have a CBAM. In fact, when you're saying it all kicks in, we'll still be in the 18-month review around the CBAM. So, it's not really giving business much certainty.

CHAIR: Senator Waters.

Senator WATERS: Mr Parker, can you please convey my personal condolences to Ms Thompson as well. We're missing her expertise at the table, and we're sorry for her loss.

Mr Parker: Thank you. I will pass that on.

Senator WATERS: Can I ask about human-induced regeneration projects, please? On what date were the production of human-induced regeneration from current projects frozen or put on hold?

Mr Parker: So, that was put on hold shortly after the release of the Chubb review, which had a recommendation in it that no further projects be credited. We needed to check out the legalities of putting projects for crediting on hold where the projects had already applied. That took a couple of days to sort out. Then at the other bookend of it, if you like, we put out a paper last week which detailed how we would envisage or are implementing recommendation 8 of the Chubb review. We recommenced crediting of HIR projects last week.

Senator WATERS: I'm just jotting that down. Recommended?

Mr Parker: Crediting of ACCUs last week. I think on Thursday, was it?

Ms Crosbie: Yes.

Senator WATERS: I'm going to ask you about that process in a minute, but firstly can I just stick with dates. Were there any HIR credits generated by projects from 28 March, when my party and the governing party reached agreement on safeguards and announced it, and 5 May, when the rules on ministerial discretion to the regulator were issued?

Mr Parker: Any projects credited in that period?

Senator WATERS: Were any HIR credits generated during that period 28 March to 5 May?

Mr Parker: I'm going to pass the floor to Michelle Crosbie, who is here instead of Shayleen.

Ms Crosbie: No, I don't believe that any HIR credits were issued between 28 March and 5 May.

Senator WATERS: I understand that there are now four additional requirements that you've specified as per the Chubb review before ACCUs can be generated again, and presumably that's what your paper last week goes through. Have proponents already come forward?

Mr Parker: Come forward with?

Senator WATERS: With proposals that will now be subjected to the four elements?

Mr Parker: Let me make an overview comment and then I'll pass to Michelle to talk about the specifics. So, as we know, the Chubb review found that the HIR method was sound, that is the method, that it was in accordance with the offset integrity principles, and that it was backed by a robust regulatory framework. It did not say there were significant changes needed or that the administration of it was wrong or, for example, that projects need to be cleared in a relevant period in order to qualify or any of that. What the HIR recommendations involved was essentially in the space where the review panel—and rightly so, in my view, for what it's worth—identified that there was a significant lack of transparency in the scheme. It's a transparency problem, I might add, that is legislated in. I've mentioned to this committee previously that we could not release carbon estimation area data because that was protected information and subjected us to criminal penalty. So, when you look at the HIR recommendation, it's also important to think of, if you like, the parallel implementation of recommendation 4, which is that more protected information should be published. The government has already passed legislation to provide for the publication of carbon estimation areas, and we envisage publishing that information in the near future. We are very pleased with that because, when the analysis is done at the carbon estimation area, it's actually dealing with what is happening on the ground as opposed to broader suppositions which might be drawn by looking at local government areas or something like that. The Chubb panel rightly said as to the limitation of information—we all have; the Clean Energy Regulator analyses projects on a case-by-case basis, and at the carbon estimation area level it was unusual that all of the observers of the scheme couldn't do that—that it recommended change. We're very pleased with that, I have to say, and we'll be releasing the information.

In terms of the HIR recommendation, which goes to the causality of suppression mechanisms during the so-called baseline period, and visibility of that through to the removal of those suppressors at carbon credit reporting

points—it's at two points, the bookends, if you like, which we thought was very useful—it's essentially about looking at evidence on a case-by-case basis, which we already have in very large measure. Most reporting that we get from a carbon project proponent has become increasingly detailed over time, and so we have a lot of material and a lot of evidence already on hand which goes to, if you like, the question of being able to see a line of sight from the project registration point, at which point the existence of suppressors is established, and as I said a line of sight to the carbon crediting application point, where the suppressors need to have been removed in order to allow the regeneration to take place.

Just to make a final observation, when you look at this at a carbon estimation area, you can see very strong increases in forest growth in these places, much stronger than in other areas, and for which there's very solid evidence that the removal of suppressors works. I'm talking there in an aggregate sense. To go to your specific question, I'll pass to Ms Crosbie.

Senator WATERS: Thank you.

Ms Crosbie: As we mentioned, we released guidance last week for recommendation 8, and that was sent out to HIR project proponents. What that covered is the information and record-keeping practices for HIR project proponents that's required or would be, in fact, best practice at registration and then again at crediting, when we issue carbon credit units. It covered the information and evidence required to demonstrate the suppressors during the 10-year baseline period. As Mr Parker said, the suppressors are stopping vegetation regenerating, and they could be things like grazing animals, feral animals, weeds, mechanical and chemical suppression. It covers off what our expectation, I guess, would be in terms of what we require there. Then with that direct line of sight during the reporting period when the activities are undertaken, we could refer to them as HIR activities, and when they're undertaken what sort of evidence and information we require to be able to demonstrate the activities being undertaken have been ceased or removed to enable the regeneration to occur. The other part of recommendation 8 was around FullCAM guidance. We outlined the requirements and the approach in terms of the FullCAM guidance and the expectations there as well. As Mr Parker said, we've been analysing the information we've collected over time from when a project is registered through to potentially multiple reporting periods that some projects may have already had. It's quite extensive, the information we already have, but we do have the powers, such that if that information doesn't satisfy us as to the eligibility requirements of the method or that the rec 8 have been met, to request additional information. We won't be issuing ACCUs unless we're satisfied that the requirements of rec 8 and the broader eligibility requirements are met. As Mr Parker said, we did start issuing some ACCUs from last Thursday. We have a number of applications on hand and so our focus is working through those and, if required, requesting additional information to ensure we're satisfied that the requirements have been met.

Senator WATERS: Chair, I have a number of follow-up questions. Shall I continue now or do you want to come back to me?

CHAIR: We might come back to you. Obviously, as people have noticed, we've completely blown the time. If senators could keep their questions to questions as opposed to statements and we can be as picky as we can with the answers, that would be appreciated. Senator Rennick.

Senator RENNICK: I note on your website you state that the role of the Clean Energy Regulator is to measure Australia's carbon emissions. How do you go about that? Do you have some sort of consolidated database where you add up all of the projects across the country and it's transparent; the public can look at it to see how we're actually tracking towards net zero by 2050?

Mr Parker: We're part of that story, not all of the story. The government publishes its inventory and projections for emissions, and we provide a substantial amount of the data that goes into that process. The way that we collect that information is that there is a legal requirement under the NGERs Act, the National Greenhouse Energy Reporting System Act, which provides for companies, and then facilities if they're bigger, to report their emissions to us. That's a substantial information gathering process done every year and we publish the information we've gathered every year. It's subject to certain details about people being able to request that their information not be published, and I won't go into that detail.

Senator RENNICK: So companies can ask for their data not to be published; is that correct?

Mr Parker: Yes, they can. They're rarely given permission.

Senator RENNICK: With regard to offsets—and I'm thinking in particular here of the mulga country in South West Queensland, how is that reported or calculated?

Mr Parker: So, rather than NGERs, that falls under the ACCU arrangements. It's a long and complicated story and, given the chair's request that I keep it very short, I'll try my best. So, broadly, in that space, two things

happen. The carbon stock in that landscape is measured by the department using the FullCAM model. Our role in that space is that, if a project is registered for the regeneration of forests in those places, we administer that as part of the ACCU scheme process.

Senator RENNICK: A lot of that mulga wasn't there 50 years ago. It's been allowed to grow there because of poor management practices imposed by governments that don't allow proper management of the land. I would argue that mulga was absorbing carbon dioxide anyway. Do you only value the incremental increase or how do you do that?

Mr Parker: So, what the, in this case, human-induced regeneration or in some cases avoided deforestation, or in some cases yet another method called the NFMR provides is to identify particular places in that landscape where the forest is degraded. What I mean by that—

Senator RENNICK: But that was originally open grassland.

Mr Parker: That's been suppressed.

Senator RENNICK: You're saying 'degraded'. That was originally open grassland, a lot of that country. What do you mean by 'degraded'? Because the mulga—

Mr Parker: Regeneration of the mulga has been suppressed through grazing or clearing or other means, pests, weeds and so forth.

Senator RENNICK: I'd disagree with you on that, because as I said that used to be open country that has now been allowed to grow, because you're not allowed to clear it. Years ago the Aboriginals used to burn it out quite regularly. But that's not the point. I'll take that offline. Can you take on notice to provide some calculations as to how all of that works, if you don't mind?

Mr Parker: We will provide a coherent description which goes into the relevant details.

Senator RENNICK: I'd appreciate that. I have a last question, Chair. In regard to natural offsets, I just want to pick up on an ABC article that came out a few years ago, just after the bushfires. It said that the phytoplankton in the Southern Ocean bloomed as a result of all the extra carbon dioxide put out into the air. In regard to calculating Australia's overall net emissions, do we also use natural offsets that were always there as a part of our competitive advantage against other countries, or do we completely ignore the huge amount of natural carbon offsets we have in nature and look only at man-made emissions and man-made offsets?

Mr Parker: It's another complicated question in many respects. The inventory process, as I mentioned—not directly done by us but done by the department, with some input from us—looks at Australia's net emissions, and it can include regrowth of forest outside of the carbon offset process that we're involved in. But in terms of the natural absorption of CO₂ into natural sinks like the ocean and so forth, that is not covered, and it is not covered by the offset scheme.

Senator RENNICK: That's a concern, because, as I just described with that example, the phytoplankton will adjust to increased CO₂ and, given the oceans absorb 70 per cent of CO₂ across the planet, it seems silly not to include the enormous carbon sinks that naturally respond to increased CO₂ anyway. When you look at what Mother Nature can do on its own, it seems silly just to say, 'Man's bad. Let's ignore everything Mother Nature does.' Shouldn't we be including the natural offsets that Mother Nature can provide to us?

Senator McAllister: Senator Rennick, I don't mean to obstruct you, but these are questions around the inventory which, properly, should've been asked of the department perhaps yesterday. But, to assist you—

Senator RENNICK: No, because the Clean Energy Regulator talks about how offsets are measure, so I'm just trying to understand why we don't use natural offsets, of which Australia has an enormous reserve because we are one of the biggest land masses in the world with one of the smallest populations.

Senator McAllister: Thanks, Senator Rennick. I am just—

Senator RENNICK: Surely that's something worth considering, rather than sending our businesses offshore in the name of reducing emissions, when we've got all this natural resource that can offset emissions naturally.

Senator McAllister: Senator Rennick, they're legitimate questions, which you're quite entitled to ask. Ms Evans administers the inventory within the department and might be in a position to answer some of the questions you're asking, but I am conscious of the chair's instructions around time.

CHAIR: No. When I say 'pithy', I don't mean 'don't answer the question'. So, absolutely—

Senator RENNICK: I'm just conscious of our jobs and our primary producers, and all those guys going offshore too.

Senator McAllister: Senator Rennick, I have indicated to you, and I'm quite happy—

Senator RENNICK: You know, it's jobs, jobs, jobs.

Senator McAllister: No-one is obstructing you from asking questions.

Senator RENNICK: You just have. But, anyway.

Senator McAllister: I'm just trying to assist you in directing them to the correct officer, because it might help you.

Senator RENNICK: That's fine.

Ms Evans: I will just quickly answer. The reason that we don't include those natural sinks is that the way we set up our inventory and then measure the emissions for the whole of the country is based on the United Nations Framework Convention on Climate Change rules about how we should do that, and that's very much focused on the human associated emissions. That's why we focus on those. But your point is valid, and I think that, in the broader science of climate change, all of the emissions are taken into account in looking at what is happening to global warming and climate change, and the parts of it that the global scientific community has said we need to focus on are the ones that are created by human activity.

Senator RENNICK: But if Mother Nature can offset human activity naturally, shouldn't we be taking that into account as well?

Ms Evans: We do take that into account, and the unfortunate state of affairs is that the natural environment is unable to fully offset the impact of human affected emissions.

Senator RENNICK: That's not what Larry Marshall of the CSIRO told me. He said we don't take phytoplankton in the oceans into account in these models.

Ms Evans: We don't take it into account in the inventory. I wasn't present when you asked Larry Marshall the question, so I—

Senator RENNICK: Yes. So we don't take the phytoplankton into account in the inventory either.

Ms Evans: No, we don't take it into account in the inventory.

Senator RENNICK: That's my point. My point is that we're making a rod for our backs if Mother Nature can help with some of this, rather than send our jobs offshore. But I'll leave it at that.

Mr Parker: If I could, I will add a comment. Of course, when the level of CO₂ in the atmosphere is measured at particular observation stations, as it is, of course, that is net of everything—net of human, net of natural sinks and so forth—and the CO₂ levels in that have been rising for a very long period of time.

Senator RENNICK: I don't deny that. I have an issue as to how fast the temperature is rising, but I don't deny CO₂ is rising.

CHAIR: I will take the opportunity to encourage other members of the committee to go and actually have a look at some of the HIR projects. After our safeguards inquiry, I did go out to Hiltaba, which is owned by the Nature Foundation, and everything clicked into place. It made perfect sense. It was a really, really valuable experience. If anybody wants to go and visit, please let me know. We will now break for morning tea to enable everyone to refresh, but I will ask you to return after the morning tea break.

Proceedings suspended from 10:35 to 10:47

CHAIR: We will now resume with the Clean Energy Regulator, and we'll go to Senator Pocock.

Senator DAVID POCOCK: Thank you, Chair. Thank you for your time. I'll ask a few questions about HIR to start. Have you restarted crediting of HIR projects following the Chubb review?

Mr Parker: Yes, we have. We started last week, after the publication of the paper which we put out on the implementation of recommendation 8 of the Chubb review. We have restarted crediting. We talked about this with Senator Waters previously. We stopped crediting in January and have just recommenced.

Senator DAVID POCOCK: Okay. My understanding of recommendations 8.1 and 8.2 was that there needed to be a review of individual projects—

Mr Parker: Yes.

Senator DAVID POCOCK: until you could restart crediting. Those reviews have all been undertaken?

Mr Parker: We are implementing that recommendation on a project-by-project basis as we have a crediting application. We're not doing everything just in case at some point in future—we are doing it progressively and at the future point when there is an application. We've got about 190, I think, applications for crediting on hand that were paused as a result of the Chubb process.

Senator DAVID POCOCK: So every project that has restarted crediting has gone through a review process.

Mr Parker: Yes.

Senator DAVID POCOCK: And who is undertaking those reviews?

Mr Parker: We are. I can pass over to Michelle Crosbie to provide you with details of that if you'd like.

Ms Crosbie: Yes. We've got a team that does assessments of projects at registration and then at crediting. As Mr Parker says, we've got a number of applications on hand and so we've commenced reviewing or assessing those applications. What we've found, through the analysis of the applications we have on hand, is that, over time, we've actually collected quite extensive information, originally at registration of the project and then throughout either one or multiple crediting periods. We have the power, if we're not satisfied that recommendation 8 or other eligibility requirements are being met, to go out for additional information, and we will. So, if we find that projects haven't been able to demonstrate that there were suppressors stopping vegetation in the 10-year baseline period before the project start date, and if we find they are unable to demonstrate that they are undertaking activities to remove those suppressors and there is a direct correlational link to those activities, we will not issue ACCUs and will ask for additional information.

Senator DAVID POCOCK: How many projects have been reviewed and restarted?

Ms Crosbie: We have assessed and processed ACCUs for around 10 projects—I don't have the exact number—since last Thursday. As Mr Parker said, we have about 180 applications on hand.

Senator DAVID POCOCK: So since last Thursday?

Ms Crosbie: Nine or 10 applications have been processed.

Mr Parker: So the reassessment of the information has been going on for an extended period.

Ms Crosbie: Since January. As the applications have come on hand, we have started having a look at the information and evidence that we have for the projects we have on hand.

Senator DAVID POCOCK: Of any of those 10, was additional information requested?

Ms Crosbie: No. With the 10, they had already provided the information that we required to be satisfied that recommendation 8 and other eligibility requirements had been met. That was the reason why those projects were issued ACCUs. As Mr Parker said, it wasn't that we started reviewing them on Thursday; they had been under review for a period.

Senator DAVID POCOCK: I saw in the budget that there was just under \$6 million for audits of HIR projects.

Ms Crosbie: Yes.

Senator DAVID POCOCK: Will that be for audits that you undertake, or will that be separate and independent?

Ms Crosbie: That's correct; money was provided in the budget for what we are referring to as 'gateway audits'. It is an expansion of what we refer to as section 215 compliance audits, which we already have a program for; they are paid for by the Clean Energy Regulator. We are in the process of designing what that would look like, but the intention there is that all five-yearly gateway regeneration checks would go through these 215 compliance audits. They would be something we organise and engage an auditor for, rather than the project proponent. We are currently working through the design of that and shortly will announce what that looks like to proponents.

Senator DAVID POCOCK: When you say 'engage an auditor', will that be an independent auditor or someone you bring on board to do these audits?

Ms Crosbie: We will engage them under the National Greenhouse and Energy Reporting Act. We accredit what we call NGER auditors. We will be engaging directly NGER auditors to undertake the audits.

Mr Parker: Like any auditor, they are independent in this instance. They do the work, and they write the report, and we receive it and then it is considered. But we don't involve ourselves in the preparation of the audit process.

Senator DAVID POCOCK: I understand. Is there a criterion for the qualifications or experience that the auditor needs, given the very technical nature of forest ecology and general landscape ecology?

Mr Parker: Yes.

Ms Crosbie: Yes, that's right. There will be a requirement for them to have ecological expertise. We are working through just what that looks like and that requirement when we go out to engage the auditors.

Senator DAVID POCOCK: So you haven't decided what ecological expertise is?

Ms Crosbie: No. That's what we are working through at the moment.

Senator DAVID POCOCK: Could I ask about the Nature Repair Market?

Mr Parker: Sure.

Senator DAVID POCOCK: Looking at the submissions to the exposure draft, a number of organisations raise concerns about the Clean Energy Regulator overseeing a biodiversity nature repair market. Given the amount of work that you have to do with the carbon market and the complexity of that work and the vast differences between something like carbon, where a unit of carbon is a unit of carbon, and the complexity around biodiversity and measuring and monitoring biodiversity, I am interested in your views on the CER's current capacity to oversee a biodiversity market.

Mr Parker: Yes. It is an interesting question, and there has been a debate about that. It is a matter for the government to decide, obviously, who performs the relevant functions under the legislation, and we have been identified. If I could break it down just to focus on the nature of the question, there are two elements to this. There is the registration of projects and the crediting of projects with certificates and the making of a market in those certificates. All those kinds of functions are in pattern with what we do already.

Senator DAVID POCOCK: Albeit in a vastly different context.

Mr Parker: Yes indeed, which is an additional element. That is the bit that's the same. What is different is that, I think as you're implying, it does tend to be on a smaller scale, a more micro scale, than the kinds of things we do. So it depends on what methods are made—they haven't been made; the legislation hasn't been passed yet. It is possible that the compliance elements will be at a smaller scale than they are for the carbon elements. That means we will need to develop expertise in that.

Senator DAVID POCOCK: So your understanding of the proposed nature of the repair market is that it will be quite a small-scale market.

Mr Parker: No, not a small market. You would need to measure biodiversity at a smaller scale than, say, measuring forestry growth for carbon uptake into the landscape—not always and everywhere but generally at a smaller scale: seeing if cat traps are still there and set, or looking at outcomes, and seeing if there are more bilbies in the landscape. However the scheme will work is probably at a smaller scale than the kind of work we presently do. But that is not to say that we couldn't develop the expertise in that; someone would have to.

Senator DAVID POCOCK: In terms of the announcement that the CER will oversee it—I am asking you because I don't understand how these things work—did you put your name forward for this, or was it the department and the minister deciding that you will oversee it?

Mr Parker: I'm not sure. I don't know.

Ms Evans: It has been a decision of the government that the Clean Energy Regulator will be the regulator.

Senator DAVID POCOCK: So the minister and her department decided on that?

Ms Evans: It is a decision of the government. The department doesn't make that decision. We put advice to the ministers and then, presumably, to the decision-making processes of the government to settle on the arrangements, and that process settled on the Clean Energy Regulator.

Senator DAVID POCOCK: What were the options you presented to the minister?

Ms Evans: This is not my area. The outcome 2 area is on later this morning, and the people who are directly responsible for the Nature Repair Market would be able to talk to that.

Senator DAVID POCOCK: I'll ask them, then. In terms of your current capacity, how many ecologists does the Clean Energy Regulator currently employ?

Mr Parker: I don't have that answer to hand. We have a broad range of expertise, so we could take that on notice.

Senator DAVID POCOCK: Okay, you could take that on notice. Finally, to go back to HIR, and maybe this is a question to the minister: a concern raised leading up to the Chubb review was that the regulator was developing methodologies, then overseeing and enforcing compliance and then being involved in the sale side of things—like with a one-stop shop. Chubb recommended that be looked at to ease the burden and the perceived conflicts of interest. But what we are hearing is that the methodology that is most under question is where Chubb suggested a stop to the issuance of credits after internal reviews, none of which have required additional information, and we are now crediting again. Is that a concern when it comes to the expectation from the public around the integrity of this crucial carbon market?

Senator McAllister: I think you're asking me to make a general comment about whether we are satisfied with where implementation is up to. Can I interpret it in that way?

Senator DAVID POCOCK: Sure.

Senator McAllister: You're right that there were a range of recommendations made, about both the implementation of the method and some of the broader governance arrangements for the scheme. Mr Parker has already alluded to some of the transparency constraints that the organisation has been operating under, and the government understands those. As indicated, the minister has made it clear that his expectations for the CER are that they will apply the method as described. I think the CER have described the process that they've gone through in starting to analyse the 191 applications for credits that are before them. They've taken their time to commence some of that work; it's obviously not concluded. They have only just now recommenced issuing credits. They've dealt with 10 applicants. I don't think we can conclude that the approach taken with the first 10 will necessarily reflect the approach taken with the balance. I'll leave that to Mr Parker and Ms Crosbie to augment, but the advice before us this morning is consistent with our expectation, which is that the organisation will look carefully and ensure that their approach to issuing credits is aligned with the method. Obviously, there are other recommendations that we're implementing, and we've already discussed this morning some of the funding that's been provided to enable those things, including the audit processes.

Senator DAVID POCOCK: On recommendations, what's the time line for the release of carbon estimation areas? I understand that they're good to go. There was a change in legislation to allow it.

Mr Parker: Yes, there was a change in legislation to allow the publication of carbon estimation areas. There was a process written into the legislation for project proponents with already registered projects, looking backwards as opposed to looking forwards. If those project proponents were to apply for carbon estimation areas to not be published and to make a case, they would suffer significant commercial detriment from doing so. We received very few applications of that sort and we're working through those applications now. As for the part of the arrangement that was settled, there were concerns—we've seen this in the past—where conclusions had been reached on projects which were simply not supported by the data. This included looking at the carbon estimation area data and—I really emphasise the point—the contextual information around the project. That is information about successors, project start date, modelling parameters for the use of FullCAM, information about the removal of suppressors and what's actually happening on trees on the ground.

You cannot judge these projects by looking at Google Earth, especially when the trees are small; they're just not big enough to show up. We do that using not Google Earth but more sophisticated satellite imagery, which has been trained—via machine learning and so forth—to pick this stuff up. It's very sophisticated, but we don't trust that as a mechanism to reach a conclusion. If we have significant issues—and we ran through this with you and the committee at an earlier point through the inquiry of then safeguard mechanism bill—we'll go out on the ground, have a look and put auditors in place.

Senator DAVID POCOCK: To be fair, Mr Parker, it was made clear that there is a very tiny percentage of ground truthing, so it is largely model based. I accept the complexity.

Mr Parker: Yes, models can do it most of the time, but they cannot support some of the conclusions that have been made.

Senator DAVID POCOCK: Three out of 91, I think it was. My question is: on the CEAs, we heard that there was a legislative issue and that there were privacy concerns. I'm hearing that both of those things have been dealt with.

Mr Parker: Yes.

Senator DAVID POCOCK: So what is the time line? When will they be released?

Mr Parker: We're looking to publicise that information at the beginning of next week. That's the hope at this point in time because, in addition to that information, and in order to avoid this issue of people reaching conclusions about projects without the full set of information, we have agreed with the industry that we will take information that they provide especially for this process—contextual information, descriptions of the suppressors, the removals and the baselines and so forth—which still remains protected information; we can't publish that. It is proposed that, following a consultation that the department will lead, that be published at later point in time by us. But, now, we can't. The industry have said, 'Can we provide it to you to publish?' and we've said, 'If you provide us with that information for the purposes of publication, we will publish it alongside the carbon estimation area.' That means that people looking at this will be more fully informed than otherwise.

Senator DAVID POCOCK: So it will start next week?

CHAIR: We're going to rotate the call and come back to you, Senator Pocock, but you've had a lengthy period of time and people are waiting. We will come back to you.

Senator ROBERTS: I want to get help with an issue that constituents want to understand and so do I; I don't understand it. It has relevance to the primacy of energy costs in the budget. I'm hoping to get into a relatively complex area and get your evidence or confirmation on how the renewable energy shortfall charge, under the Renewable Energy (Electricity) Act, works. Perhaps you could bring anyone to the table who has expertise in that.

Mr Parker: Sure. Mark Williamson has the expertise.

Senator ROBERTS: Thank you, Mr Williamson. I will try to step my way through the legislation here, and you can pick me up where I'm wrong or missing something. The renewable energy shortfall charge applies to liable entities?

Mr M Williamson: Correct.

Senator ROBERTS: Which is defined in sections 35, 31, 32 and 33, and essentially talks about entities that make a wholesale acquisition of electricity.

Mr M Williamson: Yes. For simplicity, these are typically electricity retailers.

Senator ROBERTS: Retailers.

Mr M Williamson: Yes.

Senator ROBERTS: Wholesalers?

Mr M Williamson: The electricity retailers are typically the liable parties.

Senator ROBERTS: Okay; they are the liable parties because they sell it to the end user.

Mr M Williamson: Correct.

Senator ROBERTS: Okay. Thank you. That's great.

Mr Parker: Or large users, people directly purchasing electricity.

Senator ROBERTS: So large users who buy direct can also be facing these charges.

Mr Parker: Correct.

Mr M Williamson: Correct.

Senator ROBERTS: Can I get you to explain who the liable entities for the renewable energy shortfall charge are in simple terms—again, retail or large users?

Mr M Williamson: I need to frame and explain the renewable energy target for you. It sets an obligation on these retailers or large users who are buying direct to surrender to us each year a certain number of large-scale generation certificates and small-scale technology certificates. Those amounts are based on percentages set each year in regulation by the minister. Effectively, if you're an electricity retailer, you take your acquisition of electricity in megawatt hours, you multiply it by those percentages and that tells you the number of certificates that you need to surrender to us. If a liable entity does not surrender the certificates or surrenders fewer than they should, that makes them liable for the shortfall charge.

Senator ROBERTS: So it's not power generators and not wholesalers; it's just retail and large consumers, as Mr Parker said.

Mr M Williamson: Correct; and they're only liable for the shortfall charge if they do not surrender enough certificates to us to meet their renewable energy target liability.

Senator ROBERTS: Can you talk me through the large-scale generation certificates that you just mentioned. What are they and what is the effect of surrendering them for that company?

Mr M Williamson: Large-scale generation certificates are issued for each accredited power station that's from a renewable energy source.

Senator ROBERTS: Solar or wind, for example?

Mr M Williamson: Correct. Hydro, as well, is quite common. They get a certificate for every net megawatt hour of generation. Those certificates can be used on the demand side to acquit liability, so they can be sold to electricity retailers or big users, or they can be voluntarily cancelled to prove the use of renewable energy. For example, you may have heard of the GreenPower scheme. That operates in a way that businesses who want to have more renewable energy use proven, other than just the statutory renewable energy target, can buy and cancel large-scale generation certificates.

Senator ROBERTS: So a coal-fired power station would not get them?

Mr M Williamson: That's correct.

Senator ROBERTS: Definitely not. Solar and wind would. And purchasers must buy at least 18.64 per cent right now of solar or wind power or hydro.

Mr M Williamson: Effectively, that's the case. I think that percentage you've mentioned is the renewable power percentage and so, yes, those electricity retailers or big users multiply their electricity acquisitions by that percentage. That tells them the number of certificates that they have to cancel to us.

Senator ROBERTS: I've got some figures in front me about the renewable power percentage. I'll just go through them. In 2001, it started—so that's 22 years ago—and it was just 0.24 per cent, about a quarter of one per cent. Then it went up in the following year. You mentioned that this is a ministerial directive.

Mr M Williamson: The minister sets these percentages, based on calculations that we do each year, but the actual targets are set in the Renewable Energy (Electricity) Act. A certain number of gigawatt hours of generation each year was set in the act. That got to the target, which is 33,000 gigawatt hours, which is set in the legislation from 2020, and that same number continues to 2030. That 33,000 gigawatt-hour target was reset in mid-2015 by parliament. In the early stages of the scheme, there was a table in the act that set the numbers that dictated where that percentage would be set.

Senator ROBERTS: Is that table in section 39(1) of the act?

Mr M Williamson: I'd have to ask the general counsel to try to find the right part of the legislation.

Senator ROBERTS: While we're waiting for confirmation, in 2001 it was 0.24. In 2002, the following year, it was 0.62, and it had slow increments, mild increments, until 2010. It took 10 years to get to 5.986 per cent. Then, from 2011 onwards, it rose, in 11 years, to 18.64. So it was 5.6 per cent in the first 10 years and there was a 13 per cent increase in the next 11 years.

Mr M Williamson: These were legislated increases. That was the way that the scheme was designed.

Senator ROBERTS: I want to understand this. First of all, I've focused mainly on the climate, because I haven't found anyone who can give me the science that proves the need for this. But I haven't focused on the energy, and that's where I want to go in the future. That means resolving some of the complexities. I want to understand this because we always hear that it's the market that's forcing coal-fired generators out and that no-one likes coal. Yet it appears to me, with this renewable energy shortfall charge—a fine, if you like—that it's actually the government forcing the retail sellers and the end users to buy wind and solar energy or, essentially, they'll be faced with this fine. Is that correct?

Mr M Williamson: The construct of the scheme is that the retailers should buy the certificates. The shortfall charge is only where they do not choose to or are unable to get the certificates that they need. So it's the default mechanism. But the way the scheme works is that the retailers should get in and be buying renewable energy. That should bring through more renewable energy, and that's the way the scheme works.

Senator ROBERTS: It appears deceptive from one perspective. I'm not accusing you of doing that, but it appears deceptive from one perspective, hidden in the complex legalese. Have you ever advertised to the public that the government, through you, is forcing retail purchasers and large-end users to purchase more and more wind and solar?

Mr M Williamson: We don't do specific broad community education, but all of this is regularly published; it's published by other bodies, such as the Australian Energy Regulator and the Australian Energy Market Commission. It is generally well known that there's an obligation on the electricity retailers. As I said, a lot of electricity users are choosing to buy GreenPower and to go further than the minimum statutory target.

Senator ROBERTS: What we have is a consumer faced with a choice of buying electricity. If they don't buy an adequate amount or proportion of solar and wind, they will have to pay a charge in addition to the subsidies that the solar and wind producers are getting.

Mr M Williamson: No. The obligation is set with electricity retailers. There are a lot of electricity retailers. In a competitive market, they should source the certificates at the best price they can and have the lowest level of input cost for the renewable energy target.

Senator ROBERTS: My point, Mr Williamson and Mr Parker—you can correct me or confirm—is that, in my opinion, now that I've had it clarified, this is the most significant intervention in the electricity market that the government has ever conducted, and not just this government but previous governments as well. By ministerial directive via legislation, they're ratcheting up the percentage of renewable electricity that every electricity buyer has to buy, or face a fine over the course of 20 years.

Mr M Williamson: Let me clarify, again, that the underlying numbers that lead to those percentages are locked in the act, so parliament took a decision to lock those numbers in. We do complex calculations to convert

that to a percentage and they are put to the minister. The act sets out the things that the minister must consider. This is all set in legislation that was passed in parliament.

Senator ROBERTS: Thank you for affirming that yet again. My mistake: I thought I said 'in the act', but maybe I didn't. Doesn't this confirm that solar and wind are much more expensive? We've all been hearing the fluff that says people are going away from coal because it's more expensive. Solar and wind get subsidies; plus, if somebody buys coal-fired power, the retailers or large-end users can be up for a charge. Doesn't this really confirm that, without subsidies and without a throttle on the coal-fired competition, wind and solar are too expensive?

Mr M Williamson: Not in my view; I wouldn't agree with that at all.

Senator ROBERTS: On what basis?

Mr M Williamson: There are incentives in the form of those large-scale generation certificates that go to the generators.

Senator ROBERTS: The solar and wind generators?

Mr M Williamson: Correct. Effectively, who benefits often depends on the nature of power purchase agreements between those solar and wind power station operators and the retailers. But, in essence, the numbers—if you look at the Australian Energy Market Operator's *Quarterly Energy Dynamics* report, every time that wind and solar are setting the price in the wholesale electricity market, the prices are very low and, in some cases, in negative territory. It's quite clear that, in fact, wind and solar are driving down wholesale electricity prices, which are also an input to retailers and to all of us as consumers.

Senator ROBERTS: I would say that's an aberration. What's happening is that coal is actually being forced out by the governments—I say 'governments' plural—and it's a direct market intervention in addition to the subsidies. The subsidies enhance solar and wind; the charge slams coal.

Senator McAllister: Senator Roberts, in your questions just now and, indeed, yesterday, you mentioned subsidies. Are there any particular subsidies that you're interested in? I think it's been challenging sometimes for witnesses to engage with your questioning, because you don't name them and I'm just unclear what it is that you're referring to.

Senator ROBERTS: Subsidies on solar and wind

Senator McAllister: Issued by whom?

Senator ROBERTS: Federal government, state governments.

Senator McAllister: Is there a program in particular that you're seeking information on?

Senator ROBERTS: No, I don't have any one in mind in particular.

Senator McAllister: I see. Please go on.

CHAIR: Senator Roberts, I'm going to wind you up as well. We can come back to you, if you need.

Senator ROBERTS: I'd just make the point that the market is not abandoning coal; the government is forcing buyers to not buy coal. That's the point.

CHAIR: Thank you for your statement.

Senator ROBERTS: Thank you very much, Mr Williamson, for clarifying.

CHAIR: Senator Cadell, over to you.

Senator CADELL: I'm on what is slightly a fishing and learning expedition here. I was approached this morning by a couple of farmers asking me about something, and I haven't researched it. Can you give me the current methodology for calculating on-farm emissions, as it currently stands?

Mr Parker: The first thing that I would say—

Senator CADELL: And process, too.

Mr Parker: On-farm emissions are not part of NGER's framework, so that's not a business that we get into.

Senator CADELL: It's the accounting framework that—

Mr Parker: Typically, in these cases, for on-farm emissions, you will often look at the inputs, so fuels and—

Senator CADELL: Urea and—

Mr Parker: All of that stuff. That's not something that we tend to do; it is more in the domain of the department when it does its inventory reports. The bit of it that we do is the crediting side under the ACCU process.

Senator CADELL: Only under ACCU. How do you do that; what's the process for the ACCU accreditation on farms?

Mr Parker: That's not a simple question, but I'll ask—

Senator CADELL: I think that was the point that was being raised with me, which I was trying to find: it's slightly onerous, very hard and can be expensive—is that right—to a farmer?

Senator McAllister: Senator Cadell, to assist you, could officials talk about the kinds of methodologies that are often used on farming properties?

Senator CADELL: The process for accreditation is probably more what I want than methodologies at this point, Minister.

Senator McAllister: If officials can identify the relevant methodologies and then talk through the process of accreditation, it might clarify things, because the way that emissions might be calculated will depend on what particular thing the landowner is seeking to do.

Senator CADELL: Thank you, Minister.

Mr Parker: I'm very mindful of the committee's time, so let me give you, as quickly as I can, a summary answer. To calculate the avoided emissions for an on-farm ACCU project, what we're seeking to do is to look at—let's take the so-called HIR, human-induced regeneration method, for example. That's one of the most common ones, but there's a whole range of others, including methane capture and so forth. Let's just look at one of them. In very broad terms, given the committee's time, that looks at the extent to which forests are regenerating on the landscape. These forests have tended to be suppressed either by clearing in the long past—you're not allowed to have cleared recently—or being eaten by livestock or pests, or being suppressed by other things, like weeds and so forth.

Once that project is registered, they will report to us periodically in process terms, and they will be telling us how those suppressors have been removed. Also, post the Chubb review, everybody will have to report at the best level of reporting. As Michelle Crosbie mentioned before, we have a lot of information about actual evidence of suppressors because people provide very detailed descriptions of it. Once that eligibility and regeneration, if you like, have been demonstrated, you then go into what you might call the calculation phase and, for HIR, that's done using a very sophisticated model arrangement called FullCAM, full carbon accounting.

Senator CADELL: I remember that. We saw that, yes.

Mr Parker: This is at the leading edge, globally. It's been going for a long time. It's a process involving calibration and machine learning to recognise growth. That will spit out how much you would expect over a longer period of time for the forest to have captured the regeneration, and crediting can be paused if it's not growing and so forth. It's not simple and it involves a lot of work but, at its core, it has very sophisticated measurement.

Senator CADELL: Is there a cost to the farmers to register and get assessed like this?

Mr Parker: Yes, there is. Much like the cost of any other farming, they will need to keep records of—

Senator CADELL: You would hope that they would be doing that, anyway.

Mr Parker: You would hope so. But this might be a slightly different record; this would be a record of what suppressors there were in the baseline period, what the removal of the suppressors had been, receipts, and a whole range of stuff for fencing, for example. That's not a simple process, necessarily. Many farmers choose to use a carbon service provider, much like they'll use a tax agent, an agronomist or whatever to provide input into the process, and of course that comes at a cost as well.

Senator CADELL: I may have the bull by the horns on this one, as it's a different aspect, so I might come back, through the minister's office, and ask you for some other information on that.

Mr Parker: Sure. We'd be happy to provide you with a briefing through those normal processes.

Senator CADELL: That would be great; thank you.

CHAIR: Senator Waters?

Senator WATERS: Ms Crosbie, I might pick up where we left off some time ago. Thanks for the information that you've provided to Senator Pocock, too; I was jotting things down as you were speaking. Of the 180, I think you said, outstanding HIR projects yet to be reviewed against recommendation 8 of Chubb, are they all previous projects that had been subject to the pause, or are there any new ones in that number?

Ms Crosbie: I don't have the details with me, but I would expect that the 180 or so applications will be mixed: some will be reporting for the first time, and others would have been reporting over a number of years.

Senator WATERS: Could you take on notice for me, please, the dates or the length of the projects that are subject to the review and whether there are any entirely fresh HIR proposed projects that have sought to be considered?

Mr Parker: Sure.

Senator WATERS: Thank you.

Mr Parker: It's relatively unlikely that a project registered between January this year and now would have got to the reporting stage.

Senator WATERS: Of course, because you need the 12 months; thank you. That is very logical.

Mr Parker: They might be registered but not reporting.

Senator WATERS: Thank you. What do you expect the time frame will be for you to go through the remaining 180-something projects?

Ms Crosbie: It will depend, again, as we assess each application, on whether or not they've satisfied the requirements of the method or not. If we do go out and request additional information, that can take some time, just to-ing and fro-ing between ourselves and the project proponent, so it's actually difficult to say. But where we've assessed an application and we believe that it has the information that we require, that should be a matter of weeks, in terms of the ones that we have on hand.

Senator WATERS: Per project?

Ms Crosbie: Per project, yes.

Senator WATERS: So you're not putting a rough target on when you'll have all 180 or hope to have them all reassessed?

Ms Crosbie: It's very difficult because each project is assessed on a case-by-case basis and they're all very different in terms of the information that's provided.

Senator WATERS: Has an independent overseer of the review process been appointed yet?

Ms Crosbie: No, not of the review process.

Senator WATERS: Will there be one?

Ms Crosbie: Not that I'm aware of, regarding the implementation of recommendation 8.

Senator WATERS: Minister, I might seek your guidance on that. Is there an intention—I thought there was—to have an independent overseer of not only the review of the existing HIR process against recommendation 8 of Chubb but also the five-year gateway review? Is that still the government's intention?

Senator McAllister: The officials have given a little bit of advice already about the approach that they're taking with the gateway reviews, but I'll ask them to augment that.

Ms Crosbie: I apologise; I wasn't connecting that. Yes, we will be engaging an independent expert as part of the program in which we'll be undertaking section 215 compliance audits for all five-yearly gateway checks. As I mentioned earlier, we're in the design phase of that process. That will include reaching out to an independent expert to look back at the projects that have already gone through their gateway checks and then moving forward to do a regular review of gateway checks as they occur.

Senator WATERS: Thank you. I have put two and two together now, like on your previous evidence, as well.

Mr Parker: These are auditors whose qualifications are set under Commonwealth laws that we accredit, but they are independently engaged by us to do these audits.

Senator WATERS: A change of tack now—I raised this yesterday. Hopefully, the department can assist, if CER are not able to. As for Visy, the reported emissions for Pratt Consolidated Holdings were 717,500 tonnes of CO2 equivalent, which is huge. Why does the public have no oversight of its emissions at the facility level?

Mr Parker: I will pass that question to Jane Wardlaw, who is an expert in this space.

Ms Wardlaw: Under the National Greenhouse and Energy Reporting framework, we publish corporate totals. What you are seeing are the Pratt Consolidated Holdings' total emissions for all the group members and facilities that operate within its corporate structure. The total number you see is in relation to the 129 sites they report on across Australia. The context of the question yesterday came up in discussion in relation to the safeguard mechanism. That data is broken up amongst those 129 sites. They don't have a single facility which triggers—

Senator WATERS: Which triggers that 100,000. That makes sense. Is facility-level emissions data required to be reported? If so, is that public anywhere?

Ms Wardlaw: For safeguards facilities—

Senator WATERS: Only if it is above that threshold?

Ms Wardlaw: Yes, we publish that facility-level data. We also have a requirement to publish it in relation to electricity generators. We have a separate publication which will give you facility-level information for generators, but not for other facilities outside of those.

Senator WATERS: I was going to ask whether Pratt Holdings had sought to use section 25 of the NGER Act, where there is commercial-in-confidence for trade secrets, but I think the answer is simply that the facilities are too small on their own.

Ms Wardlaw: Yes, that's correct—and for clarity, no; they haven't sought it.

Senator WATERS: That is it from me. Thank you.

CHAIR: Thank you for your time. We appreciate your coming along and sharing your knowledge and expertise. We will now release you.

Mr Parker: Thank you, Chair.

Climate Change Authority

[11:34]

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

Mr Archer: No; I am happy to go straight to questions.

CHAIR: Excellent. Senator Hughes.

Senator HUGHES: Your submission to Treasury's consultation paper on climate-related financial disclosure recommended: 'The climate disclosure framework as proposed by the Treasury requires the mandatory publication and transparency of practical plans, showing how these firms plan to meet their compulsory and voluntary emissions reduction goals'. You would think that publishing practical plans would be standard, so that you can see what emissions-intensive businesses with particularly hard to abate emissions have to do? Ultimately, isn't your advice at odds with the safeguard mechanism, which isn't really looking for practical options but just imposing a blanket target of emissions reductions and onerous penalties for the companies that cannot make that?

Mr Archer: No. I wouldn't say that our advice is contrary to the requirements under the safeguard mechanism. You are focusing on very specific words we have used there. The general point is that, where companies either have compliance obligations that relate to reducing emissions over time or they have otherwise made statements or adopted policies or targets that go to reducing emissions, we think there is significant benefit in there being some transparency around those plans so that the community at large has assurances that those entities are taking appropriate actions that support either their compliance requirements or their own objectives or targets that they have announced.

Senator HUGHES: The International Sustainability Standards Board is trying to develop a global baseline of sustainability disclosure standards for investors. What is your confidence that other nations will abide by these? If Australia is doing so, what is the likelihood that these international standards will be abided by—by India and China, for example?

Mr Archer: It is hard for me to predict what individual or specific countries will do. A lot of countries are moving in this direction. Some countries have specifically indicated that they will adopt certain international frameworks or standards as they relate to corporate climate risk disclosures. As to specific countries' intentions or otherwise, we will just have to see what they do.

Senator HUGHES: Can you clearly define for us what climate-related financial risks are? Are they just a euphemism for heavy fines from the government?

Mr Archer: No, they are not. When we think about climate risk, there are two broad categories that we might consider. The first relates to the physical impacts of climate change and how they might, for example, affect the assets of a company, how they might affect the company's operations and how they might affect the demand for the goods and services that a company supplies to the market. There is also what can be referred to as transitional risk, which relates to the broader operating environment that a company is in. That would include risks that might arise from changes to government policy in response to climate change; it might include changes in investor preferences—

Senator HUGHES: Including which country they invest in?

Mr Archer: That could be a consideration, and also consumer preferences. We are seeing a growing appetite amongst both investors and consumers for products of lower emissions origin.

Senator HUGHES: Are you able to point to any examples of Australian businesses which have lost customers because of inadequate reductions across their operations? I am trying to understand what the real imminent risk is, the impact of these climate-related financial risks.

Mr Archer: I might need to take that on notice. I don't know that I have any specific examples on the top of my mind. It is an issue that, in discussions we have had with a range of organisations and companies, is at the forefront their thinking. Just as an example, when we talk to the financial sector and the major banks, they are very concerned about the emissions intensity of the sectors they are lending money to and financing, and I think that does reflect concerns about the transitional risks that are raised.

Senator HUGHES: Your agency's sequestration insights paper points out that there is a role for government—again quoting you—'to explore risk-sharing approaches for investments in sequestration technologies with high up-front costs, including coinvesting in subsurface basin analyses for geo-ecological sequestration in keystone storage and transport infrastructure'. But we have seen this government move away from CCS in the latest budget. What role might the federal government play to ensure that these technologies are being utilised to the full?

Mr Archer: We addressed a range of matters in our insights paper, and a range of areas where government could work with industry and companies which we think would advance the understanding, take-up and deployment of sequestration in Australia. One area is in better understanding exactly what Australia's sequestration potential is, particularly in relation to geosequestration. That analysis needs to be undertaken at several levels so there is a better understanding in a purely technical sense of exactly what storage capacity we have in the landscape. There are further questions about the costs of developing that resource. That includes what alternative uses or competing uses there might be in the landscape. Then there's a question over what is actually realisable over time. Understanding all of that more than we do presently is important. Then there are questions about supporting R&D and demonstration projects. Again, there is an accepted role for government in supporting R&D, including in related technologies, such as direct air capture. There is work the government can do to identify and address regulatory gaps in, and barriers to, the deployment of sequestration, including working with states and territories, which also have some jurisdiction in these matters.

Senator HUGHES: That's all from me, Chair.

Senator WATERS: Thanks for your time today. Can I test a proposition with you? We have heard a lot this last week from ministers and the gas industry at the APPEA conference. I want to check with the independent climate experts: is expanding Australia's gas industry the key to solving the climate crisis?

Mr Archer: I am not necessarily sure that would be how we would talk about the future of gas in Australia. If you wanted to look for a representative statement of the authority's views—at least on fossil fuels more generally—you could look to the op-ed that was recently written by our chair, Grant King, and another of our members, Lesley Hughes, which points to the need to directly reduce emissions as much as possible. It also makes the point that fossil fuel expansion is inconsistent with what we are trying to achieve under the Paris Agreement. The gas story is complex; it involves both domestic markets and international markets. As we are looking to phase down the use of fossil fuels both globally and in Australia, and particularly in relation to gas, we want to be mindful of ensuring that, even as we are reducing the use of and demand for gas, we still have enough gas supply to meet what demand there is remaining. When you look at global projections about the use of fossil fuels, certainly in relation to gas, it does continue to be used for quite some time yet. The question then becomes: how do we reduce the emissions associated with the extraction and use of gas? Of course, there are a range of technologies that relate to that and there are developments in potential alternatives that can be deployed over time.

Senator WATERS: Does the expansion of Australia's gas industry increase or decrease emissions?

Mr Archer: On the surface, that's a very straightforward question, but I think the answer is: it depends. As a general proposition, we understand that the extraction and use of gas is an emissions-intensive source of energy; so, where there are alternatives available that can be deployed, they will likely offer lower emissions outcomes. If we go back in time a little bit, at the beginning of the last decade it did seem that gas, certainly with respect to coal, offered an approach that would reduce emissions in relation to electricity generation. That was before we had really seen the significant declines in the cost of renewable energy that we have seen over the last 10-plus years. But it still remains the case that, where you're deploying gas as a substitute for coal, it is likely that you'll have lower emissions outcomes. In the hearings yesterday, there was a discussion about the implications of new gas developments for our emissions inventory and projections. So, if we're looking more to what the implications are for emissions in Australia, there are questions about what is already factored into Australia's official projections of our emissions.

Senator WATERS: Why do the gas industry and the Liberal and Labor ministers keep claiming that somehow gas lowers emissions and is essential to net zero? Is that a view that you share?

Mr Archer: I'm not exactly sure what the basis for those statements is or what the points are that are made in support of those statements. There are scenarios where the deployment of gas will lower emissions—where, for example, you are substituting that for coal. It is the case that we will continue to use gas for some time, even as we are generally moving away from fossil fuels, as is needed to achieve the goals of the Paris Agreement. So gas does have a role to play in that context. While that's the case, we should be looking at how we can reduce emissions, not only from substituting away from gas over time to lower emission energy sources but also from the extraction and use of it.

Senator McAllister: Senator Waters, you asked about the Labor position. Appropriately, I think, Mr Archer hasn't commented on the views of other spokespeople in the gas industry, but he has provided you with advice. We are tracking towards 82 per cent renewables by 2030. You've heard evidence over the last day and a half that is a challenging target, and you've heard that from a range of sources. It stands to reason that the balance of the energy portfolio at 2030 will not be being met by renewables, and some of that will be gas. I think you'll also have observed the information provided by various market bodies around their projections for the demand for gas, in the context of both the electricity system but also Australia's industrial activities. The government's position has been quite clear that gas plays an important firming role, as our electricity system is transitioning. We also understand that, as an industrial and manufacturing import, it plays a significant role at the moment, while other alternative technologies are being developed. I hope that provides a more comprehensive statement of the way that we think about these issues than the one-line suggestion that you put to Mr Archer.

Senator WATERS: Thanks, Minister. Mr Archer, given that the IEA and the global scientific community have made it clear that no new coal, oil or gas projects can proceed, would you ever advise the government to halt new projects?

Mr Archer: That's a very difficult question to respond to in general terms. I think I've indicated the direction of travel in terms of the authority's thinking here, which is that over time we need to be moving away from fossil fuels. I've also made the point that, as we're doing that, we need to be mindful of not leaving ourselves short of supply to meet demand, even if that demand is declining over time. I'm not sure that I can be much more specific than those sorts of general observations. Of course, there's a whole regulatory framework that goes to decisions about the approval or otherwise of particular projects.

Senator WATERS: Have either you, Mr Archer, or other representatives of CCA had many meetings with the gas industry. If so, what have you met to discuss?

Mr Archer: I would have to take on notice the specifics of meetings that we might have had. Certainly, from time to time, we meet with APPEA. Typically, that is in relation to the specific reviews or reports that we might be working on at a particular point in time. We do meet, from time to time, with AIGN, the Australian Industry Greenhouse Network, which among its members does include companies operating in the gas sector. Those meetings are meetings where we talk about our work program and the terms of reference that we might be responding to from the government at that particular time.

Senator WATERS: Can I please ask you to take on notice to provide for me the number of meetings that you've had, let's say, in the last two years and the dates of those meetings? You mentioned that often they were in relation to reviews that you were working on at the time. Can you specify, when you mention the dates, what reviews you were working on and whether the purpose of the meeting was to seek the input of industry on that work that you were doing? Thank you.

Mr Archer: Certainly.

Senator WATERS: I will move now to your work program. You've got a lot on your plate. You've got the NGERs and the ERF review at the end of the year, the Annual Climate Change Statement, the 2035 targets and the progress report. On top of that, as part of the safeguard negotiations you'll also now have responsibilities to monitor new coal and gas projects and their impact on the carbon budget; and I think you'll also soon have to do a sector-by-sector pathway to Net Zero plan. Do you feel equipped to manage all of this?

Mr Archer: I think we're very well equipped to manage the work program. There is a lot overlap or linkages across those different elements, particularly when you look at the work that we need to do for our annual progress report, which will inform the minister's annual statement. Our work on targets and sectoral pathways is all very much about fundamentally addressing the question of how we are tracking to our targets, what should our targets be and how can we accelerate emissions reductions in Australia. We are approaching that work program in a highly integrated way. In the October federal budget last year, we received quite a significant increase in

resourcing. We're well on the way to achieving the staffing level that level of resourcing will support, and we're very much looking forward to engaging with the challenge and responding to the opportunity that work program presents.

Senator WATERS: Can you clarify for me how many staff positions that budget allocation will create?

Mr Archer: The budget allocation allows us to attain an ongoing level of staffing of 65 people.

Senator WATERS: How many new staff is that?

Mr Archer: As at the end of last month, we were at 51.

Senator WATERS: So 14 extras, roughly.

Mr Archer: Yes. We have added some staff in the last few weeks, so we're still trending in the right direction.

Senator WATERS: And seeking to fill the other positions, presumably. Do you have any self-initiated inquiries that you're looking at setting up; and, if so, who sets the direction of that? Does the board have any involvement in setting those research priorities?

Mr Archer: Yes. To address the first part of your question: no, we do not have any new self-initiated research projects that are currently underway or that will be getting underway. You've mentioned that we have a significant work program which is dictated by the government's requirements, so that will be where we are focused. In relation to the subject matter or topics that we might look at in self-initiated research projects, that is ultimately something that the members of the authority will decide upon, in consultation with and advice from the secretariat.

Senator WATERS: I think your most self-initiated research report was about carbon sequestration. Just on the NGERS review, one of the key focal points has been assuring that methane reporting and verification is accurate, given all of the methane that we know leaks from not just coalmines but also gas projects. Can you update us on how you are approaching that review in relation to methane reporting?

Mr Archer: Certainly. That was also a point of emphasis that arose out of the safeguard reform negotiations—

Senator WATERS: Indeed.

Mr Archer: that we look at methane measurement and reporting issues to see whether there's scope to improve that. There are a range of approaches that we'll take there in terms of, first of all, establishing a baseline of information around the available reporting or measuring methods that are able to safeguard NGERS reporting facilities at present. The current approach is consistent with Intergovernmental Panel on Climate Change guidelines for emissions reporting. But, within that, there are options that facilities have available to them in terms of the approach. It's about understanding exactly how companies are currently going about measurement of their emissions, and looking at what developments we are seeing globally in technologies for methane measurement. You may be aware that, in recent years, we've seen the emergence of satellite technologies for measuring methane emissions. We will be working out where the authority considers there might be opportunities to improve on current approaches, taking into account information that we receive from speaking with the industry, through the consultation processes, and with others who have an interest in the issue.

Senator WATERS: For clarity's sake, in relation to the opportunities to improve that information, will you be considering different methodologies; is that what you're referring to there?

Mr Archer: Yes; that's right.

Senator WATERS: That industry suggests.

Mr Archer: No, I don't think I'd quite put it that way. But, as part of our consultation process that we'll be undertaking for the NGERS review, we'll be speaking with the industry. That's just one part of the input that we'll be considering in the review.

Senator WATERS: Where will you get the ideas for the new methodologies?

Mr Archer: First of all, we have our own team who will be working on the review. They'll be surveying the literature that is available. They'll be consulting with experts in methane within Australia and globally. They'll be drawing on a range of information sources to inform the recommendations that we might come up with.

Senator WATERS: Thanks very much.

Senator PAYMAN: Mr Archer, last year you produced the Climate Change Authority's first annual progress report. I note that the report states that Australia needs stronger resilience and adaptation efforts to keep up with the changing climate. In your view, what was the policy justification for this recommendation and why is it needed?

Mr Archer: In terms of the justification for the recommendation, we would point to the growing evidence that the climate is already changing; that, despite countries' intentions under the Paris Agreement, temperatures are rising, and it's very likely that we are seeing the impacts of that, particularly in relation to some of the more acute weather-related events that we are seeing both in Australia and globally; and, also, in anticipation of the further impacts that we can expect, given the amount of global warming that scientists are explaining that we can expect over time. We think there is an opportunity for Australia to better prepare for these coming changes and, in that sense, we should be increasing our efforts to better understand the risks from a changing climate and for building our resilience and adapting to that in a fairly comprehensive way.

Senator PAYMAN: To what extent will Australia need to focus on that adaptation?

Mr Archer: We'll probably need further analysis and understanding to be able to answer that question. There is work that the government is undertaking that will seek to answer those questions.

Senator McAllister: Perhaps I can add, Senator, that the budget includes resourcing to allow, for the first time, a national risk assessment. That will look at a range of sectors and attempt to understand what are the key risks arising from a physically changing climate. Relevant to Senator Hughes's questioning earlier, those physical risks are substantial; there has been quite a lot of work done on them by other levels of government. For example, states and territories have commonly sought to understand the risks facing them; industries, particularly where there are large infrastructure assets, have sought to understand the physical risks of climate change to their operations. Of course, the Australian public are acutely aware, given the last three or four years, when they've been confronted by a range of natural disasters, that a changing climate presents some very significant risks, both to human life and to property and, more broadly, to the way that settlements in Australia operate. The national climate risk assessment will allow us to understand those for the first time at a national scale and will feed into a national adaptation plan.

Senator PAYMAN: Thank you, Minister. Mr Archer, would you like to expand on what CCA's reaction is to that announcement regarding the funding for a national climate risk assessment?

Mr Archer: It's not something that we've specifically discussed within the authority. When you look at what the authority have said in the past and what we have said in our progress report, it's probably a very welcome development. As part of our reporting on government's progress in responding to climate change, it's something that we will continue to have an interest in and monitor.

Senator PAYMAN: Finally, before we share the call, how can the department make the climate risk assessment a success; and are there any particular learnings from other countries and jurisdictions?

Ms Evans: We will definitely be looking at what the UK has done, in particular—they've made a lot of progress—and what New Zealand has done, and a number of other countries who have made some more progress on these kinds of issues in the past. We will take all of that into account as we design our approach. We're also building on the scoping work that's been done here over the last six months, and that's setting us up really well to work through the Australian Climate Service to deliver a good risk assessment.

CHAIR: Senator Rennick?

Senator RENNICK: My question is: you review and make recommendations on the Carbon Farming Initiative and Emissions Reduction Fund. I'm curious to know what exactly—I'm aware, for example, that the mulga country in south-west Queensland is basically locked up and that's considered carbon farming—other means are out there to farm carbon? How else is carbon farmed?

Mr Archer: A starting point for answering that question would be to look at the methods that are available under the Emissions Reduction Fund. There are several, so I'll seek to summarise them. Clearly, where we're taking activity for the express purposes of regenerating previously cleared land—any activity that is promoting the growth or regrowth of, to put it simply, trees—that is a form of managing carbon on the land. There are also methods relating to the management of soil carbon and promoting a greater store of carbon in soils.

Senator RENNICK: How do you do that? How do you store more carbon in soil?

Mr Archer: I'm not a specific expert in these matters, but there are ways—

Senator RENNICK: You are the CEO; you're supposed to be advising on this.

Mr Archer: That's right, and I probably have some support here from people who can help me with this.

Senator RENNICK: By all means.

Mr Archer: Generally speaking, with the way that you manage the soil, as part of your farming operation, how you are turning that over and how you are rotating your crops, these sorts of issues in terms of your land management will affect the amount of carbon that is stored in the soil.

Senator RENNICK: Coming back to mulga, when the mulga is allowed to grow uncontrolled, it actually ends up killing the grass underneath it. The soil seals and the water runs off, causing erosion. Are these impacts taken into account when the mulga gets locked up?

Mr Archer: I would have to take that on notice. For the purpose of the Emissions Reduction Fund and how that's currently operating, that might be a question that's better addressed to the Clean Energy Regulator.

Senator RENNICK: You're here to recommend on carbon farming initiatives. I would have thought understanding the balance between tree life and grass life is very important. With soil management, as you just said, and the grasses that grow underneath the mulga or where the mulga is not there and you have open fields of grassland—grass itself generates carbon offsets, too, and it grows much faster as opposed to, say, carbon in mulga that's locked up and stops being a net carbon absorber after a certain period of time. You don't have any understanding of that at all?

Mr Archer: What you're saying makes sense in principle. Within the authority, right at the minute, it's not an issue that we have been focusing on. Certainly, under the—

Senator RENNICK: Okay; it's an important issue to the people in south-west Queensland who rely on the mulga and the management of their pastoral lands, when their neighbours lock it up and basically the farm will become overrun with pests because the farmers move out; they sell up to the carbon farmers. This is a serious issue. My understanding of it is that most of the carbon offsets come from south-west Queensland; it punches way above its weight in terms of offsetting carbon in this country. I think it's something that you should be around, if your job is to advise on it.

Mr Archer: I'm not at all suggesting that it's not a serious issue. I don't recall it being an issue that has been raised with us previously; but, to the extent that there are serious concerns, we're very happy to talk to people to better understand those concerns.

Senator RENNICK: I'll reach out; that's good to know. In regard to the safeguard mechanism, what's your recommendation on that? My understanding of this safeguard mechanism is that the big companies have to reduce their carbon emissions every year and, if they don't reduce them by a certain amount, they'll pay penalties. How are you measuring that carbon or CO₂ reduction?

Mr Archer: Those companies are required to report their emissions through the NGER reporting framework, the National Greenhouse and Energy Reporting system. We will take the information that the companies are reporting, to analyse the effects of the safeguard mechanism.

Senator RENNICK: Will you be auditing those reports? How would some of these companies know? They may not be in the business of measuring CO₂, so how are they expected to get the knowledge to know just how much CO₂ they're reducing?

Mr Archer: The administration of the NGER Act is one that—

Senator RENNICK: That's a heavy compliance cost, as well as the actual cost, if they don't reduce. How are they expected to—

Mr Archer: Again, these are questions that the Clean Energy Regulator would be better positioned to respond to. Generally speaking, there are measurement methodologies which are available for companies to use. There are carbon service providers—that is probably not quite the right term—in the market who can assist companies to meet their NGER reporting requirements.

Senator McAllister: Senator Rennick, perhaps I could add that the NGER reporting arrangements are longstanding. The evidence earlier from the CER—I'm not sure whether you were still in the room at that time—was that this is a mature regulatory framework; and, indeed, more broadly, the safeguard mechanism has been in place for some time. So the facilities that are covered at the moment are already in the practice of measuring their emissions.

Senator RENNICK: Okay. You may be able to tell me, Minister: have we modelled the impact of how many companies will be forced to go overseas because they can't reduce their CO₂ emissions? Do we have some idea of what the economic risk is of companies going offshore rather than remaining here?

Senator McAllister: These issues were canvassed extensively yesterday. The CER can comment on their role, to the extent that they have one. In fairness to the officials who are before you now, they are questions that were appropriately addressed by previous witnesses. But, please, Mr Archer—

Senator RENNICK: I accept that. But it says on their website that they do make reviews and recommendations on the safeguard mechanism, so I would have thought that they would be reviewing the impact of this, in addition to—

Senator McAllister: I'm just providing some context, Senator Rennick. Mr Archer may well have some additional information.

Mr Archer: Certainly. Generally speaking, when it comes to the safeguard mechanism, the authority has recommended for some time the approach of reducing carbon facilities baselines as a means to drive emissions reductions in that part of the Australian economy. In a broad sense, the steps or the reforms that the government is undertaking with the safeguard mechanism are consistent with that advice. Certainly, we agree that we need to be mindful of the risk of what we refer to as carbon leakage, which is where companies might relocate offshore to continue their operations, to avoid having to comply with the safeguard mechanism and, in effect, you don't achieve a reduction in emissions. There are mechanisms built within the reform scheme which are designed to address that, in the form of financial assistance that will be provided to emissions intensive facilities to assist them to adopt new technologies, and there is some relief in the form of discounted baselines under the safeguard mechanism. Those arrangements are built into the reforms, and we in the authority will have a role in advising on the impacts that the scheme is having, and whether it's achieving its objectives. It will be too early for us to do that this year because the scheme will have only just begun, but that will certainly be a part of our reporting in future years.

CHAIR: Senator Waters?

Senator WATERS: Obviously, we're really wanting the CCA to be a strong and successful body, and we're pleased that you've been allocated some more staff in the recent budget, but it is concerning when board members have direct or indirect interests in the coal and gas industry and carbon offset markets. I'm interested in whether any other country has a chair of an independent climate agency that is a former fossil fuel executive, to your knowledge.

Mr Archer: I would have to take that on notice; I just don't know.

Senator WATERS: I have also seen a recent declaration that one of your board members, Ms Smith, was doing contract work for Santos last year. Does she still do paid consulting work for APPEA—the gas industry peak that is, itself, actively opposed to meaningful action on the climate crisis?

Mr Archer: I will take that on notice, just to ensure that I get it right, but at present, not to my knowledge.

Senator WATERS: Given the sad prevalence of members with an interest in carbon offset markets, can you state whether CCA has a view on the benefits of offsetting versus stopping emissions directly?

Mr Archer: Yes, because that is something we have addressed in more than one of our reports. It is also built into the strategic framework we have published on our website, which is to say that, first and foremost, we should be doing everything we can to directly reduce emissions. There are ways we can do that: as we increase the take-up of renewable energy we can electrify as much activity as we can; so fuel-switching. Being more efficient in our use of energy will also contribute significantly. There is a role for offsetting. As we think about moving to net zero over time, increasingly we will think about offsets as they relate to removals of carbon from the atmosphere because, as we aspire to each sector in the economy reaching net zero, a particular sector is not going to be in a position to earn credits for abatement and then sell them to other sectors when it has its own goal of achieving net zero over time. We think there is a role for offsetting. It creates the conditions that can contribute to achieving lower cost abatement, achieving abatement where costs are lowest earlier, and in that sense potentially allowing you to achieve more abatement over time. As we think about getting to net zero, increasingly the focus will need to be more on carbon removals and sequestration—both biosequestration and geosequestration.

Senator WATERS: Your act says that an authority member:

... must not engage in any paid employment that conflicts or may conflict with the proper performance of his or her duties.

Has the CCA ever sought legal advice on any of the current board members?

Mr Archer: Have we sought legal advice with respect to that provision of the act? No, I don't think we have. We have consulted with the department in the form of seeking probity advice for how we manage conflicts of interest.

Senator WATERS: For current board members?

Mr Archer: Correct; yes.

Senator WATERS: What was the result of that consultation?

Mr Archer: That was with respect to our review of international offsets, which we undertook last year. When we published our review report, we published a tranche of probity material which set out exactly how we went about managing conflicts, which included the preparation of a conflict-of-interest management plan as it related to the review of international offsets. The information is contained there. In terms of summarising the key elements

of that, as a matter of course we maintain a register of interests which members will provide updates to at each authority meeting. We have meetings generally every six weeks, so that register is maintained. Where there is the possibility that there is a conflict of interest on a matter before the authority, members will determine whether they consider that to be the case and determine how that is to be managed.

Senator WATERS: The members themselves will decide how they will manage their own conflict; is that what you were just saying?

Mr Archer: The idea is that, once a member has identified a conflict and it is confirmed that is something that needs to be managed, the remaining members determine the approach.

Senator WATERS: Without the involvement of that particular implicated member?

Mr Archer: That's right. That is what is set down in how we operate.

Senator WATERS: Did that conflict-of-interest management plan pertain just to the international offset review, or is that your broader conflict management plan?

Mr Archer: It was a management plan that we put in place for the review of international offsets. It comprised elements which are ongoing in terms of how we manage conflicts of interest. We have a document within the authority which we refer to as the 'authority charter', which describes in general terms how the members go about conducting the business of the authority and authority meetings. This is a document that we will shortly be publishing on our website.

Senator WATERS: It is not already published?

Mr Archer: No, it is not currently published.

Senator WATERS: Why the delay in publishing it? You have been around for a while. Is the document new?

Mr Archer: It is a document that has been around for some time. It is not a document that we were ever required particularly to publish.

Senator WATERS: Sometimes it is good to publish these things, even if you are not required to.

Mr Archer: That is ultimately the decision the members have recently taken. It will be an option.

Senator WATERS: What was the reason for that change of approach? Did something happen?

Mr Archer: It would be fair to say that with what might be characterised as the restoration of the authority and its role in advising government on climate change targets and progress to targets, we are mindful of an increased level of interest in the activity of the authority and also interested in continuous improvement in how we go about doing things.

Senator WATERS: Was there a disclosure that led to the discussion to then reveal the charter which addresses conflict matters?

Mr Archer: No.

Senator WATERS: What was the genesis of the conversation?

Mr Archer: The charter provides for an internal review; so for members to review the charter. As part of the consideration of the review of the charter, the question arose as to whether it was a document that should be published.

Senator WATERS: When was that document going to be published?

Mr Archer: The decision was taken at the last authority meeting for that to happen. We haven't set a date that we are aiming for. Within one to two weeks we should have that up on our website.

CHAIR: Thank you for your time and your contribution. We will now release you and call the department to the table.

Proceedings suspended from 12:23 to 12:27

Department of Climate Change, Energy, the Environment and Water

CHAIR: I welcome officers from the Department of Climate Change, Energy, the Environment and Water. Outcome 2.1 is: 'Conserve, protect and sustainably manage Australia's natural environment through a nature positive approach'. Mr Fredericks, do you have any opening commentary?

Mr Fredericks: No.

CHAIR: Senator Duniam.

Senator DUNIAM: You asked some important questions around all matters environmental. If I could start with the area of Regional Forest Agreements, which are within the scope of what is being discussed in the post-

Samuel world. The Samuel review talked about increasing the level of environmental protection afforded in Regional Forest Agreements. Where are we headed with regard to those standards? What level of protection might be afforded through a future-looking RFA?

Mr Knudson: At this point, there is a process of engagement occurring with a set of stakeholders on the proposed standards. Once those standards have been settled, we expect that they will be put to the public more broadly, along with the draft legislation at the back end of this year. That then gives a basis to deliver on the commitment that's in the Nature Positive Plan to apply the standards to the Regional Forestry Agreements.

Senator DUNIAM: So the ultimate aim is to have a national standard applied to RFAs; so some standardisation of how these things are dealt with. Minister, what is your view of native forest logging?

Senator McAllister: It is a very general question, Senator Duniam.

Senator DUNIAM: A general answer would be fine, then. Do you support it? Do you think it is outdated, and should go?

Senator McAllister: Australia's domestic timber requirements are not able to be met by plantation logging at the moment. As a nation, we will continue to make investments in our nation's environmental and commercial interests. I hope that all senators would seek to have a sustainable industry. The reforms to which Mr Knudson has just spoken seek, as he has indicated, to establish a standard that can apply where logging operations are underway.

Senator DUNIAM: So you do accept, as a minister in this government, that native forest harvesting, the native forest industry, does have a role to play. I take that from what you have said. I don't want to verbal you. Broadly speaking, I think that is what you said. You did acknowledge that it needs to be sustainable. A decision has been made today in Victoria to accelerate the shutdown of native forest harvesting in that state, which is a state decision. I don't expect you to commentate on that decision. I am not going to ask any officials about that in general, although I might ask about what communication was had. They are applying a \$200 million bailout package, taking support for the native forest sector in Victoria, as I understand it, to \$875 million of borrowed moneys to shut down an industry in an accelerated fashion, which I don't think is good use of taxpayers' money.

Putting that to one side, that is a state taking a decision on an issue that we, at this level of government, seem to now be seeking to apply a national standard to—or we hope to, post the Samuel review. Has the department done any forecasting or modelling around what impact a decision in one state, to cease operating there, might have on the environmental outcomes of native forest harvesting in another part of the country?

Mr Knudson: No, Senator. You would be aware that the regional forestry agreements are principally the domain of the Department of Agriculture, Fisheries and Forestry. That's where the questions along that line should be directed, I would suggest.

Senator DUNIAM: In terms of environmental standards, though, which we are contemplating a revision of under the Samuel review, what response might be forthcoming on that? You are consulting on that. Has there been any work done on what a decision like this, which is to cease and ban a particular form of harvesting, might have on the environmental outcomes in another state if more pressure were applied to that sector?

Mr Knudson: No, Senator. I can ask my colleague Mr Tregurtha to comment on this in more detail, if it's helpful. We have a set of standards that we are working to develop that will then kick off engagement with the sector, in terms of how those can be applied within that sector. We haven't got to that point yet. We certainly haven't done any modelling along the lines which you are suggesting.

Senator DUNIAM: Will you do modelling or not, do you think?

Mr Knudson: That will depend on what we need to inform those discussions.

Senator DUNIAM: Has industry asked this department to do any modelling in the lead-up to consultation?

Mr Tregurtha: No, is the short answer. I should say that industry have reached out to us. They are incorporated in a number of our stakeholder reference groups, as we seek to develop the standards which will eventually be applied through the process that Mr Knudson described.

Senator DUNIAM: With regard to the consultation on and design of this national standard, would the ultimate outcome of what might happen here be to require a complete rewrite of all RFAs, once this work is done?

Mr Knudson: I don't believe that's been settled yet. What we are trying to do at this point is develop the standards. Then we'll have to engage with industry, as well as the Department of Agriculture, Fisheries and Forestry, to figure out how those are best applied and what the consequential impacts of those standards being taken into account would mean.

Senator DUNIAM: RFAs are exempt from the EPBC Act as they stand today. There is no oversight at all for this department around decisions made under an RFA at this point in time. Is that right?

Ms Kennedy: You are correct. Compliance with the RFAs is undertaken by the Department of Agriculture, Fisheries and Forestry. What is also an important distinction to make is that the statutory documents, like recovery plans and conservation advices, are required under RFAs to be applied. That compliance with those documents is a matter for the state to be undertaking and is oversighted by the Department of Agriculture, Fisheries and Forestry.

Senator DUNIAM: Are those conservation plans something that you set a standard for, and they then go and fill in the details with respect to whatever specifics there are in their state? Is that how that works? Then they can apply through the department of ag?

Ms Kennedy: Recovery plans and conservation advices are documents that are developed for listed species under the EPBC Act. Where those statutory documents apply in an RFA area, they are to be applied in that RFA area under the RFA Act, as negotiated. So it is not true to say that none of the documents that apply under the EPBC Act can go on to apply under the RFA.

Senator DUNIAM: Who drafts those recovery plans and conservation advices? Is it the relevant state?

Ms Kennedy: The Threatened Species Scientific Committee are responsible for the development. The department is involved in that, and also independent experts. It goes through the TSSC. Then the minister for the environment makes the decision on those statutory documents. How they flow through under the RFA Act and under the agreed RFAs is a matter for the Department of Agriculture, Fisheries and Forestry—how they're then applied.

Senator DUNIAM: So the last point at which the minister for the environment sees anything relating to these documents and their application is when they're signed off. Compliance is then a matter for the state, in conjunction with the Commonwealth Department of Agriculture, Fisheries and Forestry.

Ms Kennedy: That's true. But as they are updated, so they apply under the RFA. Does that make sense? I am not sure if I am explaining myself.

Senator DUNIAM: There is nothing straightforward about environmental laws in this country. As I try and get my head around this, I don't envy all of you, who have to try to find a way to reform this. The decision made in Victoria today to accelerate the shutdown of an industry has a notionally positive impact on species covered by these recovery plans or conservation advices.

Ms Kennedy: Conservation advices.

Senator DUNIAM: That is the catchy title they seem to have attracted. What feedback is there? Once these documents have been prepared by the entities or individuals within this agency, what touchpoint is there again for this to be dealt with, given the revised circumstances—that is, an industry shutting down?

Ms Kennedy: There are requirements for the statutory documents to be updated under the EPBC Act, not specifically in relation to the RFA, though. Some species are endemic to RFA areas. The changed circumstances could have a positive effect. Changed circumstances in those areas, such as a bushfire or changes in forestry practices, could have a positive or negative impact, which could be taken into account in a subsequent update to that statutory document. What you might be asking me is: how does DAFF monitor compliance with those statutory documents?

Senator DUNIAM: No; that's all right. I wondered whether this department had any input, beyond the update points in time. I understand that DAFF manage the ongoing compliance. I understand that distinction. How often are these advices and plans updated?

Ms Kennedy: It depends. Recovery plans are due for sunset every 10 years. They are usually updated within that time frame. There are circumstances where that is deferred. Conservation advices are updated more regularly sometimes, as are recovery plans as well, when there is a need. There is not one set time frame where those statutory documents are always updated. When more information comes to light—

Senator DUNIAM: Like this.

Ms Kennedy: Possibly like this, but also the bushfires. If a major bushfire event went through, that would be an important thing to consider in updated statutory documents as well.

Senator DUNIAM: Through a major event review, like we had after the Victorian bushfires. But that's a DAFF thing; right?

Ms Kennedy: That's right. That's separate. What I am talking about with the recovery plans and conservation advices is a framework that exists under the EPBC Act which is picked up for the purposes of the RFAs to ensure that, despite the fact that there is an exemption for RFAs, those important statutory documents still continue to apply there. I can see you are looking at me like I haven't answered your question. I am sorry.

Senator DUNIAM: It is just a noodle nation, isn't it? Back to the broad question around the reforms: what sort of a time frame are we putting on this now, in terms of developing the standard? Potentially, if the end result is that we completely remove the exemption that the RFAs have from the EPBC Act, what time line or trajectory are we on?

Mr Knudson: As I said in my earlier response, the time line remains the same.

Senator DUNIAM: Can you remind me of what that is?

Mr Knudson: We are developing the standards currently. We are engaged with a number of stakeholders, including the Australian Forest Products Association. Those standards, along with the legislation, we expect to be out in public in the second half of this year.

Senator DUNIAM: Which isn't far away.

Mr Knudson: Indeed.

Senator DUNIAM: That then gives us the public consultation component to occur in the second half of this year. Flowing on from that is certainty to industry, to community groups, to environmental NGOs et cetera. What's the time frame from there, once you've done your public consultation in the second half of this year?

Mr Knudson: That would be a matter for parliament, in terms of how quickly they consider the legislation.

Senator DUNIAM: I wish the parliament could set the legislative agenda. Minister, when do you think the government will, post this public consultation, kick into play locking in certainty around whatever changes might arise out of the process we're about to embark upon?

Senator McAllister: We will go to public consultation. We expect there will be broad-ranging interest in it. As part of that, I imagine we will also receive feedback from other members and senators about the approach that we are proposing. We would hope to gain support from all members and senators—senators in particular—in passing the legislation as swiftly as possible.

Senator DUNIAM: Again, given that it is a matter for government, is there an intent from government to have it passed by a certain date or quarter of any of the coming calendar years, Minister? I don't want to put the officials in a spot of bother.

Senator McAllister: That is all right, Senator Duniam. I will confess at this point that, only moments ago, I managed to break my folder.

Senator DUNIAM: I hate when there's a folder break.

Senator McAllister: Mr Knudson might be able to give you some advice about what has been communicated publicly on this question to date.

Mr Knudson: I am commiserating with the minister. The answer to your question, Senator, is that no statement has been made with respect to the expected timing of the passage of the legislation. What we're getting to is broad consultation. The budget contained a number of initiatives that helped put in place the framework funding for an EPA, Environment Information Australia. A number of the pieces are coming together which then will come to life through the legislation. There is no specific time frame.

Senator DUNIAM: You talked about passage, in completion, when it becomes law. What I am interested in is when this will be brought to parliament.

Mr Knudson: The government has said, to date, that in the second half of the year the standards and the legislation will be made public. There is no further statement as to the timing of consideration by parliament at this point. As the minister mentioned, there will be a public consultation process et cetera which will then inform the timing for the next steps.

Senator McAllister: It is fair to say that we would release the exposure draft this year and hope to introduce it later this year or early in the next year.

Senator DUNIAM: Perfect. That is the information I was after. Thank you very much for that. With regard to the decision in Victoria today, do we know whether that will have any impact on the 30x30 conservation aims of this government?

Mr Knudson: We don't at this point, in the sense that the announcement just came out. I would say, though, that we are looking at different ways that jurisdictions, including states and territories, can contribute towards

30x30. It will be a matter for the Victorian government as to whether they wish to include part of what has currently been forestry activities in the national reserve estate. That will be a matter for the state government.

Senator DUNIAM: On the 30x30, I presume that, as part of everything you are doing, there are discussions with state and territory environment departments around what impact decisions they make will have on the Commonwealth's aims for reserves, including understanding what land area it might be able to be put into. We went through that in October, or whenever it was that we had that estimates session. In the conversations with the Victorian government, has the issue of the cessation of native forest harvesting ever come up in your discussions around the target set by the Commonwealth government, 30x30?

Mr Knudson: Not that I'm aware of. I will turn to Dr McMorrow to see whether she has anything to add.

Dr McMorrow: We've had general conversations with our Victorian government colleagues around the 30x30 target and generally about the commitment from Victoria to cease native forestry. At the time, it was by 2030, noting that today's announcement brings that forward.

Senator DUNIAM: As part of these general conversations, was there ever reference to, or information provided by the Victorian government around, how much land area they're looking at being able to secure into reserves as a result of their cessation of native forest harvesting?

Dr McMorrow: We have had conversations with all of the states and territories about their planned additions to the reserve estate that would contribute to 30x30.

Senator DUNIAM: With regard to Victoria, given the decision today, do you have any detail around how many hectares we're looking at? The policy hasn't changed, from a Victorian government point of view; they have just brought it forward. I presume there is some data or detail there around that which would enable this department to factor that into their thinking on the 30x30.

Mr Knudson: With respect to where the environment ministers have landed at this point, there is an acknowledgment that there is a national objective of 30x30. We'll work collaboratively with them as we update our national biodiversity strategy and action plan. In that, we'll be looking for states and territories to come forward with what contributions they would like to make towards the achievement of 30x30. We expect, as I said earlier, that Victoria will consider whether they want to contribute part of what's laid out here towards that, but that will be a matter for the state.

Senator DUNIAM: They haven't provided detail yet?

Mr Knudson: We haven't gone through a formal process where we're asking what the contributions are from each jurisdiction. All we have had a conversation about is the national target, and we have said that we will work with them to build in commitments by each jurisdiction as they see fit.

Senator DUNIAM: No formal; any informal? We talked about general conversations. They have not indicated at all in what way the cessation of native forest harvesting might contribute to 30x30?

Mr Knudson: Certainly not in any of the conversations I've had.

Senator DUNIAM: Dr McMorrow?

Dr McMorrow: Not in relation to the cessation of native forestry. There is the media release today from the Victorian government, which notes there are 1.8 million hectares in that native forest estate. That's all we have at this point. That announcement only happened today.

Senator DUNIAM: Without that detail, has there been a factoring in; do you project what you might get from each state—revisiting what we discussed in October? There was an inventory that we went through. Are these 1.8 million hectares part of that or will that be a bonus?

Mr Knudson: At this point we have been focused, based upon the commitments that the government has made and the funding that is there, on what we can deliver towards 30x30 as a Commonwealth government—a significant focus on Indigenous protected areas to help deliver towards 30x30. The next step, as I said earlier, will be to work with the states more closely to quantify and make quite specific what contributions they feel they can make.

Senator DUNIAM: I am happy to cede the call for the moment, cogitate on what you have told me and come back to this issue later.

Senator WATERS: I have some questions about the Middle Arm project. In the last estimates we talked about the precise proposed users of the Middle Arm site. The department was keen to mention that green hydrogen was envisaged but wouldn't stipulate any other potential user. Can you list other industries that will utilise the site?

Senator McAllister: At the last estimates we also made the point that the engagement with Middle Arm is principally via the infrastructure department. The discussion around the project is largely led by them. There are, of course, circumstances where, from an environment regulator perspective, the department may have a role. I will ask Mr Knudson to talk through that, to establish that. It's relevant to the subsequent questions on which you might seek information.

Senator WATERS: It is, indeed; thank you. I do have some questions about the dates pertaining to the strategic assessment. I am feeling fairly confident that the questions I ask will be relevant for this department, but we will have a go and see how we go. Notwithstanding the infrastructure department's involvement—I am keen to know about that later on—can you please articulate for me the other industries that you're envisaging will utilise the site?

Mr Knudson: To go to the point, what we'll be looking at, under a strategic assessment, is what type of actions can occur according to that strategic assessment. That will infer certain types of activities which may be associated with industries. I'll leave it to Mr Edwards to walk through the details of the class of actions being considered.

Mr Edwards: It's correct that the department of infrastructure—I should clarify that it is the Northern Territory department of infrastructure—

Senator WATERS: DIPL is their acronym; is that right?

Mr Edwards: They are the proponent of the strategic assessment. I have a colleague who can talk to the exact nature of the project. I will give you some information about exactly where that is up to, if that is useful.

Senator WATERS: I do have questions about that. I want to start with: what industries are envisaged to use the site?

Mr Edwards: I'll pass to Ms Calhoun.

Ms Calhoun: The strategic assessment is looking at supporting low emission petrochemicals, renewable hydrogen, carbon capture and storage industries. That is what is being looked at under the strategic assessment at this point.

Senator WATERS: Thank you. I have some FOI correspondence. It is No. LEX72786, which is the Department of Agriculture, Water and the Environment—obviously, your predecessor department—advising your minister for the environment. I'll read out the first point. It says:

The Northern Territory government is seeking a strategic assessment for the Middle Arm sustainable development precinct to provide a world class hub for gas production and manufacturing by 2030 ...

Can you clarify for me that it is in fact a proposed facility that will be used to expand gas export?

Ms Calhoun: That would be captured under the low emissions petrochemicals, where they are looking at potentially doing ethylene, urea and ammonia. The assessment will look at those industries utilising that hub.

Senator WATERS: In the last estimates you mentioned that Sun Cable was one of the proposed operators or users of the site. Are there any other companies that you're aware of that are showing interest in utilising the site at this stage?

Ms Calhoun: As it's a strategic assessment, the proponent is the Northern Territory government. There is interest from a number of industries, but, with respect to the specifics of that, we're not engaging with those industries directly. It's more about the activities or the actions that will be undertaken in that area.

Senator WATERS: I appreciate that you are not directly engaged, but do you have an awareness of any other companies that have expressed interest in using the site?

Ms Calhoun: No.

Senator WATERS: Can I go now to the dates? I've read through the section 144 assessment. Correct me if I am wrong: the terms of reference for the EIS are open until 10 June; is that right?

Mr Edwards: The draft terms of reference were consulted on between May and June 2022. That was last year. It attracted feedback and comments. The next stage of that process was for the Northern Territory to address those comments and forward the draft terms of reference to our minister for consideration.

Senator WATERS: Has that happened yet?

Mr Edwards: It is with our minister.

Senator WATERS: When did the minister receive it?

Mr Edwards: I don't have that date on hand. I will take it on notice.

Senator WATERS: Can somebody else look that up while we're still talking?

Mr Edwards: Sure.

Senator WATERS: There is not a statutory time frame for how long the minister has to either tick off or require more for the terms of reference; is that right?

Mr Edwards: No, there's not.

Senator WATERS: Do you have an anticipated time frame for that?

Mr Edwards: I can't speak for the minister. We would expect that the forward process would be the minister's consideration in the near term. That would then guide the Northern Territory in their next steps. Those terms of reference help them to develop their environmental impact statement and their plan or program that will be endorsed. The expectation then is for public consultation to occur later this calendar year.

Senator WATERS: On the EIS?

Mr Edwards: Yes, and the plan. Again, that is subject to decision-making time periods.

Senator WATERS: The NT government is anticipating releasing the EIS later in the year. Assuming the terms of reference are ticked off, have they given any clarity on the date that they expect to—

Mr Edwards: No.

Senator WATERS: It's a very quick turnaround for an EIS, I might say, if the terms of reference are to be approved relatively soon.

Mr Edwards: They are already working on some of the supporting documentation. They obviously have a lot of the science and the development work. The piece where it's quite hard to pin down a date is that there will be an iterative process once we issue the terms of reference and they further develop their EIS. They will engage with us. We'll give advice along the way. They may need to undertake further work. It is quite hard to pin down an exact time frame for the consultation.

Senator WATERS: How long will it be out for public comment? I can't remember the statutory time frame for draft EISs. Is it 30 days?

Ms Calhoun: A minimum of 28 days is what will be agreed by the NT government and ourselves.

Senator WATERS: What happens federally then?

Mr Edwards: Again, comments would be made on that EIS. The proponent would be required to respond to those comments. With the final forward program, they would come to the federal minister with the program, the EIS, who would then consider endorsing those different components before the strategic assessment is enlivened.

Senator WATERS: Is that what is called the adequacy review?

Mr Edwards: Yes, there will be an adequacy review; that is right.

Senator WATERS: That's the process you have just described?

Mr Edwards: Yes.

Senator WATERS: Senior Larrakia traditional owners have said that they were not consulted about the Middle Arm project, and they raised their concerns about the project and the lack of consultation with Minister Plibersek in August last year. What action has your department taken to ensure that Larrakia views, including an assessment of the project's impacts on cultural values, will be included in the EIS?

Mr Edwards: Part of the process for any proponent is that we require them to follow adequate consultation. We have guidelines to assist them in that. Part of what they need to do is respond to how they have addressed individual comments from different stakeholder groups. They would do that at the terms of reference stage and they would do that additionally at the environment impact statement stage, to follow. I would expect that would be an ongoing process. Again, if our minister is not satisfied that appropriate engagement has occurred, it would be open to her to ask that additional consultation occur.

Senator WATERS: Presumably, given that the terms of reference are now out for comment and have now been sent to the federal minister, are you satisfied that the guidelines for First Nations consultation were appropriately followed in relation to the terms of reference part of the process?

Mr Edwards: We would be satisfied that the Northern Territory has provided all the relevant material to our minister. That would now be considered by the minister.

Senator WATERS: So she might still, at this stage, decide that the guidelines or the cultural consultation was not adequate and seek further information?

Mr Edwards: It is open to the minister, yes.

Senator WATERS: Will consultation with traditional owners be part of the adequacy review when the EIS comes to the minister? Again, if it is deemed to be inadequate, would the release of the EIS be deferred while further consultation is undertaken?

Mr Edwards: It is possible. Again, the guidelines that we have are really about best practice engagement. Proponents at different stages need to demonstrate that they have undertaken the appropriate engagement, taking comments on board and being able to demonstrate how they have responded to comments.

Mr Knudson: I expect you already know this, but the guidelines as they exist are generic; they apply to stakeholder engagement writ large. There isn't a specific element with respect to traditional owners. That is also why we have committed, in the reforms to the act, to have a stand-alone First Nations engagement standard; so that we clarify the nature of best practice engagement with First Nations.

Senator WATERS: There are petroglyphs located at Middle Arm. I am told it is the last remaining rock art in the entire Darwin region. Does pushing ahead with the strategic assessment of Middle Arm before National Cultural Heritage Laws are enacted risk another Juukan Gorge situation?

Mr Edwards: I don't have a view on that, other than that strategic assessments are a good tool which allows you to consider the entire impacts of the proposed precinct. The expectation is that, again, Northern Territory would look at all the dimensions of the area that they will be impacting.

Senator WATERS: Given that we don't have any National Cultural Heritage Laws federally that are any good—in my opinion—you are saying that in the process you are undertaking it will be the Northern Territory's problem to sort that out?

Mr Edwards: No.

Senator WATERS: Is there a role for the federal minister and the cultural heritage aspects prior to us having decent cultural heritage laws?

Mr Edwards: What I am saying is that the proponent puts forward the plan and puts forward the proposed impacts. It is up to them to describe to the minister how they have dealt with necessary impacts appropriately.

Senator WATERS: To the Territory minister, or to the federal minister?

Mr Knudson: It starts absolutely with the Territory minister in this case. As you can imagine, they have a broad range of responsibilities with respect to environmental and cultural impact analysis. This specific question absolutely would sit in the first instance with the Northern Territory government.

Senator WATERS: Just in the first instance? Is there a second instance?

Mr Knudson: There is, in the sense of making sure that whatever process has been gone through is adequate for the Commonwealth as well. In the first instance, the organisation that needs to undertake that is the proponent—in this case, the Northern Territory government. Therefore, it is beholden on them in the first instance to do that engagement in a robust and appropriate way.

Senator WATERS: What lens is put federally on the cultural impacts of the potential destruction of the last rock art in the Darwin region at the moment?

Mr Knudson: In terms of the way the act is currently prescribed, it is with respect to National Heritage and World Heritage and Commonwealth Heritage where those are listed for cultural reasons of First Nations.

Senator WATERS: If the rock art has been listed?

Mr Knudson: If the state has not, then that is not a relevant consideration for the Commonwealth; we can't take that into account.

Senator WATERS: Is the rock art listed on the National Heritage List or any of those other lists?

Ms Calhoun: In the precinct that we are looking at for the strategic assessment there is no Commonwealth-listed process.

Senator WATERS: Hence my question: is this whole thing premature prior to us having national cultural heritage laws? Are you concerned that we might repeat what happened at Juukan Gorge? What is being done by the minister to avert that?

Mr Knudson: The other piece we need to acknowledge is that there is existing legislation, the Aboriginal and Torres Strait Islander Heritage Protection Act, which enables any individual in the country, if they believe there is an imminent threat to First Nation's cultural heritage, to appeal for consideration by the Commonwealth minister. That stands as a right currently.

Senator WATERS: How does that interact with the strategic assessment?

Mr Knudson: They are two pieces of legislation that are utterly separate.

Senator WATERS: So the strategic assessment doesn't obviate the ability of an applicant under that other act to seek an injunction to a court?

Mr Knudson: It does not limit the ability of a citizen, a First Nations member, et cetera, to seek such an action.

Senator WATERS: Should we not take a more proactive and precautionary approach to protecting our cultural heritage, and should not the minister actively turn her mind to these matters and seek to protect this site prior to it being destroyed or prior to leaving it to the local TOs to try to use some other act when this strategic assessment process is under way?

Mr Knudson: We are not going to sit here passively, having heard your commentary and your concerns. We also want to see a robust process undertaken by the Northern Territory government. I will give you an undertaking that we will engage with the Northern Territory government on the basis of your intervention, and make sure that it is passed through very explicitly as a set of expectations to that government.

Senator WATERS: I hear that. It is just very difficult when they are the proponent, as well. It is the quintessential fox in charge of the hen house. I don't share your confidence that they will put themselves through the ringer and make sure they protect cultural heritage.

Senator McAllister: The government is committed to law reform, both in relation to the EBPC Act and in relation to cultural heritage. I imagine that senators may seek to ask questions about that reform process at some later point in the program. The minister is keenly aware that it would be better to deal with these matters earlier, particularly in relation to cultural heritage, and to bring contemplation of those matters forward, and is working to codesign a reform process, as you know. I raise this because your commentary, or the tone of your questioning, suggests that the minister is not aware of those things. The government is aware of those things. It is on that basis that both of these legislative reform processes have been proposed. But Mr Knudson is right: at the moment the minister must work within the law as it presently exists, and is seeking to do so in ways that means she complies with her legal obligations.

Senator WATERS: Has the minister considered pausing the strategic assessment process until such time as the National Cultural Heritage Laws can be reformed? As you have said, your government is committed to doing that.

Senator McAllister: You will understand that, while a decision is before the minister, I am not in a position to provide commentary about her decision-making.

Senator WATERS: Have any of the departmental officials advised on options legally for pausing a strategic assessment in order that the parliament might consider laws for National Cultural Heritage protection? Have you provided, or been asked to provide, information about options to pause a strategic assessment?

Mr Edwards: We haven't. At this point in the process the impact assessment is yet to occur. We are not at the point yet of even understanding what the potential impacts would be. We have the terms of reference. That will guide the work that Northern Territory needs to do. There is a further process that will be subject to public consultation, and then a point where the minister can consider whether there are appropriate impacts, appropriate mitigation avoidance and all the normal measures.

Senator WATERS: But we still might not have the Cultural Heritage Laws in place at that stage; hence my suggestion for a pause. Our laws are completely inadequate. I come back to the role of the infrastructure department. For clarity's sake, is there any role for the federal infrastructure department? When you were referring to the department of infrastructure earlier, did you mean the Northern Territory department of infrastructure?

Mr Edwards: I was referring to the Northern Territory department, but there may be engagement between infrastructure developments at a federal level.

Senator WATERS: I have some questions on bioregional planning. In December last year the Commonwealth and Queensland governments announced that three pilot bioregional plans would be developed: one for urban development in SEQ; one renewable energy region; and one for critical minerals. What is the status of those plans?

Mr Knudson: There have been a number of meetings with the Queensland government. We have agreed a work plan and terms of reference. There is a joint oversight committee between the two departments to progress that work. Things are proceeding as we had wished. That being said, there aren't any bioregional plans ready to be considered. We are at the beginning of this process, not the end.

Senator WATERS: How long do you expect the process will take? When might we see a finalised bioregional plan, or three?

Mr Knudson: We don't know how long it will take to complete. That is going to be significantly driven by what sorts of circumstances we are looking at with respect to data gaps and, as you can imagine, stakeholder engagement. We have a number of steps to go through before we have a finalised bioregional plan.

Senator WATERS: Do you have any rough, ballpark sense? Are we talking six months or 18 months?

Dr McEwen: We are looking to try to have early stage plans potentially by the end of the year, which will be more indicative rather than determinative. For the full plans, it will probably be more like 18 months.

Senator WATERS: Will any of that be impacted by the potential reforms to the EBPC Act or the replacement of that act?

Mr Knudson: There are other reforms. There are existing provisions under the act for bioregional plans; that is very much contemplated in Professor Samuel's response and that will be picked up in the legislation as well, we expect.

Dr McEwen: There is a standard for regional planning being developed as well.

Senator WATERS: Will consideration of any current projects that will be within the area of any of those three bioregional plans be paused while the plans are being produced?

Mr Knudson: That is not contemplated at this point. We are trying to provide as much information upfront as early as possible, along the lines of what the minister was talking about with respect to cultural heritage; we are trying to do the same thing for biodiversity. We want to actively go out and meet with proponents and give a sense of where we think things are more complex; that is, that more biodiversity is likely to be impacted versus areas where it is less likely to be impacted; to help design projects or give information to proponents to design projects in a way that avoids major impacts.

Senator WATERS: Can you provide an update of the progress of the assessment of the Chalumbin Wind Farm and whether it is within the renewable energy bioregion that we just discussed?

Mr Edwards: Chalumbin Wind Farm is now in the approval process with us; we are in a 40-day approval window.

Senator WATERS: The EIS has been received. So everything is with the minister. It is just waiting for the final approval or refusal decision; is that right?

Mr Edwards: Not with the minister. The department is working through the 40-day approval process. We do the referral process, the proponent does their required work and consultation and then the full package is given to us for our assessment. We're doing that now.

Senator WATERS: I am still not understanding. What happens after your bit?

Mr Edwards: Either a departmental delegate would consider our final recommendation or the minister.

Senator WATERS: It is at the decision stage?

Mr Edwards: Yes.

Senator WATERS: You are pointing out that it is sitting with the delegate or the departmental officials at this stage.

Mr Edwards: Yes.

Senator WATERS: Will this one go to the minister, or will it stay with the delegate for ultimate consideration of approval?

Mr Edwards: We haven't had that conversation. Again, we have some time to work through yet before we will finalise our assessment. At that stage, when we are nearing the end, we generally engage with the minister's office and consult and see what the preference is.

Senator WATERS: Who decides whether or not the approval decision is made by the minister or the delegated person?

Mr Edwards: That is entirely up to the minister.

Senator WATERS: So she actively picks which ones she wants to tick off on and which ones she would like the delegate to tick off on; is that right?

Mr Edwards: We make the majority of decisions, but we will talk through particular matters that she might have an interest in, that might have a certain profile that the minister would like to look at directly.

Senator WATERS: Interesting.

Mr Edwards: We talk about that case-by-case with the minister's office.

Senator WATERS: I am sure my colleague will have some questions about that in the break. Was the Isaac River Coal Mine ticked off by Tanya Plibersek or by the delegate?

Mr Edwards: That was the departmental delegate.

Senator WATERS: It was the delegate. Thank you.

CHAIR: We will now break for lunch and return with outcome 2.1.

Proceedings suspended from 13:14 to 14:17

CHAIR: I welcome back officers from the department. We are continuing with program 2.1. We will go to Senator Payman.

Senator PAYMAN: One of the items in this budget is for Environment Protection Australia. How much exactly is this funding? What will it go towards?

Mr Knudson: The budget included \$121 million to establish Environment Protection Australia over four years.

Senator PAYMAN: Can you elaborate on what the funding will go towards?

Mr Knudson: Effectively, what we are setting up is an independent, arm's-length regulator that will deal with environmental approvals, which we were talking about earlier, as well as a number of other Commonwealth regulatory functions, whether it's with respect to waste, hazardous waste movements, chemicals management or wildlife trade; all of that will be housed in Environment Protection Australia.

Senator PAYMAN: When it comes to departmental resourcing for those sorts of environmental approval functions, there was funding set aside in the October budget. Can you confirm that?

Mr Knudson: Absolutely.

Senator PAYMAN: Can you run through how that operates with the proposed EPA?

Mr Knudson: I might turn to Mr Tregurtha for the details. You have correctly pointed out that there was a funding decision in October, which was for the environmental approvals area, to make sure we are delivering better and faster decisions. That, in effect, is part of two divisions that have been put together with our latest restructure, which is the foundation for Environment Protection Australia. That's now been supplemented with this budget's announcement of \$121 million.

Mr Tregurtha: The only thing I would add is that the other part of the October decision, and as a part of the government's Nature Positive Plan measure in this budget, is funding for the task force that I'm leading, in order to implement the legislative outcomes and the national environmental standards which will inform and support the creation of Environment Protection Australia.

Mr Knudson: I would add that the budget figure from October last year for sustaining environmental assessments was \$117.1 million.

Senator PAYMAN: The Leader of the Opposition has claimed that Environment Protection Australia will make environmental approvals slower and more expensive. Is that true?

Mr Knudson: It is certainly not the intention. The Nature Positive Plan that the government put out in December explicitly states that this is a set of reforms that will be better for business and better for the environment. We have a significant amount of resourcing going into our environmental approvals area. When we take a look at the current statistics for approvals on time, they are quite significantly positive, with over 90 per cent being on time. As I said this morning, when we are late, we are late by a few days.

Senator PAYMAN: Going back to the Samuel review, we were discussing that earlier this morning. The Samuel review found that the laws, as they operated under the opposition, were costly. Can you speak to the aspects of the minister's Nature Positive Plan which will streamline the approvals process to make it easier for business?

Mr Tregurtha: In terms of the Nature Positive Plan, there are a few measures in there. Indeed, the middle chapter of the plan refers to streamlining, and being faster and better for business. The things that part of the Nature Positive Plan highlights are around the use of national environmental standards to set a very clear outcome so that the operations of both the EPA and any accredited entities will be tested to make it easier to function as the EPA and/or accredited entities to deliver on environmental assessments and approvals. That chapter also talks about the implementation of regional plans, which Mr Knudson spoke about earlier, which are intended to provide

upfront information to businesses choosing to develop in the area of that regional plan, which allows for a much earlier assessment by the developer themselves around where they might site their project to make it through the environmental assessment and approval functions more quickly.

It also talks about a complete reformation of the environmental offsets obligations that pertain to those businesses which have a residual significant impact and need to offset their residual significant impacts. Finally, it talks about the nature repair market. The government has recently introduced legislation in relation to the nature repair market, making it easier to invest in biodiversity outcomes, including, where relevant and where provided for, in relation to offsets as well.

All of those areas go towards one of the overarching goals of the Nature Positive Plan, which is being better for business, and streamlining.

Mr Knudson: Can I add one quick thing, which is not necessarily as clear as it might need to be? Part of what happens with a regular approval is that a company sends us a proposal. We then react to that proposal. In effect, for most businesses, they are well and truly along the process of thinking about and conceptualising a project. What we are trying to do, and Mr Tregurtha talked about this, is that, by getting information out into the public domain more clearly and earlier about where we have some areas that are particularly important from a biodiversity perspective, it gives proponents right away the opportunity to take a look at how they shape their project to minimise the impact on biodiversity. If they do that, the complexity of their assessment lowers. That's really important to deliver better, faster decisions. Mr Edwards mentioned to me a little while ago that, when we look at renewable energy projects, which take, on average, about 80 weeks, the vast majority of that is time with the proponent, at about 68 weeks. In terms of savings for businesses, it's mostly in their gift. If they get better information from us, they can design their projects to minimise their impacts and get a faster decision.

Senator PAYMAN: I note that Professor Samuel said that distrust of the system of environmental approvals was a dominant theme of his review of the EPBC Act. What kind of issues did the submission have with federal environmental law and why do you think that there was that mistrust?

Mr Knudson: Professor Samuel, when he did his engagement on developing his proposal for government, articulated a number of cases where there was systemic and long-standing distrust. The process, as Mr Tregurtha talked about, isn't transparent enough for businesses to be able to know where to avoid and where to impact. It isn't transparent enough for communities to understand and be able to engage with what's being proposed and how they can make a difference. As the minister at the table mentioned earlier, we're trying, in the reforms of these laws, as well as the cultural heritage laws, to bring forward the consideration of both impacts on cultural heritage and impacts on the environment earlier in the process and in a transparent way that's very clear. With the current legislation, I would characterise it as heavily process dominated. If do you the following things according to certain timelines, you're generally going to get through the process. But it isn't nearly as clear as it needs to be about the outcomes that are being sought with these reforms. That's where, as Mr Tregurtha was mentioning, the standards play a really critical role, for the first time articulating what standards we are trying to achieve as a country and how they deliver not only for business but also for the environment and communities.

Senator PAYMAN: What benefits do you see coming out of centralising data through Environment Protection Australia, which was funded in the budget? Also, the Samuel review found that the department's information analysis wasn't fit for purpose.

Mr Knudson: It's an absolutely critical role. It goes back to your point about trust, and people not knowing where the environmental assets of the nation are, what state they're in and how we're trending. We've made a commitment, and it's a bipartisan commitment, to 30x30—protecting 30 per cent of land mass and the sea by 2030. We need to be able to track how we're progressing on that. That's one very critical role for Environment Protection Australia. In addition to that, though, there is the point about getting information to communities about where the environmental assets are, so that they can better manage those assets themselves. Whether it's through the local natural resource management group doing community work on the ground, or whether you are a proponent trying to figure out where your offsets will have the greatest possible environmental benefit, that sort of information will be absolutely critical.

The other thing I would say is that I spent a year and a half in New South Wales fairly recently, in their environment department. The amount of information that exists in states and territories, and in businesses, that we need to be able to harness and make available to all citizens, is absolutely essential. This isn't a question of the Commonwealth doing this all alone. We need to harness that other information that exists throughout our country.

CHAIR: Senator Pocock?

Senator DAVID POCOCK: Thank you for your time this afternoon. Looking at the budget papers, I am interested in digging into how much new money there is for threatened species. I note that there are announcements around national parks, AIMS, and urban rivers and catchments. I want to go through the line items in the budget.

Mr Knudson: With the overall figure, since the October budget, we are up to \$4.8 billion being invested in environment and water issues as a whole. The reason why I say that, and starting with that headline figure, is that, as you would imagine, a number of the figures do have positive benefits for threatened species, while they may not be in the headline figure directly targeted at threatened species. You mentioned, for example, the Australian Institute of Marine Science. A lot of the work that they do supports species on the Great Barrier Reef, so there is a direct connection there as well.

Senator DAVID POCOCK: Of that \$88.1 million over four years, what percentage of that is actually for threatened species as opposed to ongoing—

Mr Knudson: It's impossible to give you an answer on that because, for the Australian Institute of Marine Science, I can't break down which parts will go specifically and exclusively towards certain species versus the reef as a whole. I can turn to Dr Fraser to walk through some of the key initiatives that were explicitly and exclusively targeted on threatened species, if that's helpful.

Dr Fraser: The Parks Australia measure was \$262 million for parks over the next four years. I don't have the precise figure on this, but probably up to \$128 million of that is specifically for threatened species and related management issues. It is hard to tease out, 'This is exactly going to go to a threatened species' because sometimes broader management issues will contribute to that. Weed management in Kakadu National Park will broadly contribute to the management of threatened species and other wildlife in the park, whether you would characterise that as threatened species specifically or not.

Senator DAVID POCOCK: So there is \$128 million over four years, but it says that is for 'core business' and 'to deliver environmental conservation on park research and threatened species protection'. How is that split between core business and the other things you could argue are for threatened species?

Dr Fraser: Those precise questions would need to be given to the Parks Australia division. I can't tell you the precise split, but I can tell you the activities that the \$128 million will support, if you are interested.

Senator DAVID POCOCK: So when you fund things, you are not across the detail of where it is going—it is more, sort of, lumps?

Dr Fraser: My colleagues in Parks Australia division will be. As the Threatened Species Commissioner, my office is involved in the development of a lot of those policy proposals. Now that money has come through the budget, we can work with our Parks colleagues to shape that so that it is complementary with other programs we are designing, with our National Environmental Science Program initiatives, and contributing to the threatened species action plan in a way that is strategic and meets the Parks Australia needs.

Ms Kennedy: Parks Australia division was on last night. We can take it on notice to provide you with more detail about that specific question.

Senator DAVID POCOCK: I have a real concern: the government has made a bold commitment to no new extinctions, yet I am hearing that there is next to no targeted threatened species funding, when we know that we have a whole bunch of species on the brink.

Mr Knudson: I don't think that is accurate at all; \$1.1 billion in the Natural Heritage Trust has just been rolled out—

Senator DAVID POCOCK: That is existing funding, though.

Mr Knudson: The next tranche of that has been confirmed. It is still dollars that will be spent for threatened species on the ground.

Senator DAVID POCOCK: That's the thing: we've been spending that National Trust money and things have been getting worse at a rate of knots. We have a new government that said: 'Line in the sand—no new extinctions'. You have to deliver on that. There is no new money for threatened species.

Mr Knudson: There are a number of initiatives. We have talked about the Saving Native Species Program, which is another program.

Senator DAVID POCOCK: Is that new money?

Mr Knudson: We can come with the specifics on the program money that is there for species. The spending side of things is important, but we cannot lose track of the regulatory settings. We are changing them from being

basically a no-net-loss concept to a nature positive concept. So we are getting a positive benefit there. While we look at program spending, we have to look at the nature repair laws currently before the parliament. That is about bringing in private sector money to bear as well. So you have a complement of regulation, public money and private money coming into threatened species.

Senator DAVID POCOCK: I understand that is the thinking around that. I want to make sure that I am clear that there is no targeted threatened species additional funding in this budget.

Senator McAllister: Senator Pocock, the officials are providing you with an answer which reflects the government's underlying philosophy about how we are going to tackle this crisis.

Senator DAVID POCOCK: With due respect, philosophy is not going to save species.

Senator McAllister: Senator Pocock, having a theory of change about how we are going to get from the circumstances we are in now, and how we are going to practically implement measures to address that, requires some thinking about what would be required to move the dial.

Senator DAVID POCOCK: Thank you.

Senator McAllister: The nature positive agenda is about that.

Senator DAVID POCOCK: In terms of the underlying modelling: there is a commitment to no new extinctions. Has the department done modelling on how much money is needed to deliver on that; whether it is through the nature repair market or through other things? What is the modelling there?

Mr Knudson: One estimate put the figure at around \$2 billion a year. Since the government was elected, \$4.8 billion has been invested over the forward estimates that was not there prior. That includes the National Heritage Trust, et cetera. That is the government component. As for the private sector component: it bears noting that the estimate of what the nature repair market can unlock is \$137 billion.

Senator DAVID POCOCK: I am keen to dig into that. I will put a few of these other questions on notice; time is short. Last estimates I was asking about the nature repair market and you said that you anticipated significant demand for biodiversity certificates. Have you undertaken modelling on what that demand looks like?

Ms O'Connell: We talked about the nature repair market at the last estimates. Since then the legislation was introduced, at the end of March. In terms of demand modelling, a report was done by the private sector which did model that the value of the market expected out to 2050 would be \$137 billion. All indications are that there is very strong demand. Investment in sustainable investment initiatives is growing.

Senator DAVID POCOCK: Has the department modelled that, or are you going off the PwC report?

Ms O'Connell: There is that private sector modelling. We haven't commissioned separate, different modelling. We are in conversation with corporates—significant corporates—about their demand for the market. It is strong.

Senator DAVID POCOCK: Is that demand for a stewardship program which the PwC report suggests, or is it demand for an offset market amongst corporates?

Ms O'Connell: It is a demand for private capital from corporates, not the offsets market.

Senator DAVID POCOCK: In the stewardship market?

Ms O'Connell: Yes, from corporates that are interested in sustainable credentials.

Senator DAVID POCOCK: Can you provide a list of corporates which have indicated their interest?

Ms O'Connell: They have talked to us on a non-disclosure and noncommitment basis. There are major corporates which are very interested in the market and the opportunity to have certificates from the market. Also there is an eye to TNFD, the Taskforce on Nature-related Financial Disclosures. They will come out in September with what the disclosure framework might look like. That will continue to increase demand.

Senator DAVID POCOCK: Is there a time line to implement TNFD once it is finalised?

Ms O'Connell: The first thing is getting what the disclosure framework looks like and then working from that.

Senator DAVID POCOCK: I am keen to talk about this report. At the last estimates I was advised that much of the nature repair market was based on the PwC report titled, *A nature-positive Australia*. I have a copy of it, which I table. I want to clarify that the department didn't commission this report.

Ms O'Connell: No, we did not commission or pay for that report. It came out of a conversation I had with a principal at PricewaterhouseCoopers in terms of, 'Here's something that would be useful for us to know'. It was not paid for or commissioned by the department.

Senator DAVID POCOCK: Before setting off down the nature repair market path as the big funding idea, did you consult with other biodiversity conservation experts or conservation economists?

Ms O'Connell: Yes, and worked closely with a number of those in an earlier development of the nature repair market. Also, we have had roundtables. There has been open consultation on the legislation since late December last year; quite a number of consultation activities.

Senator DAVID POCOCK: On page 12 of the report it recommends the development of a clear framework to manage supply and demand. As I understand it, there is no government money to get the market working. We saw with the carbon market the Commonwealth put in \$2.5 billion to establish projects; to get a pipeline of projects and to create ACCUs. How do you see it working if PwC are saying that is necessary but we are hearing from the government that they are not going to put money in?

Ms O'Connell: The government hasn't decided not to put money in. It hasn't put money in at this point in time on the basis that there looks like there is very strong private capital demand, which wants us to have the market introduced, legislated and up and running. The government has funded the nature repair market in this budget to the tune of \$7.7 million. That is largely to look at the supply side rather than the demand side. Our sense is that it is the supply of certificates into the market that will be the rate-limiting step rather than the demand. Currently there is a strong market for ACCUs with a biodiversity co-benefit. People pay a premium for that.

Senator DAVID POCOCK: But that's not this?

Ms O'Connell: Well, PwC can have their views in their report.

Senator DAVID POCOCK: That's not the nature repair market, Carbon Plus?

Ms O'Connell: No. But it is.

Mr Fredericks: You are looking for indicators for demand for biodiversity certificates under the nature repair market: the fact that there is demand now for ACCUs with a biodiversity outcome would suggest that demand does exist.

Senator DAVID POCOCK: Having had a couple of roundtables of my own, and talking to experts, the issue is that carbon is fungible, whereas biodiversity is hard to measure. There are inherent risks with these sorts of projects. For people to invest in a nature repair market like this they need confidence that it is robust and has integrity because they are essentially putting their brand at risk. Yet what I am hearing is that you are going to set it up and then maybe at the next budget the government may put money into it to start it. Is that correct?

Ms O'Connell: All the issues around integrity and confidence are absolutely key. In standing up the nature repair market, our focus is on high quality biodiversity certificates rather than volumes of trade. It is about quality biodiversity assets. The funding in this budget goes to assist people who will be the creators of the biodiversity assets and the seekers of certificates to be able to inform them and to deliver quality biodiversity assets. That is where our strong focus is. The expectation is that there is a fair degree of demand out there for capital.

Senator DAVID POCOCK: On page 24, recommendation 5 states:

A biodiversity market should not include biodiversity offsets and instead prioritise biodiversity stewardship certificates solely for conservation outcomes.

Can you guarantee me that this market is about stewardship and that no aspect of that will feed into an offset market?

Ms O'Connell: This market is to create an opportunity for corporate capital to be invested in biodiversity repair. Certificates under the nature repair market won't be able to be used as offsets unless and until there is the offset standard that is being created. That offset standard is a net gain standard.

Senator DAVID POCOCK: What I am hearing is that this could be a pipeline of offsets for once we have the EPBC 2.0; yes?

Senator McAllister: Yes. Biodiversity standards could be used as offsets if they comply with the offset standard that is to be established. The reason that the officials have been keen to keep the two ideas separate is that the offset standard is yet to be developed and will be the subject of significant consultation about the kinds of characteristics and qualities that an offset would be required to have to meet the standards under the proposed new laws. It is not necessarily the case that biodiversity certificates will meet that standard. They are separate benchmarks, if you will. Some may be certificates that will be established for one purpose, but in circumstances where a person or an entity is seeking to meet an offset standard, that will be its own separate test.

Senator DAVID POCOCK: Do you accept that there's far more demand for offsets than stewardship certificates?

Mr Knudson: Senator, we don't know the answer to that question at this point. What I will say, just backing what the minister just talked about, for a certificate you're going to say, 'I'm going to do the following actions on my land', and then a company will come along and say, 'For ESD reasons, I'd like to purchase that certificate and assign a value to it'. The landowner can decide whether they want to sell their certificate or not at that point. An offset standard will say, 'I've had an impact on this many hectares. I need to restore Y many hectares', a different number.

Senator DAVID POCOCK: In the same market.

Mr Knudson: The certificate may not have anything to do, though, with what's required under the offset. That's why we can't conclude at this point.

Senator DAVID POCOCK: Thank you.

Senator HANSON-YOUNG: Just touching on some of those budget questions that Senator Pocock asked, could I ask that you give us a breakdown of what the 173 million was spent on in the 2022-23 financial year and what the 190 million under the Heritage Trust is intended to be spent on in the 2023-24 financial year? I would also like a detailed year-by-year breakdown on committed and uncommitted funding of all programs under the Natural Heritage Trust account over the forward estimates. You can do it now or, if you'd like, you can give it on notice. But if you've got it, great.

Mr Fredericks: What we'll do is give you as much detail in answer to that complex question as we can now, but we will reach a limit where we'll need to take the rest of it on notice.

Ms Kennedy: Senator, I'll start with a breakdown of the 439.2, which is the next phase of NHT—the environment proportion of that, which I think would probably be the most helpful for you. But that's for the five-year phase—so the coming five years. There is 145 allocated to species and landscapes. There is five million allocated to Bush Blitz. There is 25 million allocated to pilot initiatives for the 30 by 30 initiative. There is 10.1 allocated to national, emerging or multiregional priorities.

Senator HANSON-YOUNG: National emerging priorities?

Ms Kennedy: Yes, that's correct. Some of these—there's a number—as you would be aware, under the current phase of the NHT funding, which is coming to a close, the programs were identified more by reference to the delivery mechanism than by the outcome that was being sought. In line with the Nature Positive Plan, this new phase of the Natural Heritage Trust focuses largely on the outcomes that are being sought, which is why those first sub-programs that I was talking about there—rather than being the Regional Land Partnerships program, which was the major program under the current phase, they're now broken down to be prioritised around outcome. But there is that \$10 million there to make sure that there is some funding available to be put towards emerging priorities that could be delivered either with national partners or across regions as needed. The next item that I was going to go to is \$70.1 million for regional and national capacity services and delivery. That's to maintain that regional delivery network as well as the partnerships that we have with national delivery organisations. There is also \$86 million over the forwards for departmental funding.

Senator HANSON-YOUNG: Okay, but I'd really like to know in the next financial year what the 190 million is going to be spent on and what last year's was spent on.

Mr Block: Senator, I can answer that question somewhat in the general sense. The funding has been—

Senator HANSON-YOUNG: You know what—so many people have questions. If you're going to do it in a general sense, hold it and answer my specific question on notice, if that's okay.

Mr Fredericks: We'll take it on notice.

Senator HANSON-YOUNG: Thank you. I'd like to go to some of the questions that have been asked already about the EPBC reforms. Now, I know you answered some questions to Senator Duniam about the time frame. Just to be clear, you're saying that the standards and the EPBC amendment bill won't be seen until the end of this year—end of this calendar year?

Mr Knudson: What I said, Senator, was that both standards and the draft legislation are expected to be released before the—in second half of the calendar year.

Senator McAllister: I understand the minister has publicly indicated that following consultation on the exposure draft we would hope to introduce the legislation at the end of this year or the beginning of next year—early in the next year, I think was the—

Senator HANSON-YOUNG: And the EPA legislation will be a separate standalone amendment?

Mr Knudson: Sorry, I missed that.

Senator HANSON-YOUNG: The EPA—is that going to be a separate piece of legislation?

Mr Knudson: It'll be part of the legislative package that we put forward at the end of the year.

Senator HANSON-YOUNG: So it'll be like an omnibus package?

Mr Knudson: Yes. And at this point we're contemplating that we'll actually have a number of different pieces of legislation that constitute the full reforms.

Senator HANSON-YOUNG: Okay. Maybe the minister needs to answer this. Why has the government decided to push ahead with the nature repair bill in absence of finalising what those national standards are going to be and before we've even seen this other package? It seems to me you're putting the cart before the horse.

Senator McAllister: Senator, I think we are going to progress a very complex set of reforms by doing a range of things in parallel. There's been significant consultation underway in relation to really all of the features of the package, and we're simply trying to advance all of these things. It's an ambitious reform agenda and we have—

Senator HANSON-YOUNG: But one of the key concerns that people have in relation to the nature repair market is this issue of offsets. We don't have the detail on it. We've just heard that. Why would you not wait until that has been settled to alleviate those genuine concerns? Is it because that's the only piece of legislation you can guarantee to get through the parliament because you've got coalition support or is it another reason? I'm trying to understand why you would put something that you can't actually tell the Australian people the detail of in front of the parliament.

Senator McAllister: I don't accept that characterisation of the motivation or of the nature of the reforms. As I've already explained, there is a complex, significant and important legislative reform agenda that has multiple limbs. The government has sought to establish a pathway for all of that work to be done. It's substantial, and it makes demands on stakeholders as well as on the department. We're asking interested community members to engage with many matters. The issue in relation to the nature repair market—the question that you're asking, I think, assumes a connection between the offset standard and the creation of a certificate that we have tried to explain are, in fact, separate. We do expect that there will independently be demand for certificates created as part of the nature repair market, and evidence has been provided this morning about that. We do also understand that any offset standard, however it is to be met, needs to be robust and needs to be the subject of consultation. That is the intention.

Senator HANSON-YOUNG: The minister for environment is in the House question time as we sit here and has just told the House that there has been more invested in nature than ever before. Can you show us those figures?

Mr Knudson: Senator, I think that would be the \$4.8 billion that I mentioned at the beginning of the session. I'm happy to provide details on the line items.

Senator HANSON-YOUNG: But not this year.

Mr Knudson: Since the government was elected.

Senator HANSON-YOUNG: But not this year—not in this year coming.

Mr Knudson: It's \$4.8 billion over the forward estimates.

Senator HANSON-YOUNG: Can you compare that to the rest of—since the environment department's existed?

Mr Knudson: Senator, I'm happy to come back on notice and provide what information we can.

Senator HANSON-YOUNG: I'd like to make sure that, when the minister stands up and makes statements like that, there are actually some figures to back it up.

Mr Knudson: That's the \$4.8 billion figure. Like I said, I'm happy to get further detail on that.

Senator HANSON-YOUNG: Okay. Could I ask about the minister's recent approval of the coal mine. This is a question I was asking Mr Fredericks yesterday—the Isaac River coal mine. Why was the decision a delegated one? Why did the minister delegate that decision rather than making the decision herself?

Mr Fredericks: I'll just start and my colleagues can assist me on this. There is a standing delegation from the minister to delegates. At the end of the day, that was the delegation that was relied upon by the department to make a decision.

Senator HANSON-YOUNG: When the minister said that she was the person who made the decision to stop Clive Palmer's coal mine, was that a delegated decision?

Mr Edwards: Senator, the minister made that refusal decision.

Senator HANSON-YOUNG: So she makes the ones she wants to make and delegates the ones she doesn't want to make. Is that how it goes?

Mr Edwards: That's not how it works. The minister, of course, has the power under the legislation. We are her delegates. So we engage with her on a case-by-case basis about whether she wants to take particular decisions.

Senator HANSON-YOUNG: And at what point did the minister delegate that decision?

Mr Edwards: Sorry, which decision?

Senator HANSON-YOUNG: The Isaac River coal mine.

Mr Edwards: That's been with the department. We have made that assessment. It's a proposed approval; it's not a final approval decision. The minister—in this case, there's been no indication that she's asked to do that directly. So we've proceeded as the delegates with that.

Senator HANSON-YOUNG: What advice did you seek from others in the broad climate, environment and water department that approving a coal mine was good for the environment?

Mr Fredericks: Senator, these are matters—when delegates are making decisions, they're making decisions according to law and they're justiciable decisions. So there needs to be some precision with language. At the end of the day, the test that you just provided then to my colleagues is not the test as a matter of law.

Senator HANSON-YOUNG: So our laws don't protect the environment?

Mr Fredericks: The law is the law, and the law gives a delegate a direction as to what the test is. My colleague can explain what that test is. That's the judgement as a matter of law that my colleagues are required to make.

Senator HANSON-YOUNG: I understand that, Mr Fredericks. It's also proof, isn't it, that the environment laws are broken unless they consider the impacts of climate change?

Mr Fredericks: Senator, we've had an extensive discussion this morning about the reforms that are being done to the EPBC act.

Senator HANSON-YOUNG: And do they consider the impact of climate change on the environment?

Mr Fredericks: Those reforms are fully informed by all of the views that government has across government about what's necessary to achieve net zero by 2050 and what's necessary to achieve a positive environmental outcome.

Senator HANSON-YOUNG: Mr Edwards, were you the delegated officer?

Mr Edwards: No, I wasn't.

Senator HANSON-YOUNG: Okay, who had the delegated officer for that decision?

Ms O'Connell: I was the delegate for that.

Senator HANSON-YOUNG: You got the hospital pass. Could you tell me: if the standards and the amendments that are being proposed by the government were in place, would you have been able to approve the coal mine on behalf of the minister?

Mr Fredericks: That's either or both a hypothetical question or asking for an opinion.

Senator HANSON-YOUNG: You're telling me, Mr Fredericks, that this decision was made because that is the law and that you've got extensive consultation and you've had extensive thought about what the law should be. The law as proposed doesn't allow the approval of a new coal mine.

Mr Knudson: Senator, all of the—

CHAIR: Sorry, have you fully drafted all of those laws? Are they all lined up and ready to go?

Mr Knudson: No.

CHAIR: In which case it would be very improper for them to answer the question. You can have a crack at the minister, though.

Mr Knudson: The only thing I was going to say was that, if you take a look at the Nature Positive Plan that was released in December, it's quite clear about how climate will be taken into account. Also, the considerations which I'm sure were canvassed on the safeguards mechanism in the earlier session would have also dealt with this point.

Senator HANSON-YOUNG: Mr Knudson, you have outlined an interesting point. Under the government's Nature Positive Plan, does it allow the approval of new coal?

Mr Knudson: What the Nature Positive Plan speaks to is an exposure of the emissions profile of an individual project to be released. Mr Tregurtha can talk to you specifically about what the Nature Positive Plan says.

Senator HANSON-YOUNG: No, I don't need to know all the ins and outs of it. I can read the document. What I want to know is: does it allow the approval of a new coal mine? Either you can answer it or you can't answer it.

Mr Knudson: Senator, I can—

Mr Fredericks: You're asking for a yes or no answer. What my colleagues are saying is the issue is more complicated than that. It doesn't lend itself to a yes or no answer. I think, as a matter of courtesy, it would be useful for you to hear the full answer from my colleagues.

Senator HANSON-YOUNG: Well, if you can't give me a no, that's a problem. If you can't say that the new laws and that this government's plan, the Nature Positive Plan, stops the approval of a new coal mine, we've got a problem.

Senator McAllister: This is a question where our political parties have a difference in approach. The government is committed to tackling climate change. Yesterday we ran through the things that have been accomplished in our first year in office, including establishing new targets for Australia, legislating those targets, implementing the safeguard reforms, establishing a National Electric Vehicle Strategy, setting out the Rewiring the Nation program, and making other commitments and reforms to the National Electricity Market to bring through the necessary levels of renewable generation and commence the transformation of the electricity system. We are committed to doing those things. I know that your political party advocates for a climate trigger in the EPBC Act. That is a longstanding position. If we get to the heart of it, that is not the approach—that is not the tool that we are using to manage our emissions reduction obligations. The tools that we are using include some of the ones that I've just laid out now. But this is a difference in approach between the way we are tackling this challenge.

Senator HANSON-YOUNG: Okay, thank you. What advice, if any, did you consider before proposing that this coal mine be given approval in relation to its impact on the climate crisis?

Ms O'Connell: Senator, I should firstly point out that greenhouse gas emissions and climate change are not a matter of national environmental significance that is regulated under the act. What we're concerned with are impacts to matters of national environmental significance. I can say that during the process so far, noting that the process is yet to be finalised and a final decision has not yet been made, we sought advice at both the referral stage—so, in determining that the proposed action was a controlled action decision needing further assessment, we sought advice from relevant Commonwealth ministers and the Queensland government, as well as, for instance, our Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development. And, as part of the process of coming to a final decision, similarly, we've sought more advice from relevant Commonwealth ministers.

Senator HANSON-YOUNG: Okay. Mr Knudson, the Nature Positive Plan of the government—will that stop native forest logging across the country?

Mr Knudson: Senator, again, the plan as it's articulated in the December release talks about delivering a Nature Positive Plan from every initiative both at the project level but also trying to deliver that same sort of outcome at the regional level and national level. That's why I was mentioning the 30 by 30 being critical to be able to add that up. That's why I was trying to make the point with Senator Pocock that you need to look at the full range of actions that are occurring. The regulatory system is one element, our investments are another and private sector investment is a third.

Senator HANSON-YOUNG: But does it stop native forest logging?

Mr Knudson: The only thing that's in the Nature Positive Plan, as it stands right now, noting, as was made the point earlier on, the legislation hasn't been finalised—the Nature Positive Plan does commit to applying the standards which are currently being developed to Regional Forest Agreements.

Senator HANSON-YOUNG: How can you have a Nature Positive Plan that allows the destruction of native forests?

Mr Knudson: The point would be, as I talked about earlier on, you would have a situation where a certain number of hectares were being impacted of a certain type of habitat and you are restoring and recreating habitat of a larger extent elsewhere. Therefore, the overall outcome is positive for the country versus where it is now.

Senator HANSON-YOUNG: It's not very positive for the wildlife that lives in the spot you just logged.

Mr Knudson: Again, Senator, I just use the habitat as a proxy. But, of course, you'd be taking a look at the outcome for species as well.

Senator HANSON-YOUNG: I know I've got to hand the call over, but I find it extraordinary that a Nature Positive Plan doesn't stop coal and doesn't stop native logging. I mean, it's got a nice name, but it does bugger all. It does bugger all for protecting the environment.

Senator McAllister: Senator Hanson-Young, obviously the government would not accept that characterisation. We differ on this and a number of other matters.

Senator HANSON-YOUNG: Thank you.

Senator CADELL: For those of us who think coal is a word with four letters, not a four-letter word: Bowen Coking Coal and the Isaac creek mine—does that comply? Were you were compelled by the law to approve that?

Mr Edwards: We absolutely work through all the tests applied under the EPBC act. We do that for any development.

Senator CADELL: And if that was a lithium mine or a cobalt mine or a nickel mine, it would have to do the same tests?

Mr Edwards: That's right.

Senator CADELL: And this mine was a metallurgical coal, not a thermal coal?

Mr Edwards: That's correct.

Senator CADELL: So all of those minerals, even rare earth minerals, are all mined to make renewables—to build wind turbines, to build solar panels and to build transmission lines? All of those things are required for that, aren't they?

Mr Edwards: Yes, Senator.

Senator CADELL: So, in fact, if we weren't constructing mines that were compliant with your guidelines—with the acts—it would be a harder trip to a renewable economy, wouldn't it?

Mr Edwards: Senator, I can just talk about the laws we have in place. We will assess every development on a case-by-case basis against those rules.

Senator CADELL: And there is no place in the world where we can find metallurgical coal—nickel, cobalt and lithium? These things, where they don't have to be mined, they can't be collected?

Mr Edwards: They are minerals. That's correct.

Senator CADELL: Is there enough of it to build everything we're doing? So you've complied with the law and you approved a mine for metallurgical coal, just like you would every other mine that complied with the law to help produce things we need?

Ms O'Connell: Senator, I should point out that the final decision hasn't been made. That's a decision that's been proposed. But we still have to go through that final stage of finalising that decision.

Senator CADELL: Okay, thank you very much.

Senator THORPE: I'm here to ask some questions around mega-frackers. Are you aware that a mega-fracker has come to the country?

Mr Knudson: Sorry, Senator, I'm not sure what your reference is here.

Senator THORPE: Are you aware of the mega-fracker rigs that Tamboran Resources are bringing to Australia?

Mr Knudson: Not personally, no.

Senator THORPE: This is about fracking in the Beetaloo. Tamboran are planning to bring five mega-frackers that drill four kilometres into our earth to the Beetaloo, with one currently docked in Darwin Harbour. If you don't know about it, I'm sure you haven't undertaken an assessment of these mega-frackers. Is that correct?

Mr Edwards: Senator, we have no current referrals for the Beetaloo. Obviously, the Northern Territory have made decisions around prospectivity in that area, but we have no referrals for projects under the EPBC act at this time.

Senator THORPE: Is it in the federal government's interest to understand what a mega-fracker is, given its destructive nature and given the company responsible for these mega-frackers has had five deaths?

Mr Edwards: If there's a project referred, we would routinely look at the approach that's been taken, the operation and the impacts on protected matters at that point. But it really does rely on a referral being made so we can assess it and determine whether that's susceptible under national environmental law.

Senator THORPE: Have you received any correspondence from traditional owners of the Beetaloo Basin who don't want fracking on their country?

Mr Edwards: I don't believe I have. There might have been past correspondence. I'll just look to my colleague.

Mr Knudson: We can come back on notice.

Senator THORPE: So no?

Ms Calhoun: There has been correspondence to the minister on fracking in general in the Beetaloo Basin.

Senator THORPE: From traditional owners, because they're concerned about mega-frackers?

Ms Calhoun: Due to the volume that we have had on Beetaloo Basin, I'd have to take that on notice in terms of—

Senator THORPE: Are you aware that it's about to start operating on 1 July?

Mr Edwards: Senator, there's no referral under national environmental law. To operate consistently with the EPBC act, there would need to be a referral and an assessment.

Senator THORPE: In that case, the minister has the power to review under EPBC. Is that right?

Mr Edwards: The minister has the power to call in projects under EPBC. But, again, we've had no imminent project put to us or been alerted to any imminent project in that area.

Senator THORPE: So, even though the traditional owners have written to the minister with concerns, that didn't flag the federal minister to take on those concerns and look at what's happening there?

Mr Knudson: The minister's legislative obligations kick in when we receive a proposal for a development. If a development is going to have an impact on matters of national environmental significance, a proponent is required to refer that to the Commonwealth. So I think we're just in that period where I'm sure that, if someone is planning on doing gas development in the Beetaloo, they're actively considering when to submit a referral to Mr Edwards' area for assessment.

Senator THORPE: Could I ask that the correspondence from the traditional owners be tabled as part of these estimates?

CHAIR: Are you talking about correspondence you have in your possession?

Senator THORPE: No, the correspondence from traditional owners in relation to Beetaloo and the mega-frackers. They have contacted the minister.

Mr Edwards: Apologies. I think we'd have to take that on notice. There's been a range of different correspondence from groups. We could absolutely take that on notice, though, Senator.

Mr Knudson: The other thing—just so we're not looking officious about this, we would need to seek their consent to release that document. I'm assuming that's not a problem.

Senator THORPE: Absolutely. Thank you. These rigs have two to four times the capacity of anything currently approved in Australia, being able to frack up to four kilometres underground. Traditional owners have not given permission to operate on their lands. Given the huge risks these rigs pose to climate, environment, water and cultural heritage, I just find it really hard to understand and fathom, given it—isn't this of national significance that we've got one mega-fracker sitting in the water now, ready to go, and four more coming? We've never used this technology in this country and people have died using this company's technology before. Isn't that of national significance?

Senator McAllister: Senator Thorpe, thank you for the question. I think the matters which are of national environmental significance and which are the matters that the minister may consider under the act are reasonably clearly defined in the act. Officials may correct me, but I don't believe scale of technology is itself a trigger for EPBC referral. But I think, if it is of assistance to you, and you're quite free to say no, it might help if the officials stepped through the relative roles of the Territory government and the Commonwealth government in relation to the approval processes that would be necessary if projects wish to proceed in the Beetaloo. I feel like we are, on occasion, collectively talking at cross-purposes about the Commonwealth's role in this.

Senator THORPE: And without—

Senator McAllister: And you're quite free to say no.

Senator THORPE: getting the full briefing on that—

Mr Knudson: It would take 30 seconds, Senator, if that's what's—

Senator THORPE: Well, I understand that the NT government has a responsibility over the Pepper report, but there are also federal responsibilities in that. The NT's recent Strategic Regional Environmental and Baseline Assessment Report found that there were no new risks associated with onshore gas development, additional to those that were extensively examined in the Pepper inquiry. But the SREBA provides additional information to help understand and manage the risk. Do you know if this study considered impacts of Tamboran's mega-frackers?

Mr Knudson: At this point—I'll do my 30 seconds very quickly—proponents will approach the state or territorial government. If I can do it visually, that's the state regulation. Commonwealth regulation is relatively limited. So they'll be working through with the state. That'll cover things from noise to impacts on water and groundwater, impacts on the surface, et cetera. That's what they'll have to go through with the state. They then need to do, in parallel, an assessment of whether it hits anything that we as the Commonwealth are legislatively responsible for. That's generally tied to our international obligations, whether it's World Heritage that's protected under UNESCO; whether it's migratory species under the convention on migratory species, et cetera. If they do or are going to have a likely significant impact on one of those things then they need to refer to us. That's when Mr Edwards' area would then be in contact with the Northern Territory government and the proponent to understand the nature of the proposal and what needs to be assessed comprehensively by the proponent. That then kicks off a process which generally we try to do in alignment with the state or territory in this case so that it's as joined up as possible. But at the very end of that is the ability of the Commonwealth to say, 'We think we need additional controls put in place', and we can do that.

Senator THORPE: With all due respect, I do understand, because the Djab Wurrung trees were destroyed as a result of the last government, through cultural heritage destruction, coming to the feds and not saving our birthing trees—800 years old. So I do get it as a Victorian. So I suppose my final question then is: given the risks that these mega-frackers—the unprecedented risks that they pose in this country on the Beetaloo, what action is the federal government going to take? I mean, we can't be spruiking a Voice in this country if the voices of the black fellers in the Beetaloo are freaking out about these mega-frackers fracking and destroying their country and the federal government ain't going to do anything. Where do you sit? You can't kind of sit on the fence.

Mr Edwards: If a project comes forward then there will be consultation and another opportunity for people to comment on that specific project. But that's where our role comes in. We really need to know what impacts there they think they will have, and we assess whether we think that can be mitigated and whether that's susceptible against the matters that we protect. Again, a really important part you're pointing to there, Senator, is that there's an opportunity through those processes when a referral is made for people, including First Nations people, to have their say. We would consider how the proponent responds to those if there are concerns raised at that point. The minister ultimately would assess whether that's an appropriate response—how they've dealt with and improved mitigation or changed other things in their proposal.

Mr Knudson: I think I also possibly misled earlier on. I think it was Senator Hanson-Young who was asking about guidelines for engagement. I think you were talking about First Nations engagement in particular earlier on and I said, 'There are generic engagement standards'. Mr Edwards reminded me during the break that actually in February we put out interim First Nations engagement guidelines under the act. That's the first time we've had those. That's in advance of the broader reforms that we're pursuing, not only with respect to First Nations cultural heritage but also the EPBC act as well, with a standard for First Nations engagement being a critical part of that.

Senator THORPE: When was the last time you—I'm not interested in questions on First Nations from white people. When did you last meet them—traditional owners from the Beetaloo?

Mr Edwards: Again, we have no active referral in that area.

Senator THORPE: Even though you got a letter from the Beetaloo traditional owners to the minister with concerns?

Mr Edwards: We will look at the nature of that correspondence. I'm not sure if meetings were sought as part of that. But, again, we'll come back to you with the nature of that and whether there were meetings sought and whether—

Senator THORPE: So, if the minister isn't taking this seriously for those traditional owners of the Beetaloo and aren't very concerned about mega-frackers coming into this country, the only other option is for us to shut it down and start protesting. Is that a better option?

Senator McAllister: Obviously I would disagree with your premise. I don't think you can argue that the minister isn't taking her responsibilities seriously. She does work within—in terms of the EPBC act, she does work within a legal framework and she often says publicly that she takes the responsibilities allocated to her and the department within that act extremely seriously. I think you're asking the officials for a question of opinion about how people might go about advocacy. I think that's probably beyond their brief.

Senator THORPE: It was basically a heads-up. If there's no traction then we've got to protest and put our bodies on the line again, because we've got five mega-frackers coming into this country that are going to destroy this country, its totems and its water. I think that this is a national shame and something should be done. And I would like the letter from the traditional owners, who I understand to be very upset and anxious about this. Thank you.

Senator DUNIAM: Can I pick up on something Senator Hanson-Young was asking about before. That is the process by which the government determines whether the minister or a delegate makes a decision. I may have missed what the process is. Can you just step me through that?

Mr Edwards: We talk to the minister's office, obviously, regularly about different projects. Part of that discussion includes the status of projects and what's coming up, and the minister has an opportunity to provide an indication whether she would like to more closely consider a particular decision. In a general sense, under the act, those delegates exercise the majority of decisions. You'd understand that it's not just large things like approval decisions. There are referrals and requests for more information and a whole bunch of decisions that occur at the official level below, I suppose, with the focus on approvals.

Senator DUNIAM: So there's no threshold. It's a matter of discretion for the minister?

Mr Edwards: Yes, the minister holds that power under the act. We are merely her delegates. She absolutely has that discretion.

Senator DUNIAM: And your point is that ordinarily a delegate would make a decision?

Mr Edwards: My point is she certainly trusts us to make the majority of decisions. In fact, we give her every opportunity to decide whether she would like to look at the decisions.

Mr Fredericks: I think there's been a consistent approach over the years.

Senator DUNIAM: Yes. I'm not trying to suggest there's been a change of approach, Secretary. Thank you for that helpful intervention. I'm trying to understand the process, because I wasn't the minister in the last government.

Mr Fredericks: Fair enough.

Senator DUNIAM: So it's a serious question. But thanks for the intervention. That's very helpful.

Mr Fredericks: You're welcome.

Senator DUNIAM: You referenced trust to make decisions. Did the minister indicate what reason there was for not making the decision in that case? There was some interest around who made that decision from Senator Hanson-Young. Was it just around the fact that it was a coal mine? Is that the—

Senator HANSON-YOUNG: It was the inconsistency of the minister making the decision on rejecting the coal mine—the Clive Palmer coal mine—but accepting this. She wanted someone else to do it, clearly.

Senator DUNIAM: Right, okay. So there's no hard and fast rule. You're just saying it's a discretionary call for the minister as to whether she makes a decision—he or she, whoever it might be?

Mr Edwards: Yes, and I should say it wasn't that the minister decided not to make that decision. The default is that the delegates generally make these decisions. The minister, of course, is able to do that herself if she prefers.

Senator McAllister: It is also the case, of course, that the minister takes responsibility for the decisions made within her department—

Senator DUNIAM: Sure.

Senator McAllister: regardless of whether they are made—whether ultimately the decision maker is the minister herself or her delegate.

Senator DUNIAM: Okay. Since the election, how many decisions has the minister made versus delegates?

Mr Edwards: Sorry, I'll just have to look for that.

Senator DUNIAM: Sure—and also how many overall decisions have been made?

Mr Edwards: We might have to take that on notice. But my understanding is that it would be fewer than five. So it's a very small amount in the grand scheme of things.

Senator DUNIAM: So you don't know how many decisions have been made since the election at Senate estimates?

Mr Edwards: I'll just have to get one of my colleagues to get me the detail broken between delegate and minister.

Mr Knudson: We can try to come back to you during this session.

Senator DUNIAM: I would have thought that would be a pretty basic thing to have. But, on notice, then, in addition to that, perhaps we can have a breakdown of the last four financial years—decisions made by ministers and delegates out of the overall, to the secretary's helpful point earlier on. Can I go then to the budgeted figures around the Mature Positive Plan. Can I start with the money allocated for the implementation of the Samuel review response, please.

Mr Knudson: On that, there are basically three main components. One was \$121 million for Environment Protection Australia.

Senator DUNIAM: Indeed.

Mr Knudson: One was \$51.5 million for up-to-date environmental data, and that's for the establishment of Environment Information Australia. And then there was a third component which Mr Tregurtha can probably—because it's principally with his area. That is to draft the legislation and the standards, as well as to reform our environmental conservation planning system. Do you have the number, Mr Tregurtha?

Mr Tregurtha: It's 34 million.

Senator DUNIAM: Yes. That's according to page 77 of Budget Paper No. 2.

Mr Tregurtha: Correct.

Senator DUNIAM: So I'm pleased you found that as well. On that, then, can you tell me how the \$34 million is going to be spent?

Mr Tregurtha: Yes, Senator. The \$34 million is over two years. So 2023-24 is \$19 million and 2024-25 is \$15 million. That is to support—that fundamentally funds my team, my task force, in the department for the two years that we expect it will take in order for both the department to do the policy and consultation work to develop the revised legislative package that's been the subject of discussion already today. In addition to that, my team is leading the work in the department on developing national environmental standards, which again involves a significant consultation program and drafting program that we expect to happen over the course of the next two years as we move this year towards releasing the package for consultation that Mr Knudson spoke about earlier, then responding to comments, shepherding that work—well, supporting the Minister, I should say—to shepherd that work through the parliament. We imagine there'll be a number of questions as it makes its way through that process. Then it's implementing the national environmental standards should they be approved and should the power to make national environmental standards be approved by the parliament; and the early implementation of those national environmental standards.

Senator DUNIAM: So that figure—the \$34 million—is something that the department worked up as an estimate for the cost that you've just outlined—the cost of the work?

Mr Tregurtha: Correct.

Senator DUNIAM: Okay. Just on the development of standards, the working group—from memory, there were two parts to it, like a bigger group and a smaller group.

Mr Tregurtha: That's correct, Senator.

Senator DUNIAM: Yes. Have we got a list of the names of the participants in that group?

Mr Tregurtha: I can get you a list on notice. I'm happy to take that on notice.

Senator DUNIAM: Okay, thank you. In terms of exposure drafts, we're in the same job lot, aren't we, as what was discussed earlier?

Mr Tregurtha: Yes, that's correct.

Senator DUNIAM: Okay, I'll move on from there. Can I also ask: with regard to meetings that the minister has had, I did ask on notice at the end of 2022 at the October session of estimates—and I'll refer to this answer to question on notice SQ22 000584. I asked for the details and dates of specific meetings, either departmental or minister's office or the minister individually related to the work of the response to that Samuel review. A list was

provided which contained a whole host of meetings. I then got an update of that from the subsequent estimates hearing. That is SQ23 000756. This answer only refers to meetings the department has had, not the minister. Is there a reason why there are no ministerial meetings on here?

Mr Tregurtha: Sorry, Senator?

Senator DUNIAM: Your 22 answer has a range of meetings, including 'Minister met with the Australian Foundation for Wilderness on Great Eastern Ranges; the Hon Bob Debus. Department met with ecological consultants'. Your March 2023 answer only has 'Department met with Indigenous advisory', so on and so forth, all the way through. There is no reference to the minister.

Mr Tregurtha: Senator, I think that earlier answer was during the period of time when the Nature Positive Plan was being developed. So it was in response to the meetings the minister was having in relation to the development of the plan. If I recall correctly, the second answer that you're referring to was material the department has in relation to all the meetings Mr Knudson and I have in relation to a range of stakeholders that we drew from our diaries, not from any meetings the minister had in relation specifically to the Nature Positive plan as opposed to the more broad stakeholder meetings the minister has.

Senator DUNIAM: Who made the decision to refine the scope down to the department when this was a follow-on from the earlier question, which included the minister?

Mr Tregurtha: Mr Knudson and I would have signed off on that question on notice, and we constructed it in relation to the information we had available to us at the time.

Senator McAllister: Perhaps we can agree to make further inquiries. It sounds as though the department has provided some of the information. I'll see if there is anything else.

Senator DUNIAM: Yes. If you're able to, for October, tell me that the minister had certain meetings but somehow weren't able to for the March answer, I'd like to know why, unless it is the case that the minister—and I doubt this is the case—hasn't met with anyone on this issue. I expect there has been a series of meetings. So if I could have a revised answer to that, please, and anything since to date as well, that would be helpful.

Senator McAllister: We'll take that on notice, that specific request, which is more detailed than your earlier request, and we'll see what can be done.

Senator DUNIAM: More detailed request than earlier? It's exactly the same.

Senator McAllister: No, I indicated I'd have a look. You then said something very specific. For clarity and the good workings of the committee, I am taking that very specific request, which was detailed in nature, on notice so that it may be responded to properly.

Senator DUNIAM: Indeed. Thank you. And it's exactly the same request I've had at every estimates. So I'm pleased we can continue on with that. If I can now move to the EPA—

Mr Knudson: Senator, just a quick question: do you want us to deal with your earlier question about the approvals, et cetera, and who's making which decisions?

Senator DUNIAM: You can just provide that on notice. That's fine. I know that there are a lot of interested parties here that would like to carry on through these things. Let's go to the EPA in this five minutes and I'll probably have to come back to that. I would like to understand exactly how this \$121 million, as a start—and I expect I'll have to pick up again after the break and after I'm cut off. How are we going to spend this money?

Mr Tregurtha: Senator, the construction of the EPA involves a couple of different elements. The \$121 million is money that's been provided in this budget by the government to cover one-off costs to establish the agency. Of course, you'd be aware there's a range of establishment costs that would go into forming an agency like this—everything from registering for an ABN all the way through to creating the agency's identity and so on. So there are some one-off costs there. A second part of the establishment of the EPA covered by that \$121 million is that the government made a commitment in the Nature Positive Plan to strengthen environmental compliance and enforcement. So there is in that \$121 million some money to begin the increase in the compliance and enforcement capability. Then, finally, the third part of that funding is in relation to establishing critically enabling and governance functions. So there will be a CEO of the EPA, for example, who will need support in an office. We will need a chief financial officer and a chief HR officer. So that's the \$121 million. I should also say that there is a significant component of staff and funding that would transfer from the department into the EPA as well. So the \$121 million isn't the full funding for the EPA because there are staff in the department, for example, who work for Mr Edwards who are already funded and who will continue working in a funded way for Mr Edwards but who would transfer into the EPA.

Senator DUNIAM: I think it'd be better if I pick up with this after we rotate the call, because I'd be interested to explore what the value of Mr Edwards' division is and then we can get a full picture of what the cost of compliance, et cetera, will be. So I'll pick up on that after, but I'll just give you a heads-up that I'll be asking about it. Thank you.

Senator ALLMAN-PAYNE: My questions are in relation to one of the minor venues for the Olympic Games. In the federal budget, the Commonwealth government allocated funding towards the development of a new whitewater centre in the Redlands in Queensland. I'm wondering if the department is aware of that proposal.

Senator McAllister: I was having trouble hearing you.

Senator ALLMAN-PAYNE: I'm happy to repeat the question. In the federal budget, the Commonwealth government has allocated funding towards the development of a new whitewater centre in the Redlands in Queensland. It's one of the venues for the Commonwealth Games.

Senator McAllister: It's in a different portfolio.

Senator ALLMAN-PAYNE: Yes. However, what I want to know is whether the department is aware of the proposed centre. The reason I'm asking is: has the centre been referred to your assessments process for its possible impact on surrounding koala habitat? There is a huge area of koala habitat there that, if this goes ahead, will be impacted.

Ms O'Connell: I have some awareness of that, but that hasn't been referred to the department as far as I'm aware. What happens is that there might be a proposal for a development, then it needs to actually be approved and they make a decision about whether they need to refer under the EPBC act. I'm not aware that has been referred to us as yet.

Senator ALLMAN-PAYNE: Okay, so it's on the radar but not—

Ms O'Connell: We know about it.

Senator ALLMAN-PAYNE: Thank you.

Senator RICE: I want to go to the announcement by the Victorian government this morning about the ending of native forest logging from the beginning of next year. It's a very welcome announcement. Has the department been briefed or were you briefed before the announcement this morning, Senator?

Mr Knudson: Senator, the first thing I read about it was in the paper. I don't know whether my colleagues—

Ms Kennedy: That's correct—I just read about it in the media as well. It's possible that colleagues in other departments were aware, but we're still coming up to speed with the news as well.

Senator RICE: Right. If you haven't been briefed, what I was going to ask you're not going to be able to answer. It was what this then means for the Regional Forest Agreements—noting, of course, that they are in the agriculture department, but given the assessment of Regional Forest Agreements. So you will stay tuned for that?

Ms Kennedy: Yes. You've anticipated what I was going to say, Senator. I know that the Department of Agriculture, Fisheries and Forestry is at the committee tomorrow. They may have more information then. But it would really be a matter for them in terms of what impact the state decision will have for the RFA.

Senator RICE: Okay, I'll ask them tomorrow. Can I table the statement that the Victorian government made, which I flagged with the secretariat, about the announcement?

CHAIR: We did have a conversation on this earlier. This is the federal—there's only so much they can tell you about the Victorian government.

Senator RICE: Yes, I have been listening to all the evidence prior. I want to take you to the statement that's in the sixth paragraph. It says, 'since then, native forestry has been hit with increasingly severe bushfires, prolonged legal action and court decisions'. Then at the end of that paragraph it says, 'there are no options for regulatory reform which can prevent further legal injunctions continuing to disrupt native timber harvesting operations'. I mean, this says to me—it's an acknowledgment that the Regional Forest Agreements have failed. There's basically no way to continue logging without breaking the law. That's what all of the court actions that have been taken against VicForests over the last years has shown. I wanted to know, given that acknowledgment from the Victorian government and given that's clearly a reason why they have moved forward their decision to end native forest logging, what you feel the implications of this are for other native forest logging around the country, particularly in New South Wales and Tasmania?

Senator McAllister: Senator, I think we're not in a position to comment on the decisions taken by the Victorian government. As officials have already indicated, we imagine that at some time we will receive a briefing, but I think it is premature to ask officials to draw any such conclusion. Officials are welcome to make

other remarks, but I don't believe that we have the information to provide an analysis of the kind you're requesting.

Senator RICE: What discussions have you had with the Victorian government since the last estimates about their difficulty of actually logging within the law and the fact that clearly they are finding it impossible to be implementing laws which protect wildlife and continue logging operations?

Mr Knudson: The conversations that we've had with the Victorian government and, quite frankly, all the states and territories have been about the overall direction of the Nature Positive Plan reforms, including the new legislation, and obviously a reference to the fact that the explicit intention is for the new environmental standards to be applied to the RFAs. We haven't gone into anything more detailed than that at this point.

Ms Kennedy: I'd just add that, as we've discussed previously, Senator, although the Department of Agriculture, Fisheries and Forestry is the lead in terms of the compliance with the RFAs, the department of environment colleagues do play a role in providing expert assistance on environmental matters. So we have worked with them in their discussions with Victoria around the current pause in operations down there. So it's sort of a slightly separate angle to what Mr Knudson was talking about. We were obviously aware of the ongoing pause, but, as I said before, I wasn't aware of this announcement until I saw it in the media this morning.

Senator RICE: Okay, just going to that engagement over the changes to the EPBC act and your Nature Positive Plan, in the department's response to the independent review of the EPBC Act, the department says that the government will work with stakeholders in relevant jurisdictions towards applying national environmental standards for regional forest agreements. The timing and form of this requirement will be subject to further consultation with stakeholders. So you've begun the consultation on this requirement?

Mr Knudson: What we've begun, Senator—we've had a number of sessions on the proposed national environmental standards with a broad range of stakeholders, including the Forest Products Association as one of those entities. That work will continue on, as I was saying earlier on, until the back end of this year, when we expect not only the exposure draft legislation but also the draft standards will be out for public release. That then informs not only the tabling of the legislation either at the back end of this year or beginning of next year but also helps inform our engagement with the states and territories and the Department of Agriculture, Fisheries and Forestry on the application of those standards to the RFA. So it's just a bit premature at this point.

Senator RICE: Clearly, the decision this morning—as I said, the Victorian assessment is that they can't meet the laws while continuing logging. Will that play into your consultation process?

Senator McAllister: Well, that's a characterisation of a single clause in a single paragraph of a press release. As indicated, officials have said to you that there is yet to be a full briefing. I think when we've received a full briefing we can contemplate the implications after that.

Ms Kennedy: Senator, might I just add that I think that, just reading this clause—and I'm just doing it at the same time as you, so I could be wrong—my understanding is that the reforms and the laws that they're talking about here are actually the Victorian laws. It's not a comment on the RFA structure overall, which, as you know, is slightly different. The situation that was happening in Victoria was a Victorian compliance matter. I understand what you're saying and that there could be broader implications. We look forward to the fuller briefing, but I don't think—just reading that sentence myself, I'm not sure that's what they were meaning to say.

Senator RICE: So you're okay if there are weaker laws in Tasmania and in New South Wales for logging to be doing the damage and, just because it doesn't breach those laws, that's okay?

Senator McAllister: Senator Rice, that is not a reasonable way to characterise the officials' evidence; I think you understand that. On a number of occasions this morning, officials have spoken about the reform processes that are in place at a national level in relation to the EPBC Act. The government has been very clear that our national laws require reform. It has also been clear about our intention to develop national environmental standards. I don't think it is reasonable to characterise the officials' evidence in that way.

Ms Kennedy: I apologise if I was not clear. With regard to the options of regulatory reform they are talking about there, I just want it to be clear that I don't think that is a reference to the reforms to the EPBC Act—

Senator RICE: No, I agree with you. It is a reference to the Victorian laws, because it is under Victorian laws that legal actions have been taken that have shown consistently that logging is breaking those Victorian laws.

CHAIR: I have to say, Senator Rice: please ask appropriate questions in this arena. The laws and actions of the Victorian government are very difficult for our colleagues to actually comment on.

Senator RICE: And that is an issue, because regional forest agreements are joint Commonwealth-state agreements and the forest operations have to meet both sets of laws. Going back, Mr Knudson, to the

consultation: can you tell me—on notice probably—who has been consulted, and are there stakeholders that you have not consulted yet that you intend to consult?

Mr Knudson: Senator Duniam asked a very similar question, so we will provide the full list of people who we consulted with on record.

Senator RICE: I want to go to the other big implication, and reference my standard question at every estimates since I became a senator about the recovery plan for Leadbeater's possums. Given this morning's announcement, we know that the unspoken context of the recovery plan for Leadbeater's possum is the interaction of logging operations impacting on it. Given this announcement, I presume that we can see a speedy finalisation of the recovery plan for Leadbeater's.

Mr Knudson: Before I ask Ms Kennedy to comment on this, I will say that her answer was prepared prior to us knowing this response.

Ms Kennedy: Mr Knudson is right. As we discussed at the last estimates, the Leadbeater's possum draft recovery plan is now in its final stages and is going to the Threatened Species Scientific Committee for its consideration to be finalised. That meeting is at the beginning of June.

Senator RICE: The 9th, I think I have been told.

Ms Kennedy: I know Professor Marsh is on later this evening, but that is a very big step forward, so we are very pleased to be able to report that to you.

Senator RICE: I look forward to seeing a speedy finalisation of that recovery plan. Can we go to the establishment of Environment Protection Australia. Will this agency be monitoring and regulating forestry in Australia?

Mr Knudson: I am not sure that has been decided yet.

Mr Tregurtha: The management of forestry in Australia is the responsibility of the agriculture, fisheries and forestry portfolio. In terms of environmental management and the application of environmental standards, it is envisaged that the application of environmental regulation at the federal level will be the responsibility of the EPA. That is being created through the reforms, which would operate consistently with national environmental standards. But any more regulation beyond that point that was specific to the forestry sector would be the purview of the agriculture, fisheries and forestry portfolio.

Senator RICE: Okay. If you have any more detail as things evolve as to how the agency will interact with forestry and the regional forest agreements, perhaps you could put that on notice.

Mr Tregurtha: I think Mr Knudson has already answered that, because he talked about the fact that we would be consulting. You know about the development of the standards, so I don't think I have anything further to add at this point.

Senator RICE: I have one last question. In the Nature Positive Plan, it says that a data division will be established. Is that Environment Information Australia?

Mr Knudson: Yes.

Senator RICE: It says that the Data Division 'will ... be responsible for delivering environmental economic accounts in partnership with the Australian Bureau of Statistics'. Does this mean that it will be responsible for implementing the system of environmental and economic accounting, SEEA, the new environmental standards?

Ms O'Connell: Yes, it does. Alongside a couple of Commonwealth colleagues, such as the Australian Bureau of Statistics, but yes, using SEEA frameworks.

Senator RICE: That is what I want to know—how they will interact—because I have heard of considerable concern about how SEEA is being implemented, including that there is no coordinated approach, with tenders put out and then withdrawn, with no strategic framework guiding the implementation. I wonder whether, as part of this, and the new Environment Information Australia, you intend to undertake a review of how SEEA is being implemented. Are you going to be looking at that?

Ms O'Connell: I have certainly taken on board your comment, and I will talk to my colleagues both in the department and at ABS, but there has been considerable work together about how to implement SEEA for environmental and economic accounting. I am happy to take on board any comments or concerns and address them, but there is a good collaborative working relationship on implementing environmental economic accounting.

Senator RICE: I've heard some very serious concerns from some very key, prominent people in this area of environmental accounting in the country. Perhaps you could take on notice, then, the details of how you see that coordination and interaction with the other agencies occurring.

Ms O'Connell: Certainly. Will do.

Senator PAYMAN: In the December response to the Samuel review, the minister promised to overhaul the offset regime using a hierarchy of actions. Could you explain that hierarchy and how it would apply to hypothetical projects we have been hearing about?

Mr Knudson: Certainly. I will ask Mr Tregurtha to come in, because he has been the person leading the consultations on the standard.

Mr Tregurtha: Thank you. The hierarchy is essentially based on the hierarchy we currently use in relation to determining how to address significant impacts of proposals through the current EPBC Act. But, essentially, the hierarchy is that, where it is likely there would be a significant impact on a nationally protected matter, there would be an obligation on the proponent proposing to take that impact to determine how that impact might be avoided. So that is the first step in the hierarchy. Looking at ways of redesigning a project to site particular facilities away from particularly sensitive areas would be an example of that. Following that, the second step in the hierarchy is around mitigation. So, again, the proponent of the action would determine whether or not there were appropriate measures that could be taken to mitigate the impacts of the action or reduce the impacts of the action on nationally protected matters. An example of that might be that, if you were digging a trench for a pipeline that would be a temporary diminution in grassland habitat available for some species, you might make nesting boxes or other types of facilities available while the grassland re-grew after the pipe was buried, as an example of mitigation. Following avoidance and mitigation, we determine whether or not there are any residual significant impacts. The current system then provides for those residual significant impacts to be offset. The Nature Positive Plan talks about a net gain approach to offsets, so that is a change from the current system where at the moment the offsetting obligation is—

Mr Knudson: No net loss.

Mr Tregurtha: Yes, no net loss, whereas the new test is net gain. In offsetting, what we talk about then is how you might look to restore or regenerate another area of degraded habitat that is of the same nature as the habitat that is being impacted upon. That is the third step around offsetting. Finally, the fourth step set out in the Nature Positive Plan, which is new for the Commonwealth, would be the opportunity to use a conservation payment in order to achieve the environmental outcome. The Nature Positive Plan says that, unless there is very strong evidence to the contrary, the conservation payment would also be required to be like for like, but that in using a conservation payment you might be able to achieve an offset outcome where it might not otherwise be achieved. A good example of that would be where you have small proponents who are going to have an impact on nationally protected matters who are not able to secure an offset, given the size of their project. But if their contribution, through a conservation payment, was able to be put together with a range of other contributions, it would result in economies of scale such that the offset could be achieved.

Senator PAYMAN: So, to clarify, offsets are at the bottom of the environmental approval hierarchy?

Mr Tregurtha: That is correct.

Senator PAYMAN: So, under the current operation of the EPBC Act, how are offset projects regulated? Do offset projects have to be managed to ensure biodiversity values are maintained?

Mr Tregurtha: Mr Edwards is currently responsible for the division that actually conditions for offsets at the current point in time. But, essentially, when a project is approved, it is often approved with conditions attached to it. It is those conditions of approval that set out the obligations that a proponent would need to meet in relation to the offsets they secure to offset the residual significant impact that I was talking about. Those obligations could be expressed in a number of different ways, depending not just on the nature of the project and the impact but also the nature of the nationally protected matters that are being impacted. Some things that are being impacted require greater breeding habitat. You may be impacting on breeding habitat, you might be impacting on population numbers, or you might be impacting on heritage sites or water quality. So it really depends on the nature of the impact and the consequent offset that you propose to make. But I can say, from a position of commonality, all of those obligations are set out in the conditions set for each individual project, and that is a legal obligation on the proponent of the project.

Mr Knudson: Could I add something. The intention is pretty important in terms of how to deliver a nature positive outcome. Number one, we have talked about the idea of trying to get information to proponents earlier rather than later about where to avoid. That is important for the hierarchy, and trying to be really clear to

proponents that, if you go here, not there, less environmental complexity, less of an impact. The other thing we are trying to do is also be really clear about the outcome that we need. So it is no longer just maintaining, as your question mentioned; it is actually about improving—the nature positive element. I will use a simple example of what you will see. You have cleared five hectares of a certain type of habitat for a species, and you have to restore six hectares elsewhere. So overall, there is an increase in the number of hectares that are for that species in terms of existing habitat. That is where the nature positive element comes in with respect to regulation. Another thing we will try to do in advance is also say, 'We have a national park over here, we have a private land conservation element over here. This piece in between is really important and we want to see offsets go in to create a corridor that connects those really important pieces of habitat'. That is also important for getting better environmental outcomes. The company itself will be indifferent about where it buys an offset but, if we can actually provide good advice up front to proponents about where their offsets are likely to have a better impact on the environment, we can actually deliver a much better outcome than currently happens under offsets, where a company goes and, quite frankly, determines, completely legitimately, where they place their offsets. But there is no view as to the overall network of protected areas, and how we preserve this species in a more effective way by creating a corridor that might be quite important for connecting different populations of that species. So there are a number of things we are trying to do in terms of behavioural change, in getting information to people, in communities but also in business, sooner rather than later.

Senator PAYMAN: Thank you. That was very comprehensive.

Proceedings suspended from 15:59 to 16:14

Senator DAVID POCOCK: I would like the department to add a little more about the approvals process, following on from Senator Hanson-Young and Senator Duniam. What is the process for when approvals are announced?

Mr Knudson: As soon as the minister or delegate makes a decision, we will put out a notification. It is all on our website. For each of the statutory decisions, right from referral, to the assessment level, to the final approval.

Senator DAVID POCOCK: So as soon as the decision is made it goes on to the website?

Mr Knudson: Yes, it is usually within 24 hours.

Senator DAVID POCOCK: And is the timing of putting it on the website up to the department?

Mr Knudson: Yes.

Senator DAVID POCOCK: I was interested in the Towrie Gas Development decision. I note that the decision was made the Friday before it was announced. Is that correct?

Mr Edwards: That may have been the case. Again, there is a sequence of events—anywhere between 24 and 48 hours, we will advise the proponent, we will publish the approval on our notification website. So, if it is on a Friday afternoon, it could indeed be the following week that we would do some of those processes.

Senator DAVID POCOCK: It was approved on the Friday but you decided to put it up the following week?

Mr Edwards: They are business days, so it just depends on timing, but we would generally work with our web team to get notifications put up as soon as we could—but it may be across the weekend.

Senator DAVID POCOCK: If that is the case, I am interested in why it was put up at 5.08 pm on the Monday—after 5 pm.

Mr Edwards: I don't have the exact time frame.

Senator DAVID POCOCK: I have it here—5.08 pm on Monday, 21 February.

Mr Edwards: Yes. So that is entirely within our normal processes. Again, we have to coordinate with our web team, we put the notification up on the website, and we advise the proponent within that period as well.

Senator DAVID POCOCK: Was there any direction from the minister or the minister's office to delay that until later in the afternoon or evening?

Mr Edwards: No.

Senator DAVID POCOCK: Nothing?

Mr Edwards: No.

Senator DAVID POCOCK: Pure chance?

Mr Edwards: Yes. Again, there are different variables. We provide that as soon as we have made a decision, or the minister has, to our web team. They have to too tee it up, they have to publish it in an update on the

website. Sometimes that can take longer. There might be other items they need to publish first, but generally within 24 to 48 hours, business days.

Senator DAVID POCOCK: And none of those discussions were about putting it later in the day?

Mr Edwards: No. I don't have any recollection of that type of discussion. We would follow our standard process.

Senator DAVID POCOCK: Can I take you to the Santos gas project in Gladstone, which Minister Plibersek approved on 21 February. Could you talk me through the sequence of when that was approved to when it was announced?

Mr Knudson: I am just trying to find the correct briefing.

Mr Edwards: The Towrie Santos one? I am not sure I have the exact publication time frame for that, but we would have followed that same standard process. I will just look at my briefing and see if I do have some information.

Mr Knudson: We are happy to come back to you with the exact time frames.

Senator DAVID POCOCK: That would be great. So is the timing of the announcements we see from the minister set by the department or the minister's office?

Mr Knudson: It is usually literally just the process of getting the documentation from the minister, loading it up on to our website and having it published. And each of those is a bit of an administrative step—nothing too extraordinary, but it does take us some time. That is why Mr Edwards was saying it normally happens within 24 to 48 hours. But there is nothing untoward in the slightest about that.

Mr Edwards: Senator, I confirm I don't have the details of that.

Senator DAVID POCOCK: Sure. Please take that on notice. That will be fine. I'm guessing it is purely up to the minister's office whether or not they then do a press release or a social media post?

Mr Knudson: That is correct. It is always the minister's prerogative whether they want to put out a notification. The piece that always happens is the publication of the decision.

Senator DAVID POCOCK: Minister, we have seen a number of these announcements, and the approvals seem to go up at 5 pm. With the few projects that have been knocked back, we have seen press releases and social media posts. I am just interested in the discrepancy.

Senator McAllister: I would not characterise that as a discrepancy, and I think you have evidence from the officials about the very straightforward approach they take to publishing information when decisions are taken under the act. I think, more broadly, the minister has been very clear in all of her communications, whether it is media interviews, speeches in the parliament or on social media, that she takes her legal responsibilities very seriously. And, in a period when there is an interested public trying to understand how environmental decision-making occurs, I think the minister attempts to augment the information provided by the department by communicating.

Senator DAVID POCOCK: I would put to you that the public is also interested when projects are approved.

Senator McAllister: There is no impediment to people finding out how projects are approved—

Senator DAVID POCOCK: Exactly the opposite.

Senator McAllister: In many instances—perhaps I will ask the officials to explain, but certainly in some circumstances under the act a statement of reasons is also provided, which provides quite significant levels of detail for people about the matters—

Senator DAVID POCOCK: The department seems clear-cut. The department makes decisions and then the government is publicising those and putting on a bit of a political spin, as all politicians do. I was just trying to dig into this because I have seen posts about the few that have been knocked back; I have seen nothing about the projects that have been approved.

Senator McAllister: In contrast, I have seen quite a bit of information from Minister Plibersek about her decision-making role, both on occasions where she approves projects and on occasions where she does not.

Senator DAVID POCOCK: I was reading in the *Australian Financial Review* this morning that Chevron's general manager was talking about support for a hub type development of carbon capture and storage in Australia. He was talking about economies of scale and was saying that there is a real attractiveness of Australia because of the regulatory environment and the potential for CCS, according to him. Then he talked about international interest in bringing CO₂ to Australia to be stored. I was wondering whether the department has been informed of any plans by the government to import CO₂ and store it in Australia.

Mr Edwards: There have been international negotiations under the London Protocol that relates to sea dumping, but also things that can be planted within the ocean. There is a current inquiry looking into our expected ratification of the latest amendments to that protocol.

Senator DAVID POCOCK: Thank you. I am just interested to know: has the department received any correspondence from a minister from third parties about a proposed agreement for Australia to allow this to happen, either through legislation or—

Mr Edwards: As I was explaining, that inquiry, which is ahead of the parliament at the moment, is actually looking at a proposal as a country to ratify the agreement under that convention that would allow Australia to accept and then permit, following assessment, the sub-sea sequestration of carbon. That is on the public record. That is something that the parliament is currently looking at. I assure you that, once the proposals to amend the Sea Dumping Act were ratified under the London protocol, any subsequent proposal would go through a rigorous assessment to see if that was permitted or not.

Senator DAVID POCOCK: Separately to what is happening in parliament in terms of looking at that and legislating, have you received any proposals or potential agreements to actually do this, if that happens?

Mr Edwards: Not at this stage. We are not able to do that. I understand that there are a number of international partners under that London Protocol international agreement that are quite interested, and have expressed that they are quite interested, in working with Australia if we do move forward with that.

Senator DAVID POCOCK: Has the department received any correspondence from third parties about potential agreements to enter into doing that?

Mr Edwards: I would have to take that on notice but, again, we don't have that mechanism at the moment.

Senator DAVID POCOCK: I understand. But there must be unsolicited—

Mr Fredericks: Can I assist on that one? I think the question is really addressed to the breadth of the department. What we have here is the environment part and the environmental approvals division. So could I take it on notice, and I will interpret it as that you are broadly asking if the department, across all our breadth, has received any of the correspondence that you are referring to.

Senator DAVID POCOCK: Thank you.

Senator ROBERTS: Minister, are you still considering an application to build a second tailings dam, full of toxic, acidic tailings, in the Tarkine area of remote north-west Tasmania?

Senator McAllister: I will ask the officials to provide any information they might have about any matters that are before the department, perhaps repeating some of the earlier information I have provided, which is just to reiterate that the minister has a series of obligations under the law to consider projects that are before her in a particular way. The officials may have something to add. They may also not accept your characterisation of the project in question. I think it would be helpful if the officials could just explain what projects are before them, without accepting all of the matters in your preamble.

Mr Edwards: We do have a proposal before us at the moment for a tailings dam in the Tarkine area of Tasmania. That is being assessed through a bilateral agreement with Tasmania. Tasmania has an agreement through which it can assess, under state laws, and then also under national laws, and they pass the result to us, because we have to do the ultimate approval against our own rules. But that is in process, yes.

Senator ROBERTS: Are you aware, then, that the current tailings dam has leaked toxic waste into the local river system on 18 occasions since 2018?

Mr Edwards: I am not familiar with the details of that project. Again, it will be assessed by Tasmania and they will provide their report to us about the merits of that particular approval.

Senator ROBERTS: So what will be your oversight of the minister's oversight?

Mr Edwards: Under the bilateral agreement with Tasmania, the Tasmanian government will assess the proposal that has come forward. We will provide them with advice about our requirements under national law. We ask that they consider those requirements in reaching their own assessment. They can grant their approval or not, under their state laws, but then they hand the rest of the assessment to us to consider under the EPBC Act, and I would advise the minister in that decision, or it may be a departmental delegate. But we would undertake an approval consideration at that point.

Mr Knudson: May I make one clarification. I am not aware of the details of this project, but if it already existed as either a mine or a tailings dam, and this is an expansion, if that was subject to consideration under the EPBC Act, we would have a responsibility with respect to compliance and enforcement for the equal of the

conditions that were put on that project. But we can come back to you on notice as to whether there is an existing approval by the Commonwealth. That is relevant to your point about how we are engaged on this project.

Senator ROBERTS: Admittedly, I am relying on the press, but the press has said that there are 18 occasions on which toxic waste has leaked into the local river system. So I am wondering, Mr Edwards and Mr Knudson, does the Commonwealth have any auditing or vetting process or do you just accept what the Tasmanian government says?

Mr Edwards: We seem to be at cross purposes here, so I will just clarify the proposal in front of us under the act. And the Tasmanian government is progressing this for a new tailings facility. As Mr Knudson indicated, if there is an existing facility that has a potential impact on matters of national environmental significance, and if there is an approval related to that, we would have a role in our compliance area to see if there had been any breach of any approval conditions. To be honest, as a matter of course we would quite often talk to the Tasmanian government just to understand whether there was something that we needed to be considering.

Mr Knudson: Also, we regularly look at the record of the proponent. We have to make a determination whether the person is of proper standing—there is properly language behind that in the act—but, in effect, their prior environmental record would be taken into account. .

Senator McAllister: Senator Roberts, can I ask whether the document before you names a site or a place? I am conscious—

Senator ROBERTS: It's the existing tailings dam.

Senator McAllister: Yes, I understand that.

Senator ROBERTS: The Chinese owners of the mine, MMG, have requested that the development at South Marion oak should not be required to be fully assessed under national environmental laws. What is your view on that?

Senator McAllister: My point in seeking clarification about the specific project is that the officials to date have been providing you with general information about how such a project, in general, would be treated from a process perspective under the act. I don't have information before me, but officials may have something to tell you about any matters relevant to this project that are presently before the department. But, as I have sought to emphasise in previous answers, the minister has legal obligations and the department has legal obligations to actually follow the act as it is laid out. So there are some constraints on how much information may be provided if there is in fact some sort of assessment on foot.

Senator HANSON-YOUNG: For 12 months this has been in front of—

Senator McAllister: Senator Hanson-Young, we had a very general question about a dam somewhere in Tasmania. We now understand the project, and I am inviting officials to provide the information that they can.

Mr Edwards: I have just talked to a colleague. My understanding is that there is an existing tailings dam in Tasmania.

Senator ROBERTS: That is where the toxic waste has come from.

Mr Edwards: I do not have information in front of me as to whether a current EPBC approval relates to that project, but we are happy to take that on notice—the advice we can receive from the Tasmanian government on that facility. The one I was referring to, just to be clear, is a proposal currently under assessment for a new tailings facility.

Senator HANSON-YOUNG: Where is that at?

Mr Edwards: That is under assessment by the Tasmanian government.

Senator HANSON-YOUNG: Why have we had to wait 12 months for a response from Minister Plibersek?

Mr Edwards: It has not yet been provided to us by the Tasmanian government. We try to align assessments as far as possible. If they have an opportunity to assess under state law and national law at the same time, we would look to exercise that opportunity. And then the outcomes will be provided to us and to Minister Plibersek for consideration.

Senator ROBERTS: Minister, as you know, I am a very strong advocate for mining, provided it is done responsibly, because everything in this room has come out of a mine or out of the ground. I will call out irresponsible mining, such as I have with BHP for almost four years now in the Hunter Valley—exploiting workers—and I will call it out when a mining company exploits the environment or does not comply with the appropriate legislation. Are you ready to take a stand and make decisions that actually protect the Australian environment in this case?

Senator McAllister: To be honest—

CHAIR: Let us just be very clear about the difference between a statement and a question. The department officials will do everything they can to answer a specific question.

Senator McAllister: I think the best way to answer that, Senator Roberts, is that the minister consistently expresses her commitment to applying the law.

Senator ROBERTS: Okay. Thank you very much—because mining and the environment need each other. Mining prospers when the environment is considered and the environment prospers when mining is considered, because mining is important to the environment. I just want to make sure that they can both co-exist and that any miners who are not doing the right thing are dealt with.

Senator WHISH-WILSON: Minister, you talked about applying the law, but it was mentioned recently that Minister Plibersek was discussing with a company alternatives to a tailings dam, such as infill operations, which have been used at MMG's other operations. Are you able to elaborate on whether there have been any developments in that field?

Mr Knudson: We can take that on notice and come back to you, once we check in with the minister, on whether there are any further developments. But we are not aware of any.

Senator MCKIM: I have a follow-up question on that project too. Can I ask you to confirm the evidence I think you gave, Mr Edwards, which is that the Tasmanian government has not yet put that project before the minister?

Mr Edwards: That's right. So my understanding—

Senator MCKIM: This is the alternative tailings dam proposed for near Rosebery by MMG?

Mr Edwards: Correct. So there is a tailings dam proposal. That is under assessment by the Tasmanian government, and they have not yet completed that process to be able to provide us with their findings.

Senator HANSON-YOUNG: So what were you doing in the Federal Court?

Mr Edwards: The Federal Court was actually for different exploratory work associated with that project.

Senator HANSON-YOUNG: Associated with that. Let's not try to be too cute. There is a decision before the minister at the moment in relation to this overall project, is there not?

Mr Edwards: No, that is incorrect.

Senator HANSON-YOUNG: Okay. Well, you tell me: what was Minister Plibersek doing down there over summer, negotiating with the workers and the company, if she's got nothing to do with it?

Mr Edwards: I would be happy to answer and give you some clarity about the project.

Senator HANSON-YOUNG: I have asked many questions about this project in this exact estimates session previously, as you would recall.

Mr Edwards: I will try again. Just to clarify, there are two projects. One is a tailings dam proposal, and that is under assessment by the Tasmanian government under the bilateral arrangements. There is a second associated works, which is exploratory works, for a tailings dam. That is subject to a court decision, which found a previous not controlled action decision not to be valid, and the proponent is therefore working to resubmit a further referral for that component.

Senator MCKIM: So, on the second of those two matters, where are we in the process now? Are you saying that the proponent is going to submit a revised proposal? Has that stopped the clock?

Mr Edwards: The clock has not started. They are working to prepare their documentation for a referral.

Senator MCKIM: Thank you. I want to ask some questions about the Lake Malbena proposal, which is for a helicopter access tourism development on Halls Island, inside the Walls of Jerusalem National Park and the Tasmanian Wilderness World Heritage Area. Where are we in that process? Specifically, has the department received from the proponent copies of all the comments and details that the proponent received as part of the assessment?

Mr Edwards: I will tell you where it is up to and I have my colleague, Mr Linton-Smith, who can add any definition around that. My understanding is that project has been provided to us by the project proponent. They have received public comments as part of that process, and we are in the process of reviewing the material that they have provided to us.

Senator MCKIM: As part of that reviewing, has the department confirmed that it did receive from the proponent copies of all comments or submissions provided to the proponent?

Mr Edwards: I will ask Mr Linton-Smith to answer that.

Senator McKIM: Mr Linton-Smith, it is a requirement of the act, is it not, that the proponent provide a copy of the comments received?

Mr Linton-Smith: I can confirm that we have received all the comments in relation to that proposal, and that it is, as Bruce mentioned, on the clock and under active assessment within our branch at the moment.

Senator McKIM: How many copies?

Mr Linton-Smith: We received a total of 5,306 comments.

Senator McKIM: Are you able to inform the committee how many of them may reasonably be characterised as pro forma comments?

Mr Fredericks: Can we just pause on that for a moment? It is a legal process. I just want to make sure that, by starting to go down the line of the substance of the consideration, we are not starting to impact upon a legal consideration. I was happy while it was all process. I have a suspicion that starts to move it into the substance.

Senator McKIM: I will withdraw that question.

Mr Fredericks: Thank you for that.

Senator McKIM: Will the minister publish the comments received?

Mr Linton-Smith: Not in full, generally. No, there would be privacy issues and it is not one of our requirements under the act to publish every single comment that we receive during an assessment.

Senator McKIM: Will the minister publish a draft decision for comment before a final decision is made?

Mr Linton-Smith: That has not been determined yet.

Senator McKIM: At what stage in the process would that be determined, and would that be the sort of thing that the department would provide advice to the minister on?

Mr Edwards: That is, I suppose, one of the projects that we would have ongoing discussions with the minister about—first of all, whether she would like to make the decision or whether it is something for a delegate. I know concerns have been raised about addressing public consultation. We have discussed with the proponent, and reiterated, the requirements of the act, and either the delegate or the minister—whoever considers that—will be very clear that all those requirements will need to be sufficiently met, according to the act, before we proceed to any type of proposed approval.

Senator McKIM: As part of the process, would the department seek to determine whether the proponent has misrepresented the public commentary, in content or in number, or ignored any of the public comments that have been received?

Mr Edwards: If we have questions about any of that, we will go back to the proponent.

Senator McKIM: You would seek to make a determination about that?

Mr Edwards: We would certainly make a determination about whether we believe the statutory requirements have been met or not, and if we had any doubts about that we would get back to the proponent.

Senator McKIM: Finally, on the number, the 5,306, has the department taken steps to satisfy itself that is actually the number of submissions that the proponent received?

Mr Edwards: I think it is too early. We received that material fairly recently and we will be working through that.

Senator McKIM: I also want to ask whether the department is aware of a request from a Tasmanian tourism organisation, West by North West, for funding to undertake preparatory work and restoration works at Dismal Swamp?

Mr Linton-Smith: Generally speaking, I am aware of that proposal. However, we have not received a referral for that one yet.

Senator McKIM: Have you received a request for funding, or are you aware of a request for funding submitted to any other federal agency?

Mr Linton-Smith: I am not, no.

Mr Knudson: My colleagues work in a regulatory area—

Senator McKIM: I understand that. Mr Linton-Smith, you said you were aware of that project. How has that project come to your awareness if no referral has been made?

Mr Linton-Smith: That one, I think, was press clippings, to be honest. We try to keep an eye on things in the lead-up to these hearings, and I think that is where I read it.

Senator McKIM: So you are not aware of any funding request, and you don't deal with funding. Mr Fredericks, could I ask you to take on notice, on a whole-of-department basis, whether the department is aware of any funding request and, if so, to whom that has been made and the details of such a request.

Mr Fredericks: Yes. I am happy to take that on notice.

Senator WHISH-WILSON: I will kick off with some questions on Tasmanian devils, following up what I asked at last estimates around population surveys. Has the department got any new information? Last time we chatted you said you had been down to Tasmania. Have you received any information from NRE in Tasmania or other groups about surveys in the Woolnorth area?

Ms Kennedy: My colleague might have more information, but at this stage I have not personally received any more information about the facial tumour disease, no.

Dr Kiessling: I also am not aware of any results of any surveys, I am afraid.

Senator WHISH-WILSON: Are you aware of any being conducted—any work being done on surveys?

Ms Kennedy: Before the last estimates when we were speaking—I can't remember how long ago; it feels like not very long—I know they were talking about doing that. But we have not had an update yet, by the sounds of it. But I am happy to take that on notice and come back to you when we can get that information from our state colleagues.

Senator WHISH-WILSON: Can I ask you specifically about a notice of extension of time in which to make a decision whether to approve a controlled action? This is in relation to Robbins Island Renewable Energy Parks. There has been a specified period for ACEN Robbins Island Pty Ltd for an extension. The department requested from the designated proponent information on 18 April 2023 in relation to offsets for Tasmanian devils. You may not have this document in front of you, but annexure A basically says:

Information was requested from the designated proponent under section 132 of the EPBC Act on offset strategy and offset management plan to compensate for the loss of up to 366 hectares of Tasmanian devil habitat. The offset proposal must be consistent with the department's EPBC policy...

And then it sets out what that is. Could you explain to me how the offset would work for a Tasmanian devil population on an island, being Robbins Island, which is disease-free, and it isn't disease-free anywhere else? How would this work in terms of directly offsetting?

Mr Edwards: I will respond to that. It is my area that requested that further information from the proponent on that. I think you have hit the nail on the head with where we are at with that. We are asking how the offsets would work and what a strategy would look like. It is reverse onus. The onus is on the proponent to explain to us why something would be manageable and acceptable under national environmental law. So that is why we have gone back to the proponent for more information.

Senator WHISH-WILSON: It is set out in the act that a minimum of 90 per cent of your offset requirements must be met through direct offsets. Are there examples of where offsets have not been able to be used because it is just not possible to offset a biodiversity impact from a project?

Mr Knudson: There was a project that was dealing with a particular stand of orchid—a very limited stand. The proposal was for urban development. Mr Tregurtha knows this project well. In effect, offsets just did not make sense, so what we ended up doing was changing the footprint of that development to protect the orchid and its surrounding habitat.

Senator WHISH-WILSON: And if you can't change the footprint—which I don't think you will be able to on the island, because it is not a huge island and there are other restrictions—what would be the fallback position if the company could not offset a healthy, disease-free population?

Mr Fredericks: I am just worried about the legality of some of the discussions we are getting into. We can't answer that question by reference to a particular application, as you know. Your previous question was done at a general level. If there is a general question, we can answer it. If it is about a potential decision under an application, we can't.

Senator WHISH-WILSON: It was a general question. If I could not change the footprint of a project to meet the requirements and still had to rely on offsets, is there some kind of legal precedent where a project has not been approved because you cannot offset?

Mr Knudson: There have been about a dozen or so projects that have, at the end of the assessment process, been refused—

Senator WHISH-WILSON: For this reason—because offsets could not be used directly?

Mr Knudson: A range of reasons.

Senator WHISH-WILSON: I am specifically interested in offsets. Obviously, we have had a broader discussion today about nature repair and how you can directly offset something, but it is a very good example right before us now. It was very bad news that we got that the facial tumour was detected in the Woolnorth area, because that area had not previously had facial tumour. So now we have this little island there, and I don't even know if it has been surveyed at this point in time, and yet this is an endangered species. So is there an example of where offsets can't be applied?

Mr Knudson: Can we take that on notice?

Mr Fredericks: It is a proper question, and we would like to give you a good answer. We will not be able to do it now, so we will take it on notice.

Senator DUNIAM: We left off talking about the EPA, which has prepared and budgeted for \$121 million, and Mr Tregurtha ran me through three elements of that—everything from an ABN to an agency ID, strengthening compliance and then the other enabling functions, and appointment of a CEO. And you mentioned that we will wrap in, at a point in time in the future, Mr Edwards's division as part of the entity—

Mr Tregurtha: Well, more than Mr Edwards's division.

Senator DUNIAM: Could you go through what it will be?

Mr Tregurtha: The point of the EPA is that it will undertake the Commonwealth's environmental regulatory responsibilities. That is set out in the Nature Positive Plan. So it is not just Mr Edwards's area. There are various other regulatory functions that the Nature Positive Plan suggests would be transferred into the EPA. They would include the compliance enforcement responsibilities in the department, which we have already mentioned.

Senator DUNIAM: Just going off the organisational structure—

Mr Tregurtha: Not all of these will be able to be cut out from the organisational chart because some of the regulatory functions are currently embedded with the policy and other administrative functions and we would just take the regulatory component out. A great example of that would be in relation to the permitting aspects for wildlife trade or the permitting aspects for recycling and waste going overseas. So those regulatory functions currently are co-located with the policy and other administrative functions the government undertakes, including participation in international agreements, all of which would stay, rightly, with the department. So there would be regulatory components of those areas that relate to the permitting and licensing functions that will go into the EPA.

Senator DUNIAM: Okay. So, can you give me, on notice, a rough idea of what number of staff from existing branches and divisions—

Mr Tregurtha: I am happy to take it on notice but I should also caution that one of the other things that will happen on the creation of the EPA is that there will have to be a machinery of government process in relation to the department's corporate functions. Without knowing the full scope and scale of the EPA—which will only really be known once we have finished the legislative and policy development process—it would be very hard for us to estimate, and I would be very reluctant to hypothesise where the machinery of government process would land. So, as I said, I am happy to take it on notice and see what we can provide, but there might be some limitations in terms of what we can give you at this point in time.

Senator DUNIAM: Sure. I understand that. Do you have a rough idea of how many staff might be embedded in this EPA, once established, or does that again come back to your point before?

Mr Tregurtha: Again, I think we are still working through. And I should say very clearly that the department is undertaking preliminary work around bringing together the functions that will ultimately transfer into an EPA once it is created as an independent entity. But I am very reluctant to try to put a figure on it because of the scope of the various areas that are spread out at the moment across the environment portfolio.

Senator DUNIAM: That is fine. Let us go back to what we do have here in the budget in relation to the EPA, and it is this \$121 million over four years. Can you step me through how you were able to cost that, given the unknowns related to this entity?

Mr Tregurtha: They are additional. This is very much an additionality function, if you like. There is a whole bunch of stuff that exists within the department now that we will transfer, which is what we have just been talking about. The \$121 million is additional functions that are new, and that is how it is costed. I ran through those elements that we talked about before, which were establishment costs, new governance costs around having a CEO and genuinely new positions, and then finally the government did commit to providing additional resources

in relation to compliance and enforcement beyond the compliance and enforcement resources we have in place at the moment. So for that \$121 million, I could give you the breakdown over the four years if you would like—

Senator DUNIAM: Maybe on notice, if you could.

Mr Tregurtha: But that is very much funding the additionality rather than the transfer that I spoke about before.

Senator DUNIAM: Sure. I am just trying to understand. The reason I am asking these questions is that there is a lot of unknown at the tail end of what we are doing here, because there is a process on foot, and I accept that. So I am trying to understand how we were, with such certainty, able to cost the \$121 million in terms of the additionality, because we have got set capacity in the department which will transfer over from wherever it is coming, and then your budgeting for additional capacity and the needs, genuinely set out as you have described. How do we know that is the extent of what is necessary?

Mr Tregurtha: I would say that is the department's best estimate in terms of supporting the government in the current budget process. I do note that the current budget measure in Budget Paper No. 2, page 77, does say:

The Government will consider future funding for the Nature Positive Plan when initial establishment work has been completed and ongoing administrative and operational requirements are better understood.

So I think that is a recognition—

Senator DUNIAM: That there is more.

Mr Tregurtha: That we need to reassess once we have been through the public consultation and legislative process that we are going through now, to ensure that we have got it right. So the point you make is a good one, but I think that has been recognised in terms of constructing the budget measure.

Senator DUNIAM: Sure. And that point in time when that future consideration occurs, would that be after the 2026-27 financial year or sometime on the way through?

Mr Tregurtha: That is a matter for government.

Senator DUNIAM: We would be guessing if I asked the minister, so I will not do that. You talk about compliance as one of the things that has been budgeted for in the \$121 million.

Mr Tregurtha: Additional compliance.

Senator DUNIAM: That is an operational thing, is it not? That is establishing it.

Mr Tregurtha: That is correct.

Senator DUNIAM: How much of the \$121 million will go to that additional compliance?

Mr Tregurtha: I don't know that I have that precise breakdown.

Mr Knudson: I think we will come back to you on that, if that is all right.

Senator DUNIAM: Yes, if you could, that would be great. Was there any public consultation around what you budgeted for here—not public but stakeholder consultation around what this entity might look like, given its interface with—

Mr Tregurtha: The government is doing consultation, as you know. It undertook consultation prior to and since the release of the Nature Positive Plan on 8 December last year, which goes to a range of elements of the Nature Positive Plan, including the scope of the material contained within it, prior to its release last year and now in relation to its implementation. So that is the sort of consultation that is happening at the moment in relation to the variety of elements contained in the Nature Positive Plan, and some of those have been given effect through this year's budget, on decision of the government.

Senator DUNIAM: In terms of the cost recovery we touched on last time, does that remain the policy of the government—that cost recovery will form part of this?

Mr Tregurtha: Yes. The Nature Positive Plan also reflects that. It was part of the government's election commitment but also in relation to the Nature Positive Plan there is a statement around cost recovery that talks about the need for activity-based costing and updated cost recovery arrangements for environmental assessments and approvals. So with a focus on that, that has been recognised in terms of taking this forward and, indeed, we would expect a component of the functionality of the EPA to be cost recoverable.

Senator DUNIAM: Your last point is that the cost recovery will cover that operational element. Is that the point you were making?

Mr Tregurtha: At the moment we already cost recover for some of our regulatory functions in a variety of ways. So for permits and licensing there are charges. For the assessment and approval work that we have been

talking about today there is a whole table of cost recovery mechanisms about how we undertake that, and there are a range of reviews associated with those cost recovery arrangements. But where a regulatory function transfers into the EPA, we would expect, if you like, the functionality of the cost recovery to go with it.

Senator DUNIAM: Going again to this point about the best estimate that the department put forward as part of this process, and reached this \$121 million, there is an operational component there. As part of this process, was any budgeting or costing done around what the cost recovery elements were of what the government is going to take forward—because you have money being appropriated over a four-year period. At some point in that four-year period, businesses are going to have to start operating under a new model, assuming the law is passed, and that will have a cost recovery component.

Mr Tregurtha: Most, if not all, of the cost recovery arrangements pertain to the regulatory aspects that are either currently located within the department or not yet established. As I said to you, the additionality of the budget measure we are talking about at the moment goes to establishment costs, general governance, including the CEO, and compliance and enforcement, which are all areas that historically you would not expect to be cost recovered but rather appropriated, given their nature. That said—and again I talked to you about there being a marker down about reviewing the operational requirements and how it works in the future—right now I would suggest that the reason we were able to construct the budget measure as it is is because those functions are not currently cost recovered.

Senator DUNIAM: So there is no interplay—we are not dependent on a cost recovery estimate to reach this \$121 million figure?

Mr Tregurtha: That is correct.

[Check join with EP when available]

Senator DUNIAM: That's fine. My final question on the EPA at this point is going to be in relation to question on notice SQ23-000750, which was about the CEO of the new EPA. The question I asked was:

Why has the decision been taken to impose strict limitations on the ability of the current or future governments to remove the CEO of the new Environmental Protection Authority from their position?

The answer I got back was:

This is a decision of Government.

Obviously, no-one apart from the minister can answer that. Why is that the case, Minister?

Senator McAllister: I think that a range of factors have gone into the proposals around governance arrangements for the new institution, seeking to balance independence, accountability and, essentially, in order to generate public trust. On balance, that's the recommendation that has come forward.

Senator DUNIAM: Right. It was a recommendation: was that in the Samuel review?

Senator McAllister: I don't believe the Samuel review was specific about these kinds of questions.

Mr Knudson: But it was in the Nature Positive Plan.

Senator DUNIAM: Sorry, where did the recommendation come from?

Senator McAllister: By which I mean it is a recommendation that has been brought forward and adopted.

Senator DUNIAM: Sorry, the Nature Positive Plan is the policy of government. Where did the recommendation come from—

Senator McAllister: My apologies, Senator Duniam. It was an incorrect use of language. I really meant to say that we're consulting presently on a range of matters, and this is what the government considers—

Senator DUNIAM: It's what it's taking forward, right. It's the government's position, and you referenced trust et cetera. Was there any legal advice or any other advice that you sought in reaching that position to establish it in the way that has been outlined?

Senator McAllister: The officials may be able to talk through some of the process that went into bringing this together, but I don't have specific information about legal advice.

Senator DUNIAM: Okay.

Mr Knudson: There would certainly have been general legal advice to make sure that whatever went into the government's Nature Positive Plan was appropriate legally. So to the extent that it's relevant to your point, we would have done that.

Senator DUNIAM: Sure. In relation to the appointment of this officer, and other officers, will that be—I should look at these things more closely, but I presume the laws, once drafted and consulted upon et cetera, will

establish that office, and it will be up to the parliament as to whether it accepts whatever is put forward. And are the cost-recovery charges done by regulation, or is it just a pricing schedule the department puts out—weekend rates and that sort of thing?

Mr Tregurtha: Mr Edwards might be better placed to answer that.

Mr Edwards: The government has a charging framework for cost recovery; it's implemented under that general framework. It's administered by the Department of Finance.

Senator DUNIAM: Sure. But there's no penalty unit? With a penalty unit, we have legislative—

Mr Edwards: No. Generally, the process is to assess the effort behind different functions and then there's a process of engaging with regulated communities, talking about options and getting their feedback. Then, ultimately, the decision about cost recovery is for government.

Senator DUNIAM: Okay. As part of what's being taken forward—and we'll have these laws at the back end of the year et cetera; we won't go through any of that again—there will be no oversight by this parliament, as a piece of legislation or a disallowable instrument, to look at the pricing schedule around cost recovery?

Mr Edwards: I don't believe that occurs as a matter of course. Again, there's an established framework which has been in place for many years that would support that.

Senator DUNIAM: Understood. Before I get into trouble—

CHAIR: Thank you kindly, Senator Duniam. Senator Thorpe.

Senator THORPE: My questions are about water and the \$9.2 million allocated over four years to establish a First Nations people's water ownership program.

Mr Fredericks: That falls into outcome 4, which is on Friday at the water estimates that we always have.

Senator THORPE: What about cultural heritage, 2.2?

Mr Fredericks: Cultural heritage is good.

Senator THORPE: We can do that one?

Mr Fredericks: Yes.

Senator THORPE: Water has got nothing to do with that, right? In November last year, Minister Plibersek announced that the government had accepted all but one recommendation from the Juukan inquiry, including a complete overhaul of a First Nations heritage framework in this country. What is the current status of the development of new heritage legislation?

Dr McEwen: At the moment we're in the process of consultation and consideration. Last year the minister signed an MOU—actually, it was more than an MOU; it was a partnership agreement—with the First Nations Heritage Protection Alliance. Since then we have been undertaking some consultation. At the moment we are doing some work around reflecting on consultation to date and consolidating policy positions. But we're still working actively with the First Nations Heritage Protection Alliance around developing options that will go to implementing the government's commitment to First Nations heritage protection legislation.

Senator THORPE: Is there a time frame for that?

Dr McEwen: We haven't got a firm time frame. It's likely that we will be looking at options later this year, but trying to make sure that we're consulting appropriately and speaking to as many people as possible around how we take this forward.

Senator THORPE: So you're meeting with one group, which is the cultural heritage alliance, is it?

Dr McEwen: No, they are a peak body which consists of a range of other organisations.

Senator THORPE: Aboriginal organisations?

Dr McEwen: Aboriginal and Torres Strait Islander organisations. But in the consultations, we're not exclusively speaking and haven't exclusively spoken with organisations within that grouping. We have also spoken with others, and it has been made very clear in discussions between the department and the alliance that, in addition to their 30 member organisations, we would be open to talking to other organisations and also other family groups and others within the First Nations community.

Senator THORPE: Could you outline to me which recommendations from the Juukan inquiry the government is actually working on?

Dr McEwen: I don't have all the recommendations in front of me, but in general many of them go to the approach to First Nations cultural heritage protection, which is actually addressed by this process that we're undertaking. There are some that are covered off by other portfolios because some of the recommendations are

around intangible cultural heritage issues, and so that's a matter for the department of infrastructure. There are some that relate to native title and native title funding, which are matters for AGD and NIAA.

Senator THORPE: They are handballed everywhere, but who is actually working on the implementation? What is happening right now to protect cultural heritage in this country?

Dr McEwen: We are working on looking at this legislation. Obviously, as you would appreciate, it's complex, and there are many views and different approaches and stakeholders within that process. We do have an interdepartmental committee which governs the implementation of the Juukan Gorge response as a whole, so while different matters sit appropriately with different agencies, we are maintaining a coordinating role around making sure we are keeping in touch with agencies about their progress against those recommendations as well.

Senator THORPE: It's certainly a different process to the Voice, given that you want to go and meet with everybody and consult everybody. That's not what the Voice wanted to do, so it's different in approach, which is very interesting. I believe Minister Plibersek wanted to make announcements around the new heritage protection framework in May this year.

Dr McEwen: There had been an original consideration that potentially there might be an ability to provide a report to government by May rather than having the minister make announcements. Given the complexity of some of the issues and discussions and interactions with state legislation, what we're trying to do is make sure that we get this right rather than just do it fast.

Senator THORPE: So how long?

Dr McEwen: At the moment, I think we are looking at getting a report from the partnership later this year—probably in the fourth quarter of this year.

Senator THORPE: Christmas?

Dr McEwen: Hopefully before Christmas.

Senator THORPE: What action is the government taking in the meantime to prevent further destruction of First Nations cultural heritage and provide temporary or permanent protection of our cultural heritage, given that, every day, a site is being destroyed in this country? What's going to happen now? Are we waiting for another sacred site to be destroyed?

Dr McEwen: We continue to undertake administration of the Aboriginal and Torres Strait Islander Heritage Protection Act. In addition, we are working with our state colleagues, who, for the most part, have responsibility around this, to have discussions around what their approaches to heritage protection and reform are.

Senator THORPE: So the department wasn't doing that prior to Juukan? It had never done that before?

Dr McEwen: We have been, but certainly, as part of the response to Juukan, we have redoubled those efforts and, as part of the cultural heritage reform framework, we have increased that engagement.

Senator THORPE: So can you guarantee that no more cultural heritage sites are going to be destroyed under this government—under your new minister—until you've talked to everybody, consulted everybody and done all your frameworks and kicked the can down the road?

Senator McAllister: Senator Thorpe—

Senator THORPE: Can you confirm that we can be safe in thinking that our cultural heritage—our inheritance as First Nations people—is not going to be destroyed?

Senator McAllister: Senator Thorpe, maybe I can provide the way the government thinks about this through a number of observations. Firstly, the Juukan Gorge incident was really shocking and, I think, prompted a really important national conversation, not just a government conversation, about what might be done differently.

Senator THORPE: It is one example of many that continue today.

Senator McAllister: From a Labor government perspective, we also recognise that cultural heritage reform is required at a national level. As the officials indicated, that reform process necessarily interacts with the existing responsibilities of states and territories. Our approach to implementing that reform has a number of characteristics, I would say. The first is co-design, and I think that Dr McEwen has explained to you that we're working with the alliance. The feedback that we receive says that it's important that a range of First Nations stakeholders are engaged. That would include native title holders. It would include traditional owners. It might include other family groupings and Indigenous organisations. So there is an attempt to work broadly with First Nations stakeholders in doing this work. When you work in that way, it does take more time than simply making rapid decisions. So we are seeking to strike a balance between the urgency—which I think everyone recognises—

for change and the need to get it right. Getting it right in this instance means doing it collaboratively with First Nations people.

Senator THORPE: Thank you. I understand that, and I really wish that the government took the same approach with the Voice because then we wouldn't be in the mess we are in today. It seems that your department wants to kick the can down the road and talk to every blackfella, every clan and every native title group and every traditional owner. I am all of those things, so I look forward to you coming to my three countries. So you're waiting to get all that happening and then you're going to make a decision, but, when it comes to the Voice business, you don't want to talk to anybody. You just run with it anyway. I just find that really—

CHAIR: Senator Thorpe, unfortunately, I'm going to have to pull you up on the fact that the Voice is not a topic that these guys could make any comment on.

Senator THORPE: It's just an example of consultation, I suppose.

CHAIR: For sure.

Senator THORPE: You're going through an exhaustive approach to consult First Nations people, but you didn't do that with what we're going to a referendum on. How long are we going to go through this process for? Free, prior and informed consent does take time. If you're going to talk to my three language groups, then that could take until next year. You've given me until December to get this done; is that right? What's the deadline on consulting and then getting action?

Dr McEwen: We don't have a clear deadline at the moment, but we're trying to make sure that we're thorough and considered in what is a very complex policy area before we make decisions.

Senator THORPE: What's so complex about it? State, territory and federal, I understand—but is the time taken to consult with traditional owners also difficult? You're working with a peak body. Could I get a list of who is on that peak body so we know who is talking for country?

Dr McEwen: Absolutely.

Senator THORPE: How long is this going to take? Can we feel comfortable out there on our land, knowing that someone's not going to destroy it? Can your department give us some indication of who you're talking to, by when and how much you're going to protect until then?

Mr Knudson: Government has acknowledged that the existing legislation is not fit for purpose. Nonetheless, there has been a step-up in the resourcing behind the administration of that act. What I can say is that we will ensure that decisions are made and protections are provided according to that act while these reforms are being prosecuted. So it's not a completely blank slate; I don't want to leave that impression. That being said, as Dr McEwen talked about, we're just incredibly conscious of the fact that this is a co-design process which means that there needs to be pretty extensive consultation and engagement on some pretty important matters, and we have to also bring to that discussion, in a co-design, what is workable, plausible et cetera from our perspective so that a real engagement happens. That's going to take time. You're right that that isn't what we've done traditionally in terms of legislative development. So we're just conscious that we've got a fairly extensive process ahead of us.

Senator THORPE: Thank you. No further questions, Chair.

CHAIR: Thank you, Senator Thorpe. Senator Payman.

Senator PAYMAN: I would like to go to flood infrastructure. The budget has included funding to upgrade emergency flood warning infrastructure. Can you tell us a bit more about what that actually means and how these gauges work?

Ms O'Connell: The budget has made a significant investment in flood warning infrastructure. The Bureau of Meteorology is the best agency to give advice on what that is and how it will work. I think if I can just look at the schedule, they're on after us. They're the best-placed agency to talk you through that quite significant investment of flood warning infrastructure.

Senator PAYMAN: Thank you, Ms O'Connell.

CHAIR: Senator Whish-Wilson, you have 10 minutes.

Senator WHISH-WILSON: Going back to Tasmanian devils, could I get clarity from the department: is there a time limit on when the proponent, ACEN, has to provide that information, or is it open-ended?

Mr Edwards: No, there's no time limit, but we won't proceed until we receive that additional information.

Senator WHISH-WILSON: I understand there's an appeal set down in the Tasmanian courts for September. You won't require the information prior to that time?

Mr Edwards: No, that's an appeal against the Tasmanian government decision.

Senator WHISH-WILSON: I wrote to Minister Plibersek about the Tasmanian devil facial tumour disease being discovered in Woolnorth and asked for some information. She responded: 'Since the report of devil facial tumour disease in the state's north-west, the Tasmanian Department of Natural Resources and Environment, DNRE, has advised officials of Department of Climate Change, Energy, the Environment and Water that their monitoring program is continuing. They've also published advice that the devil population is expected to stabilise in the next decade or so, based on monitoring data and modelling.' Do you have a copy of that report? Has anyone seen a copy of that published advice? I've looked for it and I can't find it.

Ms Kennedy: Dr Fraser might be able to help you with that. I certainly don't have it with me at the moment.

Senator WHISH-WILSON: Okay, thank you.

Ms Kennedy: We can certainly talk to our colleagues and see if it's possible to get a copy of that report.

Senator WHISH-WILSON: You'll be here this evening. You're here altogether now.

Ms Kennedy: To clarify, there is sometimes some confusion. This is the Threatened Species Commissioner which is different to the independent scientific committee, yes.

Senator WHISH-WILSON: We'll ask them some questions tonight as well. Lastly, I understand the only surveys of Tasmanian devils on Robbins Island, where the proponent is proposing to put a wind farm, have been conducted by the proponent; is that correct?

Mr Edwards: I'm not aware if that's the case. In any normal assessment, the proponent would be required to produce their own evidence, but there may have been other surveys in that area that I'm not aware of.

Senator WHISH-WILSON: So they haven't produced that to you already and you've requested the additional information, or are you just not aware of that?

Mr Edwards: We did not receive adequate information from them in relation to the impacts on the devils or how they might offset those.

Senator WHISH-WILSON: So that's why you've requested that?

Mr Edwards: That's right.

Senator WHISH-WILSON: We could go around in circles discussing whether you could offset a healthy Tasmanian devil population in a state where they're not so healthy anymore. Do you have any final comment on how it's possible to do that?

Mr Edwards: No. Again, it's up to the proponent to propose why their action is acceptable under the national environmental law, and then we'll assess whether that claim stacks up.

Senator WHISH-WILSON: My next questions relate to another quite sad and threatening issue in my home state. Maybe I could ask it as a quiz to the department. Do you know which Tasmanian animal or species is being referred to as the 'thylacine of the sea'?

Ms Kennedy: Ding, ding, ding!

Senator WHISH-WILSON: You only get a prize if you get the right answer.

Ms Kennedy: I actually apologise. I went with the quiz thing. It's actually a very sad situation, obviously.

Senator WHISH-WILSON: It is. That's the Maugean skate.

Ms Kennedy: Yes, that's right.

Senator WHISH-WILSON: I've asked many questions over many years about this. Have you read the IMAS interim report titled *Macquarie Harbour Maugean skate population status and monitoring*?

Dr Fraser: Yes, we're familiar with that report, and we've worked with the IMAS researchers who are responsible for it.

Senator WHISH-WILSON: Were you surprised they put out an interim report, claiming they had to do so because they were so alarmed at what their monitoring was showing?

Dr Fraser: I haven't considered if I was surprised or not, but I can understand their reasons for doing so. We had discussed the report with them ahead of time but not the early release.

Senator WHISH-WILSON: It has been reported in the media that the scientists in the report are saying that the 'thylacine of the sea', the Maugean skate, is only one extreme weather event away from extinction. Do you have any comments? Do you believe that to be the case?

Dr Fraser: We've got no qualms with the report and the media. We're extremely concerned about the plight of the skate. It's one of the species which we've prioritised in the Threatened Species Action Plan, the Threatened

Species Scientific Committee is working to update the conservation advice so that we've got some strong recovery actions to help guide the recovery of that skate. We've worked with IMAS, the Institute of Marine and Antarctic Studies, to help fund some of the research that has gone into that and also some community engagement. Clearly a lot more needs to be done. It is a very dire situation. I also understand that Minister Plibersek is poised to write to her counterpart in Tasmania, urging extreme intervention to assist the skate and actually avert its extinction.

Senator WHISH-WILSON: I'd certainly like to dial down on that extreme intervention in a second, but I'm particularly interested in what you guys can do. I haven't got time to go through it now, but I did go through this process back in 2017-18 with the department and with the committee, and I wrote urging immediate action and perhaps an upgrading of the status of the species, given the dire modelling that was coming in back then. Is it correct it has never had a recovery plan under EPBC law?

Dr Fraser: It hasn't got a recovery plan. It has got a conservation advice. As I mentioned, the Threatened Species Scientific Committee have been giving this species quite a bit of attention, and as part of that they asked for an eDNA survey—which you'll be familiar with—to see if there was another population still surviving in Bathurst Harbour to the south. There probably isn't, is the short answer to that, which is a concern as well, because that would be an important insurance population.

Senator WHISH-WILSON: The letter the minister has written, to use your words, 'urging' the Tasmanian government to take 'extreme intervention', has that been made public? Is it possible to get a copy of that?

Dr Fraser: I don't think the minister has sent that letter yet, but I am told that she intends to send a letter urging action in Tasmania.

Senator WHISH-WILSON: Have you any ideas on what that 'extreme intervention' might be, given you've have been monitoring and assessing the skate?

Dr Fraser: I guess the threats, as you would be aware, Senator, to the skate are very clear. There is the aquaculture industry there. There are the hydro electricians, the water flows, and there have been gill-netting issues, which have been partially addressed in the past. Those industry issues have really weakened the resilience of the skate, which means they're very prone to pulse events or storms, and things like that, or warming weather. They are the urgent interventions which are within a human's control, whereas climate change and the skate's special niche needs to survive are not.

Senator WHISH-WILSON: Is that all the minister can do under the current EPBC, assuming it's without changes? Is that all the minister can do—urge extreme action? Can the Commonwealth intervene?

Dr Fraser: It's not clear to us—and my EOD colleagues may have more to add on that—that there actually is a lever for us at the moment, and, if there was, it might take quite some time to look into that. I understand the Tasmanian government is responsible for the regulation of that species, but those particular industry issues at the moment—

Senator WHISH-WILSON: The decision was taken in 2012, made by the Commonwealth, that the activity to approve salmon expansion in Macquarie Harbour was not a controlled action as long as it was undertaken in a 'particular manner'. Then it says, 'and the particular manner requirements relate to things like undertaking monitoring of water quality' which I understand is actually being done by IMAS and others, 'in being able to implement management responses if they are finding that there are changes or adverse impacts on the water quality', in this case on an endangered species. Do you feel that the interim report that's been released is evidence of adverse impacts?

Ms Kennedy: I think that the minister, being very keen to write to her Tasmanian counterpart—

Senator WHISH-WILSON: I am very glad to hear that by the way. I am not belittling that in any way.

Ms Kennedy: No, absolutely. I think that what we've said is that the minister is very keen to see action to ensure that we can do as much as possible to try and put the maugean skate onto a better path. We understand that it's urgent. The minister understands that it's urgent. She's really keen to work on this with the Tasmanian minister. I think that's probably the best lever that we have available to us at the moment.

Senator WHISH-WILSON: I'm not being facetious here, but when I did ask a previous official back in 2017—I can give you the details, or the exact estimates—I was obviously concerned about the dissolved oxygen issue. Salmon farming, as you say, is one of the factors, but it was provided to me that the department was aware of IMAS reports specifically for the maugean skate and they then said, 'They cope well with a low dissolved oxygen environment' and that the condition of the fish were not showing any signs of harm due to dissolved oxygen. But this report is showing we've now essentially got a recruitment failure for juvenile skates. The population has halved in seven years, and it's potentially going to be the first species on our watch to become

extinct. You may remember, Mr Knudson, I asked you many years ago whether there had ever been an extinction under the act and you were pretty sure there hadn't been. I asked, 'Are you confident this won't happen?' I didn't get a response to that, but it looks like we're pretty close.

Mr Knudson: I think there is no question that we have relevant new information. We have a path forward that we want to pursue. We know there is a sense of urgency with which we need to act, and we are going to get onto that.

Senator WHISH-WILSON: Okay. I'll see if I can ask some more questions later.

Senator COX: I have some follow-on questions on First Nations cultural heritage. I just want to pick up the thread that Senator Thorpe raised around the work with the Aboriginal and cultural heritage alliance. How many times a year are they meeting?

Dr McEwen: How many times a year do we meet with the alliance? The pattern has generally been that the joint working group was meeting formally once a month, and the implementation working group—we use acronyms so much that you forget what the actual words are!—was similarly meeting before each meeting but was actually meeting on a fortnightly basis.

Senator COX: Can you explain the difference between the two groups.

Dr McEwen: The joint working group is at a more senior level. It's the decision-making level. The implementation working group were the doers in the sense of organising and undertaking processes.

Senator COX: On the proposals that I mentioned with the 30 May deadline that were to be before the minister, can you outline in a little bit more detail what those proposals currently look like.

Dr McEwen: At the moment we're in a period of consolidation and thinking through some of the projects. I think what emerged as we started having the discussions around the paper that we had before was that we probably needed to dig in a bit more deeply to some of the policy issues that we were discussing. So at the moment we've been going through and reflecting on the work that has been done to date and the consultations undertaken and working through some of that policy thinking.

Senator COX: Are those proposals available publicly?

Dr McEwen: No. There was an options paper that was released last year. There's also the Juukan Gorge response, which has the high-level framework that we've been thinking within. But, no, at the moment we are doing internal work.

Senator COX: Will they be made publicly available once the minister has those proposals put before her?

Dr McEwen: The intention has always been that recommendations that the joint working group makes, which will come from the partnership—so the alliance and the department together—will be made public when they are provided to the minister.

Senator COX: Does the minister intend to consult with the alliance beyond that step? Once the delivery of those proposals happens, what happens? I think you mentioned later on this year was the time frame for delivery.

Dr McEwen: The partnership agreement is for two years, which I think means that it would be intended that policy proposals are given to the minister and the minister makes her decision. As legislation and things are developed, the partnership would continue. So there would be an ongoing interaction through that period.

Senator COX: Will the minister seek advice on the drafting of the bill with the cultural heritage alliance, as an example of ongoing—

Dr McEwen: Potentially, but we haven't worked through that detail yet.

Ms Miller: I'm just referencing the partnership agreement. That's the agreement that the government has with the First Nations Heritage Protection Alliance, and that steps out the purposes of the agreement and the scope of works. That's all available on the department's website, but, in short, it includes a range of activities and a range of outcomes that go to liaison with state and territory governments regarding the development of cultural heritage reform; participation in consultations; discussions; potential for new program funding to support implementation of the reform; and so forth.

Senator COX: So cultural heritage reform is very different from the development of standalone legislation. I think what my question goes to is that the proposals that are put before the minister are, for example, standalone legislation, cultural heritage reform of the current legislation or do nothing. Are they the options that are being considered currently?

Dr McEwen: I think the options are a bit broader than that in terms of whether it's around the current legislation, whether it's new legislation and how that might be taken forward or whether it's done at a national level or through states and territories. So there are a range of different approaches that are being considered.

Senator COX: Minister, you might be able to answer this question: have the Aboriginal cultural heritage alliance been told that this legislation won't progress until after the referendum?

Senator McAllister: I might have to take that on notice. I'm not personally involved in the discussions, so I personally do not know the answer to that question.

Senator COX: I appreciate that.

Mr Knudson: Earlier on, in response to a question from Senator Thorpe, I laid out that there's a whole range of different policy questions that we need to settle, which Dr McEwen was talking about. In terms of the likely time frame for us to go through that consultation, the referendum, when it's scheduled in the back half of this year, will likely be before we're in a position where we have finalised legislation.

Senator COX: Let me put it in another way: I have it on good authority that the government has given signal to the cultural heritage alliance that this will be solved by the Voice to Parliament and in fact will not be done before the referendum by the internal workings of what the government should be doing. If the government believe that they can do things today, and this is what I've been told in another committee by another minister, why are we not doing this today? Why are we waiting? I've sat here and asked estimates questions many times of you, Minister, over a long period of time, and we're continuing to delay this, and I'm wondering why. Is it because we believe that the Voice will solve this problem and give us a different view?

Mr Knudson: There is absolutely a program of work under way. It's complex. We're wanting to make sure we do broad-based engagement on the policy questions. What I was trying to say earlier on is, in terms of sequencing and timing, I expect that the referendum will happen prior to this legislation, but that is not to say that we're sitting and waiting for the Voice to solve this issue. That is just not accurate.

Senator McAllister: I think you were in the room, Senator Cox, and you heard the answer I provided to Senator Thorpe. We appreciate the urgency of the task. We also appreciate the significance of co-design. I suppose a third dimension is that it is complex because there are a range of matters that presently exist with states and territories. The way that the Commonwealth's involvement interacts with those arrangements needs to be worked through. At present it sees the Commonwealth play a role at the end—in terms of the sequence of decision-making, as a general proposition, states and territories go through a process, and then people may make application under the Commonwealth legislation. There is a general view that an earlier engagement and earlier opportunities for cultural heritage matters to be contemplated properly would produce better outcomes. How best to effect that in an environment where both the states and territories and the Commonwealth have a role is one of the policy complexities people need to work through.

I suppose I would put those three things on the table as the priorities and the issues that drive our sense of sequence and workplan. I don't accept the proposition that it is connected to or a precedent for the Voice referendum—though, self-evidently, the Voice referendum is happening this year and this other matter is proceeding this year. Our consideration about sequencing really goes to those three matters: urgency, complexity and codesign.

Senator McARTHUR: Thank you, Minister. As I think Senator Thorpe said, every day that ticks by we continue to see another Juukan Gorge being repeated on country, and the projects that continue to be approved not just at a state but also at a Commonwealth level continue to compromise that. So I look forward to that work being a priority.

Senator RENNICK: Hopefully, this is where I can ask about biodiversity and our animals. I was up in North Queensland last week at the proposed Chalumbin windfarm, and locals were extremely concerned about the threat of the proposed windfarm along with some existing windfarms to the koalas there and the gliders that have been sighted in the area, as well as the birdlife given that there are a lot of water reserves beneath the proposed windfarm. Do you have any thoughts on that? How do the locals go about lodging some sort of statement or getting some sort of oversight on what's out there and what is actually under threat?

Mr Knudson: Just to give you a heads-up, this is a project that is currently under assessment. So we can only go to the process elements of it. But we will speak to how citizens can put input into the process.

Senator RENNICK: That would be great.

Mr Edwards: As Mr Knudson mentioned, this is project is under assessment. There are consultation opportunities through any referral that we receive and consider. There has been consultation undertaken in this

case. The environmental impact assessment has been consulted on and people have submitted comments on that. The process is that the proponent then takes those comments and needs to demonstrate, in submitting their final documents to the department and the minister, that they've responded to any comments received.

My understanding is that there were 783 public comments on the public environment report that was done for that one, and I understand there was also a petition with a large number of signatures. So there is public concern about that process. Full information around all those comments has been provided to the minister, and we're now considering, I suppose, that final proposal from the proponent which incorporates that.

Senator RENNICK: Some of those areas about World Heritage rainforest. In terms of that World Heritage rainforest, is that something that the government, as the custodian of that land, would also look into? I would have thought that because it is World Heritage the government would have a responsibility to make sure the birdlife or whatever lives within that area isn't impacted by the neighbouring windfarms. To me, it seems very close—to put a windfarm right next to a World Heritage rainforest.

Mr Edwards: World Heritage is one of the controlling provisions under the act. The proponent would need to detail how their proposal is acceptable in relation to the values of that World Heritage area. Even in close proximity they would need to do that; you don't need to be in that area—as this one would be. They would also detail, for example, impacts to threatened species and ecological communities and other matters such as migratory birds and other species on the site they will be doing the development.

Senator RENNICK: Is there somewhere we can see that online or is there some way that we can have a look at the process that takes place, so I can provide comfort to my constituents?

Mr Edwards: We have quite a bit of information. We're happy to direct you to the assessment process that we undertake and what is required. This one, as I say, is quite advanced—so all those matters have been triggered. I can assure you that we are assessing all of those impacts.

Senator RENNICK: Could you take that on notice and come back to me with a set of steps so that I can show the constituents how to lodge their concerns or whatever and then also see what has taken place?

Mr Knudson: I'm happy to do that.

Senator RENNICK: I'd appreciate that. Have you been following what's been happening in New Jersey with the number of whales washing up on the beaches over there as a result of—well, not necessarily as a result, but they're building—

CHAIR: I'm going to give you the same very, very short spiel that I've given to others. This is the federal government of Australia and there's only so much people can engage with in terms of other states or other countries.

Senator RENNICK: Sure. Are you aware of the risks? What are the risks of building offshore wind farms? There's now a site down between Victoria and Tasmania where an offshore wind farm has been proposed. Have you looked at other places in the world where offshore wind farms have been built to determine what the risks are? Have you then taken those risks into account when looking at building offshore wind farms here in Australia?

Mr Edwards: I can talk to that in a general sense. We obviously have a range of facilities offshore at the moment. We have petroleum facilities, for example, and other facilities. There are quite well-established guidelines in Australia about how you assess impacts to cetaceans across the board, so any proposal that came to us, if we were the regulatory agency, would be assessed against those established guidelines. For example, there are different risks at the construction period. They're very sensitive to sound, for example. Then we'd consider where they calve, breed and migrate through. All those would absolutely be assessed in accordance with those established guidelines.

Senator RENNICK: Is there any risk with these offshore wind farms when power is transferred underground—for example, down to ground cables—that they emit a frequency that's a threat to any sea life?

Mr Edwards: I don't have a proposal in front of me that covers that. We're in the pretty early days. What we would expect a proponent to do is document all the possible potential risks and impacts, and then we'd peer review and assess what we think about that. A normal proponent for any type of facility needs to think about avoiding impacts and mitigating those to the extent possible, so we'd do that at the time.

Senator RENNICK: This will be the last question, Chair. In south-west Queensland and the mulga country out there, they're locking up large swathes of mulga country. Has there been a biodiversity impact on the fact that, because these farms are no longer being managed actively because they're locked up, there is a threat to the native wildlife out there of an increase in feral cats, dogs, pigs and goats?

Mr Edwards: We would certainly have investments that assist with invasive species, but, from a regulatory point of view, we don't regulate the ceasing of farming or other activities. It's not a referral.

Senator RENNICK: I realise you wouldn't regulate the carbon side of it, but is that something you'd look at, in terms of the threat to threatened species as a result of greater—because I can tell you there are big cats out there. You'd be surprised by the size of these cats. Is that something you will look at as a result of locking up farms out there?

Mr Knudson: One of the things that has come through clearly in the Nature Positive Plan and its formulation is that there are three big threats to animals and plants. They are climate change, invasive species or ferals, and habitat loss. One of the things that we're also really keen to do is with respect to environmental offsets. Currently, the extent to which those are managed varies. We want to make it quite explicit that, when you have active management—whether it's a national park, an environmental offset or private land—you're generally going to get better environmental outcomes if you actively manage for exactly the type of risk that you're talking about.

Senator RENNICK: To be specific then, do the people who take control of these locked-up farms have a responsibility to manage the invasive species?

Mr Knudson: It would really depend on the particular circumstances, and I'm not aware of those circumstances. But what I would say is this. We were talking earlier on about the Nature Repair Market. That's often about taking active management of private land so that not only are you delivering productive landscapes—whether it's for agricultural lands, pastoral lands et cetera—but you're also getting those environmental outcomes. What would be in that certificate would include commitments to have that active management—to go to exactly the issue you're talking about—but it's being done and delivered by and compensated for a private landowner taking that action. That's just an illustrated example.

Senator RENNICK: But you're not aware of any legislation that mandates that?

Mr Knudson: I was talking about the Nature Repair Market, which will be a voluntary thing that landholders would enter into.

Senator RENNICK: So it's only voluntary?

Mr Knudson: It depends.

Senator RENNICK: Take it on notice. Can you find out if there's any legislation that mandates it?

Mr Knudson: What you have said to date is too generic. I would need the specific proposal you're talking about and whether it's a Queensland proposal.

Senator RENNICK: I'll work something up, sure. That's a question on notice.

Senator DUNIAM: Back to the EPA, with regard to the new CEO, what sort of salary or level of position are we looking at?

Mr Knudson: That hasn't been determined at all yet. We'll have to go through a fairly extensive process before we get to that point.

Senator DUNIAM: So we've budgeted for it but we don't know how much we'll pay the person.

Mr Knudson: You would budget, at a rough estimate, at a typical ASL cost et cetera. We would have said that there were a number of senior executives, but that's it. We haven't really landed on the specific remuneration for the individual positions.

Senator DUNIAM: What typical ASL position are we looking at for that, that you've budgeted for?

Mr Knudson: We would have assumed it was going to be a senior executive level 3, a deputy secretary level.

Senator DUNIAM: What's the salary band for that?

Mr Knudson: Can I come back to you on notice?

Senator DUNIAM: Sure, that's fine, and any loadings or additional elements to the remuneration would be helpful on that. Thank you. Mr Edwards, you and I spoke at some length last estimates about the information contained in the quarterly assessment reports and the period of time it takes from the conclusion of the reporting period to the uploading of that information. You said, when we caught up in February, that the data relating to October to December of last year would be uploaded within the month. Was that uploaded within the month?

Mr Edwards: I believe so. In fact, we have the publication of the first quarter for this calendar year.

Senator DUNIAM: Great. What date was it uploaded, if you could just let me know?

Ms Vithanage: You were after the date, for the uploading, for the December quarter or for the March quarter?

Senator DUNIAM: October to December 2022.

Ms Vithanage: I don't have that information available. It was in the last two to three weeks. But I'll get that date.

Senator DUNIAM: So not within a month from the February estimates. You've uploaded the subsequent quarter, the January to March data?

Ms Vithanage: That's correct. It was uploaded on Friday.

Senator DUNIAM: I think you were saying you try to not let a quarter lapse. You've done that for March but not for the quarter prior.

Mr Edwards: Just to explain, the quarterly update—you would have reviewed it—is built into a business intelligence tool. There are dynamic graphs and so on that are populated on that web page. We've had different experiences, I suppose, just assisting our IT people to upload that, to make sure it's functioning properly. We have had different time frames over the period this time around. I think we've stabilised that website. We've managed to upload it in a speedier fashion.

Senator DUNIAM: Alright. I'll move on from that. If I can go briefly to environment information Australia entity, which will also be set up, and I expect I'll have similar answers to the ones I've already received, is that going to be set up in the same way as the EPA or is it going to be more attached to DCCEEW?

Ms O'Connell: It's a division in the department, but it also has a statutory appointed head of the department. So there's a statutory appointed person but the remainder is of a division within the department.

Senator DUNIAM: They'll be like a commissioner or something, will they?

Ms O'Connell: It'll be a statutory appointee—so decisions from the rem tribunal about the nature of the remuneration et cetera, yes.

Senator DUNIAM: It will be a matter for them.

Ms O'Connell: Yes. And obviously it will be part of the legislative package for the whole Nature Positive plan.

Senator DUNIAM: Do you have—perhaps you'll need to take this on notice—in the same way you have other elements around the EPA et cetera, the number of employees you expect to exist within that division, the environment information Australia division?

Mr Tregurtha: We'll take that one on notice.

Senator DUNIAM: Would there be officials from elsewhere in the department coming across as well?

Mr Tregurtha: Yes. It involves that—

Senator DUNIAM: So the \$51.5 million, like with the EPA, is for additional capacity, not to cover existing capacity?

Ms O'Connell: No, as part of that \$51.5 million—it is a small part of that \$51.5 million—some of that fund is what's called a terminating measure, so that is an existing measure that was within the department—

Senator DUNIAM: Yes, I'm familiar with the way these things have been characterised over the last six months and made out like we were going to send the department of health bankrupt because they didn't have it funded or something like that. But go on, sorry, Ms O'Connell.

Ms O'Connell: There is a component that's a terminating measure that will be having continued funding as a result of Environment Information Australia, and the rest of it would be new funding. The quantum of the terminating measure—it's \$51.9 million over the four years, with \$4.5 million ongoing—the component of the \$51.5 million that is a terminating measure being extended, so current activity but able to be continued on now, is \$15.3 million of that \$51.5 million.

Senator DUNIAM: I might ask further questions on—were you going to add some more?

Ms O'Connell: No, sorry.

Senator DUNIAM: I don't want to stop you if you want to tell me more. I will do more on notice on those. I appreciate everyone's forbearance with my incessant questioning around detail that may not be yet realised.

I want to go, in my last question, Chair, to a matter that was canvassed last night. I accept the officials from the office of national parks are not here, and so it is a question for you, Minister, and for you, Secretary, and I accept part of this will have to be taken on notice. But I want to put it on record now. The consultation on the south-east marine park closed yesterday, 22 May. On notice I would love to know how many submissions were received. I understand all of that is collated and then presented to the minister for her consideration to make a decision. Minister, you have mentioned a number of times today the legal obligations on the minister that she must fulfil

and, I think, does with regard to the EPBC Act. I assume the same standard applies to matters related to marine parks, so I ask about a Tweet the minister herself put up last night in relation to the interrogation of the issues around this yesterday, noting that submissions to this consultation process around the marine park only closed yesterday. The minister said, in castigating my colleagues on the committee:

Today in Senate estimates the Liberals kept criticising our plan to triple the size of the Macquarie Island Marine Park.

We're wanting to better protect one of the most unique places on earth and all the penguins, seals, birds and other species that call it home. It's a no brainer.

That to me sounds like a minister who knows what she is going to do, even though the process only closed yesterday. On notice I would love to know when she received the folio of information and whether she had, at the time of this Tweet—which I will attach to my questions on notice—at 7.29 pm yesterday, made her statutory decision as a result of that review, or whether she was pre-empting it. In closing, Minister, do you think it is okay for a minister to express these views before having, it seems to me, concluded exercising her statutory functions properly?

Senator McAllister: I am not really here to offer opinions, but you have indicated that you are seeking information. I will seek to get the information to you on notice. I understand Mr Knudson may have some information about the particular act in which this statutory review is taking place, but other than that we will take the question on notice.

Senator DUNIAM: In fairness, I think Mr Sullivan is normally the—

Mr Fredericks: Can I take the process question you have asked on notice?

Senator DUNIAM: Indeed. I don't want you to do the opinion one, but process will be good. I will do the opinion later, once I have that answer.

CHAIR: For everyone's clarity, Senator Hanson-Young will take us through until the dinner break. We have not finished any of these outcomes—my deep and abiding apologies. We will assess whether we can let any of the outcomes go, but I am afraid everyone will have to come back after dinner.

Senator HANSON-YOUNG: I have some questions in relation to the Beetaloo basin. Mr Knudson or Mr Fredericks, have you been briefed on the 7.30 story last night?

Mr Fredericks: I haven't been briefed on that.

Mr Knudson: Nor have I.

Senator HANSON-YOUNG: Is there anyone on your team who knows of the allegations that were raised in that story? They were quite serious.

Mr Fredericks: Is this also a reference to an article that was in The Guardian today?

Senator HANSON-YOUNG: I don't know. This is in relation to allegations about the Tamboran company, which is fracking in the Beetaloo basin.

Mr Edwards: I did see the program, if that helps.

Senator HANSON-YOUNG: Yes, it would.

Mr Edwards: My understanding was that the coverage was primarily around concern about pumping of water from one facility into pastoral paddocks.

Senator HANSON-YOUNG: Yes.

Mr Edwards: There was no suggestion in that, to my knowledge, that there had been any contravention of any environmental law.

Senator HANSON-YOUNG: No, but I'm concerned about this. I'm extremely concerned that Tamboran—and we've dealt with this company a few times in this committee—has had its hand out for federal government money and has been subject to inquiries by this committee and the references committee about allegations that they are not managing this contaminated water properly. It seems pretty serious to be misusing the land that they have access to in this way. I'm interested in is that there have been commitments to the government in relation to the water trigger being expanded in the EPBC legislation. I'm worried that this is going ahead before that trigger has happened, and now we're seeing the result of this type of contamination. Mr Edwards, where does this leave the federal department?

Mr Edwards: My understanding is that the company has an exploration licence that would have been granted by the Northern Territory department of mines. That's the regulatory agency that I think is currently examining the accusations that have been made, but we don't have an active referral for an EPBC matter in that area.

Senator HANSON-YOUNG: This is about the environment. This is about the health of water. This is about the integrity by which these types of fossil fuel projects are undertaken. You saw the program, Mr Edwards—did it not strike you that the minister would need a briefing on this or that the department should find out what's going on from the Northern Territory? At the end of the day, this is Australia's environment, not just the Northern Territory's environment.

Senator McAllister: I think you understand that the states and territories and the Commonwealth share responsibility for protecting the environment. The current delineation of Commonwealth responsibilities are clearly set out in the EPBC act. I don't wish to repeat myself, but you know that the Commonwealth and our government are undertaking a process of reform to improve the way that act operates, but I think the evidence to you from Mr Edwards is that, as far as he can understand, the matters which were canvassed in the program relate to matters which are directly unregulated by the Northern Territory government. I should indicate just for the record that at the time that the program was screening I think we were all here at estimates, so many of us did not of course have the opportunity to see it. The Commonwealth should execute its responsibilities; that is certainly true. But I think that the official is explaining to you that, on this occasion, it is a question for the Northern Territory government.

Senator HANSON-YOUNG: Yes. However, your government has made a commitment to extend the water trigger in the EPBC to deal with exactly these types of projects. There is now a serious allegation about a private company misusing their water licence, using contaminated water and disposing of it in a damaging way. Surely some alarm bells should be ringing. I don't think it's good enough to say, 'Not our problem.'

Mr Fredericks: Can I just asked Mr Grosse to comment on that. He's the head of compliance.

Mr Grosse: At the moment we have no allegation that there is an impact, or a significant impact, I should say, on a matter of national environmental significance. But what we can do—and I have not seen the report—is liaise with our Northern Territory counterparts to see what action is being taken in relation to that matter.

Senator HANSON-YOUNG: I would very much appreciate that, and I'd like, on notice, what communication you get back from the Northern Territory government. We know that the Northern Territory has some of the weakest water regulations in the country, and cowboys like the Tamboran company are going to take total advantage of that. I'd also like, Minister, any updates on any federal funding or grants that Tamboran currently is in possession of from the federal government. You should take that on notice.

Senator McAllister: I will take it on notice, but this is the portfolio estimates for this department. We will see what we can provide. It's a very broad question you're asking.

Senator HANSON-YOUNG: It's whole of government. We don't have to silo everything, do we? These things are all interconnected.

I was asking earlier about the Isaac River coalmine decision. I'd like to know—and this is partly, Mr Fredericks, at your prompting from yesterday—how many coal and gas projects or expansions are currently on the books, being assessed or part-way through assessment or about to be assessed by your department.

Mr Edwards: We currently have 45 coal and gas projects in our case load. They're at varying stages of approval.

Senator HANSON-YOUNG: Are any of them expected to be dealt with before the end of the year?

Mr Edwards: I don't have the exact dates, but my notes do tell me that I've got five coal and gas projects with clear statutory decision times, so that would indicate that they're within the next six months at least.

Senator HANSON-YOUNG: Within the next six months?

Mr Edwards: Yes.

Senator HANSON-YOUNG: Could you just unpack for me what a clear decision time frame is? What do you mean by that? Some of these things, we hear, stretch out for a long time.

Mr Edwards: Yes, I'm happy to, Senator. I suppose there are different points where a proponent may be working on a project and we're not able to assign a time frame because we're waiting for them to respond, basically. These are ones where we've got greater confidence about when we'll be entering an assessment stage to consider an approval, so we're able to set or at least anticipate a statutory decision date.

Senator HANSON-YOUNG: Okay. Can you tell me which five they are, please?

Mr Edwards: I would have to take that on notice. We could submit that to you.

Senator HANSON-YOUNG: So you've got the figures, but you don't have the names of the projects in front of you. That's what you're telling me?

Mr Edwards: That's correct.

Senator HANSON-YOUNG: What kind of category do the remaining 38 fall into?

Mr Edwards: I had 45 all up.

Senator HANSON-YOUNG: Sorry, 45. Okay—so the remaining 40.

Mr Edwards: I can tell you, out of that 45, if it's helpful, the subset about the types of projects.

Senator HANSON-YOUNG: Yes; thank you.

Mr Edwards: Out of the 45, there are 36 that are coal related projects. There are six that are coal seam gas related projects; there are two offshore gas projects; and there is one gas energy terminal project.

Senator HANSON-YOUNG: Is that the Middle Arm project, is it?

Mr Edwards: I believe it would be.

Senator HANSON-YOUNG: And the five that we expect some type of decision on within the next six months? Can you tell me what category they are? Can you break that down for me? Are they coal, coal seam gas or—

Mr Edwards: Unfortunately, not. My notes indicate—

Senator HANSON-YOUNG: So we will have to wait until you can give me the names of them. Do you think that is something you could get to us tonight? Is somebody able to work that out for us? That would be helpful.

Mr Edwards: It is, yes.

Senator HANSON-YOUNG: Thank you. As I have got the remaining time before we go to the dinner break. I just want to jump to World Heritage issues. If I could. Last year, the South Australian Premier, Peter Malinauskas, wrote to the environment minister seeking support for an assessment of World Heritage criteria that could be applied and a nomination for the Great Australian Bight. Could whoever is in charge of that area tell me where that request is up to?

Ms Heaton: Senator, just to confirm: this is for the Great Australian Bight?

Senator HANSON-YOUNG: Yes.

Ms Heaton: As you know, it is an election commitment of the South Australian government. The boundaries are not yet defined. As you said, the Premier wrote to Minister Plibersek seeking support for progressing the World Heritage nomination. The minister replied noting that she is happy for both agencies to work together to progress an initial assessment against World Heritage criteria. In that, she noted that free, prior and informed consent is a requirement.

Senator HANSON-YOUNG: Where has that initial assessment got to?

Ms Heaton: I am not aware of that. I will have to take that on notice.

Senator HANSON-YOUNG: Okay. I would like a status update on that initial assessment and the time line for when we expect that assessment to be completed? Do we know if there has been any funding put aside to help complete the assessment?

Ms Heaton: Not that I'm aware of.

Senator HANSON-YOUNG: Is that something that would normally come at some point?

Ms Heaton: I'm not sure whether we would provide funding for a tentative listing process. Yes, I think we would actually. In some cases we have provided funding for tentative listing processes, but not for this one yet.

Senator HANSON-YOUNG: Could I also ask—and you will understand why this is important—whether you are aware that the Koonalda Cave in South Australia was vandalised over the summer?

Ms Heaton: Yes.

Senator HANSON-YOUNG: That is a very important heritage site on the coast of the Great Australian Bight. This provides evidence of Aboriginal life dating back more than 22,000 years. The traditional owners, as you can imagine, are extremely distressed that this cave was vandalised. It happened in December last year, and I am wondering if there has been any investigation by authorities in relation to this.

Mr Grosse: We have liaised with our South Australian colleagues, who did the investigation into the matter, and confirmed that, due to the time frame in which the activity allegedly occurred, which is quite significant—up to 12 months—and the unknown exact time that it occurred within that time frame, the ability to collect evidence was very limited. That was the end of the investigation, unless future information is identified which would reopen that investigation.

Senator HANSON-YOUNG: Is it correct that a \$400,000 grant was given to protect and conserve the cave?

Ms Heaton: Correct, through the Australian Heritage Grants program.

Senator HANSON-YOUNG: So that money has been granted, but has it actually left the federal government coffers?

Ms Heaton: That's managed by the Business Grants Hub, but I could check that for you.

Senator HANSON-YOUNG: Could you? That would be helpful. I would like to know if the money has been put to use. Are there security cameras? Is there fencing? What's happened? I am concerned about how this type of vandalism, this destruction of heritage, is going to impact on a World Heritage assessment. I would like to know if there's been any consideration about that and I'd like to have any information that you have in relation to that.

Ms Maguire: I want to add that the \$400,000 was only just announced in April by Minister Plibersek and so I suspect it hasn't yet gone out the door, but it is intended to serve that purpose of works that can enable the security of the site.

Senator HANSON-YOUNG: If somebody had vandalised the Sydney Opera House, the security upgrade would have happened straightaway. So I really would like to know what the expectation of that money being spent and implemented is.

Senator McAllister: It's quite mystifying, isn't it, why anybody would engage in such a destructive, pointless act that is so hurtful to traditional owners but also impacts on all Australians, because we all have a stake and are proud of our First Nations heritage and should seek to protect it. It's on that basis that, as the officials have outlined, grant funding has been provided. The officials have undertaken to come back to you with information about the timing and, I think, the specific application and the kinds of measures that might be contemplated by the grant.

Senator HANSON-YOUNG: Minister, we know that there is a South Australian government commitment to World Heritage listing for the Great Australian Bight, I am wondering whether federally there has been any movement on the federal party's position beyond just supporting an assessment. Are you committed to the Great Australian Bight getting World Heritage protection?

Senator McAllister: I think the officials have explained where the government is up to, but I will take that on notice and see if I can get you any further information.

Senator HANSON-YOUNG: Thank you.

CHAIR: We will now break for dinner.

Proceedings suspended from 18:18 to 19:18

CHAIR: We will recommence. We are currently negotiating to juggle with the agenda a little bit so that we can squeeze everything in. We will go back to programs 2.1, 2.2 and 2.3 and we will start with Senator Whish-Wilson.

Senator WHISH-WILSON: Thanks, Chair. I've only got a few more questions, along the same line of questioning around the Maugean skate. They may have to be taken on notice. The first one relates to what powers the Commonwealth has in relation to the protection of the Maugean skate, specifically in relation to Macquarie Harbour. The salmon farming industry, as I mentioned, wasn't deemed to be a controlled action subject to activities being undertaken in a particular manner. Now that new information has come to light, what role does the minister now have? For example, could she now make salmon farming a controlled action subject to this new information and put restrictions in place?

Mr Edwards: My understanding is that salmon farming in Macquarie Harbour predates the act. The not controlled action 'particular manner' decision you are referring to was a random—

Senator WHISH-WILSON: Do you know when salmon farming started?

Mr Edwards: I understand it was in the late eighties or early nineties.

Senator WHISH-WILSON: It was in 2012. The expansion of Macquarie Harbour was deemed not to be a controlled action at the time by I think it was Peter Garrett, subject to conditions. If you want to take it on notice, that's fine.

Mr Edwards: I understand that. I'm talking about farming generally. You're correct; the expansion activity was in 2012. The particular manners related to the expansion activity only and so they no longer applied beyond I think it was a two-year time frame for that expansion activity to occur.

Senator WHISH-WILSON: So you're saying the Commonwealth has no jurisdiction as a controlled action, or around a controlled action for Macquarie Harbour, following two years.

Mr Edwards: That's correct. So it was in 2012. It was a two-year period relating to the expansion activities, and my understanding is that most of those particular matters referred to the state controlled measures of the fin fishery there. They're the ongoing regulatory arrangements around Macquarie Harbour.

Senator WHISH-WILSON: If you could provide where that is in the act, I'd like to have a look at that. Another possibility is the register of Macquarie Harbour as a critical habitat. I know that, with critical habitats, enforcement activities can't occur unless they're in Commonwealth waters or under Commonwealth jurisdiction. But there is an example of a listed critical habitat in South Australia. That's a bird habitat. Given the dire situation in Macquarie Harbour, perhaps you could take on notice whether it's possible to list Macquarie Harbour as a critical habitat under federal environment law. How would that change under the new system that's been brought in?

Mr Knudson: The second part of your question—the last part—is a bit hypothetical. But we can talk a bit about what the Nature Positive Plan talks about with respect to habitat.

Senator WHISH-WILSON: Did you say hypothetical?

Mr Knudson: It's hypothetical in the sense that legislation doesn't exist yet.

Senator WHISH-WILSON: We went down this road last estimates, Mr Knudson. Clearly we're going to get a change of legislation. Under the draft plan, shall we say, or the planning, would that still remain in place?

Mr Knudson: I'm very happy to refer to the Nature Positive Plan and how we manage the specifics.

Senator WHISH-WILSON: Will we still be able to list critical nature habitats under the Nature Positive Plan?

Mr Knudson: Yes.

Senator WHISH-WILSON: Chair, in relation to the threatened species committee, could I table a letter that I wrote to the committee in 2018?

CHAIR: Certainly.

Senator WHISH-WILSON: Could I ask why a recovery plan wasn't put in place for the skate, given the information that we've known for some time now about the dissolved oxygen issues and the ongoing monitoring, which has clearly shown a decline in the species, and scientists have consistently raised concerns about this?

Ms Kennedy: We haven't had a chance to look at the letter yet and I don't think any of us were in our current roles at that time. To give you the best possible answer, if we could take that on notice, we'd appreciate that. I know we've had conversations before about the sorts of general reasons why a recovery plan is needed, and it's often where there are cross-jurisdictional issues that need to be addressed.

Senator WHISH-WILSON: Such as state-federal?

Ms Kennedy: It's more like multiple different states, where something goes across a large swathe of the country or there are other complications like that. Where there's a species—and I'm speculating, which is why I would like to take it on notice—that is essentially, as we've talked about here, in a very small geographic region within the control of the state, that would be an ideal situation for a conservation advice.

Senator WHISH-WILSON: Considering the conservation advice is in place, has that been upgraded to account for new situations? What action's happened on the skate in the last 10 years?

Ms Kennedy: The Threatened Species Commissioner can work through some of the things that we've done recently. But, as she mentioned earlier, the conservation advice is being updated as we speak, and the Threatened Species Scientific Committee has had the Maugean skate under close review and I think is having it come up at its next meeting, which is in a couple of weeks, again.

Senator WHISH-WILSON: How long has it been under close review? Obviously it's an issue now, but how long has it been under review?

Prof. Marsh: It was proposed for uplisting in 2021, and it was considered at that time. However, that was when the bushfire—a large number of species were coming through for consideration for uplisting or a new listing at that point of time, so it wasn't prioritised for uplisting then. And then, when the committee next considered it, they said they needed more information to be certain about what was happening with the skate. That was when that eDNA survey was commissioned, and other survey work. That is the information that flowed through last year, that there were no further skate to be found in Macquarie Harbour, and so now it's coming back to TSSC. I guess the other work that they've done in that time is to be very clear about the management actions

that need to be put forward in the conservation advice, including considering management such as captive breeding or ex situ conservation as an emergency.

Senator WHISH-WILSON: Or reintroduction to Bathurst Harbour, potentially?

Prof. Marsh: These are things for the TSSC to consider in the final conservation advice, but certainly everything like that is on the table. But, as you would appreciate, it's not a simple measure to do that, because there are predators in Bathurst Harbour and there are different conditions.

Senator WHISH-WILSON: Indeed.

Prof. Marsh: So we need to know that there's safe habitat for that species to be reintroduced there—if that happens, because it's a very expensive and actually a risky exercise. We don't know how feasible it really is.

Senator WHISH-WILSON: If it gets uplisted and the conservation advice is changed and enhanced, what powers does the Commonwealth still have with the state government, for example, to direct actions on the skate—for example, protecting areas within Macquarie Harbour from other activities like gillnets or fish farming. What power does the Commonwealth have?

Dr Fraser: I would make a simple statement to start with, but I would then refer to my EAD colleagues. I think, regardless of the uplisting, conservation action still needs to be taken, and still could be taken, to address all of the issues that we've talked about today—the current suite of threats. Addressing that current suite of threats is not contingent on the uplisting occurring or any new conservation advice being agreed. There's sufficient information to know that the species is significantly imperilled.

Senator WHISH-WILSON: It is. I'm not being critical here of you or the department, but we've known that for some years. So what will change? Obviously, the minister's letter will be a good start. But can that be backed up by action? I suppose that is what I'm asking. If the state government doesn't change anything—and, sorry, I'm a cynic because I've been following this issue for so many years. To be fair, the EPA did de-stock Macquarie Harbour, thanks to your intervention, I suspect, and that is perhaps why the department said they thought things were in hand. But clearly it hasn't worked. What action will we see from the minister, based on conservation advice in place or changing?

Ms Kennedy: Senator, we can certainly take it on notice. As we said, the TSSC is considering this very soon, at their next meeting, which I think is on 9 June. Prospectively, I think we're very hopeful that the intervention that our minister is making with the Tasmanians will make a difference. That doesn't mean that we're not exploring other options under the current law or potentially looking at what could be the case under reforms not just in this context but more broadly as well. But, really, I think that the actions that the Threatened Species Commissioner has spoken about in terms of practical things that we can do and making sure the best scientists are looking at how we can make that species safe to be able to look at re-establishing the population in Bathurst Harbour as well. Those sorts of practical actions are the best things that we can do for the Maugean skate at the moment, and we're really very focused on it.

Senator WHISH-WILSON: Alright. I'll perhaps put some more detailed questions on notice. But, if you could read that letter—

Ms Kennedy: Yes, will do.

Senator WHISH-WILSON: that would be appreciated. Thank you.

CHAIR: Senator Cadell.

Senator CADELL: I have questions on recycling, specifically on the RMF. I feel like we've been talking about a lot of things out in the world, and recycling has fallen a little bit by the wayside in prominence. I don't think it necessarily should. What is Australia's current recycling and domestic market capacity by material type? Do we have that?

Ms Lynch: I don't believe I would have in front of me that information by material type in terms of market capacity. I can try to find the data for you in terms of recycling volumes.

Senator CADELL: That's great. We had the soft plastics fall over, and we just had an exemption granted. The industry is generally saying there needs to be more heavy lifting from the people who buy the products they manufacture. There has been a real market capacity failure in forcing people to use recycled materials.

Ms Lynch: There are a couple of different pieces of data I can provide you with, but I'm not sure either is what you're looking for. I might take it on notice.

Senator CADELL: Not a problem. There might be a lot of that, I get that. Are there projections as to the aggregate recycling and domestic market capacity required by the end of 2024? I think I saw some charts on that. The RMF website recently changed—there were some updates in the last week, and I'm not sure.

Ms Lynch: What's likely to be playing out there is that under the Recycling Modernisation Fund we have reported on the total exports of those four material types prior to the waste export ban coming into effect. What we have been doing over the last couple of years is showing the licensed export amounts and projecting what the recycling needs are. If we look at the total volume of recycling capability that we're funding under that Recycling Modernisation Fund, we anticipate that it will increase the volume significantly. There have been 103 projects announced by the government—

Senator CADELL: I have just over a million tonnes per annum RMF—

Ms Lynch: In total, it's about 244,000 tonnes of plastic—I can break it down by material types at this aggregate level under the Recycling Modernisation Fund. There are 48 projects that will add 244,000 tonnes of plastic recycling capability; 16 projects will add 333 tonnes of glass recycling; 10 projects will add over 70,000 tonnes of tyre recycling; and five projects would recycle over 239,000 tonnes of paper and cardboard. There are an additional 24 projects that are expected to recycle 169,000 tonnes—those are projects that have a combination, with multiple different types. Some will do glass, plastics, tyres, paper and cardboard, or a combination of those things.

Senator CADELL: A nerd-type question now: when you talk about plastics, is that broken down into polymer type?

Ms Lynch: I can provide some of that level of detail, but perhaps I could provide it on notice so I can get the latest figures.

Senator CADELL: That'd be fine, thanks. The RMF website two weeks ago had \$213 million of disbursement from government, and now says \$205 million—congratulations on the saving. How much additional funding are we looking at to achieve the domestic market capacity to meet those export regulations?

Ms Lynch: The total funding that has been contributed at the moment is approximately \$606 million—that's for all 103 of those projects. What's happened to make the figure change is that some of the projects that have been previously agreed and awarded funding have withdrawn.

Senator CADELL: A lot of Western Australian ones.

Ms Lynch: There are a couple of big projects that have withdrawn, for a whole range of reasons, particularly problems around supply chains, access to materials and equipment, and the market conditions changing quite a lot since they were first proposed. But other projects have been announced, and there is still a pipeline of new announcements coming. Was there a second part to your question?

Senator CADELL: No; I just wanted to get an understanding. I know that 205 have been dispersed so far and you've got others in the pipeline—about 600.

Ms Lynch: Yes.

Senator CADELL: Do we think 600 are still going to meet the—

Ms Lynch: Sorry; your question was about how much would meet that export requirement.

Senator CADELL: Yes.

Ms Lynch: For some time now, we have exceeded by almost 100 per cent. So we are at about 200 per cent of the total volumes that were previously exported. We have announced projects that will more than double that volume in Australia. The only constraint at the moment is on two fronts. One is getting all of those projects built, developed and operational. They have been delayed, as I mentioned, for a whole lot of different reasons, particularly around the COVID global supply chain issues, which delayed many of the projects for some time.

The second thing is that this is replacing those materials that were previously exported offshore. But, as I'm sure you know, and as we see from the data that we released, there has also been a whole lot of other materials that are typically sent to landfill here. So they were not being exported previously. So that additional capacity that we are funding won't go to waste; it will help to reduce the amount of plastics, for example, going into landfill.

Senator CADELL: Of that bit over a million tonnes that we were talking about broken down there, is there a difference between where the RMF is supporting sorting capacity and manufacturing capacity? Is that broken down between those two? An industry complaint that I hear is that there's lots of money going into sorting and they go into a big pile but not enough to do anything with it once they are in neat piles.

Ms Lynch: I'm sure we can get that detail for you. The majority of these RMF projects are either sorting or processing—not so much on the manufacturing back into new products side, because the RMF is targeted at the material being to a point where it can be reused.

Mr Knudson: Just to clarify: the reason why there was a significant investment in sorting was that even doing the simple act of sorting increases the secondary value of the product. So I just wanted to make it clear that, even getting them in piles and then potentially the process—both of those steps are important for the secondary market.

Senator CADELL: I agree. Getting out of the detail and into philosophical things now, I agree with the sorting being important, but that is where I think we fall in that it becomes a traded commodity then. We have all this research about what we can and cannot export but, once it is sorted, it becomes a commodity that has a value no matter what grade it is. So I think there is over-regulation of what can be sold and what can't be sold. But that is an aside.

I have a self-interest question, being a National Party senator. The RMF has been 'tasked with supporting waste infrastructure in regional and remote Australia'—explicitly mentioned in it. According to my calculations going through, only 20 per cent of the RMF supported aggregate recycling capacity is currently located in regional and remote Australia. Is that a problem with a lack of projects? Why is that? I may be wrong. You can tell me if I am wrong.

Ms Lynch: I can certainly tell you about the process under which those projects were selected. For the majority of the Recycling Modernisation Fund, those projects were selected by state and territory governments. In some cases they ran their own EOI and application processes. I do not think it is a shocking from our perspective to see that a lot of the facilities were put forward as being high-value recycling, where there was a lot of need, have ended up being closer to denser population centres, because a lot of this material is basically generated from household waste, and it is collected through that kerbside recycling system. That being said, there are number of projects that are funding recycling facilities in regional Australia and those are still progressing. But, to your board question about how those were determined, decisions were taken by state and territory governments about which projects they would like to see funded.

Senator CADELL: This is not necessarily in your remit. We have these piles and we've seen all the soft plastics and warehouses not being able to be sold. Can we work as a parliament, as a government, to get more manufacturing and demand more uptake of recycled goods in Australia, so that processing industry and manufacturing industry have a customer? It is great to keep these things, but we are becoming hoarders of trash.

Ms Lynch: You've hit the nail on the head. One of the major barriers to a really efficient and effective recycling industry is having the demand, the pull through, for the product of the end of the day. The government is currently pushing ahead on few fronts here. Firstly, the government has an election commitment to increase demand for recycled materials. So we are doing work within the department on sustainable procurement, gathering better information. Because there is a huge volume of procurement activity that occurs by governments, we are gathering that so that we can set baselines and report on how we are better using recycled materials. We're looking for those high-value opportunities to do so. We've undertaken some research on that front and identified certain categories of procurement, in particular where we think there's a lot of value, and we're getting some fantastic engagement with agencies across the Commonwealth, who are partnering with us to trial reporting systems.

State and territory governments are also doing quite a bit on that front. There are a number who have articulated particular policies around buying recycled. We've developed some new Australian standards for the use of recycled materials in very large structure projects, so things like roads and other major construction activities, looking to see what we can safely and effectively use in those types of infrastructure, in terms of recycled content, without affecting the performance or longevity.

The government is committed to rolling out a 're-made in Australia' brand, which is going to be a label applied to consumer products, effectively. We're doing work at the moment to inform the specific requirements so that is actually an evidence backed, credible scheme and so that we know for certain when they're using that label on a product that we can be confident of its authenticity and be certain that it's not only being made in Australia but also using Australian recycled materials. That will help drive demand for recycled content.

A more recent reform that Minister Plibersek has also been pushing through with her colleagues in the environment ministers fora is to push ahead with reforming relations on the packaging front. You'll be aware that Australia currently has some industry based voluntary targets around packaging.

Senator CADELL: Only two per cent is recycled at the moment in some plastics—

Ms Lynch: It is a bit higher than that. It's about 12.4 per cent.

Senator CADELL: In some plastic categories.

Ms Lynch: Exactly. There are some types of polymers where that's harder to achieve, for sure. For that work that we're doing with states and territories to change the mandatory obligations around packaging, we expect environment ministers will consider a draft of that late this year and hopefully finalise a new regulatory framework across the country next year.

One of the main things we're looking to do there is actually push more onus into the design of materials in the first place—in this case, packaging. Where we are using packaging, we should put the onus on making sure that they're being designed sustainably and that you're reducing the use of materials in the first place, increasing the use of recycled materials and putting some targets or a mandatory obligation into that scheme in that sense too—as well as having that scheme look at collection and obligation to recycle it at the end of the day.

Senator CADELL: Did the department have input into the decision of the minister to allow the 12-month exemption for plastics that was just given last week?

Ms Lynch: I'll just invite my colleague Ms Bird up to the table to speak about that in a little more detail, but the department essentially provides advice to the minister as part of our process of administering the Recycling and Waste Reduction Act, which is the legislation under which that process falls. So I'll just hand over to Ms Bird to talk about the process.

Senator CADELL: Just generally, I'm aware the industry is seeing the ability to export more as a commodity at the moment, with a lack of processing and uptake in Australia. The exemption process is somewhat onerous for some of it. How does this process go forward. Are there any discussions about, potentially, streamlining it, given the glut of soft plastics and bags found in warehouses in Australia at the moment, to help us get over that before our own manufacturing and uptake demand lifts?

Ms Bird: I can go through the process with you. Perhaps it might be helpful to clarify the difference between the soft plastics issue that you've raised. The exemptions that the minister has granted, and previous ministers before her, are published by the department's website. So there is a list of those publicly available with an overview of the reasons that they were considered appropriate to grant. You will see the plastics exemption that you mentioned is for sorted polymer, so it's a sorted single type of polymer that is clean and appropriate for the processing overseas.

The process that the department goes through is that we receive an application, we assess the application against the objects of the act and any other requirements. We also make sure that it complies with our international obligations. That talks to the Basel Convention, which requires us not to export mixed plastics, which is where you may be thinking in terms of the soft plastics issue that you mentioned.

It is a process we apply a degree of rigour to because it is seeking to provide the applicant with an exemption from the requirements of the act and the rules, so it can take us some time to assess that with the appropriate amount of rigour that's required. That is because there are a number of issues to weigh up, including the investments that some have made in Australia to invest in that processing capacity. We need to be confident when we're providing advice to the minister about the claims that are being put forward.

Senator CADELL: Do you have any other applications that are still being assessed at the moment?

Ms Bird: I don't have that on hand, but I understand we have a couple still to be assessed.

Senator CADELL: Could you potentially get that back to us on notice?

Ms Bird: Sure.

CHAIR: Senator Thorpe?

Senator THORPE: I've got some questions on PFAS. When did the department last review the evidence around the health impacts of PFAS?

Ms Lynch: I'll endeavour to enter that question for you, but I'll also invite my colleague, Ms Burgess, up to the table.

Senator THORPE: Thank you.

Ms Lynch: I'll start responding to your question by outlining that this department works really closely with colleagues across the rest of the APS. Typically, when it comes to the health impacts of PFAS that's a matter that the department of health is responsible for.

Senator THORPE: You've got to clean it up, though? Are you responsible for cleaning it up?

Ms Lynch: It depends on the nature of the incident and it depends what land it is. For example, if it is Commonwealth land then it's the relevant Commonwealth agency.

Senator THORPE: Crown land? Stolen land?

Ms Lynch: For example, if it's a site that's currently leased by the Department of Defence then the Department of Defence will take the lead role in terms of any remediation occurring on the site. If it's not a Commonwealth leased site—

Senator THORPE: I have questions for all the other departments so this one's relevant to you. I am aware of that.

Mr Knudson: It might be helpful to walk through what our responsibilities are as a portfolio.

Ms Lynch: Sure. In terms of what DCCEEW takes responsibility for and the role that we play helping to convene and coordinate and support colleagues across the Commonwealth, we aim to help to implement a nationally consistent approach as much as possible. We manage the intergovernmental agreement on a national framework for responding to PFAS. That agreement outlines principles and protocols for well-coordinated and timely responses from all responsible agencies. In the instance that your—

Senator THORPE: Just to cut there, because I know I'm going to get caught up on time. My question was when did the department last review the evidence around the health impacts of PFAS?

Ms Burgess: When it comes to looking at the potential health impacts, that is a responsibility of the Department of Health and Aged Care. They take forward the work on commissioning and overseeing research into the potential health effects, particularly around long-term exposure to PFAS, but then also taking that information and evidence to develop health based guidance and values to support the health risk assessments.

Senator THORPE: Okay. So, basically handballing it everywhere else. This department doesn't do a review on PFAS?

Ms Burgess: We work closely with our colleagues in the department of health as well as infrastructure and defence. Our key role is really about drawing together the relevant agencies, including jurisdictions, and facilitating those relationships and conversations. We also provide advice, technical support and guidance to Commonwealth entities.

Senator THORPE: You don't do a review?

Ms Burgess: Not of the health impacts.

Mr Knudson: We do a review with respect to the environmental impacts, not the health impacts.

Senator THORPE: On PFAS?

Mr Knudson: On PFAS. We do that coordination role, and then we are the experts with respect to the environmental impacts.

Senator THORPE: Excuse me for being a black person, a First Nations person, in this country, because we don't separate it. We don't separate environment from health. It's all one. That's a colonial interruption that we've had in this country, so excuse me for that—maybe. What's your department's review of PFAS saying?

Ms Lynch: At the moment, the department is also taking the lead on the implementation of the industrial chemicals environmental management standard, which essentially takes the form of a register. We are currently assessing that, so we've looked at the listing of a number of PFAS chemicals. I should clarify, for the purpose of the record here, that there are over 4,700 different PFAS chemicals that all fall into that family. We have identified some of the worst offenders and we're going through the process of scheduling them in this new industrial chemicals register. What that will do is it will basically allocate them to a part of the register according to their environmental risk. If they go onto one of the higher ends of the schedule, then it will allow consistent regulation across the country, not just by the Commonwealth but also by all the states and territories who are implementing this industrial chemicals scheme with us, to, for example, ban or severely restrict the use of these chemicals. If they go onto a lower schedule, there might be other conditions—for example, that they can be used but only in certain circumstances, and state and territory EPAs might provide a licence for their use in some situations. At the moment, there are some that Ms Burgess might want to speak to in terms of the PFAS chemicals that we're currently consulting on and expect to register in that process this year.

Ms Burgess: As Ms Lynch mentioned, PFAS is a group of over 4,700 chemicals. Most are safe; however, there are those that are severely harmful. Those are typically listed on the Stockholm Convention on Persistent Organic Pollutants. The department is proposing to schedule all of the Stockholm listed persistent organic pollutants—these include some of the more commonly known ones, such as PFOS, PFOA and PFHxS—by the end of this calendar year. We are proposing to consult on scheduling decisions very shortly and looking at proposing that those particular three PFAS be considered in either schedule 6 or schedule 7, which means they can potentially be banned or only used in very limited circumstances.

Senator THORPE: Why hasn't the government banned PFAS? They're the ones that are killing people. We know they're in our rain and in the water that we're drinking. We're all drinking PFAS, right?

Ms Burgess: The purpose of the industrial chemicals environmental management standard is to set those national standards for the regulation, which includes banning. The scheduling decisions are then implemented by all jurisdictions, including the Commonwealth, and the Commonwealth is in the process of developing legislation to give effect to that.

Senator THORPE: Okay. Thank you.

Mr Knudson: I just want to underscore that the intention that was mentioned by Ms Burgess is that we will be listing these, or we expect to, as being harmful to the environment at the end of this year under that schedule, which then could lead to them being banned in the country. We're very much working towards that. I just wanted to say that it's not on the never-never. It is within this calendar year that we're working towards this.

Senator THORPE: People are dying now and people are sick with cancers now, so the longer you wait the more lives you're going to lose as a result of being poisoned.

Mr Knudson: That's why these will be some of the first chemicals listed under this new register.

Senator THORPE: I appreciate that. What are the best methods for cleaning up PFAS from the environment, including filtering it out of our drinking water?

Ms Burgess: It is very difficult to say that one method will suit all circumstances. It will, of course, depend on the nature of the contamination, how it got there, the type—which particular PFAS—and those sorts of things. It really is very site specific. The department does provide that advice, particularly to Commonwealth entities, to support that through frameworks such as—forgive me if I get it slightly wrong—the Australian contaminated sites national environment protection measure. Although that does not specifically refer to PFAS, it does provide guidance on how to address contamination matters. So bringing that together can then inform the best way to go forward.

Senator THORPE: Should Australian people listening right now be concerned that PFAS is in our water and poisoning us with every glass of water we drink?

Ms Burgess: Again, this comes back to PFAS as a very broad range of chemicals. As I mentioned, most are safe. It is when those that are not, such as those listed on the Stockholm Convention—yes, we should be careful and act when those chemicals are identified. This is again referring back to where IChEMS not only has the potential to place controls on introducing those chemicals into the supply chains but also around their safe handling, use and disposal. An example is that some things can be dangerous if handled poorly, in certain circumstances, but if handled carefully and appropriately, in the right circumstances, then the risk is reduced.

Senator THORPE: It's like handling a bomb: you've got to handle that carefully, otherwise it's going to kill everyone, right? So PFAS is a bit like that: we've got to handle it carefully, otherwise it's going to kill everyone too—is that kind of it?

Ms Burgess: This is where the national standards go into play, in providing that advice.

Mr Knudson: I need to emphasise, Senator, again, the IChEMS, what we're responsible for, is about the potential harm to the environment. In terms of your questions about, and concern about, the impact on humans, the experts on that issue will be the Department of Health and Aged Care. My information on PFAS and its health impacts is just too out-of-date for me to give you great assurances. But previously—and this is going back a few years—health departments internationally had not concluded on the impact on human health. We have concluded on the impact on the environment, and that's why we're taking this action. I wanted to clarify that.

Senator THORPE: So it hurts the environment.

Mr Knudson: Absolutely.

Senator THORPE: But maybe it doesn't hurt—it's not out there that it hurts people—

Mr Knudson: It's not concluded, is a fair way of saying it.

Senator THORPE: even though we're drinking the water from the environment.

Mr Knudson: But it's not clear what impact that has on humans at this point. Again, I would encourage you to talk to the Department of Health and Aged Care. They are the authority and experts on that.

Senator THORPE: I will be, tomorrow. I have one more question left with my time. Are you aware of the research last year from Stockholm University that found that rainwater—in most locations on earth—contains levels of PFAS that greatly exceed safety levels? I have articles, which I'm happy to table, on that—that we're drinking poisonous water every day. Do you want to comment?

Ms Lynch: Yes, the department is aware of that research that was released and has also had discussions with other Commonwealth agencies in relation to that. It's one of the matters that continues to be raised in our ongoing consultation with industry and also with state and territory governments. One thing I can say categorically is that there is no sense that we are doing nothing in relation to PFAS contamination. It remains a very high-concern series or group of chemicals, and something there's a huge amount of interest in trying to resolve. That study draws out one of the main complexities, which is that some PFASs are pervasive in the environment. They don't break down and they have a long impact. As a result, they can find their way into different food chains, and that is one of the characteristics that makes them a dangerous chemical and something that has led to them being listed on the Stockholm Convention.

Senator THORPE: Thank you so much. I'll put the rest on notice.

CHAIR: Can I just take this moment to very strongly encourage all senators to put on notice whatever questions are humanly possible, and only ask the things they absolutely have to, because we are running significantly over time.

Senator DUNIAM: On recycling: was there any new money in the budget for recycling?

Ms Lynch: Yes, in this current budget there was. In terms of measures, there were measures in the budget but it was reallocation of funding and, in one instance, a delayed cost recovery. So, technically, yes, there was additional funding because we are delaying cost recovery.

Senator DUNIAM: That's the \$3.9 million?

Ms Lynch: Yes, that's right, for the implementation of the waste export ban.

Senator DUNIAM: Are you able to briefly state what high-level measures were contained in the budget for recycling?

Ms Lynch: There is a new measure which is in relation to food waste avoidance—so a new program that has a \$10 million allocation. There is, as we mentioned, the delayed cost recovery for the waste export ban, and there was a revenue measure in the budget related to increasing the levy for the Product Stewardship for Oil Scheme.

Senator DUNIAM: They are reallocations within what was ostensibly an existing parcel of money—except for the \$3.9 million.

Ms Lynch: That's right, yes.

Senator DUNIAM: Is it the same for the October budget as well—that is, there was no new money from the March budget prior to that?

Mr Knudson: The October budget, I believe, confirmed \$83.1 million for building Australia's circular waste economy.

Senator DUNIAM: So there's not new money—that is what was there, then it's been reallocated in May. I just wanted to get that baseline clear; that is helpful. Why was there a delay in the waste export ban resulting in that \$3.9 million cost?

Ms Lynch: I might call Ms Bird up to the table to help answer questions on this item. In essence, there was a previous standing government commitment to cost recover the implementation of the waste export licensing scheme. The department undertook some extensive consultation over the past year, primarily with industry stakeholders, about different options for cost recovery. What we have since put to government, and was agreed by the government in the context of this budget, was a decision to defer cost recovery until the 2024-25 financial year.

Ms Bird: Can I just clarify: on the Product Stewardship for Oil Scheme, that was an increase to the levy rather than a reallocation of funding, to bring it back to fiscal neutrality.

Senator DUNIAM: That's a revenue measure, right? Okay.

Ms Bird: I'm not sure I can add much more to what Ms Lynch just said about cost recovery, but, yes, it did follow consultation with industry and consideration of the feedback that was provided in relation to that consultation.

Senator DUNIAM: And we're confident we won't see a further delay in the implementation of the cost recovery?

Ms Bird: That's a matter for consideration over the course of the coming year. You will be familiar with the establishment of the environment protection agency, and there will be a broader—

Senator DUNIAM: So it's associated with that?

Ms Bird: No, it's not associated with that. Just to be clear: in a broader sense the cost recovery arrangements are being reviewed in a broader sense across the portfolio, so I can't make any specific comments on what might happen with the waste export cost recovery. It has been deferred for a year and no decisions of government have been taken in relation to that.

Senator DUNIAM: We live in hope!

Senator WHISH-WILSON: Can I ask the same questions I've been asking on plastic packaging for so many years now. On 20 April, APCO finally came clean that they're not going to meet their national targets. Through an order for the production of documents, I'd already accessed that draft report and was aware of that. What happens now? We've pretty much got a defunct a set of national targets; everyone agrees they're not going to be met. APCO themselves, to use their own language, are saying this is a historic opportunity to press the reset button. They're calling for stronger co-regulatory frameworks, and strong coordinated interventions are needed on essential packaging streams. They're calling for government regulation; they said during the Senate inquiry into this and into the private member's bill, where we nearly got a mandated scheme in 2020, that they were agnostic as to whether the schemes were mandated or voluntary. What happens now?

Ms Lynch: I mentioned earlier in this hearing, in response to some other questions, that the government is pursuing regulation. It will be a mandatory new packaging regulation that we hope to apply countrywide. That's a piece of work being pursued through the environment ministers forum. At the moment work is underway to essentially do the economic modelling of different options for how to give effect to that. Your point about APCO's review showing that the voluntary industry targets will not be met by 2025 is of some concern to environment ministers across the country.

Senator WHISH-WILSON: You're surely not surprised, given they've failed for 25 years to ever achieve anything they've set out to do—and we all knew that.

Senator McAllister: Interestingly, I'm not sure the public did know that, because the previous government made a series of quite bold statements about their progress that were, as it turned out, entirely fanciful.

Senator WHISH-WILSON: That's a fair comment.

Senator McAllister: I take your point that you might not have been surprised, but, had you listened to the previous government, it may come as some surprise to you that things were not in fact on track.

Senator WHISH-WILSON: To be fair, the industry themselves were saying that they were going to meet their targets back in 2021, when we did try to get them regulated.

Ms Lynch: Just a couple of other things: you asked what was next. One of the characteristics of the packaging sector is that there are some leading brands who are genuinely trying to do some innovative things and who have committed and invested quite significantly in trying to improve the sustainability of their packaging. That has yet to lift the whole tide, though.

Senator WHISH-WILSON: You can go onto APCO's website where they rate all their 2,000 members, and you can see which companies are doing a good job and which ones are free riders—if they haven't been kicked out of the scheme.

Ms Lynch: We would certainly agree with you about the industries', particularly APCO's, call for regulation. We are working closely with APCO on that process. As I mentioned, that's a regulatory reform that will occur through government. We also expect that environment ministers will discuss this report; the first environment ministers meeting since the release of the finalised APCO report is scheduled to occur shortly, so we anticipate that environment ministers might discuss the report as well.

Senator WHISH-WILSON: At the moment, a packaging company can choose to be regulated under the NEPM if they don't wish to join APCO. Some states, like Tasmania, have no regulation, so it's essentially a zero regulation environment. What role will the state environment ministers play in these negotiations or in any future legislation?

Ms Lynch: Environment ministers have collectively agreed to reform the packaging regulation system nationwide. This would effectively be to replace that existing NEPM that's currently in place but not being enforced effectively. The independent review of that NEPM process found there was very little, if any, effective enforcement at all.

What we would expect to see is that all environment ministers will be considering this new national packaging regulatory scheme and agreeing to it. It may be implemented at a Commonwealth level as a national piece of legislation, or some other model may work. It might be implemented through each state's and territory's

legislation. That's yet to be finalised, because those models are being costed and worked through at the moment in consultation with industry.

Senator WHISH-WILSON: So it may be a state based regulatory model rather than a Commonwealth one?

Ms Lynch: There are a whole range of different options being considered. That's part of what this work underway at the moment, the economic modelling, is looking to ascertain—what might be most effective and what are the best means to achieve that highly consistent nationwide and enforceable approach.

Senator WHISH-WILSON: So I'll ask the next logical question: when is this going to be done by? And who sets the new targets? Are there going to be any new targets?

Ms Lynch: We expect the environment ministers will make decisions around this new scheme, collectively. In terms of time frame, they have agreed that should be basically in place by 2025. So towards the end of this year they will consider a draft model with some options, and then there will be a cost-benefit analysis, a RIS process, done on where they've landed, with a decision in the first half of 2024.

Senator WHISH-WILSON: Don't tell me, the targets will be 2030 targets?

Ms Lynch: There is no information to hand yet on what those targets might be. I think it's more likely to be things like mandatory obligations that will apply from the time the scheme is in place.

Senator WHISH-WILSON: Do we all agree that there's such a low level of trust by the Australian people in the recycling architecture in this country that we're going to have to work really hard to regain that trust? Will you start from scratch in terms of what you're designing, or are you going to look at something like APCO, which is a voluntary accredited scheme under the act and convert that into a product stewardship scheme? How will this work? What are you modelling? Are those scenarios that you've modelled?

Ms Lynch: In terms of the detail of what's been modelled, I will have to take that on notice; I could do that for you. What I anticipate will happen is that we'll be looking at what's worked and what hasn't worked, more effectively, more to the point, in Australia. We certainly won't be blind to the existing work that's been done by industry in relation to those voluntary targets, but I don't expect that the regulated scheme will be those targets. We're also looking what's been done internationally by other countries and considering other models, including issues like extended producer responsibility schemes.

Senator WHISH-WILSON: The Australian Food and Grocery Council have proposed a national plastics recycling scheme, the NPRS. This has obviously come to prominence following the REDcycle collapse. How does that fit into this? Is that going to die a natural death, or are you working on that?

Ms Lynch: The National Plastics Recycling Scheme that the Food and Grocery Council is developing is essentially like a model for a membership or a payment based scheme for the collection and recycling of plastic materials. I have a couple of points. We understand from the Food and Grocery Council that it's not necessarily going to be limited to their membership base, so others across the Australian supply chain could choose to participate in that scheme. We see it as being complementary to the regulatory reform, because, at the end of the day, all of these things, as you appreciate, are part of an ecosystem here. Unless there is demand, then the recycling is a bit on the shaky ground. In this case, the Food and Grocery Council is bringing together a lot of Australia's biggest manufacturers, a lot of the big brands, who want access to quality recycled plastics, because they want to be able to make packaging for their packaging out of good, recycled plastic.

Senator WHISH-WILSON: Isn't the scheme basically putting it all back onto local government and councils to have a better sorting and recycling process, and households at the curb side? We all agree that should be more efficient, but I'm sick of the industry putting this back onto consumers. For the 15 years I've been looking at this area, it's always been about more consumer responsibility and less producer responsibility.

Ms Lynch: The scheme is yet to be finalised, but, certainly, that's the direction that is going at the moment. Under the National Plastics Recycling Scheme, they've done some trials looking at kerbside collection, but that's not the only collection mechanism that that scheme will employ or consider. We understand, from the Food and Grocery Council, that they may also be open to collecting plastics through other mechanisms and that, in fact, that fee—

Senator WHISH-WILSON: Would they be open to paying for the scheme?

Ms Lynch: I was just going to say that the fee that the participants in that plastics recycling scheme would pay would help to fund the collection and processing activities.

Senator WHISH-WILSON: Okay. This is my last question then. What kind of resources are the department putting into assisting with that scheme—any? Have you got people assigned to work on it?

Ms Lynch: We certainly have staff who work in our plastics policy space, who have very good ongoing relationships with that scheme and others that are underway in the plastics recycling sphere, who meet regularly with some of the working groups and who are members of the working groups that APCO establishes for plastics recycling across the industry. The department has also provided a \$1 million grant to support the first phase of that National Plastics Recycling Scheme. That grant essentially helped to fund some of those pilots to see what worked, what the impact on the collection and sorting of the soft plastics was and where the challenges and barriers were.

Senator WHISH-WILSON: Thanks. I'll put some other questions on notice.

CHAIR: We just have one final point. Can I ask the officers from the Natural Heritage Trust to come to the table, please. Mr Costello, can you tell me this: how long have you served in the APS?

Mr Costello: Thirty-five years.

CHAIR: And how many years have you been in the environment department?

Mr Costello: Twenty-one.

CHAIR: And as an SES?

Mr Costello: Seventeen.

CHAIR: And what's your best guess at the number of appearances you've made at Senate estimates?

Mr Costello: I think it's about 50. That's 17 years and three times a year.

CHAIR: Your dedication and commitment is obviously deeply impressive. I know that you're going to miss us all terribly and you're going to miss this experience terribly, but the committee just wants to say congratulations on a stellar career in the Public Service. Thank you so much for all you've done for this committee, and congratulations on your retirement tomorrow.

Mr Costello: Thank you. That's very kind.

CHAIR: And, with that, you can all go. Well done.

Bureau of Meteorology

[20:19]

CHAIR: Welcome, Mr Johnson. Would you care to make an opening statement?

Mr Johnson: No, thank you, Chair.

CHAIR: Wise move! Senator Rennick, you have 10 minutes.

Senator RENNICK: My first question is in regard to the request for parallel temperature data at the Brisbane Airport between the old thermometers, the mercury thermometers, and the platinum-resistant thermometers. My understanding is that you would not provide the data or said there were no documents on that parallel run step 1 and then you said—and this is in regard to the Freedom of Information—that it was not in the public interest to release that data. Could you elaborate on that please?

Dr Johnson: Thanks, I appreciate the opportunity to correct the record about this matter because its reporting in the press unfortunately does not reflect the facts. On the matter you're referring to, we received a Freedom of Information request in 2019 for data which did not exist, and we made that clear to the respondent. The respondent appealed that decision with both the Information Commissioner and the Administrative Appeals Tribunal. As part of that process we did offer the respondent access to both the digital record and our field books, but they were not satisfied with that offer. As I said, our decision under the FOI legislation was upheld by both the Information Commissioner and the Administrative Appeals Tribunal. In 2023, just the other day, we actually provided the respondent with the information that we offered them in the first place in 2019, so this notion that the bureau was withholding data is false, and, indeed, all of our records, both digital and analogue, are available to the public.

Senator RENNICK: With that in mind I note that you said you have basically got specifications in regard to the probes. What is the margin of error in the specification between, obviously, what you tolerate between a mercury thermometer and a platinum-resistant thermometer?

Dr Johnson: I might ask my colleague Dr Stone to walk you through this because he is all over that detail.

Dr Stone: The tolerance that applies to a liquid-in-glass thermometer is 0.5 of a degree. Until recently the tolerance that applied to our electronic probes was 0.4 of a degree, and with the new probes that have been purchased it will be 0.2 of a degree.

Senator RENNICK: When you say 0.5 is that plus or minus 0.5?

Dr Stone: Yes, it is plus or minus. I will take you through what that means. There are actually five measures of certainty in measurements. The first is accuracy, and that refers to the closeness between a measured and a true value. It's important to note that it is scientific fact that the true value can never be actually known. The second is error, and that is the difference between the measured value and the true value. Then there is tolerance, which is the allowable error. It was tolerance that I mentioned before. It was half a degree for liquid-in-glass, 0.4 for the electronic probes until recently, and now with our new probes 0.2.

Senator RENNICK: When you say there is a tolerance, does that mean that at the Brisbane Airport, for example, if one thermometer measures 20 degrees and the other measures 20.4, you will tolerate that? Is that what that means?

Dr Stone: Correct. If you had, for example, a mercury-in-glass you can actually add those tolerances to get the difference and you would say it was within tolerance. You could expect a difference between two thermometers within the range of the two tolerances added together.

Senator RENNICK: Which is what, half a degree?

Dr Stone: Well, 0.9. because the tolerance in the liquid-in-glass is 0.5 and the electronic probes as they were was 0.4, so you could expect to get a reading of up to 0.9 difference and say those two measures of observing temperature are both working.

Senator RENNICK: In regard to the parallel runs, wherever you have done them, are documents available to look at the average difference between a platinum-resistant thermometer and a mercury thermometer—or a liquid-in-glass, as you say, thermometer—or is data available to check that parallel run?

Dr Stone: Yes, there is. Just to be clear about parallel runs, what we are normally referring to when we talk about a parallel run is looking at paired readings between different ways of measuring—

Senator RENNICK: Correct.

Dr Stone: when you are switching from one to the other. The example at Brisbane Airport is quite different. There were parallel runs—there have actually been quite a few changes in measurement since measurements started there in, I think, 1948. The interesting situation there is that has actually been continuous measurements done with liquid-in-glass and electronic since 2008. That data actually confirms—which we have across the whole temperature record, really—that even though you've got differences in tolerance from different ways of measurement, when you look at either the maximum or minimum measured using different methods, in the diurnal range or the average temperature, we don't find a difference.

Senator RENNICK: You don't find any difference?

Dr Stone: No. Just to be very clear, you can look at individual days, and absolutely you will get differences, because you get differences even between electronic probes. But when you look at the average, there's no significant or systematic difference.

Senator RENNICK: With regard to the mercury thermometers and platinum-resistance thermometer measurements in seconds—what's the story with measuring over one minute versus one second?

Dr Stone: A great question. The electronic probes, as the Bureau uses them, measure every second, and each measurement for that second really averages because of the thermal mass of the probe. That actually integrates the temperature over the previous 40 to 80 seconds, so it measures every second. That measurement is really the integral of the temperature over the previous 40 to 80 seconds. So you are getting 60 readings a minute. It sends through the data once a minute, so the data that is sent through once a minute is really the average of an average.

Senator RENNICK: Right.

Dr Stone: So it's very stable. So the implication that it's somehow measuring the very hottest second in a day is just not correct.

Senator RENNICK: In the article it quoted that there is a dramatic change in the difference since December 2019 at the Brisbane Airport of 0.35 degrees between the two different types of thermometers. Do you agree with that statement? That's since December 2019.

Dr Stone: I'm not sure about the statement. What I can say is in the three-year period the respondents analysed the data for, there was two-hundredths of a degree difference between the maximum temperature measured using liquid in glass and electronic probes, and two-hundredths of a degree difference in the minimum temperature measured. So it's just not a significant difference.

Senator RENNICK: That's fine. This is my last question: on notice, can you then provide to me the records for the Brisbane Airport of the changes in different thermometers and the reasons why you have to do so many changes at the Brisbane Airport?

Dr Stone: Yes. No problem. That exists.

Senator RENNICK: Thank you.

CHAIR: I will just advise that the committee, by a majority agreement, is going to move the Threatened Species Scientific Committee and the North Queensland Water Infrastructure Authority from today's hearing to Friday, hopefully. Hopefully that should get us to finishing at 11 pm. If whoever needs to take whatever action to ensure that those people are advised, could they please do that. Senator Roberts, over to you for 10 minutes.

Senator ROBERTS: Thank you again for being here, Dr Johnson and Dr Stone. I would like to table these two articles, Chair.

CHAIR: Certainly. What are they?

Senator ROBERTS: They are newspaper articles.

CHAIR: Given they are public documents, we probably don't need to table them; we can just circulate them around the committee.

Senator ROBERTS: The first document is about two articles in the *Australian* newspaper about parallel temperatures at Brisbane Airport—following on from Senator Rennick. The other one is about forecasts from the Bureau of Meteorology that have been inaccurate. Going to the first one, I've tabled some important news about parallel temperatures at Brisbane Airport, showing that your temperature probes do record different temperatures to mercury thermometers in the same location at the same time. If I could please go to Freedom of Information 30/6155, regarding the daily maximum and minimum temperature parallel observations for Brisbane Airport, which the stories relate to, what date did you first receive the FOI request? I think you said 2019.

Dr Johnson: It was received on 12 December 2019.

Senator ROBERTS: What date did you release the documents to the applicant?

Dr Johnson: Well, the documents were released, as agreed with the respondent, on 6 April 2023, but, as I said in my earlier response to Senator Rennick's question, the documents released were the ones that we were quite happy to provide in 2019 to the respondent, but the respondent didn't wish to avail themselves of that material back in 2019.

Senator ROBERTS: Why did you fight to keep this information a secret?

Dr Johnson: We didn't fight. Again, I reiterate my response to Senator Rennick: we didn't fight anything. We were unable to fulfill the request that we received in 2019 because the information that was requested did not exist in the form that the respondent requested it. So we offered the respondent the material we had. They declined and sought to appeal it through the various appeals processes. Our decisions were reaffirmed by both the Information Commissioner and the Administrative Appeals Tribunal, and the information that we offered to provide the respondent back in 2019 was provided in April this year. So this notion that the bureau's withholding information is a fallacy.

Senator ROBERTS: So we'd have to look further into that, but not here.

Dr Johnson: That's the record and the truth.

Senator ROBERTS: You're paid by the taxpayer, Dr Johnson, just like I am. You're meant to serve the taxpayer, as I am. You have a remuneration package of over half a million dollars a year from taxpayers. The information you have, the work you do, belongs to the taxpayer, correct?

Dr Johnson: As I said in my response by Senator Rennick, all of the bureau's data records are available to the public, either in digital or analogue form. They're held in the analogue form in the National Archives, and the digital records are available on the bureau's website.

Senator ROBERTS: I've heard that before, but I've also seen people who can't access the information.

Dr Johnson: I can only tell you the truth, and the truth is that those records are available on our website or in the National Archives by request.

Senator ROBERTS: Why did it take an application to the Administrative Appeals Tribunal for you to back down?

Dr Johnson: I reject that comment. The information that was requested by the respondent or the proponent—I'm not sure how you want to characterise it—was not available. We can't create something that's not available.

We offered the respondent a set of alternatives, which they declined initially and then subsequently agreed to take. So, again, this notion that the bureau is withholding information from the public or from this particular respondent is just not true; it's inaccurate. I can't be any clearer on that.

Senator ROBERTS: No; you're clear. Do you disagree that your temperature probes are recording different temperatures to mercury thermometers in the same place at the same time?

Dr Johnson: I'll let Dr Stone address that.

Dr Stone: No, you actually expect pairs of measuring instruments to have different measurements.

Senator ROBERTS: So if we had two probes, they would be slightly different. I understand the natural variation.

Dr Stone: Within tolerance, yes.

Senator ROBERTS: Would the difference between the two probes be less or greater than the difference between a probe and a mercury thermometer?

Dr Stone: I'll reiterate that liquid-in-glass thermometers have a tolerance, an acceptable error, of 0.5 of a degree. Our electronic probes that we've been using for 30-odd years have a tolerance of 0.4 of a degree. The electronic probes that we're about to roll out have a tolerance of 0.2 of a degree. You can expect a difference between the two probes that is the sum of the tolerances of the two probes.

Senator ROBERTS: I understand that. So there is a difference between the mercury in glass and the probes?

Dr Stone: In which sense? In tolerance?

Senator ROBERTS: No, in the actual measurement. There'll be difference in the two measurements?

Dr Stone: Sometimes, because they operate within that tolerance.

Senator ROBERTS: I understand about tolerances.

Dr Stone: For the ones operating at Brisbane Airport, for example, I have the figures on the distribution of readings and the mercury-in-glass. I don't have the exact figures, I'm sorry, but approximately 40 per cent of the time one of the probes measured a higher amount than another.

Senator ROBERTS: The figures are 41 per cent—

Dr Stone: About 30 per cent of the time, they measured below, and the balance of the time they measured very similar.

Senator ROBERTS: So there is a difference. There has to be.

Dr Stone: Correct, and we expect the difference—

Senator ROBERTS: So 41 per cent of the time it recorded a warmer temperature, and cooler temperatures were recorded 26 per cent of the time.

Dr Stone: Something like that, yes.

Senator ROBERTS: So are you saying that the analysis of Marohasy and Abbot is incorrect? Or are you saying that it may be correct but it's within allowable tolerances, so you don't care?

Dr Stone: Which part of their analysis? They did quite—

Senator ROBERTS: The 41 per cent warmer and the 26 per cent cooler.

Dr Stone: If they are the figures. Sorry; I've got them here. Yes.

Senator ROBERTS: 41 per cent and 26 per cent?

Dr Stone: That is correct.

Senator ROBERTS: Thank you. Do you think it's significant that your new temperature probes are, on average, recording warmer temperatures than the mercury thermometers in the same locations at the same times?

Dr Stone: They are not, on average. There is a difference of two-hundredths of a degree, which is not a significant difference.

Senator ROBERTS: I said on average they're recording a warmer temperature.

Dr Stone: No, sorry. On average, there was a difference of two-hundredths of a degree between the liquid-in-glass-thermometers—

Senator ROBERTS: So, on average, the probes are recording a warmer temperature.

Dr Stone: 0.02 degrees is not a significant difference.

Senator ROBERTS: On average, they are recording warmer temperatures than the mercury.

Dr Stone: No. 0.02 degrees is not a significant difference.

Senator ROBERTS: Graham Lloyd is a credible journalist; I've seen his work many times. The story also says that you, Dr Stone, claimed in response to these issues—presumably he asked you—

Dr Stone: No, he didn't.

Senator ROBERTS: that all temperature data is publicly available on your website, including the parallel data. Is that true?

Dr Stone: All of our digitised data is available on the website, and, as Dr Johnson mentioned to you earlier, data that hasn't been digitised is available from the national archive.

Senator ROBERTS: The temperature data that was released in the freedom of information request was not available on your website, was it?

Dr Stone: There were two pieces of information provided. One was scans of field books which hadn't previously been digitised. Those were digitised upon request and provided. Then the electronic data is available on the bureau website.

Senator ROBERTS: Well, why were you in the Administrative Appeals Tribunal trying to keep it secret?

Dr Stone: Sorry?

Dr Johnson: Senator, with respect, I think we've addressed this. This notion that we are withholding information from the public is just false. The administrative appeals process was instigated by the proponent, who disagreed with the decision that both the bureau and the Information Commissioner had made in respect of the freedom of information request. Again, I reiterate that the bureau's actions were affirmed by both the Information Commissioner and the Administrative Appeals Tribunal. So this notion that the bureau withholds data is false, and it's very important that it's on the record, because, as you say, taxpayers have a legitimate expectation that the data that is generated with their money—

Senator ROBERTS: Can you take me—

CHAIR: Last question, Senator Roberts.

Dr Johnson: is available. I just don't know how much clearer we can be on this.

Senator ROBERTS: Can you provide the URL where the parallel temperature data was available on your website prior to the FOI?

Dr Stone: This is a key point. The applicants asked for 'the report' in which parallel data was recorded. I've just explained the data existed in two places. The respondent refused the offer of data on the basis that we couldn't provide it in one form. It doesn't exist in one form: there are field books that have the manual temperature readings written down, and there's electronic data. Bring those two together, and you can construct the parallel dataset, but they specified that they would only accept reports of parallel data, which don't exist.

Senator ROBERTS: I know—

CHAIR: Senator Roberts, we need to move on. Your time is up. Senator Whish-Wilson.

Senator WHISH-WILSON: There have been a number of reports from different periods around the world around the chances of an El Nino event this year. What is the bureau's latest advice on that?

Dr Johnson: We have an El Nino watch out, which says there is roughly a 50 per cent chance of an El Nino forming in the months ahead. You're correct that in sections of the media there have been some reports—

Senator WHISH-WILSON: 80 per cent, 66 per cent.

Dr Johnson: Yes—from the United States. I'm not sure if you've had a chance to read all of those reports in depth, but certainly the ones I've seen are accurate in the sense that each agency has slightly different ways of looking at the phenomena. The way we look at it has stood the test of time, we think, in this country and reflects conditions here in Australia. For example, in the United States they really only look at sea surface temperatures. We don't only look at sea surface temperatures; we look at things like cloudiness around the central Pacific, the International Date Line, the strength of the trade winds and the temperature of the ocean. We look at a range of atmospheric and oceanic parameters, and our assessment is there's around a fifty-fifty chance of one forming.

Senator WHISH-WILSON: Roughly when will we know?

Dr Johnson: Our confidence improves, obviously, as the year goes on. This time of year is challenging in terms of the seasonal outlook. Our skill varies during the year across different seasonal parameters, but we'll continue to monitor the season closely. Obviously, people are quite anxious about the situation, and we'll update them as we do regularly.

Senator WHISH-WILSON: Could part of the reason that some of these other international bureaux are, as you say, going on sea surface temperatures be that we are seeing record global ocean temperatures in parts of the world? Could you give us a bit more information on the bureau's views on that.

Dr Johnson: As you know, globally, average sea surface temperatures are rising, just as temperature in the atmosphere is rising. As you probably know, the El Nino-La Nina phenomena reflect differences in atmospheric and oceanic conditions across the Pacific. When we see El Nino conditions in our part of the world, generally, that pool of warmer water is in the eastern Pacific, off the coast of South America and the United States, and we have cooler sea surface temperatures here in the western Pacific. But, globally, on average, as you correctly point out, the ocean has warmed significantly in recent decades.

Senator WHISH-WILSON: Is it fair to say that—I've been following some different sites—there have been, for this time of year, a number of record warm temperatures from North Africa; Spain; India—

Dr Johnson: Yes.

Senator WHISH-WILSON: Vietnam; Singapore, who I think recorded their warmest days on record; North America; and Canada?

Dr Johnson: Don't test me on all of those—

Senator WHISH-WILSON: No, no; they're just some of the ones.

Dr Johnson: but the trend you point out is accurate.

Senator WHISH-WILSON: Is that linked to those ocean temperatures?

Dr Johnson: Yes. Also, the trend of warming is most extreme in the Arctic, so we're seeing the Arctic Ocean warming much faster than anywhere else on the planet. Obviously, that has quite significant consequences for the world's climate and weather systems.

Senator WHISH-WILSON: Last week, the World Meteorological Organization reported to the UN that there was a 98 per cent chance that one of the next five years would break recently set records and be the hottest temperature on record. Do you have any comments about that? Are you able to scrutinise that data?

Dr Johnson: Not specifically. I'm aware of the report. I haven't read it in detail, but I'm aware of those reports, and there is nothing in those statements from WMO that's inconsistent with what we're observing globally.

Senator WHISH-WILSON: So you're not surprised, I suppose, given how quickly we're breaking records—

Dr Johnson: No.

Senator WHISH-WILSON: and have been in the last five or so years?

Dr Johnson: Well—

Senator WHISH-WILSON: What is the current—and this is not trying to test you out, either, by the way—

Dr Johnson: I'll do my best!

Senator WHISH-WILSON: What is the hottest year on record at the moment for Australia?

Dr Johnson: The summer of 2019 was, I think, about 2.4 degrees—don't quote me specifically on that—above the long-term mean. So if you think about the last 100 years, we are, on average, about 1.47 degrees above that; it was another degree on top of that in 2019. Now 2019 seems a long time ago but it is still in many communities' memories just how hot it was.

Senator WHISH-WILSON: Using that baseline of 1.47 above the long-term average, do you do any kind of estimations on what this year might look like, for example?

Dr Johnson: No, not that I am aware of.

Senator WHISH-WILSON: That's fine. The World Meteorological Organization also said the world is likely on a 66 per cent chance to temporarily exceed 1.5 degrees globally some time before 2027. How many times would you expect annual temperatures to jump above 1.5 degrees?

Dr Johnson: Do you mean in Australia?

Senator WHISH-WILSON: In Australia and globally, if you know, until it settles above that level.

Dr Johnson: I can't answer that question now. I would need to check with our people whether we can answer that.

Senator WHISH-WILSON: We are pretty close to that now.

Dr Johnson: We are at 1.47 plus or minus 0.24 at the moment. But yes, based on current emissions trajectories and the dynamics in the oceans and the atmosphere, I think that is a reasonable assumption to make.

Senator WHISH-WILSON: Based on current global commitments, we understand the world is on track for warming of between 2.1 to 2.9 degrees this century. This might be more CSIRO's kind of bag, but do you have any idea what that would translate into for Australia's land and surface temperatures?

Dr Johnson: I'm not in a position to answer that.

Senator WHISH-WILSON: They do all of that long-range forecasting, don't they?

Dr Johnson: We do some as well, but I'm not in a position to answer that right now. I would be happy to take it on notice if we can.

Senator WHISH-WILSON: If you could, that would be just as good.

Dr Johnson: We will refer it to the CSIRO. We work closely with the CSIRO, as you know.

Senator WHISH-WILSON: How do you stay positive with all this information every year? It is all record floods, record heat, record fires, record dry lightning, record rainfall.

Dr Johnson: I don't think it's appropriate for public servants to speculate.

Senator McAllister: Dr Johnson is not required to talk about his feelings.

Senator WHISH-WILSON: Look, people ask us that question all the time. I would be interested, given you have to look at this every day. It is like a fishbowl.

Dr Johnson: I am by nature a positive and optimistic person. I hope that all of the positive aspects of humanity will play forward.

Senator WHISH-WILSON: Don't we all, as they said in that film *Don't look up*. Do you remember that famous quote?

Dr Johnson: No.

Senator WHISH-WILSON: It was, 'We really did have it all, didn't we?'

Senator DUNIAM: Dr Johnson, it's very good to see you. I go to a question I put on notice in February—SQ 23 000645—relating to the internal review around social media accounts. You have responded to it I asked that question on the basis—and this was probably my error—of an article put up by the ABC. I don't know if you want me to table this or not.

Dr Johnson: I'm familiar with your question. If I recall, the premise of the question was flawed. There was no review of social media. The reporting was inaccurate.

Senator DUNIAM: You continually do it rather than answer my specific question, which was based on the article—

Dr Johnson: Sorry, I apologise. Yes, the reporting was inaccurate. It merely sought to check the report.

Senator DUNIAM: Yes, great. I just wanted to confirm. If that is the case, we will move on from that. What recommendations or changes occur out of these continual reviews of social media practices?

Dr Johnson: Just to reaffirm, there was no review of social media practices. As I said before—

Senator DUNIAM: But your answer says the Bureau of Meteorology continually reviews its social media practices.

Dr Johnson: Sorry, I thought you were talking about something else. Yes, we review. These are not formal reviews; this is just part of continuous improvement. I thought you were referring to a capital-R review.

Senator DUNIAM: No.

Dr Johnson: Do you mean ongoing good practice?

Senator DUNIAM: Yes. So you have no specific capital-R recommendations or capital-C changes?

Dr Johnson: No. Apologies for the confusion.

Senator DUNIAM: Not at all. It has been like the *Benny Hill Show* in here today, so let's continue that. In relation to the placement of the panel observatory or the solar panel we talked about last time, the answer you provided relating to the removal of the panel was there was something like a 2½-month period between restoration of power and the removal of the panel, if I recall correctly. Does that sound about right to you?

Dr Johnson: Yes. Sorry, are we referring to the QON?

Senator DUNIAM: The QON did specify a period of time between the two.

Dr Johnson: That's my understanding.

Senator DUNIAM: So you might just confirm that for me. Was there a reason or was it just a resourcing issue where you didn't have the capacity to get in and remove it at that period of time?

Dr Johnson: I'm not sure. Dr Stone might be able to answer that one.

Senator DUNIAM: Sorry to get into the weeds here.

Dr Stone: We weren't confident that just because the power had gone back on that it would be stable.

Senator DUNIAM: So it was a backup option to maintain it?

Dr Stone: More or less, yes.

Senator DUNIAM: I asked off the back of what you had said, Dr Johnson, around compliance with WMO standards. You said you have followed them. I have tried to look on the website, which is replete with information. There is a huge number of standards and guidelines including on how to write letters too, I notice. I am wondering if you can point me to the standards by which you complied. Is there a document? Take it on notice.

Dr Johnson: I think you would be referring to guidelines. We would be happy to point you to the right area. I can't do that now but would be happy to do it on notice.

Senator DAVEY: In this year's budget papers, the government is providing \$7.1 million over four years to the Bureau of Meteorology to 'maintain and strengthen its capability to provide aviation meteorological services'. Can you give us a brief rundown what those services for aviation are for?

Dr Johnson: Yes, I can detail that at a high level because they are quite extensive. The bureau provides an extensive portfolio of forecasting products and services to the aviation industry in this country. You can think about that in three levels: inbound and outbound international aviation—the airlines flying in and out of Australia; the domestic commercial operators—people like Qantas and Virgin; and then general aviation—folks flying small light aircraft. We provide a set of services for a specified number of aerodromes around Australia. We obviously work very closely with the industry to determine where those services are provided and when. Those services are paid for by a thing called the meteorological services charge, which is a levy that is applied to all three of those actors in the international aviation system. So, by law, the bureau provides those services to support the safety and economic prosperity of the aviation sector.

Senator DAVEY: According to the budget papers—and you mentioned it—the revenue from the meteorological services charge for both international and domestic commercial aviation will deliver around \$50.2 million over the four years in additional revenue. So, if you're getting \$7.1 million and the government is getting \$50.2 million, where's the—

Dr Johnson: No. We're getting the money from the meteorological services charge.

Senator DAVEY: Oh, so that goes to you.

Dr Johnson: That pays for our services. I'm not sure if we've got time to unpack. There's a little bit of complexity because, during the COVID epidemic, the meteorological service charge was suspended, obviously because planes weren't flying, but, if only one plane flies, we still have to provide the service.

Senator DAVEY: You've got the same costs, yes.

Dr Johnson: So the government was very supportive in supplementing us with revenue to enable us to sustain our aviation meteorological capability until such time as the industry was able to resume activities. So there are some ins and outs there, which we'd be happy to unpack for you if you wanted that detail, but I think the general point you're making is accurate, which is that that charge is levied on industry and it goes to fund the bureau's aviation activities.

CHAIR: I wonder if it would be okay to do that on notice?

Senator DAVEY: The unpacking can be done on notice, but, just to quickly paraphrase, the \$50.2 million goes to the Bureau of Meteorology, but the difference in cost and income is the \$7.1 million that the government is supplementing so that you can do it?

Dr Johnson: Not quite. Dr Stone, who looks after the aviation area, might be able to drill into the small detail.

Dr Stone: I'm not quite sure about that question, but, during COVID, when flight volumes were down, in order to sustain the aviation met service without putting up the per kilometre charge, the government stepped in and paid the difference between the cost of providing the service—

Senator DAVEY: Cost recovery.

Dr Stone: Yes, it's cost recovery. It decreased slightly as we pared things back a little, but, in essence, the government stepped in and paid the difference between the decline in revenue paid by the sector and what was required to sustain the service. As traffic volumes have gone up, the proportion of the total cost that the sector is able to pay has increased, so the supplementation has basically gone from a lot to ceasing as of 30 June.

Senator DAVEY: Please provide the other information on notice, because I can imagine it's detailed. I now want to go to the new flood warning system. I've asked you before, Dr Johnson, about who owns the flood gauges. Through Senate estimates you have expressed a desire to have more ownership line of sight over the gauges and develop a better flood warning system. I'm really keen to unpack the recent announcement of funding for this and I'm happy to spend some time on it tonight. How do you see this project rolling out? Will it give you total control, or are we still going to have jurisdictional fingers in—?

Dr Johnson: We are delighted with the government's announcement in the budget, and I'd particularly like to thank Ministers Plibersek and Watt for their strong carriage of this issue through the budget process. It is a very significant investment, as you say—up to \$236 million over the next 10 years. It will see on-ground investment in about 114 catchments nationally and about 1,600 assets. And 350 of the 566 local government areas in Australia will have investment occurring in their areas as part of this process. The funding that has been provided will in broad terms remediate about 70 per cent of the entire asset base, so it's a very large investment.

I remind senators that nationally it's a very complex picture. Over 100 different organisations own the assets—these are rain and river gauges that contribute to the flood warning network. The situation is particularly complex in Queensland, where 60 organisations have responsibility. As part of this announcement the government has indicated that it wishes to have the bureau assume ownership and ongoing maintenance requirements in those high-priority catchments with those 1,600-odd assets we're talking about. That's a process we're now commencing formally. We're in discussion with the states to give effect to that.

We'll be starting work immediately in Queensland for a couple of reasons. One, there has already been a very significant amount of analysis done in Queensland, in close cooperation with the Queensland government and local government in Queensland, around where the biggest risks are and where they can be addressed most quickly. The Queensland government has also made a commitment to cost-share with the Australian government in terms of ongoing maintenance arrangements. We're hoping that the other jurisdictions will follow suit, but we're yet to finalise those discussions with them. It's something ministers will be progressing through the usual fora.

We expect works to commence in 2023-24 in Queensland, in 2024-25 at the latest in New South Wales and in later years in the other states. The vast majority of the work will be occurring in Queensland and New South Wales. Roughly 1,358 assets in Queensland and New South Wales, out of the 1,600, will be remediated as part of this package. It's a very significant endeavour. It's very complex. Also, particularly in New South Wales and to a significant extent in Queensland as well, we really want to sit down with local and state governments to make sure that this investment has the absolute maximum impact for those communities and those regions. So we will work closely with those local communities to make sure that the assets we believe need to be remediated align with local community expectations.

Senator McAllister: Senator Davey, I know you have asked about this regularly, but I think you understand how significant it is for a range of reasons, particularly for emergency management.

Dr Johnson: Indeed.

Senator McAllister: Dr Johnson may wish to elaborate on some of the impacts we're expecting from the investment, if we have time.

Dr Johnson: I'm happy to do that now. It will transform I think the resilience and the quality of the bureau's forecast and warning products and services. As you know, Senator, in your home state during the last three years we've had some challenges when we've had gear not working. We have redundancy in the system, but it's no substitute for having gear working. Some particularly hard hit communities have really been on the receiving end of substandard infrastructure. For example, the Wilsons catchment in Lismore and Mandagery Creek around Eugowra—many areas you've personally been involved with for a long time—are certainly on the list for remediation as soon as possible that we'll be in discussions with the New South Wales government on.

Senator DAVEY: I know that it's starting in Queensland. That has been announced. I know Queensland has been identified as a high-risk area. The other question is though: is this proposal also going to enable more telemetry, so reduce the reliance on physical monitoring?

Dr Johnson: Correct.

Senator DAVEY: Is Queensland further behind than, say, New South Wales in telemetry capability? It has been put to me that Queensland has been requesting funding from the Commonwealth for a while. At the time, states are responsible for river monitoring and flood gauges, so, if the state wants to upgrade, the state should upgrade. My question is: are we rewarding a state who has been recalcitrant in upgrading by putting them at the top of the list when all states—and I put South Australia in here as well. South Australia, as you've mentioned in the past, do their own monitoring, and you've had very little to do with South Australia. I don't know where they are on the list.

Dr Johnson: There's a lot of richness in that question, and I'll try and deal with the various elements of it. Firstly, the national network comprises assets that are owned by the bureau, by state government and by local government, and the proportions across the three levels of government vary quite significantly across different states. In Queensland, for example, the bureau only owns and operates about a third of the network at the moment. The other two-thirds are run by state and local government. New South Wales are different percentages and so on. Then, within the network, the nature of the assets varies as well. So some parts of the network and some states have more manual gauges, and others have more automatic gauges—it varies. I could go into great detail, but it's getting late. The network varies quite significantly across the country.

You're right: the funding will do a few things. It will replace, in these high-risk areas, manual gauges with automatic gauges. When we also think about manual gauges, we're not just talking about river gauges; we're talking rainfall stations as well. There are a number of gauges that are owned by some of the actors in the system, and it'd be fair to say that the standard of equipment could benefit from being brought into line with what we would regard as best practice. There are also some gauges at the moment that we draw upon for our flood forecasts and warnings that are not necessarily in the optimal location from a flood forecast and warning perspective. They have been installed, for example, for water-quality monitoring, and we've been drawing upon them because it's the best data we've got. So in some places we'll work with the local stakeholders to actually change the location of a station so that it can have maximum utility from a flood forecast and warning perspective.

It's that level of detail that we'll work through with each of the jurisdictions. We're further ahead in that work in Queensland because the Queensland government and the Local Government Association of Queensland, sponsored with the bureau, did a very detailed scoping study of the Queensland area, which reflects, as you pointed out, the flood risk. Queensland is the state most at risk of flooding. In Australia it's where insured losses to flooding are the highest. It's where you have the intersection of big rainfall, big rivers and lots of people, and, yes, it's the most institutionally complex. As I said, there are over 60 different organisations currently owning assets that we draw upon to issue our flood forecasts and warnings. So we'd really like to clean that up to the best extent that we can. We won't be able to remediate every asset, but we'll remediate a very large number in Queensland and then get to work on the other states and seek to remediate them as soon as we can.

Senator DAVEY: In our flood-gauge and river-gauge network, is this going to effectively be—and I don't use the term maliciously—a takeover by the bureau? Will it get state jurisdictions and the other 100 organisations out of the picture, or is there still going to be multiple fingers in the pie but better line of sight of data for the bureau?

Dr Johnson: I would characterise it by saying that, of the most high-priority assets—which I said is around 70 per cent of the total—the bureau will have ownership and maintenance responsibilities for that. We won't be remediating all assets in all catchments as part of this package, but, certainly, we'll continue to engage with all the stakeholders in the process to seek to mitigate the entire risk profile as soon as we can. But it's a very large amount of money. There's also the sheer practicalities of remediating that many assets over huge distances. We feel this package is doable in the time frame we have with the technology and resources we have. We'll work cooperatively with the states. We've had nothing but positive feedback from the jurisdictions. They welcome it, I think. They welcome the bureau's expertise. They welcome our long track record in this space. This will streamline arrangements. To the minister's comments before: I think it will enhance community confidence in the flood forecasting and warning products that we produce; it is already high, but I think this will further strengthen it. Certainly, as the Director of Meteorology—the person who's responsible by law, under the Meteorology Act, for the issuing of flood forecasts and warnings—it will de-risk what's currently quite a risky situation where we're dependent on third parties to provide us with data, which we currently have no control over.

Senator DAVEY: I'll come to that in my next block, but my last question is about the ongoing maintenance costs. Will there be a co-contribution or cost-recovery model with the states?

Dr Johnson: Yes. That's the intent. As I said before, the Queensland government has already provided its commitment to providing cost-sharing arrangements. I had discussions with senior officials in the New South Wales government last week, immediately after the budget, and they've indicated support. Obviously, we have to

conclude those arrangements. The cost-sharing amounts in the other states outside of Queensland and New South Wales are actually quite small amounts of money: less than a couple of million dollars and in some cases less than \$1 million. In the scheme of the overall budget context these are small amounts of money, and I'm optimistic that we'll be able to work quickly to get those arrangements sorted out.

Senator DAVEY: I will be watching closely. I have another block, but I'll share the call.

CHAIR: I hope it's a short one! Senator Roberts, you have one or two questions?

Senator ROBERTS: Yes, that's it. I just have three very short questions.

CHAIR: Go ahead.

Senator ROBERTS: The information you scanned from the field book for the freedom of information request—where was that available before the FOI request?

Dr Johnson: That would have been available as a paper record in the National Archives.

Senator ROBERTS: The scanned information from the field book and the FOI information—where is that available on the bureau's website today?

Dr Johnson: The scanned information from the bureau's field books is not on our website. That was a specific request undertaken for a particular proponent.

Senator ROBERTS: So it's at the National Archives.

Dr Johnson: But, to my comment earlier: if anyone from the public wants to access our field books they can put a request in through the National Archives. There's no issue in doing that.

Senator ROBERTS: Science thrives on debate—open debate based on objective data. A truly scientific body would be encouraging people like Marohasy, Abbott, Bill Johnson and others to actually challenge the Bureau of Meteorology. So why do you run from those challenges? You've had many, many scandals—

Dr Johnson: Senator, I just can't agree with the premise of your question. We don't run. We welcome engagement with all sectors of society in the work that we do. I think this has been an ongoing subject of public discourse for a long time. Our records are available to anyone who'd like to access them. We welcome all members of the public if they have an interest in our records. There's no impediment to them accessing them.

Senator ROBERTS: There's a list of scandals, if you like, or accused scandals, involving the BOM and global weather agencies. The question—

Dr Johnson: Sorry—Senator, I don't know what you're referring to.

Senator ROBERTS: I'm questioning your data.

Dr Johnson: What are you referring to by 'scandals'?

Senator ROBERTS: Questions about temperature fabrications lead to a call for a full inquiry. That inquiry was not held.

Dr Johnson: There have been assertions about these which have been tested in independent inquiries on at least two occasions since I've been Director of Meteorology.

Senator ROBERTS: One of them was just tea and bickies! It looked at the process, not the data.

Dr Johnson: Senator, these are independent—

CHAIR: Let's not speak over each other, please.

Dr Johnson: These are independent reviews commissioned by the Australian government into our practices.

Senator ROBERTS: One of them I know was a cursory look over the processes and did not go into the data.

Dr Johnson: I'm not sure what you're referring to—

Senator ROBERTS: The one under Tony Abbott as Prime Minister.

Dr Johnson: but all I can say is: in response to community interest in our practices, certainly since I've been Director of Meteorology, or aware of it, or within the vicinity, 2017 was the last one. It was commissioned by then minister Frydenberg. An esteemed panel of national and international leaders—

Senator ROBERTS: It looked at the process.

Dr Johnson: confirmed that our methods were fit for purpose and sound. These are world experts.

CHAIR: Senator Roberts, maybe, if you would like, you could catalogue the issues that you're detailing here and place that on notice for Dr Johnson to respond to.

Senator ROBERTS: I am happy to.

CHAIR: It could be that we have a difference of opinion here. Just so that we have the facts on the record, that would be really handy.

Senator ROBERTS: Thank you, I'll do that.

CHAIR: Thank you very much. Senator Payman?

Senator PAYMAN: For the sake of time, I will just ask one burning question. For clarification, I'm just seeking some information from you, Dr Johnson, about what Senator Davey was talking about—gauges and the funding in the budget. What sparked the need for the upgrade in the infrastructure? How long were the existing gauges in place?

Dr Johnson: It depends. The national warning network has been in place for decades. The impetus really came—I think I've partially addressed this in my response to Senator Davey—after our identification that there was a risk here that we needed to mitigate. In other words, we're responsible for the issuing of flood forecasts and warnings, but the data that we were critically dependent on had risks associated with their transmission to the Bureau. The community has a legitimate expectation that we're utilising the best data we can to issue our flood forecasts and warnings, so we identified this risk and, in conversation with government, argued and supported that that risk needed to be mitigated, hence the government's very welcome announcement in the last budget.

Senator PAYMAN: Great. Thank you.

CHAIR: Senator Davey?

Senator DAVEY: Dr Johnson, we know Western Australia is cyclone-prone and bushfire-prone. It has a very good bushfire warning system that is colour coded and easy for people to understand. It has a very tried and tested cyclone warning system thanks to the Bureau, and that information is also colour coded. But we also know that tropical lows can cause as much if not more widespread damage than cyclones due to the tendency over there for tropical lows to dump massive rainfalls. I've recently been over there and heard serious concerns about the flood warning system in the area and the lack of association between the tropical low and potential flood warnings. What processes does the Bureau have in place to determine the severity and likelihood of floods in the Kimberley, Fitzroy Crossing and Kununurra areas? How do you then disseminate the information?

Dr Johnson: Again, that is a very rich question. I presume you're referring to the events around Tropical Cyclone Ellie and the subsequent low pressure.

Senator DAVEY: Yes.

Dr Johnson: Like in all jurisdictions, the Bureau works really closely with the relevant emergency management agencies in Western Australia. That colour coding system that you referred to is not a Bureau product. That's something that the relevant department—in this case, DFES, the Department of Fire and Emergency Services, generates—

Senator DAVEY: Just for the record, they don't do colours for flood warnings, which is a problem in itself.

Dr Johnson: For cyclones, fires and so on, they do. We obviously work very closely with our colleagues in DFES to provide them with forward guidance about the weather. The system that you referred to, TC Ellie, and its subsequent development into a low-pressure system, formed up well before Christmas, on 21 or 22 December, I think, and its effects went on for many weeks, as you know. We provided warning of that many, many days in advance. We issued flood watches and flood warnings many, many days in advance, not just in the Kimberley but through all the relevant parts of the Territory as well. We sent severe weather warnings out from 22 December to 8 January and flood warnings out until at least 10 January. I've been advised that we undertook over 85 briefings with the emergency management agencies in Western Australia over that period, and that would have translated into extensive communication by traditional and social media through those communities, particularly through ABC Radio. We also had staff based at DFES's emergency management headquarters in Perth as well as at their regional operations centre in Broome.

It was a challenging event, particularly in the West Kimberley—if you think about the Fitzroy catchment. It's certainly the biggest event we've recorded there, and talking to First Nations elders in that region it's the biggest in their memory, in their traditions, in their stories. Also, in a catchment the size of the Fitzroy, which, if it's not the largest it's one of the largest catchments in Australia just by area and volume of water discharged, there are four gauges there that are owned currently by the Western Australian government and they were all taken out by the event.

Senator DAVEY: But only four gauges?

Dr Johnson: But only four gauges in that catchment, yes.

Senator DAVEY: I've just recently been up there. It's a massive area.

Dr Johnson: Yes, it's huge.

Senator DAVEY: One of the concerns that came to me from a landholder, who was monitoring your site—as you say, your information is public—and noticed that the Margaret River was getting massive inflows and I think the Dimond Gorge was getting massive inflows and they were, in their mind, going, 'These are going to congregate.' So they were ringing DFES, which is the Western Australian emergency services, saying, 'We're not hearing the warnings about the confluence these two massive flows are going to reach.' The people on the ground up there were frustrated. They didn't feel that they were getting listened to, and their sense—and it may have been a perception—was that DFES and the people they were talking to were saying, 'Well, that's not what we are getting from the bureau.' Have you got a response to that?

Dr Johnson: Yes, I would be happy to talk to you privately about it. We welcome that feedback always, but it's very difficult to know where exactly the folks who were giving you that feedback where in the catchment. So, I find it difficult—

Senator DAVEY: They can only be monitoring at four gauging stations, if that's all that's there.

Dr Johnson: We do have one at Dimond Gorge, and I'm pretty sure we've got one on the Margaret as well. So, again, without knowing the specifics, it's a bit hard to respond directly to your question. All I know is that it's a huge catchment and there isn't a very large footprint of gauging stations on it, but it's a very low population there, a big river—

Senator DAVEY: A low but vulnerable population.

Dr Johnson: Some of those places are vulnerable, and others are less so. We would have been issuing warnings, particularly at Fitzroy Crossing, with the best information that we had. But, as you know, even the gauge there at Fitzroy Crossing near the bridge got washed away as well as the bridge. So, it'll take some time for those services to be restored. In fact, we've reached an agreement with the Western Australian government around our services until such time as that infrastructure can be restored, but it was a very significant event.

Senator DAVEY: Are you conducting a lessons learnt review of what went on and then looking at ways we can improve the monitoring and the messaging? Are you including the potential to install more gauges in this new flood warning system process, because it's huge?

Dr Johnson: Certainly that's in scope. That's something we'll need to talk to the Western Australian government about, as to what we want to do in the Fitzroy vis-a-vis other risks that exist in WA systems. We welcome feedback. That's the first time I've had that feedback. I've had a lot of positive feedback from the community at Fitzroy Crossing itself, but obviously I haven't been on the ground out into some of the other places upstream, so we welcome feedback from those landowners and pastoralists, whoever they might be, if the services didn't meet their expectations. I'm happy to take that feedback on board.

Senator DAVEY: I am happy to provide you stuff on notice. You just said that you have been to other areas, not necessarily Fitzroy Crossing, but you have been on the ground over there?

Dr Johnson: No. Not in the Fitzroy catchment, I haven't. But our staff in Perth have. As I said, we had a number of resources physically based in Broome which is close enough and safe enough during events like that to give on-the-ground intelligence to our colleagues from DFES.

Senator DAVEY: Dr Johnson, you haven't been to Fitzroy since their floods. There've been concerns about other flood warnings in other areas like Lismore. Have you yourself actually visited any of these flood impacted areas?

Dr Johnson: Yes, absolutely.

Senator DAVEY: Have you been to Lismore?

Dr Johnson: Yes, I have. Not after this recent event, but after the previous flood I visited twice, I believe, and met with Lismore citizens, met with the local member, met with local folks around what's going on in the catchment. After the last event, our senior staff responsible for flood forecasts and warnings have visited the catchment on a number of occasions to work with local—

Senator DAVEY: So you've had senior staff up there?

Dr Johnson: Absolutely, and I personally visited there though not after this most recent event. I don't want to sound like I'm making excuses but just the physical extent of the flooding in that last summer, I just can't get to every catchment.

Senator DAVEY: Can you provide on notice which senior staff have been to Lismore, to the Fitzroy catchment and also Eugowra—the significant flood events—in the last 18 months so that we can ensure that the bureau are out and about.

Dr Johnson: We're listening with big ears. We're trying very hard to improve our services every day. To your question earlier, we're continually reviewing our performance. It's something we do across all the lines of our business. But again, it's a big country and—

Senator DAVEY: I haven't even got to the Murray River yet.

Dr Johnson: We're trying our best and it's very complex over huge areas and the summers that we've seen—the three wet summers—are unprecedented. Despite some of the feedback we have, I would like to place on the record that I thought our people did a remarkable job under sustained pressure over huge areas for long periods of time. Are we perfect? No. Are we getting better every day? Yes. Will we continue to improve? Yes.

Senator DAVEY: Thank you for embedding your people into state emergency ops centres. I appreciate that. In the new flood warning system, as I've asked previously and as you've said again tonight, more than 100 organisations own all the river gauges. Last time you said that, despite not necessarily owning them, you monitor and do the flood warnings in the Murray-Darling Basin, everywhere except South Australia. Are you going to—

Dr Johnson: Just to be clear, what I said last time and what I reaffirmed is that if you look at the basin, we do everything upstream of Wentworth. Between Wentworth and the South Australia border is done by the Murray-Darling Basin Authority. Then, today, as we stand downstream of the South Australian border is done by the South Australian government. We've been working closely with the South Australian government to assume responsibility. It's with their agreement.

Senator DAVEY: And it will come into this—

Dr Johnson: In July this year we will assume responsibility for flood warnings from South Australian border down, and we're in ongoing discussions with the MDBA about that section between Wentworth and the South Australian border.

Senator DAVEY: Very exciting.

Proceedings suspended from 21:28 to 21:40

Great Barrier Reef Marine Park Authority

CHAIR: I now call officers from the Great Barrier Reef Marine Park Authority. Mr Thomas, would you like to make an opening statement?

Mr Thomas: I won't, thank you.

Senator DUNIAM: I don't have a great deal here, but I know that the Australian Greens have some questions. In terms of publications and alerts around new data studies and information on the reef, what's the usual practice for interaction with other agencies when it comes to the publication of that information and disseminating it?

Mr Thomas: The Great Barrier Reef Marine Park Authority synthesises a vast amount of information across the Great Barrier Reef in partnership with a number of other organisations all the time.

Senator DUNIAM: Yes, constantly I expect. Is AIMS, the Australian Institute of Marine Science, one of them?

Mr Thomas: AIMS is one of them, along with the CSIRO, members of certain universities and our own research programs. We synthesise that information, and we report to the public on the health of the reef. We do that through a number of different publications and channels.

Senator DUNIAM: Is everything that you work with other agencies on and collaborate on published as a matter of course, or is there a selection process?

Mr Thomas: We have some key documents that we publish, including the Great Barrier Reef Outlook Report, our five-yearly seminal publication about the health of the reef. The next one is due out mid next year. That is probably our most notable publication. We also publish an annual state-of-the-reef snapshot, which we have done for the last four years in approximately March or April. That's published in consultation—jointly developed even—with the CSIRO and AIMS.

Senator DUNIAM: In terms of the Great Barrier Reef summer snapshot, is that the one that you typically disseminate to alert people to its presence or existence?

Mr Thomas: We do.

Senator DUNIAM: Was there a media release relating to that this year or any activity on that this year?

Mr Thomas: Not this year. There is not always a media release around that particular snapshot document. It has been released four times, and there has been one media release about it in the past.

Senator DUNIAM: What does the authority weigh up when deciding whether or not to bring to the attention of the broader community a particular piece of research?

Mr Thomas: The snapshot is really the summary of information on the reef health for the summer just past, and we report on the state of the reef through a range of different mechanisms. We have YouTube videos, and we disseminate information through our local and marine advisory committees and a number of other channels. That snapshot document really puts a ribbon around, if you like, everything that we've seen on the Great Barrier Reef over summer. We published the snapshot that was just released recently through our social media channels, of which we have several. It is also available on our website and was disseminated through special newsletters.

Senator DUNIAM: Do you have a subscription service or something like that for those who are interested in all matters reef?

Mr Thomas: Yes, we very humbly would say we have got quite a good readership of our newsletters, and it certainly went out through all of those channels.

Senator DUNIAM: What is your readership? What is your distribution network—you could maybe take that on notice.

Mr Thomas: I think we have a subscription of around 1,700 for one of our newsletters.

Senator DUNIAM: I'll have to sign up. I have to confess I'm not on your list.

Mr Thomas: We'd love to have you.

Senator DUNIAM: You've just bumped it up tonight, so someone in Tasmania will be reading it as of next week. Thank you for that—if there's any further information, please do take it on notice.

Senator McAllister: The point you may have skipped over—and I'm not sure whether you took this information in—is that this has been accompanied by a ministerial media release on just one occasion.

Senator DUNIAM: No, that was quite clear. Did anyone else miss that?

Senator McAllister: I was just checking that you'd caught it.

Senator DUNIAM: I certainly picked that up. I'm grateful to you for underscoring that. Thank you for bringing that to my attention again. Mr Thomas was very clear the first time round. I'm simply genuinely seeking information. Turning to the Special Envoy for the Great Barrier Reef—given we're in a playful mood—the answer I've received to a question on notice from the Heritage, Reef and Ocean division—totally unrelated to you, in outcome 2—in relation to the Special Envoy's large workload mentions that the Special Envoy engages regularly with AIMS and GBRMPA on the programs they run, including announcing government funding for crown-of-thorns starfish control. Can you run me through your interactions with the Special Envoy?

Mr Thomas: We've had numerous engagements with Senator Green in her role as Special Envoy for the Great Barrier Reef. On her coming into the role, we provided briefing to her about the extent of our program and our role on the reef. We've supported her in various engagements with our programs, including Reef Guardians, crown-of-thorns starfish, and in her engagements out on the water.

Senator DUNIAM: What sort of engagements are out on the water?

Mr Quincey: We had her come along on a couple of ministerial visits to the reef, firstly when Minister Plibersek visited the reef. She came along again recently on a crown-of-thorns starfish control vessel inspection at Green Island. I can think of at least two occasions.

Senator DUNIAM: What was the Reef Guardians engagement?

Mr Thomas: That was some time in the last two months, I believe. People from our organisation supported Senator Green in engaging with a couple of Reef Guardian schools in her local community around Cairns.

Senator DUNIAM: In her community in Cairns?

Mr Thomas: She's the senator for Queensland, but based in Cairns.

Senator DUNIAM: In relation to the crown-of-thorns starfish control program, what was the engagement there?

Mr Quincey: The Senator spoke to the media in respect of one of the crown-of-thorns starfish control program vessels in Cairns. There was a joint media release on the continuation of the program.

Senator DUNIAM: Joint with whom?

Mr Quincey: With the operators and the Great Barrier Reef Marine Park.

Senator DUNIAM: So there was the briefing, the Reef Guardians, the crown-of-thorns, plus two ministerial visits. Are there regular meetings?

Mr Thomas: There are meetings as required. We do have regular contact with the Senator. I'd have to come back to you on notice about how often, but the Senator certainly has access to some of the briefing we provide through ministers' offices as well.

Senator DUNIAM: Do you prepare briefings to the Special Envoy specifically?

Mr Thomas: I'm not aware that we've provided any directly in writing in a formal sense. Our primary responsibility is to report to the minister for the environment. The minister's office then supports the Senator routinely in executing her other duties.

Senator DUNIAM: For absolute clarity, could you take on notice whether any written briefing or support is provided, as well as any support for other meetings beyond these engagements you mentioned before. Other tasks mentioned in the answer to this question on notice are meetings with stakeholders, including tourism industry workers, farmers in reef catchments, reef traditional owners and others doing reef protection work. I just wonder if there's been any work. You can take it on notice. I don't need an answer now. That would be helpful. I think that will do me, Chair.

Mr Thomas: Just to follow on from the senator's point there: on 13 March the special envoy visited Holloways Beach Environmental Education Centre in Cairns with high school students, as part of the Reef Guardian Schools program, during their 20th anniversary celebrations. On 15 March the special envoy met with members of the Cairns Local Marine Advisory Committee, a local voluntary group who provide advice on reef management. On 20 April 2023 the minister, the special envoy and the United States Ambassador, Caroline Kennedy, also went out on the reef supported by us.

Senator DUNIAM: Are they encapsulated in the events or are they in addition to the ones you mentioned before?

Mr Thomas: Two were additional, and the first one, Holloways Beach, I referred to earlier in a different way.

Senator McAllister: Senator Duniam, you are of course entitled to ask any questions that you wish, but perhaps it's just worth providing some context. This role, of course, was established under the previous government, and the member for Leichhardt, Mr Entsch, was in that role between 2019 and 2022. In appointing Senator Green to this role, the Prime Minister has asked that she use her local experience, her contacts, to engage communities on the protection and restoration of the Great Barrier Reef in the face of the many threats that I think everyone in this room understands are faced by the reef. So she works very closely with the minister for the environment and reports to her.

Senator DUNIAM: I appreciate that, and I also appreciate being entitled to ask questions. I'm just interested in what she's doing. That's all I'm asking about.

Senator McAllister: So you're interested in what she's doing.

Senator DUNIAM: Correct, and I've been given some fulsome answers by the authority, and I'm sure I'll be provided more on notice. So I will not detain us any longer.

CHAIR: Thank you. I might suggest that you follow her Facebook. A lot of her activities are—

Senator DUNIAM: I do not use social media.

CHAIR: Very impressive engagement with the community!

Senator DUNIAM: Can you see me on Facebook? I'm not a Facebook kind of guy.

CHAIR: Okay. No worries. We'll move on to Senator Whish-Wilson.

Senator WHISH-WILSON: Just as a matter of interest, Senator McAllister, can you remind us what resources are allocated to the envoy? Do they have full-time staff equivalents assigned to them by the Prime Minister's office?

Senator McAllister: I would have to take that on notice.

Senator WHISH-WILSON: If you could. I vaguely remember that, when Warren Entsch MP was given the role, there were some resources assigned to him as envoy. I'd be interested. Are there any moves afoot to appoint an envoy for the Great Southern Reef, and all Australia's temperate reefs, which are equally significant to the Australian communities and to the economy as the Great Barrier Reef is to the north of Australia?

Senator McAllister: I believe if the government were intending to do that we would have done it, but it's a very interesting suggestion.

Senator WHISH-WILSON: We did propose it as a policy before the last election. Just to even things up, I think it'd be nice to see an envoy appointed to lobby for the communities along the Great Southern Reef as well as in northern Australia.

Senator McAllister: I will observe, in response to that, that I think you have seen Minister Plibersek take a great interest in ocean conservation. Even in the last couple of days, we've canvassed—

Senator WHISH-WILSON: There's an idea I'll follow up with you again then. Thank you. In relation to crown-of-thorns, I asked a few months ago, at the last estimates, for an update on recent outbreaks of crown-of-thorns. Could you let us know how that's going?

Mr Quincey: The situation hasn't changed since our last appearing here. We still have seven control vessels on the water controlling outbreaks in the central and southern and some in the northern Great Barrier Reef, across a number of reefs. It just depends what level of outbreak is on a reef as to whether that is a quick revisit or a detailed program. We're still looking at controlling 500 priority reefs over the cycle of the outbreak, and that's an ongoing program.

Senator WHISH-WILSON: With the ongoing program I obviously understand there is money allocated and volunteering that's going into removing as many as possible. Who does the monitoring of those outbreaks?

Mr Quincey: The control program is required to do an amount of surveillance and reconnaissance monitoring beforehand, and there's information on control and post reporting that's reviewed by the reef authority. It's then backed up and validated by a range of other monitoring, including the AIMS long-term monitoring program. That's not specifically at each reef where crown-of-thorns starfish are controlled, but, to be able to understand the comparisons, there's an overlap in the reefs that it looks at.

Senator WHISH-WILSON: Just to confirm, are the most recent outbreaks associated with the growth in acropora and the plate and stag corals that have become dominant on the reef following mass coral bleachings?

Mr Quincey: I'll pass to Dr Beeden for the reasons for the outbreaks.

Dr Beeden: Those types of corals, the fast-growing corals, are the preferred food source of crown-of-thorns starfish, for a variety of reasons. They happen to be ones that are pretty easy for them to tackle and eat, so they will preferentially eat those. They will, when they're in outbreak proportions, eat pretty much all types of corals that are there, even the slower-growing ones as well, which is one of the reasons why we look to tackle outbreaks as a whole, particularly on reefs that are important for ecological and economic reasons.

Senator WHISH-WILSON: Will this kind of information be provided to the World Heritage Committee when they look at the World Heritage in Danger values of the Great Barrier Reef?

Mr Thomas: Whether or not they're looking is probably up to them, but we would hold up the crown-of-thorns program as one of the shining lights of our broad program to keep the reef resilient for the future because of the sheer impact it does have at a local scale in protecting coral.

Senator WHISH-WILSON: So you're protecting areas for the tourism industry, but that's only a very small part of the reef. I'll ask a follow-up question on that, and I know it's a separate line of questioning. Could you give us an update on your participation in the upcoming—I think it's in Dubai or Abu Dhabi—next meeting of UNESCO that's going to look at their World Heritage Danger listings? What has your involvement been in that over the last three months since the last estimates?

Mr Thomas: Can I just mention, on the crown-of-thorns, that it's not just tourism reefs. That program is executed according to a very sophisticated pest management strategy. Dr Beeden has been very involved in that over the last couple of years, and it does go that ecological function.

Senator WHISH-WILSON: Are you able to provide that to me on notice?

Mr Thomas: We'd be very happy to provide more information on that. In relation to Australia's approach to the next World Heritage Committee meeting, the department does hold most of the liaison functions through the UNESCO system. We do provide advice—technical, scientific—about the Great Barrier Reef, and if we can be supportive through that process we will be. But at the moment I'm not aware of any—

Senator WHISH-WILSON: Will you be sending anyone to Abu Dhabi to assist?

Mr Thomas: We haven't made any decisions around that yet.

Senator WHISH-WILSON: When will you make that decision?

Mr Thomas: I'm not sure, but we will discuss with our colleagues in the department about what the total Australian delegation might look like, and, if we can be helpful in that context, we will be.

Senator WHISH-WILSON: You haven't got experience in that area yourself, I presume?

Mr Thomas: I have, over many years, been involved one way or another with the world heritage question around the Great Barrier Reef.

Senator WHISH-WILSON: I'll look forward with interest to see who's going, if anyone at all. I had an order of production of documents in which I looked at the response to the monitoring mission. I've seen the most recent documents, and there were broad risks outlined about the impacts of climate change, but there didn't seem to be any updates on some of the threats to the world heritage values, like crown-of-thorns outbreaks—the most recent ones and the most concerning ones.

Mr Thomas: You're referring to information—

Senator WHISH-WILSON: It was February and March.

Mr Thomas: provided by us?

Senator WHISH-WILSON: It was provided by the department. I'm not sure if they work with you, but I think you had input into the response to the monitoring mission.

Mr Thomas: We may, but I'm sorry; I don't have all that detail in front of me. UNESCO, the World Heritage Centre and all its advisory bodies are under no illusion about what the threats are and the proportionality of those threats to the Great Barrier Reef. We've certainly, through the department, provided a lot of what I would consider to be very helpful information about those challenges and what we're doing to mitigate those threats into the future.

Senator WHISH-WILSON: I note too, Minister, that there was prominence given to the fact that you'd knocked back a coalmine in that report, but there was no mention of the recent ones that have been approved either—just for the sake of balance and fairness.

Senator McAllister: Senator Whish-Wilson, we have canvassed this reasonably extensively over the last 16 hours—

Senator WHISH-WILSON: And will continue to.

Senator McAllister: but, as I made clear to your colleague earlier today, the government has a clear view about climate change mitigation and how we tackle that, and it is different to the view taken by the Australian Greens. Our unapologetic focus is on the emissions produced in the Australian domestic economy. That's our approach. Coalmines that meet the eligibility threshold are, of course, captured in the safeguard mechanism, which requires mandatory reductions in emissions over time. We have a different approach, and I think you understand that.

Senator WHISH-WILSON: Perhaps we don't. With all due respect, the fact that you mentioned that you knocked back a coalmine to the UNESCO committee suggests maybe we share a similar view. You obviously felt that needed to be highlighted in the report. I'm just saying, for balance sake, there was no highlighting about new coalmines that had been approved.

Senator McAllister: Senator Whish-Wilson, the minister has made it very clear that she executes her legal obligations in every case in the matters that come before her.

Senator WHISH-WILSON: I won't persist with that. Another issue that I know, Mr Thomas, you do have a lot of personal experience in is in relation to shark mitigation, especially nonlethal measures for shark mitigation on the Great Barrier Reef. Perhaps thanks partly to you, the federal government did provide some financial assistance to the Queensland government. It was \$5 million if I remember rightly. Could you give us an update on how much of that has been spent and whether you have some kind of audit process or ongoing communication with the Queensland government on the effectiveness of that expenditure?

Mr Thomas: To try and be helpful we'll answer as much of that question as we can. The \$5 million itself we might have to defer—

Mr Quincey: The \$5 million was actually through the department—

Mr Thomas: That's right.

Mr Quincey: and is administered through the department.

Mr Thomas: So they might have to give you a bit more detail about exactly where that was spent, over what time et cetera. From our perspective, our main interest in the shark control program run by the Queensland government is in making sure they're complaint with, first, the AAT and then the Federal Court's ruling that it needs to move progressively towards a nonlethal program. We keep track of how they're going in that regard, and at the moment we're satisfied that they are taking steps to progressively trial new technologies. Mr Quincey, do you have anything?

Mr Quincey: I'd add that it funded elements such as the catch alert drumlines that we spoke about last time. The trial is ongoing, and the scientific committee's reviewing the first period of analysis. That's a Queensland government scientific working group, for the shark control program. That included some of the shark-smart drone trials and explored options for whether physical barriers were appropriate at any locations. But that hasn't been a strategy that's been pursued.

Senator WHISH-WILSON: They haven't put any expenditure into that particular element?

Mr Quincey: No.

Senator WHISH-WILSON: The reason I'm asking the question—good on you, by the way; I'm really glad you did that—is I sense it's coming to an end in terms of a lot of the funds have been expended, perhaps not all of them. What comes next? Hopefully, it was an incentive for the Queensland government to go down a different road, but where do we go from here?

Mr Quincey: The last scientific working group met recently, and they have yet to put out their communique, which they do on the DAF website. They looked at expansion of the trials and whether that is showing promise, so I think they will consider where they do go with that.

Senator WHISH-WILSON: Is there a reason they haven't put it out yet?

Mr Quincey: It's only timing between the meeting and getting the communique up. It's only weeks ago that it occurred.

Senator WHISH-WILSON: Could you remind me which website? You said DAFF?

Mr Quincey: No, the Queensland Department of Agriculture and Fisheries. They have a dedicated section on reporting catch and release from the shark control program.

Mr Thomas: But, as the regulator, our expectation is that they do continually move towards nonlethal programs through time, and, again, we're satisfied they're doing that. We have a very healthy relationship with Queensland Fisheries and try to support them where we can to take more-sustainable actions.

Senator WHISH-WILSON: Any chance you could ask them to do that in other parts of Queensland, apart from the Great Barrier Reef, seeing as you've had success with that?

Mr Thomas: I'm happy to ask for you, Senator, but I'm not sure—

Senator WHISH-WILSON: I might be pushing my luck. Alright; that's fine. Could you get me any data on what hasn't been expended. I'll wait and see if they post that, but I'd be very interested to see where it goes from there. Thank you.

CHAIR: Senator Duniam, did you have a couple of questions on notice?

Senator DUNIAM: I do actually, thank you. I want to go back very briefly to the question on notice I was referring to before. Minister, I'll put this to you. The answer to question on notice SQ23-000547 refers to a letter of expectations from the Prime Minister to the special envoy. Could I ask you to table that for me please, on notice.

Mr Thomas: Yes.

Senator DUNIAM: Thank you. That's it for me.

CHAIR: Thank you so much for your time. Sorry that we had to make it late. We do appreciate your coming to answer questions.

Australian Institute of Marine Science

[22:06]

CHAIR: Welcome, Dr Hardisty. Would you care to make an opening statement?

Dr Hardisty: Actually, yes I would, if I might. It's under 90 seconds.

CHAIR: Fantastic! I love it.

Dr Hardisty: Thanks for the opportunity to make an opening statement. I would like to acknowledge the traditional owners of the AIMS sites in all the places that we work across the north.

It's almost six years now since I took over as AIMS CEO. During that time it's been my great honour to help AIMS develop into one of the leading marine science institutions in the world. During that time we've doubled our externally sourced revenue, we've started to double the size of our National Sea Simulator, the world's largest and most sophisticated research aquarium complex, and we've forged new international science collaborations in the Pacific. We've led the way in engaging with traditional owners by becoming the first and, as far as I know, the only Commonwealth agency that requires formal provision of free, prior and informed consent before any project

activities can go ahead. We're also leading the world's research effort to help coral reefs adapt to and recover from the effects of climate change, and we continue to faithfully monitor the Great Barrier Reef, as we have done now for almost four decades.

This week we will publish, with our partner Deloitte, our ninth edition of our *AIMS index of marine industry*, which shows that our blue economy in Australia contributed 5.2 per cent of GDP in 2020-21, with a total output of \$118 billion, and was responsible for 462,000 full-time jobs. Safeguarding this source of wealth for all Australians is central to our role as the national marine science agency.

We'll soon be announcing, with our partners, a major new research program on the potential for macroalgae—seaweed—to sequester large volumes of carbon in the deep oceans, where it may remain securely stored for centuries. This will be one of the largest research projects of its kind in Australia. While doing all of these things, I'm really proud to say, we've managed to significantly improve our safety performance.

The new funding announced by the government in the budget was a fantastic vote of confidence in who we are, what we do and how we do it. It will allow AIMS to continue to deliver the world-leading science that we need to face the challenges of the future as climate change, biodiversity loss and pollution continue to degrade the world's oceans and the life they contain.

CHAIR: Thanks very much. We'll go to Senator Payman.

Senator PAYMAN: I just wanted to get a clarification. You mentioned the funding in this year's budget. Is the funding going to be for science or infrastructure?

Dr Hardisty: The funding that we received is for both. We've received some infrastructure funding to upgrade our facilities at our Cape Cleveland headquarters, and we've also received significant operational funding that pays for people and scientists to do the work. You need both, so, thankfully, we received both.

Senator PAYMAN: Great. There was a *Courier-Mail* article on 13 April this year which asserted that a third of AIMS's workforce was at risk because of the institute's precarious funding situation. Is that correct?

Dr Hardisty: That was one of the scenarios that was on the cards, yes.

Senator PAYMAN: What can your organisation do now that ongoing funding has been secured?

Dr Hardisty: What this funding does is essentially safeguard the financial sustainability and the future of AIMS well into the next decade—well into the 2030s. It's so significant for us because having to come back for funding in small chunks for small periods of time again and again is not only draining on management time, effort and focus, but research is inherently such a long-term business. We're working on stuff now that may only ever see the light of day in a decade. That longer term certainty around staffing levels and being able to hire the best and brightest in the world, which we aspire to, really requires a sustainable financial future.

Senator PAYMAN: This workforce has remained in Townsville. Can you describe the working conditions they've had?

Dr Hardisty: Yes. There were some stories about mould and stuff like that. But, as I said in some of the follow-up media, we don't let anybody work in unsafe conditions. We have the highest and most rigorous safety standards of any organisation of its type in the world, I believe. There were some areas of our site that are old and mouldy. We just closed them off, and nobody can go in there and nobody can use them. So part of the funding will be to refurbish those places, and now we can use them—because we need the space.

Senator PAYMAN: Are there any other organisations who do your level of work in terms of the work you do as an institution?

Dr Hardisty: Globally I think there are analogous organisations, like Woods Hole and Plymouth Marine Lab, who we collaborate with globally. But I think, in Australia, the science we provide is unique.

Senator PAYMAN: Okay. Thank you.

CHAIR: Can I ask about your seaweed project. Could you give us a little bit of a sketch of what that looks like?

Dr Hardisty: Yes. The reason we're really excited about it, as is our external partner—

Senator WHISH-WILSON: Sorry, who is your external partner?

Dr Hardisty: We're just organising that. I'll let you know as soon as we can.

Senator WHISH-WILSON: It's not a salmon company, is it?

Dr Hardisty: A what company?

Senator WHISH-WILSON: Salmon.

CHAIR: Mr Hardisty's not in a position to be able to answer your question, Senator Whish-Wilson.

Dr Hardisty: Salmon company! No, it isn't a salmon company. I can tell you definitely it isn't a salmon company. But we'll be announcing the partnership formally pretty soon. We've just inked the deal and now we're going through our comms strategy and so on.

To come to the answer to your question, biosequestration of emissions from carbon is acknowledged around the world as one of the most important wedges that we can use to drive down global emissions. It won't be one thing. It's going to be a combination of things that we can do across the world that are going to drive down emissions to the level we need them to get to. Sequestering carbon in the natural biosphere is one of those key areas. But any sort of tree planting, even mangroves, or terrestrial biosequestration is at real risk because the climate's changing. If you're trying to grow trees and the rainfall pattern's changing and it doesn't rain anymore, then those trees, in 20 or 30 years, might all start to die because there's no water. Or they might burn up because forest fires are becoming more frequent and so on. So that carbon storage is that risk, if you see what I mean, in a decadal sense. There is a very significantly real mechanism that this research will seek to unlock for the first time in the world, that looks at the conveyor belt, essentially, from macroalgae, sargassum and other types of seaweed. Remember, I'm an engineer, not a scientist, so I'm paraphrasing: when they die in their life cycle, we think that a lot of it sinks to the deeper bits of the ocean—we're talking thousands of metres, really cold, very high pressures and very low temperatures where, essentially, it will stay locked away for centuries, if not millennia. So that question of carbon security—this has a very definitive and powerful carbon sequestration potential. If we can prove that's happening, it will open up not only the possibility of safeguarding natural systems that are already working in that conveyor but potentially systems that would enhance and grow that stuff and send it out there and sink it down. If we can do that, it could be a game changer for reducing emissions quickly. This is research. It's going to take a lot of effort to find out whether that's the case—it's a five-year program initially—but it sure is exciting, thanks for asking.

CHAIR: It'll be great to follow its progress.

Senator WHISH-WILSON: I might ask some follow-up questions on that. Are you talking about macrocystis, primarily?

Dr Hardisty: Sargassum, primarily. We're looking at certain species and we're going to start the trials in Western Australia.

Senator CADELL: How high in Western Australia?

Senator WHISH-WILSON: It would have to be cold and deep. Would it be the Bremer basin?

Dr Hardisty: No, we're looking at potentially off Ningaloo; there's a deep ocean abyss right off the edge of Ningaloo. We've done a lot of work there. We've got a good existing database to build off. That's what you want to do; you want to work where you've got good baseline information. If this can be proven as a legitimate life cycle for carbon it could apply anywhere. It's really exciting and really prospective. We're looking initially at particular species in a particular location, and we're also going to be doing more general work on sediments and so on in some of the other areas of the north-west in WA, offshore. The idea is that it should be transferable to many locations.

Senator WHISH-WILSON: As a Tasmanian I've been following this issue very closely for many years, looking at developments for the Blue Economy CRC and other attempts to sequester carbon and regrow seaweed. I'm just interested in why you chose WA over other—

Dr Hardisty: We've got a really good existing understanding of that. We've done a bunch of preliminary work already, so let's just build on that rather than starting fresh somewhere else. It's much more cost-effective in terms of both our investment and our partner's investment. It also allows us to move forward more quickly because there is a time urgency around this not only from our point of view but from our partner's point of view. We want to move these things along as quickly as we can. The other thing is: you probably know that AIMS is primarily a tropical agency; that's our expertise. We're not a cold-water agency. We work essentially in the north and in the tropics. That's our expertise and we're going to play to our strengths.

Senator WHISH-WILSON: It's not the Minderoo Foundation, is it?

Dr Hardisty: No.

Senator WHISH-WILSON: Please tell me it's not a big oil and gas company!

CHAIR: Senator Whish-Wilson, that is enough!

Senator WHISH-WILSON: I missed the name of the seaweed you mentioned.

Dr Hardisty: Sargassum.

Senator WHISH-WILSON: Is that endemic to that area in Western Australia?

Dr Hardisty: No, I don't think it's endemic. It's pretty widespread across the whole country.

Senator WHISH-WILSON: Is the project going to be tied to blue economy carbon trading and carbon credits?

Dr Hardisty: One of the things that it could lead to, if it works, is the development of an ability for people to invest in that to offset their emissions. That's how all the biosequestration stuff works. You're not directly capturing your own emissions. You're saying, 'I'll capture them using this mechanism through another means.' That will be one of the possibilities, for sure.

Senator WHISH-WILSON: How much money is going towards this five-year project?

Dr Hardisty: This is going to be a total \$20 million investment which, in our world, is pretty big money.

Senator WHISH-WILSON: A cheeky question: you call yourself the Australian Institute of Marine Science; why don't you do more in cool temperate waters? It's a big country.

Dr Hardisty: It's a historical thing. It predates my tenure by a long, long way. My understanding is that the CSIRO has an oceans division. It's now a part of their environment business unit, I think. And there's just been an understanding that they have their headquarters in Hobart and they have scientists who are pretty good at cold water stuff, and we're up north and we have mostly scientists who are pretty good in tropical. We've just managed to have a nice, happy coexistence that way.

Senator WHISH-WILSON: I was very pleased to see the allocation you got in the budget. It was one of the highlights of the budget for me. The Greens have always been a proponent for public good funding for public good science. Will this take pressure off AIMS having to do joint ventures with companies like Woodside and INPEX and BHP?

Dr Hardisty: My CFO and I were talking about this just a few days ago in one of our all-staff emails. You're right, it's fantastic and we're over the moon for the reasons I mentioned before. We've been working on it for a long time.

Senator WHISH-WILSON: It could date back to the Great Barrier Reef Foundation funding? I remember you guys got duded really badly. I chaired the select inquiry into that so I remember that.

Dr Hardisty: Yes, I remember that. I'd just started when that was all kicking off. I guess the point I'm trying to make is that we've received basically a significant increase to our core appropriation funding, which we use to source and pay for science that we think needs to be done—we, not somebody else, not some of the other organisations that you've mentioned—that we think is important for the nation, based on our conversations with stakeholders and with the department and with the minister and so on.

Over the years, has that declined? We had to use more and more of that to seek external revenue to keep the level of activity in the science that we needed going. That was our essential dilemma, which this funding solved. We had reached record external revenue earnings in the last year, but now—because we've essentially almost doubled our appropriation—we're not going to double our sourced revenue. This is about sustainability. We're going to keep at that level, and this new money allows us to now have that buffer to invest in the science that we think is important for the nation, although everything we do is public good, by the way, even the stuff that we do where we're extracting funds out of other organisations, essentially, to fund public good science, that's what we do. One hundred per cent of our work is public good science. We're not going to double our external revenue. We're going to keep it where it is.

So, the short answer is yes, but I wanted to put some detail around it. We're going to be able to invest more in the things that we think are important for the nation.

Senator WHISH-WILSON: You probably expect me to ask this question. In terms of your project with Woodside off Ningaloo or off Scott Reef, they get a benefit from that too, right? They get to say they're working with an organisation of your reputation and character?

Dr Hardisty: Sure, they do. A lot of these organisations want to work with us because they know that we're the best, that we do not compromise, that we provide public good, that it's all peer reviewed, that it's all shared completely with the public and there's nowhere to hide. That gives it great credibility. Yes. The flipside for them is that they put their money in but they've got absolutely no say on what it turns out to be, right? It could turn out to be something that maybe they don't like, but that's too bad, and that's a part of the deal.

Senator WHISH-WILSON: From your experience, do they, themselves, understand the impacts that the burning of fossil fuels is having on the oceans? It seems like cognitive dissonance on one level to me.

Dr Hardisty: I'm not going to comment on what senior executives in these various firms believe or don't believe in.

Senator WHISH-WILSON: It was worth a try!

Dr Hardisty: But you can go on their websites and you can see what their commitments are, and many of them have net zero 2050 commitments.

Senator WHISH-WILSON: I won't comment on that. Good luck with the seaweed. I'll be watching that one very closely.

Dr Hardisty: Yes, I know we all will.

Senator WHISH-WILSON: It is going to be a race to see who can get this done first, I think.

Senator CADELL: A lot of mine is project-specific stuff. In understanding the jurisdiction, or the cut lunch stuff, you mentioned CSIRO. They've got their own ocean division. You guys have the Great Barrier Reef authority. Is there any overlap? Is there coordination between them to prevent duplication?

Dr Hardisty: There is a lot. We talk all the time. We have a really close relationship with CSIRO. For instance, we have quarterly joint leadership team meetings where we just get together and we talk about: What are you guys doing? What are we doing? Where's the overlap? Where's the collaboration? For instance, in the Reef Restoration and Adaptation Program, which is one of our signature programs, we're leading the world and AIMS is leading that, and CSIRO is a part of that. They're doing a lot of the work on social engagement and some of the decision-making work and helping us on some of the modelling. So they have their strengths and we have ours, and we always try to blend them together, so I would characterise the relationship as excellent.

Senator CADELL: Totally out of self-interest—I was out on Agincourt and Hastings reefs earlier this year, and there were some people diving who said they were doing research. They were off two different commercial boats and were two different groups on two different days. Do you have people who go out on boats and dive and collect data on a regular basis? I think they said they were doing something for you.

Dr Hardisty: For AIMS?

Senator CADELL: Yes.

Senator WHISH-WILSON: It might be a Reef Life Survey.

Dr Hardisty: On any given day, we have our two purpose-built research vessels.

Senator CADELL: But they're yours. These were commercial ones.

Dr Hardisty: Yes. Part of the issue in the budget and in the previous budget was we are presently designing a new vessel to replace one of them that is at the end of its life and that's something that we are still working with government on. But, we have so much activity and so much demand for what we do that our two vessels are—actually, we were, believe it or not, at the global research vessel operators conference in New Zealand. There is one! There is such a thing!

Senator CADELL: That's niche!

Dr Hardisty: Our two boats are among the top three most highly utilised of their type on the planet, so we have so much work that we actually have to routinely charter other vessels to do our work. How much chartering do we do? Do you know off the top of your head?

Mr Ahvick: It varies. On average, we might charter another \$300,000 to \$500,000 a year worth of charter vessels, depending on the demand that's out there, and demand is high right now.

Dr Hardisty: So it's almost equivalent to another vessel.

Senator CADELL: That goes to your asset base.

Dr Hardisty: I don't know the day and who it was. It could have been that they were—

Senator CADELL: It was a pretty good day actually. On your asset base, you own two boats and you charter some, but what real property do you have? You were using a leased property. Is that still the case? Or it is all government owned property? There was a question about fixed facilities.

Mr Ahvick: Our facilities in Townsville are under a deed of gift from the state government, so a donor arrangement. Our buildings are all owned on that land. For our facilities in Darwin, the buildings are owned as part of the Charles Darwin University and on the campus in Western Australia we are a part of the IOMRC on UWA.

Senator CADELL: So all the extra funding can go into operations?

Dr Hardisty: Yes. But, like I said earlier, there is funding going to upgrade our facilities in Townsville and so on.

Senator CADELL: Understood. Are the boats on the agenda somewhere?

Dr Hardisty: Oh, yes, that would be amazing.

Senator CADELL: Not yet?

Dr Hardisty: I've seen what I think is going to be the design for the new vessel to replace at the *Cape Ferguson*. It's going to be designed to be state-of-the-art, built in Australia and absolutely the leading-edge vessel of its kind on the planet.

Senator CADELL: Does that fit into the budget?

Dr Hardisty: We're designing it right now, so that's something that we're still working on.

Mr Ahyick: We've been funded for the design of the replacement of the RV *Cape Ferguson*. This last budget announcement funded a small vessel replacement of our RV *Apollo* so there is a vessel coming. That's a smaller, coastal vessel that covers the marine monitoring program.

Senator WHISH-WILSON: I have a quick follow-up question. This has just reminded me. I haven't had a chance to look at it for some time—probably for nine months now. AIMS is working on an in-situ seismic testing array and released its first information about pelagic fish, but there was a second trial on the impact on the pearl industry. Has that been released yet?

Dr Hardisty: Yes. You're talking about the North West Shoals to Shore program?

Senator WHISH-WILSON: Yes, with Woodside. I know the first one was released, but I haven't followed if the second one was. Could you take on notice when that's coming out?

Dr Hardisty: I can tell you that it's complete. The fish part found no effects, and the pearl oyster part found also no significant effects. But I'm happy to send you a copy of that full report.

Senator WHISH-WILSON: Did you do one on plankton, as well?

Dr Hardisty: No. We were trying to get one on plankton, but, in the end, we didn't get the funding. At that point, we didn't have any—

Senator WHISH-WILSON: You've got the funding now.

Dr Hardisty: Now we've got some funding, but now we've got so many things to do that we have to carefully triage which to do.

Senator WHISH-WILSON: I'm going to lobby for that.

Dr Hardisty: Okay.

CHAIR: Thank you. We'll look forward to hearing further updates on how you progress in your brave new world.

Dr Hardisty: Yes, ma'am.

CHAIR: Thank you so much; we do appreciate your time. Sorry for keeping you waiting.

[22:31]

CHAIR: We will welcome back the officers from the department in relation to outcome 3, program 3.1: Contribute to Australia's national Antarctic interests through science, environmental management and international engagement, including delivering Australia's scientific research and operations in Antarctica and the Southern Ocean.

Senator DUNIAM: Hello, everyone. May I start by congratulating Ms Campbell on your appointment.

Ms Campbell: Thank you.

Senator DUNIAM: I wasn't even aware of that until I saw you on the list.

Ms Campbell: It's day 12 for me.

Senator DUNIAM: Are you relocating to Tasmania?

Ms Campbell: Yes.

Senator DUNIAM: Excellent.

Senator CADELL: Commiserations!

Senator DUNIAM: I can recommend a few good suburbs for you, so we'll touch base afterwards. Thank you very much. We have some important matters to discuss. I might start with the question I've previously asked the former director, Mr Ellis, around Macquarie Point and the proposed Antarctic and Science Precinct, which has

received a fair degree of interest in other estimates committees this week. There's been a bit of movement with regard to a commitment for funding for a stadium and what some call an arts and entertainment precinct. I wonder, in terms of the AAD's involvement or, indeed, DCCEEW's involvement in the ASP proposal—are there any changes? Are there any updates from your point of view—Mr Sullivan, perhaps?

Mr Sullivan: I'm happy to run through that. You're right—it's an issue that has been traversed in a number of committees over the last couple of days. The update is really with respect to the \$240 million that the government has committed to support the Macquarie Point precinct. That is intended to cover not only the football stadium or the sports and arts cultural precinct; it's also conditional on the Tasmanian government providing affordable housing, doing transport corridor work and doing a revised master plan for the point, as well as upgrading wharf No. 6. That obviously means a revised planning process from the Tasmanian government that will form the basis of an intergovernmental agreement that will hopefully be concluded before the end of the year. Minister King has been quite public about those conditions with respect to the government's investment in Macquarie Point. That has implications for an Antarctic and Science Precinct, and whether it can be co-located with a wharf upgrade and social housing as well as transport corridors. This will, in part, depend on the master planning and, particularly, what is part of the sports, arts and cultural precinct. That will inevitably pick up some of the facilities that were originally planned for the science precinct.

One thing with the Antarctic division from our perspective is that the highest priority is the wharf, particularly with the *Nuyina* back in service, making sure that we've got those facilities not only for the *Nuyina* but also to continue to build on Hobart's central role as one of the gateways for activities in Antarctica. Hopefully, we can build on that. I know other countries are very interested in using Hobart as a gateway, and that is dependent in part on the wharf facilities. I don't think I've helped you with respect to the science precinct, but I wanted to step through that broader issue across Macquarie Point and the process that we need to go through that will involve multiple Tasmanian agencies, a couple of Commonwealth agencies and local government agencies like Hobart City Council, Macquarie Point Development Corporation, and TasPorts.

Senator DUNIAM: We like doing things simply down there. For what it's worth, from my point of view, I think that if whatever happens there under this refresh plan doesn't include an Antarctic and Science Precinct in the vein that has been contemplated previously then it's a nonstarter, a dud deal. I don't expect you or anyone else to comment on that, but I hope that it is inclusive of whatever has been previously contemplated. The wharf upgrade is obviously a matter for the infrastructure department or even the Tasmanian govt, but, broadly, is it your expectation that you would have input into this multiple-agency and multiple-layers-of-government refresh plan update process?

Mr Sullivan: Absolutely. I think Ms Campbell met with our Infrastructure colleagues yesterday.

Ms Campbell: I met with Finance and Infrastructure here in Canberra. We've had an initial meeting—

Senator DUNIAM: Which Finance colleagues?

Ms Campbell: The Department of Finance.

Senator DUNIAM: Which ones?

Ms Campbell: Property and projects.

Senator DUNIAM: Good, I'll come to them. Go on.

Ms Campbell: We're planning to meet with TasPorts and the Department of State Growth next week.

Senator DUNIAM: Who from a Commonwealth level is taking the lead on the Australian government's input into this?

Mr Sullivan: The intergovernmental agreement that will underpin the Commonwealth investment with Tasmania is being led by Infrastructure. We will continue to work very closely with them, as we have been over the course of the last six months.

Senator DUNIAM: What is Finance's role in this?

Ms Campbell: We're looking at all the resources of the Commonwealth and significant investment from the Commonwealth, which touches a range of interests. We know that the finance department has a range of expertise, and we are leveraging that to the extent that we can.

Senator DUNIAM: That's what they tell me: expertise to be leveraged. I will try them out at their estimates. In terms of the funding that was committed prior to the last election, post the cessation of pursuit of the paved runway in Antarctica there was a commitment made of, I think, around \$800 million—or thereabouts—over a period for a range of projects. Can I generally understand whether all elements of that commitment stand or if

there has been any deviation? I'm not suggesting any cuts or anything nefarious; it's legitimately a question of interest.

Mr Sullivan: That funding still stands. Obviously, we have had a really disrupted season. We did amazing things this season—don't get me wrong—particularly with some of the science outcomes, but it was difficult with the *Nuyina* not in service, and we had difficulties with initial use of Wilkins, just because of the amount of snow that we had. So we had a shortened season with a late start with respect to the use of the intercontinental aircraft. But we are now in the process of going through a three-year planning exercise to give greater certainty of what science outcomes and policy outcomes we're trying to achieve over the next three years. You'll recall, Senator, that in part we have a backlog of work because of COVID and shipping disruptions. So fingers crossed—I shouldn't say 'fingers crossed', because the *Nuyina* has had an extensive amount of science commissioning work done on the way back from Singapore to Hobart. The voyage to Macquarie at the moment is a multidisciplinary voyage. There's not only resupply and personnel supply to Macquarie happening, as well as getting more information around geotech specifications on Macquarie in terms of infrastructure; there is also ongoing science commissioning work. So basically we're now set up moving forward. We're trying to give more certainty to that science forecast over the next three years. That's a long way of saying that that money is in place, but I think there's always an appetite for how much we could spend.

Senator DUNIAM: Yes, I know. You want some more.

Mr Sullivan: So it's not a sense of cuts; it's more about making sure that we cut our cloth to fit that future budget.

Senator DUNIAM: Indeed, with changing needs and, as you say, delays and all of those other challenges. Thank you for that. I might place some questions on notice about that and, indeed, some further question on notice about future engagement on the Antarctic and Science Precinct.

I might just briefly turn to the Nash and Russell reviews while we have Ms McCulloch at the table. I just wonder—perhaps on notice given the hour, and I know Senator Whish-Wilson has questions as well—is there an easy way of outlining the practical changes that have been put in place post the Nash review? I've already asked a question on notice about the complaints to DCCEEW, but it is separate to that. Would you prefer to take it on notice? I'm happy for you to do that. Just take it on notice. I'll put them all on notice and stand down. Thank you, Chair.

CHAIR: Well done, Senator Duniam.

Senator DUNIAM: You've worn me down, Senator McAllister!

Senator McAllister: That's incredible!

CHAIR: That's right. Senator Cadell, do you have any questions?

Senator CADELL: No.

CHAIR: Senator Whish-Wilson.

Senator WHISH-WILSON: Thank you, Chair. I'll fly through them. Is the *Nuyina* all fixed and ready to go? Do you anticipate any more teething problems?

Mr Sullivan: It's a really complex piece of kit. With any bespoke vessel that's the first off the line, there are inevitably issues with respect to commissioning. The good thing is that the propulsion system and the clutch issues have been solved, and so we're now in the process of working through that science commissioning process, because it is a really complex ship with respect to the amount of science that can be done. But it is a new ship, and the normal sort of outlook for new ship is 18 months to two years of commissioning, where we will find things that we need to alter and make more fit for purpose. But that's not unusual. Basically, we're reliant currently on the *Nuyina* for the next season, and we're making plans around that being our sole vessel for the coming season.

Senator WHISH-WILSON: For this summer?

Mr Sullivan: Yes.

Senator WHISH-WILSON: That is good to hear. I will fly through these. Will Australia be attending the 45th Antarctic Treaty Consultative Meeting and the 25th meeting of the Committee for Environmental Protection in Helsinki, Finland between 29 May and 8 June?

Ms Campbell: Yes, we will.

Senator WHISH-WILSON: Great. Which ministers or staff will be attending? Will you be attending?

Ms Campbell: I won't, because I've just joined. Professor Webster will for the division.

Prof. Webster: We have a delegation of four from the Australian Antarctic division, comprising myself, the chair of the Committee for Environmental Protection, another one of our policy leads who leads on working group 1 in the Antarctic Treaty Consultative Meeting. We also have the head of our international group attending that meeting. We also have a contingent from DFAT who lead at the ATCM.

Senator WHISH-WILSON: Are there any key issues you feel will be on the agenda?

Prof. Webster: We're expecting this ATCM to be relatively regular as far as the meetings go. We'll cover all aspects of science and tourism. There is a special event occurring on the first Friday of this particular treaty meeting, which is a special workshop on climate change. That will cover government's commitment to actions on climate change and it will also cover aspects of what science priorities the community are designating for the near future. We're expecting a Helsinki declaration to come from that climate change workshop.

Senator WHISH-WILSON: A Helsinki declaration? Excellent. Following up some questions I've asked previously, including on notice, has the minister received briefings on recent scientific assessments that show the increased risk of unstable and accelerating glacier retreat in the Australian Antarctic Territory and the East Antarctic?

Prof. Webster: The minister has not been briefed on that directly. I think at the last estimates I informed you of a new initiative that the Antarctic Division is driving called React, which is commencing this year and which we will progress at the Antarctic Treaty meeting and we will also progress at the upcoming COMNAP meeting. At this stage, the minister hasn't been directly briefed on that initiative or on the latest science with respect to the East Antarctic ice sheet.

Senator WHISH-WILSON: Are you able to give us a brief overview tonight, like a summary of the assessment of glacial destabilisation that you referred to in your response to me on notice? Have there been any changes?

Prof. Webster: There hasn't been substantive new research since the last time we briefed this estimates committee and the question on notice. I think last time I did inform you that we have a very large campaign that we've set up over this current season to look at the Denman Glacier in the 2023-24 season and again in the 2024-25 season we'll be looking at the marine aspects of the glacier, so ocean warming and glacial melts from beneath. Next season we will be mounting a terrestrial campaign that will be looking at aspects of ice sheet stability, the biodiversity and how that's changing with climate change. Our current focus is on setting up the science that will be able to inform the vulnerability of the Denman area.

Senator WHISH-WILSON: Okay. Will you be releasing more detail on the React initiative including an outline of the work plan? When will that be finalised?

Prof. Webster: That will probably be finalised within the next couple of months. We're aiming to hold the first workshop in March 2024. The reason for that is there are a number of international meetings happening this year where we're expecting to be able to really progress this with the international community so that everybody's prepared for that March 2024 meeting.

Senator WHISH-WILSON: The March 2024 meeting will obviously be following your expedition [inaudible] so you'll be able to add that—providing the boat works, which I'm assuming it will.

Prof. Webster: And the researchers are able to analyse data in real time to be able to inform that but we will be bringing the brightest minds in climate and Antarctic ice sheet science together for that meeting.

Senator WHISH-WILSON: You mentioned assessments and monitoring the increased risk of unstable or accelerating glacial retreat. Is there any research being carried out or proposed by the AAD on possible solutions to unstable ice and glacial retreat including glacial engineering, seabed anchors and seabed anchored curtains? That kind of thing?

Prof. Webster: Currently the AAD climate science program is really aimed at understanding the vulnerability and putting estimates in place with respect to projected sea level rise. We don't have any active areas of research that are looking at geoengineering solutions.

Senator WHISH-WILSON: Right. I'm not proposing that, by the way. I was just interested. Can I ask a few quick questions? Then I'll be done, Chair. In relation to the Russell review, can I get an update on the work to implement the recommendations of the very damning Russell review into harassment within the AAD, including on base stations, and what actions have been taken to respond to the issues raised to ensure the AAD is a safe and respectful workplace?

Mr Fredericks: I'll go first and then I'll refer to each of my colleagues at the table. This is an important piece of work, as you know. For me, personally, I think it's one of the most important tasks I have: leading this

organisation, including AAD, to drive cultural change within the AAD with the specific aim of ensuring that all of the AAD's workplaces—and we're not just talking about stations; we're talking about Kingston as well—are safe and inclusive. That's the mission. The Russell report, which we made public on 3 April, was obviously challenging for AAD and for the department more generally. But I think you will have seen from the comprehensive nature of our response that it's something that we have taken seriously, and we will continue to do so.

In many ways, we need to come at it in two ways, which is why I'll refer to both of my colleagues. For AAD itself, there's quite a program of cultural change to be led by the leadership of AAD. Like you, Senator Duniam, I welcome the appointment of Ms Campbell to lead the AAD and, together with Mr Sullivan, drive that cultural change. They'll articulate what's been involved in that. To be fair, simultaneously, the department also has had to have a look at itself and the processes that we go through, particularly to give comfort and confidence to staff to be able to report to us. That's the mission that we have as a department, and that's what Ms McCulloch will talk to.

Senator WHISH-WILSON: I certainly would like to hear those responses, but briefly, before you go to that, have you had any process around consulting or surveying the staff response to your response? And has the feedback been positive?

Mr Fredericks: Yes. Mr Sullivan will be able to talk to that in some detail. There is some survey work we're doing, but, the reality is, I went down to AAD and did a statement of recognition acknowledging the difficulties. I have to say: Mr Sullivan and others have invested a lot of time precisely on that consultation in order to make sure that staff feel that they've been engaged in the process and will continue to be engaged in a good-faith process. That's part of the cultural change that we need to drive.

Mr Sullivan: I won't do this justice, because an enormous amount of work has gone into Leigh Russell's report, but, briefly: when we released an unredacted report from Leigh Russell, a comprehensive implementation plan on what the department set out to do, that also included an associated people-care support plan. It was done very carefully with respect to training for people and trauma training. The implementation plan has 32 initiatives that cover both Professor Nash's study and Leigh Russell's report. In the first phase 17 of those initiatives were set out to begin in the first month, and we've completed that. We're now moving into the second phase, which is months two and three, and we have another set of initiatives to progress. Part of that is based on ongoing staff consultation and engagements, and, as I said to Senator Duniam, part of that is also getting a three-year integrated planning outlook for the Antarctic Division so that there's certainty about what the mission is and certainty around what's going to be funded as part of that—changes in governance and leadership but also changes in the way that we work across the department.

I think you asked about what the reaction of staff has been. One of Leigh Russell's recommendations was to do that—basically to check in. We'll do that in a comprehensive way after one year, but before that we'll be doing poll surveys. We've got a very extensive quantitative base to work on with that from Leigh Russell's work, so we will get quantitative figures of how we're tracking. But the anecdotal evidence that I see, having spent a lot of time in Hobart over the last three months, is that people are beginning to see the change. We need to build on that, and part of that is the job of Ms Campbell, Ms Webster and other senior leaders as a partnership inside the division but also with the department—not being seen to be isolated from the department and left to their own measures. One thing I wanted to briefly say as well is that Leigh Russell's report was framed around leadership from Kingston. It was not driven by behaviour on base. I just want to make it clear that this is about cultural change driven by the heart of the organisation, which will have impacts across the total organisation.

Senator WHISH-WILSON: In terms of change—I'm not asking for details here—has there been any action taken against alleged perpetrators of abuse, bullying and harassment outlined in the report since its release?

Mr Sullivan: Since the release of the report—Ms McCulloch may need to update me—I'm not aware of any formal processes that have started as a result of this. Part of that, I think, is due to the significant work that we put in to make sure that people had a sounding board. We had a task force in place immediately on the ground when the report was released. We had psychological counselling available, both in person and through the normal processes of telephone et cetera. What we found is that a lot of staff wanted to continue the discussion and continue the conversation, not necessarily to move against perpetrators. Proof will be in the pudding in terms of the cultural change being evidenced by people. That being said, there are ongoing matters that are still under investigation.

Senator WHISH-WILSON: Are there avenues available—

CHAIR: Senator—

Senator WHISH-WILSON: This is my last question.

CHAIR: I was just going to tell you we are going to finish bang on 11 pm.

Senator WHISH-WILSON: No worries. I'm keeping a very close eye.

CHAIR: You've got a minute.

Senator WHISH-WILSON: In a minute and 30 seconds—oh, sorry; a minute.

CHAIR: You've just wasted 30 seconds! Let's go.

Senator WHISH-WILSON: Are there avenues available for any potential historic complaints for people who may not have come forward?

Mr Sullivan: We made that offer quite open to previous staff—not only expeditioners but also previous staff. Some previous staff of the division have contacted me personally, and they continue to do that. But that's also part of the healing process rather than the blaming process. I think that's also a positive indicator around a sense of optimism for change rather than necessarily just looking back and rehearsing the mentality of, 'Who are the perpetrators of the past?'

Senator WHISH-WILSON: With my last 30 seconds—you can perhaps take this on notice—is there any evidence of research quality being impacted by any allegations in terms of functions being carried out?

Mr Sullivan: I'm not aware of any.

Senator WHISH-WILSON: Thank you.

CHAIR: I now conclude this hearing. Thank you to all the witnesses. Thank you for all of your patience. Thank you to Hansard, Broadcasting and the secretariat for all that you do. I will remind senators that we have agreed that any written questions should be lodged with the secretariat by 2 June. The committee stands adjourned.

Committee adjourned at 22:59