

ENVIRONMENT AND COMMUNICATIONS LEGISLATION COMMITTEE

QUESTIONS ON NOTICE – ADDITIONAL ESTIMATES 2021-22 – 14 FEBRUARY 2022

INDUSTRY, SCIENCE, ENERGY AND RESOURCES PORTFOLIO

QoN No.	Portfolio QoN No.	Department /Agency	Senator	Title	Question	Transcript Page
1	1	Department of Industry, Science, Energy and Resources	Jenny McAllister	Allocation for media buy	<p>Senator McALLISTER: What is the allocation across the categories of buy financially? Last time we talked about print, digital, radio, cinema and out-of-home as the areas where Universal McCann had been directed to make purchases.</p> <p>Ms Bennett: We will need to take that on notice. I have the allocation to Universal McCann, which for phase 2 is \$15 million, but I don't have that split by TV, radio, et cetera. I'd need to take that detail on notice.</p>	5
2	2	Department of Industry, Science, Energy and Resources	Jenny McAllister	Phase 1 research outputs	<p>Senator McALLISTER: Last time we discussed the Aboriginal and Torres Strait Islander audience communications through Cox Inall Ridgeway. Is that contract being extended?</p> <p>Ms Bennett: Yes, it is.</p> <p>Senator McALLISTER: What's the value of the extension to that contract?</p> <p>Ms Bennett: The extension is still being negotiated. We do not have a confirmed value yet.</p> <p>Senator McALLISTER: There was a culturally and linguistically diverse audience communications contract being pursued through Embrace Society.</p> <p>Ms Bennett: That's correct.</p> <p>Senator McALLISTER: Is that being extended?</p> <p>Ms Bennett: That will be extended as well, but again we haven't negotiated the contract as yet. The value is to be determined.</p> <p>Senator McALLISTER: The evaluation of the campaign?</p> <p>Ms Bennett: The evaluation will occur at the end of the campaign, phase 1 and phase 2, and that will be undertaken by Hall & Partners.</p> <p>Senator McALLISTER: So, no evaluation has been undertaken as yet?</p> <p>Ms Bennett: No. Hall & Partners do regular monitoring of the campaign, but the full evaluation won't happen until the end of the campaign.</p> <p>Senator McALLISTER: As to the public relations component of the campaign, at last estimates you told us that they were providing advice about various media, including social media, and that they would be running social media moderation services. Is that continuing?</p> <p>Ms Bennett: I did correct the record on that through a letter to the committee.</p>	5-6

					<p>They aren't providing advice on social media moderation. That is being run by Universal McCann. But the public relations component basically looks at extending the messages of the campaign, production of fact sheets, media articles, and they are monitoring some media on the campaign and related content.</p> <p>Senator McALLISTER: There is a research component in both phase 1 and phase 2. Can you please table the research outputs from the phase 1?</p> <p>Ms Bennett: I could take that on notice.</p> <p>Senator McALLISTER: You took that on notice last time we were here, and that was back in October. When can we expect to see the outputs of that research? It's publicly funded and it talks about Australian attitudes towards government policies on climate change and energy. Is there any reason we cannot see it?</p> <p>Ms Bennett: The research itself does go to one of the subcommittees of cabinet. We need to be respectful of the cabinet processes, and that's why I'd need to take that on notice.</p>	
3	3	Department of Industry, Science, Energy and Resources	Jenny McAllister	Reference to wind power in advertising campaign	<p>Senator McALLISTER: Can you confirm that wind power is not included or referenced in the advertising campaign at all?</p> <p>Ms Evans: I'll need to go back and actually have a look at all of the material to make sure there's no explicit reference to wind, but obviously there's a lot of references to clean energy, renewable energy, and all of that includes wind power.</p>	6
4	4	Department of Industry, Science, Energy and Resources	Larissa Waters	ARENA contracts and process if Senate disallows programs	<p>Senator WATERS: ... I'm interested now in whether any contracts have been issued under the expanded ARENA powers that of course are still subject to disallowance?</p> <p>Ms Evans: We might have to confirm with ARENA whether they have issued any contracts, but no contracts in the department have been issued under those powers.</p> <p>Senator WATERS: Has any money been handed over to any of those companies that we've mentioned under those last three grants programs?</p> <p>Mr Sullivan: As I said, there have been no contracts finalised with respect to UNGI program. There is a grant that's been processed and made with respect to the Port Kembla AIP project, but that's a pre-FID grant, not an UNGI grant. I'm answering this to be complete. For the Port Kembla AIP project there's a \$30 million grant that's being progressed with respect to that process, but that is not part of the UNGI program per se. With respect to the carbon capture and storage technologies, as Ms Croker said, that's currently going through the process of assessment of grants and we'll get back to you with respect to the number of applications and the time frame. I think on the ARENA one we were going to come</p>	7

					<p>back to you as well.</p> <p>Senator WATERS: Is there a process for handing money back if the Senate disallows any of those programs, in particular the ARENA powers? What is that process?</p> <p>Mr Fredericks: I will take it on notice. In the generality my understanding is that the answer to that question is no, but I would like to take it on notice. As I understand it, I think the reason it's no is of course that those powers and the exercise of them remain valid until the Senate has declared them otherwise. I think the assumption is that the grant is valid as a consequence. But in fairness to you I think it's a tricky question. I'll take it on notice and come back to you.</p> <p>Senator WATERS: Yes, thank you.</p>	
5	5	Department of Industry, Science, Energy and Resources	Larissa Waters	Number of approved projects	<p>Senator WATERS: ... The department has released its newest major projects report, at the end of the last year, and it's showing that there are 114 coal, oil and gas projects in the approvals pipeline. Can I ask: is it government policy for as many of those projects to proceed as possible?</p> <p>Senator Seselja: We'd have to sort of take them one by one. Sorry. I know this has suddenly gotten very loud, but it's probably going to be near enough to impossible at that volume. You could ask us about various projects, if you like, but certainly government policy when it comes to energy projects is, where they comply with the law, we want to see them go ahead, because we know that they create jobs and economic activity. We know the Greens' plan, if Labor gets into government and you're the balance of power, is to kill all of those projects, but that's not our policy.</p> <p>Senator WATERS: Yes; we don't want to see new coal, oil and gas. That is an accurate assertion of our stance. Can I confirm that the government views that these 114 new coal, oil and gas projects are compatible with its net zero 2050 position?</p> <p>Senator Seselja: I'll ask officials to give more detail.</p> <p>Mr Sullivan: The 114 is a total of major projects that we're aware of and, with respect to the numbers, our chief economist could give you more information about how many of those actually come to fruition. With respect to those coal and gas projects, it's not a very big step to actually be put on the list of the 114 in terms of trying to get a handle on what the total number of projects is. We can get back to you with respect to how many of those actually come to fruition in terms of FID. It's a very small percentage.</p> <p>Senator WATERS: Yes, okay.</p>	8

6	6	Department of Industry, Science, Energy and Resources	Anne Urquhart	Prime Minister's attendance at COP26	<p>Senator URQUHART: Mr Fredericks, we know from public statements that the Prime Minister indicated that he wasn't planning on attending COP26 as late as October last year. Is that the understanding of your department?</p> <p>Mr Fredericks: I think I'd have to take that on notice. Senator URQUHART: You have to take it on notice? Mr Fredericks: Yes, if I could, please.</p> <p>Senator URQUHART: Okay. On 27 September the Prime Minister said, 'We haven't made any final decisions about attending COP26.' He said:</p> <p>I mean it is another trip overseas and I have been on several this year and spent a lot of time in quarantine. On the 1st of October I will have spent, if I do that, a total of four times 14-day quarantine basically in this building, not being able to engage in my normal duties around the country as much as I'd like to. That's a long time for a Prime Minister to be in quarantine in a six-month period.</p> <p>On 5 October, the Prime Minister said:</p> <p>So the people I'm most interested in aren't overseas when it comes to this issue, it's the people in Australia and I want to ensure that I'm in a position to be able to explain to them about how our plans work. And on top of that, at that time of year, we'll be dealing with opening up, issues around COVID, international travel starting, bringing people home, students. There will be a lot on here. So I've already been out of the country a few times this year. In the last 12 months I've spent about 50 days in quarantine and I've got another week to go now. So, you know, we've got to prioritise where's the best place for me to be?</p> <p>Those were the statements of the Prime Minister on 27 September, 1 October and 5 October. Can you tell me the date the department was informed that the Prime Minister would indeed be attending COP26?</p> <p>Mr Fredericks: I wouldn't be able to do that. I think I'll have to take that on notice, if I could.</p> <p>Senator URQUHART: Are you able to come back today?</p> <p>Mr Fredericks: Yes, if I can.</p>	9
7	7	Department of Industry, Science, Energy and Resources	Anne Urquhart	Communication regarding the Prime Minister's attendance at COP26	<p>Senator URQUHART: In the leadup to COP26, did the department receive any other communications from equivalent foreign agencies encouraging the Prime Minister's attendance or expressing disappointment that he had not yet confirmed attendance?</p> <p>Mr Fredericks: I will come back to you on that. I appreciate that question. I will take that on notice.</p> <p>Senator URQUHART: So you'll come back today?</p> <p>Mr Fredericks: We'll try. I'm taking it on notice, and we will see where we go.</p> <p>Ms Evans: The questions that you're asking are about the travel plans of the Prime Minister, which are the responsibility of the Department of the Prime Minister</p>	9-10

					and Cabinet. You might be better to ask- Senator URQUHART: I want to find out from this department, because it's Environment, what this department knew. I would appreciate it. Mr Fredericks: I will take it on notice.	
8	8	Department of Industry, Science, Energy and Resources	Larissa Waters	Emissions projections	Senator WATERS: At what point does it become a project-by-project consideration? I thought that was the final investment decision phase. Surely you look at the actual projected emissions of a project that is at final investment decision stage? Is that the stage? Ms Rowley: In the projections? Senator WATERS: Yes. Ms Rowley: I would need to take that on notice, but I can come back to you on that, at what point specific projects get mapped in. But, yes, this is looking out to 2030. So, we have to use different lines of evidence. Senator WATERS: Thank you for coming back to me with as much clarity as you can.	12
9	9	Department of Industry, Science, Energy and Resources	Larissa Waters	Project emission projections	Senator WATERS: ... Last estimates when we had the 2020 emissions projections available you told us that scope 1 emissions in 2030 from opening up the Beetaloo basin would be 0.1 megatonnes of CO2. Empire Energy's own environmental management plan says in fact it would be 937,000 tonnes in the exploration phase alone, and the Federal Court said it would add 13 per cent a year to Australia's emissions. Have you revised your assessment of 0.1 megatonnes? Ms Rowley: Can I confirm that was for Beetaloo? Senator WATERS: Yes. Ms Rowley: Under the 2021 emissions projections, which were released late last year, we assumed new commercial gas extraction and production from the Beetaloo basin would commence in 2025. It's assumed to start producing in small amounts and then gradually ratchet up, and over the aggregate period, 2025 to 2030, the total emissions over that period we project at 4.9 megatonnes of carbon dioxide equivalent. Senator WATERS: What's the thing that made you massively increase your estimate? Apart from reality? Ms Rowley: I'd need to check the details of the previous estimate, but often estimates relate to a single scope. I can't say for sure that 4.2 megatonnes is only scope 1, but we can check that if you're interested. Senator WATERS: Yes, if you could take that on notice. Ms Rowley: Yes, but with respect to differences in estimates, is it a single year or a period of time? Is it scope 1 or scopes 1 and 2, which includes the emissions embodied in energy, and other reasons might account for the difference. In the	12-13

					<p>absence of the specifics of that original estimate, I couldn't explain it right now.</p> <p>Senator WATERS: Do you have current estimates for the 2030 emissions from projects that have received final investment decisions last year, Woodside, Scarborough and Pluto Train 2, and if so what are they?</p> <p>Ms Evans: I think that's at a level of detail that we will have to take on notice today.</p> <p>Senator WATERS: I am also after that for Santos's Barossa project. If you could take those three on notice and possibly come back to us today that would be tops.</p>	
10	10	Department of Industry, Science, Energy and Resources	Larissa Waters	The department's 2021 emissions projection report	<p>Senator WATERS: I have some figures here. AEMO said in December that the most likely scenario was that 14 gigawatts of coal-fired power capacity would close by 2030. I think the department's 2021 emissions projection report had 11 gigawatts. There's obviously a bit of discrepancy there. My understanding is you relied on the 11 gigawatts to calculate your Glasgow reductions of 30 to 35 per cent. Can I ask, please, which coal-fired power stations make up the 11 gigawatts that your department has said will close by 2030?</p> <p>Mr Sullivan: You will have to forgive the musical chairs, because the emissions reduction is with my colleagues.</p> <p>Mr Fredericks: To be fair, I think that's a level of detail we'll take on notice, if we could, please, and come back to you.</p> <p>Senator WATERS: Today if possible, please.</p> <p>Mr Fredericks: Yes, if possible.</p>	13
11	11	Department of Industry, Science, Energy and Resources	Samantha McMahon	Cost of projects not going ahead	<p>Senator McMAHON: Further to my colleague's questions about the 114 projects that she discussed, does the department have any modelling or any idea whether those 114 projects were to not go ahead what would be the cost; and not just in terms of energy, but what would be the cost in terms of energy plus the manufacturing options that would come out of that for products such as urea, AdBlue, various hydrocarbons, et cetera, with all of the products that can be made out of the oil and gas industry? Do we have any modelling on what that cost would be to Australia in the future if those projects were to suddenly not go ahead?</p> <p>Ms Evans: I don't think we do, but perhaps we'll take it on notice to confirm.</p> <p>Senator McMAHON: Yes, thank you. Any information that you could provide along those lines would be great.</p> <p>...</p> <p>Senator McMAHON: Thank you. I do realise my question was a little bit 'how long</p>	13-14

					is a piece of string', if I'm asking you to speculate on what may be, say, the value of urea production 50 years from now. I understand that it's probably a little bit impossible to answer in those terms. But thank you for that information that you have provided, and anything additional that you can provide on the potential economics of those projects not going ahead.	
12	12	Department of Industry, Science, Energy and Resources	Larissa Waters	Glasgow projections	<p>Senator WATERS: Yes, I understand. Before we go, I would like to know which scenario you based the Glasgow projections of 30 to 35 per cent on-my understanding is it's the 11 gigawatt scenario, but I want you to confirm that for me-and which coal plants comprise that 11 gigawatts.</p> <p>Ms Brunoro: I can confirm that 11 gigawatts is in the projections, and that was what Ms Rowley said before. I believe she's thinking the information on the precise power plants.</p> <p>Mr Fredericks: We'll take that on notice. We will try to get back to you.</p>	17
13	13	Department of Industry, Science, Energy and Resources	Jenny McAllister	Release of the of the long-term emissions reduction modelling	<p>Senator McALLISTER: Did the minister provide any direction about the timing of the release of the information?</p> <p>Ms Evans: We had discussions with a range of people around the timing of things, so I'd have to take it on notice to specifically check if the minister himself gave any particular direction.</p> <p>...</p> <p>Senator McALLISTER: In any case, Ms Evans, we were talking about whose decision it was to hold back the modelling and only release the plan; and to wait until after the COP. I asked you whether you had any communication with the minister's office about that and you took it on notice. Is that correct?</p> <p>Ms Evans: No. I said there were definitely discussions with the minister's office and others around the timing, but I had to take on notice whether we specifically had any direction from the minister, which was your question.</p> <p>Senator McALLISTER: Could I ask you to table any correspondence that occurred between the department and the minister in relation to the timing of the release of the modelling?</p> <p>Ms Evans: I can take that on notice, because I certainly don't have any of that with me today.</p>	18-19
14	14	Department of Industry, Science, Energy and Resources	Jenny McAllister	Long-term emissions reduction modelling	<p>Senator McALLISTER: So when did the department itself, in its own work, establish that net zero by 2050 was one of the scenarios that would be contemplated in the modelling?</p> <p>Ms Evans: Again, I'll have to take that on notice to check the exact timing, but in a broad sense the modelling began in roughly-this is the modelling, not the work</p>	19

					<p>leading into the modelling. There was a lot of other work which I've described before, but the formation of the modelling team and the work to actually put it through the general equilibrium modelling started around February this year. I would need to check exactly when we settled on the exact scenarios that we were going to be running through that.</p> <p>Senator McALLISTER: Can I ask you to take that on notice and to provide information to the committee about it. Given the opacity that surrounded government decision-making on net zero by 2050 at the last estimates, it would be reasonable if at these estimates we could have some indication of the time line about when work commenced on a net zero by 2050 outcome from a technical and modelling perspective.</p> <p>Mr Fredericks: We'll take that on notice.</p> <p>Senator McALLISTER: Today would be terrific.</p> <p>Mr Fredericks: I can't commit to that, but I'll take it on notice.</p>	
15	15	Department of Industry, Science, Energy and Resources	Sarah Hanson-Young	Invitation process for COP26	<p>Senator HANSON-YOUNG: Did any of those industry bodies or companies pay the financial cost of their attendance at Glasgow?</p> <p>Ms Munro: The Australian government provided no assistance, so any attendance was via the companies involved.</p> <p>Senator HANSON-YOUNG: So all the costs were borne by them?</p> <p>Ms Munro: That's correct.</p> <p>Senator HANSON-YOUNG: When were the invitations issued?</p> <p>Ms Munro: This was in the process in the lead up to COP26, obviously. As you recall, we were in the thick of the COVID pandemic, so it was an iterative process. Peak agencies that we would ordinarily work with, such as the Carbon Market Institute and the Australian Industry Greenhouse Network and their members-that's the ordinary case. We reached out, and lot of those institutions weren't going to be able to attend because of the risk assessment. I will have to go back and take it on notice, just in terms of actual dates.</p> <p>Senator HANSON-YOUNG: I am keen for the dates. I'm also hoping that you can give us a copy of an invitation letter or expression of interest call that was sent to this list of people and organisations and the dates by which they were distributed. I assume you've got a paper record of these-you didn't just pick up the phone.</p> <p>Ms Munro: I'm happy to go into a little bit more detail in terms of the process that was involved. The focus is obviously on the low-emissions-technology approach to climate action. The department initially identified two to four companies which were working on each of the priority technologies, which are identified in the Low Emissions Technology Statements. We consulted with the special adviser to the Australian government on low-emissions technologies, Dr Alan Finkel. We also</p>	20-21

					consulted through our own networks but also ARENA and CEFC, who have been working with a number of these companies over a number of years. I'll have to take on notice the details in terms of the dates and the correspondence. Some of it would have been verbal, but I'll follow that up.	
16	16	Department of Industry, Science, Energy and Resources	Sarah Hanson-Young	Invitation of Santos to COP26	Senator HANSON-YOUNG: Who invited Santos? Ms Munro: There were a number of ways of getting information. Santos, as you are aware, has one of the largest CCS projects, which is one of the priorities for the low-emissions-technology road maps. I will just have to take that on notice at this time.	21
17	17	Department of Industry, Science, Energy and Resources	Sarah Hanson-Young	Direction on invitations to COP26	Senator HANSON-YOUNG: Did your minister give a list of who he wanted to be there? Ms Munro: There was no list. There was liaison, as I said, with agencies and the special adviser. We also did consult with Minister Taylor's office. Senator HANSON-YOUNG: Perhaps, Minister Seselja, you could also take that on notice whether Minister Taylor had asked specifically for any of those who attended to be invited. Senator Seselja: Sure.	21
18	18	Department of Industry, Science, Energy and Resources	Larissa Waters	Carbon capture methodology	Senator WATERS: ... Finally, on the carbon capture methodology which was just approved by the Clean Energy Regulator, and obviously subject to disallowance in the Senate, would a brand new gas field that wasn't previously planned be eligible to receive funding or does it only apply to existing fields that say they want to install CCS technology? Ms Evans: I'm afraid I don't know the answer to that question so, unless Ms Rowley does, we are going to have to take it on notice. Ms Rowley: The details of the methodologies were developed by the Clean Energy Regulator, so you might wish to ask that question of them. They're appearing later in this session.	24
19	19	Department of Industry, Science, Energy and Resources	Jenny McAllister	MOU on energy with New South Wales Government	Senator McALLISTER: The MOU indicates that three projects will be supported. It's very explicit about the fact that, if one of them fails to get up, there'll be an assessment of a different project up to an equivalent value. It's a very, very explicit commitment of funding and resources. The Vales Point Power Station upgrade has been withdrawn, as you've indicated. What alternative New South Wales projects are being assessed to substitute for the Vales Point upgrade? Mr Sullivan: It's not a substitute for Vales Point. The Kurri investment, Tallawarra, Armidale New England, is in progress with respect to pumped hydro and early discussions. It's not as though there's been a process in terms of discussions with New South Wales on what's the other one of the three. It's a much broader agreement in terms of trying to facilitate cooperation wherever possible.	26

					<p>Senator McALLISTER: I understand the objective of broad cooperation, but there's a very, very explicit commitment that there are going to be three projects in New South Wales. I asked you if that MOU still stood. You said yes. I'm trying to understand how that could possibly be true if you can't tell me which three projects are going to meet the commitment set out in writing in the MOU that there will be three projects. It's a pretty simple question.</p> <p>Mr Sullivan: I can take that on notice and check with respect to the records of committee structure, if you like, but the AIP power station is one where we're committed and we're funded to progress under UNGI. The New England pumped hydro project is in early discussions and still remains compatible to be under the MOU. Kurri is a total investment by the Commonwealth in terms of equity stake and would be the third.</p>	
20	20	Department of Industry, Science, Energy and Resources	Jenny McAllister	Criteria for UNGI projects	<p>Senator McALLISTER: Is there anything in the new instrument that confines the program to the 10 projects that are on the UNGI short list?</p> <p>Mr Whelan: Senator, I'd need to confirm, but my understanding is no, so it would allow for funding for any projects under UNGI going through into the future.</p> <p>Senator McALLISTER: Right.</p> <p>Mr Sullivan: Well, let's be very clear-the government's stated quite publicly that the current list of the original list of 12 UNGI projects, which is now down to 10, is the list for the foreseeable future. There is an opportunity to add further entrants at some point further in time, but there's nothing on our forward schedule for doing that at the moment.</p> <p>Senator McALLISTER: Is there anything on the forward schedule for actually developing the eligibility criteria and publishing them? That's been a government commitment since 2018, and we're still waiting, are we not?</p> <p>Mr Sullivan: Going back to 2018 and 2019 is stretching my memory, Senator. I'll take it on notice as to where the original criteria-and I know we've traversed that space in this committee a number of different times. But, in terms of taking stock as to where it's up to, I'm happy to take that on notice and get a comprehensive update to you.</p>	28
21	21	Department of Industry, Science, Energy and Resources	Jenny McAllister	Public criteria for UNGI program	<p>Senator McALLISTER: I'm more interested in what criteria one has to meet to actually be eligible for any of these models of financial support. Is there anything in this instrument that defines which technologies can be supported under the instrument?</p> <p>Mr Sullivan: I'd have to take that on notice because I don't have the instrument in front of me, Senator.</p> <p>Senator McALLISTER: Mr Whelan, it sounds like that's your job within the department. Do you know?</p>	29

					<p>Mr Whelan: My apologies. I don't have it in front of me either, so I would have to take it on notice. But, from memory, when we were developing it, it's designed to support dispatchable generation into the market.</p> <p>...</p> <p>Senator McALLISTER: So we don't yet know if there are going to be any public criteria for the program additional to those contained in the instrument. There's an indication in the EM that there will be, Mr Whelan, but you can't give me any timing for when these criteria are going to be published?</p> <p>Mr Whelan: No, I can't.</p> <p>Mr Sullivan: As I said, we'll take that on notice, Senator.</p>	
22	22	Department of Industry, Science, Energy and Resources	Greg Mirabella	Green hydrogen produced in Australia	<p>Senator MIRABELLA: Okay. I'm just trying to get some idea of relative volumes here. If, for argument's sake, you're looking at a 10 per cent mix, what's that volume actually mean in terms of-what is it? Is it kilos? And right now, today, as we sit here, assuming we're only talking green hydrogen, how much green hydrogen is currently produced in Australia?</p> <p>Mr Sullivan: I don't have that. Whether any of my colleagues-</p> <p>Senator MIRABELLA: That's all right.</p> <p>Mr Fredericks: I think the difficulty there, Senator, is that the relevant official was in outcome 2-they can answer that question. But we will take that on notice for you.</p>	30
23	23	Department of Industry, Science, Energy and Resources	Anne Urquhart	Government support for Marinus Link and Battery of the Nation	<p>Senator URQUHART: I have questions around Marinus Link and Battery of the Nation. The Marinus Link and Battery of the Nation announcement around ARENA funding was in 2017. That was correct, wasn't it? That's when the federal government first expressed support for Marinus Link and Battery of the Nation?</p> <p>Mr Sullivan: You're taking me back.</p> <p>Senator URQUHART: Sorry-the announcement would've been made by then premier of Tasmania, Premier Hodgman; then prime minister, Malcolm Turnbull; and Minister Frydenberg in April 2017, I think.</p> <p>Mr Sullivan: Sorry-there was the formation of a Tasmanian Energy Security Taskforce, which was established in April 2016. That ran for a year. Then I think-</p> <p>Senator URQUHART: But in terms of the federal government support, that was-</p> <p>Mr Sullivan: That was John Tamblyn's work, which was then presented to government. Following that, in December 2017, the establishment of Project Marinus, which was as it is currently, is owned by public-</p> <p>Senator URQUHART: Sorry, Mr Sullivan, I'm asking a specific question about whether or not you can confirm that the federal government first expressed</p>	30-31

					<p>support for Marinus Link and Battery of the Nation with an announcement of ARENA funding in 2017.</p> <p>Mr Sullivan: I don't have the timing of the ARENA funding. I know ARENA have been called as a witness. If not, I can take that on notice, Senator.</p>	
24	24	Department of Industry, Science, Energy and Resources	Anne Urquhart	Jobs created by Marinus Link project	<p>Senator URQUHART: In a speech in February 2019 the Prime Minister said that the construction of the Marinus Link was expected to generate between 500 and 1,000 jobs during construction in Tasmania and between 900 and 1,500 jobs in regional Victoria. Can you confirm how many jobs have been created in Tasmania and Victoria so far?</p> <p>Mr Peisley: I'd need to take that on notice, Senator, and talk to the Tasmanian government. Marinus Link Proprietary Limited are currently running the project at the moment.</p>	31
25	25	Department of Industry, Science, Energy and Resources	Anne Urquhart	Maritime study for Marinus Link	<p>Senator URQUHART: How long will the maritime study take?</p> <p>Mr Peisley: I'm not sure, Senator. I'll need to take it on notice. It's their third one. It's quite a big maritime study. But I will take that on notice and get an answer for you.</p>	32
26	26	Department of Industry, Science, Energy and Resources	Dorinda Cox	Guidelines for shortlisting of projects	<p>Senator COX: Given that no-one had any guidelines or oversight of this shortlisting for coal, gas or pumped hydro projects, yet they claim that they were technology neutral, can you describe or disclose what the guidelines were in relation to these projects being shortlisted?</p> <p>Mr Sullivan: I think what we were going to do from questioning from Senator McAllister was to provide an update of where we're up to and look back in terms of the underpinnings of the selection of those projects, which was prior to the last election. I don't have that inside my folder at the moment, so if we can take that on notice-</p> <p>Senator COX: If you can provide that, that would be great.</p>	34-35
27	27	Department of Industry, Science, Energy and Resources	Dorinda Cox	Carbon credits	<p>Senator COX: ... Just moving to the Santos Moomba project, at Glasgow COP last year Minister Taylor helped Santos launch this carbon capture storage project. Let's put aside the dodgy public-private sponsorship deal, which we'll ask DFAT about. Can the department please advise what form of public financial support this project will receive?</p> <p>Mr Sullivan: Sorry, what project was that?</p> <p>Senator COX: The Santos Moomba project.</p> <p>Ms Croker: Under the CCUS Development Fund, on 8 June 2021 the government did announce six successful grantees, and that included funding to Santos Ltd. They were awarded up to \$15 million towards the low-cost capture and storage of CO2 emitted from Santos's Moomba LNG operations for permanent storage in the</p>	35

					<p>Cooper Basin in South Australia. That project is expected to store 1.7 million tonnes per annum on an ongoing basis.</p> <p>Senator COX: My understanding is that the regulations that have been tabled will allow carbon credits under the Climate Solutions Fund and they'll be made available. Is that correct?</p> <p>Ms Croker: I'm sorry, I'll have to take that question on notice.</p>	
28	28	Department of Industry, Science, Energy and Resources	Dorinda Cox	Carbon credits policy	<p>Senator COX: Given Santos's long history of intending to use EOR at Moomba, what information should the public rely on about what's going to ensure that no EOR takes place if they do receive carbon credit payments from the government?</p> <p>Mr Sullivan: Senator, you're probably straying. I'm not trying to obfuscate here; that's more of a question for my climate change colleagues, particularly with respect to carbon credits and potential for carbon credits. In terms of assurance et cetera, that's getting into a level of detail that I'm not across, so I'm going to have to take that on notice. But I wanted to give you the explanation of why I'm taking on notice. It's not because I'm neglecting to give you an answer or trying to hide something; it's because my climate change colleagues, who are responsible for that, were on earlier this morning.</p> <p>Senator COX: Yes, and the clarity on that would just be appreciated-what the regulations say and what the legislation says and then relying on that-so we can give the public more clarity about the carbon credit payments that the government are providing.</p>	35
29	29	Department of Industry, Science, Energy and Resources	Dorinda Cox	Glasgow projections and potential coal plant closures	<p>Senator COX: ... Can I just make one request. The coal plants closure by 2030 and the projections that went to Glasgow that were discussed in the last session, I think from Senator Waters-are we able to get those today?</p> <p>Mr Fredericks: Just on that, we will need to take that on notice. We did suggest that we would. That's because our preliminary examination of that information would suggest that some of it is commercially sensitive, including to the market, because it includes judgements about what might happen in the future in that particular market. So we do want to come back with that and answer that question. We won't be able to do it today. We'll have to take some advice around commercial sensitivity, so we'll take it on notice on that basis if that's okay.</p> <p>Senator COX: Okay. But there is already some information in the public domain about the projections. Is that right?</p> <p>Mr Fredericks: No. What I'm saying is that the information that Senator Waters was asking about in this department is a mixture of publicly available information and judgements about future that is not publicly available. So we want to make an assessment about the degree of risk to commercial sensitivity around the release</p>	35

					of that information. We'll make that judgement and then provide whatever we can on notice.	
30	30	Department of Industry, Science, Energy and Resources	Anne Urquhart	Information on programs	<p>Senator URQUHART: I just want to follow up on a letter that I wrote to Mr Fredericks on 10 February around providing information on a number of programs-Energy Efficient Communities Program, the Hotel Energy Uplift Program, the microgrids regional and remote communities program and the Powering Communities Program. So we wanted tabled the total figure of each program announced; the total figure of each program spent up to the current date; and each individual grant and its location, quantum and status. I'm not aware that's been tabled at this stage, Mr Fredricks. I did write a letter to Senator Seselja asking for some other things, which has now been complied with-thank you, Minister. But I'm just wondering, Mr Fredericks, whether you are able to provide that information.</p> <p>Mr Fredericks: Senator, we'll be able to provide that information. In fact, the document is just being prepared for tabling now. We will be able to provide you the information in relation to question 1, which is the total figure of the program announced for each of those four categories. I also want to provide you the information in relation to question 2, which is the total figure spent against each of the programs. The one that we will not be able to provide you today, but we will take it on notice and work has been commenced on it, is the detailed question around each of the projects. There is a very large amount of projects involved. So, to be really frank with you, we just need to do a hell of a lot of work to pull that information together for you. So the balance we've struck was that we've done everything we can to get the information on 1 and 2, which we'll table shortly. I'll have to take on notice question 3.</p>	36
31	31	Department of Industry, Science, Energy and Resources	Jenny McAllister	Commonwealth expenditure on Snowy 2.0	<p>Senator McALLISTER: I have a series of questions. Can I just get an indication of how much the Commonwealth has expended so far on Snowy 2.0?</p> <p>Mr Sullivan: Senator, I think I'm going to have to take that on notice. I don't have that information about how much has been provided to Snowy Hydro with respect to 2.0-what has been expended to date. But I'll take that on notice in terms of what's been expended to date.</p> <p>Senator McALLISTER: Sure. I feel this is information the department probably has. Can we track that down?</p> <p>Ms Brunoro: Snowy is appearing a little bit later, and we'll seek to obtain that information for you, Senator. Mr Sullivan: We'll try to do that over lunch so that you can have that.</p>	36

32	32	Department of Industry, Science, Energy and Resources	Jenny McAllister	Original Cost Estimate for Snowy 2.0	<p>Senator McALLISTER: Okay. What is the current estimate for the total Commonwealth contribution to the project?</p> <p>Mr Sullivan: The government's commitment remains at \$1.38 billion in equity for 2.0, with the rest of the project funded by Snowy Hydro.</p> <p>Senator McALLISTER: Right. So \$1.38 billion in equity is provided by the Commonwealth government. What is the total project cost?</p> <p>Mr Sullivan: It has a \$5.1 billion contract with Future Generation, and the final cost estimate that comes from S&P in its September 2020 ratings advice is a range from 5.7 to 6.2 billion.</p> <p>Senator McALLISTER: Right. So 5.7 to 6.2. The original cost assessment was for less than \$3 billion, wasn't it?</p> <p>Mr Sullivan: Senator, I think again in terms of what the original estimate was I'm happy to take that on notice, but I know we've traversed this space before in terms of the announcement at the time where it was first put forward as an idea from Snowy Hydro. But in terms of the business case-the firm business case when that has gone to final investment decision for the board-there has been really no cost blowout since then.</p>	36
33	33	Department of Industry, Science, Energy and Resources	Jenny McAllister	Medium-term emission reduction projections	<p>Senator McALLISTER: I understand that Snowy 2.0's entry into the electricity market was included in the previous emissions reduction projections for the government. Has this delay associated with the delay in establishing transmission infrastructure been accounted for in the updated medium-term emission reduction projections?</p> <p>Mr Sullivan: That's a question for my climate change colleagues-I'm not aware of that, Senator.</p> <p>Senator McALLISTER: You're not aware. You don't know the answer or you believe that it hasn't occurred?</p> <p>Mr Sullivan: I don't know the answer. I can take it on notice.</p> <p>Senator McALLISTER: Ms Brunoro, do you know?</p> <p>Ms Brunoro: No, sorry; I don't know that. It would be in the projections. But the way the projections run is that they are taking into account projects that are on foot, obviously. So they keep alive to when those are delivering and dispatching. I expect that some of that generation would be in the forward projections at 2030 and beyond. But we'll take that on notice and confirm with our projections colleagues.</p>	38
34	34	Snowy Hydro Limited	Jenny McAllister	Hunter Power Project capacity for large-scale renewables	<p>Senator McALLISTER: Green hydrogen is connected to renewable capacity. Does the site of the Hunter Power Project have the potential to host large-scale renewables?</p> <p>Mr Broad: I have to come back in detail but, as I understand it, there is a waste-to-</p>	39

					energy project on site and there is some potential to develop significant solar on site. But I'm not sure if that's what the landowners are doing; you would have to ask them.	
35	35	Snowy Hydro Limited	Rex Patrick	Snowy 2.0 tender	<p>Senator PATRICK: Okay. An article in Australian Manufacturing on 9 February this year claimed that the Snowy 2.0 tender required all steel plate to come from Australian manufacturers. Was that the case with the tender?</p> <p>Mr Broad: I am not aware of that; so I can't comment.</p> <p>Senator PATRICK: They included an image in that which would support that claim. They have an image from the tender. My concern here is that you have tendered-</p> <p>Mr Broad: No; correction. The contractor, FG, has tendered. We're not acquiring the steel; the contractor is.</p> <p>Senator PATRICK: Didn't you tender the whole project, which Future Generation won as a joint venture?</p> <p>Mr Broad: Yes.</p> <p>Senator PATRICK: So what did it say in that tender about Australian steel?</p> <p>Mr Broad: We went through the content in accordance with the Australian policies.</p> <p>Mr Whitby: It refers to Australian standards. It doesn't say the steel must be Australian.</p> <p>Senator PATRICK: All right. Can you on notice table the tender for the JV: the tender that led to the joint venture winning the contract?</p> <p>Mr Broad: I'll have to take on notice whether that is commercial-in-confidence.</p> <p>Senator PATRICK: It was put out on an AusTender site. I would hope that you would not claim that a tender stating Australian requirements is commercial-in-confidence. This is the sort of stuff I have to deal with- officials making ambit claims which are clearly ridiculous. It is a tender on an AusTender site, and you are claiming it is commercial-in-confidence?</p> <p>Mr Whitby: If it is a tender, it is from FG; it is not from Snowy Hydro.</p> <p>Mr Broad: If it is commercial-in-confidence, you would have to speak to the contractor who put the tender out.</p> <p>Senator PATRICK: You put the tender out, didn't you?</p> <p>Mr Broad: For that steel, no. On the tender we put out-</p> <p>Senator PATRICK: So how did we get to the point where-</p> <p>Mr Broad: We can get a component of the contract which talks about Australian content; I'll get that out. But the remainder of the contract, no.</p> <p>Senator PATRICK: Okay.</p> <p>Mr Whitby: Senator, if you can provide us with that information we will take it on</p>	44

					notice and have a look at it. Senator PATRICK: I'll provide the article. I'll table it.	
36	36	Snowy Hydro Limited	Rex Patrick	Snowy 2.0 project schedule	<p>Senator PATRICK: I have some questions on schedules. This is my last block of questions. On a couple of occasions I have asked for schedule information. On one occasion you provided me a schedule that had seven milestones. On another occasion you provided me a schedule that had eight milestones. Your final investment decision has 26 milestones. Why, when I asked you for a schedule, wouldn't you give me all 26 milestones?</p> <p>Mr Broad: I thought you wanted the key ones; so we gave you the key ones.</p> <p>Senator PATRICK: These are ones on the critical path. If you are open and transparent and give the information upfront, we don't end up going through this three or four times. Is there anything sensitive in the schedule where it has all the 26 milestones mentioned in the FID?</p> <p>Mr Broad: We gave you what we believed to be the key ones.</p> <p>Senator PATRICK: Can you provide me with all 26?</p> <p>Mr Broad: I'll take it on notice.</p> <p>Senator PATRICK: I want to know whether you have an integrated master schedule for this program.</p> <p>Mr Broad: Of course they do.</p> <p>Senator PATRICK: Okay.</p> <p>Mr Broad: At varying levels, at varying degrees. Again, I'll take it on notice.</p> <p>Senator PATRICK: So the reason you'll take it on notice-</p> <p>Mr Broad: I'll see what I can release.</p> <p>Senator PATRICK: Okay. So you are doing that to work out what you can and can't release publicly in terms of time frames. Because there is a document-I am also happy to table this-that lists all 26 of them. So I am not asking for anything secret; it is already in the public domain-just the timing of it. Surely that's not secret.</p> <p>Mr Broad: As I said, I'll take it on notice.</p>	45-46
37	37	Snowy Hydro Limited	Perin Davey	RAR releases	<p>Senator DAVEY: Are you able to provide, on notice, the dates and volumes of your RAR releases over the last couple of years, just so that we can get a picture?</p> <p>Mr Broad: Sure.</p>	47
38	38	Australian Renewable Energy Agency	Larissa Waters	Legal advice on CCS and hydrogen regulations	<p>Senator WATERS: Thank you, Chair. Thanks for joining us online today. I don't have very many questions. I will start, though, with the new proposal that's been tabled to expand your remit, if you like, to spend money on carbon capture and storage and gas-derived hydrogen. Has ARENA taken legal advice from either the Solicitor-General or externally on the lawfulness of these regulations?</p>	47-48

					<p>...</p> <p>Senator WATERS: Can I ask the date that you sought the legal advice on?</p> <p>Mr Miller: I'd have to get back to you, but it was—I'd have to take that on notice to give you a specific, accurate date.</p>	
39	39	Department of Industry, Science, Energy and Resources	Larissa Waters	Revision of emission estimates	<p>Ms Evans: ... But it's probably also worth understanding that in some of the areas that those reports looked at—in the Bowen Basin in Queensland, for example—about half of the emissions there are actually from underground coal mines. And in those areas we're very confident that we have very accurate information about the methane emissions. For the surface mines, it is an area where there is room for improvement, and even in the most recent quarterly update of the inventory we have revised some of the factors that we've been using for the surface mines there. So you'll see that when it's released later this month.</p> <p>Senator WATERS: I was going to ask you immediately about that, what the date for revision was.</p> <p>Ms Evans: It's due very soon.</p> <p>Senator WATERS: Would you mind taking on notice for me the reason for the revision, what new data or method came to light and then sort of revisit those figures?</p> <p>Ms Evans: Happy to. The quarterly report that's forthcoming has a very good explanation.</p>	50
40	40	Department of Industry, Science, Energy and Resources	Larissa Waters	Satellite technology for monitoring emissions	<p>Senator WATERS: So have you reached out to the scientists who designed the satellite approach and discussed it with them?</p> <p>Ms Evans: I'll have to check with my team if they've gone that far. I know they've certainly looked at all of the written material that's available about it.</p>	50
41	41	Department of Industry, Science, Energy and Resources	Kim Carr	Reliability of electricity supply after closure of generators	<p>Is the Department confident that AEMO has (a) the required data and (b) the necessary technical expertise, to ensure early closure of generators does not place new levels of unreliability on electricity supply?</p>	Written
42	42	Department of Industry, Science, Energy and Resources	Kim Carr	AEMO control over distributed generation	<p>Can the Department detail any additional steps being taken to enable AEMO as grid operator to have increased control over distributed generation?</p> <p>Further, given the uncoordinated adoption of rooftop solar by households in distribution networks and various schemes, independently developed for their control—to all intents and purposed only in so far as they relate to voltage control within the distribution networks, what assurance is there that distribution zone</p>	Written

					substation power demand, millisecond-by-millisecond, can be part of NEM-wide stability and resilience control?	
43	43	Department of Industry, Science, Energy and Resources	Kim Carr	Plans to maintain stability and resilience of NEM networks	Can the Department detail any plans it has to maintain the stability and resilience of NEM networks given the present limited jurisdiction of AEMO and the independent nature of stakeholders including network owners and generator owners?	Written
44	44	Department of Industry, Science, Energy and Resources	Kim Carr	Plans for renewable source integration	<p>1. Further, are any steps are being taken for a national, integrated approach to renewable source integration involving a central design and implementation authority? Given the disparate, independently state-based renewable plans, would such an authority as mentioned above, be desirable?</p> <p>2. Has any further consideration been given to the development of a national energy plan or policy to manage the transition to renewable generation?</p>	Written
45	45	Department of Industry, Science, Energy and Resources	Kim Carr	Stability and resilience following inclusion of renewables	Given the physical features of inverter-based resources replacing traditional synchronous generators, and exclusively used to connect batteries and solar and wind generation, has the Department determined how stability and resilience will be assured as Australia progresses beyond 50% inclusion of renewables.	Written
46	46	Department of Industry, Science, Energy and Resources	Kim Carr	Revision of "Step Change" approach	Has the Department asked AEMO to reconsider or revise its "Step Change" approach in light of proposed early closure of synchronous generation?	Written
47	47	Department of Industry, Science, Energy and Resources	Kim Carr	Notice of closure from existing synchronous generators	Has the Department considered requiring a longer (or nationally standardised) notice of closure from existing synchronous generators?	Written
48	48	Department of Industry, Science, Energy and Resources	Kim Carr	Generation capacity and spinning reserve	<p>1. Has the Department considered additional requirements from generator owners in regard to continuing to provide a generation capacity beyond any proposed closure such as: (a) mothballing rather than scrapping or (b) additional payments for continuing operation as a spinning reserve?</p> <p>2. Is the Department considering any other steps to provide spinning reserve, in order that Australia has a period sufficiently long to permit safe transition to higher and higher inclusion of renewables?</p>	Written
49	49	Department of Industry, Science,	Kim Carr	Future workforce requirements	Has the Department been involved in (and able to relate) any planning to meet future workforce requirements, such as power system engineers or electrical mechanics?	Written

		Energy and Resources			Can the Department detail any specific institutions where such training is being undertaken?	
50	50	Department of Industry, Science, Energy and Resources	Kim Carr	Future interconnectors	In regard to possible future interconnectors, has the Department considered other possible steps for coordination of interconnector plans to make them subject to a total, integrated system (for example, such as creating an office such as the UK Chief Engineer and Head of Networks authority and its jurisdiction as to integrated developments)?	Written
51	51	Department of Industry, Science, Energy and Resources	Dorinda Cox	Ranger mine rehabilitation	<ol style="list-style-type: none"> 1. What is the status of moves to amend the Atomic Energy Act to extend the current mandated timeframe for rehab work to the Ranger Mine and when can we expect to see this introduced to Parliament? 2. Are you concerned that ERA may not be able to meet the full cost of rehabilitation given it has blown out to \$1.6 – \$2.2 billion? 3. Who will be responsible for covering the rehabilitation costs if ERA and Rio Tinto can't foot the bill? Will it be the Commonwealth Government? 	Written
52	52	Department of Industry, Science, Energy and Resources	Sarah Hanson-Young	Carbon Estimation Areas	<p>Please provide the figures for:</p> <ul style="list-style-type: none"> - The total area of all Carbon Estimation Areas for registered Human Induced Regeneration projects. - The total area of all Carbon Estimation Areas for registered Native Forest from Managed Regrowth projects. - The total area of all Carbon Estimation Areas for contracted Human Induced Regeneration projects. - The total area of all Carbon Estimation Areas for contracted Native Forest from Managed Regrowth projects 	Written
53	53	Department of Industry, Science, Energy and Resources	Sarah Hanson-Young	ACCUs	<p>Which organisations/products/services/buildings/precincts certified by Climate Active have any of the following ACCUs in their portfolio? Currently and historically:</p> <ul style="list-style-type: none"> - Human Induced Regeneration - Avoided deforestation - Landfill gas 	Written
54	54	Department of Industry, Science, Energy and Resources	Lidia Thorpe	Beach Energy Enterprise pipeline in Otway Basin	<p>Beach Energy Enterprise pipeline in Otway Basin</p> <p>In the Victorian Otway Basin, testing and assessment has been undergone and Beach Energy is progressing with engineering and design of a pipeline which will flow the offshore gas to the Otway Gas Plant near Port Campbell.</p> <ol style="list-style-type: none"> 1. These activities take place on the lands and waters of the Eastern Maar people which include the Marr, Eastern Gunditjmara and DjapWurrung. <ol style="list-style-type: none"> a. How have the Eastern Maar been consulted about these activities? b. Provide dates and locations of these consultations. c. How are you implementing the articles in the UNDRIP, particularly around free, 	Written

					<p>prior and informed consent?</p> <p>d. What do you understand about the significance of this site to First Nations people?</p> <p>2. Which Traditional Owners have signed off on the project?</p> <p>a. What evidence do you have of their consent?</p> <p>b. Have the articles in the UNDRIP been followed with regards to free, prior and informed consent?</p>	
55	55	Department of Industry, Science, Energy and Resources	Peter Whish-Wilson	Emissions reduction projections	<p>The State Party Report on the state of conservation of Australia's Great Barrier Reef - 2022 (SPR) claimed that emissions are on track to achieve a 30-35% reduction on 2005 levels by 2030.</p> <p>- What is the current level of emissions reduction?</p> <p>- To what extent does this emissions figure rely on land use emissions data?</p> <p>- What would the figure be if land use emissions were not included?</p>	Written
56	56	Department of Industry, Science, Energy and Resources	Peter Whish-Wilson	Australia's Long-Term Emissions Reduction Plan	<p>Australia's Long-Term Emissions Reduction Plan is referenced in the SPR. Can you confirm that the reduction plan describes liquified natural gas as 'clean', despite being a fossil fuel (and 'clean' being a well-established greenwashing term)?</p>	Written
57	57	Department of Industry, Science, Energy and Resources	Peter Whish-Wilson	Hydrogen production	<p>The SPR refers to 'clean' hydrogen production. Clean hydrogen has been exposed time and again as a greenwashing term that refers to fossil-fuelled produced hydrogen.</p> <p>- When was it decided that the government was abandoning green hydrogen in favour of carbon emitting hydrogen production?</p> <p>- What assurance can the government give that all hydrogen production will be purely from green sources?</p>	Written