AGENCY/DEPARTMENT: Department of Industry, Science and Resources

**TOPIC:** Jobs and growth in the oil and gas sector

**REFERENCE:** Question on Notice (Hansard, 31 March 2023, Page 44 - 45)

# **QUESTION No.:** 2

Senator ALLMAN-PAYNE: Thank you to everyone for appearing this afternoon. I think my questions are probably most appropriately directed to Ms Long in relation to industry. I noted in your opening statement you talked about the fact that one of the objects of the department is to be creating resilient and sustainable economic growth. I note in your submission you talk about how the transition to a low-carbon economy and positioning Australia as a low-emissions powerhouse presents significant opportunities, which is really exciting to hear. We've also heard that there are up to 1.2 million technology jobs coming into the future. I also note your submission says that oil and gas offers a significant opportunity to generate new jobs. I'm interested to unpack that a little bit in terms of is that based on the idea that there will be new projects. And secondly, given that the National Reconstruction Fund and the safeguard mechanism have passed this week does the department have a view on how the mix of oil and gas jobs and the sustainability of that versus focusing more on the renewable energy sector has changed in the context of that?

Ms Long: Absolutely. As you know, the submission talks about opportunity for jobs and growth across a range of different regions, particularly in new energy industries and critical minerals and resources as well. I would probably need to take on notice in specific to the oil and gas sector and the balance question that you are asking there. But I guess in terms of that sustainable piece—and when we're talking about resources development we are talking about new projects. For example, in our submission we talk about exploring for the future and the importance of continuing to explore for minerals, in particular critical minerals that will go in to ultimately be processed and then go into batteries and solar and a range of new energy technologies. We also think that there are opportunities in the north through the manufacturing of some of those new technologies as well, and that's where the NRF and the government have a range of support there in order to build our capabilities in that regard as well.

Senator ALLMAN-PAYNE: I absolutely agree that there are huge opportunities in critical and rare-earth minerals. Just coming back to oil and gas though, is the department working on the basis that this opportunity to generate new jobs and economic growth is predicated upon opening up new oil and gas projects or based on the projects that there currently are? Ms Long: I would have to take that on notice.

# ANSWER

The submission references projects identified in the 2022 Resources and Energy Major Projects report and potential oil and gas projects in the Beetaloo Sub-basin.

### AGENCY/DEPARTMENT: Department of Industry, Science and Resources

**TOPIC:** Specific recommendations to enhance workforce opportunities in northern Australia

REFERENCE: Question on Notice (Hansard, 31 March 2023, Page 42 - 43)

# **QUESTION No.:** 1

Senator McDONALD: Terrific. I'm just thinking in terms of this committee, because we want to provide some specific outcomes and recommendations to enhance workforce availability and options in northern Australia. You're really just saying that there is potential. I'm wondering what I can specifically get from you that would be useful to this committee and that we could take away.

Mr Hewett: Certainly. In general, because of the geographic advantages that exist in northern Australia, that is a nascent industry that can be developed and, therefore, provide workforce opportunities. There are, of course, diversity issues within the industry that we are looking at as a whole, not specific to but certainly relevant to the northern parts of Australia. We are implementing programs to increase Indigenous participation in the industry, such as the National Indigenous Space Academy, which will sponsor Indigenous internships with NASA at the Jet Propulsion Laboratory. That's an opportunity for postgraduates to spend time with the premiere space engineering organisation in the world. I don't have specific programs— other than that space offers real and meaningful jobs in remote locations, which is relevant to this committee.

Senator McDONALD: In addition to being 'the final frontier'!

Mr Hewett: In some very remote locations for some very lucky people, but certainly, on Earth, remote locations provide advantages for the space industry.

Senator McDONALD: Sorry, I was being a bit smart, given that was a Star Trek reference! Terrific. You've named the Indigenous Space Academy; I think that's terrific, but we are trying to get down to brass tacks, so anything useful that you'd additionally like to talk about would be good. I saw the 3D printing group in Darwin, when I was there last, which is associated with the university. They were making some great observations about programs and projects that they've been working on that support the parts, the rocket engines and whatnot. I think there's a lot more to be unpacked there.

Mr Hewett: I'm happy to come back to the committee with more specific recommendations. Senator McDONALD: I'd appreciate that, thank you.

# ANSWER

The Australian Space Agency (the Agency) takes a national, rather than state, territory or region specific approach in developing policy to grow and upskill Australia's space workforce. The Agency is part of the Department of Industry, Science and Resources and works across the portfolio and across government in its remit and delivery.

The following themes and related actions are linked to enhancing workforce opportunities in the Australian space sector, including in Northern Australia:

**Theme 1 - Improve awareness of space sector career opportunities:** research conducted by the Australian Space Agency indicates a low level of public awareness as to the skills and occupations associated with the space sector, including in regional and remote areas. There is merit in seeking to raise levels of awareness as a means of increasing the flow of students and workers in adjacent sectors into the space sector.

### Actions:

The Australian Government's Jobs and Skills Summit, held 1-2 September 2022, and the Employment White Paper are examples of the Government's existing actions to help shape the future of Australia's labour market.

The Australian Space Agency is also undertaking a range of space specific activities in line with the Government's workforce development agenda, including:

- hosting two National Forums on Space Workforce in late 2022, bringing together government, industry, academia and members of the public from across Australia.
- Sponsoring the 'Kids in Space' program, which has gone into more than 70 Australian primary schools this year. This includes eight schools across the Northern Territory many in remote and regional parts of the Territory.
- Supporting Studio Schools of Australia, a not-for-profit providing opportunity and access for Indigenous students, with a new program they are developing called "Seasons and the Stars: Learning on-country" which connects language and culture, Western science knowledge, and communication and broadcasting industry knowledge.

**Theme 2 - Community education and outreach targeting underrepresented groups to increase diversity and inclusion:** research conducted by the Australian Space Agency and extensive engagement with industry has highlighted the need for outreach, engagement and action to increase the participation of underrepresented groups in the sector.

# Actions

The Australian Government is undertaking a 'Diversity in STEM Review' exploring the barriers to participation in science, technology, engineering and mathematics studies and career paths for Australians.

The Australian Space Agency is actively contributing to the review, which is being led by an independent expert panel and is part of the Government's commitment to boost diversity and increase the participation of women and historically under-represented groups in STEM.

The expert panel will provide evidence-based, independent and impartial advice and make recommendations on a range of important topics, including the delivery, effectiveness and impact of existing programs under the Government's Women in STEM program suite as well as programs within the Industry and Science portfolio. The review will make public draft recommendations in July 2023 for consultation. Final recommendations will be provided to Government by October 2023.

From a space sector perspective, the Australian Space Agency will continue to increase diversity and inclusion within the sector in line with the Government's policy agenda. An example of an initiative to date includes the establishment of the National Indigenous Space Academy, which will fund internships for Indigenous Australians at NASA's Jet Propulsion Laboratory in California.

In addition to the above themes and actions, the Agency notes the relevance of the Australian Government's \$15 billion National Reconstruction Fund (NRF) and its role in providing loans, equity and guarantees to support, diversify and transform Australia's industry and economy across key priority areas. Space plays a vital role in a variety of industries, and it is expected that a range of projects from the space industry will be eligible for finance from the National Reconstruction.