## **Economics Legislation Committee**

## ANSWERS TO QUESTIONS ON NOTICE

Industry, Innovation and Science Portfolio 2016 - 2017 Additional Estimates 2 March 2017

**AGENCY: GEOSCIENCE AUSTRALIA** 

**TOPIC:** Available Gas in Eastern Australia

**REFERENCE:** Question on Notice (Hansard, 2 March 2017, page 110-111)

**QUESTION No.:** AI-41

Senator BUSHBY: I have a couple of questions along the lines of Senator Xenophon's questions about resources, and what is proven and also a bit about prospectivity. How much gas is proven to be available in eastern Australia, including Victoria?

Dr Johnson: In eastern Australia, in the broad, there would be a little over 100,000 petajoules. That is Queensland, New South Wales and Victoria, onshore and offshore. And that is in the identified resources category, which is essentially reserves which are commercially viable today, and the category of contingent resources, which are geologically proven up—they have been proven up by the drill—but require some other contingency to make them economic.

Senator BUSHBY: So they are proven to a much higher level than what you might think is there by declaring an area prospective?

Dr Johnson: Yes, they are—a higher level of geological confidence than what we would categorise as prospective resources.

Senator BUSHBY: So that is 100,000, and it was 279,000 you said of proven resources?

Dr Johnson: Of identified resources for Australia in total.

Senator BUSHBY: So about 100,00 of that at this stage is what we are aware of in eastern Australia. Presumably there are also prospective areas that have not yet had the work done to that standard to determine whether there are resources there?

Dr Johnson: That is correct—a significantly higher figure for prospective resources nationwide. Senator BUSHBY: I am interested in eastern Australia—Victoria, even Tasmania to some degree. Dr Johnson: I do not have a figure but I could take it on notice for eastern Australia. We have recently published some preliminary figures for Victoria in terms of prospective resources and they tally to around 29,000 petajoules.

## **ANSWER**

Conventional, shale/tight and coal seam gas resources are available and potentially available for development in eastern Australia (New South Wales, Queensland, Victoria, South Australia and Tasmania).

The identified gas resources (reserves plus contingent resources) in eastern Australia total about 98 000 PJ, including 51 600 PJ of gas reserves and 46 000 PJ of contingent resources (Table 1).

Over 85 per cent of proven gas reserves in eastern Australia are coal seam gas (44 100 PJ), the remainder being conventional gas (7 478 PJ). While approximately 93 per cent of the identified coal seam gas reserves are located in Queensland, the identified conventional gas resources are mainly from the offshore Gippsland and Otway Basins in Victoria.

More than 418,000 PJ of prospective gas resources are potentially discoverable in eastern Australia. Of this potential, approximately 44 per cent is known in South Australia, 45 per cent in Queensland, 6 per cent in Victoria and 5 per cent in New South Wales.

PRMS classification	Conventional	Shale/Tight	CSG	Total
	Petajoules			
Reserves	7,478	0	44,100	51,578
Contingent Resources	5,723	13,144	27,443	46,310
Reserves + Contingent Resources	13,201	13,144	71,543	97,888
Prospective Resources	3,639	382,067	33,015	418,721
Grand Total	16,840	395,210	104,558	516,608

Table 1: Identified gas resources in the Australian eastern coast