Senate Standing Committee on Economics

ANSWERS TO QUESTIONS ON NOTICE

Resources, Energy and Tourism Portfolio
Additional Budget Estimates 2009
26 February 2009

Question:	**AR-3**
Topic:	**Uranium**
Proof Hansard Page:	**written**

Senator Bushby asked:

1. With regards to uranium mining in Australia, with the exception of Queensland:
   - How much will mining of uranium increase GDP to 2030?
   - What could it be (in terms of GDP) if Queensland also exported uranium?

2. What expenditure has there been in the exploration of uranium for each state and territory for the period 2001 to February 2009? Can you break this down by year?

3. What does the Department estimate the spot price of uranium to be in February 2010 and February 2011?

4. Can the Department provide up-to-date statistics pertaining to how much uranium is exported annually from Australia and to which countries these exports go? How much CO2 does this displace from that that would otherwise be emitted from coal-fired power stations?

1. Answer: Modeling undertaken by Deloitte Insight Economics for the Australian Uranium Association in early 2008 indicated that if South Australia and the Northern Territory continue to mine uranium, and in a scenario where some action is undertaken by governments in combating climate change, uranium mining will add around $14.2b to Australian Gross Domestic Product (GDP) over the period 2008-2030.

If Queensland and Western Australia are also allowed to mine, Deloitte forecast that GDP would increase by another $3.2b in Net Present Value terms.

Uranium mining was forecast to add around $3.2b to the Gross State Product (GSP) in Western Australia and around $1.5b in Queensland during the outlook period. It should be noted that the sum total of the GSP in each state should not be taken as contributing directly to Australian GDP, as it does not take into account the 'crowding out' effect caused by uranium mining due to competition for resources/contracts between states.

2. Answer:

Table 1 Uranium Exploration Expenditure- Breakdown by State - $million

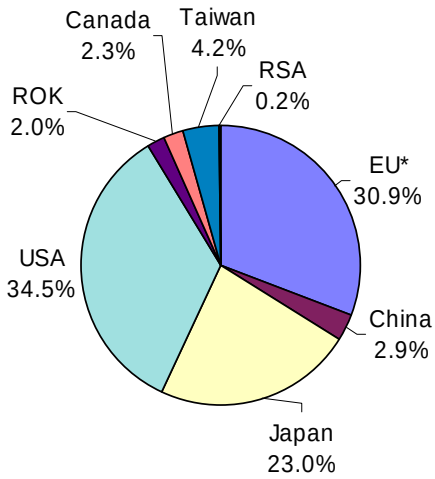
	NSW	VIC	SA	WA	TAS	NT	QLD
2001	0	0	0.3	0.0	0.0	2.7	0.0
2002	0	0	0.6	0.0	0.0	0.0	0.0
2003	0	0	0.2	0.0	0.0	2.1	0.0
2004	0	0	6.0	0.2	0.0	0.0	0.0
2005	0	0	21.2	0.3	0.0	2.2	0.0
2006	0	0	45.2	1.7	0.0	23.5	1.9
2007	0	0	99.3	20.5	0.0	41.1	16.7
2008	0	0	93.5	0.0	0.0	58.3	41.8
Total	**0**	**0**	**266.3**	**22.7**	**0**	**129.9**	**60.4**

Source: ABS Cat No 8412.0 - Mineral and Petroleum Exploration, Australia, Dec qtr 2008

3. Answer: ABARE's Australian Commodities March quarter 2009 estimates that in 2010 the uranium spot price is forecast to average around US $70/lb. ABARE considers that despite strong consumer demand, strong growth in mine production and steady secondary supplies in the medium term will push the spot price down to an average US $60-65/lb during the period 2011-14.

4. Answer: In 2008, Australia exported 9663.3 tonnes of Uranium Oxide (U_3O_8).

Australian uranium is exported to converters in the US, Canada, France and China. Once converted, Australian uranium is then sold to countries with which we have a bilateral safeguards agreement and that observe the Treaty on the Non-Proliferation of Nuclear Weapons. Non-nuclear weapon states must also have an Additional Protocol in place. A break-up of the total deliveries of converted Australian uranium in 2008 is below.



**** EU includes Finland, Germany, Spain, Sweden, Belgium and UK***

Data available for CO_2 emissions according to the Kyoto Accounting Framework estimated Australia's total CO_2 emissions in 2006 to be around 427,788.11 Gg

(Giga tonnes greenhouse gases). The Australian Safeguards and Non-Proliferation Office Annual Report 2007-08 advises that countries using Australian uranium exported in 2007-08, would have avoided CO_2 emissions equivalent to roughly two-thirds of Australia's total CO_2 emissions from all sources, or around 285.192 Gg, of the total emissions. This is on a life cycle basis and assumes that nuclear power replaces sub-critical black coal power stations.