

Senate Standing Committee on Economics

ANSWERS TO QUESTIONS ON NOTICE

Resources, Energy and Tourism Portfolio
Budget Senate Estimates
1 June 2010

Question: BR43
Topic: Geoscience Australia
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Senator Eggleston asked:

1. Has Geoscience Australia done any work comparing geothermal energy to other forms of renewable energy? In particular, looking at the levels of investment required, amount of power available, etc
2. What involvement did Geoscience Australia have in the search and investigation of the Mentelle Basin of the West Australian coast?
3. What research work is continuing around Australia in investigating further deep-sea resources?
4. How much does Geoscience Australia work with other state agencies?
5. Where are the likely areas that are going to be hit by earthquakes in Australia by the end of the year?
6. Is Geoscience Australia working with Geological and Nuclear Science, the New Zealand geoscience agency?

Answers:

1. Yes. The Australian Energy Resource Assessment (AERA) was undertaken jointly by Geoscience Australia (GA) and the Australian Bureau of Agricultural and Resource Economics and commissioned by the Department of Resources, Energy and Tourism. It provides a comprehensive, integrated scientific and economic assessment of Australia's energy resources, from fossil fuels and uranium to renewables, including geothermal. The assessment reviewed and assessed the factors likely to influence the use of Australia's energy resources to 2030 including the technologies being developed to extract energy more efficiently and cleanly from existing and new energy sources.

No, GA has not looked, in particular, at the levels of investment required or amounts of power available.

The AERA is available from the GA website -
www.ga.gov.au/products/servlet/controller?event=GEOCAT_DETAILS&catno=70142

2. In 2004, GA acquired 1060 kilometres (km) of 2D seismic in the Mentelle Basin (survey GA 280). This was followed in 2008-09 by the acquisition of a further 2570 km of seismic data, as well as gravity and magnetic data (survey GA 310). Using that data, GA undertook a geological study of the Mentelle Basin, which included assessing its petroleum potential. This pre-competitive work was used to support the release of one area (W10-26) in the Mentelle Basin in the Australian Government's 2010 offshore petroleum acreage release.

3. GA is currently completing geological studies of the remote frontier Capel and Faust Basins, offshore eastern Australia, and the under-explored deepwater Otway and Sorell Basins, offshore Victoria and western Tasmania; the southernmost parts of the Sorell Basin are considered to be frontier as there has been no petroleum exploration in the area. Studies in all these areas include assessment of the petroleum resource potential. Due to limited, or no exploration drilling in these areas, this assessment relies on the geological interpretation of remotely acquired data sets, particularly seismic, gravity and magnetic data. Work on these areas is due to be completed by June 2011.

4. There is an agreed work program which includes extensive collaborative projects between GA and the state and Northern Territory Geological Surveys. These are performed as schedules of work under an umbrella National Geoscience Agreement which ensures no duplication of activities. This work is governed by the Chief Government Geologists Committee, a sub-committee of the Ministerial Council for Mineral and Petroleum Resources.

5. It is not possible to predict exactly when and where earthquakes will occur in Australia.

6. Under a Memorandum of Understanding between GA and New Zealand's Institute of Geological and Nuclear Sciences (GNS), the two agencies are collaborating on a regional geological synthesis of the region encompassing New Zealand's Taranaki Basin to Australia's Capel and Faust Basins. Within this project, GNS has undertaken petroleum systems modelling of the Capel and Faust Basins to assist in GA's assessment of the petroleum prospectivity of the area, and GA has assisted GNS in undertaking studies of the regional tectonic framework.

GA also works with GNS in a number of other areas, including natural hazard monitoring and hazard assessment.