

**Economics Legislation Committee**  
ANSWERS TO QUESTIONS ON NOTICE  
Industry, Innovation, Science, Research and Tertiary Education Portfolio  
Supplementary Budget Estimates Hearing 2012-13  
26 November 2012

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**AGENCY/DEPARTMENT:** DEPARTMENT OF INDUSTRY, INNOVATION, SCIENCE, RESEARCH AND TERTIARY EDUCATION

**TOPIC:** Effects of sea level rises

**REFERENCE:** Question on Notice (Hansard, 26 November 2012, page 7).

**QUESTION No.:** SI-199

**Senator BUSHBY:** Professor, we have previously asked you on a number of occasions about sea level rises. What scientific evidence is there that rising seas will inundate homes in places like Torquay and Anglesea in Victoria, or devastate the Great Ocean Road, by 2050?

**Senator Lundy:** I will take that on notice on behalf of the minister.

**ANSWER**

The following response has been provided by the Department of Climate Change and Energy Efficiency which has responsibility for this matter.

The question relates to the report *Coastal Climate Change Vulnerability and Adaptation* commissioned by the Great Ocean Road Coast Committee on the potential future exposure to coastal hazards from sea level rise for the 55 km stretch of coastline between Torquay and Lorne. The report uses four sea level rise scenarios to assess risk, current mean sea level and 0.2m (by 2030), and 0.8m and 1.4m (by 2100). The report sets out the scientific basis for the finding that built infrastructure is at risk from sea level rise in locations including Torquay and Anglesea. The report is available at [www.gorcc.com.au/projects/319/](http://www.gorcc.com.au/projects/319/).

The 2007 Intergovernmental Panel on Climate Change (IPCC) *Fourth Assessment Report* found that sea levels could rise by up to about 0.8m by the end of the century. Research since the 2007 IPCC report shows that a sea level rise of a metre or more cannot be ruled out.

Across Australia it is estimated that greater than \$266 billion in commercial, industrial, road and rail, and residential assets could be at risk from sea level rise of 1.1 metres.

Sea level rise will continue for hundreds to thousands of years after greenhouse gas concentrations in the atmosphere are stabilised due to the long lag times involved in warming of the oceans and the response of ice sheets.