# Australia shakes up science budget

Clean-energy agency axed and major funding cuts hit the government's science agency, while biomedical research celebrates gains.

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The first budget announced by Australia's conservative coalition government has polarized scientists.

While medical research is boosted, major cuts will see the abolition of Australia's renewable-energy agency, as well as cuts and job losses amongst scientists at the government's science agency, the Commonwealth Scientific and Industrial Research Organisation (CSIRO).

The budget's biggest winner may be a new Aus\$20 billion (US\$18.75 billion) Medical Research Future Fund, which is likely to target diabetes, Alzheimer's disease, cardiovascular diseases, cancer and obesity. The fund will help to double the country's medical research funding by 2022, with annual payments from the fund amounting to Aus\$1 billion per year by then.



Scott Barbour/Getty Images

The new budget by Australian Prime Minister, Tony Abbott, and his government, may be good for biomedical sciences but other sciences will lose out.

"Creation of this Aus\$20 billion fund into perpetuity is among the most significant initiatives in the history of medical research in Australia," says Brendan Crabb, president of the Association of Australian Medical Research Institutes.

lan Olver, chief executive officer of Cancer Council Australia, agrees that the funding mechanism will help gather independent evidence "to address the changing needs of an ageing population and challenges such as obesity". He also lauds an Aus\$95.9-million plan that will accelerate a bowel-cancer screening programme by 14 years and, he says, prevent some 35,000 deaths from bowel cancer over the next 40 years.

### Move overseas

But many think that the increases announced in the budget on 13 May do not justify the cuts, and are not necessarily good for supporting health. "It is disappointing that this kind of long-term vision has not extended to the rest of Australian sciences, and that overall funding for sciences continues to decline," says Suzanne Cory, president of the Australian Academy of Science. "Health research is dependent on maintaining the strength of many disciplines."

The renewable-energy sector will be one of the hardest hit. The lead research and development agency, the Australian Renewable Energy Agency (Arena), will be abolished and its functions merged back into the department of industry, a move meant to save Aus\$1.3 billion. This will also require the repeal of an act passed by the Australian parliament (the ARENA Act 2011). While some 181 Arena projects will continue to be funded, new projects are thought unlikely to get support, sparking concerns that the projects will move overseas.

CSIRO has also been badly hit. It will lose more than Aus\$111.4 million from its budget over four years. The cuts are expected to lead to a loss of 500 jobs – almost 10% of the organization's staff – particularly in areas such as radio astronomy, carbon capture, geothermal research and neuroscience.

### Next generation

"The funding cuts are short-sighted and destructive," says Michael Borgas, acting secretary of the CSIRO section of the Community and Public Sector Union. "They will do lasting harm to CSIRO and the capacity to deliver new inventions and crucial research for the next generation of Australians."

The Australian Research Council (ARC) is also hit with a Aus\$74.9-million budget cut over three years. The ARC, however, released an upbeat statement noting ongoing funding for its core programme for mid-career researchers, and other programmes including

Aus\$35 million to establish a network of type 1 diabetes researchers, Aus\$42 million to expand research on tropical infectious diseases at James Cook University in Townsville, Aus\$26 million for multidisciplinary research in dementia, and Aus\$24 million for research in the Antarctic.

Other losers in this budget include the Defense Science and Technology Organization (which will lose Aus\$120 million), the Australian Nuclear Science and Technology Organization (Aus\$27.6 million) and the Australian Institute of Marine Sciences (Aus\$7.8 million).

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