

# Safeguarding Australia against global climate change



Climate Change in Australia: A collaborative resource management project

# The challenge

External climate variation factors such as increasing anthropogenic greenhouse gas emissions and land use change are creating serious and tangible consequences for Australia. This challenge must be addressed with an enhanced scientific understanding of climate change and variation. In addition to this, it is more important than ever that climate change planning and adaptation tools are adopted.

The total economic cost of natural disasters - most of which will be exacerbated by climate change - is expected to reach \$39 billion per year by 2050.

### The response

CSIRO has partnered with Australian Bureau of Meteorology (BoM) and delivered a new suite of regional climate projections for the whole of Australia, including appropriate downscaled information. These new projections focused on the elements of climate change of highest priority to Natural Resource Management (NRM) groups (i.e. temperature, rainfall, wind).

An overarching framework was developed to coordinate existing and new projections which are displayed in a one stop shop website for climate projections suitable for a multi user clientele. The website is the primary access point and is the preeminent source of climate change planning and adaptation data in Australia.

# The impact

CSIRO's climate change adaptation (CCA) work delivers greater certainty around issues relating to the planning and implementation of climate change adaptation measures.

CSIRO's CCA work has delivered significant benefits. Those benefits extend well beyond NRM Clusters and partner countries. Examples of how the information generated by the CCA work has been used include coastal zone planning by local governments, planning of agriculture and infrastructure projects.

An independent economic assessment estimates that the net present value of benefits to 2025-26 from the CCiA project is \$222 million. The project has a benefit-cost ratio of over 151.

1 ACIL Allen Consulting, 2014. CSIRO's Impact and Value – An Independent Assessment.

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# FOR FURTHER INFORMATION

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