

## **Biography: Dr Damian Barrett**

Dr Damian Barrett is Research Director of the Energy Resources Program in CSIRO's Energy Business Unit comprising ~150 staff and students working on geoscience issues associated with carbon capture and storage, hydrogen production and storage, natural gas and underground energy storage.

He is also Director of the CSIRO's 'Gas Industry Social and Environmental Research Alliance' (GISERA).

Dr Barrett has over 30 years of scientific research and research management experience in the Commonwealth Scientific and Industrial Research Organisation (CSIRO), The University of Queensland, and the Cooperative Research Centres (CRC) for Greenhouse Accounting and eWater.

Dr Barrett graduated with a PhD from the Australian National University in 1993. He was a CSIRO Plant Industry Post-Doctoral Fellow between 1993 and 1994 and a Carnegie-Melon Foundation Visiting Research Fellow at the Smithsonian Institution, USA, in 1995.

From 1996 to 2003, Dr Barrett worked in the CSIRO Climate Change Science Program and CRC Greenhouse Accounting on mitigation of GHG emissions using land-based carbon sinks at the national scale. His research focused on continental scale coupled models of the carbon, nutrient and water cycles.

Between 2004 and 2008, Dr. Barrett was Research Stream Leader of the Environmental Remote Sensing Group in CSIRO Land and Water. He was also Principal Investigator of the NASA 'Carbon, Water and Energy Fluxes of Tropical Savannas' Project.

In July 2008, Dr Barrett was appointed Professorial Research Fellow at the Sustainable Minerals Institute, University of Queensland, and was Director of the Centre for Water in the Minerals Industry between 2009 and 2012. He returned to CSIRO in 2012 where his research interests have focussed on environmental issues and social acceptance in the resources sector with a particular focus on GHG mitigation, water management, onshore natural gas development, legacy issues and emerging issues in hydrogen fuel production and storage and carbon capture and storage.

Dr Barrett has presented at more than 60 national and international workshops and conferences in the last 10 years on topics as diverse as water availability forecasting; the global terrestrial carbon cycle and greenhouse gas mitigation; satellite modelling of water and carbon cycles; human impacts and global climate change; sustainability, mining and biodiversity; water management in the resources sector; carbon capture and storage; hydrogen production and storage; and, social acceptance of resources-based developments.

Dr Barrett has published more than 130 refereed papers, been cited more than 6800 times and has a H-index of 37. Dr Barrett's research interests include environmental biophysics, mathematical inverse modelling, physical hydrology, GHG mitigation technologies, energy resources and sustainable development.

