Not everyone has heard of Geoscience Australia, but what they do has value to every Australian citizen. As Australia’s pre-eminent public-sector geoscience organisation, it is the government’s trusted advisor on the geology and geography of the country. With its long history and reputation for excellence, CEO Dr. James Johnson thinks the time has come for more people to understand the importance of geoscience in their lives, and the important work Geoscience Australia continues to do to address real-world challenges such as securing Australia’s water resources, providing fundamental geographic information, and increasing community resilience to natural hazards.

Geoscience Australia: Government advisor, scientific innovator, public educator

In the fast-paced and constantly changing world of science and technology, Geoscience Australia (GA) is an organisation that uses the latest data and tools to make sense of the Earth, applying their professional expertise in the geosciences to challenges that affect the everyday lives of people across Australia. CEO Dr. James Johnson has a vision of ‘One GA’, an organisation that not only solves problems but does so collaboratively, professionally and progressively, striving for a diverse, innovative and inclusive organisational culture.

Research Features found out more from Dr Johnson about the changing role of the organisation, its strategic priorities and its goal to educate people on the biggest geoscience problems in modern Australia.

Hi Dr Johnson! Can you tell us about Geoscience Australia’s (GA) background and heritage?
GA dates back almost to Australia’s Federation in 1901, when land was set aside for the capital of Australia. This led to the establishment of the Australian Survey Office in 1910, which was GA’s first predecessor organisation. This organisation morphed into the Australian Surveying and Land Information Group (AUSLIG) in 1987 when it merged with the Division of National Mapping. Separately, the Bureau of Mineral Resources, Geology and Geophysics (BMR) was formed in 1946 when the Australian government recognised a need to understand its inventory of minerals. BMR changed its name in 1992 to become the Australian Geological Survey Organisation (AGSO). Geoscience Australia came into being in 2001 when AUSLIG merged with AGSO.

Since that time, GA’s activities have expanded and today it has responsibility for meeting the geoscience requirements of the Australian government. This role takes the agency well beyond its historical focus on resource development to topics as diverse as natural hazards, environmental issues, groundwater research, marine...
and coastal research; carbon capture and storage; vegetation monitoring, and Earth observations from space. GA’s remit also extends beyond the Australian landmass to Australia’s vast marine jurisdiction.

What are the strategic priorities and core mission for GA?
GA applies science and technology to describe and understand the Earth for the benefit of Australia. The six priority areas are: building Australia’s resource wealth; ensuring that Australian communities are more resilient to natural hazards; securing Australia’s water resources; managing Australia’s marine jurisdictions; providing fundamental geographic information; and maintaining geoscience knowledge and capability.

What are GA’s most important challenges?
The Chief Scientist of Australia identified five of the most important societal challenges in 2014. They were: living in a changing environment; promoting population health and wellbeing; managing our food and water assets; securing Australia’s place in a changing world; and lifting productivity and economic growth.

GA has a role to play in all of these priorities, from satellite-derived Earth observations of the changing environment to understanding the quantity and quality of groundwater for food production, leading the development of international standards for scientific data transfer and collaboration, facilitating the growth of resources-based national wealth, and the establishment of national infrastructure for satellite positioning to support technologies that will boost the productivity of a range of Australian industries.

As CEO, what is your vision for GA?
Our work as an organisation and as a group of people is guided by my vision to be ‘One GA’ – striving for unity across diverse business units as we work together to achieve a common goal of providing value to Australia through the development and application of high-quality geoscience. This ‘One GA’ vision explicitly recognises the mutual responsibility all employees have to work collaboratively as we pursue excellence in our science and work with the community and inspire next generation scientists.

Whenever an Australian uses Google Maps or another GPS-based system, they are relying on infrastructure that we maintain.