South Australia: a global leader in Uranium

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ABSTRACT

South Australia has an abundance of uranium with approximately 80% of Australia's reported resources hosted in the state. In 2020 the state's uranium miners produced 5497 tonnes of uranium oxide worth \$521 million – exported globally for low-emission power generation. South Australia has been a major producer for more than thirty years operating under a leading practice regulatory framework that was further enhanced with the introduction of the revised Mining Act on 1 January 2021.

The State remains attractive for new discoveries. Although the majority of production is associated with copper and gold within breccia-hosted iron oxide mineralisation at Olympic Dam, the majority of dedicated uranium exploration remains focused on sandstone-hosted mineralisation.

The South Australian government through the Department for Energy and Mining continues to support a strong exploration industry and investment in the minerals and energy sector. The Accelerated Discovery Initiative (ADI) provides a major contribution to achieving the *South Australian Growth Agenda* target supporting potential discovery of new mineral resources and the development of innovative exploration technologies. The ADI is providing \$10 million over 3 years for approved co-funding exploration activities. This funding has supported the successful and innovative application of passive seismic to aid palaeovalley mapping in the State.

Geoscience Australia's Exploring for the Future (EFTF) initiative is now moving its focus to southern Australia. Extensive airborne electromagnetic (AEM) data has recently been acquired along eastern South Australia. This significant AEM survey is amongst a range of activities within EFTF that will provide benefit to exploration for sandstone-hosted and unconformity style mineralisation in the region.

Geoscientific research on uranium mineral systems by the Geological Survey of South Australia in the northern Curnamona Province and Eromanga Basin continues to further the understanding of the genesis of known uranium occurrences, and outline areas with the potential to host new resources.