UWA Building New CO_2 Lab To Boost Carbon Capture Storage Research

The University of Western Australia will have a new CO_2 research facility built on its campus in 2013.

The Australian Government has announced a $48 MM National Geosequestration Laboratory (NGL) at the Australian Resources Research Centre (ARRC) in Perth with with nodes at other Australian sites, including a new CO_2 research facility at UWA. The NGL is funded by the Commonwealth Department of Industry, Innovation, Science, Research and Tertiary Education through the federal Education Investment Fund.

The NGL will develop innovative solutions to minimise risk and uncertainty in the long-term geological storage of carbon dioxide, which is a by-product of oil and gas extraction. The research forms a key component of Australia's drive to achieve a reduced carbon resources and energy economy, and is vital for Australia's massive oil and gas industry.

The International Energy Agency predicts that one-fifth of the world's carbon dioxide reductions necessary by 2050 will have to come from carbon capture storage (CCS).

UWA Vice-Chancellor Professor Paul Johnson said the University's new CO_2 laboratory and the NGL would be a significant drawcard for attracting international research talent and cooperation, and would help Australia to build capability and create a talent pool in carbon capture storage.

"Universities play an important role in carbon storage R&D and, together with other institutions, industry and government, we can help to provide certainty, objective data and analysis, and the rigour needed to find the right technology for this process," he said.

UWA's Energy and Minerals Institute Director and WA:ERA Board member Tim Shanahan said the NGL helped to position Australia as a world leader in developing deployable CCS solutions.

"Research outcomes at UWA will be used to reduce and capture carbon emissions in the most efficient and safe way," Mr Shanahan said.

"UWA's state of the art CO_2 facility will be led by world-class scientists to produce cutting-edge research into new techniques in geophysical monitoring and further our understanding of the complex properties of CO_2 through advanced process engineering.

"The teaching labs will ensure our students graduate with the highest skills and most relevant, accredited training."

The NGL will operate as a collaboration between CSIRO, UWA and Curtin University. It complements and builds on the successes of the Western Australian Energy Research Alliance and aims to develop and deploy critical research and development to help enable commercial-scale carbon storage in Australia.

At the recent Perth announcement, the Minister for Science and Research, Senator the Hon Chris Evans, said the NGL will be one of the most significant international centres for research, training and technology development for the global resources sector.

"By strengthening partnerships between industry, government and the global research community we will secure genuine sustainability and lasting prosperity," Senator Evans said. ■

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