

HYDROGEN ECONOMY

## Buru Energy Subsidiary 2H Resources Partners With CSIRO To Advance Natural Hydrogen Exploration Program

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In a significant step forward for its natural hydrogen exploration program, [Buru Energy Ltd \(ASX:BRU, OTC:BRNGF\)](#) subsidiary 2H Resources has entered into a research agreement with the Commonwealth Scientific and Industrial Research Organisation (CSIRO).

Thomas Nador, Buru's CEO commented:

” Buru has been actively incubating its 2H Resources subsidiary focused on natural hydrogen and helium exploration and development to ensure it is part of the future of energy, and not a passive observer of the transformation of the energy sector that is well underway.

“This latest development, involving this research agreement with the CSIRO, will provide 2H Resources with added expertise and access to potential breakthrough innovation to support early exploration efforts for this essentially carbon-free energy source.”

### Collaboration with CSIRO

The project, “Baseline study for natural hydrogen flow – long term deployment of autonomous monitoring instruments to detect natural hydrogen and other gases in soil”, aims to accelerate the discovery and positioning of future dedicated natural hydrogen exploration wells.

As part of the collaboration, 2H Resources will gain access to state-of-the-art autonomous soil gas sensors developed by CSIRO. These cutting-edge sensors will play a crucial role in measuring the flow of hydrogen and other gases in the soil.

The deployment of these sensors is a key element of 2H Resources' experimental exploration workflow designed to identify areas highly prospective for naturally occurring hydrogen.

The research agreement will at first involve the provision and deployment of six monitoring units and one base station over a three-month period.

After this a larger-scale production, with the assistance of external manufacturing contractor(s), will be considered to expand the deployment of up to 140 autonomous monitors, covering larger test sites over six months.

Despite ownership of the monitoring technology remaining with CSIRO, 2H Resources stands to gain valuable insights as an early adopter of this innovative monitoring technology. The vast amount of data acquired will significantly inform its future exploration plans and decision-making processes.

Preferred applicant for exploration licences

In other news for Buru, the South Australian Petroleum Exploration Licence (PEL) areas owned by 2H Resources are considered to hold immense potential for natural hydrogen reserves, and the state's government has confirmed 2H Resources as the preferred applicant for six PEL and two Gas Storage Exploration Licence (GSEL) applications.

The exploration process, including the deployment of the autonomous sensors, will begin once land use agreements on the application areas are executed, and the PELs and GSELs are granted. This phase will focus on field testing the selected sites within the PEL areas to remotely monitor the presence and flux of gases in the soil. The data collected from these tests will help refine survey designs and data analytics strategies.

Estimates in

An independent third-party Hydrogen Prospective Resource estimate from RISC Advisory in January 2023 indicated a range of risked prospective hydrogen resources across the six application areas, with a risked Prospective Best Estimate Resource (2U) of 343 million kilograms.

These estimates are being considered in the context of the target price of \$2 per kilogram for alternative hydrogen production methods to be competitive with fossil fuel-based hydrogen.

To ensure a smooth licensing process, the company has initiated engagement with key Native Title groups covering the application areas, which it expects to conclude by the end of this year.

“In concert with progressing key land access agreements to support the granting of the South Australian Petroleum Exploration Licences covering over 30,000 square kilometres, and commissioning an independent third-party assessment of the prospective hydrogen resource potential of these areas, the company is making steady progress to realising the potentially very substantial shareholder value from this exciting and innovative hydrogen initiative,” Nador concluded.