



## **IPHE Country Update September 2023: Australia**

<b>Name</b>	Rebecca Thomson
<b>Contact Information</b>	<a href="mailto:rebecca.thomson@dcceew.gov.au">rebecca.thomson@dcceew.gov.au</a>
<b>Covered Period</b>	April 2023 to September 2023

### **1. New Initiatives, Programs, and Policies on Hydrogen and Fuel Cells**

Australia has announced a \$2 billion Hydrogen Headstart program which will help to scale up Australia's renewable hydrogen industry. This will contribute to the Government's objective to make Australia a renewable energy superpower. It will provide revenue support for large-scale renewable hydrogen projects through competitive hydrogen production contracts.

We continue to progress important work under our Guarantee of Origin (GO scheme) certification scheme (used to certify H<sub>2</sub> and its derivatives) and the National Hydrogen Strategy Review.

- We are currently consulting on a GO scheme consultation package, which seeks stakeholder feedback informing final GO scheme legislation.
- Work on the National Hydrogen Strategy review is progressing rapidly to ensure Australia remains on the path to becoming a global hydrogen leader, and for the decarbonisation of Australian industries.

### **2. Hydrogen and Fuel Cell R&D Update**

The Australian Government announced the ARENA Hydrogen R&D Funding Round of up to \$25 million to support research and development activities in renewable hydrogen production, storage and distribution.

The fund aims to accelerate the commercialisation of renewable hydrogen through innovative R&D in hydrogen production, storage and distribution technologies, and build academic research capacity.

### **3. Demonstration, Deployments, and Workforce Developments Update**

In September 2023, The Australian and South Australian Governments finalised a \$70 million grant agreement to develop the Port Bonython Hydrogen Hub under the Regional Hydrogen Hubs Program. The funding will deliver common user infrastructure upgrades to support proposed private sector projects at Port Bonython that could generate up to 1.8 million tonnes of hydrogen by 2030.

In July 2023, the Australian Government awarded \$70 million in funding to Origin to progress the proposed Hunter Valley Hydrogen Hub (HVHH). Funded under the Government's Regional Hydrogen Hubs Program, the project aims to produce up to 5500 tonnes of green hydrogen per year.

The Australian Government and BP formally executed a grant agreement for \$70 million for the H<sub>2</sub> Kwinana Hydrogen Hub project in June 2023. The project will see an investment of over \$400 million in the future of Australia's hydrogen industry. At 75 MW, the project's



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electrolyser will be one of the largest hydrogen developments proposed for Australia in the medium term.

In July 2023 the Australian Renewable Energy Agency (ARENA) announced \$32.1 million funding for Rio Tinto and Sumitomo Corporation to trial hydrogen calcination technology at the Yarwun Alumina Refinery in Gladstone, Queensland. The \$111.1 million 'Rio Tinto and Sumitomo Corporation Yarwun Hydrogen Calcination Pilot Demonstration Program' will be the first-of-its-kind deployment of hydrogen calcination in the world.

In May 2023, ARENA announced \$20 million in funding to Stanwell Corporation Limited (Stanwell) to support a front-end engineering and design (FEED) study for a large-scale renewable hydrogen project in Gladstone, Queensland. The \$117 million project will finalise the development stage of the Central Queensland Hydrogen (CQ-H2) Project, which will initially involve the installation of up to 640 MW of electrolysers to produce hydrogen for commercial operations commencing in 2028.

#### 4. Events and Solicitations

The Australian Government – through the Australian Trade and Investment Commission – is supporting the Asia-Pacific Hydrogen Summit taking place on 26 – 27 October. This event brings together global hydrogen leaders to meet with the region's policy makers and energy stakeholders.

#### 5. Investments: Government and Collaborative Hydrogen and Fuel Cell Funding

Since April, the Australian Government has provided over AUD\$2 billion in hydrogen specific funding under the following:

- Hydrogen Headstart: \$2 billion providing revenue support for large-scale renewable hydrogen projects through competitive hydrogen production contracts. This investment will help bridge the commercial gap for early projects.
- First Nations Engagement: \$2.0 million to establish a fund to support First Nations people and businesses to engage with hydrogen project proponents, planning processes and program design.
- Hydrogen Research and Development Round: ARENA has \$25 million for two streams: one focused on improving and optimising the production of renewable hydrogen and hydrogen derivatives such as ammonia, and another investigating storage and distribution solutions.
- Guarantee of Origin Scheme: \$38.2 million was provided for the creation of a Guarantee of Origin scheme to certify renewable energy and track and verify emissions from clean energy products.
- Alongside funding to the Yarwun Alumina Refinery and Central Queensland Hydrogen (CQ-H2) Project mentioned above (\$53MAUD), the Australian Government has provided significant project funding including:
  - \$20.9 million for Wollongong-based startup Hysata to demonstrate their next generation hydrogen electrolyser technology at commercial scale
  - \$36.1 million commitment to AGIG for the 10 MW electrolyser deployment in Wodonga, Victoria.



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### **6. Regulations, Codes & Standards, and Safety Update**

The Australian Government continues to progress work under the National Hydrogen Regulatory Review. This initiative supports development of Australia's hydrogen industry by providing greater clarity around regulatory pathways.

The next stage of the review involves delivering draft National Codes of Best Practice for the following topics to Energy Ministers for their endorsement and publication:

- Hydrogen Production Safety.
- Ammonia Production Safety.
- Hydrogen Refuelling Stations.
- Hydrogen Appliances, Plant and Equipment Compliance.
- Ammonia Appliances, Plant and Equipment Compliance.

Once published, the National Codes of Best Practice will provide clear regulatory pathways for the lifecycle of these types of hydrogen and ammonia projects.

It is anticipated that these National Codes of Best Practice will be available to hydrogen project proponents sometime in 2024.