



PRIMERAS JORNADAS DE **HIDRÓGENO**

OPORTUNIDADES INTERNACIONALES
DEL HIDRÓGENO PARA LA ARGENTINA



Industria del Hidrogeno en Australia



Embajada de la
República Argentina
Australia



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ASPECTOS DE MAYOR RELEVANCIA

1. El gobierno de Australia cuenta con un plan estratégico para el desarrollo de la industria del hidrógeno, lanzado en 2019.
2. Australia cuenta con distintas plataformas con información relevante para actores del sector
3. Casi todos los estados y territorios cuentan con estrategias propias para el desarrollo del sector.
4. El gobierno australiano ha concretado una serie de acuerdos bilaterales de cooperación, enfocándose en áreas de interés mutuo.
5. Desde el sector privado, se destacan proyectos internacionales de Fortescue Future Industries y el Australian Hydrogen Council, incluyendo con la Asociación Chilena de Hidrógeno.

Iniciativas/Programas de Alcance Nacional

1. Hoja de Ruta de CSIRO
2. Estrategia nacional de hidrógeno / Plan de reducción de emisiones
3. HyResource
4. HyCapability
5. Hydrogen Technology Cluster Australia (NERA)
6. Geoscience Australia AUSH2

CSIRO National Hydrogen Roadmap (2018)

La hoja de ruta aborda las siguientes cuestiones:

- Superación de barreras a la activación del mercado, específicamente la falta de infraestructura y el costo de suministro de hidrógeno, por medio de inversiones estratégicas del sector público y del sector privado
- Potencial en Australia para la producción de hidrógeno a partir de distintos procesos químicos.
- Tecnologías para el almacenamiento y transporte de hidrógeno
- Posibles ámbitos de utilización de hidrógeno, incluyendo transporte, sistemas energéticos en ubicaciones remotas y exportación, entre otros.
- Aplicaciones posibles estableciendo un precio de hidrógeno competitivo

Australia's National Hydrogen Strategy (2019)

Ejes de acción:

- Apoyo para proyectos piloto estratégicos
- Evaluar necesidades de infraestructura para la cadena de valor
- Creación de centros productivos (“hydrogen hubs”) que nucleen actores clave (por ej, en industria y transporte)
- Desarrollo de cadenas de valor para los centros productivos

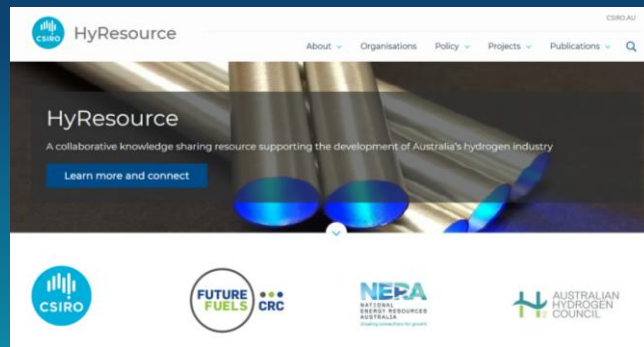
Prioridades:

- Reforma regulatoria para eliminar barreras al desarrollo de la industria
- Acuerdos internacionales con mercados clave como sustento de inversiones
- Coordinación internacional para elaboración de esquema de certificación, a fines de establecer normas favorables para el comercio del hidrógeno
- Apoyo a acciones para el desarrollo tecnológico, desde I&D hasta comercialización

Australia's Long-term Emissions Reduction Plan (2021)

- Se busca reducir el precio de producción a 2 dolares x kg
- Inversion de casi USD mil millones en la industria del hidrógeno, orientado al desarrollo de la actividad exportadora y el desarrollo de sectores relacionados bajos en carbono como amoníaco, fertilizante y acero.
- Se espera que Australia pueda cubrir el 10% de la demanda global de hidrógeno para el año 2050

PRIMERAS JORNADAS DE HIDRÓGENO



OPORTUNIDADES INTERNACIONALES
DEL HIDRÓGENO PARA LA ARGENTINA



Organisations

There are innumerable market players involved across the hydrogen industry value chain in Australia (and New Zealand).

Many individual companies and institutions involved in hydrogen-related research, development and deployment activities can be found in the information displayed under the [Projects](#) tab.

There are a number of key organisations with a national (and international) perspective – e.g. industry and related associations, collaborative research and standards bodies, government and related entities – involved in hydrogen research, development and deployment activities. These include:

Government and Related Entities

- Teams supporting implementation of the National Hydrogen Strategy such as the **Hydrogen Project Team** and the **Commonwealth Department of Industry, Science, Energy and Resources (DISER)**
- Major funding bodies such as the **Australian Renewable Energy Agency (ARENA)** and the **Clean Energy Finance Corporation (CEFC)**
- Pre-eminent scientific research organisations with considerable hydrogen-related activities such as the **Commonwealth Scientific and Industrial Research Organisation (CSIRO)** and **Geoscience Australia**
- Austrade** with its focus on industry promotion and investment attraction

Industry and Collaborative Organisations

- Peak hydrogen industry bodies such as (in Australia) the **Australian Hydrogen Council** and (in New Zealand) the **New Zealand Hydrogen Association**
- Significant industry associations, such as the **Australian Pipelines and Gas Association** and **Energy Networks Australia**, that are providing financial and other support for hydrogen-related R&D activities and whose members are involved in actual project deployment (and related activities)
- Cooperative Research Centres with significant hydrogen-related research programs such as the **Future Fuels CRC** and the **Future Energy Exports CRC**
- NEPA – National Energy Resources Australia** (focus on developing hydrogen industry clusters), **Standards Australia** (focus on developing standards for hydrogen use), the **Clean Energy Council** (Renewable Hydrogen Directorate – focus on export capability), and the **Smart Energy Council** (Hydrogen Division – focus on industry promotion through knowledge sharing tools)

Home

About

Organisations

Hydrogen Project Team and the Commonwealth Department of Industry, Science, Energy and Resources (DISER)

Australian Hydrogen Council

ARENA

Austrade

Clean Energy Council

CEFC

CEFC

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Policy

The clean hydrogen industry is enjoying considerable momentum, with the number of projects being announced globally rising rapidly. The number of countries with policies that directly support investment in hydrogen technologies is increasing. In the past few years, many jurisdictions have released strategies, roadmaps and policy statements focused on or significantly impacting the development of a clean hydrogen industry.

For Australia and New Zealand, HyResource provides a comprehensive overview of the key national and state/provincial/territory hydrogen strategy and roadmap documents and related funding and policy announcements in support of hydrogen industry development.

Understanding the global landscape is an important element in the decision-making process for investors and policy-makers, and HyResource includes summary information on the key national and state/provincial hydrogen vision, strategy, roadmap documents and related policy statements from the major global economies.

Australia and New Zealand

Detailed information on key national and state/provincial/territory hydrogen-related policies.

International

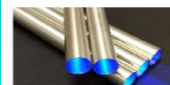
Catalogue of key national and state/provincial hydrogen-related policies from major world economies.

Projects

Hydrogen project activities in Australia (and New Zealand) are represented through two categories:

- Industry** – includes projects being undertaken or proposed by corporate/industrial entities involving the construction and operation of pilot and larger-scale plant and facilities, and
- Research Programs** – includes significant hydrogen-related R&D activities being undertaken by research bodies or research partnerships arising from major research funding programs.

A third category, **International**, provides information on global hydrogen project databases and related information.



Industry →

Hydrogen large-scale, demonstration and pilot projects



Research →

Major hydrogen R&D programs



International →

Information on international hydrogen projects.

[ABOUT](#) - [PUBLICATIONS & INSIGHTS](#) - [PROJECTS](#) - [NEWS & EVENTS](#) - [ENERGY HEROES](#) - [TECH CATALOGUE](#) - [CONNECT](#)

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HyCapability

Australian Hydrogen Capability Finder

HyCapability is Australia's first hydrogen capability finder — a free, online, searchable platform that connects Australian hydrogen businesses with a domestic and global market.

Developed by NERA and the [Hydrogen Technology Cluster Australia \(H2TCA\) network](#), and created with the assistance of [EconomX](#), the platform maps regional hydrogen ecosystems and supply chain capacity, making it easier to identify businesses along the hydrogen value chain that have innovative technology, service and equipment offerings for the hydrogen industry.

HYCAPABILITY
AUSTRALIAN HYDROGEN
CAPABILITY FINDER

Register your capability

To express your interest in being listed on HyCapability, **create your hydrogen business profile** on the EconomX platform, and then **register your interest in HyCapability**. Click [here](#) for guidance notes on how to register. For more information on this process, please refer to the FAQs below.

REGISTER HERE

Search Suppliers

Categories (None Selected)

- ☐ Production
- ☐ Storage
- ☐ Transportation (of H2)
- ☐ Utilisation
- ☐ Cross-cutting

BOC Limited
Rocklea QLD 4106, Australia

Australia's leading manufacturer and distributor of industrial, bulk, scientific and medical gases. One of Australia's leading supplier of Welding machines, equipment...

[VIEW MORE](#)

Epic Environmental
95 N Quay, Brisbane City QLD 4000, Australia

Epic Environmental is a specialist, environmental consultancy with offices located in New South Wales and Queensland, Australia. Across a wide range of public, commercial and...

[VIEW MORE](#)

Contract Resources Pty Ltd
37 South St, Lytton QLD 4178, Australia

Contract Resources onshore and offshore services are set out below - High pressure water blasting, cold cutting, industrial cleaning and fin fan cleaning - Catalyst handling...

[VIEW MORE](#)



Cluster locations and contact details

The interactive map below provides a location-specific guide to Australia's hydrogen clusters.



State/territory	Cluster name	Cluster leads/members
ACT	ACT Renewable Hydrogen Cluster	Evoenergy, ACT Renewables Hub, Australian National University, ACT Government, Hydrogen Australia, Smart Energy Council
NSW	NewH2 - Hunter Hydrogen Technology Cluster	The University of Newcastle Australia and 14 partners
NT	NTH2 - Northern Territory Hydrogen Technology Cluster	Darwin Innovation Hub along with NT Government, Energy Club NT and Charles Darwin University (CDU)
QLD	H2Q - Queensland Hydrogen Industry Cluster	Regional Development Australia Brisbane, on behalf of 38 organisations
	CQH2 - Central Queensland Hydrogen Ecosystem Cluster	Gladstone Engineering Alliance and Gladstone Regional Council, Gladstone Ports Corporation, Central Queensland University, Department of State Development, Regional Development Australia and Start up Gladstone.
	TSBE Hydrogen Industry Cluster	Toowoomba and Surat Basin Enterprise (TSBE)
SA	SA-H2H Hydrogen Technology Cluster	EfficientSee Pty Ltd and Mumford Commercial
TAS	Bell Bay Hydrogen Technology Cluster	Bell Bay Advanced Manufacturing Zone (BBAMZ)
VIC	Gippsland Hydrogen Cluster	Committee for Gippsland on behalf of 64 supporting organisations

AusH2 - Australia's Hydrogen Opportunities Tool – Geoscience Australia



Potencial de recursos eólicos y solares



Proyectos de hidrógeno



Ubicaciones potenciales para exportación

Vinculación Internacional

- Singapur
- Japón
- Corea
- Alemania
- QUAD y otras iniciativas multilaterales
 - International Partnership for Hydrogen and Fuel Cells in the Economy
 - Clean Hydrogen Mission – Mission Innovation
 - Hydrogen Initiative – Clean Energy Ministerial

Estrategias de Estados/Territorios

South Australia

- Orientado a consumo interno y exportación
- Acciones en 5 áreas:
 - Facilitar inversiones en infraestructura
 - Establecer marco regulatorio
 - Fortalecer vinculos comerciales y capacidades de suministro
 - Fomentar innovacion y capacidades de fuerza laboral
 - Integracion de hidrógeno a sistema energético del estado

Queensland

- Incluye fondo de USD 11 millones para proyectos industriales
- Acciones en 5 áreas:
 - Apoyo a la innovación
 - Facilitar inversión del sector privado
 - Asegurar marco regulatorio eficiente
 - Fortalecer confianza de la comunidad
 - Fomentar desarrollo de capacidades tecnológicas

Western Australia

- Incluye inversion del estado de USD 20 millones
- Se enfoca en el desarrollo de la industria en los siguientes rubros:
 - Exportación
 - Aplicaciones remotas
 - Incorporación del hidrógeno a redes de gas natural
 - Transporte

Estrategias de Estados/Territorios

Victoria

Ejes de la estrategia:

- Sentar las bases (Formación, regulación, investigación)
- Vinculación con sectores económicos (exportación, transporte, redes energéticas, etc.)
- Liderazgo en el sector (coordinación del gobierno del estado, confianza de la comunidad, Victoria como referente de comercio y para atraer inversiones)

Northern Territory

Áreas de acción:

- Desarrollo de industria local
- Gestión de recursos
- Crecimiento y aprovechamiento de demanda
- Apoyo a la innovación
- Regulación

New South Wales

- Hidrógeno esparte del plan del estado para lograr cero emisiones netas al 2050
- El plan incluye la mezcla de 10% de hidrógeno en la red de gas al 2030

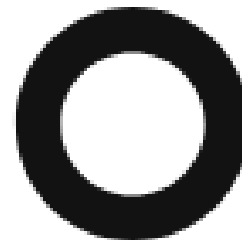
Tasmania

- Incluye USD 37 millones para fomento de inversiones
- El gobierno busca ser líder en producción de hidrógeno a gran escala y proveedor global de hidrógeno verde

Fortescue Future Industries

- Anuncio reciente de inversión en Argentina de USD 8,4 mil millones para la generación de 2,2 millones de toneladas de hidrógeno verde para año al 2030.
- El objetivo de Fortescue a nivel global es el desarrollo de proyectos para la generación de 15 millones de toneladas de hidrógeno al 2030.
- Acuerdos recientes firmados incluyen con el Reino Unido, Jordania y Papua Nueva Guinea

**FORTESCUE
FUTURE
INDUSTRIES**



Australian Hydrogen Council

- Principal entidad del sector en Australia
- Entre sus miembros se encuentran algunas de las principales empresas presentes en Australia, incluyendo Toyota, Hyundai, British Petroleum, Woodside y Fortescue, entre otras.
- Convenio de colaboración entre la Asociación Chilena de Hidrógeno (H2 Chile) y el Australian Hydrogen Council para fomentar el desarrollo del hidrógeno verde.



Gracias



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