



Energy, infrastructure and environment

Hydrogen

forv/s
mazars

Hydrogen

The fuel of the future

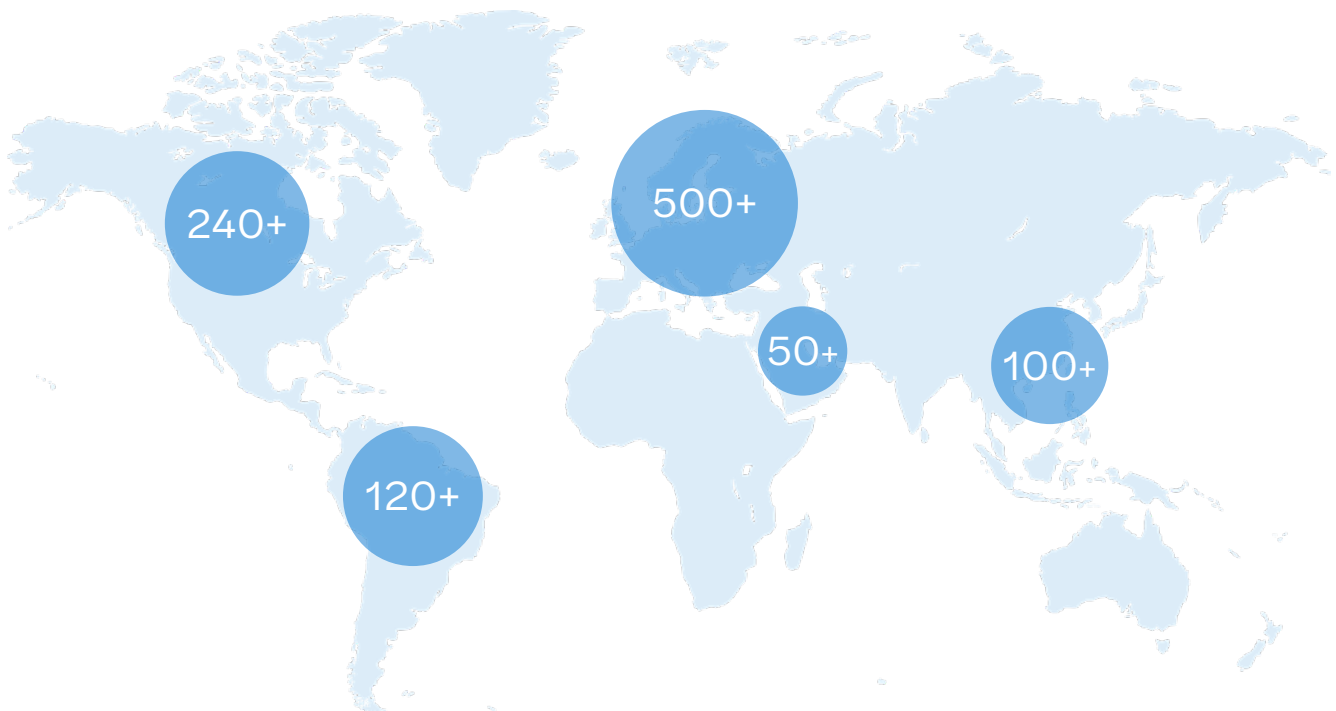
Hydrogen is a versatile and sustainable replacement for high-carbon fuel that shows growing potential in the global transition to a low-carbon economy and global decarbonisation.

The global hydrogen market has witnessed a significant rise in the hydrogen projects funnel across various project stages with most growth occurring in the advanced planning stage.

Policies and initiatives promoting hydrogen adoption as part of comprehensive climate strategies are gaining traction worldwide.

As of [October 2023](#), a total of 41 governments have adopted hydrogen strategies, accounting for nearly 80% of global energy-related CO2 emissions.

Europe remains the global leader in hydrogen with the largest number of projects (540) and the highest total investments announced of USD 193 billion (33% of global investments).





Key facts on Hydrogen

1400+

Hydrogen projects announced globally.

1,011 of which plan full or partial deployment by 2030.

\$570bn

Direct investments in hydrogen projects announced through 2030 (+30%).

\$39bn have passed FID.

300GW+

Of electrolysis capacity has been announced through 2030.

30%

Of investment growth in nine months.

\$430bn

Of investment gap remains to be in line with the 2030 ambition.

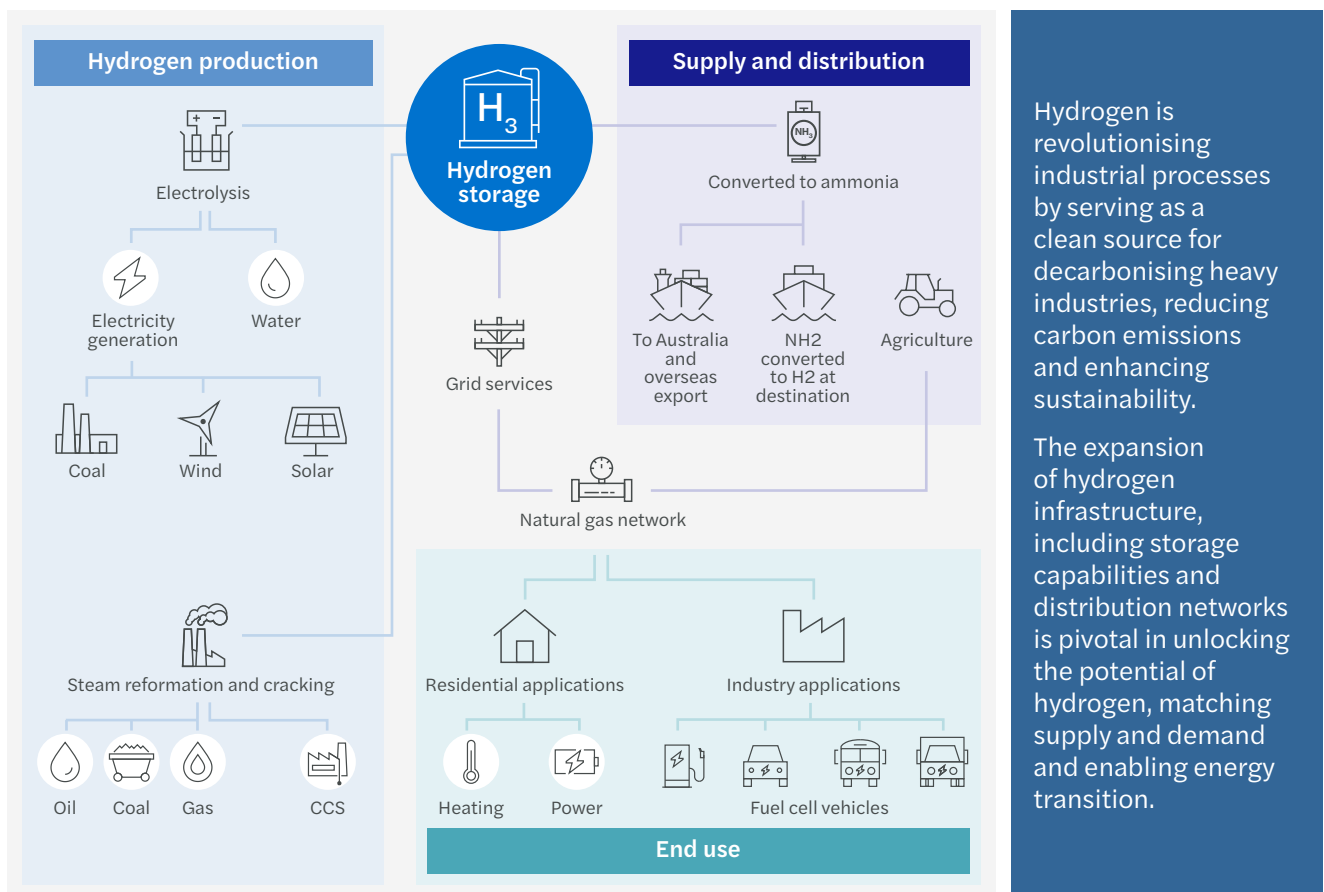
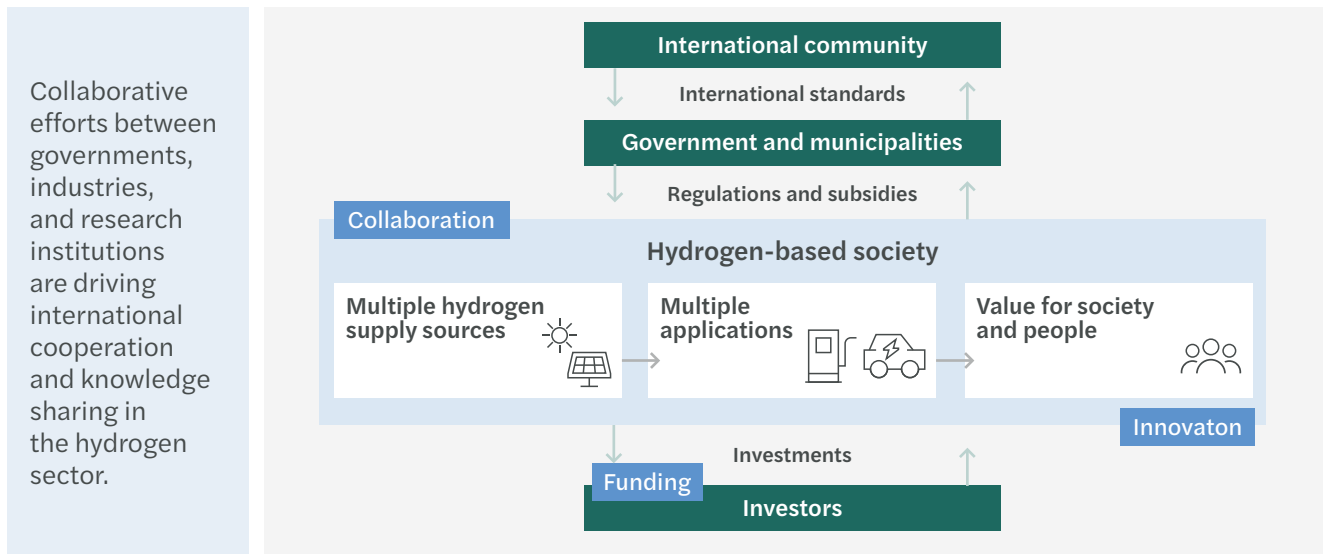
45Mt p.a.

of clean hydrogen supply announced by 2030.

Of which 70% is renewable and 30% is low-carbon.

Sources: Hydrogen Council, International Energy Agency, Government of Australia

The potential of Hydrogen economy



What is next for Hydrogen?

Harmonisation of standards and certification across the emerging hydrogen value chain, transparency around the PPA activities and reference prices, and the ability to meet the requirements of environmental criteria at the international level are

critical to scaling up the production of low-carbon hydrogen. Stakeholder acceptance of hydrogen into the energy mix should not be overlooked to enable hydrogen integrated into the energy ecosystem.

A global and integrated approach

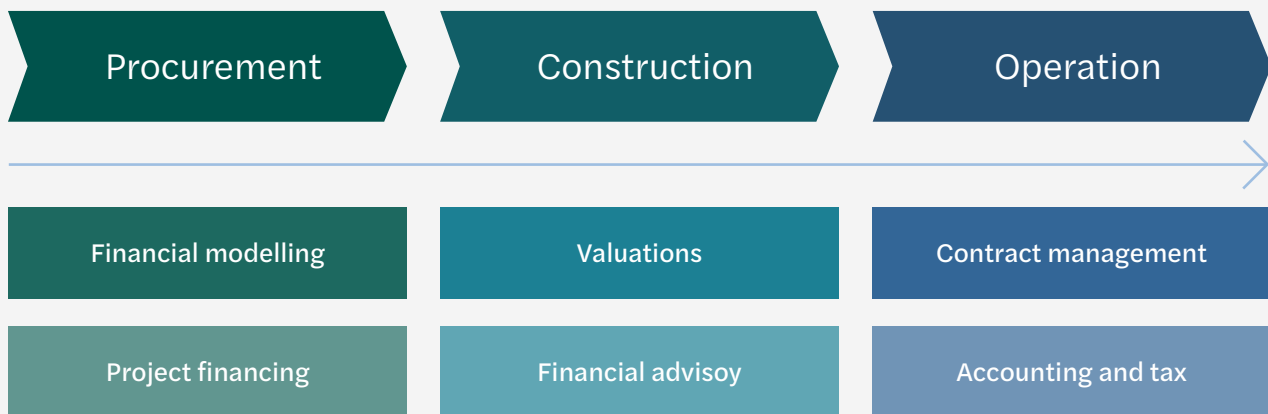
Our integrated team of specialists provide services to clients in the hydrogen market, ranging from large multinational corporates to SMEs, helping them to navigate the challenges of an ever-changing business environment.

We continuously invest in the development of strong sectoral expertise and specialised technical skills. When combined with our innovative approach, this ensures our services are relevant and responsive to the needs of the industry and each client.

How we can help

We provide a holistic approach, supporting each phase of a hydrogen project, including: financial modelling and the development of a strong business case at project commencement; setting up the business structure, processes and systems; developing effective accounting, commercial and taxation frameworks; and, providing company secretarial services.

In addition, we can provide valuation, audit, consulting, and M&A services at the later stages of hydrogen project delivery.



At Forvis Mazars, we work under the umbrella of one global team. This enables us to work with clients wherever they are – internationally and locally. Through our flexible approach, we help clients evaluate.

business opportunities and make new offers, and strengthen strategic decision-making to build a sustainable business and transition to new energies.

Case study: The NEOM Green Hydrogen Project

Model audit of the world's largest utility scale, commercially-based hydrogen facility powered entirely by renewable energy.

The NEOM Green Hydrogen Project, an equal joint venture between NEOM, Air Products and ACWA Power, is the world's largest utility scale, commercially-based hydrogen facility powered entirely by renewable energy.

The Production of clean hydrogen by electrolysis using thyssenkrupp technology; production of nitrogen by air separation using Air Products technology; and production of up to 1.2 million tonnes per year of green ammonia. When complete, the project will mitigate the impact of 5 million metric tonnes of carbon emissions per year.

More than 3.8 GW of electrolyser projects have reached FID or started construction. This is mainly due to construction starting on the NEOM

Forvis Mazars was engaged by ACWA Power, Air Products and Public Investment Fund (PIF) - Kingdom of Saudi Arabia to provide model audit services for the 3.9GW NEOM Green Hydrogen Project in Saudi Arabia.

The project in numbers

3.9GW

of Green Hydrogen production capacity.

600 tonnes per day

of clean hydrogen by electrolysis,
upon commissioning.

4GW

of renewable energy.



Trusted by clients around the world

<h2>Transaction support</h2>	<ul style="list-style-type: none"> Transaction support in relation to the acquisition of a target in Italy, involved in hydrogen production. 	<ul style="list-style-type: none"> Provided assistance to a company in relation to a potential investment in carbon-free electric and hydrogen systems in France.
<h2>Audit services</h2>	<ul style="list-style-type: none"> Provided services to Air Liquid, which has a goal of producing 3GW electrolysis capacity by 2030 in Italy. Audit services for the IPO of Hydrogen Refueling Solutions, set up to provide hydrogen based refueling stations for electric vehicles, in France. 	<ul style="list-style-type: none"> Audit services for the IPO of Haffner Energy, the designer and builder of HYNOCA, a disruptive carbon-negative solution for producing competitive renewable hydrogen, in France.
<h2>Financial modelling</h2>	<ul style="list-style-type: none"> Developed a financial model to assess the prospective investments ranging from \$8m to \$50m across smart infrastructure projects including hydrogen, hybrid storage and distributed energy in Germany and the UK. 	<ul style="list-style-type: none"> Financial modelling support for the development of a large-scale electrolyzers to produce green hydrogen, powered by 15GW of renewable energy in Africa. Financial modelling services in relation to the development of a hydrogen project in the Americas.
<h2>Model audit</h2>	<ul style="list-style-type: none"> Model audit in relation to the development of a 10MW electrolyser renewable hydrogen production facility co-located with an 18MWp solar PV field and 5MW/5MWh BESS. Currently providing model audit services to a green hydrogen and ammonia developer for a project in Americas. 	<ul style="list-style-type: none"> Model audit in relation to the development Neom green hydrogen plant-which is the world's largest plant to produce green hydrogen, powered entirely by renewable energy in Saudi Arabia.
<h2>Due diligence</h2>	<ul style="list-style-type: none"> Buy-side due diligence for Plastic Omnium, for the acquisition of a company specialised in the design and production of tanks for the storage of pressurised hydrogen. Buy-side due diligence for Swiss Hydrogen, for the acquisition of a company specialised in the design & production of solutions in hydrogen fuel cell systems dedicated to mobility. 	<ul style="list-style-type: none"> Model due diligence to a subsidiary of a listed energy company, which is developing technology of producing 1.9GW of green hydrogen sector by 2030 in Spain. IPO preparedness program (AIM) for a leading R&D and manufacturing company operating in the hydrogen sector, UK.
<h2>Commercial advisory</h2>	<ul style="list-style-type: none"> Review, maturity assessment, and development of recommendations in relation to Cadent's applications of Ofgem for funding of hydrogen pipeline (this pipeline is part of HyNet Cluster, Phase 2). 	

Specialist expertise to meet global energy needs

Our multidisciplinary approach is key to supporting our clients' changing needs and helping them achieve sustainable growth.

For over 15 years, we have been demonstrating strong experience, skills and expertise across the energy and infrastructure sectors, which are easily transferable to upcoming sectors like hydrogen.

We support our clients across the whole value chain, offering a rich and full breadth set of services including Audit, which has long been at the heart of our business, and other core services such as tax, financial advisory, consulting, legal and compliance, outsourcing and sustainability practices.



Renewable energy



Infrastructure /real estate



Power and utilities



Oil and gas



Water and waste



Natural resources

Recognised as the

#1 Global Model Auditor

for the tenth consecutive year
(by Information as per the deal count and deal value)

A track record of

developing over 1,000 relevant financial models

using Forvis Mazars financial modelling methodology

Valued in excess of

\$25 billion of investments

in the past 12 months alone

Ranked

#3 by number of successful M&A Deals in CEE

(based on Mergermarket CEE Accountant League Table for 2023)

Provided training to over

18,000 professionals

globally

Global sector contacts

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