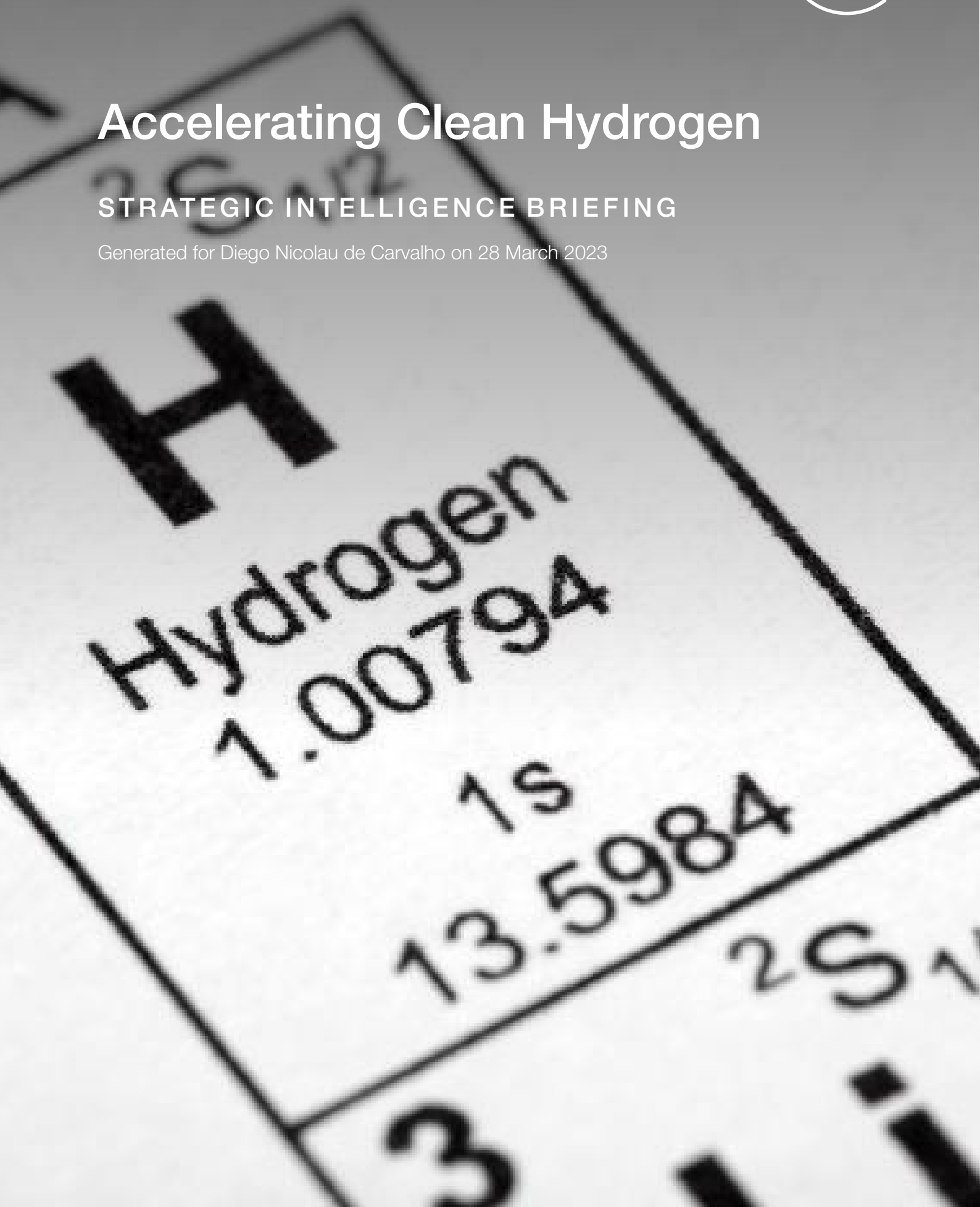


Accelerating Clean Hydrogen

STRATEGIC INTELLIGENCE BRIEFING

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Executive Summary



Strategic Intelligence on
Accelerating Clean Hydrogen

Hydrogen is the most abundant element in the world and its diverse application has made it a critical pillar in the transition to net-zero. However, the market is not scaling fast enough to deliver on its potential.

The Accelerating Clean Hydrogen Initiative aims to create an environment that allows hydrogen to realise its role in the global energy transition, drive collaboration and accelerate the number of clean hydrogen projects reaching final investment decision.

To achieve this mission we work with international stakeholders across industry, policy and finance, to launch two complementary programmes: the Enabling Measures Roadmaps for Green Hydrogen covering key geographies, and the Clean Hydrogen Project Accelerator.

To learn more about the role of clean hydrogen please read our blog.

This briefing is based on the work of the Forum's Accelerating Clean Hydrogen initiative.

The key issues shaping and influencing Accelerating Clean Hydrogen are as follows:

Supporting Policy Understanding

The variation and lack of clarity regarding hydrogen policies globally act as a significant barrier

Connecting Global Regions

The growing interest in hydrogen ultimately stems from its ability to decarbonise hard-to-abate sectors

Facilitating Stakeholder Collaboration

Due to the diverse applications of clean hydrogen, the market coalesces many stakeholders across the value chain

Accelerate the Route to Final Investment Decision

Final investment decision (FID) is a critical phase for hydrogen projects

Accelerating Access to Long Term Offtake

Today, the vast majority of hydrogen is used by the refining and chemicals industries

Below is an excerpt from the transformation map for Accelerating Clean Hydrogen, with key issues shown at the centre and related topics around the perimeter. You can find the full map later in this briefing.



For the very latest information about Accelerating Clean Hydrogen, visit our [transformation map](#) on the [Strategic Intelligence website](#) or [apps](#).

1

Latest insights

The latest publications from our network of over four hundred content partners.

Below are your latest updates on the topic of Accelerating Clean Hydrogen spanning 15 different sources.



Harvard Kennedy School - Belfer Center for Science and International Affairs

Harvard-Tsinghua Joint Statement on Carbon-Neutrality Pathways for China and the United States

27 March 2023

Teams from Harvard University (Cambridge, Massachusetts) and Tsinghua University (Beijing, China) have been working together on how to maximize the likelihood that the carbon-neutrality goals announced by the United States and China for around mid-century can be met. This statement by senior members of the two teams conveys key findings from the first phase of the collaborative project.



World Resources Institute

Green Hydrogen Adoption in Fertilizer Manufacturing: Opportunities and Challenges

14 March 2023

Green Hydrogen Adoption in Fertilizer Manufacturing: Opportunities and Challenges India's fertilizer sector is dependent on imports of natural gas, ammonia and fertilizers. Geopolitical conflicts and supply chain disruptions have caused abnormal spikes in the cost of these imported commodities, specifically natural gas, thereby increasing the... Read more



Brookings

How to get serious about climate change

02 March 2023

How to get serious about climate change

The last 12 months have seen extraordinary

progress in the U.S. effort to cut emissions of the pollution that causes climate change. Three new laws, including last summer's Inflation Reduction Act, are set to mobilize about \$1 trillion of new spending on clean energy and industry.

For all the good news, however, these are just the first steps in a serious program to cut emissions. That's because showering cash on today's industries can't eliminate the pollution of warming gases.



GreenBiz

How will AI shape the future of clean energy?

16 February 2023

Last week was the foremost utility trade show in the U.S. descended on the San Diego Convention Center — DISTRIBUTECH. AI-powered technologies were scattered across the expo hall, touting new applications for energy and data management.



Boston Consulting Group

Foreign Direct Investment and the Greening of Emerging Markets

21 March 2023

Global Capital Flows in the Postpandemic World

The pandemic has amplified trends that were already underway, but it is also driving radical changes in consumer behavior and other areas that will affect investments in industries.

COP27 highlighted the many complexities of mobilizing the trillions of dollars needed for climate adaptation and mitigation in developing countries, which have contributed the least to global warming but are suffering the most from it. Meeting this need will require innovative mechanisms and multiple

types of capital, some of it public but most of it private.

Foreign direct investment across the many sectors impacting (or impacted by) climate change—“green FDI” for short—is the most important segment of these much-needed private capital flows.



Carbon Brief

CCC: Here's how the UK can get reliable zero-carbon electricity by 2035

09 March 2023

The UK can build a reliable, secure and cost-effective electricity system that is decarbonised by...

The post CCC: Here's how the UK can get reliable zero-carbon electricity by 2035 appeared first on Carbon Brief .



Fraunhofer-Gesellschaft

Economical and resource-saving green hydrogen

01 March 2023

Large quantities of hydrogen will be needed to ensure a successful energy transition. As part of the HighHy project, an international team of researchers from Germany and New Zealand is working on improving the efficiency of the emerging AEM electrolysis technology to produce green hydrogen. To make this possible, scientists from the Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM in Dresden have turned to the readily available and resource-saving metals manganese and nickel in a bid to introduce this promising electrolysis process to large-scale industry. The new technology offers a number of other advantages in addition to reduced costs when compared to the existing processes.



Clean Energy Wire

European Investment Bank may finance Iberian gas pipeline

20 February 2023

The European Investment Bank (EIB) is willing to finance the future green hydrogen pipeline connecting Portugal, Spain and France if it meets eligibility criteria, EIB Vice-President Ricardo Mourinho Félix told Lusa in an interview, noting that the bank has launched exploratory talks with Portugal.



The Conversation (French)

Quelle communication pour stimuler l'adoption des énergies renouvelables ?

08 February 2023

Une étude montre que les ménages se montrent sensibles à une information générique pour prendre conscience des enjeux puis à une information personnalisée au moment d'adopter les technologies.

[Try translating with Google](#)



Eco-Business

Chinese provinces push for coal and clean energy

02 March 2023

China's provincial-level jurisdictions (hereafter “provinces”) will focus on both coal and renewable power in the year ahead, according to work reports released ahead of the national Two Sessions. These, the country's most significant annual political and legislative meetings, will begin on 4 March in Beijing.

More than two-thirds of the 31 provinces in mainland China have pledged to promote “clean” coal, to construct “advanced” coal power capacity, or to ensure coal supply. Seventeen plan to speed up building wind and solar farms or industrial parks, with more attention given to offshore wind.

Twenty-one want to develop “new types” of energy storage, while another 15 have plans for more pumped-storage hydropower.



World Economic Forum

Why heat is a challenge in the fight against climate change, and what we can do about it

16 March 2023

Heat makes up half the world's total energy consumption, meaning its decarbonization is vital to tackle climate change.

Industrial heat accounts for half of all heating and requires new innovations for the sector to be able to decarbonize.

Decarbonizing heat offers opportunities for reducing both carbon emissions and potentially creating entire new industries.

Heat comprises half of the world's total energy consumption – which is significantly more than electricity (20%) and transportation (30%). Unsurprisingly, heat contributes more than 40% of global energy-related carbon dioxide (CO₂) emissions .



German Institute for International and Security Affairs

Omani Hydrogen for Germany and the EU

21 March 2023

Not just a matter of energy policy Germany and the EU plan to import hydrogen and its derivatives from the Arab Gulf states. Although Germany has signed a joint declaration of intent with the Sultanate of

Oman to this end, its efforts focus primarily on Oman's larger neighbours. However, it would be a mistake to overlook Oman's potential role within German and European energy policy, geostrategy, and climate diplomacy. Oman's ambitious hydrogen plans can provide Germany and the EU with affordable clean energy; and enhanced (trade) relations with the Sultanate align with a value-based approach to trade, support global climate action, and stabilise regional power balances – thus preventing the potential of dangerous conflict.



VoxEU

Radical climate policies

25 February 2023

The transition to net zero will require policies that promote switching to carbon-free technologies on a large scale. Furthermore, the transition will often involve complementarities and peer effects in demand. This column argues that in the presence of such complementarities, transformative policies are needed to move society to a green, low-emissions equilibrium. Policies could include restricting sales of high-pollution goods, taxation, or phasing out polluting technologies. This process will also require ensuring political support, dealing with free-rider problems, and engaging both the public and private sectors.



Boston Consulting Group

Building the Green Hydrogen Economy

21 March 2023

Infrastructure Strategy 2022: A Pivot to the Digital Frontier

Traditional projects offer varying returns, depending on an investor's willingness to embrace risk. All eyes are on digital.

Infrastructure investments have become an even more attractive alternative investment opportunity over the past year because of the uncertainty roiling the world's economies and financial markets. By their very nature, investments in infrastructure tend to be more resilient than other investment classes during periods of economic volatility and surging inflation.



Fraunhofer-Gesellschaft

Highly efficient ammonia-based systems for climate-friendly energy supply

15 February 2023

In the future, ammonia could play a decisive role in the transition from fossil fuels to climate-friendly alternatives — as long as it is produced from green hydrogen, for example, using renewable energy sources. Ammonia is easy to store and transport. Researchers at the Fraunhofer Institute for Microengineering and Microsystems IMM are

developing ammonia-based systems for a mobile, decentralized energy supply in the infrastructure, transportation and industry sectors. The various research projects will be presented for the first time at the Hannover Messe Preview on February 15, 2023.



The Conversation (French)

L'essor des énergies renouvelables engendre de nouveaux risques pour les investisseurs

08 February 2023

La volatilité des marchés ou encore la hausse des coûts de développement a engendré une hausse de la prime de risque ces dernières années.

[Try translating with Google](#)



World Economic Forum

Why we can't ignore green hydrogen in the clean energy mix

16 March 2023

Emissions-free green hydrogen could be an important addition to the range of clean energies.

It is viable for use in certain industries – but not yet scalable for mass consumption.

For wider uptake, it needs technological breakthroughs and infrastructure development.

Historically a dark horse, green hydrogen energy has received renewed attention among global policy-makers and energy experts as a potential driver of net zero emissions. This is in large part because of significant advances in enabling technologies along with government subsidies and industrial policies supporting its research and development (e.g.



The Conversation (Spanish)

Llegará un momento en que sobre energía renovable: ¿qué haremos con el exceso?

12 March 2023

Las tecnologías renovables no producen electricidad de forma continua, por lo que habrá periodos de menor generación pero también de exceso. ¿Cómo podemos aprovechar esa energía sobrante?

[Try translating with Google](#)



Carbon Brief

Heat pumps 'up to three times cheaper' than green hydrogen in Europe, study finds

23 February 2023

"Green" hydrogen, made by splitting water with low-carbon electricity, is unlikely to emerge as a...

The post Heat pumps 'up to three times cheaper' than green hydrogen in Europe, study finds appeared first on Carbon Brief .



Eco-Business

Air conditioner curbs add to heat deaths—but renewables can help

07 February 2023

When Japan shut down its nuclear power reactors in the wake of the 2011 Fukushima disaster, it asked its citizens to conserve scarce energy, such as by using fans instead of air conditioning during summer heat.

That public-spirited conservation push - the kind of call being made across Europe this winter in response to gas shortages following Russia's invasion of Ukraine - is estimated to have caused 7,710 premature heat-related deaths each year, most among Japan's elderly, a new study has found.

The study covered the years 2011 to 2015, the period energy conservation measures in response to the nuclear shutdown remained in effect.

The data suggests that well-intended public policy aimed at curbing people's energy use to limit climate change or tackle other threats could have unintended health consequences - with swift investment in renewable energy the best way to avoid them.

Climate change is already upon us and encouraging less use of air conditioning or other means of adapting to extreme temperatures can kill people living right now.



The Conversation

Rishi Sunak's reorganisation: history shows creating government departments in response to short-term problems is rarely a good idea

08 February 2023

UK prime minister Rishi Sunak has announced a major reorganisation of Whitehall, creating a new department dedicated to energy and another for science and innovation as well bringing various business and trade portfolios under one roof.

Reorganisations of this kind tell voters a great deal about the government of the day and its priorities. Sunak's announcements are revealing not only as signals of his aims ahead of the next election but also of the pressures he faces.

The life and times of a department

The evolution of the departments dealing with housing over the years is a case study in how priorities are reflected in departmental reorganisation, and can help us understand what is going on now.



Clean Energy Wire

Germany pushes green hydrogen use in transport as national infrastructure takes shape

03 February 2023

The national infrastructure for producing and using green hydrogen in Germany is beginning to take shape, as the government seeks to support market scale-up for the renewable fuel. In a map, the Renewable Energy Agency (AEE) listed 60 running projects in Germany for hydrogen production with renewables, with another 80 currently being planned or constructed. The largest installation has a capacity of 110 megawatts (MW), comparable to a large solar PV farm.

2

Overview

The strategic landscape around Accelerating Clean Hydrogen.

Hydrogen is the most abundant element in the world and its diverse application has made it a critical pillar in the transition to net-zero. However, the market is not scaling fast enough to deliver on its potential.

The Accelerating Clean Hydrogen Initiative aims to create an environment that allows hydrogen to realise its role in the global energy transition, drive collaboration and accelerate the number of clean hydrogen projects reaching final investment decision.

To achieve this mission we work with international stakeholders across industry, policy and finance, to launch two complementary programmes: the Enabling Measures Roadmaps for Green Hydrogen covering key geographies, and the Clean Hydrogen Project Accelerator.

To learn more about the role of clean hydrogen please read our blog.

This briefing is based on the work of the Forum's Accelerating Clean Hydrogen initiative.

FIGURE 1 Transformation map for Accelerating Clean Hydrogen



The following key issues represent the most strategic trends shaping the topic of Accelerating Clean Hydrogen. These key issues are also influenced by the other topics depicted on the outer ring of the transformation map.

2.1 Supporting Policy Understanding

The variation and lack of clarity regarding hydrogen policies globally act as a significant barrier

Public policy support is essential for the development of the clean hydrogen economy, with different economies providing various degrees and types of support. The most prominent policies include:

- Europe: under RePowerEU the European Commission will roll out carbon contracts for difference (a financial mechanism to cover the switching cost) to support the uptake of green hydrogen by industry.
- US: the Department of Energy has announced an \$8 billion program to develop regional clean hydrogen hubs under the Infrastructure, Investment and Jobs Act and \$270 billion for clean energy tax credits under the historic Inflation Reduction Act, allowing green hydrogen to have a \$3/kg subsidy advantage over grey.

However, globally, the variation and lack of clarity regarding hydrogen policies act as a significant barrier to projects reaching final investment decision as project developers are apprehensive about investing significant funds if there is uncertainty regarding the future of the market. This can include global discrepancy in standards and certification causing export challenges and failure to account for the price premium, additionality requirements, undetermined technology regulation and lack of support helping the supply and demand side of the industry grow together.

The Accelerating Clean Hydrogen Initiative acknowledges the need to bring policy clarity, global unity and clear direction to scale clean hydrogen globally. The Enabling Measures Roadmaps for Green Hydrogen for Europe and Japan have already been leveraged by key public and private stakeholders in order to design their national hydrogen strategies, or create their hydrogen business plans. Moreover, during our community and public meetings policy makers are gathered with project developers and financiers to help share requirements, interpret policy and breakdown barriers.

Related topics: [United States](#), [SDG 13: Climate Action](#), [Global Governance](#), [Agile Governance](#), [Leadership](#), [European Union](#)

2.2 Connecting Global Regions

The growing interest in hydrogen ultimately stems from its ability to decarbonise hard-to-abate sectors

Clean hydrogen is a powerful tool which can support different countries unique needs, compliment natural endowments and interconnect regions, as reflected by 26 countries issuing national hydrogen policies. The growing interest in hydrogen stems from its ability to decarbonise hard-to-abate sectors, redistribute renewable energy across geographies, provide long term storage solutions and ensure the security of energy supply in countries with limited access to a steady renewables baseload. This has become increasingly important due to the recent energy crisis and need for energy independence. As such, there are 680 projects in the pipeline, with each region playing a key role. For example, Europe is home to 30% of hydrogen investment, whilst North America currently operates 80% of the global low carbon hydrogen capacity in North America. Meanwhile, South Korea / Japan are essential in supporting the supply chain having produced half the global fuel cell manufacturing capacity.

The Accelerating Clean Hydrogen Initiative is continuing to expand its geographical reach to propel the global hydrogen market. During COP26 we launched the Enabling Measures Roadmap. These Roadmaps highlighted the 38 enabling measures needed to boost the green hydrogen economy globally and turn industry recommendations into concrete policy measures and accelerate action to net-zero. Building on their success in Europe and Japan, , we will shortly be launching a Chinese Green Hydrogen Roadmap.

During the Davos Annual Meeting in 2022 we launched the Clean Hydrogen Project Accelerator, which works directly with four projects across Europe and Japan to expedite the pathway from announcement, through to Final Investment Decision with a focus on the role of long term offtake and de-risking project financing.

In addition, we will be working with the Leaders for Sustainable MENA Initiative to leverage the momentum of the Egyptian COP27 and UAE COP28 presidencies and progress the clean hydrogen market developments

in the region. In Latin America, the Energy Transition in Latin America Initiative is gathering public and private stakeholders from countries such as Brazil, Chile, Colombia, and Panama. They have highlighted the important role of clean hydrogen and its ability to change economic structures and industry foundations.

Related topics: [China](#), [United States](#), [Latin America](#), [Energy Transition](#), [Japan](#), [European Union](#)

2.3 Facilitating Stakeholder Collaboration

Due to the diverse applications of clean hydrogen, the market coalesces many stakeholders across the value chain

Due to the diverse applications of clean hydrogen, the market coalesces many stakeholders across the value chain. This includes electrolyser producers, renewable energy providers, project developers and offtakers (e.g. hard-to-abate sectors like steel, chemicals, metals and heavy mobility). Navigating this nascent and complex web of stakeholders can be a daunting and immense challenge for companies: whom should I buy my electrolyser from, which financial institutions can provide funding, and whom should I supply to? Without knowledge or access to potential stakeholders across the value chain, stagnation is inevitable.

The Accelerating Clean Hydrogen Initiative understands the vital role stakeholder collaboration plays in accelerating projects to Final Investment Decision and has taken strides to enable this. The Initiative brings together market actors on a regular cadence to deep dive into the challenges faced by the clean hydrogen economy and ideate solutions to solve them. During international fora we coalesce global stakeholders to raise the profile of the clean hydrogen industry, and the partnerships required to achieve it.

For example, during the 2022 Global Community Meeting – Technology Partnerships we brought together project developers, industrial clusters and policy makers to explore the barriers to securing offtake agreements, and how the interconnections between clean hydrogen projects and industrial clusters can result in facilitating offtake agreements for clean hydrogen projects and support the path to net-zero.

During COP27, we highlighted how stakeholders can be mobilised to reach Final Investment Decision and debunk hydrogen myths. Our recent COP27 events include the following: UN Climate Change Innovation Hub Panel and We Mean Business Panel.

Related topics: [Leadership](#), [Chemical and Materials Industry](#), [Global Governance](#), [Supply Chains](#), [Mining and Metals](#), [Hydrogen](#), [Banking and Capital Markets](#), [SDG 17: Partnerships for the Goals](#)

2.4 Accelerate the Route to Final Investment Decision

Final investment decision (FID) is a critical phase for hydrogen projects

To achieve net-zero by 2050, current hydrogen production needs to be decarbonised (only 1% is currently clean) and considerably scaled up (200Mt is needed by 2030 to be on track for 2050 net-zero). This represents significant effort and support from both the public and private sector to launch the pipeline valued at \$240 billion. Whilst many projects have been announced, only 4% have made it to final investment decision. Without supporting mechanisms, many projects risk remaining at an impasse.

Final investment decision is a critical phase for clean hydrogen projects as it determines if the decision makers give the green light for the project to proceed and the developers can begin to put boots on the ground. Achieving this can take many years and requires significant investment to reach, however the role of hydrogen in a net-zero future does not have the time to wait and investors face trepidation about investing in an infant industry with much uncertainty.

The Accelerating Clean Hydrogen Initiative is working with key stakeholders across demand and finance to identify concrete mechanisms that can help solve these challenges. Key industrial partners have brought forward their announced projects, to share insights and help the community learn from the unique ways in which they have built cross industry ties, removed barriers and driven progress at the project level to support cost reduction, innovation and bankability. For example, engaging credible sponsors and developers is essential in removing technological and operational risk, signaling bankability and securing blended financing mechanisms (financing from both the government and financiers).

Related topics: [Banking and Capital Markets](#), [Hydrogen](#), [Energy Transition](#), [Development Finance](#)

2.5 Accelerating Access to Long Term Offtake

Today, the vast majority of hydrogen is used by the refining and chemicals industries

Clean hydrogen has often been referred to as the Swiss army knife of climate solutions. Today, the vast majority of hydrogen is used by the refining and chemicals industries, with new applications accounting for 1% of demand and 1% of the 94Mt of demand was satisfied with clean hydrogen in 2021. However, clean hydrogen comes with a price premium, constraining buyers from switching from their original emissions-based feedstock or energy source, and market structures (e.g. subsidies, standards and certifications and quotas) are yet to compensate for it and incentive demand. This is a particular challenge in sectors with low-profit margins, such as fertiliser production, where hydrogen is a critical component.

Recognising the essential role of securing long term offtake, the Accelerating Clean Hydrogen Initiative has made this one of their priority areas. Community interactions have allowed us to understand how projects can secure offtake in an uncertain market where buyers may feel apprehensive, overcome the price premium and deal with supply side risk. For example, co-location within industrial clusters, the epicentre for hydrogen activity and industrial decarbonisation, is a hugely successful approach to securing advantageous offtake agreements.

Related topics: [Aviation, Travel and Tourism](#), [Mining and Metals](#), [Transitioning Industrial Clusters Towards Net Zero](#), [Supply Chains](#), [Behavioural Sciences](#), [Mobility](#), [Economic Progress](#), [Chemical and Materials Industry](#), [Agriculture](#), [Food and Beverage](#), [SDG 12: Responsible Consumption and Production](#)

About Strategic Intelligence

Our approach

In today's world, it can be difficult to keep up with the latest trends or to make sense of the countless transformations taking place. How can you decipher the potential impact of rapidly unfolding changes when you're flooded with information - some of it misleading or unreliable? How do you continuously adapt your vision and strategy within a fast-evolving global context? We need new tools to help us make better strategic decisions in an increasingly complex and uncertain environment.

This live briefing on Accelerating Clean Hydrogen, harnesses the World Economic Forum's [Strategic Intelligence](#) platform to bring you the very latest knowledge, data and context from our 300+ high quality knowledge sources. Its aim is to help you understand the global forces at play in relation to Accelerating Clean Hydrogen and make more informed decisions in the future.

Each day, our Strategic Intelligence platform aggregates, distills and synthesizes thousands of articles from around the world. We blend the best of human curation with the power of machine learning to surface high-quality content on over [two hundred global issues](#) to our one million users globally. Our hand-picked network of [content partners](#) from around the world means that we automatically exclude much of the noisy clickbait, fake news, and poor quality content that plague the Internet at large. We work with hundreds of think tanks, universities, research institutions and independent publishers in all major regions of the world to provide a truly global perspective and we are confident that our data are well positioned when it comes to the intrinsic biases inherent to open text analysis on uncensored content from the Internet. For further context on our approach, you may be interested to read [Strategic trend forecasting: anticipating the future with artificial intelligence](#) and [These Are The 3 Ways Knowledge Can Provide Strategic Advantage](#).

↓ A leading expert presenting a transformation map at our Davos Annual Meeting



Transformation maps

Our [Transformation Maps](#) are dynamic knowledge visualisations. They help users to explore and make sense of the complex and interlinked forces that are transforming economies, industries and global issues. The maps present insights written by experts along with machine-curated content. Together, this allows users to visualise and understand more than 250 topics and the connections and inter-dependencies between them, helping in turn to support more informed decision-making by leaders.

The maps harness the Forum network's collective intelligence as well as the knowledge and insights generated through our activities, communities and events. And because the Transformation Maps are interlinked, they provide a single place for users to understand each topic from multiple perspectives. Each of the maps has a feed with the latest research and analysis drawn from leading research institutions and media outlets around the world.

At the centre of each map is the topic itself. This is surrounded by its "key issues", the forces which are driving transformation in relation to the topic. Surrounding the key issues are the related topics which are also affected by them. By surfacing these connections, the map facilitates exploration of the topic and the landscape within which it sits.

Continue online

Our suite of Strategic Intelligence tools are available to help you keep up to date across over 300 topics.

On the web

Visit [Strategic Intelligence](#) on your desktop or laptop. All modern browsers supported.



In the app stores

You can find our [Strategic IQ app](#) on the Apple App Store, Google Play Store or Huawei App Gallery.



You can also follow Strategic Intelligence [on Twitter](#).

Go further with our Pro offering

Our Pro membership allows you to create unlimited custom transformation maps and the ability to collaborate on them with your colleagues. We also give you access to Advanced Analytics, to help you understand the dynamics surrounding a particular topic in more detail. You also get the ability to export transformation maps images and Powerpoint presentations. To learn more, [visit our membership site](#).

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Harvard Kennedy School - Belfer Center for
Science and International Affairs

The Conversation

The Conversation (French)

The Conversation (Spanish)

VoxEU

World Economic Forum

World Resources Institute

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