Infocus International

SAVE $300
If you book 3 persons or more

Mastering Clean Hydrogen

LIVE ONLINE COURSE OVER 5 SESSIONS

Commences: 4 December 2025

Course Sessions

1. The energy transition and clean hydrogen production pathways
2. Producing hydrogen from renewable power
3. Assessing market demand for clean hydrogen
4. Storing and moving hydrogen
5. Policy supports, investment cases and market growth

Benefits of Attending

- Gain a clear understanding of hydrogen industry technologies, terminologies & metrics
- Review the value chain from hydrogen production to end-use market demand
- Focus on the production of clean hydrogen from renewable power (green hydrogen)
- Understand the competitive playing field and the economic variables that will impact it
- Discuss the key practical delivery challenges facing clean hydrogen projects
- Learn key lessons from project examples and proposals from around the world

Online Course at a Glance

The online course will be delivered in 5 live interactive sessions. Each session will be 3 hours, including a 10-minute break. The live online course is powered by Zoom, which can be accessed via laptops, desktops or mobile devices. Please refer to page 4 for more details.

Mastering Clean Hydrogen (live online course)

COURSE OVERVIEW

The 'hydrogen economy' was first described 50 years ago, but failed to develop. Now hydrogen is making a comeback, with unprecedented momentum from both policymakers and industry amid a background of energy decarbonisation. Nevertheless, given its failure in the past, current investors and business developers in the sector are strongly advised to ensure they understand the complexities and competitive environments of the hydrogen landscape. This new course combines an excellent overview of the different elements of the clean hydrogen sector with a series of critical thinking and analysis exercises which provide clear guidance on market assessment requirements, including key opportunity and risk influences.

This comprehensive course is designed for those seeking a wide-ranging, hype-free and independent perspective on the markets and supply chain activities which will (and won't) drive demand for clean hydrogen. You will have a clearly explained, business-focused perspective on the competitive context of hydrogen across its various use cases. You will be able to separate what is actually happening in the market from the headlines and hype, and to identify the drivers and credible near-term opportunities for your business. You will evaluate barriers to hydrogen within certain market segments and its competitive advantages in others, illustrated by examples from a global perspective.

YOUR EXPERT COURSE DIRECTOR

A respected energy business analyst, consultant and energy communicator with **over 30 years**' commercial experience. He focuses on the interconnected clean energy transition topics of renewable power, energy storage, energy system electrification and clean hydrogen and also on the impacts of clean energy technologies on power systems and their associated value chains, helping companies to understand and explore new business opportunities and to plan for success when developing them.

He has helped senior business-people in **over 30 countries across 5 continents**, representing a wide variety of organisations from start-ups to the world's biggest corporations. His combined academic and business expertise enables him to demystify technological and scientific issues for non-technical, business and investment-focused audiences, whilst helping technologists understand how investment decisions and business strategies are formulated, and helping senior business development executives develop a clear view of the many interconnection business variables determining market success (or failure): in particular finance, market structure, technology disruption and policy. This 'technoeconomic' focus marks him out in helping clients break away from working 'silos' and connect vital skills and pools of knowledge.

WHO HAVE ATTENDED

ABO Wind • Almar Water Servicios • Alunorte • Arab Petroleum Investments Corporation • ArcelorMittal • Asian Development Bank • Black & Veatch • Debmarine • German Energy Agency • Dubai Electricity & Water Authority • EDF Renewables • Edison • National Research Council Canada • FuelCell Energy • HSBC • IPC Petroleum France • Mott MacDonald • National Energy Regulator of South Africa • Natural Resources Canada • New Zealand Steel • Norton Rose Fulbright • NOVA Chemicals • OMV • Ontario Energy Board • PETRONAS • Repsol Sinopec Resources • RWE Renewables • Saudi Aramco • Shell • Siemens Energy • Sumitomo Corporation • Energy Commission, Malaysia • Hongkong Electric • Tokyo Gas America • U.S. International Development Finance Corporation

TESTIMONIALS

"Trainer is extremely knowledgeable and was able to cover a wide range of questions from the group, with excellent use of real life examples in industry."
Project Engineering Manager, Technip Energies

"The course was informative, extensive in coverage and insightful. I am happy to have attended the course and also endorsed it for participation for some of my other colleagues."
Executive Director, PTC India

"From zero to great knowledge and full of information regarding hydrogen production. It covers everything including policies around the globe, market segmentation, technical and commercial analysis of hydrogen plant."
Senior Engineer, Tenaga Nasional Berhad

"The course was very informative and insightful. The integration of theory and practice through the use of practical examples helped to enhance the understanding of the concepts."
Gas Regulation Advisor, National Energy Regulator of South Africa

COURSE CERTIFICATE

Upon the successful completion of this course, you will receive a Certificate of Attendance to testify your endeavour and serve towards your professional advancement.

IN HOUSE TRAINING (SAVE UP TO 40%)

Interested in this course for a group of at least 15 people? Contact Ms. Jessie Ang on +65 6325 0218 or email jessie@infocusinternational.com

PROGRAMME SCHEDULE (GMT+0)

Applicable to all 5 sessions

13:00	Session starts
14:30-14:40	Break
16:00	End of session

SESSION 1 4 December 2025, 1pm–4pm GMT

The Energy Transition and Clean Hydrogen Production Pathways

The future growth of hydrogen vary from positioning it as 'the new oil' to dismissing it as another over-hyped false dawn.

What is the reality likely to be and which factors will determine it? What do 'net zero' scenarios and models suggest about the potential role of hydrogen in the energy transition? What processes and options exist to produce hydrogen in a 'clean' way?

Examining the role of hydrogen in energy transition strategies and policies

- Reviewing the hydrogen strategies announced by key countries and regions
- Positioning hydrogen in the competitive environment of the wider energy transition
- Sector coupling and the role of clean hydrogen within energy electrification
- Assessing the wide range of opinions over hydrogen's future role
- The geopolitical and strategic implications of hydrogen (or its derivatives) as an energy vector

Identifying the competing pathways to clean hydrogen production

- How clean is clean hydrogen (metrics and definitions)?
- Hydrogen 'colours': what they mean (and why they matter less than regulatory definitions)
- Current and emerging hydrogen production pathways
- Factors in the competitiveness of different processes, including feedstocks and co-products
- Which supply chain factors could slow down clean hydrogen growth?

SESSION 2 5 December 2025, 1pm–4pm GMT

Producing Hydrogen from Renewable Power (Green Hydrogen)

A clear explainer, for business people, of 'green' hydrogen technology and its economic determinants.

What are the different product options available, how do they compare and what factors will drive project choices? When analysts talk about cost reductions, what exactly do they mean: which costs matter and what needs to happen for green hydrogen to compete?

Electrolysis: a technology primer

- The key inputs, outputs and performance metrics
- Comparing and contrasting competing electrolysis methods, both current and emerging
- Relating electrolyser capacity to hydrogen production
- The balance of system components for a green hydrogen project
- Reviewing key market examples, for a realistic view of production scales & timeframes

The economics of green hydrogen production

- Reviewing and understanding the wide range of electrolysis cost data
- Balance of system, operational and cost contributions
- Calculating the cost of hydrogen production (a levelized cost approach)
- Sensitivity analysis: which variables are most important for green hydrogen costs?
- Forecast future cost reductions – how they can be achieved

SESSION 3 15 December 2025, 1pm–4pm GMT

Assessing Market Demand for Clean Hydrogen

An independent, hype-free perspective on the market opportunities for hydrogen, illustrated by a review of numerous project examples from around the world.

How is hydrogen being deployed now, and which sectors offer its best short-term prospects? Who is buying clean hydrogen? What competition does hydrogen face in each sector?

Hydrogen in industry

- Current and emerging hydrogen applications: a market opportunity assessment
- Examples of activity in key sectors, including ammonia, refining, steelmaking & chemicals
- The importance of hydrogen hubs and industrial clusters

Hydrogen in transport

- Is hydrogen losing a its competitive battle against battery vehicles?
- The importance of transport market segmentation and comparative advantage
- Reviewing activity including in trucks, shipping, aviation & rail

Hydrogen in power and heat

- Replacing natural gas and coal with hydrogen and ammonia
- Hydrogen as solution to long-term energy storage
- Prospects for hydrogen heating, both domestic and high-temperature industrial

SESSION 4 17 December 2025, 1pm–4pm GMT

Storing & Moving Hydrogen

Hydrogen isn't an easy molecule to handle, bringing with it big challenges compared to well-established fossil fuel supply chains.

What are the current ways in which hydrogen is handled in industrial use? How scalable are these current methods and what are the cost and efficiency penalties that will add to the cost of the delivered product? To what extent can we re-use existing infrastructures such as natural gas pipelines, fossil fuel bunkering facilities and shipping?

Moving and storing hydrogen as hydrogen
- The practical limitations of hydrogen, including energy density and safety challenges
- Hydrogen compression, including small-scale storage and transport
- Options for large-scale hydrogen storage
- Hydrogen pipelines, including infrastructure re-use and repurposing, and hydrogen blending
- 'LH2': producing, transporting and storing liquid hydrogen

Moving and storing hydrogen within other molecules
- Identifying the range of hydrogen derivatives and carriers: how do they compare?
- Evaluating the pros and cons of ammonia as a hydrogen carrier, including its production
- Linking hydrogen with Carbon Capture & Utilisation (CCU) to create clean hydrocarbons
- Liquid Organic Hydrogen Carrier (LOHCs) technology
- Reviewing project examples and planned deployments, to analyse the competitive positioning of different hydrogen transportation solutions

SESSION 5 18 December 2025, 1pm – 4pm GMT

Policy Supports, Investment Cases and Market Growth

While hydrogen offers multiple market opportunities and huge growth potential, in practice the current costs of clean hydrogen mean its short-term prospects depend on policy support.

How are policymakers in different regions helping create business cases for hydrogen project investment? What does the evidence on the ground, from confirmed projects, tell us about the growth pathways for clean hydrogen? What do investors need, in order to make projects 'bankable'?

Assessing policy, hydrogen scale-up and deployment strategies
- Identifying contrasting policy drivers in different regions and localities
- The status and timeframes of scaled-up hydrogen project examples and proposals
- Reviewing the status of key aspects of policy, standardisation and certification
- Support schemes which are creating hydrogen trading opportunities
- Which are the hydrogen sectors to watch, in the short-term and further into the future?

Creating investment cases for clean hydrogen
- Dissecting the hydrogen value chain and its key players
- Business models, off-take contracts and revenue streams for clean hydrogen
- Analysing factors in 'project deliverability'
- Site selection and infrastructure integration requirements
- Who's investing, and why?

Summary: what will the future of hydrogen look like?

WHAT EQUIPMENT DO I NEED?

- A laptop / desktop PC / tablet / mobile phone
- Internet connection – wired or wireless broadband
- Speaker and microphone
- Webcam

HOW DOES IT WORK?

A unique meeting ID and password will be provided to the participants to enter Zoom virtual meeting room and to take part in the interactive live course. You can choose to download the Zoom software, or simply access via web browser. Ask live questions or utilise Chat feature to interact with the trainer and fellow participants. You can also use Whiteboard and Screen Sharing features. Just like in a physical workshop, Whiteboard allows trainer and all participants to write on a blank screen for everyone to see. Our event coordinator will be there to guide you if you need any assistance.

WHAT IF I MISSED A SESSION?

Participants who miss a session may contact our dedicated course coordinator to request the video recording, which is available up to one week after each session. Note that the video will not be downloadable.

WHO WILL BENEFIT?

Any stakeholders seeking to cut through the hype and get to the reality of the clean hydrogen sector, including:
- Government & policymakers
- Renewable energy developers
- Oil & gas producers
- Industrial hydrogen users
- Electrolysis technology developers
- Fuel cell developers
- Industrial gas providers
- Low-carbon heat developers
- Maritime & transport operators
- Investors (funds and project finance providers)

Event Code: 251204OC

REGISTRATION FORM

Mastering Clean Hydrogen

LIVE ONLINE COURSE OVER 5 SESSIONS

Commences: 4 December 2025

DELEGATE DETAILS

1 Full Name Mr/Ms _____
Job Title _____
Tel/Mob _____
Email _____

2 Full Name Mr/Ms _____
Job Title _____
Tel/Mob _____
Email _____

3 Full Name Mr/Ms _____
Job Title _____
Tel/Mob _____
Email _____

4 Full Name Mr/Ms _____
Job Title _____
Tel/Mob _____
Email _____

5 Full Name Mr/Ms _____
Job Title _____
Tel/Mob _____
Email _____

6 Full Name Mr/Ms _____
Job Title _____
Tel/Mob _____
Email _____

ORGANISATION DETAILS

Company _____
Address _____
_____

AUTHORISATION

Full Name Mr/Ms _____
Job Title _____
Email _____
Signature _____

Registration & Enquiries

Infocus International Group Pte Ltd
143 Cecil Street #25-02, Singapore 069542

Contact : Ms. Jessie Ang
Tel : (65) 6325 0218
Main : (65) 6325 0210
Email : jessie@infocusinternational.com
Web : www.infocusinternational.com/hydrogen

YOUR INVESTMENT

	For 1 or 2 persons	For 3 persons or more
FEE PER PERSON	USD 2,750	USD 2,450

PAYMENT METHOD

Payment is required within 5 working days upon receipt of invoice.

❑ By Credit Card: ❑ VISA ❑ MasterCard ❑ American Express

Note that the credit card will be charged in Singapore Dollar currency (SGD). We will quote the SGD amount and send credit card payment instruction prior to the charge.

❑ By Telegraphic Transfer (USD)

Account name: Infocus International Group Pte Ltd
Account number (USD): 017–025866–1
Swift code: SCBLSG22XXX
Bank name: Standard Chartered Bank (Singapore) Ltd
Bank address: 8 Marina Boulevard, #27-01, MBFC, Singapore 018981

OTHER UPCOMING EVENTS

Green Hydrogen Projects, Economics & Finance
Mastering Clean Ammonia
Mastering Solar Power
Carbon Capture, Utilisation & Storage (CCUS)
Electricity Economics in Changing Electricity Markets
Energy Storage
ESG and Sustainability
Sustainable Procurement & Supply Chain Management
Electric Vehicle (EV) Charging & Power Grid
LNG: Supply, Demand, Pricing and Trading
Power Purchase Agreement
Renewable Energy Power Purchase Agreement
EPC Contracts for Energy Industry
Public-Private Partnerships
Project Finance & Project Financial Modelling
Renewable Energy Project Finance & Financial Modelling

www.infocusinternational.com/public-courses

CANCELLATION POLICY

Should you be unable to attend, a substitute delegate is welcome at no extra charge. If this is not suitable, cancellations must be made in writing (letter or fax) at least 30 days before the program commences. A full refund less an administration charge of 10% will be given. Registrations cancelled less than 30 days before the event must be paid in full and a credit voucher equivalent to the full amount will be issued for you to attend any Infocus International Group events for up to 18 months. Credit vouchers will not be issued for no-shows without cancellation. Infocus International Group will provide full course documentation to a delegate who has paid, but is unable to attend. Infocus International Group reserves the right to change the content of the program without notice including the substitution, alteration or cancellation of speakers and/or topics and/or the alteration of the dates of the event. Infocus International Group is not responsible for any loss or damage as a result of a substitution, alternation, postponement or cancellation of an event under any circumstances.

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