



9 - 11 MAY 2023 ROTTERDAM AHOY, NETHERLANDS

THE GLOBAL PLATFORM WHERE HYDROGEN BUSINESS GETS DONE





THE WORLD HYDROGEN 2023 SUMMIT & EXHIBITION – AT A GLANCE –



- World-Class Exhibition: Showcasing innovative technologies, projects & solutions
- **Strategic Summit**: The place to meet with policy makers, investors, private sector leaders and technology manufacturers to showcase, discuss, collaborate and do business, driving the hydrogen industry forward.
- **H2 Tech Series:** Technical Sessions providing a steppingstone into further research & collaboration
- **3rd World Hydrogen Awards:** Recognising achievements through industry awards
- Site Visits to the Port of Rotterdam Maasvlakte to witness world-leading hydrogen developments
- Masterclasses led by TU Delft University
- Co-Located with the World Energy Storage Exhibition & Forum
- With Thanks to the Support of the SEC Hydrogen Advisory Board:
 - o Allard Castelein, President & CEO, Port of Rotterdam Authority
 - o Paul Bogers, Vice President Hydrogen, Shell
 - o Andrew Horvath, Global Group Chairman, Star Scientific Limited
 - o Grace Quan, President & CEO, Hydrogen In Motion Inc. (H2M)
 - o Jorgo Chatzimarkakis, CEO, Hydrogen Europe
 - o Max Correa Achurra, Director Latam, Copenhagen Infrastructure Partners (CIP)
 - o Noe Van Hulst, Vice-Chair at IPHE, Hydrogen Advisor at IEA & Gasunie
 - o Horst H. Mahmoudi, CEO & Executive Chairman, Smartenergy
 - o David Burns, Vice President Clean Energy, Linde
 - o Alicia Eastman, President, InterContinental Energy
 - o Shigeru (Sam) Muraki, Representative Director, Clean Fuel Ammonia Association
 - o Elaine Wong, Co-Founder & Partner, H+ Partners
 - o Najla Al Jamali, Chief Executive Alternative Energy, OQ
 - o Dr Fiona Simon, CEO, Australian Hydrogen Council (AHC)
 - Federico Bernardelli, Country Image Coordinator and International Positioning Coordinator, International Affairs Office of the Chilean Ministry of Energy



THE ONLY TRULY GLOBAL EVENT FOR THE HYDROGEN

VALUE CHAIN



108 COUNTRIES REPRESENTED

Algeria Japan Netherlands Andorra Germany Jordan Singapore Angola Slovakia Congo Costa Rica Uganda Ukraine Hong Kong Hungary Iceland Emirates United Kingdom United States Bangladesh Cyprus Philippines Belarus Luxembourg Poland Belgium Benin Uruguay Djibouti Iraq Switzerland Zimbabwe Egypt Bulgaria Isle of Man Taiwan Region Burkina Faso Finland Israel Federation of China



THE WORLD HYDROGEN 2023 EXHIBITION

Highlight Your Solutions, Meet Decision Makers & Secure Deals

- Showcase your products and services to global decision makers
- A cost and time effective way to discover new business opportunities
- Position your brand as a leader in the growing hydrogen market
- Exchange insights and answer your clients' questions instantly
- Be part of a growing hydrogen community world-wide
- Generate new leads for your company in a highly targeted environment
- Host meetings and secure business deals right on your Exhibition stand

H2 Tech Series: Short Presentations on The Exhibition Floor

- Hydrogen technical sessions running in parallel with the main Summit
- Tech series providing a steppingstone into further research & collaboration
- Present your technology advancements right on the exhibition floor
- Introduce your company's solutions to the exhibition visitors
- Demonstrate working innovations to potential buyers and partners
- Grasp the latest cleantech developments for your hydrogen business
- Hear from technology manufacturers presenting their latest solutions
- Kickstart your hydrogen research & development at World Hydrogen 2022



Click to View the Floorplan & Book Your Stand



TUESDAY 9th MAY

AFRICA HYDROGEN FORUM DAY

09:00 AFRICA HYDROGEN FORUM OPENING



10:00 SITE VISIT 1 TO THE PORT OF ROTTERDAM HYDROGEN PROJECTS



15:00 SEC WORLD HYDROGEN ADVISORY BOARD ANNUAL MEETING

16:30 END OF AFRICA HYDROGEN FORUM

17:00 WELCOME DRINKS

Sponsored by:





17:30 VIP EXHIBITION OPENING

Join a delegation of Ministers as they officially open the Exhibition and have a tour around the stands with a VIP delegation.

- H.E. Liesje Schreinemacher, Minister for Foreign Trade and Development Cooperation, Government of the Netherlands
- H.E. Jeannette Baljeu, Regional Minister, Province of Zuid-Holland
- H.E. Ahmed Aboutaleb, Mayor, City of Rotterdam
- Allard Castelein, President & CEO, Port of Rotterdam Authority, SEC Hydrogen Advisory Board Member

18:00 WORLD HYDROGEN AWARDS CEREMONY



The **World Hydrogen 2023 Awards** will once again celebrate the exceptional achievements from companies and individuals who are driving the hydrogen industry forward. Their accomplishments deserve well-rounded recognition, and many others will build on their successes for years to come.

Join us as we celebrate a winner in each of the following categories:





WATCH THE WORLD HYDROGEN 2022 AWARDS EVENING VIDEO



CONFIRMED SUMMIT SPEAKERS INCLUDE:

- 1. Frans Timmermans, Executive Vice-President, European Commission
- 2. H.E. Micky Adriaansens, Minister of Economic Affairs and Climate Policy, Government of the Kingdom of the Netherlands
- **3.** H.E. Liesje Schreinemacher, Minister for Foreign Trade and Development Cooperation, Government of the Kingdom of the Netherlands
- 4. Hon. Peter Malinauskas, Premier, Government of South Australia
- 5. H.E. Salim Al Aufi, Minister of Energy and Minerals, Sultanate of Oman
- 6. H.E. Sharif Al Olama, Undersecretary for Energy and Petroleum Affairs, Ministry of Energy & Infrastructure, United Arab Emirates
- 7. H.E. Jeannette Baljeu, Regional Minister, Province of Zuid-Holland
- 8. H.E. Ahmed Aboutaleb, Mayor, City of Rotterdam
- 9. H.E. Robert Simons, Vice Mayor Port, Economy, Hospitality and Governance, City of Rotterdam
- 10. Lord Callanan, Minister for Energy Efficiency and Green Finance, Department for Energy Security & Net Zero, UK Government
- 11. David Crane, Director of the Office of Clean Energy Demonstrations, U.S. Department of Energy
- 12. Dr. Sunita Satyapal, Director, Hydrogen and Fuel Cell Technologies Office, U.S. Department of Energy
- 13. Ruud Kempener, Cabinet Member, Cabinet of the Commissioner for Energy (Kadri Simson), European Commission
- 14. Nicola McFarlane, Director of Hydrogen and New Energies Division, Department of Jobs, Tourism, Science and Innovation, Government of Western Australia
- **15.** Dr. Falk Rouven Bömeke, Head of Divison VB1: General issues of bilateral climate and energy cooperation; cooperation in North America, East Asia, Oceania and Turkey, Federal Ministry of Economic Affairs and Climate Action, Germany
- **16.** Dr. Christine Falken-Grosser, Director, Hydrogen Coordination, Federal Ministry of Economic Affairs and Climate Action, Germany
- 17. Allard Castelein, President & CEO, Port of Rotterdam Authority, SEC Hydrogen Advisory Board Member
- 18. Martijn Coopman, Program Manager International Hydrogen Supply Chains, Port of Rotterdam
- 19. Nico van Dooren, Head of Business Development, Port of Rotterdam Authority
- 20. Christian Pho Duc, Chief Technology Officer, Smartenergy
- 21. Matthias Ziebell, VP, Sales & Business Development Electrolysis Technology & Services, Robert Bosch GmbH
- 22. Ivo Bols, President for Europe & Africa, Air Products
- 23. Caroline Stancell, General Manager, Hydrogen for Mobility Europe & Africa, Air Products
- 24. Felipe Arbelaez, Senior Vice President Hydrogen & CCS, bp
- 25. James Patterson, VP North West Europe, bp
- 26. Narainsam Dorasamy, Executive Director of Bio and Chemical Energy, Renewable and Sustainable Energy Research Center, Technology Innovation Institute
- 27. Simon Herbert, VP, EAME, ExxonMobil Low Carbon Solutions
- 28. Yelda Guven, VP Policy, EAME, ExxonMobil Low Carbon Solutions
- 29. Paul Bogers, Vice President Hydrogen, Shell
- 30. Dr. Yunji Xu, General Manager of Commercial Industry, Shell
- 31. Carlos Barrasa, Executive Vice President of Commercial & Clean Energies, CEPSA
- 32. Dr. Axel Wietfeld, CEO, Uniper Hydrogen GmbH
- 33. Dr. Werner Ponikwar, CEO, thyssenkrupp nucera
- 34. Marcel Galjee, Managing Director, HyCC
- 35. Olivia Breese, Senior Vice President, Head of Power to X, Ørsted
- 36. Laurel Broten, CEO, Invest in Canada
- 37. Eric Vennix, Partner Consulting, Managing Partner Energy & Resources, Deloitte Netherlands
- 38. Tarek Helmi, Partner Consulting, Deloitte Netherlands
- 39. Geoff Tuff, Partner Consulting, Deloitte
- 40. David Burns, Vice President Clean Energy, Linde, SEC Hydrogen Advisory Board Member

Building a Sustainable Future, Together



- 41. Sean Strawbridge, Chief Executive Officer, Port of Corpus Christi Authority
- 42. Alan Hayes, Global Head of Pricing for Energy Transition, S&P Global Commodity Insights
- 43. David Bow, Executive Vice President, Electrolyzer Business Unit, Plug
- 44. Massimo Scopelliti, Product and Marketing Manager, Nidec Industrial Solutions
- 45. Dominique Rouge, Vice President, Sales & Technology, Air Liquide Engineering & Construction
- 46. Tomas Malango, Renewable Fuels and Circular Economy Director, Repsol
- 47. Alicia Eastman, Co Founder and President, InterContinental Energy, SEC Hydrogen Advisory Board Member
- 48. Lucien Robroek, Chief Executive Officer, Nuvera Fuel Cells, LLC
- 49. Occo Roelofsen, Founder, Power2X
- 50. John Gunn, Global Manager of Operations, Energy Transition, Bechtel
- 51. Mattijs Slee, CEO, Battolyser Systems
- 52. Nicolas Marti, Business Development Manager EMEA Alternative Fuel, Emerson Automation Solutions
- 53. Dr Fiona Simon, CEO, Australian Hydrogen Council (AHC), SEC Hydrogen Advisory Board Member
- 54. Alex McIntosh, Director of Business Development and Transactions, Australian Renewable Energy Agency (ARENA)
- 55. John Cole, Chief Executive, Edify Energy
- 56. Garry Triglavcanin, Chief Development Officer, Provaris Energy
- 57. Ian Thompson, Chief Technology Officer, H2X Global
- 58. Matthew Blieske, CEO, LIFTE H2
- 59. Senior Representative, Gexcon
- 60. Juancho Eekhout, Vice President Business Development, Sempra Infrastructure
- 61. Piyush Katakwar, Global Hydrogen Lead, Royal HaskoningDHV
- 62. Dr. Nima Pegemanyfar, Head of Hydrogen Business Europe, Siemens Energy
- 63. Tamme Mekkes, Business Development Director, Koole Terminals
- 64. Hans van Zutphen, Senior Project Manager, McDermott
- 65. Henrik Larsen, Vice President, Clean Ammonia & Hydrogen, KBR
- 66. Andrea Pisano, Head of Hydrogen Initiatives, eni
- 67. Eystein Leren, Market Development Director, Yara Clean Ammonia
- 68. Jacky de Letter, Director Business Development, Yara Clean Ammonia
- 69. Shaun Gregory, Executive Vice President of New Energy, Woodside
- 70. Matias Saettone, General Manager, Hydrogen Products, Chevron New Energies, Chevron
- 71. Ramon van den Dungen, Managing Director Energy Sector Coverage, Hydrogen Lead The Netherlands, ING
- 72. Perry Houtepen, Managing Director HCR, Howden, a Chart Industries Company
- 73. Sally Prickett, Director, Hydrogen Advisory, Arup
- 74. Dr. Dean Bialek, Chief Officer External Affairs & Government Relations, CWP Global
- 75. John Barry, Vice President Hydrogen Development and Technology, Statkraft
- 76. Murat Aydemir, Managing Director, Faurecia Hydrogen Solutions Germany GmbH
- 77. Annant Shah, Director of Strategy and Route to Market, SSE Renewables
- 78. Morgan Rote, Director, U.S. Climate, Environmental Defense Fund
- 79. Tim Hard, SVP Energy Transition, Argus Media
- 80. Hugo Figueirêdo, CEO, Port of Pecém
- 81. Laurent Antoni, Executive Director, IPHE
- 82. Emmanuel Rodriguez, Head of Decarbonization Partnerships, Arcelor Mittal
- 83. Demetrios Papathanasiou, Global Director, Energy and Extractives Global Practice, The World Bank
- 84. Daria Nochevnik, Director for Policy and Partnerships, Hydrogen Council
- 85. Prof. Dr. Christopher Hebling, Director Division Hydrogen Technologies, Fraunhofer ISE
- 86. Rob Arthur, Director of Partnerships, Sustainable Energy Council
- 87. Master of Ceremonies: Simone van Trier



WEDNESDAY 10th MAY

WORLD HYDROGEN SUMMIT

DAY 1

"SCALING UP HYDROGEN PRODUCTION & IMPORT/EXPORT"

08:00 WELCOME NETWORKING COFFEE

Sponsored by:



09:00 SUMMIT WELCOME ADDRESS

- Rob Arthur, Director of Partnerships, Sustainable Energy Council
- Master of Ceremonies: Simone van Trier

09:05 OPENING KEYNOTE ADDRESSES

- H.E. Jeannette Baljeu, Regional Minister, Province of Zuid-Holland
- H.E. Robert Simons, Vice Mayor Port, Economy, Hospitality and Governance, City of Rotterdam
- Allard Castelein, Chief Executive Officer, Port of Rotterdam Authority, SEC Hydrogen Advisory Board Member

09:30 **FIRESIDE CHAT:** U.S. Department of Energy: An Insight into the US Hydrogen Plans

Moderator

Daria Nochevnik, Director for Policy and Partnerships, Hydrogen Council

Speaker

David Crane, Director of the Office of Clean Energy Demonstrations, U.S. Department of Energy

09:40 SPOTLIGHT: Air Products: Moving H₂umanity Forward with Hydrogen

Keynote Speaker

Ivo Bols, President for Europe & Africa, Air Products



09:50 SESSION 1: Leading Global Hydrogen Production Projects & Policies

- Current projects underway leading developments
- Latest progress in the development of Europe's Hydrogen Hub
- Policies incentivizing demand towards a profitable energy transition
- Will we achieve the 10+10 MTPA by 2030 in Europe?
- Lessons from effective Policy-Project integration

Keynote Speaker

Christian Pho Duc, Chief Technology Officer, Smartenergy

Moderator

Panellists

Marcel Galjee, Managing Director, HyCC Dr. Axel Wietfeld, CEO, Uniper Hydrogen GmbH Dr. Werner Ponikwar, CEO, thyssenkrupp nucera Olivia Breese, Senior Vice President, Head of Power to X, Ørsted

Interactive debate led by expert moderator with 5 leaders.

10:45 SPOTLIGHT: Invest in Canada

Keynote Speaker Laurel Broten, CEO, Invest in Canada

10:55 NETWORKING COFFEE BREAK

Sponsored by:





11:25 SESSION 2: Renewable Hydrogen Production & Electrolyser Developments

- Will there be enough electrolyser production capacity?
- Will there be enough green power from Wind, Solar, Hydro, Geothermal?
- Using hydrogen to solve the renewables intermittency issue
- Electrolyser giga factories: will there be enough capacity? What are the bottlenecks?
- Electrolyser advancements towards commercial scale-up & cost reduction
- Renewable power cost decline curve
- New tech revolutionising hydrogen deployment

Keynote Speaker

Matthias Ziebell, VP, Sales & Business Development Electrolysis Technology & Services, Robert Bosch GmbH

Moderator Tim Hard, SVP Energy Transition, Argus Media

Panellists

Massimo Scopelliti, Product and Marketing Manager, Nidec Industrial Solutions Mattijs Slee, CEO, Battolyser Systems

Dr. Nima Pegemanyfar, Head of Hydrogen Business Europe, **Siemens Energy Annant Shah,** Director of Strategy and Route to Market, **SSE Renewables**

To further engage in the Electrolyser technology development and cost reduction, don't miss the Electrolysers session in the H2 Tech Series.

12:10 SPOTLIGHT: Grasping the Opportunity

Keynote Speaker

Dr Fiona Simon, CEO, Australian Hydrogen Council (AHC), SEC Hydrogen Advisory Board Member

Building a Sustainable Future, Together



12:20 SESSION 3: Low Carbon Hydrogen Production & CCUS

- Low carbon hydrogen latest project and policy developments
- What are the barriers holding low carbon hydrogen back?
- How critical is low carbon hydrogen to meet current targets?
- What are the different low carbon standards? Which are effective and achievable?
- Timescales and transition pathways to future proof investments
- CCUS as a key enabler of hydrogen demand and infrastructure development
- Utilising CCUS to decarbonise existing hydrogen markets

Keynote Speaker

Felipe Arbelaez, Senior Vice President Hydrogen & CCS, bp

Moderator

Yelda Guven, VP Policy, EAME, ExxonMobil Low Carbon Solutions

Panellists

David Burns, Vice President Clean Energy, Linde, SEC Hydrogen Advisory Board Member
 Dominique Rouge, Vice President, Sales & Technology, Air Liquide Engineering & Construction
 John Gunn, Global Manager of Operations, Energy Transition, Bechtel
 Matias Saettone, General Manager, Hydrogen Products, Chevron New Energies, Chevron

13:15 NETWORKING LUNCH

14:25 SESSION 4: Hydrogen Infrastructure: Storage, Transportation & Distribution

- Current status of infrastructure developments
- Matching storage investment to production investment
- Established vs Alternative storage options
- Enabling large-scale hydrogen storage to improve energy system resilience
- Import terminal developments
- Developing transportation and distribution efficiencies and cost reduction
- Challenges and opportunities retrofitting existing pipeline infrastructure

Moderator

Senior Representative, Pin Oaks

Panellists

David Bow, Executive Vice President, Electrolyzer Business Unit, Plug
Garry Triglavcanin, Chief Development Officer, Provaris Energy
Matthew Blieske, CEO, LIFTE H2
Senior Representative, Gexcon
Murat Aydemir, Managing Director, Faurecia Hydrogen Solutions Germany GmbH

If you'd like to drill down into Energy Storage and why it's crucial for the energy transition, please do visit the World Energy Storage Hall in the Exhibition with its dedicated Forum Stage where these topics will be addressed in depth.



15:00 SPOTLIGHT: Deloitte: Business Model Solutions to Advance the Clean Hydrogen Economy

- Addressing the "chicken or egg" problem: key insights from Deloitte's collaboration with Princeton University
- Industry perspectives on how to better balance supply and demand
- Re-evaluating existing contracting norms
- Managing risk across the value chain through new approaches to commercial models

Speakers

Eric Vennix, Partner Consulting, Managing Partner Energy & Resources, Deloitte Netherlands Tarek Helmi, Partner Consulting, Deloitte Netherlands

15:10 **SPOTLIGHT**: Unique Opportunities for Hydrogen within PtL in the UAE: The Benefits of Abundant, Cheap Renewable Resources

Speaker

Narainsam Dorasamy, Executive Director of Bio and Chemical Energy, Renewable and Sustainable Energy Research Center, **Technology Innovation Institute**

15:20 SESSION 5: Hydrogen Mobility Market: Advancements on Land, Sea & Air

- Trains, Trucks, Buses, Cars Latest projects and priorities to meet 2030 targets
- Cross sector collaboration to develop a hydrogen mobility ecosystem
- Projections for aviation & shipping decarbonisation using hydrogen-based fuels
- Power-to-x pathways to decarbonise shipping and aviation
- Timescales towards achieving net-zero long-haul mobility
- Case Studies from successful hydrogen transportation deployment to date
- Producing Hydrogen-based fuels at large-scale to meet future demand
- How can Hydrogen and EV work together?

Moderator

Panellists

Nicolas Marti, Business Development Manager EMEA - Alternative Fuel, Emerson Ian Thompson, Chief Technology Officer, H2X Global Perry Houtepen, Managing Director HCR, Howden, a Chart Industries Company Senior Representative, Fuel Cell Energy Senior Representative, MASDAR

If you'd like to expand on hydrogen's role to decarbonise mobility, please do visit the H2 Tech Series session at where these topics will be addressed in depth.

15:55 NETWORKING COFFEE BREAK

Sponsored by:





SMARTENERGY 16:25 SESSION 6: Hydrogen Applications in Industry: Decarbonising Heavy Industry

- Leading projects decarbonising heavy industry sectors
- Power-to-x opportunities beyond hydrogen to enable cross sector decarbonisation
- Green steel manufacturing challenges and opportunities
- Future vision of a decarbonised heavy industries
- Can Hydrogen be the first step towards low carbon Cement industry?
- Roadmaps and requirements to decarbonise Chemicals & Refineries
- Fuelling our digital world: Hydrogen's role in the creation of carbon neutral data centres
- Off takers lessons learned to date and priorities

Moderator

Occo Roelofsen, Founder, Power2X

Panellists

Tomas Malango, Renewable Fuels and Circular Economy Director, Repsol Hans van Zutphen, Senior Project Manager, McDermott Andrea Pisano, Head of Hydrogen Initiatives, eni Jacky de Letter, Director Business Development, Yara Clean Ammonia Emmanuel Rodriguez, Head of Decarbonization Partnerships, Arcelor Mittal

17:00 SPOTLIGHT: Hydrogen Strategies and Programs in the EU and US

Speakers

Dr. Sunita Satyapal, Director, Hydrogen and Fuel Cell Technologies Office, U.S. Department of Energy

Ruud Kempener, Cabinet Member, Cabinet of the Commissioner for Energy (Kadri Simson), European Commission



17:10 SESSION 7: Hydrogen Bankability, Investments, Subsidies

- Regulations and Policies to harmonise global hydrogen trade projects
- Financing secure long term off-takers
- Examples on successful Public Private sector co-operation projects
- Incentivising demand through including PPAs, CfDs, and carbon pricing
- De-risking projects from the inception to enable quicker FIDs

Moderator

Dr. Christine Falken-Grosser, Director, Hydrogen Coordination, **Federal Ministry of Economic Affairs and Climate Action, Germany**

Panellists

Alex McIntosh, Director of Business Development and Transactions, Australian Renewable Energy Agency (ARENA)

Ramon van den Dungen, Managing Director Energy Sector Coverage, Hydrogen Lead The Netherlands, **ING**

John Barry, Vice President Hydrogen Development and Technology, Statkraft

Demetrios Papathanasiou, Global Director, Energy and Extractives Global Practice, The World Bank

END OF SUMMIT DAY 1

17:45 DRINKS RECEPTION



18:45 GALA DINNER





Speakers indicated are in the process of being invited & are not necessarily confirmed. Private Companies are subject to sponsorship pricing unless discretion is exercised



THURSDAY 11th MAY

WORLD HYDROGEN SUMMIT DAY 2

"ESTABLISHING A GLOBAL HYDROGEN INDUSTRY & TRADE"

08:00 WELCOME NETWORKING COFFEE

09:00 SUMMIT WELCOME ADDRESS

• Master of Ceremonies: Simone van Trier

09:05 OPENING KEYNOTE ADDRESSES

- H.E Micky Adriaansens, Minister of Economic Affairs and Climate Policy, Government of the Kingdom of the Netherlands
- H.E. Salim Al Aufi, Minister of Energy and Minerals, Sultanate of Oman
- Hon. Peter Malinauskas, Premier, Government of South Australia
- H.E. Sharif Al Olama, Undersecretary for Energy and Petroleum Affairs, Ministry of Energy & Infrastructure, United Arab Emirates

09:50 SESSION 8: Leading Global Hydrogen Export Projects & Policies

- Current projects underway leading developments
- Lessons learnt to date from global trade
- Policies incentivizing and facilitating export standards
- New hydrogen export players redefining geopolitics
- Lessons from effective Policy-Project integration
- Hydrogen trading platforms to facilitate trade

Keynote Speaker

Carlos Barrasa, Executive Vice President of Commercial & Clean Energies, CEPSA

Moderator

Dr. Dean Bialek, Chief Officer External Affairs & Government Relations, CWP Global

Panellists

Simon Herbert, VP, EAME, ExxonMobil Low Carbon Solutions John Cole, Chief Executive, Edify Energy Juancho Eekhout, Vice President – Business Development, Sempra Infrastructure Shaun Gregory, Executive Vice President of New Energy, Woodside Senior Representative, Iberdrola

Interactive debate led by expert moderator with 5 leaders.



10:40 EU Leading Global Hydrogen Developments Keynote Address

• Frans Timmermans, Executive Vice-President, European Commission

11:00 NETWORKING COFFEE BREAK

Sponsored by:



11:40 SESSION 9: Standardization, Certification & Regulations

- Systems being trialed how will a global system be selected and implemented?
- Global coordination for commercial trade and carbon credits
- Global certification for green hydrogen
- Global standards for green Hydrogen

Moderator

Alan Hayes, Global Head of Pricing for Energy Transition, S&P Global Commodity Insights

Panellists

Laurent Antoni, Executive Director, IPHE Daria Nochevnik, Director for Policy and Partnerships, Hydrogen Council Morgan Rote, Director, U.S. Climate, Environmental Defense Fund

12:15 SESSION 10: Global Ports Creating Hydrogen Hubs and Demand Centres

- Leading ports and projects paving the way for a global hydrogen economy
- Port partnerships creating green corridors rewriting energy politics
- Connecting supply and demand through hydrogen centres
- Ports as enablers of cross sector decarbonisation

Moderator

Peter Hartl, Associate Partner, Horváth & Partner GmbH

Panellists

Nico van Dooren, Head of Business Development, Port of Rotterdam Authority James Patterson, VP Hydrogen North West Europe, bp Sean Strawbridge, Chief Executive Officer, Port of Corpus Christi Authority Lucien Robroek, CEO, Nuvera Fuel Cells LLC Sally Prickett, Director, Hydrogen Advisory, Arup

13:00 NETWORKING LUNCH



14:15 **SPOTLIGHT:** An Insight into the UK Hydrogen Strategy

Keynote Speaker

Lord Callanan, Minister for Energy Efficiency and Green Finance, Department for Energy Security & Net Zero, UK Government

14:25 SESSION 11: An Outlook for Hydrogen's Future

- Where could the hydrogen industry be in 5-10 years?
- What needs to happen for the hydrogen industry to reach its mid to long term goals?
- What are the opportunities and bottlenecks as the hydrogen industry progresses?
- How can we use what we have learned so far to accelerate the industry?

Moderator

Geoff Tuff, Partner Consulting, Deloitte

Panellists

Caroline Stancell, General Manager, Hydrogen for Mobility - Europe & Africa, Air Products Paul Bogers, Vice President - Hydrogen, Shell

Senior Representative, **SFC** Senior Representative, **Fluor** Senior Representative, **Technip**

15:00 SESSION 12: Hydrogen Carriers: Ammonia, Methanol, Liquid Hydrogen, LOHC

- Projects and end-use cases decarbonising different sectors
- How will hydrogen trade through the ammonia vector impact on traditional ammonia trade?
- Attractiveness of each carrier vs Ammonia
- Decarbonising Shipping with green ammonia or methanol
- Latest Developments and cost reduction advancements
- Standardisation, regulation, and certification to enable cross regional trade
- Case Studies of successful use & cost comparison

Moderator

Alicia Eastman, President, InterContinental Energy, SEC Hydrogen Advisory Board Member

Panellists

Piyush Katakwar, Global Hydrogen Lead, Royal HaskoningDHV
Tamme Mekkes, Business Development Director, Koole Terminals
Henrik Larsen, Vice President, Clean Ammonia & Hydrogen, KBR
Eystein Leren, Market Development Director, Yara Clean Ammonia
Prof. Dr. Christopher Hebling, Director Division Hydrogen Technologies, Fraunhofer ISE

15:40 NETWORKING COFFEE BREAK

Sponsored by:





16:15 SPOTLIGHT: Global Alliances Enabling Hydrogen Projects & Social License

Speaker

Martijn Coopman, Program Manager International Hydrogen Supply Chains, Port of Rotterdam

16:30 SESSION 13: Global Hydrogen Trade Corridors: Connecting Established & New Suppliers to Global Off Takers

- Geopolitical implications for the hydrogen economy amid an energy crisis
- Energy security at the forefront of emerging global partnerships
- Strengths, opportunities & challenges from key corridors

(15 mins) CORRIDOR 1: Australia to Europe

Speakers

- Nicola McFarlane, Director of Hydrogen and New Energies Division, Department of Jobs, Tourism, Science and Innovation, Government of Western Australia
- **Dr. Falk Rouven Bömeke,** Head of Divison VB1: General issues of bilateral climate and energy cooperation; cooperation in North America, East Asia, Oceania and Turkey, **Federal Ministry of Economic Affairs and Climate Action, Germany**

(15 mins) CORRIDOR 2: Middle East energy supplies to Asia and Europe

Speakers

- Dr. Yunji Xu, General Manager of Commercial Industry, Shell
- Senior Representative, ARAMCO

(15 mins) CORRIDOR 3: North & Latin America: export corridors to the world

Speakers

• Hugo Figueirêdo, CEO, Port of Pecém

(15 mins) CORRIDOR 4: South Korea to the World

Speakers

• Senior Representative, South Korea

(15 mins) CORRIDOR 5: India export corridors to the world

Speakers

- Senior Representative, Avaada Energy
- Senior Representative, REC

17:45 CLOSING STATEMENTS

• Rob Arthur, Director of Partnerships, Sustainable Energy Council

END OF WORLD HYDROGEN SUMMIT 2023

Building a Sustainable Future, Together



FRIDAY 12th MAY

POST-EVENT DAY

09:30 MASTERCLASS: Hydrogen Fundamentals For Energy Transition

LED BY TU DELFT UNIVERSITY



10:00 SITE VISITS 2 TO THE PORT OF ROTTERDAM HYDROGEN PROJECTS



14:00 SITE VISITS 3 TO THE PORT OF ROTTERDAM HYDROGEN PROJECTS





WITH THANKS TO OUR 2023 EXHIBITORS





GET IN TOUCH WITH THE TEAM:



Chris Hugall

Managing Director Sustainable Energy Council Phone: +44 20 7978 0080



Rob Arthur

Director of Partnerships Sustainable Energy Council Phone: +44 20 7978 0095



Kelly-Marie Tuthill Government Relations & Speaker Manager Sustainable Energy Council Phone: +44 207 978 0010