





**DISCOVER** 

# The future of the first the biggest Hydrogen Event in MENA

# **Show Guide**

12-14 DECEMBER 2023

Oman Convention & Exhibition Centre Muscat, Sultanate of Oman

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# Oman's Vision: Leading the Green Hydrogen Revolution

Green hydrogen plays a pivotal role in the journey to clean energy and Oman has gone further than most in placing green hydrogen front and centre in its decarbonisation strategy. More than 130 countries around the world, including the Sultanate of Oman, have committed to Net Zero by 2050. Investments of billions of dollars are set to catalyse this vision over the next three decades – an ambition that can only be achieved through collaborative partnerships, joint ventures and knowledge sharing.

# The largest Hydrogen event in MENA



GHSO 2023 is the largest Green Hydrogen event in the MENA region, bringing together global decision makers in policy, finance, tech and industry for discussions geared towards driving economies of the future and advancing energy solutions that can sustainably meet the energy demands of our growing population. Securing steady, affordable energy resources is key. Governments and senior executives will highlight the critical role of Green Hydrogen and how we can cooperate globally to achieve sustainable energy systems.



The Sultanate of Oman's trajectory toward a low carbon and green hydrogen economy shines with immense promise. Through steadfast dedication, we have forged agreements and secured over \$30 billion in investments for pioneering projects. In this journey, we stand shoulder-to-shoulder with esteemed global developers and investors, driven by a shared commitment to a sustainable, cleaner tomorrow. Collaboration becomes the cornerstone of our voyage, steering us toward the realization of a Net Zero world, where innovation and unity pave the way for a brighter future.

**H.E. Eng.Salim Al Aufi**Minister of Energy and Minerals
The Sultanate of Oman

# Uniting for a sustainable future

The renewable energy revolution has enabled a green hydrogen economy to come into focus. A hydrogen economy could compensate for the limitations of renewables as Hydrogen makes it feasible to imagine a complete energy transition.

With over 131 countries including Oman, committed to Net Zero by 2050, the Green Hydrogen industry is set to play a key role in shaping the energy industry. Learn how you can play a role in shaping this new industry.



**5000+** Visitors



3000+ Delegates



**500+** Companies



100+ Speakers



**50+** Exhibitors



100+ Countries





# 400 event program

# **DECEMBER**

10 Sunday Monday 13 Wednesday 14 Thursday Tuesday Exhibition Exhibition BMW H<sub>2</sub> Driving tour Exhibition Mobility event - SOHAR Masterclass Workshops Conference Conference OCEC Build up days **EU Summit Energy Executive Circle** Women in Future Energies Gala Dinner - OCEC At the biggest Hydrogen Event in MENA

The future of energy

7 | **GHSO2023** Summit Guide **Dec** 12-14, 2023

JW MARRIOTT - OCEC

Dec 12-14, 2023

# Programming

3 day Exhibition

2day Conference

1day Masterclass workshops

+6 Side events

SIDE EVENTS







DEC 10
DUBAI - PORT OF SOHAR - MUSCAT
BMW Drive the future today

DEC 12 JW MARRIOTT - MUSCAT Women in future energies

DEC 13 JW MARRIOTT - MUSCAT Energy Executive Circle



DEC 13 JW MARRIOTT - MUSCAT European Union Summit



DEC 12-14 OCEC- MUSCAT TecH₂ Stage



DEC 14 OCEC- MUSCAT Future Energy Leaders Awards

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# Strategic Partner



#### Hydrom

Hydrom is a fully owned independent subsidiary of Energy Development Oman SAOC (EDO). Hydrom serves as the overall orchestrator and master planner of Oman's green hydrogen sector. Its mandate includes identifying government-owned land areas, structuring large-scale green hydrogen projects, managing the allocation process to developers, and facilitating the development of shared infrastructure and connected ecosystem industries and hubs. www.hydrom.om

#### Diamond Partner



#### **Oman Shell**

Shell has played an important role in fostering Oman's development and advancement over the past few decades. Our commitment has been reflected through the introduction of pioneering technologies and industry expertise in the energy sector, thus generating significant value for the local community. In Oman, Shell maintains an extensive presence within the energy sector, engaging in collaborative ventures and independent initiatives that span the spectrum from research and development, exploration and production, to trading, retail, and emerging energy fields. www.shell.com.om

# Mobility Partner



#### **BMW**

The BMW Group is the world's leading premium manufacturer of automobiles and motorcycles, with a production network comprising 31 production and assembly facilities in 15 countries and a global sales network across more than 140 countries. BMW Group has the ambition to become the most sustainable car manufacturer and is at the forefront of promoting hydrogen technology as a supplement to battery-electric drive trains. www.bmwgroup.com

### Host



#### OQ

OQ is a global integrated energy company with roots in Oman. OQ has operations across 17 countries, that covers the entire value chain from exploration and production of oil and gas, refineries and petrochemicals to marketing and distribution of endused products reaching more than 80 countries worldwide. OQ Alternative Energy focuses on investments in renewables and green hydrogen in Oman. www.oq.com

#### Gold Partner



#### Opaz

The Public Authority for Special Economic Zones and Free Zones was established in August 2020 by the Royal Decree No 105/2020 to oversee the Special Economic Zone at Duqm, Al Mazunah Free Zone, Salalah Free Zone, Sohar Free Zone and any other special economic zone or free zone. www.opaz.gov.om

# Premium Sponsor



#### Vulcan Green Steel

Vulcan Green Steel (VGS) stands as the leading green hydrogen-ready steel plant globally, specializing in automotive steel production. As the newly established steel arm of Vulcan Green, VGS operates under the esteemed Jindal Steel Group of Companies, which boasts a rich legacy of 50 years in the steelmaking industry, making it the oldest and largest steel family in India. At VGS, our operations are firmly rooted in decarbonization and sustainability, aligning with the overarching agenda of the Jindal Group of Companies to significantly reduce the industry's carbon footprint. www.vulcangreensteel.earth

# Main Sponsors



#### Oman LNG

Oman Liquefied Natural Gas LLC (Oman LNG) is a Joint Venture established by a Royal Decree in 1994, and operates under the laws of the Sultanate of Oman. The Company produces and sells Liquefied Natural Gas (LNG) and its by-product, Natural Gas Liquids (NGLs). Oman LNG directly and indirectly undertake project operations and related activities essential to liquefy, store, transport and market Oman's natural gas and to deliver LNG to customers. www.omanlng.co.om

#### **ASYAD**



Asyad Group is Oman's global integrated logistics provider, ranked 4th on Forbes' "10 Biggest Logistics Companies in MENA" list. As a USD 4 billion enterprise backed by an initial USD 26 billion in government infrastructure spending, Asyad is attracting customers and investors keen on leveraging the country's state-of-the-art logistics facilities and established manufacturing capabilities. www.asyad.om

# Registration Area Sponsor

#### Port of Dugm



The Port of Duqm stands as the pivotal access point to the Middle East's largest Special Economic Zone (SEZD). Overlooking the Arabian Sea and strategically positioned outside the Strait of Hormuz, this port is ideally situated to bridge major Eastern and Western trade routes. It presents a compelling choice for international shipping lines catering to the expansive and burgeoning markets of the Indian subcontinent, East- and South Africa, and the GCC countries, all of which are within direct reach from Duqm. www.portofduqm.om

# Lanyard Sponsor

#### Advario



Advario is a leading global player in the storage industry, with a focused growth on strategy on chemicals, gas and new energy and a strong commitment to embed ESG and sustainability across our entire operations. Advario is a carve out of Oiltaking GmbH and we are committed to play a frontrunner role in the energy transition through developing transformational partnerships. Advario is headquartered in Rotterdam and operated 13 terminals in Europ, China, Singapore, Middle East and the United States, with a total storage capacity of 8 mln cbm. www.advario.com

# **Exclusive Bank Sponsor**



#### Bank of Sohar

Sohar International has quickly become the fastest growing bank as well as one of the most profitable banks within the Sultanate of Oman designed for success by putting into motion the organization's applauded strategy resulting in milestones that have been attested by numerous local, regional, and international accolades covering a wide spectrum of the bank's activities and initiatives. Engaged in businesses catering to Commercial and Investment Banking to Wealth Management, Islamic Banking and beyond, every segment presents an opportunity waiting to be harnessed into a uniquely successful proposition achieving diversity and contributing towards Oman Vison 2040. www.soharinternational.com

# TecH2 Stage Sponsor

#### Takhzeen Oman



Takhzeen Oman, a dynamic subsidiary of ONEIC, is set to revolutionize Oman's energy landscape with cutting-edge sustainable energy storage solutions, aligning with national energy objectives and the pursuit of net-zero emissions. Takhzeen's commitment to innovation not only propels economic growth but also strengthens incountry value, enriches job opportunities, and fuels progress. Takhzeen is dedicated to commercializing and scaling transformative technologies, paving the way for a net-zero economy. www.takhzeenoman.com

# Platinum Sponsors

#### bp



Our purpose is reimagining energy for people and our planet. We want to help the world reach net zero and improve people's lives. bp Oman is the operator of block 61 and holds a 40% share, OQ 30%, PTTEP 20% and PETRONAS 10%. Block 61 produces 1.5 billion cubic feet of gas and around 60,000 barrels of associated condensate per day and has the capacity to deliver approximately 35% of Oman's total gas demand. In June 2023, we signed a project agreement for a Duqm block to potentially produce approximately 150,000 tonnes of green hydrogen annually through solar and wind energy. www.bp.com

#### Worley



We're a professional services company of energy, chemicals and resources experts helping our customers shift their operations towards a more sustainable future. We partner with our customers to deliver projects and create value over the life of their portfolio of assets. We solve complex problems by finding integrated data-centric solutions from the first stages of engineering to the last stages of installation and commissioning. It is our ambition to derive 75 percent of our revenue from sustainability-related work by FY26, and to be recognized as a leader in sustainability solutions. www.worley.com

# PTTEP

#### **PTTEP**

PTT Exploration and Production Public Company Limited or PTTEP conducts business in petroleum exploration, development, and production to support Thailand's energy security and the energy demand of countries we operate in. Established in 1985, we have a mission as a Thai energy company to create shared value for all stakeholders. We invest in over 50 petroleum exploration, development and production projects worldwide. In preparation for energy transition, we have diversified into new businesses involving new forms of energy, advanced technology and decarbonization. www.pttep.com

#### ACME



ACME Group, a global leader in sustainable and renewable energy, was founded in 2003 by Mr. Manoj K. Upadhyay. Known for pioneering fit-for-market products in telecom infrastructure, the company achieved grid parity in 2013, making solar power 25% cheaper than thermal power. ACME is India's largest solar power developer, with a 5 GWp portfolio and 1.5 GWp in operation. Diversifying into Green Hydrogen and Ammonia, ACME set up the world's first integrated pilot project in Rajasthan and plans large-scale projects in India and Oman. With projects approved in Tamil Nadu and Odisha, ACME envisions producing 10 million tonnes/year of Green Ammonia and equivalent-Green Hydrogen by 2032. www.acme.in

#### **NT Energies**



NT Energies is a joint venture created by Technip Energies and National Petroleum Construction Company (NPCC). Headquartered in Abu Dhabi, NT Energies is actively contributing to the energy transition across the United Arab Emirates, the broader Middle East region, and North Africa. Our extensive portfolio of services is designed to address diverse energy and sustainability needs. We specialize in blue and green hydrogen production, decarbonization projects, advanced CO2 capture technologies, and a range of industrial initiatives, including waste-to-energy, biorefining, and biochemistry. Our commitment to these endeavors underscores our dedication to advancing cleaner and more sustainable solutions for the region and beyond.

# OQGN

www.ten.com | www.nmdc-group.com



OQGN holds a natural monopoly over critical gas transportation infrastructure in Oman as the exclusive owner and operator of the NGTN. With the support of its around 480 talented individuals as at 30 June 2023, the Company prioritizes maintaining high standards of operation and maintenance, which is reflected in the OQGN's operational track-record, having delivered 99.99% gas availability over the last 10 years and recorded no gas supply interruptions in 2022. OQGN actively considers the interests of society at large and the economic development of Oman in the course of its operations and strives to maximize its engagement in and contribution to the Omani communities. www.oqgn.om

# **Gold Sponsors**



#### **Amnah Consortium**

Amnah Consortium, led by Copenhagen Infrastructure Partners (CIP), Al Khadra Partners LLC (AKP), and Blue Power Partners A/S (BPP), won Hydrom's first land auction in Oman. Their plan involves a \$6 billion investment to build a 4.5GW green hydrogen production facility within a 320km2 block. This initiative aims to position Amnah as a frontrunner in global green hydrogen production while supporting Oman's economic diversification goals outlined in Vision 2040.

www.cip.com| www.bluepowerpartners.com| www.bahwancybertek.com

#### Engie



ENGIE is a global reference in low-carbon energy and services. With its 96,000 employees, its customers, partners and stakeholders, the Group is committed to accelerate the transition towards a carbon-neutral world, through reduced energy consumption and more environmentally-friendly solutions. Inspired by its purpose ("raison d'être"), ENGIE reconciles economic performance with a positive impact on people and the planet, building on its key businesses (gas, renewable energy, services) to offer competitive solutions to its customers. www.engie.com

#### Siemens Energy



Siemens Energy is one of the world's leading energy technology companies. With its portfolio of products, solutions and services, Siemens Energy covers almost the entire energy value chain – from power generation and transmission to storage. The portfolio includes conventional and renewable energy technology. An estimated one-sixth of the electricity generated worldwide is based on technologies from Siemens Energy. Siemens Energy employs around 94,000 people worldwide in more than 90 countries and generated revenue of €31.1 billion in fiscal year 2023. www.siemens-energy.com

#### thyssenkrupp



thyssenkrupp nucera, a joint venture with Industrie De Nora, excels in high-efficiency electrolysis plants, boasting a track record of 600+ projects and 10 GW installed. Specializing in chlor-alkali and green hydrogen, the company pioneers innovative solutions for industrial progress and green value chains. Their water electrolysis technology produces green hydrogen at scale, driven by renewable energy, with zero harmful greenhouse gas emissions. As a major step towards climate-neutrality, thyssenkrupp nucera powers an industry fueled by clean energy. www.thyssenkrupp.com

#### SLB



SLB (NYSE: SLB) is a global technology company that drives energy innovation for a balanced planet. With a global footprint in more than 100 countries and employees representing almost twice as many nationalities, we work each day on innovating oil and gas, delivering digital at scale, decarbonizing industries, and developing and scaling new energy systems that accelerate the energy transition. www.slb.com

# Gala-dinner Sponsors

#### Plug Power



Plug (a Nasdaq listed company) is building an end-to-end green hydrogen ecosystem, from green hydrogen production, storage and delivery to energy generation through mobile or stationary applications, to help its customers meet their business goals and decarbonize the environment. In creating the first commercially viable market for hydrogen fuel cell technology, the Company has deployed more than 60,000 fuel cell systems for forklifts and more than 185 fueling stations that our customers use daily to fill their forklift trucks. www.plugpower.com

#### **Oman Cables Industry**



Oman Cables Industry (SAOG) is the leading cable solutions provider in the Sultanate of Oman. Listed on the Muscat Stock Exchange (MSX), the company specializes in developing, manufacturing, and marketing a broad range of electrical products, including medium voltage power cables, low voltage power & control cables, instrumentation cables, pilot cables, overhead power transmission line conductors, and building wires. With offices in Oman, UAE, Qatar, Bahrain, and KSA, and an extensive network of distributors and agents across the Middle East, Oman Cables Industry is part of the Prysmian Group, the global leader in the cable industry. www.omancables.com

# Green Zone Sponsors

#### **EDF Group**



As a major player in energy transition, the EDF Group is an integrated energy company active in all businesses: generation, transmission, distribution, energy trading, energy sales and energy services. EDF group is a world leader in low-carbon energy, having developed a diverse production mix based mainly on nuclear and renewable energy (including hydropower). It is also investing in new technologies to support energy transition. EDF's raison d'être is to build a net zero energy future with electricity and innovative solutions and services, to help save the planet and drive well-being and economic development. www.edf.com

SPONSORS SPONSORS

## Silver Sponsors



#### **Energy Dome**

Energy Dome is the ideal partner for anyone deeply committed to green hydrogen production. Our core mission is to start decarbonizing the world, with a groundbreaking solution designed to facilitate energy storage, hence enabling green hydrogen generation. Our signature innovation, the CO2 Battery, stands as a testament to our commitment to the future. It is readily available and represents a remarkable breakthrough in long-duration energy storage, enabling cost-effective electricity storage with excellent round-trip efficiency. www.energydome.com



#### InterContinental Energy

InterContinental Energy pioneers large-scale green hydrogen production using upstream wind and solar in coastal deserts. Since 2014, we've led in creating top-tier green fuels hubs, featuring projects like Green Energy Oman (GEO) and Australian Renewable Energy Hub (AREH). With a global, multi-disciplinary team, we prioritize innovation and operate across Singapore, Australia, and the Middle East. Guided by the ethos of "doing the right thing, the right way," we optimize outcomes for stakeholders, including First Nations and communities, collaborating with partners to deliver value to strategic investors. www.intercontinentalenergy.com

#### walter tosto



With over 60 years of global leadership, Walter Tosto specializes in mechanical design, fabrication, and construction for Chemical, Petrochemical, Oil & Gas, and Energy sectors. Renowned for top-quality high-pressure equipment, they collaborate globally with licensors, EPC companies, and producers. Walter Tosto's commitment to high-quality engineering, advanced fabrication, and efficient logistics drives industry progress. They lead in embracing Green Technologies, actively participating in initiatives for a Net Zero economy in response to environmental concerns. www.waltertosto.it

#### HYDROGEN SYSTEMS



Hydrogen Systems, a Saudi Arabian business established in 2010, pioneers integrated hydrogen solutions and provides value-added support to commercial and renewable energy markets. A sustaining leader in hydrogen energy and decarbonization solutions, the company plays a pivotal role in advancing Saudi Arabia and the region towards sustainable and decarbonized energy solutions, marking a significant presence in the hydrogen market. www.h2systems.sa

#### Hyundai Motor Company





Established in 1967, Hyundai Motor Company is present in over 200 countries with more than 120,000 employees dedicated to tackling real-world mobility challenges around the globe. Based on the brand vision 'Progress for Humanity,' Hyundai Motor is accelerating its transformation into a Smart Mobility Solution Provider. The company invests in advanced technologies such as robotics and Advanced Air Mobility (AAM) to bring about revolutionary mobility solutions, while pursuing open innovation to introduce future mobility services. In pursuit of sustainable future for the world, Hyundai will continue its efforts to introduce zero emission vehicles equipped with industry-leading hydrogen fuel cell and EV technologies. www.hyundai.com/worldwide/en/

# **Associate Sponsors**

#### **Boston Consulting Group**



Boston Consulting Group partners with leaders in business and society to tackle their most important challenges and capture their greatest opportunities. BCG was the pioneer in business strategy when it was founded in 1963. Today, we work closely with clients to embrace a transformational approach aimed at benefiting all stakeholders—empowering organizations to grow, build sustainable competitive advantage, and drive positive societal impact. Our diverse, global teams bring deep industry and functional expertise and a range of perspectives that question the status quo and spark change. www.bcg.com

# Associate Partner - Italy

#### VIBEA



As VIBEA, founded in 2020, is an Italian energy consulting firm specializing in Business Development, Supply Chain Management, and Engineering Services. Our mission is to be a global industrial compliance point of reference, supporting plant builders and manufacturing companies. With a vision for supporting new technologies in the energy transition, we aim to increase the competitive advantages of companies, foster business opportunities, and contribute to shared social well-being. Our service lines include Supply Chain Management, Business Development, and Engineering Services for sustainable and efficient processes. www.vibea.it

# Session Sponsors



#### Special Oilfield Services (SOS)

Established in 1986, Special Oilfield Services (SOS) is a leading oilfield supplier in Oman. Originally a Joint Venture between Mohsin Haider Darwish LLC and Al Mansoori Petroleum Services, SOS transitioned to a JV between MHD and TAQA in December 2022 after AMPS's acquisition by TAQA. TAQA, a Saudi joint stock company, endorses SOS. Leveraging expertise from these iconic names, SOS delivers prime products and services, solidifying its position as a key player in the Oman oilfield industry. www.specialoilfield.com

#### Special Technical Services (STS)



#### Value Engineering Centre SPC (VEC)

VEC Resources & Energy, established in 2004, is the "First Time Right" Engineering Consultancy in Oman, specializing in Energy Transition toward Net Zero. As a high-end Omani-owned firm, VEC offers a full spectrum of Engineering services, including conventional Oil & Gas, De-carbonization, and Green energy solutions. Accredited to ISO standards, VEC collaborates with DCRP-approved Hamed Engineering Services to extend capabilities in Green Power & Infrastructure Engineering. With a focus on achieving technically correct and accurate Engineering within defined schedules and budgets, VEC contributes to the In Country Value. www.vecoman.com

#### **Bureau Veritas**



Shaping a World of Trust

Bureau Veritas, a global leader founded in 1828, with 82,000 employees across 1,600 offices worldwide, offers industry-leading laboratory testing, inspection, and certification services. We enhance client performance, ensuring assets, products, and processes meet quality, health, safety, environmental, and social responsibility standards. Our testing, analysis, and inspection services ensure compliance with regulations, giving companies confidence in product reliability. As an accredited certification body, we certify systems and products to international standards, supporting clients in accessing new markets and fortifying their brands on the journey to a more sustainable business and world. www.bvna.com

#### MSA Safety



Established in 1914, MSA Safety Incorporated is the global leader in the development, manufacture and supply of safety products that protect people and facility infrastructures. Many MSA products integrate a combination of electronics, mechanical systems and advanced materials to protect users against hazardous or life-threatening situations. The company's comprehensive product line is used by workers around the world in a broad range of markets, including the oil, gas and petrochemical industry, the fire service, the construction industry, mining and the military. www.msasafety.com

# Knowledge Partners

#### **GUtech**



German University of Technology in Oman (GUtech) is the only university in Oman with an academic affiliation to a German University. Located in Halban, off Muscat Expressway, GUtech collaborates with RWTH Aachen University, offering internationally recognized programs accredited by ACQUIN. GUtech, the first private Omani university to receive ACQUIN accreditation, moved to its green campus in Halban in 2012, winning awards for the best commercial building in Oman and the Middle East in 2013. GUtech aspires to be a regional leader, meeting international standards in education, research, and innovation. www.gutech.edu.om

# مرکز عُمان للهيدروجين

#### Oman Hydrogen Centre (OHC)

Established in 2019 by GUtech, the Oman Hydrogen Centre (OHC) is Oman's first research center focused on accelerating the transition to renewable energy. OHC strives to lead the shift from fossil to renewable sources, particularly solar and wind, utilizing green hydrogen as the future economy's clean energy carrier. Aligned with Oman Vision 2040, OHC collaborates with local and international partners, fostering competencies in the hydrogen-based economy through coordinated efforts between industry, academics, government, and society. www.ohc.om

#### BloombergNEF



BloombergNEF (BNEF) is a strategic research provider covering global commodity markets and the disruptive technologies driving the transition to a low-carbon economy. Our expert coverage assesses pathways for the power, transport, industry, buildings and agriculture sectors to adapt to the energy transition. We help commodity trading, corporate strategy, finance and policy professionals navigate change and generate opportunities. www.about.bnef.com

# We would like to thank our **Exhibitors**

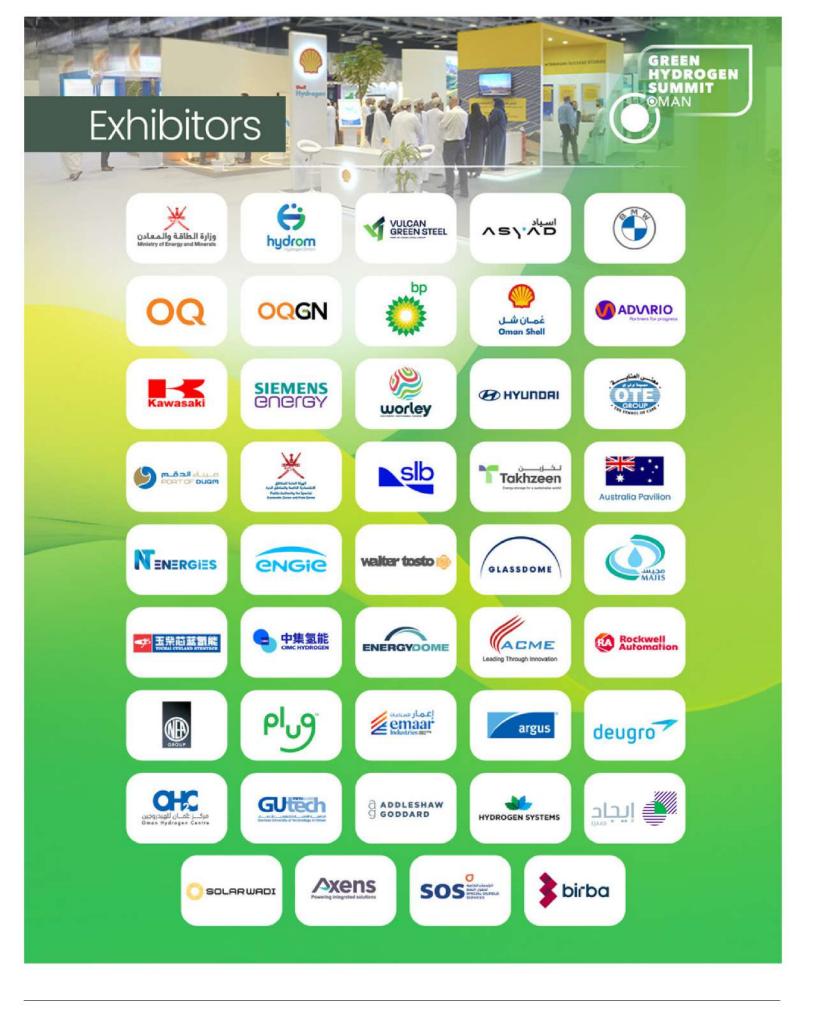
# The future of the following of the follo

#### Dec 12-14, 2023

Oman Convention & Exhibition Centre Muscat, Sultanate of Oman

Green Hydrogen is fast becoming a key player in our goals to net zero. As part of that journey, Green Hydrogen Summit Oman hosts exhibitors from around the world; bringing all aspects of this fast-paced hydrogen story to one place, with key players in the industry exploring the challenges and showcasing the incredible possibilities of this new tomorrow, today.

В1	Birba
B2	Ministry of Energy and Minerals
В4	bp
В5	Hydrom
В6	OQ / OQGN
В7	Solar Wadi
C2	Plug
C3A	Rockwell Automation
C3	Neuman & Essar
C4	OPAZ
C5	Vulcan Green Steel
C6	ASYAD
C7	Advario
C8	GUtech & OHC
C8A	Solar Wadi
D3	Takhzeen
D4	Worley
D5A	Engie
D5B	NT Energies
D6	Oman Shell & Hydrogen Systems
D7	slb
D8	Walter Tosto
E4	Argus Media
F2	Axens
F3	Addleshaw Goddard
F5	CIMC Hydrogen
F6	Australian Pavillion
F7	ACME
F8	
F9	Siemens Energy
G2	deugro
G3	Emaar Industries
G5	Yuchai Cynland Hyentech
G5A	
G6	Majis
G7	Glassdome
G8	Special Oilfield Services
G8A	Ejaad
HI	Hyundai Motor Company
НЗ	Kawasaki
H4	BMW Group

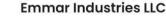


EXHIBITORS



#### Addleshaw Goddard (AG)

Addleshaw Goddard (AG) is a premier international business law firm offering a comprehensive range of services. Operating seamlessly across the Middle East from offices in Oman, the UAE, Qatar, and Saudi Arabia, AG is a rare firm with such extensive regional coverage. Established in 2013, our Oman office stands as a committed player, combining global standards with local expertise. With a focus on quality, responsiveness, and innovative legal solutions, AG's Oman office is recognized as a leading corporate practice in the Sultanate. www.addleshawgoddard.com





Emaar Industries LLC, a 100% Omani company based in Oman, specializes in manufacturing sandwich panels and modular buildings. Renowned for delivering high-quality, innovative solutions, Emaar Industries is a leading player in the manufacturing industry. Their sandwich panels, known for exceptional insulation and structural properties, are widely used in various construction applications, offering energy efficiency and versatility. With a commitment to sustainability, Emaar Industries provides eco-friendly construction materials, making them a trusted choice for clients seeking reliable building solutions in Oman and beyond. www.emaarllc.com

#### Australian Business Group Oman (ABGO)



The Australian pavilion is brought to by the Australian Business Group Oman. ABGO promotes member networking and contact with Omani businesses and Government offices, as well as between the Australian business community in Oman. The group provides a link between the Australian business community in Oman and visiting Australian officials and trade delegations/missions and is also a source of informal information and advice for Australian businesses wishing to do business in Oman. www.abgoman.com

#### Majis



Majis Industrial Services was established in 2006 with the business vision, "To be a global supplier of innovative water solutions enhancing value to our stakeholders". Majis supplies sustainable eco-friendly water solutions to clients in Sohar Industrial Port Area (SIPA), Sohar Free Zone (SFZ) and Sohar Industrial City (SIC). The company is the only one-stop, fully integrated, water solutions platform in the Sultanate of Oman, catering to water utility and effluent (polluted water) treatment requirements of industrial clients, operating in SIPA. Majis' continued efforts in pursuing operational excellence, maximizing the utilization of the available capacity and maintaining excellent relationships with stakeholders. www.majis.om

#### **Axens Group**



Axens Group delivers comprehensive solutions for oil and biomass conversion, petrochemical production, plastics recycling, natural gas treatment, and low carbon hydrogen solutions. Specializing in decarbonization, ultra-purification of hydrogen, and innovative storage through LOHC technology, Axens provides technologies, equipment, and services across the value chain, ensuring peak performance with a minimized environmental impact. An IFP Group company, Axens boasts highly trained personnel, modern facilities, and a global support network. www.axens.net

#### **Rockwell Automation**



Rockwell Automation, Inc. (NYSE: ROK), is a global leader in industrial automation and digital transformation. We connect the imaginations of people with the potential of technology to expand what is humanly possible, making the world more productive and more sustainable. Headquartered in Milwaukee, Wisconsin, Rockwell Automation employs approximately 29,000 problem solvers dedicated to our customers in more than 100 countries. www.rockwellautomation.com

#### deugro



deugro, a highly specialized project freight forwarder, excels in turnkey logistics solutions across diverse industries. With a proven track record in executing projects of any scale under challenging conditions, we actively collaborate with clients, emphasizing value-added logistics for low-carbon projects. Leveraging a vast global network, deugro ensures comprehensive expertise worldwide, combining global coverage with local proficiency. Founded in 1924, we bring nearly a century of logistics experience as an independent entity within the deugro group. www.deugro.com

#### YUCHAI CYNLAND HYENTECH CO. LTD.



Yuchai HyEnTech, a Guangxi Yuchai Machinery subsidiary and Top 500 Chinese company, is a leading hydrogen solutions provider. Since 2017, they've excelled in PEM fuel cell and electrolyzer R&D, becoming a top domestic hydrogen supplier. With a strong Ph.D.-led R&D team, they've established a semi-automatic PEM fuel cell production line, producing 2,000 units annually, and plan a 100MW electrolyzer production line in 2024. www.yuchai.com

EXHIBITORS

#### CIMC Hydrogen



CIMC Hydrogen, a pivotal enterprise within CIMC Group and CIMC ENRIC, spearheads the implementation of the hydrogen energy strategy. Committed to becoming a leading technology enterprise, CIMC Hydrogen covers the entire hydrogen energy industry chain, offering key equipment manufacturing and overall solutions. Leveraging a strong brand and cutting-edge technology, we aim to provide global customers with green, convenient, and economical solutions for hydrogen energy utilization, spanning various sectors such as production, storage, transportation, and refueling.

www.en.enricgroup.com/hydrogen

#### Glass Dome



Glassdome specializes in Product Environmental Footprints (PEFs) for carbon-intensive industries, offering software and consulting to global leaders. Covering sectors like Hydrogen, Concrete, Plastics, Steel & Aluminum, and EV Battery, Glassdome's advanced Life Cycle Assessment (LCA) platform securely manages industrial data, aiding in dynamic PEF creation and regulatory compliance. With a focus on supporting Hydrogen companies in Oman and the GCC, Glassdome is committed to advancing sustainability and aiding in decarbonization projects. As a US-based VC-backed SaaS provider, Glassdome's subscription model minimizes upfront integration costs, ensuring a sustainable ROI. www.glassdome.com

#### Solar Wadi



Solar Wadi is one of the first independent Omani power company that invests in, builds, owns and operates Renewable Energy power plants. Established by a group of pension funds, Omani Investors and international Solar Developers. Majority held by Omani Shareholders. Renewable energy is the most abundant and available energy source on Earth. Solar Wadi is dedicated to harvesting that energy in an environmentally responsible way, as part of a global transition from fossil fuels. **www.solarwadi.com** 

#### **Argus Media**



Argus is the foremost independent provider of market intelligence for global energy and commodity markets. Our comprehensive services include essential price assessments, news, analytics, consulting, data science tools, and industry conferences, illuminating complex commodity markets. Headquartered in London with 29 offices worldwide, our privately held company, founded in 1970, is trusted by companies, trading firms, and governments in 160 countries for decision–making, risk management, trading facilitation, and long–term planning. Our prices serve as trusted benchmarks globally, contributing to transparent and efficient pricing in transportation, commodities, and energy markets. www.argusmedia.com

#### EJAAD



Established in 2017, EJAAD is a non-profit platform bridging industry and academia to promote Research, Development, and Innovation (RDI). Created by The Ministry of Higher Education Research and Innovation, in collaboration with the Ministry of Energy and Minerals and Petroleum Development Oman, EJAAD focuses on applied research and technology development across Technology Readiness Levels TRL (4–9). Our mission is to facilitate efficient R&D partnerships, contributing to Oman's knowledge-based economy and aligning with Vision 2040 goals. Join us in advancing applied research, technology development, and innovation for a transformative impact on Oman's future. www.ejaad.om

#### Kawasaki



Kawasaki focuses on clean energy "hydrogen" to realize a hydrogen-based society. We provide equipment and services across the hydrogen supply chain, emphasizing production, transportation, storage, and utilization without emitting CO<sub>2</sub>. In spring 2022, our successful pilot demonstration of international liquefied hydrogen transportation using the world's first carrier, "Suiso Frontier," marked a milestone. As we progress towards a hydrogen-centric future, we leverage accumulated technologies for the next phase. Explore our advancing hydrogen-related technologies connecting production sites to consumers, forging a new "Hydrogen Road." www.global.kawasaki.com

#### **NEUMAN & ESSER**



NEUMAN & ESSER, as a trusted industry partner, leads decarbonization efforts with integrated solutions for tomorrow's energy infrastructure. As an OEM for compressors, electrolyzers, and reformer systems, including hydrogen filling stations, we bring challenging defossilization projects to life. With a century of H2 compression experience, we offer full integration across the value chain, providing optimal overall solutions from generation to distribution. With nearly 200 years of heritage, our determined team drives the oil and gas industry towards sustainable energy futures. www.neuman-esser.de

## **Broadcast Partner**



## Media Partners



























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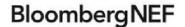






















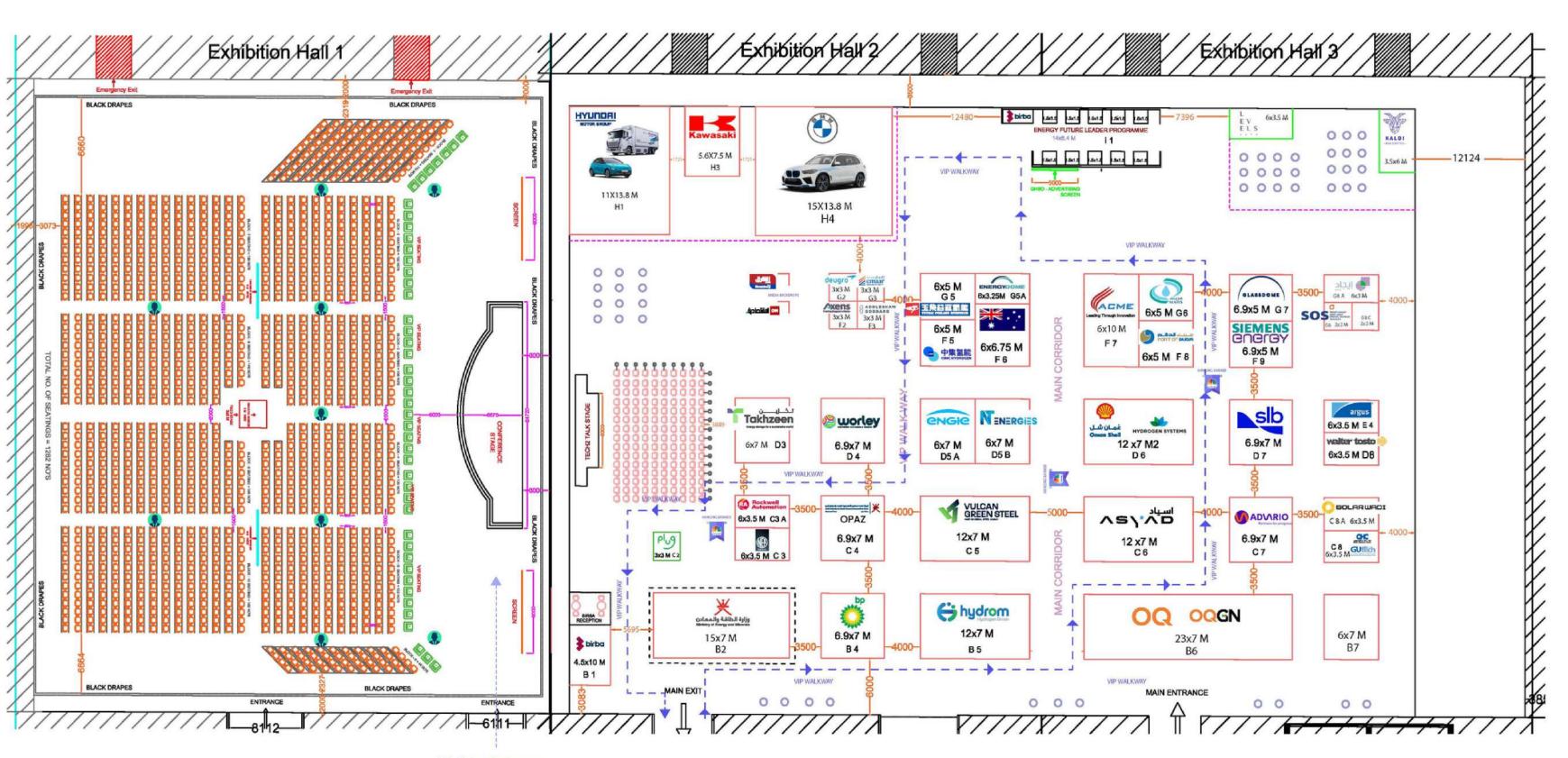












# GHSO23 Workshops day

**TUES 12 DEC** OCEC

8:00 - 9:00

Registration & Opening Ceremony

9:00-9:10

**Icebreaker** 

We kick off the day with an engaging GH2 Fact or Fiction activity, a fun way to connect, share some laughs, and get to know each other better

9:00-12:00

#### Hydrogen 101

Iln this workshop we explore the fundamentals of green hydrogen, from the Hydrogen Rainbow, green hydrogen production through electrolysis, and its versatile applications in transportation, industry, and energy storage. Join us in this insightful session to better understand the challenges and future potential of this incredible energy source.

#### Project Feasibility (Case Study)

This in-depth session dives into the practical aspects of implementing green hydrogen projects using a real-life case study to examine the feasibility factors including resource availability, infrastructure requirements and GH2 technico-economics.

12:00 - 14:00 Lunch Break

14:00-15:30

#### **Green Hydrogen Certification Schemes**

Discover the key components of certification such life cycle analysis and carbon footprint. This session will take a look at certification mechanisms, challenges, and considerations for the international hydrogen trade and its impact; exploring the various certification frameworks and standards to ensure the sustainability and traceability of green hydrogen production and use.

#### **Green Hydrogen Safety**

Certification mechanisms, challenges, and considerations for international hydrogen trade and its impact. Explore the various certification frameworks and standards that ensure the sustainability and traceability of green hydrogen production and use. Discover the key components of certification, including lifecycle analysis and carbon footprint.

15:30 - 16:00 Coffee break

#### In Country Value – Hydrogen driving a green economy

Diversification is achieved by leveraging renewable resources, enhancing energy security and paving the way for a sustainable new green economy. Explore the transformative potential of green hydrogen's in-country value through local production, the reduced dependency on fossil fuels and job creation across the supply chain, from production to infrastructure development.

Dec 12-14, 2023

Gain in-depth insights into the field of Green Hydrogen and its value chain Connect and actively engage in practical exercises and collaborative activities with leaders from the industry. Learn from pioneers as they share their knowledge, experiences, best practices and provide cutting-edge insights.

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# GHSO23 Conference program

DAY 1 WED 13 DEC OCEC HALL 1

7:30 - 8:40

8:40 - 9:00

#### **Keynote Speech**

With an industry-leading regulatory framework and a first-of-its-kind public auction system for land blocks, Oman is clearly a frontrunner in the global green hydrogen race. As an emerging green hydrogen hub, Oman will be well-positioned to supply clean energy to support decarbonizing economies globally. For green steel and other hard-to-abate industries, Oman is ideal for investment.

#### Attendee insights

With over 131 countries, including Oman, committed to Net Zero by 2050, the Green Hydrogen industry is set to play a key role in shaping the energy industry.

9:00 - 10:20

#### Oman's Green Hydrogen Mission: From Vision to Action

Registration & Opening Ceremony

Oman is on its way to becoming the Hydrogen hub of the Gulf. The Sultanate's notable efforts in supporting hydrogen are showcased through strategic signings that have transitioned plans into action, driving progress and rallying support for hydrogen projects within the country.

10:20 - 10:45 Coffee Break

10:45 - 11:45

#### Global H<sub>2</sub> review

The hydrogen industry is set to play a key role in the future of global sustainable energy. Governments and industries are rallying behind Green Hydrogen as it enables the decarbonization of sectors like transportation, industry, and power generation, fostering economic growth and energy security while supporting the mitigation of climate change. Showcasing the latest updates from a regional and international perspective, lessons learned and good case practices.

11:45 - 12:45

#### Policies, Regulations and Certification

Developing effective policies, regulations, and methodologies is paramount for the widespread adoption of green hydrogen. Identifying and addressing gaps while leveraging global best practices ensures a supportive framework that incentivizes investment, fosters innovation, and promotes sustainability, driving the growth of the green hydrogen sector.

12:45 - 14:00 Lunch Break

14:00 - 15:00

#### **Green Hydrogen Markets**

This session offers a concise and informative exploration of the rapidly evolving market for green hydrogen. As governments and industries worldwide seek clean energy alternatives, green hydrogen is gaining traction as a versatile solution. In this session, experts and market analysts will discuss the current state of the green hydrogen market, including supply, demand, pricing trends, and emerging investment opportunities.

15:00 - 16:00

#### The challenge: Hydrogen Production at Scale

Rolling out renewable hydrogen at scale entails the deployment of gigawatt electrolysers to ensure sufficient resources. Additionally, integrating desalination at scale, renewables, and a robust grid infrastructure are crucial components. Overcoming these challenges is the key to realizing the full potential of hydrogen at scale.

16:00 - 17:30 Networking and exhibition

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DAY 2 THURS 14 DEC OCEC HALL 1

9:00 - 9:10

Introduction & Recap of Day 1

9:10 - 10:0

#### The Role of Hydrogen in the Energy Trilemma

The growing demand for green hydrogen necessitates the active involvement of developers, deployment off-takers, and market shapers. Their collaborative efforts drive the affordability and scalability of green hydrogen solutions, unlocking its potential as a sustainable energy source for a wide range of applications.

10:00 - 11:00

#### Hydrogen Supply Chain and ICV

This session will delve into the intricacies of the hydrogen supply chain: the production, transportation, storage, and distribution of hydrogen, as well as the challenges and opportunities that lie along the supply chain. Experts will highlight the importance of developing domestic capabilities, creating jobs, and promoting technology transfer through strategies in support of 'In Country Value'.

11:00 - 11:30 Coffee Break

11:30 - 12:30

#### Sustainable H<sub>2</sub> Mobility

Governments worldwide are actively implementing regulations to support low emissions vehicles. Hydrogen plays a significant role in decarbonizing the transport sector, offering zero-emission options with longer ranges and faster refuelling times. Its potential impact lies in enabling sustainable, clean transportation and reducing greenhouse gas emissions on a large scale.

12:30 - 13:30

#### Financing Green Hydrogen: Strategies and Solutions

This session focuses on the pivotal connection between financing and national incentives, key components in driving sustainable initiatives including Hydrogen projects, emphasizing the critical role of financial institutions in promoting sustainability.

13:30 - 15:00 Lunch Break

15:00 - 16:00

Dec 12-14, 2023

#### Catalyzing Change: Startups and Innovation

Experts will shed light on various innovative processes, including electrolysis, water desalination technologies, and advanced storage methods, all of which contribute to the efficient and cost-effective generation of green hydrogen. The discussion will highlight the pivotal role of innovation in scaling up green hydrogen applications across diverse sectors.

16:00 - 17:30 Networking and exhibition

# GHSO23 Side events

DEC 10

SHOV

## BMW Ultimate H<sub>2</sub> Driving Tour

**DUBAI-MUSCAT** 

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Get revved up to embark on the ultimate driving tour powered by hydrogen! Swapping the sparkling skyscrapers of Dubai for the majestic mountains of Muscat, join our drivers as we set out to showcase the vehicles set to revolutionise cars as we know them. Our journey is a symbol of hope, demonstrating that a greener, carbon-neutral future is within reach.

DEC 12-14

### **Low Emissions Mobility Showcase**

OCEC - EXPO

Taking place within the expo area, this captivating series of talks takes the mobility stage. Experts and visionaries share their solutions, presenting revolutionary breakthroughs that could reshape mobility. From fuel cell technology, H<sub>2</sub> as a fuel, utilisation and the latest developments in H<sub>2</sub> vehicles, these talks explore the limitless potential of renewable hydrogen.

DEC 12

RKING

#### **Women in Future Energies**

Women have a vital role to play in driving an equitable, safe and abundant future for our present and future generations. By nurturing a pipeline of women leaders, 'Women in Future Energies' seeks to foster inclusive and sustainable development, inviting women to unite, and harness their collective vision to promote progress and build a resilient future for all.

DEC 12-14

#### TecH₂ Innovation Stage

OCEC - EXPO

The TecH₂ stage is located inside the expo area and is accessible to all visitors. Here, you will hear from start ups, students and inventors to learn what makes these tech pioneers tick and how their latest innovations work. Visionaries will present their challenges and ideas as we re-think the energy landscape and re-imagine a sustainable future.

**DEC 13** 

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#### **Energy Executives Circle**

JW MARRIOTT - OCEC

JW MARRIOTT - OCEC

The Circle will come together from all corners of the globe in reflection on COP28 and what comes next. Bringing together the global leaders making an impact and accelerating the deployment of sustainable energy. They will share their thoughts on the current state and outlook of energy, the challenges and opportunities that will help drive progress.

DEC 12-14

### **Future Energy Leaders**

OCEC - EXPO

Students compete to solve the world's toughest energy challenges in the Energy Future Leaders competition. Students participating will share their solutions in support of green hydrogen. Challengers present their solutions to industry leaders, collaborate with like-minded peers, and compete for a chance to make a global impact.

**DEC 13** 

**EU-Oman Cooperation on Green Transition** 

Organized by the EU-GCC Green Transition Cooperation Project in collaboration with the EU Delegation, this event features ministers and senior energy executives. Their goal is to foster strategic collaborations between the EU and the Omani government, focusing on the potential of green hydrogen and advancing the global energy transition.

**DEC 14** 

Gala Dinner + Awards

OCEC

Distinguished delegates will come together to network and celebrate a greener future, as they turn vision into action. Commitments are being made, new friendships are forged and global businesses are connected. Awards will be presented to visionary students whose ideas showcased a potent blend of sustainability and creativity in the Future Energy Leaders challenge.



CHAIRMAN'S MESSAGE
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Everyone can play a role in building a better future. We believe in challenging the status quo, to build and innovate for a better world. At Birba we bring change makers together, through future focused events, media and intelligence. Our team are driven, solutions focused and inspired to shine a light on the industries and innovations which will shape the economies of the future. Supporting a better world through our events, media and intelligence.

#### **Abdullah Al Harthy**

Executive Chairman & Founder Birba

Keep up to date with the latest event news by following us on social media or contact one of our experts for more information.

### **Sponsorship Marketing**

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