

Under the patronage of

وزارة الطاقة والمعادن
Ministry of Energy and Minerals



The future of energy

Green Hydrogen – From Vision to Action

Dec 12-15, 2023

Oman Convention & Exhibition Centre
Muscat, Sultanate of Oman

850 Billion

The estimated value of the Green
Hydrogen market in 2050

Re-Think Energy

“

Having secured over \$30 billion in committed investments, and with a growing pipeline holding promise for tens of billions more, Oman's voyage into green hydrogen has undeniably set sail. Alongside us in our journey stand esteemed global developers and investors, united by a shared vision for a cleaner, sustainable future for humanity. Collaboration stands as the pivotal key for the global realisation of Net Zero.

HE Salim Al Afi

*Minister of Energy and Minerals
The Sultanate of Oman*

**GREEN
HYDROGEN**

Connecting global leaders

GHSO 2023 is the largest Green Hydrogen event in the MENA region. Global decision makers in policy, finance, tech and industry will come together for discussions geared towards driving economies of the future and advancing energy solutions that can sustainably meet the energy demands of our growing population.

Ensuring uninterrupted and reliable fuel supplies and critical energy related commodities at affordable prices remains a fundamental goal. Governments and senior executives will highlight the critical role of Green Hydrogen and how we can cooperate globally to achieve sustainable energy systems.

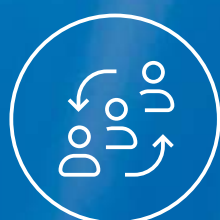


THIS EVENT IS BROUGHT TO YOU BY **BIRBA**

Uniting for a sustainable future



6000+
Visitors



3000+
Delegates



500+
Companies



100+
Speakers



50+
Exhibitors



100+
Countries

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.



THIS EVENT IS BROUGHT TO YOU BY **BIRBA**

5 strategic objectives to move into H₂



Ensure energy security



Diversify economies, connect industries and create new jobs



Decarbonize to safeguard a sustainable future



Create Green H₂ sectors with a competitive LCOH for export markets



Support innovation and capabilities development



The Sultanate aims to secure more than 50,000 square kilometres of land dedicated for green hydrogen investments, which will be able to generate more than 10 times the domestic energy demand by 2050. When it comes to Oman’s role in the green hydrogen game, the ambitions of its strategy were not only around the production targets set, but rather were comprehensive in a way that capitalises on the country’s strategic geographical location, political stability, strong infrastructural network, capable human capital, ease of doing business and rich renewable energy resources – blending all of these factors to turn The Sultanate into one of the leading global hydrogen hubs

Abdulaziz Al Shidhani
Managing Director
Hydrom



6day event program

DECEMBER

10

11

12

13

14

15

BMW H₂ Driving tour
Dubai – Muscat

Exhibition

Exhibition

Exhibition

Field Visits

Masterclass Workshops

Conference

Conference

OECC

Women in
Future
Energies

Energy
Executive
Circle

Gala
Dinner

KEMPINSKI

2day_{conference}

Join 100+ speakers from around the globe as they highlight opportunities green hydrogen presents in a Net-Zero world.

Held over two days, the conference raises awareness and inspires action in support of a sustainable energy future. It provides a platform to discuss the latest technological advancements, investment opportunities, and policy frameworks necessary for scaling up hydrogen infrastructure globally.

Through the conference program, stakeholders can unite to share success stories and ideas for collectively working towards reducing greenhouse gas emissions, raising new sustainable economies, and creating clean and resilient energy systems needed to power our world.



THIS EVENT IS BROUGHT TO YOU BY **BIRBA**

Conference themes

- Global H₂ Review
- Oman's Green Hydrogen Mission: From Vision to Action
- The challenge: Hydrogen production at scale
- Green Hydrogen Markets
- Hydrogen Supply Chain
- Policies, regulations & certification
- The role of hydrogen in the energy trilemma
- In country value: Hydrogen driving a green economy
- Green financing
- Sustainable H₂ mobility: Auto shipping & aviation
- Green Hydrogen innovation and start ups



Possessing an industry-leading regulatory framework and a first-of-its-kind public auction system for land blocks, Oman is a frontrunner in the global green hydrogen race. As an emerging green hydrogen hub, Oman is strategically positioned to supply clean energy and to support decarbonising global economies. For green steel and other hard-to-abate industries, Oman emerges as an ideal location for investment. Together let us forge partnerships and collaborate to secure a green energy future!

HE. Mohsen Al Hadhrami
Under-Secretary
Ministry of Energy and Minerals
Sultanate of Oman



GHSO23 Conference program

DAY 1 WED 13 DEC		OECC HALL 3
8:00 – 8:30		Registration & Opening Ceremony
KEYNOTE	8:30 – 9:00	
	Keynote	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.
SESSION 1	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 – 10:05	
SESSION 2	Oman's Green Hydrogen Mission: From Vision to Action	EXECUTIVE PANEL
	Oman is on its way to become the Hydrogen hub in 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. * Video by Ministry of Energy & Minerals and Hydrom	
SESSION 3	10:05 – 11:05	
	Global H₂ review	SESSION
SESSION 4	The hydrogen industry is set to play a key role in the future of 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.	
	11:05 – 11:20	Coffee Break
SESSION 5	11:20 – 12:20	
	The challenge: Hydrogen Production at Scale	SESSION
SESSION 6	Rolling out renewable hydrogen at scale entails the deployment of gigawatt electrolyzers 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.	
	12:20 – 14:00	Lunch Break
SESSION 7	14:00 – 15:00	
	Green Hydrogen Markets	PANEL DISCUSSION
SESSION 8	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	
SESSION 9	Policies, Regulations and Certification	PANEL DISCUSSION
	Developing effective policies, regulations, and methodologies is paramount for the widespread adoption of green hydrogen. Identifying and addressing gaps while leveraging global best practices ensure a supportive framework that incentivizes investment, fosters innovation, and promotes sustainability, driving the growth of the green hydrogen sector.	
SESSION 10	16:00 – 17:30	Networking and exhibition

DAY 2 THURS 14 DEC		OECC HALL 3
8:00 – 8:30		Welcome and introduction
SESSION 6	9:00 – 10:00	
	The Role of Hydrogen in the Energy Trilemma	PANEL DISCUSSION
SESSION 7	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	
SESSION 8	Green Financing	SESSION
	This session focuses on the pivotal connection between green financing and national incentives, key components in driving sustainable initiatives. We will also emphasize the critical role of governments and policymakers in promoting sustainability through national incentives and Financial Institutions' Role in Sustainable Investments.	
SESSION 9	11:00 – 11:30	Coffee Break
	11:30 – 12:30	
SESSION 10	Hydrogen Supply Chain	SESSION
	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'.	
SESSION 11	12:30 – 13:30	
	Sustainable H₂ Mobility: Auto Shipping & Aviation	SESSION
SESSION 12	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.	
	1:30 – 15:00	Lunch Break
SESSION 13	15:00 – 16:00	
	Green Hydrogen Innovation and Start Ups	EXECUTIVE PANEL
SESSION 14	Experts will shed light on various innovative processes, including electrolysis, water desalination technologies, and advanced storage methods, all contributing 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 Workshops

TUES 12 DEC

OECC HALL 3

8:00 - 8:30 Registration & Opening

WELCOME

8:30-9:00

Master class workshop - Icebreaker

For an engaging Masterclass we will start the day with an icebreaker activity: GH2 Fact or Fiction: each group will come up with 3 facts, two of which are true and one that is false. Each group will share their statement and the rest will guess which one is the false statement.

WORKSHOP 1

9:00-10:30

Hydrogen 101

The Green Hydrogen 101 workshop, where we'll explore the fundamentals of green hydrogen. Learn about the Hydrogen Rainbow, the production of Green Hydrogen through electrolysis using renewable energy sources. Discover its versatile applications in transportation, industry, and energy storage. Gain insights into the challenges and future potential of green hydrogen.

10:30 - 11:00 Coffee Break

WORKSHOP 2

11:00 - 12:30

Projects Feasibility (Case Study)

In this in-depth session, we'll delve into the practical aspects of implementing green hydrogen projects. Using a real-life case study, we'll examine the feasibility factors, including resource availability, infrastructure requirements, GH2 Technico-economics...

12:30 - 14:00 Lunch Break

WORKSHOP 3

14:00-15:30

Green Hydrogen Certification Schemes

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.

WORKSHOP 4

15:30-16:00

In Country Value – Hydrogen driving a green economy

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

16:00 - 17:30 Networking and exhibition

Gain in-depth insights into the field of Green Hydrogen and its value chain

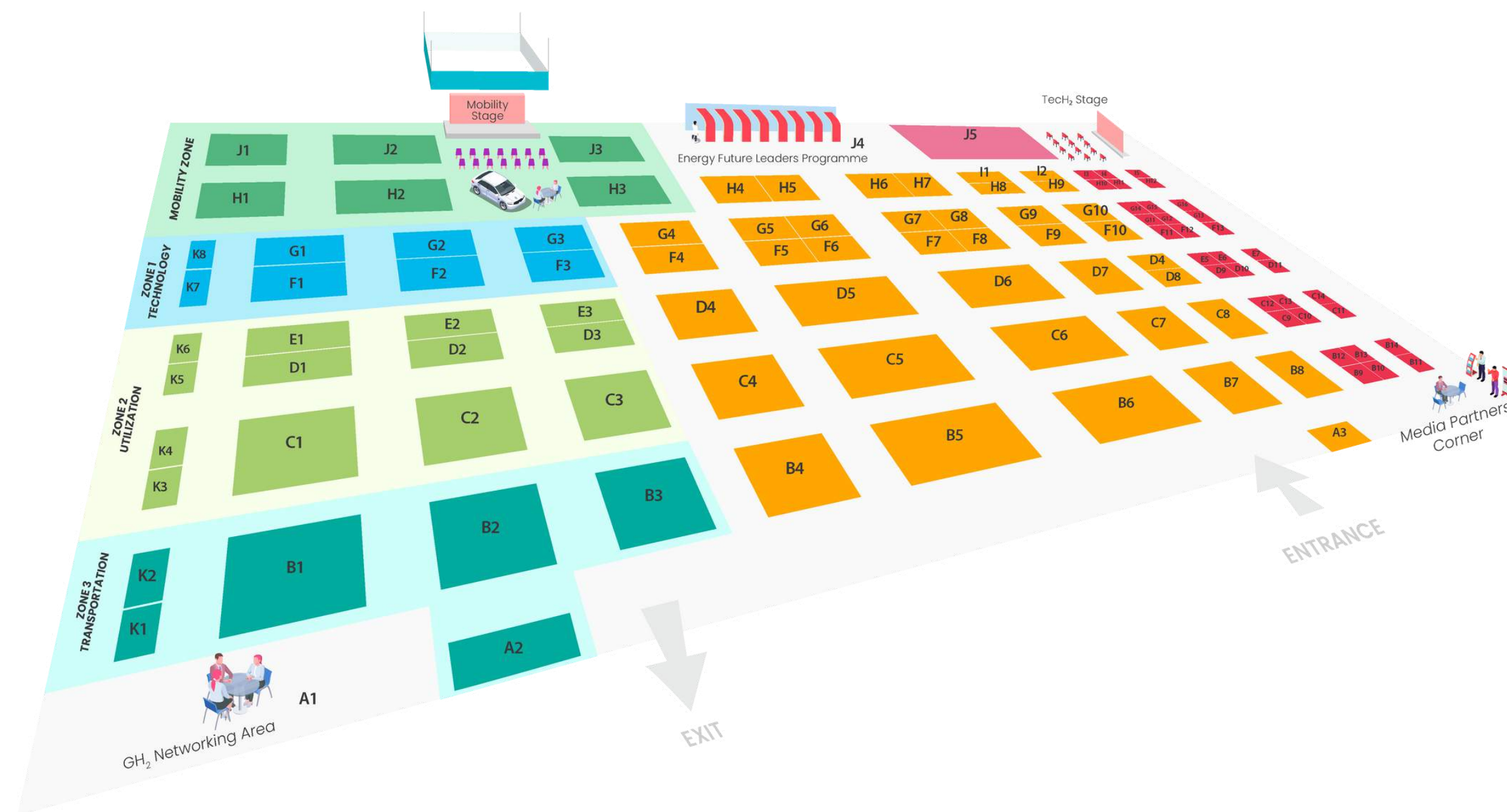
Connect and actively engage in practical exercises and collaborative activities with leaders from the industry. Learn from pioneers as they share their knowledge, experiences, best practices and provide cutting-edge insights.

3day_{exhibition}

Drive business growth and connect with new customers

Action-packed and vibrant, the GH20 exhibition shares the latest solutions energy decision makers, industry experts, potential customers, media and offers an opportunity to generate widespread visibility for your products and services.

It serves as a powerful platform to showcase technology and promote innovations for sustainable energy. Through effective branding and presentation, exhibitions enhance brand recognition, build trust, and create a lasting impression.



GHSO23 Side events

ROAD SHOW	DEC 10	BMW Ultimate H₂ Driving Tour	DUBAI-MUSCAT	TALKS	DEC 12-14	Low Emissions Mobility Showcase	OECC - EXPO
		Get revved up to embark on the ultimate driving tour powered by hydrogen! Swapping the sparkling skyscrapers of Dubai for the majestic mountains for 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.				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 ₂ as a fuel, utilisation and the latest developments in H ₂ vehicles, these talks explore the limitless potential of renewable hydrogen.	
NETWORKING	DEC 11	Women in Future Energies	OECC	TALKS	DEC 12-14	TechH₂ Innovation Stage	OECC - EXPO
		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.				The TechH ₂ 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 learn 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.	
VIPEVENT	DEC 12	Energy Executives Circle	KEMPINSKY	COMPETITION	DEC 12-14	Future Energy Leaders	OECC - EXPO
		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.				Students compete to solve the world's toughest energy challenges in the Energy Future Leaders competition. Students participating work to 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.	
GALA	DEC 12-14	Gala Dinner + Awards	OECC - HALL 3	FIELD VISITS	DEC 15	Field Visits	UNDER CONFIRMATION
		Distinguished delegates will come together to network and celebrate a greener future, as they turn vision into action. Commitments are being made, new friendships forged and global business' connected. Awards will be presented to visionary students whose ideas showcased a potent blend of sustainability and creativity in the Future Energy Leaders challenge.				Delegates explore the Sultanate while discussing ideas for harnessing renewable energy and unlocking new opportunities. They visit Oman's centers for innovation and hubs of ingenuity to see groundbreaking technologies, disruptive ideas, and visionary projects under development.	

Tickets

Exhibition

DEC 12-14

FREE for visitors

Masterclass workshop

DEC 12

200 OMR
1 Masterclass
Coffee Break

Conference

DEC 13-14

300 OMR

2 Day Conference pass
Coffee Breaks, Lunch
Conference Networking Area

Women in Future Energies

DEC 11

50 OMR
Networking dinner

Field Trips

DEC 15

Field trip locations
and events to be
confirmed



Exhibition booth prices

Space per SQM

150 OMR / SQM
Minimum 10.5 sqm
Includes complimentary delegate pass

Shell Scheme booth

2500 OMR
3x3m

3x3m floor area
x1 Reception Table
x1 Meeting Table
x3 Chairs
x1 - 40 inch LED TV
x1 Plant

Branding specifications

Wall area: 2.4m x 2.4m
Header logo area: 2m x 0.6m
Reception : 0.5m x 0.3m
Pillar area: 0.6m x 1.2m

- * Utilities must be paid by the exhibitor
- * Exclusive of VAT



Executive committee



CHAIRMAN



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Undersecretary
Ministry of Energy and Minerals



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Technical committee



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Organising committee



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Communications Manager at PDO



Rumaitha Al Busaidi
Business Development
Manager



Abdullah Al Harthi
Executive Chairman &
Founder





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.

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