



# WELCOME

Dear Industry Colleagues,

It is our greatest pleasure and honor to chair the 1<sup>st</sup> Kuwait Int'l Hydrogen Technology Symposium and Exhibition, themed "The Kuwait Hydrogen Outlook from Vision to Action", 5-6 March 2024, at Hilton Resort Hotel, Kuwait City.

Now more than ever the World calls for energy evolution, affordability, and security, where Hydrogen could play a pivotal role in the transition towards a low-carbon economy and sustainable future. In response to the demand for cleaner energy, Kuwait possesses all vital resources for the production of both "blue" and "green" hydrogen.

Reaching a Net-zero economy will require the development of commercial-scaled hydrogen infrastructure that can facilitate both production and distribution, a prerequisite, which the country already works on. Putting Kuwait on the map of the world's leading Hydrogen players demands a wide range of tools - strategic, financial, and policy ones, along with adopting state-of-the-art production technologies.

Time and time again, our country leaders have strongly reconfirmed their long-term commitment to achieving carbon neutrality in the oil and gas sector by 2050, and in other sectors by 2060.

Held over two days, the symposium raises awareness and calls for action. It provides a platform to discuss the latest technological advancements, investment opportunities, and policy frameworks necessary for scaling up hydrogen infrastructure locally, regionally, and globally.

The time for action is now. Please come and join us on this exciting journey.

Executive Committee Co-Chair

**Abdullah Al-Mutairi**

Manager Production and Projects - GAS  
Kuwait Oil Company

Executive Committee Co-Chair

**Peter Jensen**

ETSX Contract Manager North Kuwait  
Jurassic Gas Shell

## EXECUTIVES CHAIRS



**ADNAN SHIHAB-ELDIN**  
Honorary Executive Advisor



Executive Committee Co-Chair  
**ABDULLAH AL-MUTAIRI**  
Manager (Production & Projects - GAS)  
Kuwait Oil Company



Executive Committee Co-Chair  
**PETER JENSEN**  
ETSA Contract Manager  
North Kuwaiti Jurassic Gas Shell

## EXECUTIVE COMMITTEE MEMBERS

FOR SYMPOSIUM / 5 - 6 MARCH 2024  
(Members in Alphabetical Order)



**ENG. ABDUL HADI ALAJMI**  
Research & Development Director  
Equate



**MUDASSAR NAZEER**  
Assistant Professor, Programme Director,  
MSc Reservoir Evaluation & Management  
Herriot Watt University



**BADRIA FARHAD**  
Former Heavy Oil Manager - NK, KOC



**DR. SALEM ALHAJRAF**  
Research Scientist  
KISR



**DR. FOWZIA ABDULLA**  
Professor Petroleum Geology  
Kuwait University



**Mohamed Al Shatti**  
Former KPC, KOC Executive



**DR. MEENA MARAFI**  
KISR



## PROGRAMME COMMITTEE MEMBERS

FOR SYMPOSIUM / 5 - 6 MARCH 2024  
(Members in Alphabetical Order)



**ABDULAZIZ JAMAL  
A/AZIZ ALBEAJAN**

Senior Planning Engineer  
KIPIC



**HAMAD AL-KANDARI**

Team Leader - Operations  
KNPC



**DR. KAMALJIT SINGH**

Associate Professor Institute of  
GeoEnergy Engineering  
Herriot Watt University



**MOHAMMED AL-BISHARAH  
(JURASSIC OPERATION)**

Team Leader  
Kuwait Oil Company



**DR. MOHAMMAD AL-SHAWAF**

Environmental Scientist  
Kuwait University



**WAEEL HAMED A. MAOTI**

Gas Industries Expert  
Organization of Arab Petroleum Exporting  
Countries 'OAPEC'

# PROGRAM

## DAY ONE

Opportunities in Kuwait Hydrogen:  
Enabling Kuwait to Enter the Hydrogen ERA

### Opening Keynotes

Esteemed speakers, such as top-ranking executives from the Kuwait Ministry of Oil and Kuwait Ministry of Electricity, Water, and Renewable Energy, along with distinguished representatives from Kuwait Petroleum Corporation, its affiliates, JV firms, regional NOCs and IOCs, and significant service majors will deliver the keynote presentations. These experts will lead an engaging opening plenary session, framing a comprehensive symposium program.

The agenda includes discussions about the latest advancements in hydrogen technology, an examination of current industry challenges and opportunities, and thought-leaders sharing their visions for the future. Attendees will also benefit from gaining an in-depth understanding of policy and regulatory frameworks, exploring investment opportunities, and discussing potential collaborative projects.

### Session 1: Hydrogen Potential Markets & Application

- † Identifying the markets & End users
- † Opportunities missed if we do not do it.
- † How to use Hydrogen Locally (to produce electricity directly or blend and use as fuel)

### Session 2: Hydrogen Technology Selection

- † Pros & Cons in technology selection
- † Other Enabling Technologies (Water, others)
- † Public Private Partnerships

### Session 3: Key Risks & Opportunities

- † Financial Risk" Funding - Selling-pricing"
- † Missed Opportunities
- † International Regulations Changing with Carbon Tax introduction
- † Hydrogen Certification TUV, etc. "to be able to export to Europe

### Session 4: Hydrogen Transportation & Export: Challenges verses Solutions

- † Gaseous hydrogen: Gas compression/Pipelines/Tube trailers
- † Liquid hydrogen
- † Novel hydrogen carriers
- † On-site and bulk storage

# PROGRAM

## DAY TWO

Decarbonization of the Energy Sector:  
CCUS applications from the world to Kuwait

### Opening Keynotes

### Session 5: Subsurface application (Panel Session Discussion)

- ↑ Finding the best spot
- ↑ Injection, Storage and Monitoring
- ↑ Learning from Regional & International Experience
- ↑ Looking at Kuwait Potential

### Session 6: Decarbonization of the Energy Sector: implementing CCUS Applications from Global Perspective into Kuwait

The prosperous execution of Carbon Capture, Utilization, and Storage (CCUS) projects hinge on their economic feasibility and cost-effectiveness. The day's sessions will centre around opportunities and initiatives bolstering the CCUS projects in Kuwait.

The focus will be on establishing partnership models and promoting technology advancements to foster cost reduction. The adoption of a collaborative approach among stakeholders and collectively addressing complex issues is pivotal to enhance the commercial capability of CCUS. This cooperative spirit is a critical step toward fostering a decarbonized and sustainable future.

### Session 7: Building a Receiving Hub / Transport

- ↑ International lesson from building a receiving hub
- ↑ The Long Ship - North Sea Project – Northern Light Project
- ↑ Various options to transport Hydrogen, Pros & Cons
- ↑ Scaling up for Commercial Operation

## Session 8: What will be the Business Model (for H2&CCUS)

- ↑ Government Policies, Mandates, Incentives & Support
- ↑ Ownership & Financing - Partnerships
- ↑ How would this work without Carbon Price

## Closing Session

Highlights of the program including principal assumptions, action points and closing remarks will be presented to the audience. This will enable attendance to have a written reference and Roadmap to progress with.





## WHY ATTEND

- Learn from industry leaders: You'll be able to get hands-on experience and first-hand information about the most cutting-edge advancements in this field.
- Comprehensive coverage: A thorough exploration of the Hydrogen industry. Attendees can expect in-depth sessions on all aspects of Hydrogen technology.
- Networking opportunities: The symposium will provide excellent opportunities for networking, creating valuable connections and potentially initiating collaborative projects.
- Access to exhibition: As part of the symposium, you'll also gain access to an exclusive exhibition showcasing the latest technologies and solutions in the Hydrogen industry.
- Understand Kuwait's Hydrogen Landscape: A unique opportunity to gain a deep understanding of the Hydrogen industry's development and prospects in Kuwait specifically and the Middle East generally.
- Exclusive location: Combine professional development with the experience of Kuwait's luxurious hospitality and distinctive cultural heritage.
- Contribution to Sustainable Energy Dialogue: Join the ongoing international dialogue on sustainable energy, highlighting the vital role that Hydrogen technology plays in achieving energy sustainability and mitigating climate change.
- Opportunity for business development: For businesses operating in the Hydrogen industry, this is an ideal opportunity to understand market trends, establish presence, explore potential partnerships and even discover potential clients.
- Boost professional skills and knowledge: With various presentations, workshops, and interactive sessions, attendees will be able to develop their understanding of Hydrogen technology, improving their skills and knowledge which could further their careers in the sector.
- Stay updated: Lastly, the symposium ensures that you stay abreast of all the latest developments and changes in the Hydrogen industry.



## ABOUT AEP



The Association for Energy Professionals (AEP) Established in 2016 under the Abu Dhabi Global Market Authority, Abu Dhabi Chamber of Commerce, the Association for Energy Professionals (AEP) is a diverse community dedicated to supporting professionals in the oil and gas industry in the Middle East and across the globe. Through connecting, networking, and collaborating, we strive to solve major challenges facing the energy industry. We take pride in uniting professionals in this field under one roof. Come join us!

**Location:** D11 ,07th floor, Al Sarab Tower ADGM Square, Al Maryah Island, Abu Dhabi, United Arab Emirates

**Phone:** +971 4 361 9616, +971 50 558 4540

**Email:** [info@a-ep.org](mailto:info@a-ep.org)

## FOR MORE INFORMATION CONTACT US

-  +971 4 361 9616
-  +971 4 361 4375
-  +971 555 261030
-  [sylvia@a-ep.org](mailto:sylvia@a-ep.org)