



20 | IECEx International  
24 | Hydrogen Conference

In partnership with:



UNECE

Hydrogen Council



IRENA  
International Renewable Energy Agency

# Clean pathway to a sustainable future

Standards and conformity assessment covering equipment and services to support hydrogen production and use at scale

Concorde Hotel Singapore, Singapore – 29 May 2024



An event organized by the IEC via its IECEx System, together with ISO, UNECE, the Hydrogen Council, IRENA and the Singapore IEC National Committee.

### A great networking opportunity

This full day event offers a unique opportunity for industries in the region to learn about latest developments in hydrogen technologies, network within the expert community and form valuable contacts. Attendees will receive information on how to benefit from the services provided by the organizing partners and how to get involved.

### World experts share experience and knowledge

Leading experts from across the world will share their insights and expertise on international standardization, equipment manufacturing, inspection, repair and overhaul associated with hydrogen production, transportation and use. The conference will also address the assessment and certification of personnel competence, and tackle issues concerning regional requirements and regulations.

### Practical information

- Conference admission: Free of charge – lunch provided
- Official IECEx Certificate of Attendance delivered to all attendees

### Places are limited! Secure your space now on [www.iecex.com](http://www.iecex.com)

For questions, please contact: [info@iecex.com](mailto:info@iecex.com)

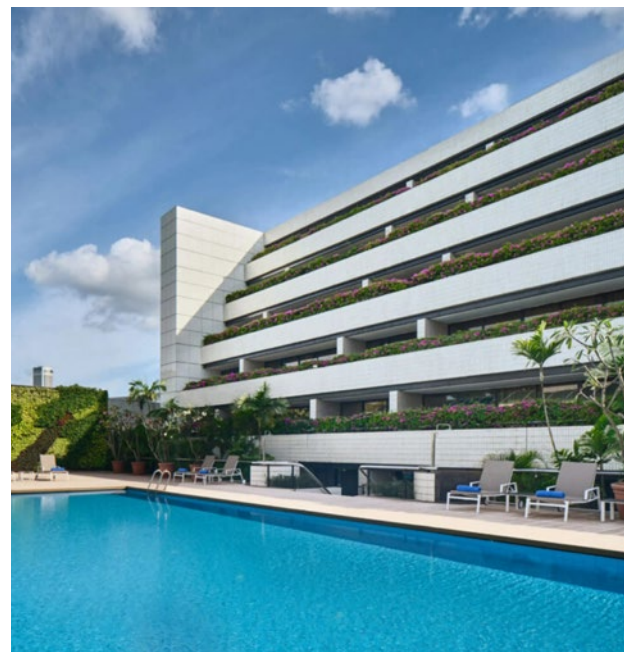
Practical details about the conference can be found on the [IECEx website](http://www.iecex.com)

### Accommodation

Concorde Hotel Singapore  
Concorde Shopping Mall  
100 Orchard Road  
Singapore 238840  
T +65 6733 8855

For reservations contact [nelly.voon@concorde.net](mailto:nelly.voon@concorde.net) and include “IECEx event” in the email subject to access the special rate.

All reservations and incurred costs are the full responsibility of the attendee.



The international community recognizes hydrogen as a key enabler for advancing efforts aimed at capping global temperature rise to 1.5-degrees. Hydrogen produced from water electrolysis and powered by renewable energy stands out as the most attractive avenue due to its high decarbonization potential. With rising demand however, hydrogen processes are becoming increasingly complex and capital intensive when it comes to generation, processing, and distribution infrastructure. To safeguard this investment and the people working around these installations, compliance with international safety and performance standards is paramount.

IEC (International Electrotechnical Commission) and ISO (International Organization for Standardization) standards

along with the IECEx international certification have been covering hydrogen for decades. More recently, the intensifying focus on hydrogen and demand for its large-scale commercial use has prompted IEC and ISO to refine their portfolio of international standards in support of safety and sustainability across the hydrogen value chain. Likewise on the international certification side, IEC via its conformity assessment body [IECEx](http://www.iecex.com) has extended its coverage of Hydrogen equipment and services to target equipment, systems and competence of persons associated with hydrogen production, transportation and use, including hydrogen dispensing equipment.

IECEx is partnering with other international organizations dedicated to promoting an international approach.

## Programme

07:45 – 08:30	Registration
08:30 – 08:35	Welcoming remarks <i>Mr Chris Agius, IECEX Executive secretary</i>
08:35 – 08:45	Keynote address <i>Mr Jo Cops, IEC President</i>
08:45 – 09:30	Overview of the global hydrogen market and initiatives <ul style="list-style-type: none"> <li>■ Current market demand and trade flows</li> <li>■ Renewable and low carbon hydrogen projects</li> <li>■ Highlights of COP28 regarding global hydrogen initiatives</li> </ul> <i>Ms Daria Nochevnik, Director Hydrogen Council + IEA H2TCP Task 47 H<sub>2</sub> Certification Manager</i> <ul style="list-style-type: none"> <li>■ Safety and sustainability – global perspective</li> </ul> <i>Dr Andrei V Tchouvelev, Director Hydrogen Council + Chair ISO/TC 197/SC1 + IEA H<sub>2</sub>TCP Task 43 H<sub>2</sub> Safety Manager</i>
09:30 – 10:00	Industry – Challenges and opportunities <ul style="list-style-type: none"> <li>■ Manufacturing and supply of equipment used in hydrogen production and use</li> <li>■ Whole life cycle</li> <li>■ Human factor</li> </ul> <i>Dr Thorsten Arnhold, IECEX WG19 Convener + Member IEC Board on Conformity Assessment</i>
10:00 – 10:30	Coffee/Tea break
10:30 – 11:00	ISO on-going work on hydrogen <ul style="list-style-type: none"> <li>■ ISO/TC 197</li> <li>■ ISO/TC 197/SC 1</li> </ul> <i>Mr Tetsufumi Ikeda, Chair ISO/TC 197 &amp; Dr Andrei V Tchouvelev, Chair ISO/TC 197/SC 1</i>
11:00 – 11:30	Hydrogen activities in the Asian region <ul style="list-style-type: none"> <li>■ Update on activities in the region</li> <li>■ Current work of ISO/TC 197/SC 1 on hydrogen pipelines</li> </ul> <i>Prof Jinyang Zheng, Director of Zhejiang University Hydrogen Energy Institute + Convener of ISO/TC 197/SC 1 AHG on H<sub>2</sub> pipelines</i>
11:30 – 12:00	Work of the United Nations UNECE in support of hydrogen <i>Mr Branko Milicevic, UNECE &amp; Dr Frank Lienesch UNECE WP6</i>
12:00 – 12:40	Installation and plant requirements according to Ex safety requirements of International Safety Standards IEC 60079-14 and inspection requirements of IEC 60079-17 <ul style="list-style-type: none"> <li>■ Fundamental design considerations</li> <li>■ Installation and inspection practices</li> <li>■ Area classification to IEC 60079-10 series</li> </ul> <i>Mr Peter Thurnherr, Thuba Ltd, Chair IECEX ExSFC + Member IECEX Executive</i>
12:40 – 14:00	Lunch ( <i>lunch will be provided free of charge to facilitate networking opportunities</i> )
14:00 – 14:30	Role and work of IRENA in supporting the hydrogen economy <ul style="list-style-type: none"> <li>■ Role and current activities of IRENA</li> <li>■ AFID (Alliance for Industrial decarbonisation)</li> </ul> <i>Mr Jaidev Dhavle, IRENA Associate Programme Officer, Innovation for the Energy Transition</i>
14:30 – 15:00	IECEX + IECC System updates in support of hydrogen at scale <ul style="list-style-type: none"> <li>■ Equipment, components and systems</li> <li>■ Services certification</li> <li>■ Personnel certification</li> <li>■ Process to gain IECEX certificate</li> <li>■ Value in holding an IECEX certificate</li> </ul> <i>Mr Chris Agius, IECEX Executive Secretary</i>
15:00 – 15:30	Other international standards update <ul style="list-style-type: none"> <li>■ IEC TC 31, Equipment for explosive atmospheres <i>Dr Martin Thedens, Chair IEC TC 31</i></li> <li>■ IEC TC 105, Fuel cell technologies <i>Mr Hong Ki Lee, Chair IEC TC 105</i></li> </ul>
15:30 – 16:00	Coffee / Tea break
16:00 – 16:30	Panel discussion
16:30 – 17:00	Open forum, to offer all attendees the opportunity to raise questions concerning any of the topics covered
17:00	Close + final remarks <i>Mr Chris Agius, IECEX Executive Secretary</i>

Since its inception in 1996, IECEx has established dedicated international certification schemes that provide assurance that equipment and systems are manufactured, serviced and operated according to the highest international standards of safety in the areas of:

- Equipment by the IECEx Certified Equipment Scheme
- Services by the IECEx Certified Service Facilities Scheme (e.g. repair and overhaul)
- Personnel competence by the IECEx Certification of Personnel Competence Scheme (CoPC)

Through more than 100 IECEx-approved Ex Certification Bodies (ExCBs) in 33 countries, the IEC System known as IECEx has

become the world's single best practice for demonstrating compliance with international standards. Its credentials include acceptance by end-users and also the formal endorsement by the United Nations, through the UN Economic Commission for Europe (UNECE), as the recommended model for regulating the safety of equipment and persons working in areas where the potential for an explosive atmosphere may exist.

All IECEx Certificates issued by ExCBs are in [one location](#). If it is not shown on the IECEx website, then the certificate does NOT exist!

