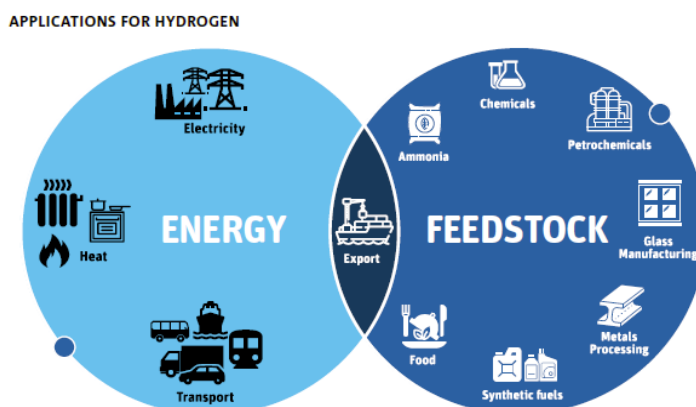


Event Details

Date & Time: Thursday, 29th November 2018, 8:30am – 4:30pm (registration 8:15am)
Venue & Parking: ARRC, 26 Dick Perry Avenue, Kensington, WA 6151. Public parking is available onsite.
Cost: Free of charge but places are limited. RSVP essential – lngfutures-fems@uwa.edu.au

Overview

Hydrogen has been identified as central to the decarbonisation of the energy and industrial sectors. The CSIRO has released a National Hydrogen Roadmap intended to help the development of a hydrogen industry. Significant efforts in research & development are underway to promote hydrogen production, distribution and utilisation within Australia. Tremendous opportunities also exist to establish a H₂ export industry that builds upon our world-leading track record as global supplier of LNG. However many technical challenges exist regarding the most cost-effective methods of exporting H₂ from Australia to the large prospective markets in Japan, Korea and China. Overcoming these challenges efficiently will require Australia to develop systematic and coordinated research & development program, informed by industry and the experience of other countries that builds upon existing strengths while minimising duplication. The design and use of research infrastructure that allows for industrial-scale validation of H₂ export technologies will be central to this program.



In 2018, the NERA Growth Centre co-funded with Chevron, Shell, Hyundai Heavy Industries (HHI) and UWA, the pre-FEED design of the LNG Futures Facility (www.lngfutures.edu.au). This is a 10 tonne-per-day LNG plant intended to serve as a national facility for industrial-scale research and technology validation for natural gas processing, liquefaction, storage and re-gasification. This proposed Facility could readily be augmented to include infrastructure for testing technologies that will accelerate the launch of a future H₂ export industry.



Objectives

This Workshop will bring together global experts on H₂, natural gas & LNG to achieve the following:

- Understand driving forces, current efforts and future plans for industrially-focused H₂ research in Australia and internationally
- Learn about the LNG Futures Facility, its potential capabilities for industrial-scale testing at high-pressures and cryogenic temperatures, and the proposed R&D program
- Develop an industry-led R&D plan to accelerate the growth of H₂ exports from Australia that is complementary and avoids duplicating existing research initiatives.

Participants will include: Future Fuels CRC; CSIRO; Prof Roland Span, RUB Germany; Prof Martin Trusler, Imperial College; Woodside; Hyundai Heavy Industries; UWA; Curtin and Hazer

Rev: Final

Schedule (Preliminary)

Time	Activity	Speaker	Organisation
8:30	Welcome & Workshop Objectives	Prof Eric May	UWA
8:45	LNG Futures Facility	Prof Eric May	UWA
9:00	CSIRO H2 Roadmap	Dr Nick Burke	CSIRO
9:30	CRC Future Fuels	Dr Klaas van Alphen	CRC Future Fuels
10:00	Morning Tea		
10:15	German Perspective & Experience	Prof Roland Span	Ruhr University Bochum, Germany
10:45	Technology gaps for utility scale hydrogen production	Rachelle Doyle	Woodside Energy
11:15	Renewable H ₂ & H ₂ Carriers as Clean Transport Fuels	Prof Dongke Zhang	UWA
11:45	Clean H ₂ from Natural Gas	Dr Andrew Cornejo	Hazer Group
12:15	Summary	Prof Eric May	UWA
12:30	Lunch		
13:30	Korean H ₂ R&D	Dr Sang-min Park	Hyundai Heavy Industries
14:00	H ₂ Research at Curtin	Prof Craig Buckley	Curtin University
14:30	UK Perspective and Experience	Prof Martin Trusler	Imperial College, London
15:00	H ₂ Export R&D Break-out	All	
15:30	Afternoon Tea		
16:00	Collation & prioritization	All	
16:15	Next steps	All	
16:30	Close & drinks		

Host

Professor Eric May FTSE FICHEM
Chevron Chair in Gas Process Engineering & ARC Future Fellow
Director, ARC Training Centre for LNG Futures

Eric is the Chevron Chair in Gas Process Engineering at UWA which, in 2011, was endowed in perpetuity. He is also the Director of the Australian Centre for LNG Futures, an Australian Research Council Future Fellow, and a Visiting International Professor at Ruhr University Bochum in Germany. He has been an academic at UWA since 2005, where his research group works closely with industry, conducting projects in LNG production, flow assurance and fluid property prediction. Recently his team released the freeware package, *ThermoFAST* for predicting cryogenic solids formation in LNG production, endorsed by GPA Midstream. Eric was awarded the Malcolm McIntosh Prize for Physical Scientist of the Year as part of the 2012 Prime Minister's Prizes for Science.



RSVP

Please RSVP your attendance at the Workshop to lngfutures-fems@uwa.edu.au with your full name, company name and position title.