Argus Green Ammonia Live – Virtual Conference
24-25 March 2021 | Day 1

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Agenda

Regulatory policies in Japan, Singapore and Australia: Creating viable pathways for green ammonia
- What are the possible pathways for green ammonia within carbon neutrality goals? How will this impact market players?

Supporting scalability and price competitiveness for green ammonia market creation
- How will regulatory framework for disruptive technologies allow them to compete with the incumbents?

Andrea Valentini, Principal - Consulting Services, Argus

Financing and Infrastructure for Green Ammonia Projects and Market Development: Key Questions
- What is the potential size of the market for green ammonia and what is its development timeline?
- What are the main challenges for green ammonia? Renewable energy supply: regional hotspots for renewable energy
- Potential trade flows for the future: new opportunities beyond fertilizer, towards energy and transportation?
Andrea Valentini, Principal - Consulting Services, Argus

Keynote Panel: Building a Green Ammonia Market fit for supporting the Energy Transition
- What are the current state of the green ammonia supply chain?
- Which sectors will drive the growth of green ammonia?
- Cross-sector growth opportunities in a hydrogen economy
Sacha Thacker, Chief Strategy Officer, InterContinental Energy

Creating a level playing field using regulatory frameworks
- Where is policy emerging?
- How will Europe implement hydrogen and green Deal strategies?
- What are the possible pathways for green ammonia? How will this impact market players?
- Supporting scalability and price competitiveness for green ammonia market creation within a hydrogen economy framework
Jacob Hansen, Director General, Fertilizers Europe

- How will regulatory framework for disruptive technologies allow them to compete with the incumbents?
- Offtake guarantees for projects: pathways for green ammonia use in single vs. multi-use applications – how will this be supported by regulatory frameworks?
Bert Hinnemann, Senior Innovation Project Manager, Technical Innovation, Maersk

- What price might consumers pay for green products?
- How will consumers be motivated to pay for this product? (regulatory pressure? Investor pressure? Product price?)
Berit Biebuyck, Head of Innovation, Hydrogen Utility, Cummins

Demand side Panel: What do buyers need to see to make the switch to green ammonia?
- What price might consumers pay for green products?
- How will consumers be motivated to pay for this product? (regulatory pressure? Investor pressure? Product price?)
Haldor Topsoe, Senior Director, Hydrogen Solutions, Denmark

Developing large scale water electrolysis - technologies for the advancement of the green hydrogen value chain
- Improving operational ratio improving the economics to ensure commercialisation possibility for green ammonia
Dr. Andrei Zschocke, Senior Business Development Manager, thyssenkrupp

Panel discussion
- Andrew Dickson, Development Manager, Asian Renewable Energy Hub, CWP Renewables
- Dr. Franziska Bliedorn-Pretzl, CEO, Planet Power Finance
- Cosma Panzacchi, Executive Vice President Hydrogen Business Unit, Snam

Where to start? Adapting ammonia plants for green ammonia production vs. new builds
- Hybrid vs. new builds: the near term and long term solutions
- Moves toward making green ammonia OPEC and CAPEX competitive: outlooks for renewable energy supply and electrolyser scalability
- Using artificial intelligence and big data analysis for an effective transition
Denis Thomas, Chief Executive Officer, Ammonia, Hydrogen Development, Arlanza

Roundtable with thyssenkrupp
Contact the conferences team to find out more.

Blue ammonia’s role in the transition towards green ammonia in a hydrogen economy
- Does blue ammonia have a place as a bridge between grey and green ammonia?
- Is the shift to green inevitable? How long will the blue ammonia market last?
- Will the carbon credits of blue ammonia incentivise people to use ammonia as a fuel?

Tuesday Johanssen, Head of Maritime Application and Value, Maersk Mc-Kinney Moller Center for Zero Carbon Shipping

Fertilizer
Petroleum
Power
illuminating the markets
**Argus Green Ammonia Live – Virtual Conference**

**24-25 March 2021 | Day 2**

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**Agenda**

**Power Generation in Asia: Green Ammonia’s role in achieving carbon neutrality by 2050**

- An assessment of Japanese, South Korean and Chinese plans to achieve carbon neutrality using hydrogen by 2050
- Australia: a hub of green ammonia production for export – government, policy strategy and new project development
- Challenges and opportunities: applicability to co-firing in coal plants, improved transportation efficiency, realising large-scale production and securing stable supply

Bunno Shiozawa, Senior Associate, Sumitomo Chemical (Innovation Strategy Coordinator, Energy Management, SIP)

Akihiko Taniguchi, Executive Officer Global Partnerships, JERA

Eiji Ohira, Director General, Fuel Cell and Hydrogen Office Advanced Battery and Hydrogen Technology Dept., NEDO

Moderator: Andrea Valentini, Principal - Consulting Services, Argus

**Green Ammonia as Part of a Matrix solution for the Future of Marine Fuels**

- Standards for the market: a robust regulatory framework from the IMO for 2050 goals?
- Reducing economies of scale: creating an attractively priced solution for the maritime industry
- Location, location, location: infrastructure and proximity to existing storage facilities – plans for expansion?

Hugo De Stoop, CEO, Euronav

Rob Stevens, Director Ammonia Energy and Shipping Fuel Climate Neutrality, Yara International

Charles Haskell, Decarbonisation Programme Manager, Lloyd’s Register

Aile O’Leary, Director - International Climate, Environmental Defense Fund

Moderator: Nicolas Ganas, Business Development Manager, Argus

**Engine Technology Innovation for the Future: Designing an Engine in the 2020s for 2050 carbon-neutrality goals**

- What are the possibilities and options seen so far for ammonia engines? Two stroke vs ICET?
- What are shipowners’ considerations for converting to ammonia-powered engines?
- Where will there be the most uptake in use of ammonia fuelled engines?

Kjeld Aabo, Director New Technologies, MAN ES

Kaj Portin, GM Sustainable Fuels & Decarbonisation, Wärtsilä

Ulrik Andersen, CEO, Golden Ocean Management

Moderator: Will Collins, Editor - Freight, Argus

**Market synergies for ammonia supply? Potential future interactions between the fuel, power and fertilizer sectors**

- Connecting supply and demand for hydrogen: The benefits of green ammonia as an energy carrier
- Will ammonia producers for fertilizers, also become fuel producers? Is the fertilizer market a real market for green ammonia?
- Which sector will develop fastest and in which part of the world?

Hans Vrijenhoef, CEO, Proton Ventures

Inti Serrano, Green Ammonia Project Manager, Trammo

Moderator: Andrea Valentini, Principal - Consulting Services, Argus

**What is a European infrastructure that supports ammonia’s adoption as a fuel in the energy transition?**

- Energy infrastructure fit for supporting the energy transition - onshore/ offshore solutions?
- Production, transportation and cracking of ammonia: energy and cost management challenges
- How might ammonia adoption in Europe develop?

Dina Lanzì, Head of Technology Development Hydrogen BU, SNAM

Panagiotis Panousos, Energy Transition Manager, DESFA

Camel Makhloufi, Power2X R&D Program Leader & E-Fuel Key Program Co-Manager, Engie

Knut Nyborg, CEO, Aker Clean Hydrogen (Zeeds Project)

Moderator: Ruth Sharpe, Editor - Ammonia, Argus

**What is a decarbonised fertilizer and what value-add does it bring to the fertilizer consumer?**

- How to produce the most effective ‘green’ fertilizers whilst maintaining cost competitiveness? How may carbon capture play a role in curbing emissions?
- What are the most suitable types of fertilizer for green ammonia application? Which can be most easily converted?
- What is the value of the carbon footprint effect on the food production chain, and what is the value farmers and food industries can find?

Joacim Christiansen, SVP Sustainable Food Ecosystem, Yara International

Tobias Birve, Head of Sales Fertilizer and Methanol, thyssenkrupp

Jean-Luc Pradal, Director General, Fertiberia France

Moderator: Oliver Hatfield, VP Business Development, Argus

**Roundtable: Power-to-X: linking renewable energy into clean fuels**

Led by Tristan Chapman, Senior Vice President - Clean Energy, Lloyd’s Register

Contact the conferences team to find out more.

**Round-up Panel: The strategic importance of green ammonia in the transition to a hydrogen economy and how might this be achieved?**

Trevor Brown, Executive Director, Ammonia Energy Association


Jitendra Roychoudhury, Research Fellow, King Abdullah Petroleum Studies and Research Center (KAPSARC)

Dr Dolf Gielen, Director - Innovation and Technology Centre, IRENA

Moderator: Oliver Hatfield, VP Business Development, Argus

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**Fertilizer, Petroleum, Power illuminating the markets**