

Sustainable Hydrogen & Ammonia Forum – Session Overviews
Production | Transportation | Safety | End Use

Wednesday, September 7th, 2022 (11:00 am – 1:00 pm ET)

Theme: Introduction & Emerging Markets

Session description:

The first panel of the Sustainable Hydrogen & Ammonia Forum will provide an overview of the current state of hydrogen in Canada and the emerging markets for sustainable hydrogen both within Canada and globally. Hydrogen, which is currently utilized primarily as a building block for chemicals and ammonia production, can provide a significant pathway for the decarbonization of Canada's transportation and heavy industrial sectors. With clear and ambitious emission reduction targets set by the Government of Canada and the ongoing development of a Hydrogen Strategy for Canada, Canada is positioned to be a significant player in emerging markets for sustainable hydrogen.

As these emerging markets develop, best practices and lessons learned within the Canadian fertilizer and chemical industries can be drawn on to ensure the continued safe and efficient manufacturing and transportation of hydrogen and ammonia in Canada. It is essential that all potential market participants have an opportunity to work collaboratively and ensure these emerging markets can be served with the best industry practices.

Wednesday, September 14th, 2022 (11:00 am – 1:00 pm ET)

Theme: Production Pathways & Infrastructure

Session Description:

The second panel will look to explore the infrastructure requirements for widespread adoption of sustainable hydrogen, including the necessary infrastructure for production, transportation, and alternative end uses. As the current primary producers and users of hydrogen, the chemistry and fertilizer industries will play a key role in determining which hydrogen production pathways are most economical in Canada. Not all forms of hydrogen are cost competitive, and it is important that federal and provincial governments work with industry to find ways to make existing hydrogen production cleaner using available technologies, such as carbon capture, utilization, and storage. With an increasing demand in existing and emerging markets, the infrastructure and emerging low-carbon technologies required to make this transition possible will be essential.

September 21st, 2022 (11:00 am – 1:00 pm ET)

Theme: Safety, Storage & Transportation

Session Description:

The third panel will look at the valuable experience that Canada's chemistry and fertilizer sectors have in managing best-in-class industry safety and stewardship programs, including CIAC's Responsible Care and TRANSCAER programs, and Fertilizer Canada's Ammonia Code of Practice. Safety, transportation, and storage will play a key role in successfully scaling hydrogen as a sustainable energy source or fuel. The movement of hydrogen and ammonia as a hydrogen carrier at scale is complex, and, with both hydrogen and ammonia are regulated as dangerous goods under the *Transportation of Dangerous Goods Regulations*, supply chain stakeholders including railways and ports must continue to play an active role in safety compliance as well as emergency prevention and response. Both industry and government have important roles to play in fostering safety through the supply chain as movements of hydrogen and ammonia are projected to increase with the transition to low-carbon energy sources.

September 28th, 2022 (11:00 am – 12:30 pm ET)

Theme: Conclusions & Future Considerations

Session Description:

The final session of the Sustainable Hydrogen & Ammonia Forum will be a fireside chat between Karen Proud, President & CEO at Fertilizer Canada, Bob Masterson, President & CEO at the Chemistry Industry Association of Canada, and Natural Resources Canada (requested). The moderated session will facilitate a concluding discussion summarizing key takeaways and next steps from the previous sessions on sustainable hydrogen & ammonia production, transportation, and use. This discussion will be followed by an open question and answer period which will allow participants to engage with the speakers and further discuss any topics of interest.