



HFC2017 International Summit Program Overview
Terminal City Club, Vancouver, Canada
June 5 – 6, 2017
 837 West Hastings Street, Vancouver BC, V6C 2T4

| | |
|----------------------------------|---|
| Sunday, June 4, 2017 | |
| On-Site Registration Open | |
| 2:00-5:00 PM | On-Site Registration Open HFC 2017 Registration Desk – Metropolitan Ballroom Foyer – Main Floor, Terminal City Club |
| Monday, June 5, 2017 | |
| Day One | |
| 7:30 AM-3:30 PM | On-Site Registration Open HFC 2017 Registration Desk - Metropolitan Ballroom Foyer – Main Floor, Terminal City Club |
| 8:30-8:45 AM | Welcome, Introductions & Summit Overview <ul style="list-style-type: none"> • Mr. Ross Bailey, Vice Chair, Canadian Hydrogen & Fuel Cell Association President & CEO, Greenlight Innovation |
| 8:45-9:15 AM | Canada’s Global Leadership in Hydrogen Fuel Cell Technology Session Chair: Mr. Colin Armstrong, President, Hydrogen Technology & Energy Corporation (HTEC) <ul style="list-style-type: none"> • Mr. Daryl Wilson, Chairman, Canadian Hydrogen & Fuel Cell Association President & CEO, Hydrogenics Corporation • Mr. Randall MacEwen, President & CEO, Ballard Power Systems • <i>5 minute Q&A from audience</i> <p>The Canadian sector is a global leader as a result of pioneering technologies, world-renown expertise, and over two decades of partnerships between industry, academia and Canadian governments. In this keynote panel two senior Canadian HFC executives examine the current state of Canada’s global leadership in the development and commercialization of fuel cell technology.</p> |
| 9:15-10:15 AM | Global Report: Breakthroughs in Technology and Uptake in Asia and Europe Session Chair: Mr. Geoff Budd, Principal, GSB Consulting <ul style="list-style-type: none"> • Mr. Tetsufumi Ikeda, Director General, The Association of Hydrogen Supply and Utilization Technology (HySUT) (Japan) • Dr. Lih-Chyi Wen, Director, Center for Green Economy & Deputy Director, Green Trade Project Office, Ministry of Economic Affairs, Government of Taiwan |

- **Ms. Lucia Seissler**, International Cooperation Officer, National Organisation Hydrogen and Fuel Cell Technology (NOW) GmbH (Germany)
- **Dr. R.K. Malhotra**, President, Hydrogen Association of India (HAI)
- *5 minute Q&A from audience*

Outside North America, several advanced industrial nations have well-developed national energy strategies that do not rely entirely on market forces to promote the development of HFC technology. This panel of leaders from industry and government reviews breakthroughs in both the technology and its deployment in Asia and Europe.

10:15-11:00 AM

Public-Private Partnership in Opening the Market Place for HFC Technologies

Session Chair: Ms. Grace Quan, CEO, Hydrogen In Motion

- **Mr. Bernard Frois**, Chairman, International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE)
- **Mr. Bart Biebuyck**, Executive Director, Fuel Cells and Hydrogen Joint Undertaking, EU
- **Dr. David Hart**, Director, E4TECH, Switzerland
- *5 minute Q&A from audience*

Public policy has nurtured the growth of modern hydrogen fuel technology since its early days in the physics labs of public universities. In this session, the summit is honoured to hear from experts on the topic of public-private cooperation and how that plays a significant role in commercialization of HFC technologies.

11:00-12:00 PM

1-Hour Networking Lunch (Courtesy of Hydrogenics Corporation)

Metropolitan Ballroom - Main Lobby Level

12:00-1:15 PM

Spotlight on Commercialization of Fuel Cell Vehicles

Session Chair: Dr. Ira Wolff, Director Business Development, NORAM Engineering + Constructors

- **Dr. Joachim Blum**, Chief Executive Officer, Automotive Fuel Cell Cooperation (AFCC)
- **Dr. Guido Bartlok**, Program Manager, Hydrogen Systems Advanced Development, Magna Steyr
- **Mr. Donald Wright**, Head of Department, Products, Electrification and Racing Test Systems, AVL
- **Dr. John Shen**, Chairman & CEO, Palcan Energy Corporation
- **Dr. Joergen Karstedt**, Coordinator, eMobility, ZBT GmbH (Germany)
- *10 minute Q&A from audience*

With the arrival of commercially-available FCEVs, this session will examine current progress, successes, barriers, plans and visions for commercialization of vehicles in Canada, in the United States and elsewhere globally. Speakers include leaders from the auto sector and research industry.

1:15-1:35 PM

20-Minute Networking Break (Courtesy of Automotive Fuel Cell Cooperation)

Metropolitan Ballroom Foyer-Main Lobby Level

1:35-4:35 PM

Bringing Hydrogen Infrastructure to the World

1:35-2:20 PM

Panel 1- Canadian Update

Session Chair: Mr. David Leger, Founder & Director, Loop Energy

- **Mr. Colin Armstrong**, President & CEO, HTEC
- **Mr. Raymond Lings**, President & CEO, Powertech Labs
- **Ms. Liz Ferris**, Climate Action Analyst, Capital Regional District (CRD)
- *5 minute Q&A from audience*

2:20-3:05 PM

Panel 2- American Update

Session Chair: Dr. Benjamin Zahirisabzevar, Lab Manager, Clean Energy Research Centre (CERC)

- **Mr. Stephen Jones**, Managing Director, ITM Power Inc.
- **Ms. Chris White**, Director, Communications, California Fuel Cell Partnership
- **Mr. Wolfgang Fengler**, Senior Program Manager, Mobile Pipeline Products, Hexagon Lincoln
- *5 minute Q&A from audience*

3:05-3:50 PM

Panel 3- European Update

Session Chair: Dr. Andreas Truckenbrodt, Principal, Truckenbrodt Clean Energy Consulting

- **Mr. Javier Brey**, Chairman, Spanish Hydrogen Association (AEH2)
- **Mr. John Lidderdale**, Chairman, Scottish Hydrogen and Fuel Cell Association (SHFCA)
- **Mr. Bjørn Simonsen**, Director of Market Development & Public Relations, Nel Hydrogen
- *5 minute Q&A from audience*

3:50-4:35 PM

Panel 4- Asian Update

Session Chair: Mr. Alakh Prasad, President & CEO, Quadrogen Power Systems

- **Mr. Go Yamaguchi**, Hydrogen Gas, Iwatani Corporation, Japan
- **Dr. Chun-Hsu Lin**, Director, Taiwan Fuel Cell Demonstration and Promotion Office
- **Dr. Jong Won Kim**, Principal Researcher, Korea Institute of Energy Research (KIER)
- *10 minute Q&A from audience*

HFC-powered vehicles will not succeed in the marketplace unless refueling is practical and convenient. This extended, four-part conference session will highlight the success stories in various nations and the significant role that fuel cell technologies play on reducing our dependence on petroleum fuels. This panel will also discuss the need for an initiative that will accelerate the pace of fueling infrastructure deployment globally.

4:35-5:00 PM

Corporate Updates Interactive Discussion

***Opportunity for organizations to provide 3-5 minute updates on their recent research, policy and industry activities**

Session Chair: Mr. Ross Bailey, Vice Chair, CHFCA

The hydrogen fuel cell sector is so dynamic – so driven by constant innovation in the lab, in the marketplace and in the public sector – that any gathering of industry leaders always includes people just bursting to share exciting, late-breaking news about new technology or new deals or new support programs or policies from government. This session gives industry and government “newsmakers” amongst the Summit delegates a platform to briefly share their hottest, latest unpublished news with colleagues from across North America and around the globe.

6:00-8:00 PM

**Clean Energy Now: HFC Networking Reception
(Sponsored by Government of British Columbia)
(Presidents Ballroom, 2nd Floor, Terminal City Club)**

8:00 PM END OF DAY 1

8:00 AM-12:00 PM

On-Site Registration

Club Foyer – Main Lobby Level

8:30-8:35 AM

Day One Recap & Day Two Orientation

- **Mr. Ross Bailey**, Vice-Chair, Canadian Hydrogen and Fuel Cell Association (CHFCA); President & CEO, Greenlight Innovation

8:35-9:35 AM

Hydrogen Production

Session Chair: Dr. Dave Ghosh, President & CEO, XRG Energytech Solutions

- **Mr. Javier Brey**, CEO, H2B2
- **Mr. Alakh Prasad**, President & CEO, Quadrogen Power Systems
- **Dr. Nirmal Gnanapragasam**, Process/Modeling Scientist, Hydrogen Isotopes Technology Branch, Canadian Nuclear Laboratories (CNL)
- **Dr. Amir Ghasdi**, Business Development Director, Advanced Gas Purification Systems, Xebec
- *5 minute Q&A from audience*

The environmental footprint of hydrogen varies depending on how it was created. Combining surplus peak power from wind or solar with electrolysis creates hydrogen with no carbon by-products. This “green hydrogen” can be held in reserve for use in a fuel cell when renewable generation falls below demand at off-peak times. This panel takes a look at the increasing deployment of this model around the globe on scales that range from regional utility to technology campus to small local applications.

9:35-10:20 AM

Energy Storage: Success Stories and New Opportunities

Session Chair: Mr. Geoff Budd, Principal, GSB Consulting

- **Dr. Thomas Kattenstein**, Head of Fuel Cell and Hydrogen Network, EnergieAgentur.NRW
- **Mr. Rob Harvey**, Director, Energy Storage, Hydrogenics Corporation, Canada
- **Dr. Martin Schneider**, Head of Product Management, Hydrogenious Technologies GmbH
- *5 minute Q&A from audience*

Pairing fuel cells with wind or solar creates an energy source as reliable as a hydro-thermal plant or a hydroelectric dam by using the fuel cells to store surplus peak power for release when the wind dies down or the sun sets for the night. This is a game-changer for renewable, and the panel examines several success stories and provides some insight on opportunities for growth.

10:20-10:40 AM

20-Minute Networking Break (Courtesy of Mercedes-Benz Canada)

Metropolitan Ballroom Foyer-Main Lobby Level

10:40-11:10 AM

Spotlight on Material Handling

Session Chair: Mr. Nicolas Pocard, Director, Marketing, Ballard Power Systems

- **Mr. Matthew Fairlie**, CEO, Next Hydrogen Corporation
- **Mr. Sajith Manikath**, Director, Vendor Development, Material Handling, Wajax
- *5 minute Q&A from audience*

The marketplace has responded remarkably well to no-emission HFC forklifts, and this panel includes business leaders from both the manufacturers – and from some of the blue-chip customers who are switching their no-emission forklift fleets from acid-battery technology to HFC.

11:10 AM -12:10 PM

Spotlight on Transportation

Session Chair: Dr. Omar Herrera, Program Manager, Transportation Futures, Clean Energy Research Centre (CERC), The University of British Columbia (UBC)

- **Mr. Ben Nyland**, President & CEO, Loop Energy
- **Mr. Ryan Sookhoo**, Director, New Initiatives, Hydrogenics Corporation
- **Mr. Nicolas Pocard**, Director of Marketing, Ballard Power Systems
- **Mr. Øystein Ulleberg**, Principal Scientist, Institute for Energy Technology
- *5 minute Q&A from audience*

With the commercial rollout of hydrogen fuel cell vehicles finally a reality, the current headlines tend to focus on private transportation. However, the global market for HFC-powered busses and trucks is rapidly growing. This panel takes a look at some of the companies leading the development and commercialization of the technology, and looks at the prospects for eventually moving beyond pilot projects to full deployment and all-hydrogen fleets.

12:10-1:10 PM

Networking Lunch (Courtesy of Ballard Power Systems, Government of British Columbia) Metropolitan Ballroom BC- Main Lobby Level

1:10-1:40 PM

Defense Applications for Hydrogen and Fuel Cells

Session Chair: Dr. Ira Wolff, Director Business Development, NORAM Engineering + Constructors

- **Mr. Ryan Sookhoo**, Director, New Initiatives, Hydrogenics Corporation, Canada
- **Mr. Paul Osenar**, President & CEO, Protonex
- *5 minute Q&A from audience*

Although many military applications of HFC technology are classified, there is enough activity in the public domain for an interesting panel discussion. Examples range in maturity from small pilot projects to fully deployed, and in scale from microgrids to ships to personal appliances that fit in a backpack. The panel examines and discusses current military applications and looks at opportunities for expanding military uptake around the world.

1:40-2:55 PM

Academic & Research Perspectives

Session Chair: Mr. Ross Bailey, President & CEO, Greenlight Innovation

- **Dr. Walter Mérida**, Director, UBC Clean Energy Research Centre, Canada
- **Mr. Ulf Groos**, Head of Department Fuel Cell Systems, Fraunhofer-Institut für Solare Energiesysteme ISE, Germany
- **Dr. Dmitri Bessarabov**, Director: DST HySA Infrastructure Center of Competence, South Africa
- **Dr. Caizhi Zhang**, Professor, Research of Fuel Cell Lead, Chongqing University (China)
- **Dr. Gina Strati**, Director, Energy Programs, Canadian Nuclear Laboratories (CNL)
- *5 min Q&A from the audience*

2:55 PM

Final Remarks and Adjournment

- **Mr. Ross Bailey**, Vice-Chair, CHFCA

3:00 PM END OF DAY 2