Fuel Cell and Hydrogen Market Development Forum

A Joint International Partnership for Hydrogen and Fuel Cells in the Economy and Korea Ministry of Trade, Industry and Energy Event

Wednesday, November 2, 2016

Kimdaejung Convention Center

Room 302 - 303

30 Sangmunuriro, Seo-gu, Gwangju

Republic of Korea

Overview:

There is significant progress in the commercialization of fuel cell and hydrogen (FCH) products with hundreds of fuel cell electric vehicles (FCEVs) and over 150,000 combined heat and power (CHP) units in commercial use today. This is the start of the transition from traditional energy and transportation systems to clean systems using hydrogen as an energy vector. This event brings together leading industry and government representatives working to increase the adoption and integration of clean energy and transportation systems. The focus will be on views on the development of the commercial market using FCH technologies, and the actions needed to support further deployment to meet sustainability objectives.

Expected Outcomes:

- Examples of best practices and lessons learned in the deployment of innovative clean energy solutions with potential to meet emissions and other policy goals;
- Identify key non-R&D barriers that governments can potentially address to accelerate the deployment of clean energy technologies with a focus on FCH; and,
- Identify potential actions for industry and governments to accelerate the deployment of FCH technologies.

Participants:

- Government representatives from countries leading in FCH technology development and deployment;
- Private sector stakeholders deploying technology to meet national environmental and economic goals; and,
- Thought leaders on policies, incentives, technology development, and deployment.

Agenda

8:30AM **Registration (Coffee and Tea Available)**

9:00AM **Welcome and Foreword**

- Mr. Bernard FROIS, Chair of the IPHE
  Mr. Sang Yang NOH, President of the New and Renewable Energy Center, Korea Energy Agency, Ministry of Trade, Industry and Energy

9:10AM **SESSION 1: Vision on the Commercialization of Fuel Cell Electric Vehicles**

This session provides insights from representatives of leading industry stakeholders on their vision for the roll out of FCEVs, followed by a moderated discussion with audience Q&A.

Moderator: Nha NGUYEN, Department of Transportation, USA

- Hyundai: Mr. Sae-Hoon KIM, Fuel Cell Vehicle Group, "Development and Status of FCEV at Hyundai"
- Honda: Mr. Takashi MORIYA, Senior Chief Engineer, Div. 5 Technology Development, Automobile R&D Center, Honda R&D Co., Ltd., "Honda Fuel Cell Vehicle Development and Toward the Hydrogen Society"
- Guangdong Nation Synergy Hydrogen Power Technology Co. Ltd. ("Synergy") China: Dr. Zhixiang (Henry) LIU, Technical Center Director, "Vision and Development of Fuel Cell Vehicles in China"

10:30AM **COFFEE/TEA BREAK**

10:50AM **SESSION 2: Emerging Hydrogen Infrastructure**

This session provides insights into the current drivers and vision for the development of hydrogen infrastructure, views on progress made, and the next phases of infrastructure, followed by a moderated discussion with audience Q&A.

Moderator: Katarzyna DRABICKA, DG Research & Innovation, European Commission

- Department of Energy, United States, Mr. Greg KLEEN "Hydrogen@Scale"
- Korean Hydrogen Industry Association (KHIA), Korea, Dr. Hee-Chun LIM (Vice Chair), "The Status and Prospects of the Hydrogen Infrastructure in Korea"
- NOW GmbH, Germany, Dr. Hanno BUTSCH, "Renewable Hydrogen Infrastructure – the German Experience"
- Air Liquide, Mr. Yongkyu LEE, Horizon Hydrogen Energy (H_2E) Program Business Development Manager, Air Liquide Korea

12:30PM **LUNCH**

13:30PM **Guest Speakers**

- Mr. Bart BIEBUYCK, Fuel Cells and Hydrogen Joint Undertaking (FCH JU): "Supporting FCH Technology Development and Deployment"
- Mr. Fabio FERRARI, Symbio FCell: "Increasing Linkage Between Energy and Transportation"

14:30PM **COFFEE/TEA BREAK**

14:45PM **SESSION 3: Commercialization of Distributed Power Generation**

This session looks at the latest developments in the deployment and use of distributed power generation, issues encountered, and measures to contribute to more rapid deployment, followed by a moderated discussion with audience Q&A.

Moderator: Dr. Laurent ANTONI, Alt. Energies & Atomic Energy Commission (CEA), France

- Toshiba Fuel Cell Power Systems Corp., Mr. Yuji NAGATA, Technical Advisor, "Japanese ENE-FARM Toward the Future"
- Osaka Gas Co. Ltd., Dr. Takeshi TABATA, General Manager, Residential Energy Business Unit, "Role of Osaka Gas in the Development & Deployment of Residential Fuel Cell Systems"
- POSCO Energy, Korea, Mr. Byeong-Geun SEONG, Group Leader, Fuel Cell Technology Institute, "The Status of POSCO Energy's Molten Carbonate Fuel Cell Business and Technology Development"
- Doosan Corp. Fuel Cell BG, Mr. Kyungyul CHANG, General Manager, "Large Scale Fuel Cell Power Generation Using By-product Hydrogen for Commercial Purpose"
- KOLON / Hydrogenics, Mr. Alan KNEISZ, Hydrogenics Business Development Director for Asia-Pacific, "1MW Hydrogen Fuel Cell Power Plant Project Using By-product Hydrogen from Industrial Complex"

16:30PM **SESSION 4: Roundtable Discussion**

Highlights and identification of the actions and measures articulated throughout the day for governments, industry, and the IPHE with a moderated discussion.

Moderator: Tim KARLSSON, Executive Director, IPHE

17:00PM **Wrap-Up**

17:30PM **Forum Dinner:** Hosted by the Ministry of Trade, Industry, and Energy (MOTIE), and, the Korean Electric Power Corporation (KEPCO)

Location: Kimdaejung Convention Center, Convention Hall 2&3

Korean Society for New and Renewable Energy and IPHE Forum Dinner Agenda

Opening Ceremony (17:30)

Opening Address: Mr. Yong Ho LEE, Chairman, Korea Society for New and Renewable Energy

Welcome by the Mayor: Mayor Chang Hyun YOON, City of GwangJu

Congratulatory Speeches: Mr. Bung Wan CHANG, Chair of the Industry and Energy Committee

Mr. Tae Hee WOO, Vice Minister, Ministry of Trade, Industry and Energy

Keynotes (18:00)

Mr. Bung Moon JI, President, Chonnam National University

Mr. Duck Soo HAN, Chairman, Korea Climate Change Center

Mr. Tim KARLSSON, Executive Director, International Partnership for Hydrogen and Fuel Cells in the Economy

Banquet Dinner (18:45 ~ 20:30)