

# International Seminar on the Hydrogen Economy for Sustainable Development

28-29 September 2006  
Reykjavik, Iceland  
Nordica Hotel

Including

**Special Event**  
**A Hydrogen Economy Based on Geothermal Resources:  
Current Developments and Potentials**  
Conference Hall, Geothermal Power Company, Reykjavik

Co-organized by:  
The Government of Iceland  
United Nations Department of Economic and Social Affairs

**Programme**

*Field visit to geothermal power plant on Wednesday, 27 September 2006.*

## THURSDAY, 28 SEPTEMBER

### OPENING SESSION

#### OPENING ADDRESS

H.E. MS. VALGERÐUR SVERRISDÓTTIR  
Minister of Foreign Affairs, Iceland

#### WELCOME ADDRESS

MR. KUI-NANG MAK  
Chief, Energy and Transport Branch  
United Nations Department of Economic and Social Affairs

#### KEYNOTE ADDRESS

MR. DAVID K. GARMAN  
Under Secretary of Energy  
U.S. Department of Energy

### SESSION I STATUS AND TRENDS OF THE HYDROGEN ECONOMY

Chair: Mr. Sveinn Thorgrímsson, Head of Department, Ministry of Industry and Commerce, Government of Iceland

#### KEYNOTE ADDRESSES

PRESENTERS *The Hydrogen Economy: An Introduction*

MR. THORSTEINN I. SIGFUSSON  
Professor of Physics, Science Institute, University of Iceland  
Co-Chair, Implementation Liaison Committee (ILC) of IPHE

#### *Global Status & Trends of the Hydrogen Economy*

MR. ROBERT K. DIXON  
Head, Energy Technology Policy Division  
International Energy Agency

#### *Overview of the Hydrogen Economy: Perspectives from Europe*

MR. WILLIAM BORTHWICK  
Co-ordinator, Hydrogen and Fuel Cell Research  
Energy Production and Distribution Systems Unit  
European Commission, Directorate General Research

***International Cooperation - A Win-Win Scenario: Perspectives from Mongolia***

H.E. MR. BADARCH ERDENEBAT  
Minister of Fuel and Energy, Mongolia

***International Cooperation - A Win-Win Scenario: Perspectives from China***

MR. DINGHUAN SHI  
Counsellor for Science and Technology  
State Council, Beijing, China

**SESSION II DEVELOPING COUNTRY PERSPECTIVES AND EXPERIENCES WITH HYDROGEN PRODUCTION AND USE**

Chair: Mr. Ralph Wahnschafft, Energy and Transport Branch, United Nations Department of Economic and Social Affairs

**PRESENTERS** ***The Hydrogen Economy: Perspectives from Malaysia***

MR. WAN RAMLI WAN DAUD  
Professor of Chemical Engineering at the Department of Chemical & Process Engineering at Universiti Kebangsaan Malaysia

***The Current Status and Prospect of Hydrogen Economy in China***

MR. KUN YUAN  
Professor at the Institute of Nuclear and New Energy Technology (INET), Tsinghua University, Beijing, China

***Hydrogen Energy: A Comprehensive Approach Integrating Energy Systems for Sustainable Development***

MR. KHALID BENHAMOU  
Managing Director, Sahara Wind Inc., Rabat, Morocco

***A Hydrogen Outlook from a Transition Economy: Development of Hydrogen Fuel Cells by H2 Economy in Armenia***

MR. VAHE ODABASHIAN  
Vice President, H2 Economy, CJSC, Armenia

**SESSION III PANEL DISCUSSION ON PERSPECTIVES FOR A HYDROGEN ECONOMY**

Chair: Mr. Thorsteinn Sigfusson, Professor of Physics, Science Institute, University of Iceland  
Co-Chair, Implementation Liaison Committee (ILC) of IPHE

**ON THE PODIUM** ***The Barbados Perspective of a Hydrogen Economy***

MR. HUGH SEALY  
Chairman of the National Commission on Sustainable Development (NCSD), Barbados

***Perspectives for a Hydrogen Economy and UNIDO-ICHET Pilot Projects***

MR. JOHN SHEFFIELD  
Deputy Director, International Center of Hydrogen Economy and Technology, United Nations Industrial Development Organization

**Geothermal Resources in El Salvador: Current Status**

MS. EVELYN DE VELIS  
Manager, LaGeo, S.A. de C.V., El Salvador

MR. SAMI GÖREN  
Head of the Department of Environmental Engineering,  
Fatih University, Istanbul, Turkey

**Site Visit to Hydrogen Fuelling Station in Reykjavik****FRIDAY, 29 SEPTEMBER****SESSION IV PERSPECTIVES FOR THE DEVELOPMENT AND USE OF RENEWABLE ENERGIES AND POTENTIALS FOR HYDROGEN PRODUCTION**

Chair: Mr. Shaoyi Li, Energy and Transport Branch, United Nations Department of Economic and Social Affairs

## PRESENTERS

***South African Hydrogen Economy Activities - National Hydrogen Energy & Fuel Cell R&D Strategy Development***

MR. MKHULU MATHE  
Council for Scientific and Industrial Research, Research Group Leader Fuel Cells, South Africa

***Perspectives from St. Lucia***

MR. GEORGE JAMES  
Deputy Secretary, Ministry of Physical Development, Housing and Environment, Saint Lucia

***Geothermal and the Hydrogen Economy - A Perspective from Montserrat***

MR. THOMAS YEUNG  
Managing Director, Montserrat Utilities Ltd.

***Perspectives for the Development and Use of Renewable Energies and Potentials for Hydrogen Production in the Pacific Islands***

MR. SOLOMONE FIFITA  
Chief Technical Advisor, Pacific Islands Renewable Energy Project  
South Pacific Regional Environment Programme, Samoa

***Renewable Energy Scenario in Bhutan***

MR. KINGA TSHERING  
Head of Renewable Energy Division, Department of Energy, Ministry of Trade and Industry, Kingdom of Bhutan

## SPECIAL EVENT

### SESSION V A HYDROGEN ECONOMY BASED ON GEOTHERMAL RESOURCES: CURRENT DEVELOPMENTS AND POTENTIALS

Chair: Mr. Andres Svanbjornsson, Chief Engineer, Ministry of Industry and Commerce, Government of Iceland

#### PRESENTERS

#### *Geothermal Energy: An Option for Hydrogen Production?*

MR. ÓLAFUR G. FLÓVENZ  
General Manager ISOR (Iceland GeoSurvey) and  
Secretary of the International Geothermal Association

#### *H<sub>2</sub> in Iceland: Current Status and Future Aspects*

MR. JÓN BJÖRN SKÚLASON  
General Manager of Icelandic New Energy

#### *Geothermal Energy Status and Human Capacity Building in Developing Countries*

MR. INGVAR BIRGIR FRIDLEIFSSON  
Director of the Geothermal Training Programme of the United Nations University, Iceland

### SESSION VI DEVELOPMENT AND FINANCING OF ENERGY PROJECTS IN DEVELOPING COUNTRIES - INCLUDING HYDROGEN

Chair: Mr. Shaoyi Li, Energy and Transport Branch, United Nations Department of Economic and Social Affairs

#### PRESENTERS

MR. YNGVE SÖDERLUND  
Senior Regional Manager of the Nordic Investment Bank

MR. LARUS ELIASSON  
CEO ENEX Geothermal Development Company, Iceland

#### *Sustainable Banking*

MR. ÁRNI MAGNÚSSON  
Director Sustainable Energy, Corporate Investment Banking  
Glitnir Bank, Iceland

MR. ALBERT ALBERTSSON  
CEO Svartsengi Power Company, Iceland

## **CLOSING SESSION**

### **KEYNOTE ADDRESS**

MR. MAGNUS JOHANNESSON  
Secretary General  
Ministry of Environment, Government of Iceland

### **ADOPTION OF A CHAIRMAN'S SUMMARY REPORT ON CONCLUSIONS AND RECOMMENDATIONS**

### **CLOSING REMARKS**

MR. RAGNAR BALDURSSON  
Counsellor, Department of Natural Resources and Environmental Affairs, Ministry for Foreign Affairs, Government of Iceland

### **Site Visit to Geothermal Power Plant**