



**International Partnership  
for the Hydrogen Economy**

# IPHE Goal

Efficiently organize and coordinate multinational research, development and deployment programs that advance the transition to a global hydrogen economy.

# California Fuel Cell Partnership

...a collaboration of auto companies, fuel providers, fuel cell technology companies, and government agencies that is placing fuel cell electric vehicles on the road in California



# IPHE Ministerial

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The IPHE Ministerial was held November 19-21, 2003 in Washington DC, USA.

- Signing of the Terms of Reference
- 700+ delegates and participants representing approximately 30 countries
- Public-Private Dialogue Sessions
- IPHE Committee meetings
  - ❖ Steering Committee
  - ❖ Implementation-Liaison Committee

# IPHE Partners



Russian Federation



USA



Canada



Iceland



Japan



Republic of Korea



China



India

## IPHE Partners' Economy:

- Over \$35 Trillion in GDP, 85% of world GDP
- Nearly 3.5 billion people
- Over 75% of electricity used worldwide;
- > 2/3 of CO<sub>2</sub> emissions and energy consumption

United Kingdom



France



Germany



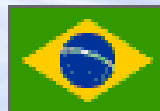
Italy



Australia



Brazil



Norway



European Commission



New Zealand



# Steering Committee

## ➤ Recent Meetings:

- Paris, France (January 2005)
- Beijing, China (May 2005)

## ➤ Initiated the Beijing Action Plan

- ❖ Identify appropriate role for IPHE in Codes and Standards work
- ❖ Identify pathway forward for stakeholder participation
- ❖ Develop IPHE communication and outreach package
- ❖ Convene a meeting of the R&D managers on IPHE Partners
- ❖ Compile an integrated IPHE hydrogen roadmap
- ❖ Organize international conferences

## ➤ Next meetings:

- ❖ Kyoto, Japan (14 – 15 September 2005);
- ❖ Vancouver, Canada (March 2006).

# Implementation-Liaison Committee

- Meetings in Germany, Iceland and Brazil
  
- High Priority Activities
  - ❖ Hydrogen Production
  - ❖ Hydrogen Storage
  - ❖ Fuel Cells
  - ❖ Codes and Standards
  - ❖ Socio-economics
  - ❖ Developing National Hydrogen R&D Roadmaps
  
- Next Meetings
  - ❖ Shanghai, China (17 – 19 October 2005)
  - ❖ Lyon, France (18 – 19 June 2006)

# Implementation-Liaison Committee

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- **Highlights from the 14 Point Reykjavik Action Plan:**
  - Publication of Scoping Papers on High Priority Activities
  - Conduct International Conferences on High Priority Topics
  - World Atlas on Hydrogen and Fuel Cell Demonstration Projects
  - Development of IPHE Roadmap
  - Establish a Safety, Codes and Standards Task Force
  - Labeling IPHE Projects



# IPHE Workshops

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- ❖ Joint IEA-IPHE SOFC Fuel Cell Workshop - May 14, 2005  
Quebec City, Canada
- ❖ Joint IEA-IPHE PEM Fuel Cell Workshop - June 1-3, 2005  
Mol, Belgium
- ❖ IPHE International Conference on Hydrogen Storage -  
June 20-22, 2005 - Lucca, Italy
- ❖ IPHE Socio-Economic Task Force - June 30, 2005  
- Paris, France
- ❖ International Conference on Hydrogen Safety - September  
8-10, 2005 - Pisa, Italy
- ❖ Hydrogen from Renewable Energy Sources - October 24 -  
26, 2005 - Seville, Spain

# IPHE Projects

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- **IPHE Project Evaluation Team Established**
- **Project criteria:**
  - **Supported by more than one IPHE member;**
  - **All funding options are available;**
  - **National environmental, safety, and health concerns addressed; and**
  - **Project partners are willing to share non-proprietary project information with other IPHE Members.**

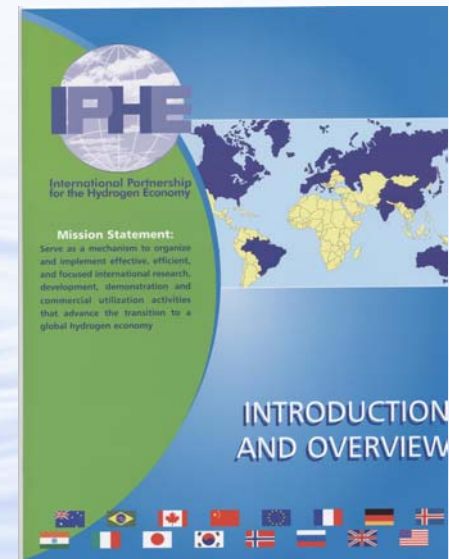
# Proposal Application Process

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- **Project proposal is submitted to the IPHE Secretariat;**
- **ILC Evaluation Team reviews project proposal for compliance with criteria and recommends projects to the ILC;**
- **ILC submits approved projects to the IPHE Steering Committee for endorsement; and**
- **Project partners sign a “Partnership Agreement”.**

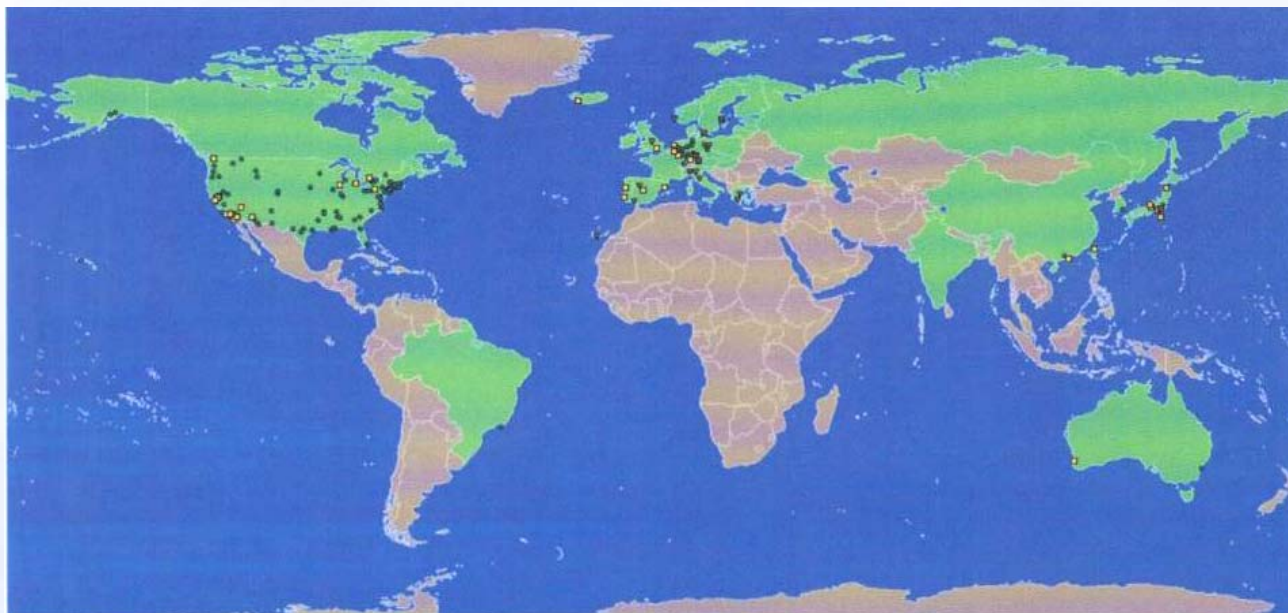
# Recent IPHE Products

- Updated Website
- World Demonstration Atlas
- IPHE Brochure
- Hydrogen Fact Sheets
- Hydrogen Vision and Roadmap (with members)
- APEC Interim Hydrogen Framework
- IPHE Scoping Papers (5)
- IPHE Project and Events Guidelines
- Concept Paper on Stakeholder Involvement
- International Workshops



# http://www.iphe.net

- Hydrogen Demonstration Project Atlas
  - Name of project; partners; project dates; type of fuel; and other project specifics; miscellaneous notes
  - Submission form for additional projects



Submit Project Data to the IPHE Demonstration ATLAS

[Click Here](#)

Hydrogen Demonstration ATLAS

**CUTE Bus Demo. BP in charge of H2 station**

Barcelona, Spain

**Date of Operation:** Opened September 2003

**Fuel:** Compress. H2

**Production / Size:** BP & Vandenberg Hydrogen Systems; IMET@powered water electrolyzer

**Notes:** On-site production via renewable solar and grid electricity powered electrolysis. Uses a Linde High Booster Compressor System for high pressure H2.

**Link:** n/a



# Stakeholder Involvement

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- **The IPHE website:**

- Special section for stakeholders
- Opportunity for stakeholders to interact and exchange information with the IPHE and its members.

- **Individual Stakeholder Contact List:**

- The Secretariat will maintain a list of stakeholders and organizations, including key contact information.
- The Secretariat will provide information on:
  - Conferences, Workshops, IPHE Committee updates, Reports and Newsletters, and general information.

# Stakeholder Involvement

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- **Liaison Group of Stakeholder Associations:**
  - The Secretariat will maintain a list of stakeholder associations that would be notified of IPHE meetings.
  - Conduit for channeling ideas and viewpoints of the stakeholder community to the IPHE committees.
  
- **IPHE Ministerial, SC, and ILC Meetings:**
  - Sessions expressly intended to facilitate an exchange of views and ideas on issues of substance that would specifically include stakeholder participants.

# Stakeholder Involvement

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## Process:

1. IPHE members recommend associations to the IPHE Secretariat from the geographic area that they represent.
2. Association is added to the IPHE website with a link to their association website.
  - Information disseminated from the Secretariat for their members;
  - Invited to be represented (one individual) at IPHE Steering Committee and Implementation-Liaison Committee meetings.



# Contacts

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