Canadian Hydrogen Association
Association Canadienne de L'Hydrogène

Mr. David E. Bruderly (Presenter)

President
Bruderly Engineering Associates, Inc.
1826 NW 57th Terrace
Gainesville, FL
32605, USA

Tel: 352-377-0932
Fax: 352-378-6326
Email: bruderly@aol.com
Website:

Title:	**Hydrogen Energy Systems: A Roadmap for Cost-Effective Pollution Prevention and GHG Reduction Opportunities**
Other Authors:	**Erik Esselstyn John Jones Steve Misiazsek Robert Farmer**
Abstract	*Hydrogen energy systems offer society a cost-effective technology transition pathway to a sustainable energy future using renewable and nuclear energy sources, zero-pollution vehicles, and distributed power generation. Several promising zero-emission end use applications using hydrogen fuels and electrochemical fuel cells as well as heat engines and burners are now technically feasible. Even more exciting, the use of hydrogen as the chemical energy carrier of choice also creates many opportunities for widespread commercial deployment of renewable, fossil, and nuclear energy sources in both the United States and in developing countries. I presented these concepts in a paper entitled: "Hydrogen: The Clean Fuel of Tomorrow is Available Today" at the 1990 IAHE meeting in Honolulu. I propose to update the*

	material presented in this paper to reflect the latest developments in technologies and regulatory attitudes. The paper will provide a roadmap for commercial deployment of hydrogen energy technologies in niche applications and will suggest hydrogen energy projects that can be integrated into corporate pollution prevention and Greenhouse Gas (GHG) reduction policies, strategies and programs. Policies to encourage deployment of zero-pollution and zero-GHG energy systems will also be discussed.