
X.14 H2 and You: A Public Education Initiative by the Hydrogen Education Foundation

Patrick Serfass (Primary Contact),
Ingrid Freemyer
Hydrogen Education Foundation (HEF)
1211 Connecticut Ave. NW, Suite 600
Washington, D.C. 20036
Phone: (202) 261-1366; Fax: (202) 223-5537
E-mail: serfassp@hydrogenassociation.org

DOE Technology Development Manager:
Christy Cooper
Phone: (202) 586-1885; Fax: (202) 586-9811
E-mail: Christy.Cooper@ee.doe.gov

DOE Project Officer: Gregory Kleen
Phone: (303) 275-4875; Fax: (303) 275-4788
E-mail: Greg.Kleen@go.doe.gov

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Objectives

- Increase awareness and understanding of hydrogen and hydrogen-fueled technologies among the general public.
- Educate leading hydrogen influencers to validate hydrogen's impact and potential.
- Establish hydrogen as an essential part of the long-term energy mix.
- Capitalize on related initiatives and resources from program steering committee partners.

Technical Barriers

This project addresses the following technical barriers from the Education section of the Hydrogen, Fuel Cells and Infrastructure Technologies Program Multi-Year Research, Development and Demonstration Plan:

- (A) Lack of Readily Available, Objective, and Technically Accurate Information
- (B) Mixed Messages
- (C) Disconnect Between Hydrogen Information and Dissemination Networks
- (E) Regional Differences
- (F) Difficulty of Measuring Success

Contribution to Achievement of DOE Education Milestones

This project will contribute to achievement of the following DOE milestones from the Education section of the Hydrogen, Fuel Cells and Infrastructure Technologies Program Multi-Year Research, Development and Demonstration Plan:

- **Milestone 11:** Develop set of introductory materials suitable for a non-technical audience. (4Q, 2006)
- **Milestone 13:** Develop materials for community seminars. (4Q, 2008)
- **Milestone 14:** Hold community seminars to introduce local residents to hydrogen. (4Q, 2008 through 4Q, 2012)
- **Milestone 17:** Hold "Hydrogen 101" seminars. (4Q, 2008 through 4Q, 2012)
- **Milestone 29:** Evaluate knowledge and opinion of hydrogen technology of key target audiences and progress toward meeting objectives. (4Q, 2009)

Accomplishments

- Increased visits to the H2 and You Web site to an average of 4,300+ visits per month.
- Expanded to Social Networking sites Twitter, Facebook, and LinkedIn to increase audience for public education. All are experienced average to significant growth in audience size and interaction with target audiences since launch.
- Created online networks that allow the HEF to "train the trainer." Through the social networks, other experts and new enthusiasts, like Project Driveway drivers, have a forum to interact equally with experts and the less informed to share learnings, news, pictures, video and other information. www.H2andyou.org
- Created the H2 and You photo contest with online voting and donated prizes from companies in the industry. Vote for your favorite today at <http://www.h2andyou.org/photoContest.asp>
- Continued execution of program activities:
 - Stage is set for continued visibility for H2 and You.
- Conducted multiple one-on-one interviews with major publications (e.g. New York Times, Wall Street Journal, USA Today, Associated Press, etc.).
- Participation as MC and spokesperson for the hydrogen industry during the first four days of the

Hydrogen Road Tour 2009, which attracted 53.5 million online impressions.

- Responded to online news regularly to provide accurate hydrogen facts to meet the DOE milestone of public education.
- Responded promptly to inaccurate information: in online forums when the public was misinformed and 1-on-1 when a reporter was misinformed with requests for a correction.
- Additional oversight provided by industry and government representatives through the H2 and You Steering Committee.
- Additional funds contributed by Daimler, Shell Hydrogen, Linde, Hydrogen Utility Group, Nebraska Public Power, Xcel Energy and Proton Energy Systems.



Introduction

H2 and You is a project of the Hydrogen Education Foundation, a 501(c)(3) organization, dedicated to increasing understanding about hydrogen. It has been designed to take the complexity, confusion and intimidating science out of hydrogen. H2 and You is making it easy to understand what hydrogen is, how it applies to people’s daily lives, and how it fits into the alternative energy picture. The project’s focus for 2009 has been on increasing interactivity, so people can easily learn more about hydrogen and fuel cells, take action to show their support, and actively share what they have learned with others. This has created an environment for multiple “train-the-trainer” interactions every day.

Approach

To reach the most people possible, a strategic, targeted approach has been developed. Outreach materials have been developed to be understood by the general public but distributed through three main channels:

- Key media.
- A network of about 250 industry eminents including a variety of leaders across different industries.
- Online engagement/Web 2.0.

Results

A major achievement for H2 and You in 2009 was the expansion of online engagement to social networking. The H2 and You program now utilizes Facebook, Twitter, and LinkedIn in addition to the popular H2 and You site to disseminate hydrogen education to large audiences. The goal of using these

tools is to educate the general public, gain awareness and understanding about hydrogen, and provide those with an interest in hydrogen a place to interact and get involved with spreading accurate information about hydrogen and fuel cells. The H2 and You program had much success in the growth of these networks in 2009 (Figure 1).

To maintain positive media relations, the H2 and You staff conducted multiple one-on-one interviews with key media. Some of the media interviews conducted were for the New York Times, the Wall Street Journal, USA Today, and the Associated Press, among others. Being consistent with the H2 and You goal of education, these interviews were conducted to ensure positive and accurate reporting on hydrogen. Where inaccuracies were discovered as a result of these or other pieces, reporters were promptly contacted to make corrections. The H2 and You program promoted and participated in the Hydrogen Road Tour 2009, which attracted 53.5 million online impressions.

H2 and You tracked interactions with influencers based on news and other commentary. The H2 and You staff responded rapidly in the blogosphere to augment support or correct inaccuracies or misperceptions, thus educating the public on hydrogen energy. The “blogs” and responses were presented to the steering committee monthly. Some blogs H2 and You responded to included Green Car Congress, Autoblog Green, NY Times blog, and multiple postings on the Hydrogen Road Tour blog. In tracking these blogs and news, the H2 and You program has concluded the tone about hydrogen is noticeably improving and HEF is observing a growing number of news articles on hydrogen and fuel cells (Figure 2) with a mostly neutral tone.

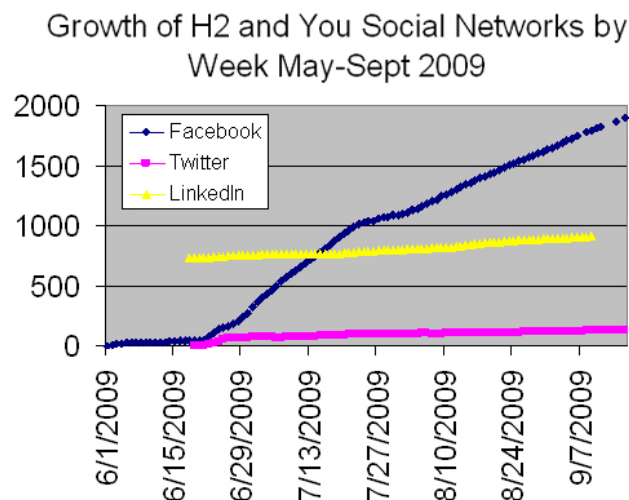


FIGURE 1. Growth of H2 and You Social Networks by Week May-Sept 2009

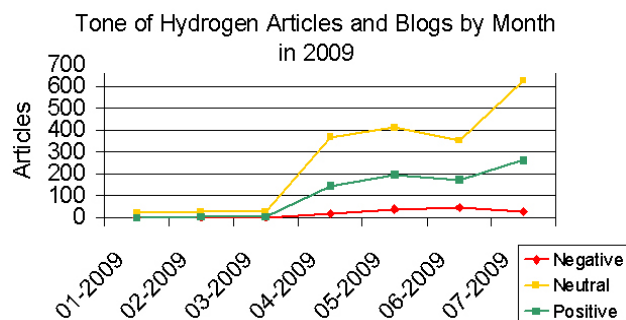


FIGURE 2. Tone of Hydrogen Articles and Blogs by Month in 2009

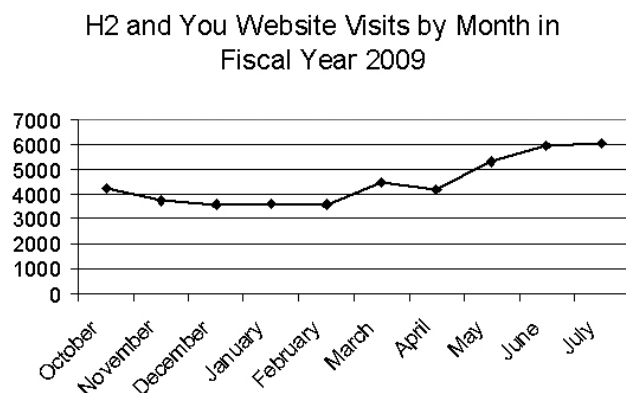


FIGURE 3. H2 and You Web Site Visits by Month in Fiscal Year 2009

The H2 and You Web site (www.h2andyou.com) is an information source and now a center for interaction for target audiences and the general public to gain understanding of hydrogen without needing to sift through technical language. Figure 3 shows the number of visits to the site each month. In 2009, there were 4,300+ visits every month. This is an increase from the previous year. There were 160 sites referring visitors to the H2 and You site.

Conclusions and Future Directions

Summary

- Cost-effective project for educating the public about hydrogen (2 DOE \$ = 5 Project \$), thanks to additional support from Daimler, Shell Hydrogen, Linde, Hydrogen Utility Group, Nebraska Public Power, Xcel Energy and Proton Energy Systems.
- The multi-tiered approach across media, blogs and other influencers is having an impact.
- Directly addresses Education Multi-Year Research, Development and Demonstration Plan barriers.
- Solid foundation in place and measurable progress is beginning.

- Clear path spelled out for continuation of work and potential expansion.
- Expansion to Social Networking sites Twitter, Facebook, and LinkedIn proved to expand H2 and You's reach exponentially and provided several more opportunities a day for interaction on hydrogen and fuel cell education .
- Monthly reports to the DOE and other organizations on the H2 and You Steering Committee has guided project.

Future Work

- Deepen and broaden existing educational activities:
 - Showcase hydrogen-focused developments in national media and most popular energy and environmental blogs.
 - Daily content delivered to encourage interaction through social networks.
 - Integration, synergies and regular communication with DOE and other organizations on steering committee.
 - Finish conversion of H2 and You Web site from purely informational to information and action, thus being the location for hydrogen supporters to act and support hydrogen initiatives.
- Build a groundswell of consumer support:
 - Continue with existing approach to consumer education.
 - Continue to expand focus and implement tactics to support:
 - Consumer advocacy
 - Viral marketing
 - DOE remains a resource for information and assistance.