

Hydrogen Education in Texas

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Project
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Overview

Timeline

- ❖ Start: August 2008
- ❖ End: February 2010
- ❖ 23% complete

Budget

- ❖ Total Project Funding: \$177,207
 - ✓ DOE share: 100%
 - ✓ Contractor share: 0%
- ❖ Funding received in FY08 and FY09:
 - ✓ Expenditures
 - ✓ FY08: \$17,479
 - ✓ FY09: \$29,247

Barriers

- ❖ Hydrogen Education Barriers Addressed
 - ✓ Lack of readily available, objective, and technically accurate information
 - ✓ Disconnect between hydrogen information and dissemination networks
 - ✓ Regional differences
- ❖ Partners
 - ✓ Collaboration/coordination
 - Texas H2 Coalition – outreach and linkage to target audience
 - State Energy Conservation Office
 - Clean Cities Programs in major urban areas of Texas – coordination of events and event communication with target audience
 - ✓ Project Lead
 - Houston Advanced Research Center (HARC)

Relevance

❖ Aim

- ✓ To increase basic knowledge and awareness of hydrogen and fuel cell technologies among Texas state and local leaders

❖ Objectives

- ✓ To establish communications to reach target audience
- ✓ To assemble accurate and consistent educational materials and presentations for web, workshops/webinars, and meetings
- ✓ To conduct workshops/webinars for five major metro areas to reach different regional audiences
- ✓ To assess knowledge improvements from project activities

Approach

❖ Overall approach

- ✓ This is the first state-wide hydrogen education effort in a state with major hydrogen producers and related energy interests. Large urban areas in Texas contain most of the state's leaders and are the focus of this project. Face-to-face meetings were selected as the preferred method for achieving objectives, with webinars in two target cities. These are supplemented with communications that (1) initiate participation and coordination (e-mail), and (2) provide a means of follow-up contact and more in-depth educational materials (web).
- ❖ From previous hydrogen projects, key individuals are being identified for regional activities (ongoing). Clean City coordinators have been informed of project goals and will help enlist participation.
- ❖ Existing educational materials, such as those developed by DOE programs, are being used for basic content on key topics for accurate and consistent educational materials; i.e., production, storage, distribution, fuel cells, applications, etc.
- ❖ Texas-based information is being included as available for topic areas.
- ❖ Basic hydrogen “test” questions are being built into presentations.

Milestones

Objectives	Milestones	Progress
Communications and Outreach	• Create mailing lists for target audience • Create website for follow-up information • Identify related events and schedules • Contact with target cities	• Initial e-mail list • Discussions with target cities • Key contacts ID'd
Content Development	• Develop basic topics • Compile content from existing sources • Adapt content for communication and events • Supplement with Texas focused content	• Topics ID'd • Content assembled • Texas content ID'd
Workshops/Webinars	• Contact target organizations for coordination • Determine timing of event in concert with other events and meetings	• Initial contacts and agreements • Discussions of calendars and related events • Presentations in two relevant events
Assess change	• Determine method • Apply method • Go/no-go decisions on methods for incorporating this – before initial workshop (May/June '09)	• “Test” questions in presentation materials

Technical Accomplishments and Progress

1. Accomplishments

- ✓ Project initiation and identification of needed revisions
- ✓ Participation in related projects and events to gauge interest and roll-out initial content
- ✓ Contact with Clean Cities coordinators and agreements to support efforts in four of five target cities
- ✓ Initiated website design and development
- ✓ Capturing value from Texas Hydrogen Roadmap process and recent state energy studies and emerging energy policies

2. Addressing Hydrogen Education Barriers

- ✓ Consistent content development for Texas audience
- ✓ Recruitment of key speakers/experts suited to workshop purposes and method
- ✓ Project conducted by an independent research organization with current and previous work in target metro areas

Technical Accomplishments and Progress

3. Project initiation and revisions

- ✓ Project start linked to DOE workshop with other DOE education projects (October 08)

4. Project approach revised based on DOE workshop input

- ✓ Shorter regional workshops/webinars to improve success and participation
- ✓ Scheduling of parallel events with regional meetings
- ✓ Linkage and coordination with Clean Cities programs
- ✓ Addition of briefings at related events in target cities
 - Education booth at Texas clean air conference
 - Briefing of Houston Clean Cities stakeholders
 - Identification of similar events in other target regions

Technical Accomplishments and Progress

5. Regional Coordination

- ✓ Contact with Clean Cities coordinators on project purposes and approach
- ✓ Commitments for possible joint meetings and/or communication coordination
- ✓ Identification of regional calendars, events, and newsletters for announcements and outreach

Collaborations

❖ Texas H2 Coalition

- ✓ Subcontractor: 501(c)(6) business league/trade association
- ✓ Workshop participation as speakers
- ✓ Provides on-going outreach to enlist and inform target audience

❖ Texas State Energy Conservation Office

- ✓ Key state agency on energy alternatives
- ✓ Occasional communications, but long term organizational relationship

❖ Clean Cities Programs

- ✓ Regional contacts
- ✓ Austin, Houston, Dallas/Ft. Worth, and San Antonio. El Paso not yet involved.
- ✓ Agreements to cooperate on area workshops and scheduling
- ✓ New involvement in this project

Proposed Future Work

- ❖ Briefings in all target areas
- ❖ Finalize workshop materials and presentations
- ❖ Launch of website
- ❖ Implement workshops and webinars
 - ✓ Austin
 - ✓ Houston
 - ✓ Dallas-Ft. Worth
 - ✓ San Antonio
 - ✓ El Paso
- ❖ Determination of any testing method
- ❖ For completion by end of 2009

Summary

❖ Framework in Texas

- ✓ The state is important as one of the largest hydrogen producer and the state's role in the energy economy. The five program target areas comprise 70% of the population, and are home to most state and local leaders.

❖ Project Framework

- ✓ Project activities are in the largest metro areas.
- ✓ Regional organizations (Clean Cities) and a hydrogen stakeholder group (Texas H2 Coalition) are helping to engage participants.
- ✓ Changes in the economy since developing the project strategy will affect outcomes.
 - Less involvement due to the business climate.
 - Greater interest due to stimulus funds and environmental challenges in the state.