



U.S. Department of Energy
Energy Efficiency
and Renewable Energy



VA-MD-DC Hydrogen Education for Decision Makers

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OVERVIEW

Timeline

- September 1, 2008
- September 30, 2010
- Yr 1 Percent Complete: 20%

Partners

- Project Lead: Virginia Clean Cities / DMME, Division of Energy
- Strategic Partners:
 - Los Alamos National Laboratory
 - NEED
 - MotorWeek
 - University of Maryland, College Park, Virginia Tech, JMU
 - Local government Clean Cities stakeholders

Barriers

- Barriers (Ed. Plan Related)
 - Mixed Messaging
 - Regional Differences
 - Difficulty Measuring Success
- Barriers (New Findings)
 - Lack of available/relevant demonstrations
 - Information overload / Decision maker and expert time demand

Budget

- \$282,000
 - DOE Share: \$219,000
 - Contractor Share: \$63,000
- Funding received in FY08 and FY09: \$21,283

OBJECTIVES

The goal of the two-year project is to increase a targeted audience's understanding of hydrogen and fuel cells, including early market applications, and to provide specific examples of actions that the targeted audience - state and local government leaders - can take to support the development and use of hydrogen and fuel cell technology leading to better understanding of the community benefits that can result.

- Conduct a dozen in-person workshops by technical experts and professional educators
- Produce video resources for public television, seminar use, and DOE/general public
- Use hardware demonstrations when possible and provide real-world examples of technology
- Produce electronic “magazine” articles on hydrogen technology demonstrations and other instructional project deliverables

MILESTONES

#	Milestone
1	Finalize seminar venues, dates, instructors, tours, demonstrations, and outreach partnerships (Task 2)
2	Produce articles on hydrogen or fuel cell demonstrations (Task 4)
3	Web products released (Task 3)
4	Produce and update curriculum (Task 1)
5	Conduct seminar (Task 2)
6	Conduct materials review and feedback sessions (Task 5)
7	Produce newsletter (Task 5)
8	Report to DOE (Task 6)
9	Produce MotorWeek video segment (Task 4)
10	Conduct electronic and telephone follow-up surveys (Task 5)

Task	Subtask	Year 1 (2008-2009)											
		Q1			Q2			Q3			Q4		
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1. Curriculum and Resource Development	Research hydrogen or fuel cell technology demonstrations												
	Develop Hydrogen 101 instructional resources				4			4					
	Develop demonstration instructional resources				4			4					
	Develop decision maker empowerment instructional resources				4			4					
2. Decision-Maker Training	Form relationships with organizations hosting complimentary meetings				1								
	Develop event planning workshop template and detailed planning guidelines												
	Research feasible venues, dates and partnerships												
	Confirm demonstration site access and possible tour dates				1	1	1	1	1	1			
	Determine instructor scheduling				1	1	1	1	1	1			
	Develop seminar schedule			1	1	1	1	1	1	1			
	Plan seminars												
	Purchase inexpensive portable demonstrations for seminars				1								
	Conduct seminar					5	5		5	5		5	5

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[illegible]

MILESTONES

Milestones Status:

- Conducted 1 Seminar, 3 more scheduled:
 - April 29, 2009: Chesterfield County, VA
 - April 30, 2009: Roanoke, VA
 - June 5, 2009: College Park, MD
- Finished shooting for Y1 MotorWeek / H2 Video Segments
- Completed 2 magazine articles, working on more
- Website up

APPROACH

- Use strategy in selecting hosts, marketing seminars
- Team with local government and select appropriate demonstration hardware
- Have technical expert and professional educator instructors
- Use NEED instructors and high school students for “table talk” demo sessions
- Have ride-n-drive
- Shoot a wide variety of H₂/FC research and demonstrations for video segments
- Utilize media and ensure sound talking points are provided
- Utilize “new media” approaches
- Foster communication with policy makers

TECHNICAL ACCOMPLISHMENTS/PROGRESS/RESULTS

Milestones:

1. Seminar and other logistics: Developed key partnerships, working to develop more in DC/MD; having trouble securing relevant demonstration
2. Articles: Produced 2 articles, working on more
3. Web Products: Website up and updated
4. Curriculum: Curriculum produced and well received, second set under development by University of MD
5. Seminars: Conducted first seminar, and have 3 more on schedule

TECHNICAL ACCOMPLISHMENTS/PROGRESS/RESULTS

Milestones:

6. Materials Review and Feedback: Currently conducting materials review sessions with partners
7. Newsletters: First newsletter published April 2009
8. Reporting: First 2 reports on time
9. MotorWeek segments: Finished shooting for first segment early April 2009 at NHA conference
10. Follow-up and Evaluation: First surveys indicated audience understanding increased

TECHNICAL ACCOMPLISHMENTS/PROGRESS/RESULTS

PLACEHOLDER
FOR
MOTORWEEK
CLIP

FUTURE WORK

- Seminars: Conduct 5 seminars in 2009, 6 in 2010
- plan to incorporate more innovative approaches to reach audience
- Articles: Produce 2 articles in 2009, 2 in 2010
- Video Resource: Produce 2 video segments in 2009 (1 short for TV, 1 for seminars), 2 in 2010
- Follow-up & Evaluation: Conduct follow-up surveys 6 months after each seminar (first April 2009)
- Demonstration: Have relevant demo deployed by local county or VA state agency

SUMMARY

- Barriers (we suffer from them too)
 - Difficult to demonstrate to decision makers how they can support emerging markets when we can't seem to borrow or buy an example of any kind of product, emerging or otherwise, other than a science toy
- The few technical expert partners AND our audience are in high demand and overloaded now
- Seminars proved to increase audience understanding of hydrogen/fuel cells as proven by before and after surveys
- Video segments should be useful
- Plan to incorporate more content and innovative strategies to future seminars

CONTACT INFORMATION



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