



# Hydrogen Education State Partnership Program: Project ID ED015

Charles Kubert  
Project Director  
Clean Energy States Alliance

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# Project Overview

## Timeline

- Project start date: Sept 2008
- Project end date: Aug 2011
- 50% complete

## Budget

- Project start date: Sept 2008
- Total project funding: \$300,000
- FY09 Funding: \$121,667
- FY10 Funding: \$78,333 (planned)

## Barriers Addressed

- Lack of objective, technically accurate information
- Mixed messages
- Disconnect between information and target audiences

## Partners

- National Council of State Legislatures

# Project Objectives (Relevance)

- ④ Identify state hydrogen program **best practices** and policies.
- ④ Provide **information** and **technical assistance** to state policy leaders and state renewable energy programs to foster the development of effective fuel cell programs.
- ④ Promote strategic opportunities for states and DOE to advance fuel cell deployment through **partnerships, collaboration**, and targeted activities.

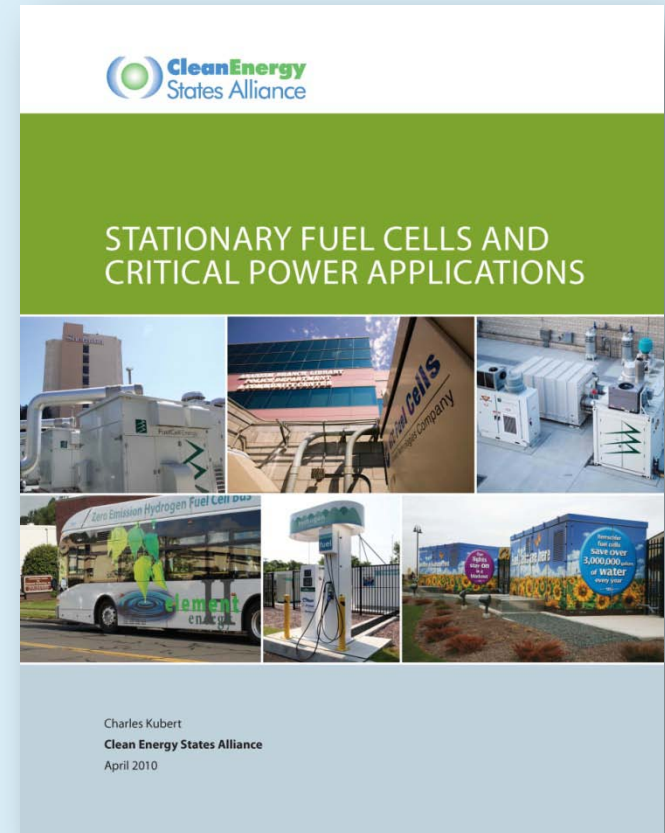
# Identification of Best Practices (Approach)

- ④ State Hydrogen and Fuel Cell Survey
- ④ Case Studies
  - State policies, industry support, incentive programs, and projects
- ④ Model Policies and Programs
  - Based on survey, recommendations and case studies

# Information and Technical Assistance (Approach)

## Reports for Policy Makers:

- Stationary fuel cell technologies
- State fuel cell policy and programs
- Fuel cell applications for critical facilities
- H<sub>2</sub> production and storage technologies
- Reports targeted at general audience with limited knowledge of hydrogen or fuel cells



# Education and Outreach (Approach)

## Workshops

- NCSL webinar and annual meeting
- CESA semi-annual meeting
- Meeting of state code officials and fire marshals

## Bi-monthly Conference calls with DOE and NHA

- 2009 topics included:
  - Hawaii hydrogen and fuel cell program
  - Update on DOE fuel cell program
  - CT Fuel Cell industry development program

# Communications (Approach)

## H2 and Fuel Cell Listserve

- To share updates of state policies and projects, case studies, and relevant news and reports
- Invited from CESA members, state energy offices, NCSL membership as well as state based fuel cell organizations, DOE H2 education grant awardees

## Fuel Cell webpages on CESA website

<http://www.cleanenergystates.org/JointProjects/hydrogen.html>

# Focus on Critical Power (Approach)

- ④ Critical facilities represents key near-term market
  - Heightened awareness of power reliability issues
  - NEC Article 708 broadens definition of critical facilities and specifically identifies fuel cells as acceptable power solution
- ④ Attempting to engage DHS and FAA in promoting fuel cells
- ④ Working with state/local building code and emergency management officials



# Accomplishments and Progress

- Initial Survey of state programs completed
- State fuel cell listserve and webpages established
- Ongoing state and regional calls
- Technical research underway
- 3 of 4 overview reports completed
- Need to repeat 2004 baseline survey to measure change

# Collaborations

- Other DOE Education and Outreach awardees
  - Bi-monthly calls and information sharing
  
- NHA and DOE
  - Bi-monthly webinars
  
- National Conference of State Legislatures
  - Access to state legislators
  - Preparation of briefing materials
  - Hosting webcast and workshop.

# Future Plans

## 2010

- Complete Hydrogen Storage Report
- Complete two additional Case Studies
- Lead webinar and workshop with NCSL, May and July
- Lead workshop at CESA meeting, September
- Continue to monitor and update:
  - State policies and projects
  - Stationary fuel cell and hydrogen technology developments
  - Opportunities for collaboration among states and with DOE
- Engage DHS in collaborative work on fuel cells for critical power
- Listserve and webpage maintenance
- State and regional calls (with DOE and NHA)

# Future Plans

## 2011

- Complete two additional Case Studies
- Complete updated version of State policies and projects best practices
- Work directly with state fund managers, energy offices and policymakers to develop fuel cell programs and draft model legislation
- Ongoing:
  - Listserve and webpages
  - State and regional calls
  - Identify opportunities for collaboration among states and with DOE

# Outcomes

- ④ **Educational materials, case studies, reports, technical overviews** and analysis of state efforts, opportunities, best practices, and funding assistance mechanisms to advance fuel cell and hydrogen applications and markets.
- ④ **Recommendations** of effective policies, programs, and financing mechanisms to promote hydrogen-fuel cell project deployment at the state level, may include model legislation.
- ④ **Effective communications and collaboration** between CESA member states, NCSL, DOE, NHA, other organizations interested in developing fuel cell and hydrogen programs

# Summary

- ④ Stationary fuel cells continue to be largely unfamiliar to state policymakers.
- ④ Minority of state clean energy funds provide support
- ④ Objectives of this project are to build awareness and supportive policies
- ④ Efforts beginning to bear fruit
- ④ Critical power is the key entry point to build attention and support

# Contact Information

**Charles Kubert**

**[CKubert@cleanegroup.org](mailto:CKubert@cleanegroup.org)**

**(802) 272-1135**

**Clean Energy Group**

**Clean Energy States Alliance**

**[www.cleanegroup.org](http://www.cleanegroup.org)**

**[www.cleanenergystates.org](http://www.cleanenergystates.org)**