

State Activities that Promote Fuel Cell and Hydrogen Infrastructure Development

Hydrogen & Fuel Cells 2007
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Fuel Cells 2000 / BTI

- ◆ U.S. nonprofit organization
- ◆ Established in 1993
- ◆ Promotes fuel cells from public interest perspective.
- ◆ Supported by foundations, grants and contracts
- ◆ www.fuelcells.org



State Fuel Cell and Hydrogen Policy and Demonstration Database

Find Activity :: Fuel Cell States Web - Microsoft Internet Explorer

Address <http://www.fuelcells.org/dbs/>

State Fuel Cell and Hydrogen Policy and Demonstration Database

FUEL CELLS 2000


Brought to you by: www.fuelcells.org DOE Hydrogen Program

Find Activities View

Oct. 25, 2006

Activity Search:


Step 1. Select a State:



Instructions
Make a selection by clicking the state on the map (selected states will turn yellow).
You can select more than one state for a search.
To de-select a state, click the state a second time.
If you do not select any states, search will include all of the United States.

Find Activity :: Fuel Cell States Web - Microsoft Internet Explorer

Address <http://www.fuelcells.org/dbs/>



Select All

Step 2. I want to view information on:

Demonstrations Policies (to search for both, leave blank)

For

H2/FC Vehicles
 Stationary Fuel Cells/Power Generation
 H2 Fueling Stations

Search Clear

Advanced Search Options

Title:

Project:

Total Power:

Fuel Source:

Fuel Cell Type:

Fuel Cell Manufacturer:

Text Search:

Search Clear

State Fuel Cell and Hydrogen Policy and Demonstration Database

Includes:

- All state policy - incentives, tax credits, grants, RPS, interconnection standards, initiatives, partnerships
- Stationary fuel cell installations
- Hydrogen fueling stations
- Vehicle demonstrations
- Based on recent comprehensive 240-page report but is searchable

Available at www.fuelcells.org

State Activities that Support Fuel Cell and Hydrogen Infrastructure Development

- ◆ 47 states plus D.C. have something going on in fuel cell/hydrogen arena
- ◆ Critical support for industry
- ◆ Financing demonstrations and innovation
- ◆ Addressing planning and installation requirements
- ◆ Educating decision makers & public
- ◆ Leading where federal government can't, hasn't, won't
- ◆ Provides economic as well as environmental benefits to state

Federal Government + States = Competitive U.S.

U.S = 1.2 billion over 5 years

Ohio = Third Frontier Fuel Cell Initiative:
\$103 million for Ohio companies

California = \$6 million for the Hydrogen
Highway program

Connecticut = Connecticut Clean Energy
Fund –almost \$11 million in subsidies to
help 11 installations (9 more in process)

Honor Roll

- ◆ Research – Ohio, SC
- ◆ Vehicles/Infrastructure – CA (24 H2 stations, 13 planned)
- ◆ Stationary Installations – NY (more than 50 installations, more than 136 fuel cells)
- ◆ Industry – CT (several major fuel cell manufacturers located there)

States are Moving Forward with Regulation

Facilitates installation of stationary fuel cells

- ◆ Interconnection Standards (16 states, 4 pending)
- ◆ Renewable Portfolio Standards (15)
- ◆ Net Metering (18 states and DC, pending in PA)

Easing the Financial Burden

- ◆ 12 states offer grants or loans for purchasing or demonstration of stationary fuel cells
- ◆ 13 states offer tax credits, exemptions or rebates

Innovative -

- ◆ Massachusetts offers Alternative Energy and Energy Conservation Patent Exemption
- ◆ Minnesota has Anaerobic Digestion Production Incentive - provides 1.5 cents per kWh for 10 years for electricity generated by on-farm anaerobic manure methane digesters. Fuel cells are eligible.

Putting Cars on Road

- ◆ 15 states offer tax incentives for H2 and fuel cell vehicles, 6 states offer grants/loans
- ◆ 10 states and DC have fuel cell cars and/or buses on the road in testing and demonstration
- ◆ FedEx and UPS demonstrations
- ◆ Honda leasing two vehicles in CA



Filling Them Up

- ◆ 14 states and DC have H2 refueling stations (CA has 24)
- ◆ 3 states offer grants/loans for H2 infrastructure
- ◆ 5 states offer tax incentives for H2 infrastructure



Shell H2 station in DC

Fuel Cells = Good Business

- ◆ 27 states and D.C. support research parks/institutes, provide incubators/business assistance (marketing, legal, etc.), or offer grants/loans/tax incentives.
- ◆ 14 states have H2/FC roadmaps, plans, reports or legislation – 3 more are developing.
- ◆ 8 other states and DC have alt. energy plans that include H2.

Regional Partnerships

ARRC/H2 Alliance

FuelCell South

Hydrogen Energy Center

H2TEC

H2USA Centers

HyTEC

Mid-Atlantic Hydrogen Coalition

Northeast Hydrogen Alliance

Public Fuel Cell Alliance

Southern Fuel Cell Coalition

Upper Midwest Hydrogen Initiative

More sprouting up all the time!



Thank you

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