### HTAC POLICY & PLANNING SUBCOMMITTEE

### Summary of Subcommittee Teleconference March 19, 2008

Presented at HTAC Meeting May 13, 2008

### SUBCOMMITTEE MEMBERS

### • HTAC members who volunteered:

- » Larry Bawden
- » John Hofmeister
- » Art Katsaros
- » Byron McCormick
- » Geri Richmond, Co-chair
- » Bob Rose
- » Roger Saillant
- » Bob Shaw, Chair
- » Jan van Dokkum
- » Greg Vesey
- Staff support:
  - » Shawna McQueen
- DOE representative
  - » Kathi Epping

### AGENDA: March 19, 2008 Telecon

- HTAC Vision Statement
  - » Discuss draft and refine
  - » Reach consensus
- HTAC Annual Report
  - » Discuss concept
  - » Consider categories of information to be gathered
  - » Define information gathering process
- Hydrogen Progress Index
  - » Review concept
  - » Consider potential index components and structure

 The Subcommittee considered edits on the proposal made at the December HTAC meeting and recommends that HTAC adopt the following vision statement:

Our vision of the future is that hydrogen will become an ubiquitous energy carrier, progressively substituting for carbon-based fuels over time. Hydrogen will be produced from a number of sources, increasingly with the lowest possible carbon impact. In time, hydrogen will become the most economically competitive carrier to meet the needs of the planet. To realize this vision, we must aggressively introduce to the market the hydrogen-based technologies that are available now and those that will be developed in the future. HTAC's role is to develop a framework for the nation's hydrogen conversion business plan, taking into account the technical, political, social, cultural, environmental and commercial requirements of the transition.

 Please consider these words carefully -- we will discuss briefly tomorrow morning

### HTAC Hydrogen Annual Report

- The Subcommittee endorsed the idea of preparing an Annual Report
  - » Focused on major accomplishments in the hydrogen space during the year
  - » Limited to 5 pages -- pithy, focused
  - » To be as widely circulated as possible both inside and outside Washington
- A process was established to gather information that might be included in the Annual Report over the course of the year
  - » The outline attached was accepted as a guide
  - » Please email items that you feel should be flagged to
    - Bob Shaw (aretecorp@roadrunner.com), and
    - Shawna McQueen (smcqueen@energetics.com)

# HTAC Hydrogen Annual Report Information Input

### Use the following outline as a guide, but not a constraint --

Key Reports: e.g.

- GM/Shell Infrastructure report
- National Academy report on the Hydrogen Transition

#### **Product Events**

Honda and GM introductions of limited numbers of vehicles into the market

New fueling stations additions

#### **Technology Events**

#### **Major Policy Decisions/Initiatives**

State level (hydrogen highway)

- Federal level
- Outside U.S.
- ICAO decisions on fuel transport

#### New Entrants into the Hydrogen Space

Major corporate initiatives

New start-ups

### HYDROGEN PROGRESS INDEX

- The Subcommittee agreed that
  - » An index was a good idea
  - » It should be *qualitatively* set each year (e.g. like *Bulletin of Atomic Scientists'* "Minutes to Midnight Doomsday Clock")
  - » It should accompany the Annual Report
- Although the Subcommittee settled on a qualitative approach, we discussed and agreed on the attached list of variables/factors as ones to consider
- Subsequent to the meeting, the Subcommittee Chair developed the attached concept for presenting the index and discussed it with a few members (apologies to those not reached)

# QUALITATIVE HYDROGEN PROGRESS INDEX

The following variables/factors are ones to consider in setting the index each year --

#### VEHICLES

- Number of FCV or other H2 vehicles sold, in year and total
- Percent of total fleet (U.S., Rest of World)

#### **FUELING STATIONS**

Installed, in year and total

- Percent of gas stations, total, and states having 1 or more

#### FUEL CELLS SOLD (U.S., Rest of World)

- For all applications
- For transportation
- For stationary systems

#### DISTRIBUTED H2 PRODUCTION SYSTEMS SOLD

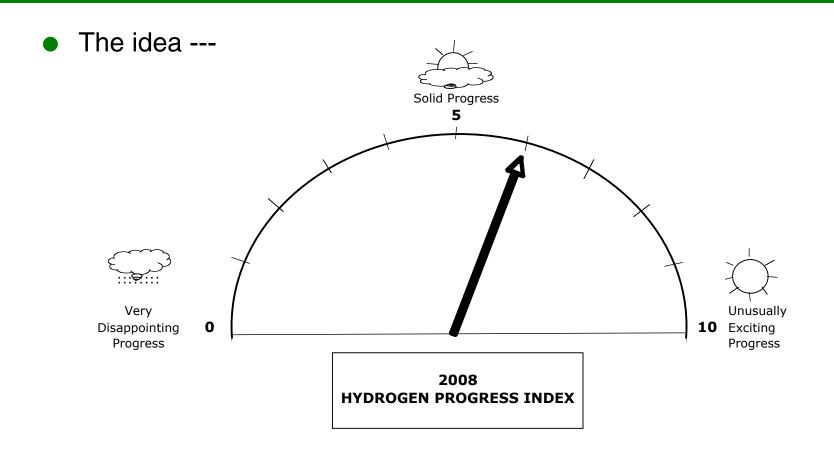
SMR, etc.

Electrolyzers

#### **KEY EVENTS**

- R&D breakthroughs: Storage, Fuel cells, H2 production
- Regulatory initiatives (U.S., Rest of World)

# HYDROGEN PROGRESS INDEX --Conceptual Approach



Once the Annual Report is drafted and circulated to the full Committee for review, the Subcommittee will propose an Index for the year and ask HTAC for concurrence

### SUMMARY

- This is our thinking so far
- Your comments and suggestions are encouraged
- And new Subcommittee members are welcome