

Status Update for HTAC Infrastructure Report

Joan Ogden

Presented November 19, 2014

HTAC Meeting

Current Status

HTAC Infrastructure Report finalized (Fall 2013)

- Sent to Secretary Moniz November 2013.**
 - Cover letter states key developments and needs for infrastructure**
-
- 2013 Report Developed Strong Baseline for Tracking Status of H2 Infrastructure**
 - New committee forms to develop 2nd Infrastructure Report.**

New thinking emerges on H2 infrastructure

- H2 infrastructure planning more sophisticated.
- 1-of-a-kind demos => system thinking/network concepts.
- Realistic Plans w/ stakeholder buy-in.
- More experience building infrastructure

CA is one example of how thinking on H2 Infra. has evolved

CA H2 Highway (2004) Locate stations every 20 miles along the interstates.

Problem: This did not adequately serve H2 vehicles in cities where most people live.

Solution: Focus infrastructure mostly in cities w/ a few stations along the interstates to allow intercity travel.

CA H2 Blueprint Plan (2006) Build Optimized Urban H2 Infrastructure Based On Existing Gasoline System

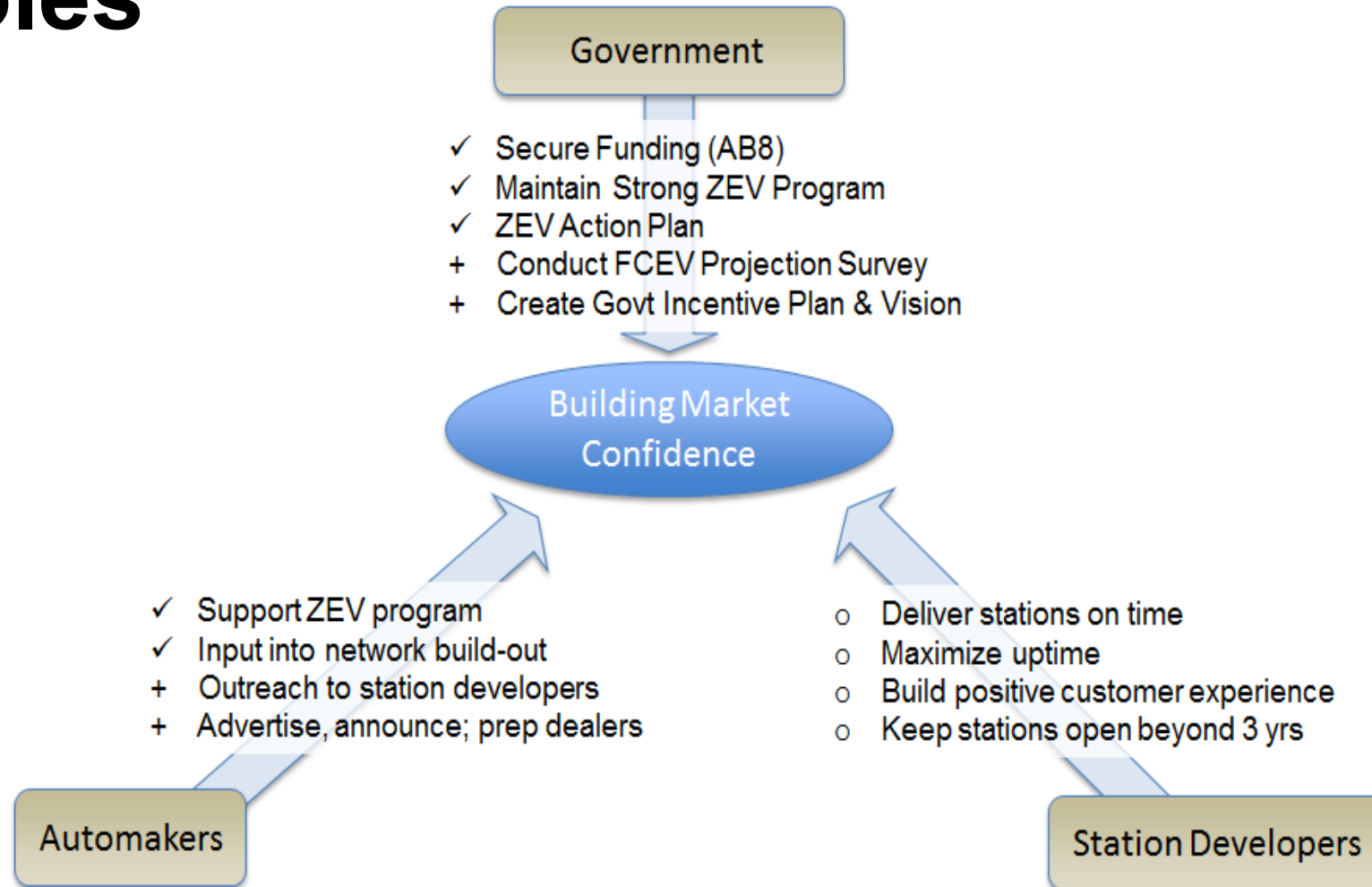
Problem: For good access need H2 at 10-30% of gas stations. In LA this is ~400 stations just to get started.

Solution: Regional “Cluster” Strategy” (current paradigm)

FCVs, H2 stations placed together in “clusters” ID’d by stakeholders as early market sites. “Connector” stations added to facilitate regional travel

How many stations needed? Where should they be located?

Early Market Dynamics: Stakeholder Roles



Source: Tyson Eckerle and Remy Garderet, Incentivizing Hydrogen Infrastructure Investment: An analysis of the use of Cash Flow Support To Incentivize Early Stage Hydrogen Station Investment, Energy Independence Now, June 19, 2012. <http://cafcp.org/incentivizing-hydrogen-infrastructure-investment>

What are Key Issues for next report? Some ideas

- Follow technical advances in infrastructure technologies
- Track progress of worldwide H2 FCV rollout (metrics?)
 - Vehicle deployments
 - Station numbers/technologies
 - Public/private partnerships (Incl. H2USA)
 - Public and private funding
 - International comparisons
- Examine evolving business case for H2 and FCVs
 - When will infrastructure investments “break even”?
 - How do we measure benefits (incl. social benefits NRC 2013?)
- Examine role of policies
- Make recommendations

Thoughts?

What are the most important issues?

Volunteers for Committee

Timeline for next committee meeting