

# Status Update and Issues for 2014 HTAC Infrastructure Report

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HTAC Meeting

# Outline

- Update on 2013 Infrastructure Report status
- Group Discussion: What are key issues for 2014/15 Infrastructure Report?

# **Update on 2013 Infrastructure Report**

- **HTAC Infrastructure Report finalized (Fall 2013)**
  - **Sent to Secretary Moniz November 2013.**
  - **Cover letter states key developments and needs for infrastructure**
- **New committee forms to develop 2<sup>nd</sup> Infrastructure Report.**

# **Status of H2 Infrastructure (2013 Report Cover letter)**

- **A robust and growing U.S. H2 infrastructure exists in the U.S. today.**
- **Hydrogen is in use today as an energy carrier.**
- **Major motor vehicle manufacturers are committed to commercialization in 2015.**
- **FCEVs, along with other advanced technologies, can deliver energy and environmental security.**
- **Research budgets are on the rise in Europe and Asia.**
- **Infrastructure is being deployed with support from governments and the private sector.**
- **U.S. lags overall, but California has a strong fueling station program.**
- **The benefits of DOE activism outweigh the costs.**
- **Commercialization is at a critical stage.**

# Recommendations (Cover letter)

1. Emphatic public support by the U.S. government for fuel cell electric vehicle (FCEV) deployment will give public and private stakeholders confidence and increase public awareness at a critical point in the commercialization cycle.
2. The U.S. government has an opportunity to work with infrastructure initiatives in Germany, Japan, Korea, the United Kingdom and elsewhere to collaborate on technical and regulatory issues and coordinate rollout plans; doing so would reduce costs and accelerate deployment.
3. Direct DOE investment in hydrogen infrastructure in collaboration with the States and with industry would accelerate deployment in early markets, attract much-needed private investment, and yield valuable experience in achieving a national rollout.
4. These efforts would be most effective if integrated with a well thought-out strategy to support both 2016 and 2025 corporate average fuel economy mileage and greenhouse gas standards recognizing that hydrogen fuel cell vehicles can play an important role by 2025 along with hybrid, battery, biofuels, and improved conventional vehicles.
5. The hydrogen fueling infrastructure build-out should be part of a comprehensive National Energy Policy.
6. DOE's hydrogen and fuel cell research budget has shrunk by more than 50% since FY 2009, while research budgets in other countries have grown significantly; a stronger commitment to research and development would ensure U.S. technology leadership and build on the impressive current U.S. knowledge base.

# **2013 Report Developed Strong Baseline for Tracking Status of H2 Infrastructure**

## **What Are Key Issues for the Next H2 Infrastructure Report?**

# **Key Issues for next report: Some suggestions**

- **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**

# Comments?

- What are key topics for the report?
- Volunteers to develop outline?