

H₂USA

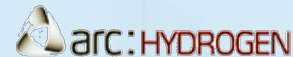


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Overview of **H₂USA** Activities

Connor Dolan, FCHEA

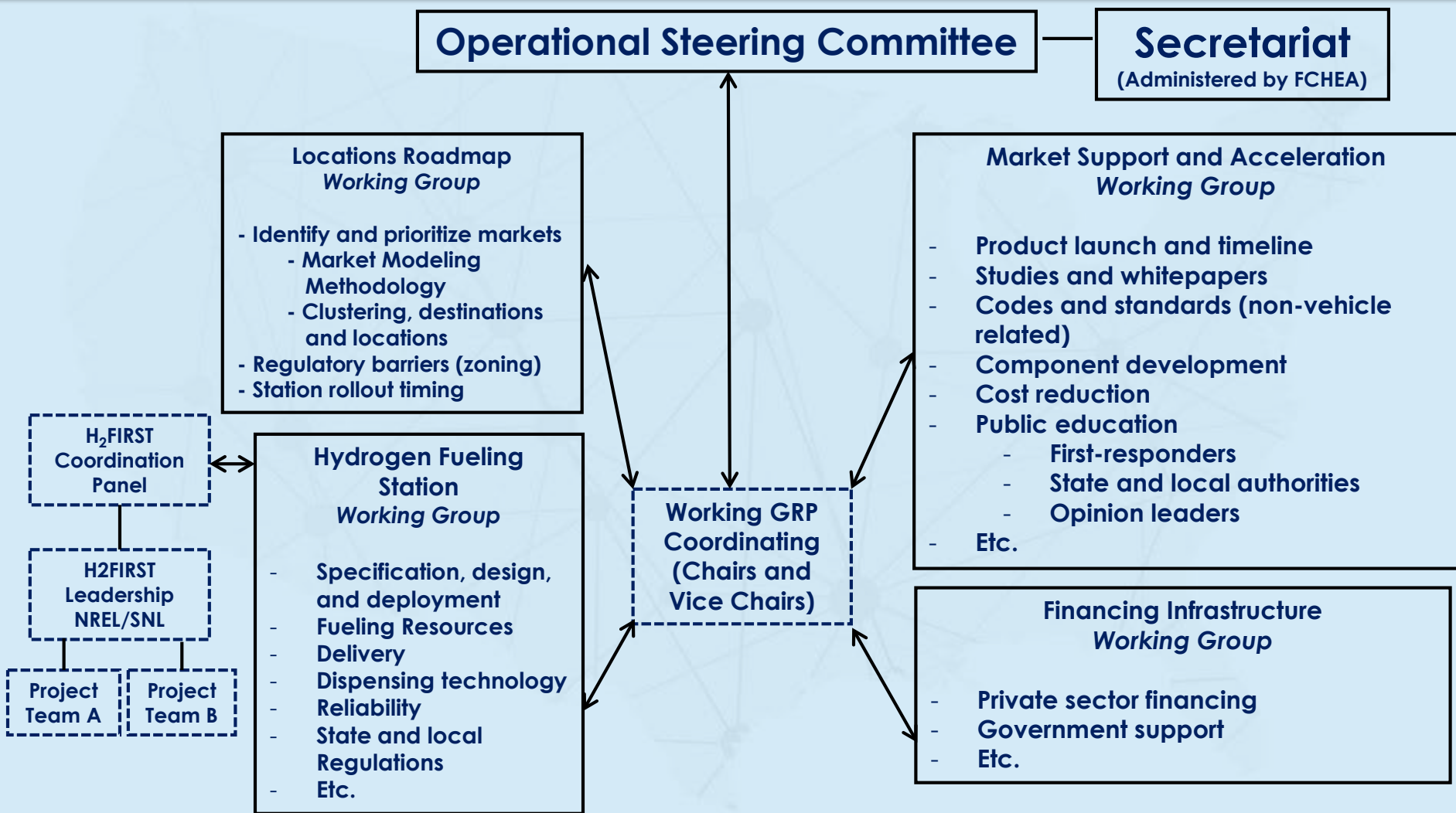
H₂USA Participants



Mercedes-Benz



H₂USA Organization Chart



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Market Support and Acceleration Working Group

- **Progress report on roadmap for station locations provided by DOE**
- **H2USA is developing strategy in regards to Volkswagen settlement**
 - MSAWG developed task force is tracking developments
- **DC Station is fully approved and is fueling vehicles**
- **Regulatory and legislative outreach pertaining to bridge and tunnel issues**
 - DOE, SNL, and Mass DOT met regarding Boston tunnels
 - Toyota met with FDNY, Port Authority, NYC MTA on city's tunnels, regarding first responder training
 - Awaiting Results from Port Authority H2 Study
 - FCHEA and members met with NYC Mayors Office

Locations Roadmap Working Group

- **Northeast Regional Fuel Cell Fleet Deployment Action Plan**

- Collaboration with the Connecticut Center for Advanced Technology
- Evaluating northeast fleet potential infrastructure deployment scenarios, including locations and demand potential.
- Update to 2015 Fleet Deployment Plan complete – approval pending

- **Northeast Retail Modeling**

- Northeast retail customer approach using STREET modeling, developed by University of California, Irvine, and the SERA Model, in collaboration with the National Renewable Energy Laboratory.
- Siting Refueling Stations in the Northeast Factsheet completed – approval pending

- **National “Scenarios” Modeling**

- Collaboration with the National Renewable Energy Laboratory
- Identifies criteria for a successful initial market and for potential to follow on market regions most suitable for FCEV adoption
- Based on SERA Model

Investment & Finance Working Group

Investor Outreach

- **Objective**

- To educate representatives of capital sources (“investors”) on the opportunities for infrastructure investment and offer a matchmaking opportunity. To inspire investors to commit resources to additional investment analysis (of the opportunities

- **Activities**

- Conducting outreach to the investment community at events, auto show, conferences, as well as direct meetings and communications

- **Investor Tools**

- Hydrogen Fueling Financing Analysis Scenario Tool (H2FAST), which provides in-depth financial analysis including cash flow and return on investments for hydrogen fueling stations based on key financial inputs such as station capital cost, operating cost, and financing mechanisms

West Coast Investor Showcase Briefing – LA Auto Show

- **Toured representatives from financial institutions around the show floor**
 - The walking tour allowed attendees to view Honda, Hyundai and Toyota's Fuel Cell Vehicle displays and meet with senior program executives to learn about actions automakers and hydrogen producers plan in coming model years
- **Held a briefing detailing hydrogen fueling station network opportunities for fuel cell electric vehicles (FCEVs).**
 - Investor Group attendees included representatives from Bank of America/Merrill Lynch, Moody's, Sumitomo, and Wilson, Sonsini, Goodrich and Rosatti
 - Companies presenting hydrogen infrastructure opportunities included Air Liquide, Hydrogen-XT, ITM Power, Inc., PDC Machines, and United Hydrogen
 - Underscored the importance of hydrogen fueling station networks to this growing market

Hydrogen Fueling Station Working Group

- **Providing input for Reference Station Design Phase 2**
 - Comparison of conventional vs. modular hydrogen refueling stations, and on-site production vs. delivery
- **Developing draft paper for component R&D**
 - Analysis of component reliability based on real-world data
 - Analysis of maintenance best-practices in relevant US and international hydrogen fueling station requirements
- **Facilitating station improvement and deployment through H2FIRST projects**
 - Improving station operational reliability and maintenance
 - Analysis ongoing for contaminant detectors
- **Joint Regulations, Codes & Standards Task Force**
 - Outreach to regulators in the Northeast to increase technology and safety awareness and address any regional regulatory restrictions.

- **Hydrogen Fueling Infrastructure Research and Station Technology (H2FIRST) launched by the DOE Fuel Cell Technologies Office and National Labs**
 - Addresses technology challenges associated with commercial hydrogen fueling stations
- **Three project initiatives for FY 2017:**
 - Urban station siting
 - Optimization of fill temperature limits
 - Hydrogen contaminant detector project

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Thank you

H2USA

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