

As an alternative to the standard Capstone Project, two of the program participants volunteered as mentors for the Center for Houston’s Future summer research program. Below is a summary.

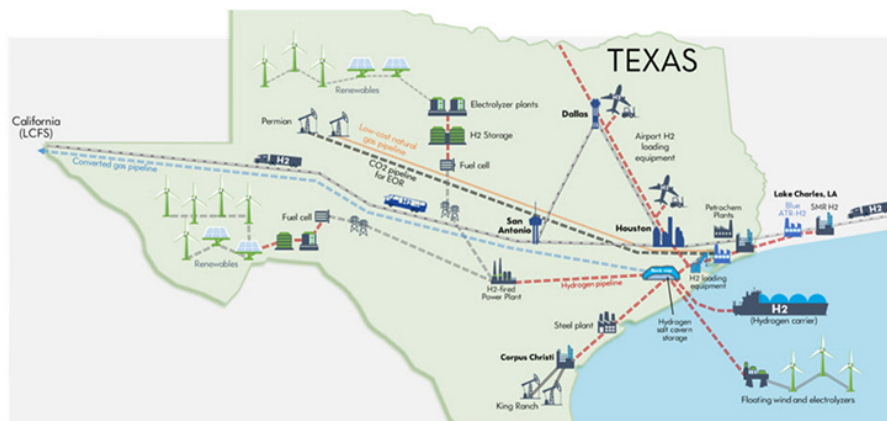
Houston, we have a problem. Houston is known as the oil and gas capital of the world. However, with alternative energy sources, changing customer demands, and goals to reach net-zero carbon emissions by 2050, Houston has charted a new mission to become the energy capital of the world. So how do we make this happen? We do it by exploring one opportunity at a time. Can Houston become a global hydrogen hub? We think so.

This presentation showcases The Center for Houston’s Future vision of transitioning Houston into a Global Hydrogen Hub. It:

- discusses major funding opportunities for Hydrogen Hubs;
- explains what positions Houston to be a global hydrogen hub – ‘H2Houston Hub™’;
- assesses the feasibility of creating an H2Houston Hub™ with a Transportation Application Study;
- describes energy transition action and inaction impacts on the Houston Economy; and
- ends with a call to action for how you can get involved to make H2Houston Hub™ a reality.

Brett Perlman, CEO, The Center for Houston’s Future
 Kay McCall, Executive Director, Renewable Energy Alliance – Houston
 Dana Wells, Principal, Dana Wells & Associates

Introducing ... H2Houston Hub™ – A Global Hydrogen Hub



Vision for a Global H2 Hub

- Anchor local and national heavy transportation markets
- Exporter, market maker
- Decarbonize industrial process heat and power
- Leverage captured CO2 for EOR

- Focuses carbon intensity for all sources of hydrogen
- Seeks to lower H2 production costs and build massive scale at an accelerated pace (2030 time frame)
- Creates opportunities for early deployment for low carbon hydrogen applications through pilot projects
- Integrates the innovation energy ecosystem to create new innovation opportunities and establishes a test bed for new applications
- Develops a new industry base that leverages Houston’s existing assets and skills

