

An aerial view of the Houston skyline, featuring several prominent skyscrapers under a blue sky with scattered white clouds.

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ADVANCING CCS IN HOUSTON

An aerial view of a complex highway interchange with multiple overpasses and ramps, surrounded by greenery and urban buildings.

Erik Oswald
Vice President of Strategy and Advocacy
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DOE: Models for Deployment of CCUS Hubs
September 30, 2021

HOUSTON CARBON CAPTURE AND STORAGE HUB CONCEPT

SCOPE

- CAPTURE CO₂ FROM ~50 LARGE EMITTERS
- ~350 MILES OF CO₂ PIPELINE, USING EXISTING CORRIDORS

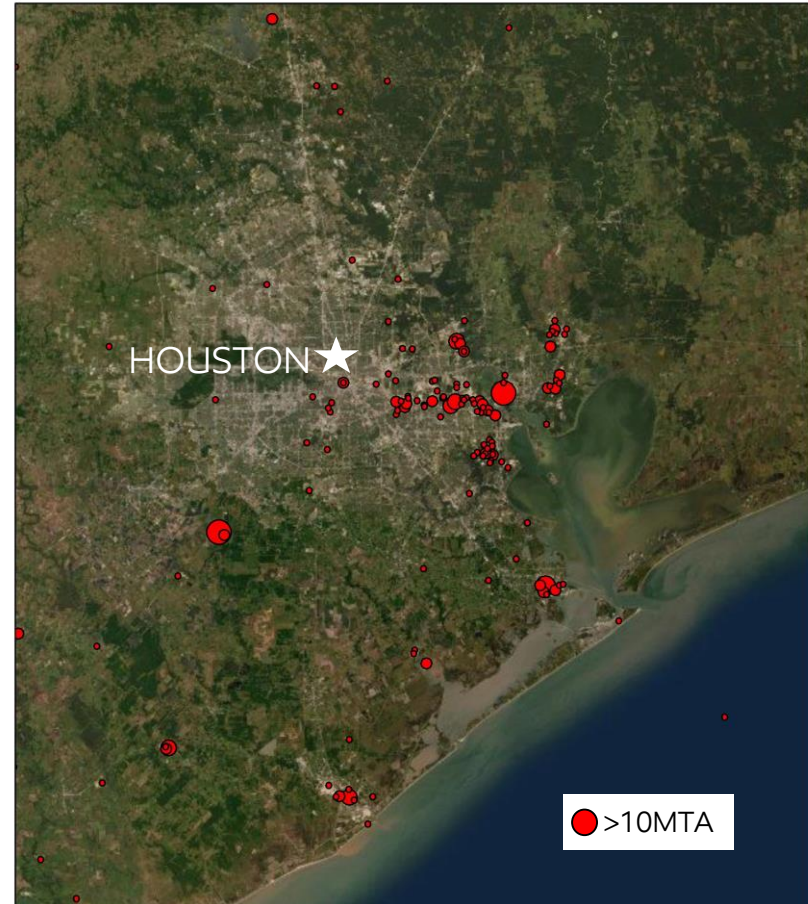
TIMELINE

- 50MTA BY 2030
- 100MTA BY 2040
- SUPPORT CARBON NEUTRAL HOUSTON BY 2050

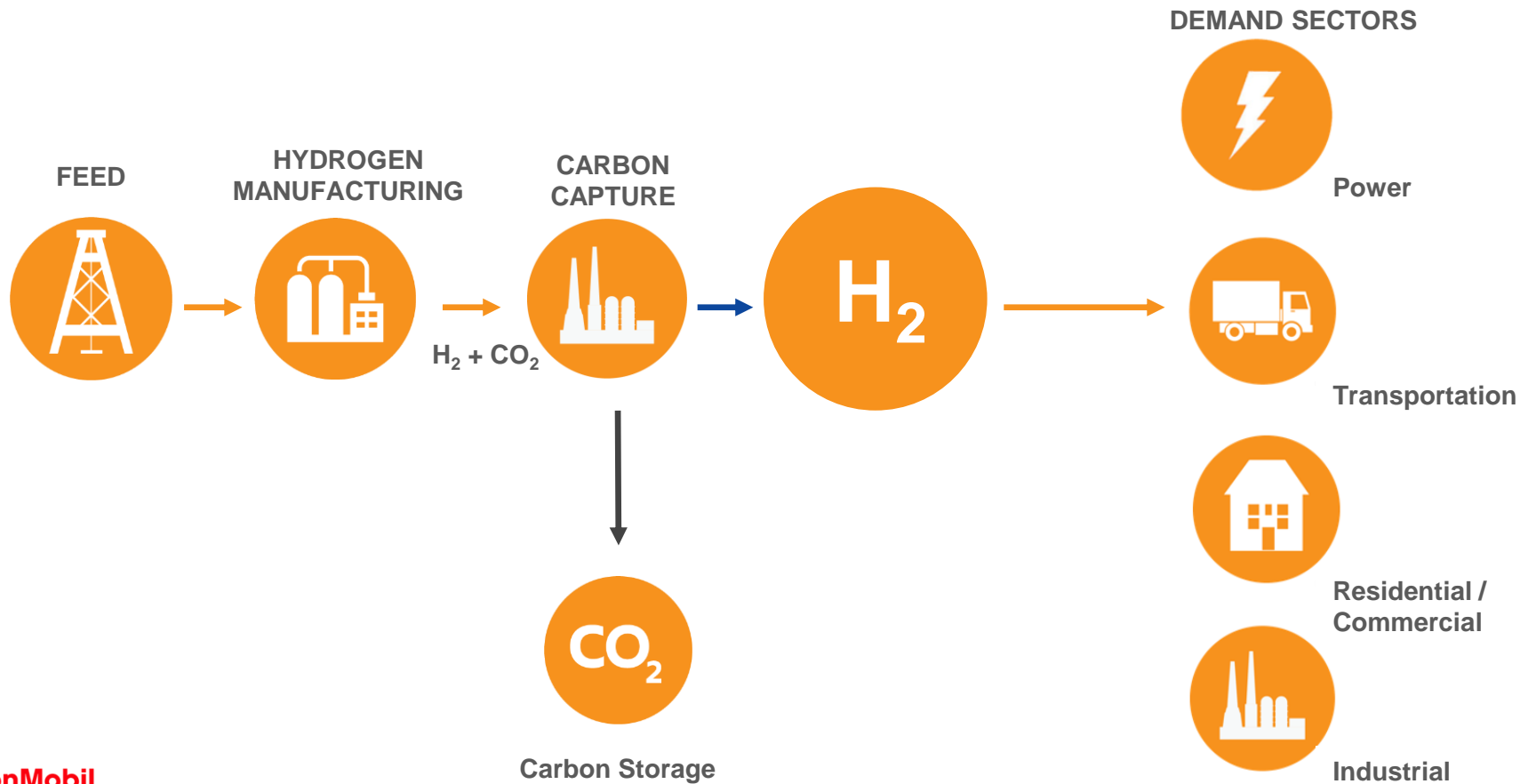
APPROACH

- CROSS-INDUSTRY COLLABORATION

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POTENTIAL FOR HYDROGEN



INDUSTRY COLLABORATION



WHAT'S NEEDED

Enhance non-EOR CCS Production Tax Credit (45Q)

- Initially increase value to \$100 per metric ton from current \$50
- Extend eligibility period to 30 years from current 12 years
- Eliminate deadline for starting construction

Provide financial support for CCS infrastructure

- Provide a \$10 billion grant to help develop infrastructure in Houston by extending current DOE programs beyond RD&D
- Expand DOE Title XVII program to include the deployment of existing CCS technologies at scale
- Amend TIFIA (transportation Infrastructure Finance and Innovation Act) to add CCS projects, or create a program dedicated to CCS

Ensure government approval for CO₂ storage

- Specifically allow offshore storage of CO₂ from sources other than coal
- Authorize the Bureau of Ocean Energy Management to issue leases, rights of way and pore space

COMMUNITY **BENEFITS** OF THE HUB

- Improved air quality
- Jobs & economic impact
- Position Houston as leader in lower-carbon energy future

Aerial view of the Houston skyline with various skyscrapers under a blue sky with scattered clouds.


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ADVANCING CCS IN HOUSTON

Aerial view of a complex multi-level highway interchange with many cars.

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Aerial view of a residential neighborhood with many houses, trees, and a green field.

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