

Hydrogen Task Force:

Hydrogen Infrastructure Working Group Charter

Co-Chairs

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Objective

The Infrastructure Working Group will develop insights into infrastructure requirements to meet projected clean hydrogen demand in Connecticut and assess existing infrastructure that can be repurposed to meet this demand. This will include providing context around hydrogen transportation and storage needs, as well as understanding around opportunities and costs to developing this infrastructure in Connecticut. This Working Group's focus will be on needed equipment for transporting and distributing hydrogen, as well as the renewable energy used to produce hydrogen. It will not address questions connected to the specific production of hydrogen or end-use demand for the fuel, which will be addressed by the Sources and Uses Working Groups, respectively.

Statutory Responsibilities

N/A

Guiding Research Questions

1. What methods are available to transport clean hydrogen to points of consumption? What infrastructure would support the cost-effective transportation of hydrogen?
2. What existing natural gas infrastructure can be used or repurposed to support a clean hydrogen ecosystem? Where is this infrastructure currently located, and what is its current capacity?
3. What existing electrical infrastructure could be leveraged for hydrogen production? Where is this infrastructure located, and what is its current capacity?
4. Are there any nearby geologic structures that could be used for hydrogen storage (e.g. salt caverns, depleted oil/gas wells)?
5. What existing vehicle fueling infrastructure could be leveraged for hydrogen distribution?
6. Are there areas where hydrogen demand and production sites are clustered? How could these clusters be leveraged to reduce infrastructure needs?
7. How do different components of hydrogen infrastructure (e.g. pipelines, storage) impact the delivered cost of hydrogen? What options exist to reduce cost impacts (e.g. by using existing rights of way for gas pipelines)?
8. Where would hydrogen infrastructure be sited relative to disadvantaged communities? How would environmental justice be addressed with respect to clean hydrogen infrastructure?
9. *(In coordination with Policy and Workforce Development Working Group)* How would the repurposing or development of new hydrogen infrastructure support job creation?
10. Are there any steps that should be taken to ensure the development of safe hydrogen infrastructure?
11. How might the hydrogen supply chain impact timing or feasibility of deploying hydrogen infrastructure?
12. What near-term steps can be taken to leverage existing R&D to advance the development of clean hydrogen infrastructure in Connecticut?

Proposed Deliverables

1. Geographic analysis detailing the locations of existing infrastructure and proximity to hydrogen production and offtake sites.
2. High-level assessment of needed infrastructure and associated costs.
3. Assessment of priority areas for hydrogen infrastructure development, taking into account environmental justice and economic development objectives.

Preliminary Timeline

- September: Present a final Hydrogen Sources Working Group Charter to the Task Force
- October: Present preliminary findings to the Task Force and provide a status update on the timing of subsequent analysis.
- November: Present draft final findings and recommendations to the Task Force for feedback.

- December: Present final findings and recommendations to the Task Force.
- January: Submit report to the legislature.

Logistics

- The Strategen team will handle meeting logistics including scheduling and recording meeting minutes.
- The Strategen team will coordinate with Working Group Co-Chairs to develop meeting agendas which will be provided to participants a week before Working Group meetings.
- The Strategen team will provide technical assistance (including research), where appropriate, for the Working Group.
- It is expected that this working group will meet on a monthly cadence. Meeting recordings and meeting minutes will be publicly available.