



**HYDROGEN STUDY TASK FORCE**  
Funding Working Group #4  
Meeting Minutes

Thursday, December 15, 2022  
10:30 a.m. – Noon

The fourth meeting of the Hydrogen Study Task Force Funding Working Group was held on December 15, 2022

All the participants joined via the Teams conference call.

**Task Force Members Present:** Samantha Dynowski (Sierra Club), Bryan Garcia (CT Green Bank), Lidia Ruppert (Designee – DEEP)

**Others Present:** Lily Backer (Strategen), Binu Chandy (DECD), Erin Childs (Strategen), Brian Farnen (CT Green Bank), Barbara Fernandez (UCONN), Jennifer Gorman (Strategen), Kaiqi Hu (Strategen), Alex Judd (Day Pitney), Andrea Lubawy (Toyota)

**1. Call to Order**

- Lily Backer, a Green Hydrogen Project Manager at Strategen providing technical support for the Funding Task Force, called the meeting to order at 10:30 a.m.

**2. Welcome and Introductions**

- Ms. Backer provided an overview of the meeting agenda which includes welcome and introductions, a discussion of key findings and policy recommendations, and an overview of next steps.
- Ms. Backer reminded participants of Strategen's role, which includes handling meeting logistics, developing meeting agendas, and providing technical support.
- Ms. Backer prompted attendees to introduce themselves.

**3. Review of Report Format and Next Steps**

- Ms. Backer provided an overview of the Legislative report structure. She noted that each mandated item from Special Act 22-8 will include a discussion of findings, recommendations, and stakeholder feedback.
- She reminded attendees that the Funding Working Group covers the following areas of 22-8:
  - An examination of how to position the state to take advantage of competitive incentives and programs created by the federal Infrastructure Investment and Jobs Act;

- Recommendations for funding and tax preferences for building hydrogen-fueled energy facilities at brownfield sites through the Targeted Brownfield Development Loan program;
- Recommendations regarding funding sources for developing hydrogen-fueled energy programs and infrastructure.
- Ms. Backer provided an overview of the upcoming December Working Group meetings. He also noted that the draft final report would be shared with the Task Force on December 16, 2022 with feedback due on December 23, 2022.
- Samantha Dynowski noted that the crunched timeline will be challenging and she explained that an extended feedback period may be warranted.
  - Ms. Backer noted that recommendations had been discussed in depth in multiple forums which may lessen the review burden.
  - Erin Childs inquired whether there were ways for the Strategen team to ease the burden of the review process, keeping the January 15, 2023 deadline in mind.

#### **4. Review Findings and Recommendations**

- Ms. Backer provided an overview of findings and recommendations, beginning with funding and tax preferences for building hydrogen-fueled energy facilities at brownfield sites through the Targeted Brownfield Loan Program. She noted that the suite of brownfield programs identified provide grants and loans, both of which would be discussed in the Legislative report. Ms. Backer explained that the end use of remediated and repurposed land is not designated by the programs, rather projects should exhibit highest and best end use, so no additional clarification would be needed to ensure hydrogen-fueled energy facilities are eligible for funding from these programs.
  - Andrea Lubawy inquired whether the brownfield programs already exist or were recommended for development.
    - Ms. Backer explained that the programs of focus for discussion already exist.
- Ms. Backer explained that the Targeted Brownfield Development Loan Program and other brownfield programs represent an excellent source of supplemental funding for developers seeking to advance hydrogen-fueled energy facilities. She explained that Connecticut could pursue specific steps to improve accessibility and use, including:
  1. DEEP and DECD should continue maintaining the Connecticut Brownfields Inventory as a resource for potential developers to identify prospective project sites.
  2. DEEP and DECD should continue supporting development of clean energy projects on brownfields and projects that have community support and/or have completed community benefits agreements.
  3. DECD should evaluate the need for additional funding for this program to help meet the clean energy needs of the state and its subsequent land requirements.
- Barbara Fernandez inquired whether the brownfield program scoring rubric included community benefits agreements.
  - Binu Chandy responded that this is not included. She explained that it is ensure that there is community involvement and sign off for brownfield projects but this is not a scoring criteria.

- Ms. Fernandez recommended the inclusion of community benefits agreements as a scoring criteria for brownfield projects to align with federal funding requirements.
- Bryan Garcia noted that Special Act 21-43 notes the inclusion of community benefits agreements and a recommendation of the Task Force will be the expansion of this policy to include hydrogen.
- Mr. Garcia noted the importance of maintaining the Brownfields Inventory as a resource for developers to identify prospective project sites. He noted that this could include those that are eligible for the energy communities adder in the Inflation Reduction Act (IRA).
- Ms. Chandy noted that the state definition of Connecticut brownfields does differ from the federal definition. She also noted that DEEP is working on a different definition of brownfields so it does not interfere with the DECD process.
- Lidia Ruppert provided support for the comments of Ms. Chandy and Mr. Garcia.
- Mr. Garcia noted that several of these recommendations are pending DECD support and Legislative funding. He recommended that funding could be set aside for distressed municipalities.
  - Ms. Chandy noted that distressed municipalities are given additional credit when projects are being scored for the brownfield program.
  - Ms. Backer noted these recommendations have already been discussed with DEEP and DECD.
- Ms. Ruppert noted that DEEP's hydrogen process is ongoing and is expecting to further discuss market based approaches to encourage hydrogen development. Ms. Ruppert explained that DEEP will publish a hydrogen whitepaper as part of its Comprehensive Energy Strategy (CES) process and there will be public opportunities to comment and technical sessions in early 2023.
- Ms. Backer noted that stakeholders had commented on the brownfield recommendations.
  - She explained that Environmental Advocates noted that many brownfields are located in environmental justice communities and distressed municipalities, where residents are burdened by environmental harms from former and existing uses and infrastructure. Connecticut should avoid siting hydrogen infrastructure on these brownfields. The Environmental Advocates noted that in addition to environmental justice concerns, there are size constraints on using brownfields for hydrogen projects.
  - Alternatively, Ms. Backer explained that DECD had noted that Brownfields are often in industrial areas which are utility connected, so these areas could be well-primed to serve some of the highest priority end-uses (ex: ports, industrial facilities, heavy-duty trucking). DECD had also noted that, if the program is

running effectively, enabling these programs for hydrogen facilities may require marketing and education.

- Ms. Chandy noted that some stakeholder feedback was in opposition to the recommendations. She noted that brownfield remediation may improve communities. Ms. Chandy inquired how this feedback would be represented in the report.
  - Ms. Childs noted that stakeholder feedback would be acknowledged within the report to provide a well-rounded picture of feedback received.
  - Mr. Garcia noted that stakeholder feedback was intended to inform the Legislature regarding stakeholder positions on key findings and recommendations.
- Ms. Backer provided an overview of findings and recommendations regarding how to position the state to take advantage of competitive incentives and programs created by the federal Infrastructure Investment and Jobs Act (IIJA). She noted that many programs within the IIJA are covered by the Biden Administration's Justice40 Executive Order (EO 14008) which states that 40% of the overall climate and clean energy investments must flow to disadvantaged communities. She also explained that many competitive IIJA grants require varying levels of match funding which may come from:
  - Third-party financing;
  - State or local government funding or property donations;
  - Project participant funding; or
  - Donation of space or equipment.
- Ms. Backer noted that to position the state to take advantage of competitive incentives and programs in the IIJA, Connecticut should consider the following actions:
  1. DEEP should lead interagency and interstate coordination on hydrogen policy development and funding, potentially including the development of a Connecticut hydrogen roadmap and research strategy.
  2. The Legislature should create a transparent source for municipalities, cities, and other local applicants to access relevant resources, such as match funding and/or application guidance.
  3. The Legislature should consider appropriating grant funding to support federal match requirements and multi-sector enabling infrastructure, such as public-access fueling stations for trucks, commuter buses, ports, and material handling equipment, etc.
  4. The Legislature should provide funding to increase community engagement and decrease burden of engagement on communities.
  5. Relatedly, DEEP and PURA should consider implementing an intervener compensation program to increase community participation in hydrogen-related proceedings.
  6. Eligible entities (academia, industry) should pursue federal funding for manufacturing capabilities for electrolyzers and fuel cells, to further advance development in the state.

- Mr. Garcia noted that the second and third recommendations may be duplicative but noted that the focus on end uses in the third recommendation was helpful framing.
  - Ms. Childs explained that the second recommendation is focused on transparency and information availability.
- Mr. Garcia recommended that support for manufacturing, industry, and academia should be included in the Legislative recommendation to provide match funding.
  - Ms. Fernandez explained that UCONN is funded through its departments. She noted that unless the Legislature decides to implement a new program, then a department or institution would need to request specific funding from the Legislature based on the Task Force recommendations. Ms. Fernandez noted that it is rare for the Legislature to set aside funding without a specific request for funding.
  - Ms. Fernandez recommended that both DECD and OPM should identify opportunities for tax incentives or programs to support Connecticut's leading fuel cell manufacturing industry.
- Ms. Dynowski explained that the recommendations should be more specific.
- Ms. Backer noted that stakeholder feedback was focused on the need for transparency and public awareness regarding federal funding opportunities.
- Ms. Lubawy noted the California Go-Biz example which provides transparency and match funding for the hydrogen hub in California.
- Ms. Backer noted that in addition to the IIJA, there is significant funding available for hydrogen in the Inflation Reduction Act (IRA) and additional federal funding opportunities.
- Ms. Backer explained that Connecticut should consider the following to best support the development of hydrogen fueled energy programs and infrastructure:
  1. DEEP and PURA may wish to consider promoting the use of hydrogen end uses that are currently commercially viable through the existing clean energy programs. PURA's consideration should include how any changes would affect the programs' existing objectives and cost-effectiveness.
  2. Legislature should consider tax exemptions for hydrogen vehicles and critical facilities that produce or use clean hydrogen.
  3. DEEP should identify and potentially expand clean transportation incentives to include on-site port handling equipment, harbor crafts, and ocean-going vessels in collaboration with other state and federal agencies.
  4. Consider amending requirements for community benefit agreements, through Public Act 21-43, to lower the minimum project size from 2 MW to 1 MW.

5. UCONN should identify opportunities to support development of the hydrogen workforce and advance early hydrogen technology innovation, and should identify resources and funding needs to implement.
  6. DECD should identify opportunities for tax incentives or programs to support CT's leading fuel cell manufacturing industry (not yet discussed with DECD).
  7. Eligible entities should pursue opportunities under the Inflation Reduction Act.
- Mr. Garcia noted that hydrogen is not a class 1 resource but should be included in Public Act 21-43 and mentioned that this point was emphasized by PURA in their written comments.
  - Mr. Garcia noted that the President of UCONN, Radenka Maric, is a fuel cell expert, and this advantage should be leveraged.
  - Ms. Dynowski noted that the fuel cell industry is already subsidized by ratepayers which is problematic because of the use of natural gas in fuel cells. She explained that there was a 30 MW procurement of fuel cells that resulted in a \$500 million investment in the fuel cell industry. She noted that clarity is needed in terms of the manufacturing recommendations and explained that there are environmental concerns with subsidizing natural gas fuel cells.
  - Mr. Garcia noted that fuel cells play a role in Connecticut economic development. He noted that HyAxiom exports 90% of the fuel cells it manufactures to South Korea.

## **5. Adjourn**

- Ms. Backer adjourned the meeting at Noon.