

February 11, 2022

Attn: H2Roadmap@hq.doe.gov

Re: GHC Comments on the US Clean Hydrogen Strategy and Roadmap

I. INTRODUCTION

The Green Hydrogen Coalition ("GHC") appreciates the opportunity to provide comment to the Department of Energy ("DOE") regarding the development of a United States ("US") national clean hydrogen strategy and roadmap. The GHC is in strong support of this effort.

GHC is an educational 501(c)(3) non-profit organization. GHC was formed in 2019 to recognize the game-changing potential of "green hydrogen" to accelerate multi-sector decarbonization and combat climate change. Our mission is to facilitate policies and practices that advance green hydrogen production and use in all sectors of the economy to accelerate a carbon-free energy future. Our specific focus is to accelerate a green hydrogen economy – meaning, hydrogen that is not produced from fossil fuels and has climate integrity – delivering zero or de minimis GHGs on a life cycle basis. We do this by fostering regional collaboration on policy and regulatory best practices, modeling and facilitating ecosystem collaboration on the formation of green hydrogen hubs by aggregating multi-sectoral offtake in targeted locations.

GHC specific comments on the US national clean hydrogen strategy and roadmap are below.

II. COMMENTS

Think Expansively About Our National Strategy

From a big picture perspective, the US clean hydrogen strategy and roadmap should include a long-term approach for the US to become a dominant global player in clean hydrogen and its derivative fuels/products. The US is fortunate to be able to leverage abundant domestic feedstocks and a large domestic market to scale up capabilities – enabling a robust competitive position globally.

Support Tradable Markets, Internationally And Domestically With Clear And Transparent Standards That Appropriately Account For All Carbon Emissions

To enable the US to become a dominant global player, it is necessary to develop clean, affordable, and reliable supply chains and support effective hydrogen trading markets. To this end, the US national clean hydrogen strategy and roadmap should ensure all hydrogen standards are clear and transparent. One key example is how the DOE will define the parameters around the carbon intensity of hydrogen – will it be through the point of hydrogen production or from the point of feedstock production? GHC strongly supports a framework based on life cycle carbon intensity

– this is the only way we can ensure we are achieving progress toward our goal, which is to fight climate change.

Accelerate The Development Of Regional And National Pipeline Transport And Storage Infrastructure

Mass-scale adoption of clean hydrogen requires the development of a substantial interstate pipeline network like the natural gas and oil pipelines we have in place today. However, unlike the known regulatory governing bodies overseeing natural gas and oil pipelines, ambiguity exists regarding interstate regulatory authority for the economic regulation of blended and 100% hydrogen pipelines. If left unresolved, this ambiguity will impede project development, capital investment, and stall the mass-scale hydrogen market. Therefore, the US national clean hydrogen strategy and roadmap should identify the appropriate regulatory authority(s) to approve and regulate interstate blended and 100% hydrogen pipelines. Additionally, since hydrogen will require vast pipeline infrastructure, GHC recommends that the US national clean hydrogen strategy and roadmap include a US hydrogen backbone plan. This vision can replicate the same steps as the European Backbone initiative.

Establish A Clear Pathway For Producing Decarbonized Liquid Fuels With Green Hydrogen And CO₂

Long-haul shipping and aviation sectors will require energy-dense liquid fuels and are not state jurisdictional, making them the hardest to decarbonize. Therefore, the US national clean hydrogen strategy and roadmap should formulate policy recommendations to encourage decarbonized fuel use for these applications and formulate pathways to produce liquid green hydrogen and its derivatives for shipping and aviation fuel. This effort should, of course, be closely coordinated with international decarbonized port/airport development activity.

Likewise, the DOE's clean/green hydrogen strategy should also be closely coordinated with planned investment in needed carbon sequestration and utilization infrastructure – which will be critical to capturing mass scale CO₂ sources needed to create decarbonized derivative liquid fuels with green hydrogen. Further, the DOE could also consider the production of carbon-negative chemicals and polymers from green hydrogen and CO₂, which would both open new pathways for decarbonizing the petrochemical value chain and open new routes to sequester CO₂. GHC recommends that DOE leverage its current CCUS activity with the planned clean hydrogen hub development to produce decarbonized liquid fuels.

Include A Transition Plan For Addressing Existing Infrastructure and Workforce Development

One of our critical national assets is our existing infrastructure and skilled workforce. Clean/green hydrogen enables us to accelerate our clean energy transition dramatically and will require repurposing much of this infrastructure and massive training. The US national clean hydrogen



strategy and roadmap should include a transition plan for addressing workforce training implications for transitioning existing fossil assets to new cleaner uses.

III. CONCLUSION

GHC appreciates the opportunity to provide these comments and looks forward to collaborating with the DOE and stakeholders on this significant effort.

Respectfully submitted,

/s/ Janice Lin

Janice Lin

Founder and President

GREEN HYDROGEN COALITION