February 14, 2024

Re: Proposed Rules - Credit for Production of Clean Hydrogen, Election to Treat Clean Hydrogen Production Facilities as Energy Property

On behalf of the **Allegheny Conference on Community Development, the Allegheny/Fayette Central Labor Council, AFL-CIO, and the Pittsburgh Regional Building & Construction Trades Council** we write in support of intentional alignment of the United States Treasury Department guidance on the 45V hydrogen production tax support with the clear intent of the Inflation Reduction Act (IRA) to develop a U.S. market for clean hydrogen.

We applaud and support the Biden Administration's bold commitment to tackle the climate crisis by mobilizing a whole-of-government effort to reduce pollution in every sector while increasing resilience, creating good-paying, union jobs to build a modern and sustainable infrastructure, delivering an equitable clean energy future, and putting the United States on a path to achieve net-zero emissions, economy-wide, by no later than 2050[1]. Southwestern Pennsylvania, like the entire Appalachian region, represents both the need and opportunity presented by this energy plan.

As a region with a deep industrial legacy, where emissions from the sector are twice the national levels[2], we face unique challenges related to decarbonization. We believe that clean hydrogen presents a particular opportunity to address our unique environmental challenges, while building resilience and competitiveness of our industrial sector and creating strong economic value for all our communities.

Consistent with the U.S. National Clean Hydrogen Strategy and Roadmap[3] and encouraged by the provisions of the Bipartisan Infrastructure Law (BIL) and the IRA, we have seen tremendous levels of innovation, investment and public-private collaboration unlocking across our region to ensure our active participation in the hydrogen economy. The Pittsburgh region's existing natural, physical, technological, and intellectual assets position us not only to establish a well-functioning regional hydrogen hub but also provide strong national benefits and a material boost to U.S. competitiveness.

However, **our ability to fully maximize the national and regional hydrogen opportunity is severely jeopardized** by some of the contemplated implementation specifics of the 45V hydrogen production tax credit program which are overly restrictive. **The particularly exclusionary provisions that limit the types of feedstocks, technologies and infrastructure that would qualify for 45V credits present real risk for regions like ours**. For example, prioritization of new development as stipulated in the proposed rules creates not only real feasibility

[1] The Biden-Harris Administration Immediate Priorities. Source: https://www.whitehouse.gov/priorities/
[2] Our Region's Energy Future; Allegheny Conference on Community Development, 2022.
[3] US National Clean Hydrogen Strategy and Roadmap

barriers but more importantly diverts critical investment and innovation from where it is needed the most. Similarly, the exclusion of ultra-low carbon intense coal mine methane (CMM) blended with traditional natural gas from claiming the full 45V credit would prevent former coal communities like ours to turn their significant challenges into competitive assets. Therefore, we strongly support recognizing the methane abatement benefits of low-carbon gasses such as fugitive CMM and renewable natural gas (RNG) and strongly urge Treasury to work with industry stakeholders toward impactful deployment of these hydrogen decarbonization solutions.

We believe that overly restrictive implementation criteria would be a detriment to methane abatement and thus not only work against the spirit of the Administration's commitment to a swift, robust and inclusive energy transition, but also actively limit the U.S. ability to achieve new levels of global competitiveness by severely stifling industrial decarbonization innovation.

In the paragraphs below, we offer specific evidence of the potential detrimental environmental, economic and competitiveness effects that overly restricted IRS rules and guidance could lead to. We believe these effects would have an impact on our region inconsistent with the IRA's original intent.

Environmental effects

Methane is a particularly concerning greenhouse gas emission. A major contributor to global warming, methane is much more potent than carbon dioxide, absorbing eighty-six times more heat in the span of two decades. The rate of methane emissions is accelerating.[4] Fugitive CMM presents a significant problem as only less than 1% of the 30,000+ abandoned and 500+ active coal mines in the United States currently capture CMM. One-third of the nation's abandoned mine lands are in Pennsylvania. Methane emissions in our region are significantly higher than the national average.

As there is no regulatory requirement or strong economic case for capturing fugitive CMM, regions like ours continue to suffer significant environmental consequences. Clean hydrogen, however, presents an opportunity for productive use of CMM. The GREET model, developed by Argonne National Lab, established that the CMM, due to its ultra-low carbon intensity profile, is a valuable feedstock for clean hydrogen production. The proposed IRS 45V credit guidance, however, does not guarantee full adherence to the GREET model and inclusion of CMM-based hydrogen to qualify for the full 45V credits. Without the full incentives, the 51 million metric tons annually of fugitive methane will continue to be emitted into the atmosphere[5] and viable paths to hydrogen won't be available to the highly concentrated hard-to-abate industries in the Appalachian region.

Economic effects

Southwestern Pennsylvania, like many former coal regions with legacy industrial activity, continues to experience severe economic headwinds. From 2018 to 2023, jobs declined by 4.9% (65,000 jobs) in the region while the Nation experienced a growth rate of 3.6%. As the number of jobs declined, the labor force participation rate decreased from 63.7% to 59.3%, the lowest rate since 1980s[6]. Over the next 10 years, the region is predicted to experience deep economic stagnation while the U.S expects job growth of over 10%.

---

[4] A Low Carbon Energy Transition in southwest Pennsylvania; authored by researchers at CMU, MIT, Harvard & Boise State, 2021.

[5] U.S. Environmental Protection Agency (2023) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2021. EPA 430-R-23-002.

[6] Lightcast; February 2024.

Energy transition presents the most significant economic opportunity for regions like ours. According to several pressure-tested scenarios, southwestern Pennsylvania would turn from an economically struggling to economically thriving and resilient region, creating significant ripple effects through the state and national economy[7]. This will only be possible if the region is able to develop a robust hydrogen economy.

If properly enabled, CMM-based hydrogen production will be able to create more than **696,000 jobs over the next two decades in the Pittsburgh region and infuse over $213 billion into the regional economy**[8]. We have identified over **30 unique projects**, each with **potential to create almost 20,000** direct, indirect and induced **jobs**[9]. These projects, however, can only happen with Treasury's intentional recognition of the climate-positive impacts of methane abatement and the beneficial use of fugitive CMM.

Innovation and Competitiveness Effects

Decarbonization gives industrial regions like ours a unique opportunity to maintain their economic competitiveness while contributing to the shared national security and competitiveness priorities. Aware of the deeply intertwined nature of environmental and economic aspects of the industrial sector, and the need to solve for both clean production and job preservation/growth, our region has seeded, scaled, and successfully deployed a wide range of innovations and groundbreaking technologies that are pushing the possibilities of industrial decarbonization. One such unique innovation is turning fugitive CMM into a feedstock for clean hydrogen. This ability to turn a harmful emission into a productively used commodity not only creates an important solution for the enormous challenges coal regions face, but it also improves those regions' attractiveness for new investments. We have experienced this firsthand; **the pursuit of a Hydrogen Hub has stimulated extraordinary business activity, more than doubling out-of-region investors' interest and accelerating efforts of regional industrial stakeholders to prepare for participation in the hydrogen economy.**

Our ability to drive this innovation forward and materially contribute to solving regional and national climate challenges hinges on reaching the full 45V credit for hydrogen production using CMM captured from existing coal mine infrastructure. Without that, **coal regions like ours will lose the ability to fully participate in the hydrogen economy in ways that utilize their abundant assets, and importantly, the transformational CMM capture and use technology developed in our region will not provide its vast benefits to national security competitiveness and climate goals.**

Southwestern Pennsylvania exemplifies the extraordinary potential hydrogen plays in the environmental and economic future of industrial regions worldwide. We have aligned our resources, know-how and investments to partner on implementing the U.S. National Clean Hydrogen Strategy and Roadmap. **We urge the United States Treasury Department to finalize the proposed 45V regulations with the recognition and facilitation of the significant climate-positive impacts of fugitive methane's beneficial use, thereby aligning with the original statutory and congressional intent and the Biden Administration's commitment to inclusive energy transition.**

Sincerely,

Allegheny Conference on Community Development

Allegheny/Fayette Central Labor Council, AFL-CIO

Pittsburgh Regional Building & Construction Trades Council

---

[7] Our Region's Energy Future; Allegheny Conference on Community Development, 2022.

[8] Source: IMPLAN; Allegheny Conference on Community Development, February 2024

[9] ibid