Let's Not Put the Hydrogen Economy at Risk: Moving the Goalposts Now May Prevent the Development of Necessary Sustainable Solutions

Marc Heissan and Cary Krosinsky

12/19/2023

The Bipartisan Infrastructure Law of 2021, passed by 69 Senators, set a potential path for creating a Hydrogen Economy for the United States. It is one of several practical new measures with significant financial incentives for developing the energy economy of the future with sustainability fully in mind (*Bipartisan Infrastructure Law | FTA*, 2022).

Hydrogen Hubs, in particular, have recently been awarded billions of dollars in support across the country, and private companies have committed to putting an even greater amount of intellectual and financial capital behind the Hydrogen Economy. Implementing this will create meaningful, good-paying jobs and jump-start the future Hydrogen Economy for the 2030s and beyond (House, 2023).

Along with the need for such innovation in sustainability, low-cost solutions are necessary to meet our environmental goals so that such early development efforts are not stopped for economic reasons. Economics, for example, recently caused Orsted to pull back from offshore wind projects in New Jersey, the outcome that is already harming progress in seeing a low-carbon economy of the future unfold (Sobko, 2023).

More generally, one of the most significant headwinds in development is capital costs, and volatility, by definition, is also a significant factor in weighted average cost of capital (WACC) calculations. As we move towards our 2030 and 2050 energy goals, mechanisms, some of which are already in place now, help incentivize ideas on how to evolve towards lower carbon solutions becoming commercial realities. We must, therefore, work together with both environmental and economic goals in mind to see transitions come to fruition (Krosinsky, 2023).

Part of this requires understanding that a successful transition to a Hydrogen Economy will require just that: a transition and development of supporting infrastructure such that lower costs in the future can encourage existing infrastructure to take on lower carbon flavors of hydrogen. The danger is in moving the goalposts now, resulting in slowing down development, putting the entire future Hydrogen Economy at risk, including the development of good paying jobs and the bringing to life of environmental justice solutions, which are a requirement of these new Hydrogen Hubs, through the implementation of thoughtful community benefit plans.

In 2022, the United States also passed the Inflation Reduction Act (IRA) to support further the development of sustainable solutions with incentives such as tax credits. To qualify for these tax credits, a tech-neutral strategy was passed in congress so that support could be received as long as solutions were developed that meet stringent carbon reduction targets. Unfortunately, tech-neutral strategies, praised in 2022 for driving innovation, now seem to have not lasted even a year. There is a growing risk that certain members of Congress and the current Administration aren't observing this tech-neutral IRA strategy and there appears to be an effort to move the goalposts.

Certain environmental groups and politicians believe a low-carbon solution involving fossil fuels is undeserving, even if they are less expensive now and have a lower carbon footprint than that of other solutions. Over the past years, we have seen…

"The decline of civility and respect poses a significant threat to the foundation of our democracy. Divisiveness and lack of trust damage our political process and cause Americans to lose faith in its institutions and leaders. This toxic environment in politics, social media, and increasingly across our society makes it more difficult for us to find common ground and act for the greater good of our nation."- The Reagan Foundation (Institute, 2023).

Unfortunately, it is now all too rare to see groups from both sides of the argument sitting across the table from each other negotiating. Instead, decisions are made in the dark of night, where changes can, perhaps unknowingly to those making such changes, greatly increase the cost of projects and slow or even eliminate the development of environmentally focused commercial solutions.

Senators Wyden, Manchin, Schumer, and the administration (Secretary Granholm) developed the IRA as tech-neutral legislation (*Financial Incentives for Hydrogen and Fuel Cell Projects*, n.d.). However, some politicians and the administration have indicated they are willing to turn their back on this policy and exclude certain specific low-carbon solutions from qualifying for the tax credit.

An example is the 45V's technology-neutral design, which incentivizes the deployment of solutions that can significantly reduce emissions in hydrogen production by using renewable power or implementing carbon capture equipment (Martinez, 2023).

The recently leaked 45V guidance proposed for the IRA lacks a foundation of substantive conversations, as one group makes decisions without considering differing opinions or a process for evaluating the ramifications of shifting parameters now.

The "Leaks suggest US 45V Guidance will be more stringent than EU renewable hydrogen rules," indicating the administration is now looking for narrowly defined solutions with a "3-pillar" mandate (Currie, Dec 2023). This will require a prescriptive solution to qualify for the tax credit versus focusing on flexible policies that, at least for now, focus on hitting carbon reduction targets, which should be the goal, and time is of the essence, requiring minimizing unnecessary delays or cancellations. This type of mandate has caused problems in commercializing solutions before. When prescriptive energy tax policies were written in the past, the development of new energy solutions didn't meet the production goals of society as it limited the number of projects that were developed.

If projects can meet carbon reduction goals, we should support those efforts regardless of technology according to the spirit of the IRA. We must remove biases from the equation and work with others to find investable solutions to achieve our sustainable goals.

The $7 billion in federal grants and expected $43 billion of private investments across 16 states are expected to create 3 million jobs while driving meaningful, positive environmental change, including on environmental justice, so it is no wonder that the national head of the LiUNA (Brent Booker) and NABTU (Sean McGarvey) have written letters to the administration looking for a more inclusive guidelines, along with many Democrats such as Governor Shapiro of PA, Senators Manchin - WV, Casey - PA, Fetterman - PA, Carper – DE (Chairman of Committee on Environment and Public Works), Cantwell - WA, Brown - OH, Durbin - IL, Gillibrand – NY, Murray - WA, Duckworth - IL, Sinema - AZ, Peters – MI, six house members from Texas and many others in the industry also oppose more restrictive guidelines (Volcovici et al., 2023).

In conclusion, the challenges posed by shifting policies now highlight the delicate balance required in navigating a successful pathway for the implementation as quickly as possible towards sustainable innovation. The original intent of the tech-neutral strategy, as embodied by the IRA, must be preserved to support a diverse array of solutions capable of achieving carbon reduction targets. The path forward involves returning to substantive conversations, restoring civility, driving economic growth, and collaborating to find the best possible, most investable solutions for a sustainable future.

For the environment's sake, let's not turn this legislation from a potential win-win into what may become a lose-lose. The perfect cannot be the enemy of the good, and necessary.

Bipartisan Infrastructure Law | FTA. (2022). https://www.transit.dot.gov/BIL

Financial Incentives for Hydrogen and Fuel Cell Projects. (n.d.). Energy.Gov. Retrieved December 9, 2023, from https://www.energy.gov/eere/fuelcells/financial-incentives-hydrogen-and-fuel-cell-projects

House, T. W. (2023, October 13). *Biden-Harris Administration Announces Regional Clean Hydrogen Hubs to Drive Clean Manufacturing and Jobs*. The White House. https://www.whitehouse.gov/briefing-room/statements-releases/2023/10/13/biden-harris-administration-announces-regional-clean-hydrogen-hubs-to-drive-clean-manufacturing-and-jobs/

Institute, T. R. R. P. F. and. (2023, June 12). *Ronald Reagan Foundation and Institute Announces New Center on Public Civility*. https://www.prnewswire.com/news-releases/ronald-reagan-foundation-and-institute-announces-new-center-on-public-civility-301848454.html

Krosinsky, C. (2023, December). *Harvard—ENVR 235*.

Martinez, M. (2023, July 5). *What You Need to Know About the 45V Tax Credit and Its Role in Scaling Clean Hydrogen | Breakthrough Energy*. https://breakthroughenergy.org/news/45v-tax-credit/

Sobko, K. (2023, October). *Danish company Ørsted pulls out of billion-dollar NJ offshore wind turbines project*. North Jersey Media Group. https://www.northjersey.com/story/news/new-jersey/2023/10/31/orsted-pulls-out-nj-offshore-wind-turbine-projects/71402059007/

Volcovici, V., Renshaw, J., & Volcovici, V. (2023, October 13). Biden awards $7 billion for 7 hydrogen hubs in climate fight plan. *Reuters*.

https://www.reuters.com/business/energy/biden-selects-7-hydrogen-hubs-across-16-states-7-billion-us-grants-2023-10-13/