Written Testimony Submitted to the

Pennsylvania Senate Democratic Policy Committee

By the Team Pennsylvania Foundation

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Senator Muth, Senator Comitta, and members of the Senate Democratic Policy Committee, thank you for this opportunity to address what we believe is one of the most important energy-related issues facing our Commonwealth, our nation, and our world, and also speak to an energy project that stands to drive economic growth and environmental justice for communities clamoring for change, for investment, and for a future.

My name is Abby Smith, and as the President and CEO of the Team Pennsylvania Foundation, my organization and I have embraced the role of champion for hydrogen as an emerging but critical driver of Pennsylvania's economic prosperity, its environmental revitalization, and its role in a rapidly shifting national and international energy paradigm. Team PA is a technology- and project -agnostic organization. By charter and by choice, we work in collaboration with state agencies, businesses, organized labor, universities, and advocacy groups to steward the Commonwealth's economy, and over the last two years, energy, and particularly hydrogen, in conjunction with carbon capture utilization and storage, have become increasingly central to these cross-sectoral conversations.

That is because America relies on our Commonwealth for a staggering amount of energy and industrial output. For example, Pennsylvania produces three times as much energy as it consumes each year, and our industrial sector ranks among the strongest in the nation. Innovation in power production, heavy industry and advanced manufacturing means finding and adopting new energy technologies that can improve efficiency while also reducing health and environmental impacts. The Biden Administration and the Shapiro Administration, as well as experts in industry, academia, labor, and environmental organizations all tell us that hydrogen and carbon capture are going to be two critical vectors if we are going to continue to grow our economy and protect our environment.

Early in 2023, Team Pennsylvania joined industry partners including Shell USA and Mitsubishi to establish the Decarbonization Network of Appalachia Hydrogen Hub (DNA), in a proposed project to provide affordable and clean hydrogen to decarbonize hard to abate heavy industry and power generation in the tri-state region. This is a multibillion-dollar effort on the part of industry and the federal government to invest in legacy energy communities and include them as a central part of a just energy transition in the U.S.

Although our hydrogen hub application was not selected by the Department of Energy for funding, due to the strength and clarity of DNA's vision, the strong ongoing support of our partners in the building and trades labor organizations, as well as in Southwest Pennsylvania

industrial sector, and our day-one, localized and proven approach to fostering community benefits and leadership, DNA remains commercially viable and there is still strong interest in advancing this transformative project. DNA also looks to be a key part of the connective tissue which can bring together the other two hydrogen hub entities that share common footprint in Pennsylvania, creating a wider, quicker, more just, and more significant energy transition within the Commonwealth.

Pennsylvania is uniquely positioned to provide both the feedstock for large-scale hydrogen production and the skilled workforce needed for the manufacturing and energy transmission processes. Hydrogen is clean burning, meaning end users in cement, steel, chemicals, and transportation sectors can meet their own sustainability goals and provide the public with affordable, environmentally responsible products. And as a means to store energy over long periods of time, hydrogen will be absolutely essential to the success of renewable energy in the Commonwealth, by offering a key opportunity to reduce seasonal variation in renewable power production, which battery storage alone is not technically able to eliminate. By unlocking a hydrogen-based economy, Pennsylvania will blaze a trail for innovation and set a powerful example for the nation and for the world.

We at Team Pennsylvania do not see carbon capture or natural gas-based hydrogen in general, as the only viable path to a low- or zero-carbon economy. There is, and should continue to be, plenty of room in the Commonwealth to deploy renewables, nuclear assets, and other advanced technologies to meet our statewide and national commitments and retain a competitive edge in the energy and industrial sectors. Team PA also supports the technical and commercial advancement of other forms of hydrogen production, beyond that which is derived from natural gas, although those technologies appear to be further on the horizon and there are more immediate opportunities with hydrogen to reduce climate impacts available now.

For the very first time, science and policymakers, industry, labor and environmental advocates are aggressively moving in the same direction and agree on a vision for our shared future – a future that includes hydrogen infrastructure buildout. Pennsylvania must play a critical role in making that vision a reality.