

EIGA Position on the Hydrogen and decarbonized gas market package

The European Industrial Gases Association, EIGA, welcomes the steps the EU is taking to align our policy ambition with the long-term goal of climate neutrality by 2050. Hydrogen has a critical role to play across a decarbonized economy, building on the already significant role it plays in industry today. In light of this, it is important that the EU carefully considers the framework which will govern hydrogen markets, and the infrastructure and actors which underpin those markets.

Today, EIGA Members operate the vast majority of hydrogen pipeline infrastructure in Europe and around the world. With decades of experience in the safe production, transportation, and handling of this product, the industrial gases sector is well placed to support the expansion of hydrogen's role in our society. Already, our infrastructure provides an essential service to industries who rely on dependable and precise supplies of hydrogen as an essential feedstock.

Private hydrogen pipelines, linked with dedicated hydrogen production, have been developed in a competitive marketplace to serve mainly industrial customers in the most cost-efficient way, meeting the necessary technical specifications for their processes and offering contractual and supply clarity; there is no need for regulatory intervention. To give an example, as even the smallest impurities in hydrogen supply to customers with sensitive processes can cause great damage, and in particular catalytic processes often cannot tolerate the smallest variations in purity, end-users served by private hydrogen pipelines commonly present with tight purity requirements as follows (based on ISO 14687:2019 and CGA G-5.3-2017).

- General industrial applications (99.95%)
- PEM Fuel cells road application (99.97%)
- Hydrogenation and water chemistry (99.99%)
- Instrumentation and Propellant (99.995%)
- Semiconductor (99.999%)

Differentiating specialist infrastructure – Pipeline Diameter

In order to differentiate between the public backbone infrastructure which will underpin the growth of the hydrogen economy and the private, specialist infrastructure which requires operation under specific conditions, pipeline diameter can be used as a metric. Today the diameter of pipelines fulfilling specialist requirements are 20 inches (50.8cm) or under.

Pipelines of this diameter can carry enough volumes of hydrogen to serve small industrial clusters, versus the wider diameter of public pipes needed to deliver hydrogen to the wider economy. They further exist over shorter distances, with prescribed pressures and purities. As such, it is appropriate to consider these pipelines as distinct from larger public hydrogen networks.

Public networks will have an important complementary role to private networks, delivering hydrogen with more flexibility around purity and quality, aiming at many other applications, including some that will be replacing the use of natural gas. Private networks in turn will grow hydrogen demand by providing security of supply (both physically and contractually) to industrial consumers. Mandatory unbundling and third party access would substantially undermine the position of purity/quality sensitive pipeline networks, by reducing legal clarity and substantially increasing the potential for deviations in purity, with associated significant costs.

As such, EIGA calls on policymakers to exempt pipelines of or under 20" in diameter from market rules under the Gas Package.

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