

DNV and Pipeline Infrastructure Limited (PIL) collaborate to integrate Hydrogen into PIL gas network assets in India

MUMBAI, INDIA, 13 July 2022- DNV, the independent energy expert and assurance provider, is providing technical advice and support to Pipeline Infrastructure Limited (PIL) on the integration of blended Hydrogen into its gas trunkline assets in India – including transmission pipelines, interconnects and spur lines, compressor, valve, and metering stations & equipment.

PIL's initiative is one of the first Hydrogen blended related projects in the transmission space in India, aligned with the government's launch of India's National Hydrogen Mission in August 2021, targeting 5 million tonnes per annum of Hydrogen production by 2030. In conjunction with fiscal support and other incentives, the Mission aims to leverage the nation's significant renewable energy potential to transform India into a green Hydrogen hub, help meet national climate goals and enable India to become a major producer and exporter of Hydrogen to Japan, South Korea, and Europe.

According to DNV's Energy Transition Outlook 2021, demand for Hydrogen in the Indian subcontinent will reach nearly 25 million tonnes per annum by 2050, primarily for ammonia production, transportation, and refining. As a basis for green Hydrogen production, the report also shows strong predicted growth in renewable generation in India, particularly solar photovoltaics, wind, and hydro power which will make up 65% of the country's electricity generation mix by 2050.

Akhil Mehrotra – MD&CEO - PIL says “The Hydrogen industry in India is still in its infancy and has a huge scope to supplement the growing energy needs while supporting the shift to a cleaner environment. Backed by strong governmental support for clean energy and significant renewable energy potential, India has the unique opportunity to become a major producer and exporter of Hydrogen”.

“Repurposing natural gas pipelines for Hydrogen is 10-30% of the cost of building new pure Hydrogen networks. DNV is pleased to play a role in this by supporting PIL to transition its gas network to incorporate blended Hydrogen to support local industries. In doing so, DNV will leverage its technical expertise and methodology to help our clients meet their emission reduction goals while retaining the use of their existing infrastructure,” said **Brice Le Gallo, Vice President and Regional Director APAC, Energy Systems at DNV**.

Drawing upon DNV's expertise in assessing the technical impacts on gas pipelines of using Hydrogen at different blending ratios, PIL will be provided with technical advice on the readiness of its infrastructure to incorporate Hydrogen. Furthermore, DNV will help PIL assess the suitability of its existing network and related assets to incorporate Hydrogen at a range of blending levels (5%, 10%, 15%, 50% and 100%) covering the following:

- Assessment of pipeline integrity
- Assessment of pipeline safety

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- Network operations with blended Hydrogen

Blending Hydrogen with natural gas in existing infrastructure will facilitate the use of a cleaner gas that can help countries such as India smoothly transition to a decarbonized future. Aside from rapidly and significantly lowering India's carbon footprint, incorporating blended Hydrogen in the transportation, power generation and industrial sectors can also offer new business opportunities.

Varadaraj Salian, Market Area Manager – India, Bangladesh and Sri Lanka for Energy Systems, DNV adds, “This pioneering project will enable PIL to engage their stakeholders in developing and expediting realistic decarbonization goals for which DNV is providing the right technical knowledge, global expertise and best practices so that their operation is safe and sustainable.”

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About DNV

DNV is the independent expert in risk management and assurance, operating in more than 100 countries. Through the group's broad experience and deep expertise DNV advances safety and sustainable performance, sets industry benchmarks, and inspires and invents solutions.

DNV provides assurance to the entire energy value chain through its advisory, monitoring, verification and certification services. As the world's leading resource of independent energy experts and technical advisors, DNV helps industries and governments navigate the many complexes, interrelated transitions taking place globally and regionally in the energy industry. DNV is committed to realizing the goals of the Paris Agreement, and supports customers to transition faster to a deeply decarbonized energy system www.dnv.com

About PIL

Pipeline Infrastructure Limited (PIL) pipeline, the country's first bi-directional pipeline, 48-inch diameter cross-country natural gas pipeline with a length of approximately 1,480 kms (including spur lines and interconnects), traverses 5 states across the peninsular region from Kakinada to Bharuch. PIL acts as the vital link in supplying clean and green energy across the country in a safe, sustainable, and reliable manner. with a design capacity of 85mmscmd, commenced operations in 2009 to transport record gas off the east coast. The above-ground facility of the PIL pipeline includes 10 compressor stations with a total installed power of 900+ MW.

www.pipelineinfra.com