

Public private collaboration to create a hydrogen valley

The Department of Science and Innovation (DSI) is collaborating with companies in the energy sector to carry out a feasibility study to create a hydrogen valley stretching from the [Bushveld Complex](#) to Gauteng and Durban in KwaZulu-Natal.



Natascha Viljoen, CEO, Anglo American Platinum

The ambitious plan aims to identify tangible opportunities to build hydrogen hubs in this key economic and transport corridor, leveraging the regional platinum group metals (PGMs) mining industry and exploring the potential for hydrogen production and supply at scale.

The collaboration agreement is led by DSI, partnering with Anglo American, Engie, and Bambili Energy.

The feasibility study, which is the first phase of the Platinum Valley initiative, will drive the planning, design, construction and commissioning of projects related to the development of a hydrogen valley.

The project will be implemented through the South African National Energy Development Institute (Sanedi), which will also fund projects to take intellectual property through the Hydrogen SA (HySA) centres of competence to market in partnership with the private sector.

Creating opportunities

“PGMs play an important role in polymer electrolyte membrane electrolysis used to produce hydrogen, as well as in hydrogen fuel cells,” the DSI said.

The department said the agreement has the potential of creating direct opportunities for economic and community development while contributing to decarbonisation efforts.

In addition, small, medium and micro enterprises (SMMEs) will be supported to take advantage of opportunities in the green economy as part of the just energy transition.

"The transition to a low-carbon world is an opportunity to drive the development of cleaner technologies, create new industries and employment, and improve people's lives," Anglo American's PGM business CEO, Natascha Viljoen, says.

She said the company was an early supporter of the global potential for a hydrogen economy, recognising its role in enabling the shift to greener energy and cleaner transport. "Our integrated approach includes investing in new technologies, supporting entrepreneurial projects and advocating for policy frameworks that enable a supportive long-term investment environment for hydrogen to deliver that potential."

Meanwhile, the department said Bambili Energy has played a pivotal role in ensuring that the HySA catalyst and membrane electrode assemblies developed by the HySA Catalysis centre of competence are integrated into commercial products through its partnership with global original equipment manufacturers.

Engie aims to accelerate the transition towards a carbon-neutral economy through reduced energy consumption and more environmentally friendly solutions. It has provided co-funding for the techno-economic analysis that will be conducted on identified hubs within the hydrogen valley corridor.

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