



Can H2 fix Africa's fertilizer problem?

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The African Hydrogen Partnership (AHP) aims to promote, support and accelerate the deployment of green hydrogen, its derivatives and related technologies in Africa, including educating businesses and the wider public on opportunities in the sector. Argus spoke with AHP chairman Innocent Uwuijaren about the partnership's view on the nascent African hydrogen economy.

Why is Africa an attractive location for green hydrogen projects?

Africa has great potential from solar, wind, geothermal and hydroelectric power, and it has a huge land mass available which could make locating and permitting projects easier than elsewhere, such as in Europe. This will allow construction of very large facilities, which will provide the necessary scale to reduce costs. The first projects for exporting green molecules will likely be in countries with strong renewable potential and locations for export trade, such as [those with close] proximity to pipelines and ports, and where national governments are most proactive to support projects.

Will African hydrogen projects mainly supply domestic markets or will they target exports?

Many very large projects to produce green hydrogen or ammonia for export have been announced over recent years, but it will likely take some time before many of these achieve financial closure. Large export projects attract media attention but finding offtakers and achieving bankability is challenging at this stage of the market. It is easier to find offtakers for domestic projects such as for green fertilisers. The AHP seeks to focus, amongst other things, on commercial opportunities which are feasible now or in the near future, including green fertiliser plants in Africa. It is taking a delegation of businesses to Somaliland and Tanzania imminently to discuss green fertiliser projects and related hydrogen ecosystems.

Why start with domestic fertiliser projects?

Africa is the most under-fertilised continent in the world. In comparison with China and India, let alone developed countries, it is shocking. Green fertiliser plants in the right locations are viable today and can produce at costs that are lower than for fertiliser made from natural gas which is delivered to the same place. At the same time, it enables substantial savings of CO2 emissions and potentially makes a huge difference to Africa's agricultural communities. Domestically produced low-cost hydrogen and green ammonia can reduce or even eliminate the need for countries to import expensive fossil fuels and having to pay for them in hard currency.

What is the longer-term vision for hydrogen in Africa?

Once green hydrogen and ammonia are available for domestic purposes, this will enable industrial hubs to manufacture products such as fertilisers, green steel and cement, as well as using green hydrogen for other processes. In time, it will also be possible for some countries to export green hydrogen and ammonia to the EU and Asia, and for real partnerships to evolve. The European Commission has referred to its wish to have such a partnership with Africa. But there is also real logic in taking industrial processes to where the hydrogen and local manpower is and perhaps also to where materials used in the process are mined. Exporting products will often be more efficient than exporting hydrogen. And the market itself, or a significant part of it, may well be in Africa too.