


GeoPura deal: factsheet

Deal Information	
Deal closed	16 February 2024
Sector	Clean energy - hydrogen
Location	Newcastle upon Tyne
Counterparty	GeoPura Ltd ⁱ
Total cost	£56m
UKIB finance	£30m
Product	Convertible loan note

Geography

Project location
 Manufacturing facility



Locations based on NUTS 3 areas
 Map: UKIB • Created with Datawrapper

Summary

UK Infrastructure Bank is investing £30m of finance to support GeoPura’s roll out of proprietary Hydrogen Power Units (HPUs) and the development of one of the UK’s largest green hydrogen production facilities, which was awarded Government funding in the Hydrogen Business Model Allocation Round 1 in December 2023. This project supports both our climate change and local economic growth objectives. It contributes to the transition away from diesel generators to green hydrogen power units and it is supporting the expansion of the UK hydrogen supply chain. UKIB investment is needed to ensure the deployment of this low carbon power solution and to attract additional private investment.

Sector context

Government’s ambition is to deliver 10GW of hydrogen production capacity by 2030, with green hydrogen making up at least half of this. Near term, the aim is to deliver 1GW green hydrogen production capacity by 2025. Low carbon hydrogen will play a key role in meeting net zero, by reducing emissions in hard-to-electrify sectors, such as industry, heavy transport and power. There is increasing focus on the role hydrogen can play in non-road mobile machinery.

The hydrogen sector is within one of UKIB’s priority sectors; clean energy.

Impact and additionality

This project supports the manufacturing of Hydrogen Power Units and will result in hydrogen production capacity of over 14MW by the end of 2024. GeoPura’s business model supports

the replacement of mobile industrial diesel generation with hydrogen in any locations where there is temporary power demand. There are limited alternative decarbonisation options available and demand for generators is forecast to grow in the coming years.

The use of GeoPura's initial 600 Hydrogen Power Units instead of diesel generators is estimated to result in emission savings of 1.3m tCO₂e over the 10-year lifetime of the HPUs.ⁱⁱ

Hydrogen production has an important role to play in meeting the government's net zero target, providing low carbon energy where it is difficult to electrify. The investment can help scale up domestic hydrogen production and demonstrate a viable, market-led hydrogen business model.

Evidence from our market analysis and feedback we have received from the company shows that UKIB financing is needed to prevent delays to the company's growth plans. UKIB involvement has crowded in other investors.

ESRG considerationsⁱⁱⁱ

This project aligns with UKIB's ESG framework^{iv}. GeoPura use renewable energy to produce hydrogen and aim to reduce overall emissions and energy consumption. GeoPura have comprehensive ESG policies in place.

Impact metrics

1	# deals in the hydrogen sector
£30m	Total investment in sector
75	Jobs created ^v
- 1.3m	Emissions (tonnes CO ₂ e) ^{vi}
£26m	Private finance mobilised

ⁱ Costock Road, Wysall, Nottinghamshire, NG12 5QT, United Kingdom

ⁱⁱ Assumes replacement of diesel generators on a 1:1 basis. This is a conservative estimate based on the lowest diesel emission intensity. Depending on the H₂ supply, the savings may differ. All numbers are rounded.

ⁱⁱⁱ By partnering with us, companies agree to reference ESG best practice guidance and report on their: Environmental, social, resilience and governance (ESRG) approach: we will assess how projects manage their direct and indirect environmental and social impact, the resilience of their projects and the robustness of their ESG governance structures. Material climate and environmental-related financial risk: we will check projects have incorporated the relevant recommendations of the Taskforce on Climate-Related Financial Disclosures (TCFD) and the International Sustainability Standards Board.

^{iv} [Our framework is published here](#)

^v Information provided by the company.

40 attributable to UKIB finance

^v

^{vi} Estimate based on the energy intensity of the hydrogen produced and compared to the emissions of a diesel generator. Based on 600 HPUs over their 10-year lifetime. Emissions from the manufacturing of HPUs have not been considered.

-700,000t CO2e attributable to UKIB finance.