

ZeroAvia deal: factsheet

Deal Information	
Deal signed	November 2023
Sector	Green transport
Location	Kemble and Sandwich
Counterparty	ZeroAvia ⁱ
Total investment	£116m
UKIB finance	GBP equivalent of \$40m
Product	Direct equity



Summary

UKIB has announced a \$40m equity investment to support ZeroAvia, an Anglo-American hydrogen- electric engine developer focussed on delivering zero emission aviation. They are conducting a series C raise to further advance the development and certification of their initial hydrogen fuel cell engines. Hydrogen fuel cells use hydrogen and oxygen to produce electricity through a catalytic chemical reaction. The only byproducts are water and heat, offering a sustainable alternative to conventional engines.

Sector context

Aviation is one of the hardest to decarbonise sectors and a significant contributor to domestic GHG emissions accounting for ~10% in 2021ⁱⁱ. To meet the CCC's balanced net-zero pathway, an emissions reduction of over 35% is required and even then, overall emissions from aviation are still forecast to be net positive in 2050 (23 MtCO₂e/ year offset by GGR technologiesⁱⁱⁱ).

Various technologies will likely need to work in conjunction to decarbonise the sector. Hydrogen and specifically fuel cell technologies are further advanced in terms of weight and

energy density compared to competing battery technologies and will therefore likely play a major role alongside sustainable aviation fuels in decarbonising the sector.

Impact and additionality

The investment has the potential to contribute strongly towards our climate change objective by accelerating the development of hydrogen fuel cell technologies which will support the decarbonisation of the aviation sector. There is potential for this technology to be used in the future for longer-distance flights, which are particularly hard to decarbonise.

It will also bring strong economic benefits to the local region through:

- Creating and supporting 280 near term jobs.
- Creating and supporting an estimated additional 230 jobs in the medium term.
- Contributing to the development of skills in an emerging area of green technology.
- Supporting associated local supply chains.

Based on the reviewed evidence UKIB investment should ensure a successful series C raise, preventing delays and therefore accelerating the realisation of the positive impacts. Involvement also guarantees impact is secured domestically and incentivises the sponsor to establish future strategic facilities in the UK.

ESRG considerations^{iv}

The sponsors' proposed approach and existing ESRG policies were assessed for ESRG risks. ZeroAvia has committed to implementing their ESG framework which includes a robust monitoring and evaluation process. We are confident in the sponsors' ability to proportionately manage ESRG risks going forward.

Impact metrics (all metrics are rounded)	
4	# deals in the green transport sector
£178m	Total investment in sector
£50m	Private finance mobilised
280	Jobs (created and supported) ^v
-2.7Mt	Emissions (CO ₂ e) ^{vi}
1,100	Number of powertrains developed

ⁱ Hangar C2 Cotswold Airport, Kemble, Cirencester, England, GL7 6BA.

ⁱⁱ [The-Sixth-Carbon-Budget-The-UKs-path-to-Net-Zero \(11\).pdf](#)

iii [The-Sixth-Carbon-Budget-The-UKs-path-to-Net-Zero \(11\).pdf](#)

iv 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.

v Jobs are the expected total created by the overall funding round and are not attributable to UKIB's share of finance given the stage of development of the project. This figure only includes the jobs created near term, directly with the company.

vi Emissions figure is the estimated total avoided emissions and does not include emissions from manufacturing. The figure is not attributable to UKIB's share of finance given the stage of development of the project.