

# HydrogenOne Capital Growth plc Q1 2023 Investor Update



**UKSIF**  
UK Sustainable Investment  
and Finance Association

Signatory of:



*Investing in clean hydrogen  
for a climate-positive impact*

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The return target stated herein is a target only and not a profit forecast, based on estimates and assumptions that are inherently subject to significant uncertainties and contingencies. Target returns (if any) are based on the market conditions and the economic environment at the time of assessing the targeted returns. There can be no assurance that any target will be met and they should not be taken as an indication of the Company's expected future results. The Company's actual returns depend upon a number of factors, including but not limited to currency exchange rates, the Company's net income and level of ongoing charges. Accordingly, potential investors should not place any reliance on any target in deciding whether or not to invest in the Company and should decide for themselves whether or not any target NAV total return is reasonable or achievable.

Investors should note that no contractually binding obligations for the sale and purchase of any pipeline assets other than those announced by the Company have been entered into by or on behalf of the Company. There can be no assurance that any of the pipeline assets will remain available for purchase or, if available, at what price (if a price can be agreed at all).

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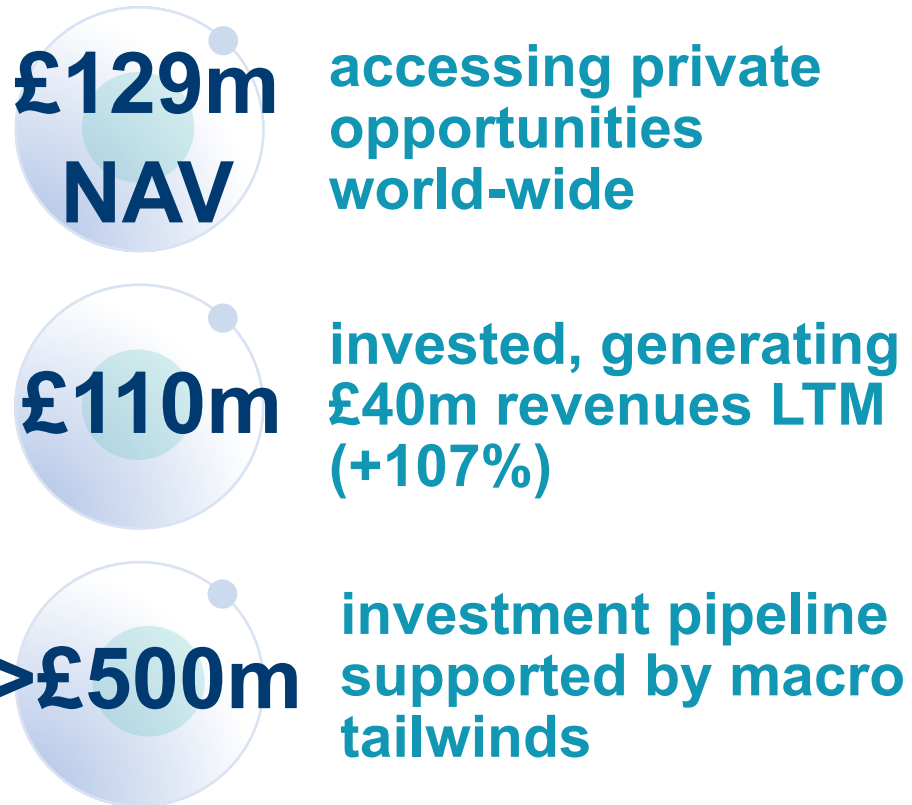
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In addition, the securities in the Company will only be offered to the extent that the Company: (i) is permitted to be marketed into the United Kingdom or a relevant EEA jurisdiction pursuant to the EU Directive on Alternative Investment Fund Managers (if and as implemented into local law); or (ii) can otherwise be lawfully offered or sold (including on the basis of an unsolicited request from a professional investor).

The securities in the Company have not been nor will be registered under the U.S. Securities Act of 1933, as amended (the "**U.S. Securities Act**") or with any securities regulatory authority of any state or other jurisdiction of the United States and such securities may not be offered, sold, exercised, resold, transferred or delivered, directly or indirectly, within the United States or to, or for the account or benefit of, U.S. Persons (as defined in Regulation S under the U.S. Securities Act), except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the U.S. Securities Act and in compliance with any applicable securities laws of any state or other jurisdiction in the United States. The Company has not been and will not be registered under the U.S. Investment Company Act of 1940, as amended (the "**U.S. Investment Company Act**") and investors will not be entitled to the benefits of the U.S. Investment Company Act.

This document has not been approved (for the purposes of section 21 of the Financial Services and Markets Act 2000, as amended ("**FSMA**").

## Investing in clean hydrogen for a climate-positive impact; SFDR Article 9 fund



**INEOS Energy** Strategic investor

### Clean hydrogen is a >US\$2tn global opportunity

- Replace polluting ‘grey’ hydrogen feedstock in chemicals, fertilizer and refining
- Replace polluting fossil fuels in transport and power sectors

### HydrogenOne’s strategy


- Specialist investor in diversified hydrogen assets world-wide
- Deploy capital in supply chains and hydrogen production
- Generate returns through IPO or trade sale of invested positions
- Invest for ‘avoided GHG emissions’


# Strong macro tailwinds underpin hydrogen investment case


## Structural drivers of the hydrogen economy...




## ...step change in policies

**\$8bn**   
'hydrogen hubs' + material hydrogen tax credit in Inflation Reduction Act

**>300GW**   
REPowerEU 2030 hydrogen target increased from 80GW

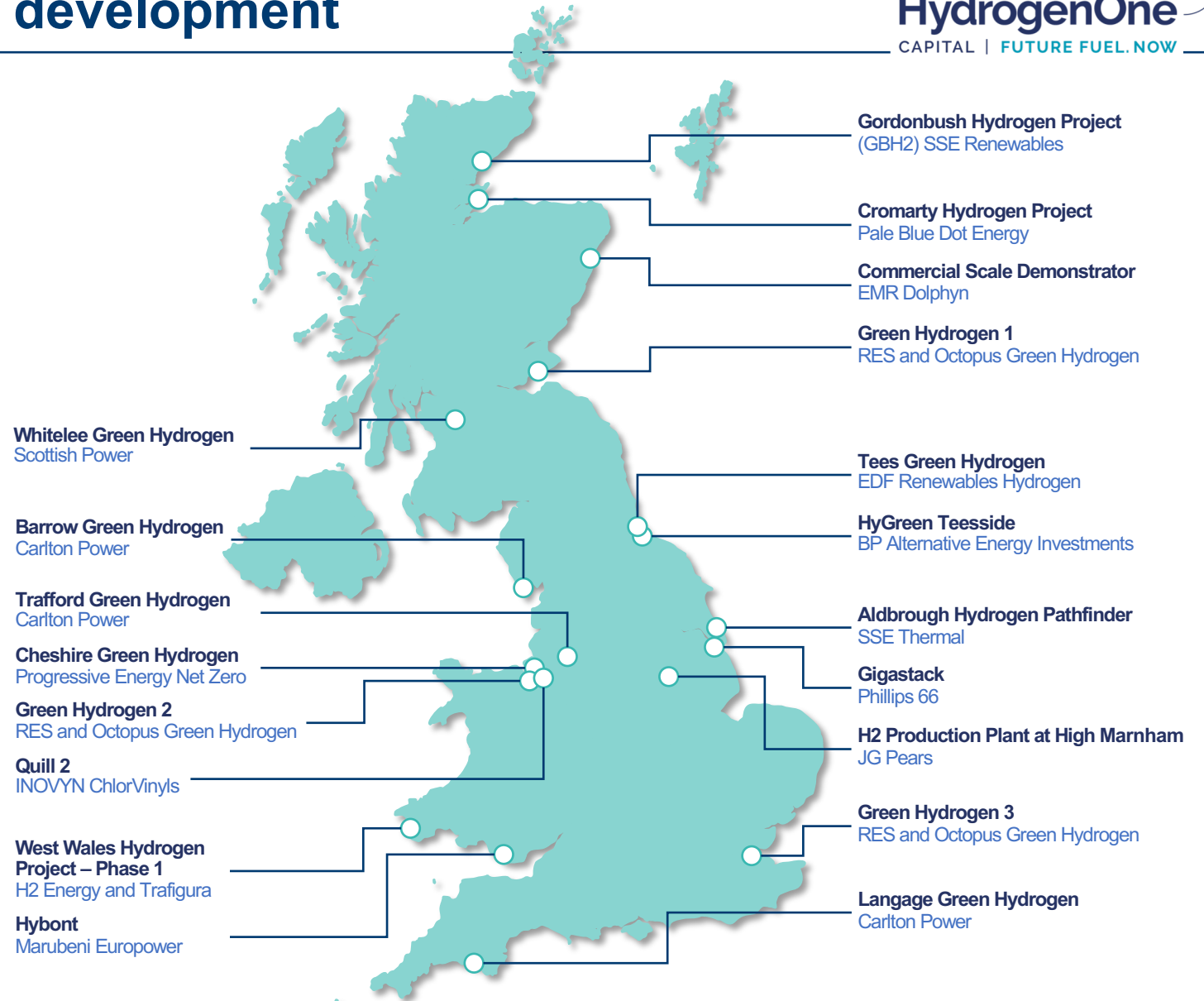
**10GW**   
UK 2030 hydrogen target doubled

**3mtpa**   
Japan 2030 hydrogen target

# Update: UK green hydrogen development

## UK hydrogen sector is gathering pace

- 10GW clean hydrogen 2030; >50% green. Target has been doubled since Russia invaded Ukraine
- 20 green hydrogen projects (250MW) shortlisted for end 2023 funding decision
- Policy decision on hydrogen gas grid blending end 2023
- £240m Net Zero Hydrogen Fund + UK Infrastructure Bank £18bn capital pool
- Potential for 35% of UK energy consumption from hydrogen by 2050



Source: <https://www.gov.uk/government/publications/hydrogen-net-zero-investment-roadmap>

# Q1 2023 financial highlights

	31 March 2023	31 Dec 2022	% change 1,2	31 March 2022	% change 2,3
NAV per share	100.00p	97.31p	2.8%	96.8p	3.3%
NAV	£128.8m	£125.3m	2.8%	£104.0m	23.8%
Market Cap	£72.7m	£102.2m	(28.9%)	£128.3m	(43.3%)
Share price premium / (discount) to NAV <sup>2</sup>	(43.6%)	(18.5)%	(135.6%)	12.4%	n/a
Portfolio valuation	£117.4m	£106.8m	10.0%	£69.9m	68.1%
Portfolio fair value gain / (loss) on cost	£11.0m	£5.6m	95.2%	£0.7m	n/a
Other net assets (incl cash)	£11.4m	£18.5m	(-38.6%)	£34.1m	(66.6%)

As at 31 March 2023 (unaudited)

1 Total returns for three months to 31 March 2023

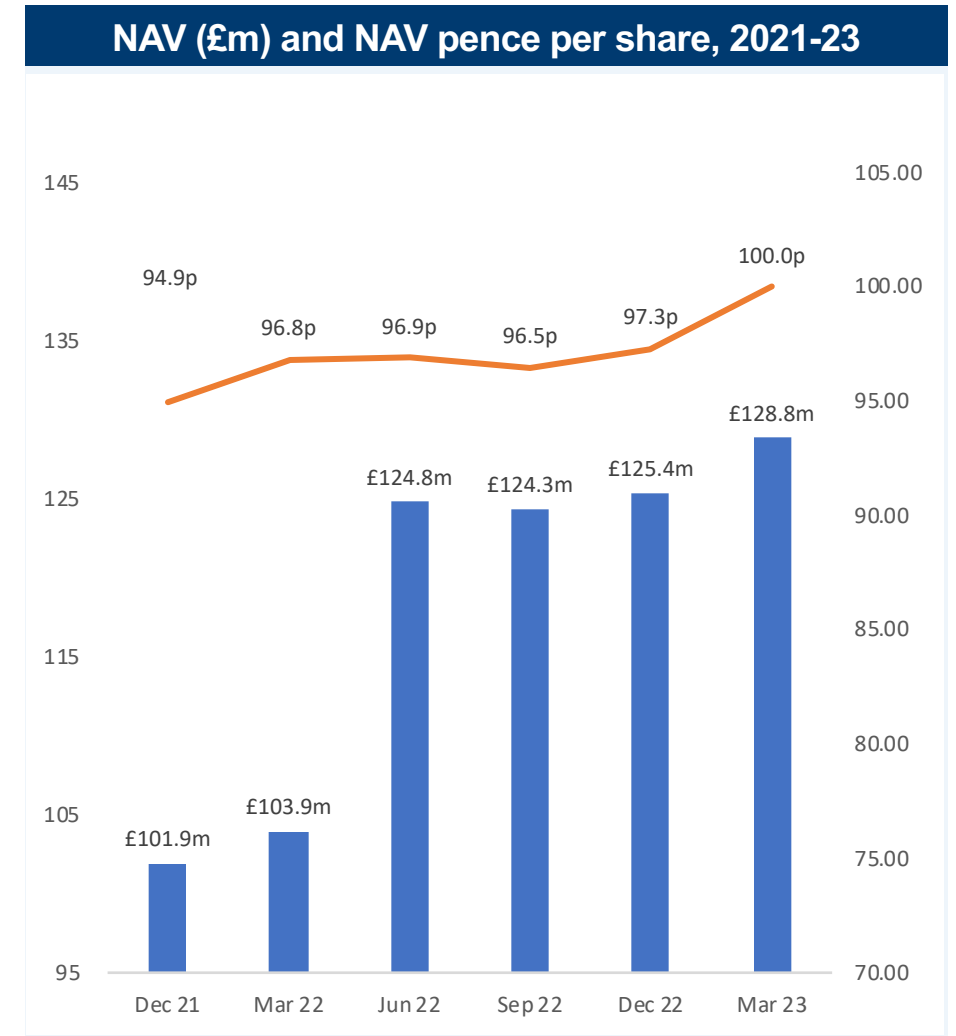
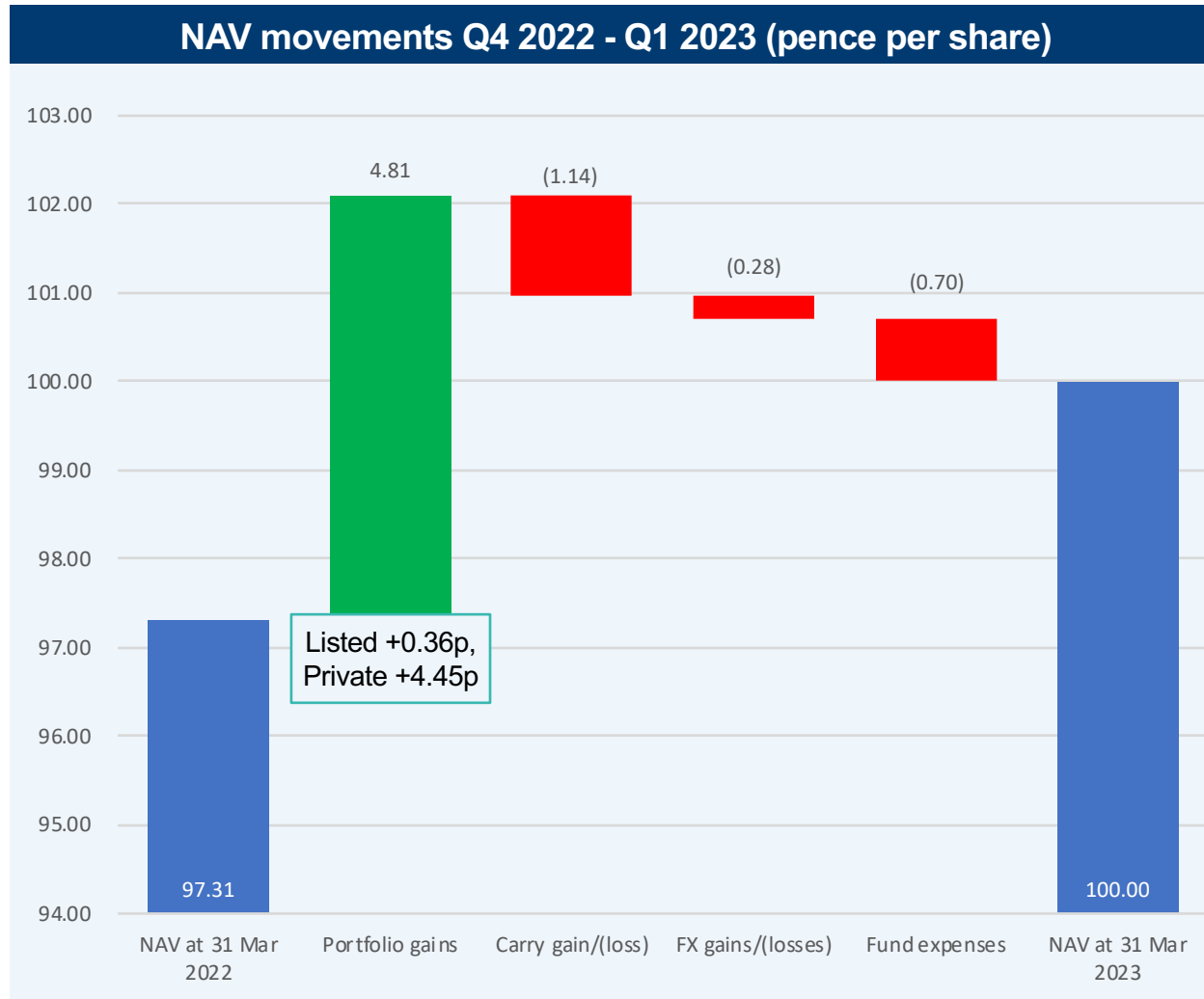
2 These are alternative performance measures

3 Total returns for twelve months to 31 March 2023

## Q1 2023 financial highlights

- NAV per share 100.00p, +3.3% Q1 22 - Q1 23 and +2.8% Q4 22 - Q1 23
- £5.4m investment, including three follow-on investments
- First green hydrogen project investment in Thierbach, Germany
- Cash and cash equivalents of £12.5m, and £3.8m of listed hydrogen companies at the end of the quarter

# Growing our NAV and NAV/share in Q1 2023



- Increased NAV in multiple assets, partly offset by fund costs

- Steady progression in NAV/share

# Share price development and valuation

HydrogenOne NAV/share vs listed hydrogen shares (SOLGHYD)



Cumulative performance (%)

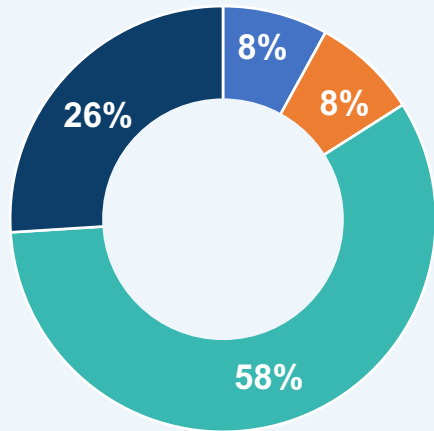
	3 months	9 months	12 months	Since Jul '21 IPO
HGEN NAV growth	2.8%	3.3%	3.3%	2.0%
HGEN share price	-28.9%	-39.5%	-48.2%	-43.6%

- Listed hydrogen company valuations have decreased in 2022-23, whereas HGEN NAV has been steady, reflecting our consistent valuation methodology



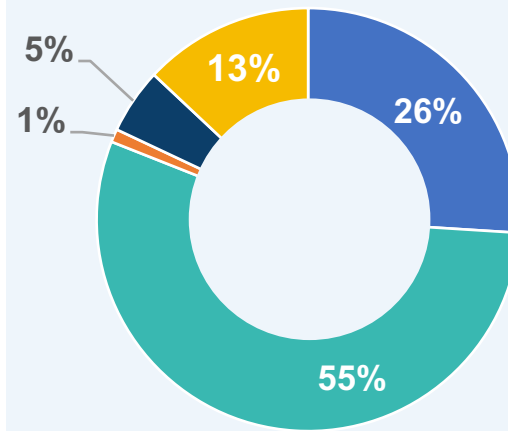
# Distinctive and unique hydrogen portfolio

Portfolio segmentation by theme



- Hydrogen production
- Hydrogen applications
- Supply chain
- Storage and distribution

Portfolio segmentation by geography



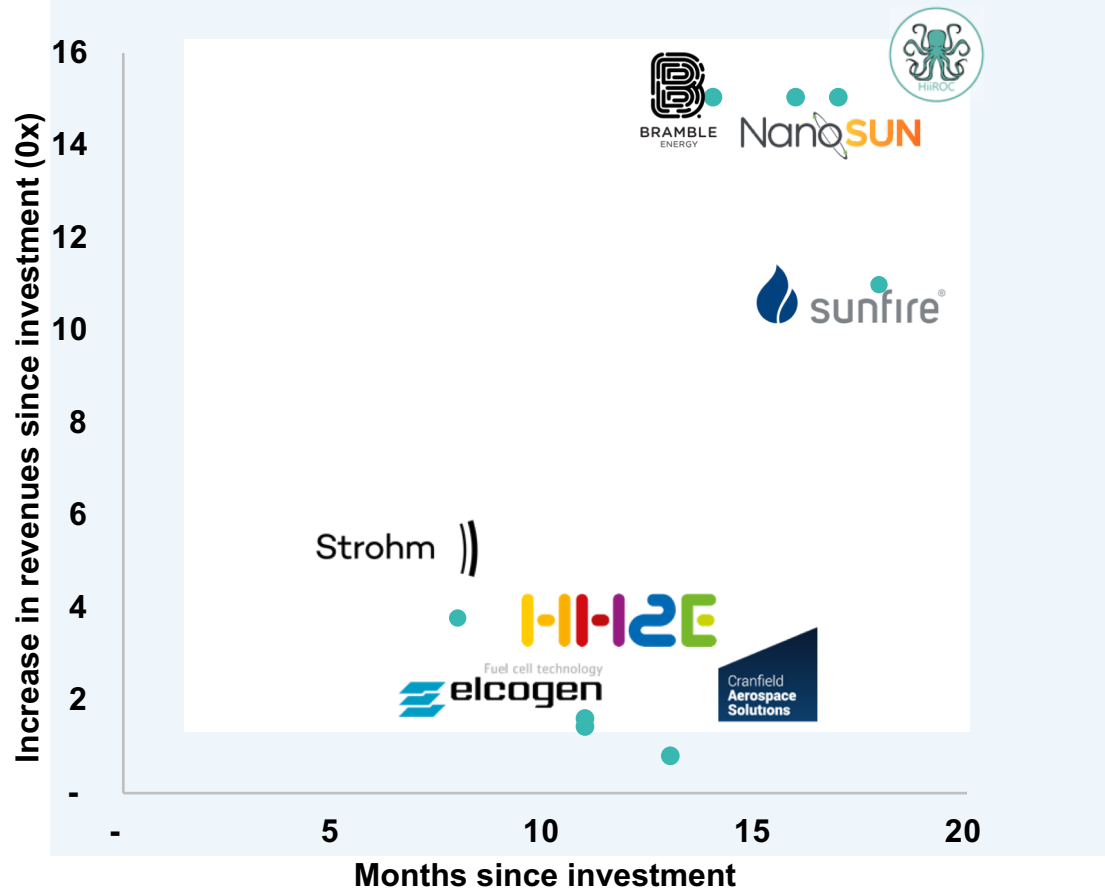
- Germany
- UK
- Other
- Scandinavia
- Netherlands

Fund holdings (as of 31 March 23)

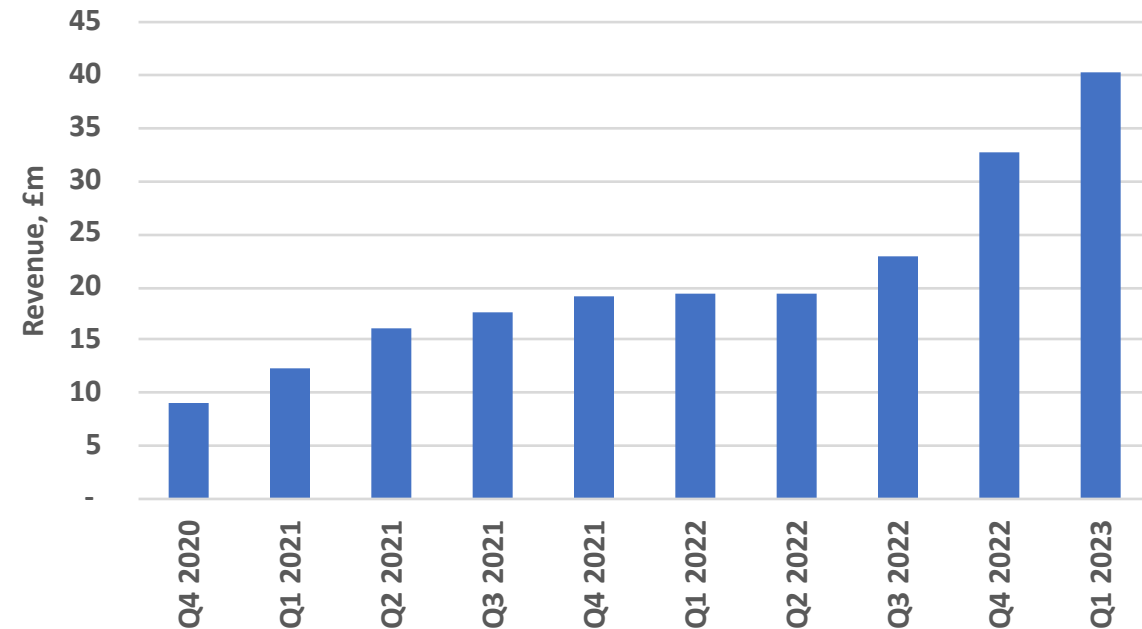
Private portfolio	NAV £m	NAV %
Sunfire GmbH	24	19%
Elcogen Plc	21	16%
Strohm Holding B.V.	15	12%
NanoSUN Limited	14	11%
HiiROC Ltd	13	10%
Cranfield Aerospace Solutions	9	7%
Bramble Energy Limited	8	7%
HH2E AG	5	4%
Gen2 Energy	4	3%
HH2E Thierbach Project	1	1%
<b>Private portfolio</b>	<b>114</b>	<b>88%</b>
<b>Listed portfolio</b>	<b>4</b>	<b>3%</b>
<b>Total investments</b>	<b>118</b>	<b>91%</b>
Net current assets (Inc cash)	11	9%
<b>Net Asset Value</b>	<b>129</b>	<b>100%</b>

# The portfolio is revenue generating and has produced consistent growth

## Growth in private portfolio revenues since investment




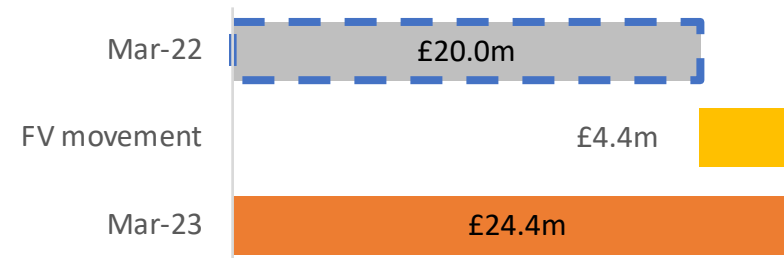
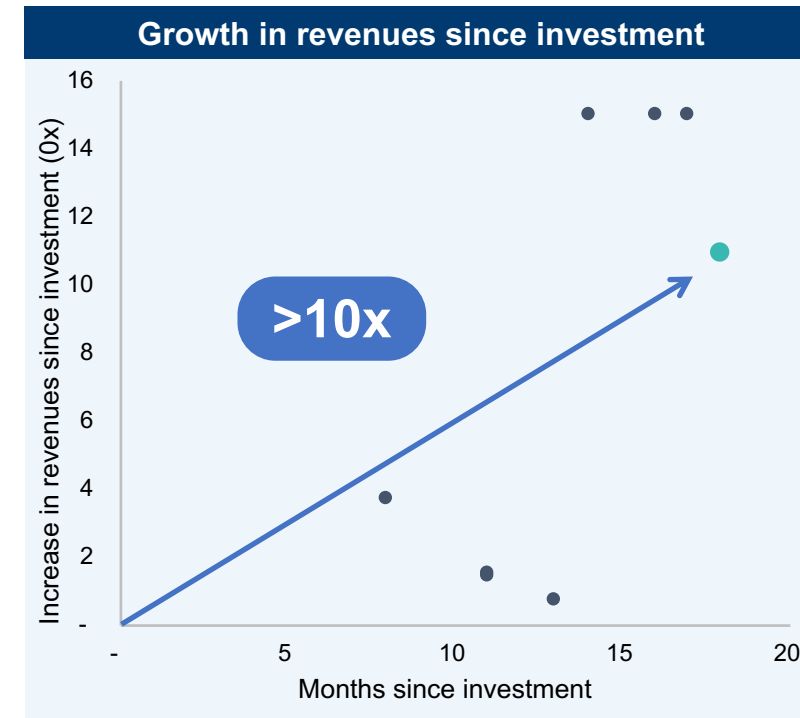
## Private portfolio revenue (100% basis), £m - Trailing 12 months



- Private investments represent 97% of the invested portfolio by value
- The aggregate revenue from these investments was c. £40m for 12m to Q1 2023, an increase of 107% from 12m to Q1 2022 on a pro-forma basis

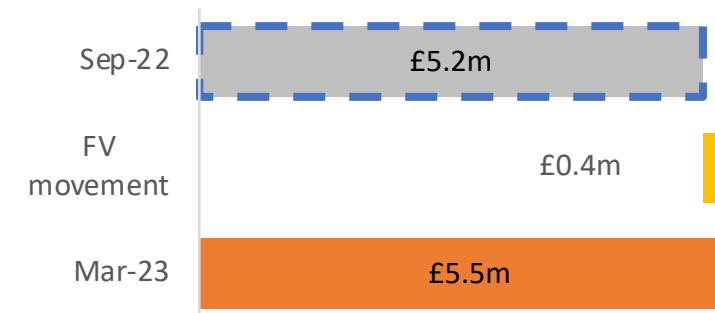
# Sunfire GmbH investment (Supply chain)

<b>Description</b>	 <p>German industrial electrolyser producer, of pressure alkaline (AEL) and solid oxide electrolysers (SOEC)</p> <p><a href="http://www.sunfire.de">www.sunfire.de</a></p>
<b>Investment size / date / % of NAV</b>	<ul style="list-style-type: none"> <li>£22m / Oct 21 &amp; Jan 23 / 19% of NAV</li> </ul>
<b>Co-investors</b>	<ul style="list-style-type: none"> <li>Planet First Partners, Lightrock, SMS, Neste, CIP, Carbon Direct Capital Management, Blue Earth Capital, Amazon</li> </ul>
<b>Why we invested</b>	<ul style="list-style-type: none"> <li>Industry-leading electrolyser manufacturer</li> <li>Revenues from a growing global customer base</li> <li>Strong product credentials with top in-house engineering and product design</li> <li>500MW / annum electrolyser production at three sites in EU</li> </ul>
<b>Total Addressable Market</b>	<ul style="list-style-type: none"> <li>&gt;£40bn (by 2030)</li> </ul>
<b>Recent developments</b>	<ul style="list-style-type: none"> <li>Delivered a 250kw solid oxide electrolyser to RWE – world’s largest to date</li> <li>Manufacturing JV agreed with Vitesco</li> <li>Launched a new factory in Solingen – 500MW alkaline capacity</li> </ul>
<b>Key milestones</b>	<ul style="list-style-type: none"> <li>Building up alkaline capacity to &gt;GW scale to match order book</li> <li>Conversion of strong revenue growth to EBITDA to underpin exit for investors</li> </ul>



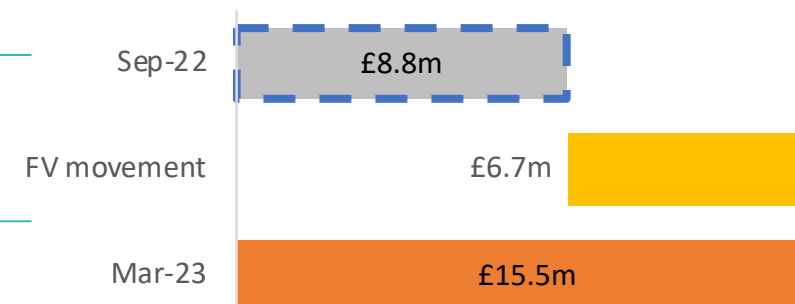
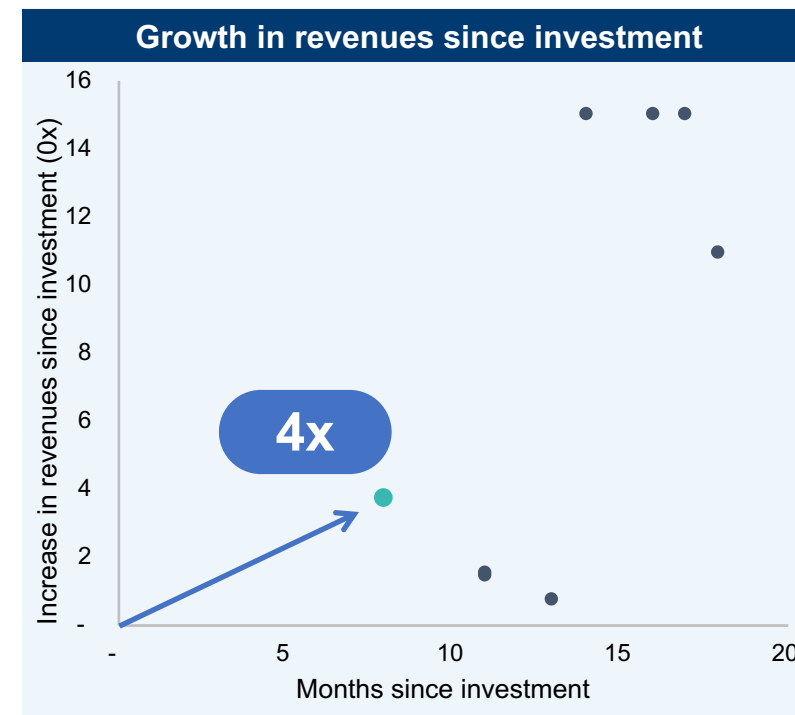
# HH2E & Thierbach investments (Hydrogen Production)

<p><b>Description</b></p>  <p><a href="http://www.hh2e.de">www.hh2e.de</a></p>	<p>German green hydrogen project developer with a focus on industrial customers. Operator of the Thierbach green hydrogen development project, in which HGEN has a direct investment.</p>
<p><b>Investment size / date / % of NAV</b></p>	<ul style="list-style-type: none"> <li>• HH2E: £5m / May 22 / 4% of NAV</li> <li>• Thierbach project (invested to date): £1m / Jan 23</li> </ul>
<p><b>Co-investors</b></p>	<ul style="list-style-type: none"> <li>• Foresight Group LLP</li> </ul>
<p><b>Why invested</b></p>	<ul style="list-style-type: none"> <li>• A prominent leader in Germany focused on green hydrogen and battery storage project development</li> <li>• Assessing 5 new projects for Final Investment Decision (“FID”)</li> <li>• Provides HGEN with investment rights in multiple large-scale industrial decarbonization projects, with first project investment completed (Thierbach)</li> </ul>
<p><b>Total Addressable Market</b></p>	<ul style="list-style-type: none"> <li>• &gt;£100bn (based on German government forecasts for green hydrogen demand by 2045)</li> </ul>
<p><b>Recent developments</b></p>	<ul style="list-style-type: none"> <li>• EUR 13m spend (HGEN EUR 2.8m) on Front End Engineering and Design (FEED), land purchase, key equipment (<i>Thierbach</i>)</li> <li>• Purchase agreement for 120MW electrolyzers from NEL ASA</li> </ul>
<p><b>Key milestones</b></p>	<ul style="list-style-type: none"> <li>• FID – 2023 (<i>Thierbach and Lubmin</i>), subject to funding</li> <li>• Phase 1 (100MW): c.6,000Htpa ~ 60,000tpa avoided GHGs (<i>Thierbach</i>)</li> </ul>



# Strohm Holding B.V. investment (Storage & Distribution)

<b>Company description</b>	<p><b>Strohm</b> ))</p> <p>www.strohm.eu</p> <p><b>Netherlands-based hydrogen pipeline company</b></p>
<b>Investment size / date / % of NAV</b>	<ul style="list-style-type: none"> <li>£10m / Aug 22 &amp; Dec 22 / 12% of NAV</li> </ul>
<b>Co-investors</b>	<ul style="list-style-type: none"> <li>Shell Ventures, Chevron Technology Ventures, Evonik Venture Capital, ING</li> </ul>
<b>Why invested</b>	<ul style="list-style-type: none"> <li>Industry leaders in offshore hydrogen and CO2 pipelines, where HGEN sees significant market growth</li> <li>Thermoplastic Composite Pipe (“TCP”) has c.50% less greenhouse gas emissions than metal. Can transfer up to nine times the amount of hydrogen energy compared to a cable.</li> <li>TCP’s flexibility, lack of corrosion, fatigue and embrittlement make it the superior pipeline solution for offshore wind farms, generating hydrogen</li> </ul>
<b>Total Addressable Market</b>	<ul style="list-style-type: none"> <li>c. £700m (2030) to &gt;£1.7b (2040)</li> </ul>
<b>Recent developments</b>	<ul style="list-style-type: none"> <li>Completed a €29m investment round including ING</li> <li>TCP pipeline contract in Guyana</li> <li>Netherlands plant expansion completed: 140km/year capacity</li> </ul>
<b>Key milestones</b>	<ul style="list-style-type: none"> <li>Grow revenues from energy transition including hydrogen to over 50% by 2025</li> </ul>



Includes £1.1m further investment in Q4 2022

# Merger of Cranfield Aerospace and Britten-Norman



## Cranfield Aerospace

- Technology leader in delivering hydrogen powered turboprop flight “Project Fresson”
- Aerospace market leader in the design and manufacture of new aircraft concepts

## Britten-Norman

- Leading sub-regional aircraft manufacturer
- Type Certificate Holder of Islander aircraft
- 400+ aircraft in service in 60 countries

- Merger to create the world’s first fully integrated, zero-emissions aircraft, for entry into service in 2026
- Accelerates and de-risks the commercialisation of Cranfield’s hydrogen flight technology
- TAM £1.4bn 2030
- Backed by HGEN, Safran, SDF c. £10m new investment
- DD underway ahead of binding SPA



## Identifying the best investment opportunities

Strong management teams

Revenue-generating equipment suppliers

Distinctive project developers

Avoided GHG potential

10-15% target return incl. exits<sup>1</sup>



Specialist team

Active stewardship

Grow EBITDA and exit

>£500m pipeline

## Clear strategy to grow NAV

(1) For an investor in HGEN at IPO, the total NAV return target is a target only and not a profit forecast. There can be no assurance that this target will be met, or that the Investment Trust will make any distributions or returns at all and it should not be taken as an indication of the Investment Trust's expected future results. The Investment Trust's actual returns will depend upon a number of factors, including but not limited to the size of the Investment Trust, currency exchange rates, the Investment Trust's net income and level of ongoing charges. Accordingly, potential investors should not place any reliance on this target in deciding whether or not to invest in the Investment Trust and should decide for themselves whether or not the target total NAV return is reasonable or achievable. The illustrative returns has been calculated on the basis of various assumptions and inputs. There can be no assurance that these assumptions and/or inputs will be correct or that the associated potential revenues and returns will be generated.

# Fund holdings

	As at 31 March 2023		As at 31 Dec 2022	
	NAV £m	NAV %	NAV £m	NAV %
<b>Private portfolio</b>				
Sunfire GmbH	24	19%	22	17%
Elcogen Plc	21	16%	20	16%
Strohm Holding B.V.	15	12%	12	9%
NanoSUN Limited	14	10%	11	9%
HiiROC Ltd	13	10%	13	10%
Cranfield Aerospace Solutions	9	7%	8	5%
Bramble Energy Limited	8	6%	10	8%
HH2E AG	5	4%	5	4%
Gen2 Energy	4	3%	3	3%
HH2E Thierbach Project	1	1%	-	-
<b>Private portfolio</b>	<b>114</b>	<b>88%</b>	<b>104</b>	<b>83%</b>
<b>Listed portfolio</b>	<b>4</b>	<b>3%</b>	<b>4</b>	<b>3%</b>
<b>Total investments</b>	<b>118</b>	<b>91%</b>	<b>108</b>	<b>86%</b>
Cash and other assets	11	9%	17	14%
<b>Net Asset Value</b>	<b>129</b>	<b>100%</b>	<b>125</b>	<b>100%</b>



## Contact us

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