

# HydrogenOne Capital Growth plc

ANNUAL REPORT & ACCOUNTS 2022

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# Company Overview

## About us

HydrogenOne Capital Growth Plc ("HGEN", "the Company") is the first London-listed fund investing in clean hydrogen for a positive environmental impact.

The Company was launched in 2021 with an investment objective to deliver an attractive level of capital growth by investing, directly or indirectly, in a diversified portfolio of hydrogen and complementary hydrogen focussed assets whilst integrating core ESG principles into its decision making and ownership process. The Company is an Article 9 climate impact fund under the Sustainable Finance Disclosure Regulation (the "SFDR").

- A unique offering to investors - leadership in a new green energy technology sector from the first London-listed hydrogen fund.
- Strong orientation to ESG mandates, investing capital in low-carbon growth and enabling the avoidance of GHG emissions.
- Significant pipeline of >£500m of potential investments to deliver 10-15% average NAV growth\*.
- First mover advantage in the Hydrogen sector, which is accelerating faster than anticipated with positive growth outlook.
- Investment Adviser's track record in energy and capital markets.

## >£100m



Deployed in low-carbon growth for avoided GHG

## 125.4m



Net Asset Value

## SFDR Article 9



Climate impact fund

## >42,000 tonnes



CO2e emissions avoided in FY2022

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



\*For an investor in HGEN at IPO. The total NAV return target is a target only and not a profit forecast

# Highlights

## Financial and operational

- During the year, the Company successfully completed investments in six Private Hydrogen Assets, offering diversified exposure to the entire clean hydrogen value chain and deployed £54 million;
- At 31 December 2022, £102.9 million has been deployed since IPO in 2021;
- HGEN's portfolio has continued to perform in line with the expectations of the Board and the Investment Adviser.
- NAV increased by 22% from £102.8m as of 31 December 2021 to £125.4 million as of 31 December 2022, with NAV per share increasing by 1.6% to 97.31p during the same year;
- Revenue generated by Private Hydrogen Assets during the year of £33 million;
- Despite challenging market conditions, HGEN raised net £21 million of additional capital from both existing and new investors in April 2022;
- The Company has retained a cash position of £18 million as at 31 December 2022; and
- The Company also completed its first £2 million investment in a private hydrogen project (Thierbach project in Germany), post year end.

## Key statistics as at 31 December 2022

	At 31 December 2022	31 December 2021	% change
NAV per Ordinary Share	97.31p	95.75p	1.6%
NAV <sup>2</sup>	£125.4m	£102.8m	21.9%
Ordinary Share price	79.3p	119.5p	(33.6)%
Market capitalisation <sup>2</sup>	£102.2m	£128.3m	(20.3)%
Share price premium/(discount) to NAV <sup>1</sup>	(18.5)%	24.8%	(43.3)%
Ongoing Charges <sup>1</sup>	2.51%	2.06%	26.7%
Cumulative capital deployed in low-carbon growth since inception	£102.9m	£48.6m	111.7%
GHG emissions avoided	42,716 tCO <sub>2</sub> e	N/A	N/A
The EU taxonomy alignment	89%	N/A	N/A

<sup>1</sup> Alternative Performance Measures ("APMs"). The disclosures above are considered to represent the Company's APMs. Definitions of these APMs and other performance measures used by the Company, together with how these measures have been calculated, can be found on page 114.

<sup>2</sup> Includes April 2022 fundraise proceeds of £20.9 million net of costs

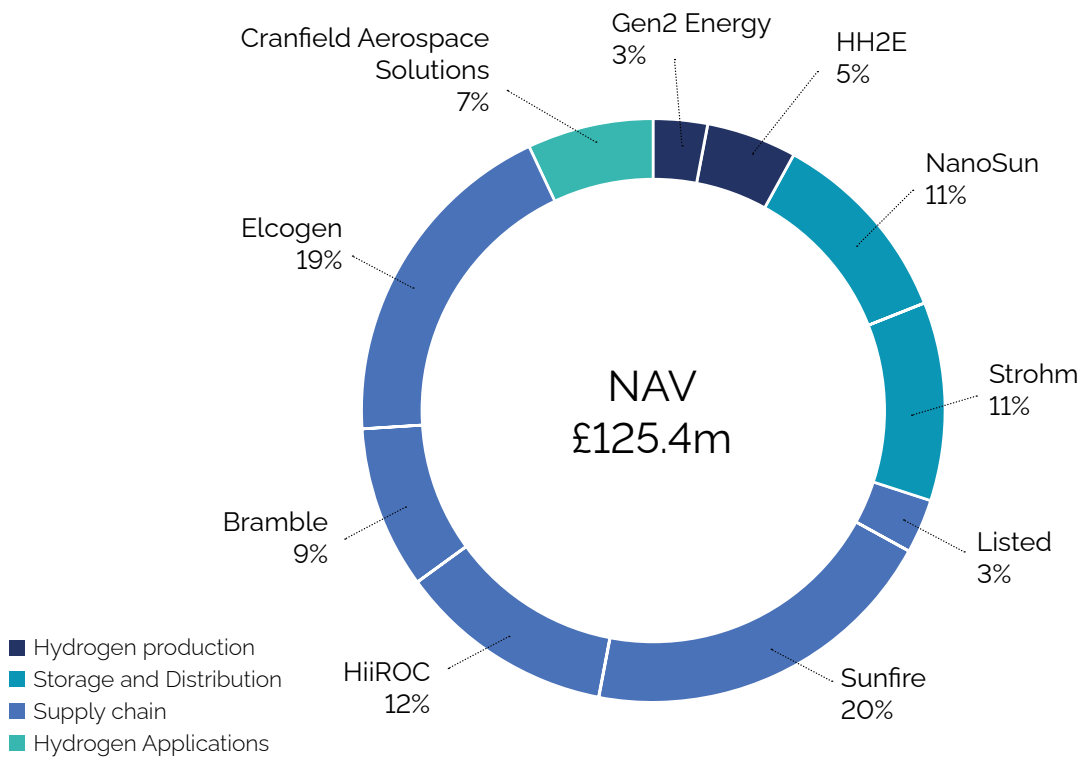
## Environmental, Social and Governance ("ESG")



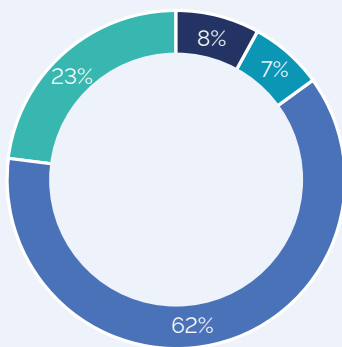
- Classified as an Article 9 Fund under the SFDR;
- Completed EU taxonomy for sustainable activities (the "EU Taxonomy") assessment on Private Hydrogen Assets – 89% alignment at 31 December 2022;
- Published the first reporting of the Company's performance in accordance with the SFDR and the draft International Sustainability Standards Board (the "ISSB") frameworks, and avoided GHG emissions disclosure;
- £102.9m deployed in low-carbon growth;
- 42,716 tonnes of Greenhouse Gas (tCO<sub>2</sub>e) emissions avoided in FY2022 and 50,579 tCO<sub>2</sub>e since IPO;
- Potential 201,000 MWh lifetime clean energy capacity in FY2022 and 226,000 MWh since IPO;
- The Company was carbon neutral in 2022;
- 1,135 jobs supported;
- HGEN's Board independence (100%) and diversity (50% female);
- Became signatory of United Nations Principles for Responsible Investment ("the PRI"); and
- Continued stewardship activity with portfolio companies to further enhance ESG credentials and reporting.

# Portfolio at a Glance

## Portfolio composition (as at 31 Dec 22)

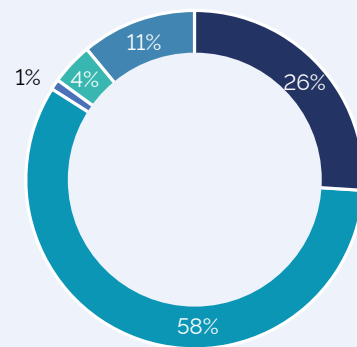


### Portfolio segmentation by theme



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

### Portfolio segmentation by geography



- Germany
- UK
- France
- Scandinavia
- The Netherlands

# Chairman's Statement



**"On behalf of the Board, I am pleased to introduce our second annual report since the Company's listing on the London Stock Exchange in 2021. It has been a very busy period for the Company as we continued with our focus on delivering a diversified portfolio of clean hydrogen investments, which as a result has grown significantly."**

**Simon Hogan** *Chairman*

The last year has been marked by dramatic changes in the macro environment, turbulent markets, the war in Ukraine, and the energy crisis. The energy crisis has resulted in extreme power price volatility, putting pressure on the economy, contributing to inflation and higher interest rates. The global downturn has also affected our planned capital raising during the second half of the year, having completed an equity raise of £21 million in April 2022.

Share prices, including the Company's, have seen considerable pressure over the last year. Listed funds have come under scrutiny from investors regarding the valuation of invested private portfolios. The Company applies a consistent approach to portfolio valuation, centred on discounted cash flows, using the International Private Equity and Venture Capital Valuation 2022 ("IPEV") Guidelines. Share prices in the listed markets are reflected in the valuation of the Company where we own listed assets. The valuation of Company's entire private portfolio is reviewed and approved by the Board on a quarterly basis, and reviewed by the Company's auditor annually. The private portfolio is valued using either the DCF method, or a combination of the DCF method and the price of recent investment. The DCF valuations are also benchmarked against listed peer group valuations in the Company's valuation process. The Company's discount rates are calculated using market parameters for each investment domicile. The portfolio average discount rate for December 2022 was 12.9%, compared to 12.5% in 2021. The resulting private valuation we have set out in this report has an implied forward revenue multiple of 6 times 2024 expected revenues, which is some 40% lower than listed hydrogen sector multiples.

The Board meets quarterly with the Company's Investment Adviser and holds meetings to review all of the Company's investment valuations, four times a year. We also have regular contact with the Investment Adviser outside of formal Board meetings. I and other Board members attended the Company's Capital Markets Day earlier this year, and met some of our investors and analysts, and the management teams of all the private companies that we have invested in. The Investment Adviser has a dedicated investment team, and is represented on all of the boards of the private assets.

The Board and Company is committed to the aim of the Company that seeks to generate NAV returns of 10-15% over time, whilst investing in clean hydrogen for a climate-positive impact.

Our diversified portfolio approach has provided resilience and our investment case has been reinforced further by macro tailwinds and supportive regulatory regimes in the clean hydrogen sector, particularly in the EU and the USA. More than ever before, we remain confident that the Company is investing in a sector with a favourable outlook and a substantial growth potential. Macro events have refocused efforts on the need to reduce global reliance on fossil fuels, with the Company well positioned to continue investing in low-carbon growth, aimed at reducing harmful emissions, improving energy security and driving the energy transition.

## Performance

During the year, six new acquisitions of equity in clean hydrogen companies were completed. Further details of these investments are provided in the Investments Adviser's Report on pages 16 to 36. In early 2023, we made our first investment in a clean hydrogen project, at Thierbach in Germany, being developed by HH2E, one of our investee companies, and should reach final investment decision later this year, subject to funding and further technical studies. We expect this to be the first of a number of hydrogen production projects, where the Company has exclusivity on multiple opportunities in several countries.

At 31 December 2022, the Company's Private Hydrogen Assets comprised nine investments in hydrogen assets in the UK and Europe with an aggregate value of £103.1 million, as well as a small allocation to strategic listed hydrogen companies.

Seven of the Company's private investments, representing 89% of its invested portfolio by value, are revenue-generating, producing equipment and technology solutions for clean hydrogen production. The aggregate revenue from these investments was £33m in the 12-month period to 31 December 2022, an increase of 110% from 31 December 2021.

At 31 December 2022, the NAV per share of the Company was 97.31 pence, representing an increase of 1.56 pence per share (1.6%) in the 12 month period. The increase was driven primarily by valuation uplifts to the Company's portfolio of private investments, positively contributing 6.75 pence per share to the NAV increase.

A number of milestones have been achieved by our Private Hydrogen Assets, as detailed in the Investment Adviser's report, which gives us confidence in future prospects and value creation.



Despite this growth delivery from our Private Hydrogen Assets companies, the Company's share price ended the year on a discount to NAV, in line with the Investment Trust sector, due to generally weak equity market conditions.

## ESG

Our commitment to positively contribute to climate change mitigation, whilst integrating core ESG principles into our decision making and ownership process, is at the core of everything that we do as a company. In just over a year, we have seen the conversation around hydrogen's potential for fuelling the global energy transition move to the top of the climate and political agenda. During 2022, as part of our sustainability commitment, we were classified as an Article 9 Fund, the highest classification under the SFDR regulation. We also became a signatory of the PRI, a United Nations supported network of financial institutions that promote sustainable investments. In collaboration with our portfolio companies, we will push forward with our sustainable investment objectives as we continue to deploy capital in low-carbon growth.

For the first time since launch, we are pleased to be publishing the external reporting of the Company's performance in accordance with the SFDR and draft ISSB frameworks, including EU taxonomy alignment of our portfolio companies and avoided GHG emissions disclosures, which can be found in the ESG section of this Annual Report.

## Board matters

During the year, Abigail Rotheroe joined our Board as a Non-Executive Director, to replace Caroline Cook. Abigail brings a wealth of experience in sustainable and impact investing. Roger Bell, the INEOS Energy appointed director was replaced by David Bucknall, the CEO of INEOS Energy. INEOS Energy remains one of our core shareholders and supporters.

## Annual general meeting

The Annual General Meeting will be held on 23 May 2023 at 11:30am at the Company's registered office, 6th floor, 125 London Wall, London EC2Y 5AS, and we look forward to welcoming shareholders to the event in person.

The meeting will consider the formal business of the AGM, as set out in the Notice of the AGM, and thereafter the Investment Adviser will provide a presentation on the Company's portfolio.

## Events after the reporting period

Since the end of 2022, the Company has invested a further £7 million in Private Hydrogen Assets. This includes £14 million into Cranfield Aerospace Solutions Ltd, a pioneer in hydrogen-powered passenger flight, marking the final tranche of the £7 million investment by the Company, as previously announced. HH2E AG, a German green hydrogen project developer, announced its second major green hydrogen production project at Theirbach, in Germany. HydrogenOne committed to invest £2.5 million (EUR 2.8 million) into further maturing this project, ahead of final investment decision, alongside other institutional investors and HH2E.

The Board continue to monitor wider market events as they relate to the Company, including the share price volatility in the market price of its shares and the discount to NAV at which the shares have traded through 2023. The Board is not aware of company-specific factors that have led to the

recent decline in the Company's share price and believes this is primarily driven by wider market events including the sudden, material rise in interest rates and an unfavourable macroeconomic backdrop.

The Investment Adviser has an attractive pipeline of potential investment opportunities under review, including exclusive opportunities to acquire minority interests in hydrogen supply projects in Germany and Norway. As stated in the Prospectus published by the Company on 26 September 2022, no ordinary shares will be issued at a price less than the NAV per share at the time of their issue. At 31 March 2023 the market price per ordinary share in the Company was 47.23 pence, representing a discount of 51.5% to the NAV per share as at 31 December 2022 of 97.31 pence. Accordingly, the Company is currently unable to raise additional equity capital through the issuance of new ordinary shares, thereby limiting its ability to make additional investments. The Board and the Investment Adviser are exploring options to address the current share price discount to NAV, as well as potential alternatives that would enable the Company to finance additional investments and further diversify the Company's portfolio.

## Outlook

Despite uncertainty caused by war in Ukraine and the energy crisis, our investment case has become more attractive as governments around the world advanced efforts to achieve energy security and reach net-zero commitments. Strong macro tailwinds continue to drive the hydrogen sector, with 6GW of green hydrogen under development globally, a four times increase in 2030 hydrogen targets in the EU and ground-breaking funding and tax credits in the United States. Our investment strategy is fully aligned with these goals.

We have assembled a differentiated portfolio of the world's leading clean hydrogen companies, spanning project developers, electrolyser, fuel cell, transport and distribution, and applications such as clean flight. Climate change mitigation remains at the core of our sustainability objective and we hope to continue to grow our impact as we drive investment in low carbon growth and reducing harmful emissions.

Whilst market sentiment towards growth companies is outside of our control, we anticipate the continued solid performance of our portfolio, revenue growth and delivery of key milestones will be catalysts for appreciation in our share price.

All of this underpins our targets to deliver 10-15% annual NAV growth over time, and I believe that our Investment Adviser, whose principals have over 60 years of combined specialist experience and track record, is well placed to deliver on these projected targets.

On behalf of the Board, I would like to thank all of our shareholders for their support, as we continue to grow our unique portfolio of the world's leading clean hydrogen investments, not available for equity investors elsewhere.

**Simon Hogan**  
Chairman

3 April 2023



# Strategic report

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# The role of clean hydrogen in the energy transition

## About Clean Hydrogen

- Clean hydrogen displaces fossil fuels, reducing CO2 emissions and improving air quality
- Some 90 million tonnes per day of hydrogen is used today in manufacturing of oil products, chemicals and steel. The demand pull to replace this polluting 'grey' hydrogen with clean hydrogen underpins the clean hydrogen sector
- Clean hydrogen can replace fossil fuels in hard to decarbonise sectors such as power generation and transport
- Clean hydrogen is an energy carrier, that can store and distribute intermittent renewable electricity at a large scale
- Hydrogen combined with renewables such as wind and solar provides a domestic energy supply option for many countries, reducing reliance on imported energy.

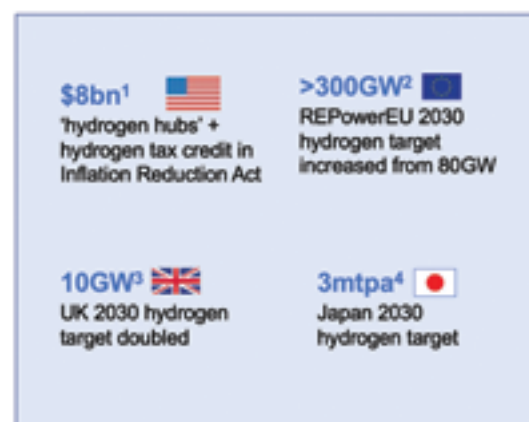
Putting all this together, clean hydrogen demand could increase by over 200 times between 2019 and 2030 as the energy transition gathers pace, abating some 6 billion tonnes/year of CO2 emissions by 2050. With the adoption of legislated Net Zero targets by governments around the world, the focus has shifted to how exactly these targets can be met. Clean hydrogen plays a key role in many corporate and country plans for Energy Transition.

## What is driving the Hydrogen Economy?

### Structural drivers of the hydrogen economy...



### ...step change in policies



<sup>1</sup> Source: US Department of Energy

<sup>2</sup> Source: European Commission

<sup>3</sup> Source: UK Department for Business, Energy and Industrial Strategy

<sup>4</sup> Source: Japanese Government

# The role of clean hydrogen in the energy transition

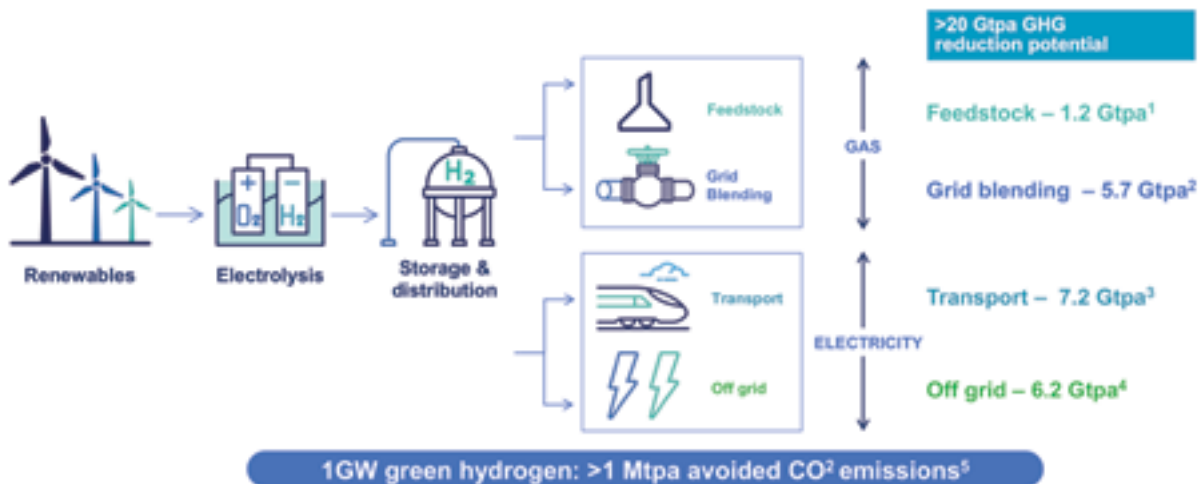
## Decarbonising the energy system

Clean hydrogen is a Net Zero gas and this has been recognised in the plans adopted to date by the EU, USA, India and over 39 countries – all of which have committed to the use of clean hydrogen to decarbonise industry and to improve air quality. They have backed this commitment with multi-billion dollar funding to kick-start the process. Other countries are expected to follow suit.

This means that markets for clean hydrogen, and its production processes, are growing fast and accelerating. The potentially large market to replace hydrogen produced from hydrocarbons in the current hydrogen supply chain is being addressed already by the falling costs of renewable energy and electrolysis as well as by carbon capture and storage pilots.

By 2050, the global hydrogen market could reach \$2.5 trillion, dominated by hydrogen producers, electrolyser and fuel cell manufacturers. Replacing today's c.\$175 billion 'grey' hydrogen market with clean hydrogen could mitigate over 800 million tonnes per annum of greenhouse gas emissions. Some 20 billion tonnes per annum of GHG emissions can be addressed with clean hydrogen over time, which is over one third of all GHG emissions today.

## Hydrogen's key role in avoiding GHG emissions



<sup>1</sup> 2020 estimate. Source: [https://www.pbl.nl/sites/default/files/downloads/pbl-2020-trends-in-global-co2-and-total-greenhouse-gas-emissions-2019-report\\_4068.pdf](https://www.pbl.nl/sites/default/files/downloads/pbl-2020-trends-in-global-co2-and-total-greenhouse-gas-emissions-2019-report_4068.pdf) (4% of 2020 emissions)

<sup>2</sup> As at 2020. 20% reduction of industrial, commercial and residential. Source: <https://www.iea.org/reports/global-energy-review-co2-emissions-in-2021-2>

<sup>3</sup> As at 2020. Of which - aviation 0.9 Gtpa, passenger vehicles 3.6 Gtpa, HGV 2.4 Gtpa, shipping 0.9 Gtpa. Source: <https://www.iea.org/topics/transport>

<sup>4</sup> Using proxy of total installed batteries in 2020 of 17 GW. Assuming 4hrs charge/day, gives 6.2 Gtpa (at 69.3kt/TJ CO<sub>2</sub>e rate for motor oil). Source: <https://www.iea.org/reports/energy-storage>

<sup>5</sup> Using LHV 33.3kWh/kg. 1.26Mtpa avoided per 1GW

# Investment objective, policy, process and strategy

## Investment objective

The Company's investment objective is to deliver an attractive level of capital growth by investing, directly or indirectly, in a diversified portfolio of hydrogen and complementary hydrogen focussed assets whilst integrating core ESG principles into its decision making and ownership process.

## Investment policy

The Company will seek to achieve its investment objective through investment in a diversified portfolio of hydrogen and complementary hydrogen focussed assets, with an expected focus in developed markets in Europe, North America, the GCC and Asia Pacific, comprising:

- i. assets that produce clean hydrogen;
- ii. large scale energy storage assets;
- iii. carbon capture, use and storage assets;
- iv. hydrogen distribution infrastructure assets;
- v. assets involved in hydrogen supply chains, such as electrolyzers and fuel cells; and
- vi. businesses that utilise hydrogen applications such as transport, power generation, feedstock and heat (together "Hydrogen Assets").

The Company intends to implement its investment policy through the acquisition of hydrogen and complementary hydrogen focussed assets.

## Private Hydrogen Assets

The Company invests in unquoted Hydrogen Assets, which may be operational companies or hydrogen projects (completed or under construction) ("Private Hydrogen Assets"). Investments are expected to be mainly in the form of equity, although investments may be made by way of debt and/or convertible securities. The Company may acquire a mix of controlling and non-controlling interests in Private Hydrogen Assets, however the Company intends to invest principally in non-controlling positions (with suitable minority protection rights to, inter alia, ensure that the Private Hydrogen Assets are operated and managed in a manner that is consistent with the Company's investment policy).

Given the time frame required to fully maximise the value of an investment, the Company expects that investments in Private Hydrogen Assets will be held for the medium to long term, although short term disposals of assets cannot be ruled out in exceptional or opportunistic circumstances. The Company intends to re-invest the proceeds of disposals in accordance with the Company's investment policy.

The Company observes the following investment restrictions, assessed at the time of an investment, when making investments in Private Hydrogen Assets:

- no single Private Hydrogen Asset will account for more than 20 per cent. of Gross Asset Value;
- Private Hydrogen Assets located outside developed markets in Europe, North America, the GCC and Asia Pacific will account for no more than 20 per cent. of Gross Asset Value; and
- at the time of an investment, the aggregate value of the Company's investments in Private Hydrogen Assets under contract to any single Offtaker will not exceed 40 per cent. of Gross Asset Value.

The Company will initially acquire Private Hydrogen Assets via HydrogenOne Capital Growth Investments 1 LP (the 'HydrogenOne Partnership'), a wholly owned subsidiary undertaking of the Company structured as an English limited partnership which is controlled by the Company and advised by the Investment Adviser. The HydrogenOne Partnership's investment policy and restrictions are the same as the Company's investment policy and restrictions for Private Hydrogen Assets and cannot be changed without the Company's consent. In due course, the Company may acquire Private Hydrogen Assets directly or by way of holdings in special purpose vehicles or intermediate holding entities (including successor limited partnerships established on substantially the same terms as the HydrogenOne Partnership) or, if the Company is considered a 'feeder fund' under the Listing Rules, other undertakings advised by the Investment Adviser and, in such circumstances, the investment policy and restrictions will also be applied on a look-through basis and such undertaking(s) will also be managed in accordance with the Company's investment policy.

## Listed Hydrogen Assets

The Company also invests in quoted or traded Hydrogen Assets, which will predominantly be equity securities but may also be corporate debt and/or other financial instruments ("Listed Hydrogen Assets"). The Company is free to invest in Listed Hydrogen Assets in any market or country with a market capitalisation (at the time of investment) of at least US\$100 million. The Company's approach is to be a long-term investor and will not ordinarily adopt short-term trading strategies. As the allocation to Private Hydrogen Assets grows the Listed Hydrogen Assets are expected to include strategic equity holdings derived from the listing of operational companies within the Private Hydrogen Assets portfolio over time.

# Investment objective, policy, process and strategy



The Company observes the following investment restrictions, assessed at the time of an investment, when making investments in Listed Hydrogen Assets:

- no single Listed Hydrogen Asset will account for more than 3 per cent. of the Gross Asset Value;
- the portfolio of Listed Hydrogen Assets will typically comprise no fewer than 10 Listed Hydrogen Assets at times when the Company is substantially invested;
- each Listed Hydrogen Asset must derive at least 50 per cent. of revenues from hydrogen and/or related technologies; and
- once fully invested, the target allocation to Listed Hydrogen Assets will be approximately 10 per cent or less of Gross Asset Value, subject to a maximum allocation of 30 per cent of Gross Asset Value.

## Cash

During the initial Private Hydrogen Asset investment period after a capital raise and/or a realisation of a Private Hydrogen Asset, the Company intends to hold the relevant net proceeds of such capital raise/realisation in cash (in accordance with the Company's cash management policy set out below) pending subsequent investment in Private Hydrogen Assets.

## Investment restrictions

The Company, in addition to the investment restrictions set out above, comply with the following investment restrictions when investing in Hydrogen Assets:

- the Company will not conduct any trading activity which is significant in the context of the Company as a whole;
- the Company will, at all times, invest and manage its assets
  - i. in a way which is consistent with its object of spreading investment risk; and
  - ii. in accordance with its published investment policy;
- the Company will not invest in other UK listed closed-ended investment companies; and
- no investments will be made in companies or projects that generate revenues from the extraction or production of fossil fuels (mining, drilling or other such extraction of thermal coal, oil or gas deposits).

Compliance with the above restrictions is measured at the time of investment and non-compliance resulting from changes in the price or value of Hydrogen Assets following investment will not be considered as a breach of the investment policy or restrictions.

## Borrowing policy

The Company may take on debt for general working capital purposes or to finance investments and/or acquisitions, provided that at the time of drawing down (or acquiring) any debt (including limited recourse debt), total debt will not exceed 25 per cent of the prevailing Gross Asset Value at the time of drawing down (or acquiring) such debt. For the avoidance of doubt, in calculating gearing, no account will be taken of any investments in Hydrogen Assets that are made by the Company by way of a debt investment.

Gearing may be employed at the level of a special purpose vehicle ("SPV") or any intermediate subsidiary undertaking of the Company (such as the HydrogenOne Partnership) or, if the Company is considered a 'feeder fund' under the Listing Rules, other undertakings advised by the Investment Adviser in which the Company has invested or the Company itself. The limits on debt shall apply on a consolidated and look-through basis across the Company, the SPV or any such intermediate holding entities (such as the HydrogenOne Partnership) or, if the Company is considered a 'feeder fund' under the Listing Rules, other undertakings advised by the Investment Adviser in which the Company has invested but intra-group debt will not be counted.

Gearing of one or more Hydrogen Assets in which the Company has a non-controlling interest will not count towards these borrowing restrictions. However, in such circumstances, the matter will be brought to the attention of the Board who will determine the appropriate course of action.

## Currency and hedging policy

The Company has the ability to enter into hedging transactions for the purpose of efficient portfolio management. In particular, the Company may engage in currency, inflation, interest rates, energy prices and commodity prices hedging. Any such hedging transactions will not be undertaken for speculative purposes.

## Cash management

The Company may hold cash on deposit and may invest in cash equivalent investments, which may include short-term investments in money market type funds ("Cash and Cash Equivalents").

There is no restriction on the amount of Cash and Cash Equivalents that the Company may hold and there may be times when it is appropriate for the Company to have a significant Cash and Cash Equivalents position. In particular, the Company anticipates holding cash to cover the near-term capital requirements of the Pipeline of Private Hydrogen Assets and in periods of high market volatility. For the avoidance of doubt, the restrictions set out above in relation to investing in UK listed closed-ended investment companies do not apply to money market type funds.

## Investment process

The Company follows a proven and successful process in order to access and execute its distinctive deal flow. The Investment Adviser has specialist insights and strong industry and market networks to access potential investment opportunities. The Company typically invests alongside some of the world's largest industrial corporations and investors. The Investment Adviser's clear investment and ESG policies underpin and guide everything that it does. The Investment Adviser, the Advisory Board, the technical advisors, regulatory and legal counsel all combine to deliver the optimal deal structures for the shareholders.

## Well established investment process and access to deal flow



## Strategy

### A highly differentiated strategy, 100% focussed on clean hydrogen

Clean hydrogen has arrived as a key element of decarbonisation, as governments, companies and society come together to address the climate change underway today caused by human activities, particularly the burning of fossil fuels. The 2015 Paris Agreement set out a pathway for the world to address these challenges, and this, combined with further government commitments on emissions, is driving an energy transition to a low carbon economy. Further momentum at the 2021 COP26 and 2022 COP 27 meetings have added to the imperative for clean hydrogen. The "Breakthrough Agenda", launched at COP26, includes a 'hydrogen breakthrough' goal, which is to ensure affordable low-carbon hydrogen is globally

available by 2030. Hydrogen has a vital role to play in the energy transition, in air quality and in energy security. Recent (2022) EU announcements on energy security ("REPowerEU"), triggered by the Russia-Ukraine war, include plans for a substantially increased role for clean hydrogen – now expected to reach 20 million tonnes per year in 2030, compared to 5.6 million tonnes projected earlier in the 'Fit for 55' plan. The scale of the challenge, and the impetus to move faster, cannot be understated.

The Company strategy is to provide investors with opportunities in clean hydrogen and energy storage for the energy transition, for a positive environmental impact.



# Investment objective, policy, process and strategy

The Company offers distinctive access to private investments, across the full hydrogen value chain, and across the OECD. The investment objective is to deliver an attractive level of capital growth by investing, directly or indirectly, in a diversified portfolio of hydrogen and complementary hydrogen focussed assets whilst, as a SFDR Article 9, PRI and Green Economy Mark company, integrating core ESG principles into our decision making and ownership process.

As the first UK listed investment company specialising in this sector, the Company has a clear competitive advantage as an early mover into a complex sector, and offers its investors a unique window into the private hydrogen asset market. With its emphasis on Private Hydrogen Assets, the Company, offers investors access to a diversified portfolio of private hydrogen companies with strong growth potential, through a listed structure offering daily dealing.

A focus on material ESG factors, and especially the deployment of capital to deliver the energy transition to a low carbon economy, is at the heart of what the Investment Adviser does, running hand in hand with a strategy to deliver the target 10-15% average NAV growth for the investors over time.

The Investment Adviser is a specialist investor in this complex and rapidly-developing growth sector. The Company believes that this specialised approach is a competitive advantage that will only grow over time. Today the Investment Adviser has a pipeline of potential investments in excess of £500 million.

An investment in the Company offers exposure to the broader hydrogen sector whilst, at the same time, diversifying risk for an investor. By targeting a diversified portfolio of investments across different jurisdictions and different technologies, the

Company seeks to spread some of the key underlying risks relating to clean hydrogen.

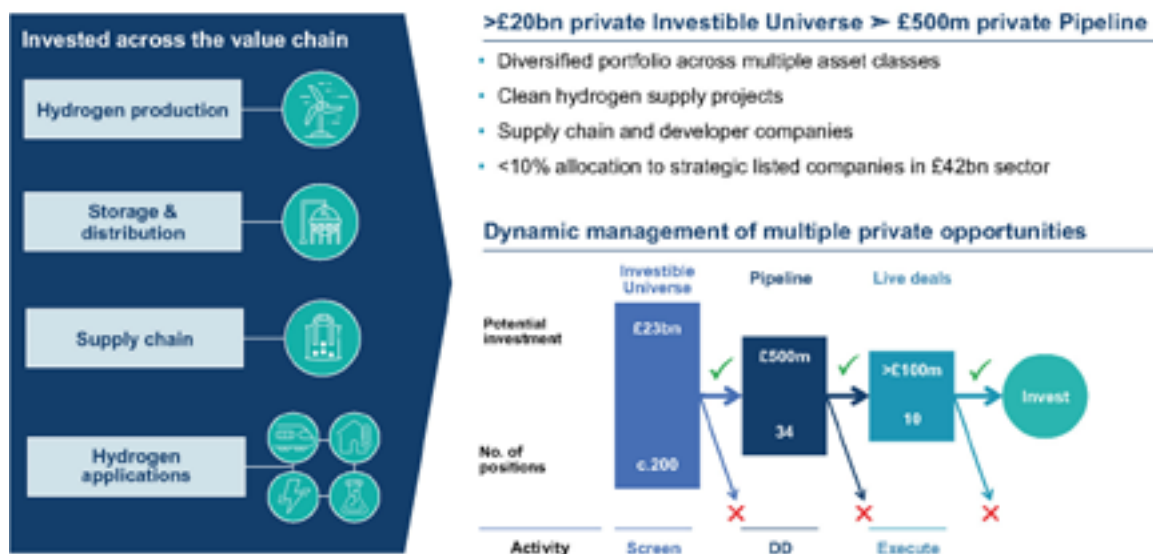
The UK and Europe are currently seeing a high level of political and societal support for Net Zero and the role of hydrogen in delivering that goal. The Company currently intends to focus its investments in these jurisdictions as a priority.

By excluding companies or projects that generate revenues from the extraction or production of fossil fuels (mining, drilling or other such extraction of thermal coal, oil or gas deposits) from the portfolio and taking on further ESG screens, the portfolio is expected to be an early mover to Net Zero in the energy transition, and will not be encumbered by the legacy greenhouse gas emissions inherent in other players in the hydrogen sector.

The Investment Adviser expects the hydrogen market to grow substantially in the coming years, and for the production scale of individual hydrogen projects to increase over time. The Company is well positioned to take advantage of this growth, by deploying capital in the best quality companies and assets, and adopting a long term investment approach.

The clean hydrogen industry in the short term is dominated by bespoke sources of supply, financed by specialised offtakers, typically at 5MW to 100MW scale. In the period from 2025 to 2030 the Investment Adviser expects these facilities to be upscaled to 100MW to 500MW scale, and ultimately to 1GW to 5GW. The Investment Adviser also believes that energy storage and Carbon Capture and Storage ("CCS") projects will also increase in scale in this timeframe, with the development of compressed air energy storage followed by hydrogen storage and long-distance transport through pipelines, as liquid hydrogen or as ammonia on ships.

## Investment pipeline





# Business model and KPIs

## Business model

The Company is an investment company and its purpose, strategy, investment objective and policy are set out on pages 9 to 12. Any material change to the investment policy requires shareholder approval.

The Company is the first UK listed investment company with a mandate to invest in a diversified portfolio of hydrogen and complementary hydrogen focussed assets principally in developed markets in Europe, North America, the GCC and Asia Pacific. The Company's differentiated strategy provides exposure to the broader hydrogen sector whilst, at the same time, diversifying risk for an investor, through a diversified portfolio of listed and private investments across different jurisdictions and different technologies.

The Company makes its investment in unquoted Hydrogen Assets ("Private Hydrogen Assets") through HydrogenOne Capital Growth Investments (1) LP (the "HydrogenOne Partnership" or the "Limited Partnership"), in which the Company is the sole limited partner. The Company may also acquire Private Hydrogen Assets directly or by way of holdings in special purpose vehicles or intermediate holding entities.

The General Partner of the Limited Partnership is HydrogenOne Capital Growth (GP) Limited (the "General Partner"), a wholly owned subsidiary of the Company. Details of the Company and Group structure are given in note 1 to the Parent and Consolidated Financial Statements (the "Financial Statements"). Other than where specified, references to the Company in this document refer to the Company together with its wholly-owned subsidiary and investment as sole limited partner in the Limited Partnership.

The Company is governed by a Board of Directors (the "Board"), all of whom are non-executive, and it has no employees. The business model adopted by the Board to achieve the Company's objective has been to contract the services of FundRock Management Company (Guernsey) Limited (formerly Sanne Fund Management (Guernsey) Limited) as the alternative investment fund manager of the Company, pursuant to the AIFM Agreement (the "AIFM"). The AIFM has appointed HydrogenOne Capital LLP to provide investment advisory services in respect of the Company (the "Investment Adviser"). The Investment Adviser will advise on the portfolio in accordance with the Board's strategy and under its and the AIFM's oversight. The Principals of the Investment Adviser responsible for the day-to-day monitoring of the portfolio are Dr John Joseph "JJ" Traynor and Richard Hulf. The Board and the AIFM monitor adherence to the Company's investment policy and regularly reviews the Company's performance in meeting its investment objective.

All administrative support is provided by third parties under the oversight of the Board. Company secretarial and administration services have been delegated to Apex Listed Companies Services (UK) Limited (formerly Sanne Fund Services (UK) Limited) ("Apex" or the "Administrator"); custody services to Northern Trust Company ("Northern Trust"); registrar services to Computershare Investor Services plc ("Computershare"); and effective 12 January 2023, the Company's broker is Barclays Bank PLC ("Barclays" or the "Broker"). Prior to this date the Company's broker was Panmure Gordon (UK) Limited.

The Board reviews the performance of the AIFM, the Investment Adviser and other key service providers on an ongoing basis. Further details of the material contracts of the Company are given in note 14 to the Financial Statements.

# Business model and KPIs

## KPIs

### Objectives

### Principal risks

# 1

#### To deliver an attractive level of capital growth

The Company is targeting a Net Asset Value total return of 10 per cent to 15 per cent per annum over the medium to long-term.

- Changes in the legislative and regulatory framework that affect the hydrogen sector
- Operational risks in the portfolio
- Valuation risks (energy prices/inflation/ operational performance)
- Investment process fails to identify new opportunities
- Lack of future pipeline and/or funding
- Increased competition for assets

# 2

#### A diversified portfolio of hydrogen and complementary hydrogen focussed assets

- Lack of future pipeline and/or funding
- Increased competition for assets
- Changes in the legislative and regulatory framework that affect the hydrogen sector

# 3

#### Maintenance of a reasonable level of premium or discount of share price to NAV

- Investment performance
- Changes in the legislative and regulatory framework that affect the hydrogen sector
- Lack of future pipeline and/or funding

# 4

#### Maintenance of a reasonable level of ongoing charges

- Costs are inadequately controlled
- Failed investment processes leads to high level of abort costs

# 5

#### Environmental, Social and Governance policy integrated in investment decisions and asset monitoring

Please refer ESG section on pages 37 to 52 for further details.

## KPIs

## Review

## NAV per share

**97.31p**

2021: 95.75p

## Share price return

**(33.6)%\***

2021: 19.5%\*

Return relative to Solactive Hydrogen Economy Index for year ended 31 Dec 2022

## NAV Total return per annum

**1.6%\***

2021: (2.3)%\*

## Index

**(46.6)%**

2021: (13.2)%

The Board monitors both the NAV and share price performance. A review of performance is undertaken at each quarterly Board meeting and the reasons for relative under and over performance against various comparators is discussed.

## Number of investments

**25**

2021: 22

## Number of geographies

**7**

2021: 6

## Invested portfolio split by value (Private: Listed)

**97%:3%**

2021: 83%:17%

The Board monitors the portfolio at each quarterly Board meeting and the reasons for relative under and over performance of sectors and geographies invested in, and performance of listed vs. private.

## Premium or (discount) of share price to NAV

**(18.5)%\***

2021: 24.8%\*

The Board monitors the premium or discount on an ongoing basis.

## Ongoing charges ratio

**2.51%\***

2021: 2.06%\*

Board meetings. The Board reviews the ongoing charges on a quarterly basis and considers these to be reasonable in comparison to peers.

Robust ESG policy with established KPIs  
Avoided GHG**42,716 tCO<sub>2</sub>e avoided**

The Board reviews compliance with the ESG policy ahead of each investment decision, and in the Company on an on-going basis. The Board additionally monitors developments in the ESG landscape more broadly.

\* The figures above are considered to represent the Company's APMs. Definitions of these APMs and other performance measures used by the Company, together with how these measures have been calculated, can be found on page 114.

# Investment Adviser's Report

## Introduction

The Company's Alternative Investment Fund Manager ("AIFM"), FundRock Management Company (Guernsey) Limited (formerly Sanne Fund Management (Guernsey) Limited), (part of Apex Group), has appointed HydrogenOne Capital LLP as the Investment Adviser to the AIFM in respect of the Company. Its key responsibilities are to originate, analyse, assess and recommend suitable investments within the hydrogen sector, and advise the AIFM accordingly. Additionally, the Investment Adviser performs asset management services in relation to the investments in the portfolio or, to the extent asset management is delegated to third parties, oversees and monitors such asset management.

HydrogenOne Capital LLP was founded in 2020 as an alternative investment firm focussed specifically on investing in hydrogen assets and their role in the energy transition. As a responsible investor, HydrogenOne Capital LLP is committed to contributing to the energy transition through the financing of sustainable investments and by providing investment solutions that reduce carbon emissions.

HydrogenOne Capital LLP employs a fully integrated investment and asset management approach and integrates its focus on ESG criteria throughout the entire investment process.

### The Principals of the Investment Adviser

The Principals of the Investment Adviser have in excess of 60 years of combined experience and a track record of success in the energy industry and capital markets which are directly applicable to the hydrogen industry, including acquisitions, mergers and divestments, development of growth energy projects, supervision of profitable energy production, ESG track record, investments in both listed and private companies and board advisory. Their biographies are included on page 61 of the annual report.

### The Investment Adviser's team

The Principals have assembled an experienced team to support the Company. This group brings a mixture of finance, technical and sector skills to support the Investment Adviser in its day-to-day activity. The Investment Adviser has established a team which is responsible for

financial modelling, corporate and asset valuation analysis, and opportunity assessment for the Company. The Principals anticipate a further increase in headcount as the Company continues to grow its activities.

### Advisory Board of the Investment Adviser

The Principals of the Investment Adviser are supported by an experienced team which comprises the Advisory Board.

The Advisory Board has been carefully selected to provide expert advice to the Investment Adviser on the hydrogen sector, project finance and capital markets. The Investment Adviser has appointed the members of the Advisory Board to provide it with advice from time to time. No members of the Advisory Board are directors, officers, employees or consultants of the Company, the AIFM or the Investment Adviser. It is envisaged that the Advisory Board will evolve over time, with additional experts being added or substituted as and when required.

### Capital Deployment since IPO and Pipeline

The Company has invested £102.9 million in nine Private Hydrogen Assets and a portfolio of listed equities since its 2021 IPO to 31 December 2022, directly or via the HydrogenOne Partnership. At the time of its IPO, the Company had an investible universe of c. 120 Private Hydrogen Assets of private companies and hydrogen production projects. The strategy then was to focus on supply chain companies, particularly electrolyser and fuel cell manufacturers in the early years, followed by investment in hydrogen production projects beginning in 2023-24.

Since the IPO, the Company has seen significant expansion of its opportunity set in both private companies and hydrogen production projects. As an indication of this, the investible universe at the end of 2022 contained over 200 opportunities totalling at least £23bn, nearly double the number of opportunities since the IPO.

Alongside this expansion in the opportunity set, the Company has seen the arrival of multiple industrial investors into the hydrogen sector. This is typically by incumbent consumers of grey hydrogen, and companies seeking to access clean hydrogen supplies and technologies. The Company is invested alongside multiple industrial strategic investors today.

## Investing alongside blue-chip industrials and funds

Invested companies		Co-investors	
Hydrogen production	Gen <sub>2</sub> Energy	Vitol	HØEGH LNG
	HH2E	Knutsen Group	HYCAP
Storage & distribution	NanoSUN	Foresight FOR A GREATER FUTURE	
	Strohm	Westfalen	
Supply chain	sunfire	ING	Shell
		PlanetFirst PARTNERS	lightrock
		NESTE	CIP
		centrica	amazon
	elcogen	SAFRAN	SDF
Hydrogen applications		motus	

Since its 2021 IPO, the Company has seen an acceleration of policy support and funding for clean hydrogen from Governments. Particularly in the aftermath of the election of President Biden in the USA, and the Russia invasion of Ukraine, there has been considerable movement in Government support for clean hydrogen in the EU and the USA. This has resulted in earlier hydrogen production opportunities for the Company than envisaged at the time of the IPO.

Overall, the Company has, at the end of 2022, invested in two hydrogen production developer companies, two transport and distribution businesses, and a number of electrolyser, fuel cell and applications businesses. The Company has particularly focused on diversifying its exposure to different technologies and geographies. As an example of this, the Company has invested in both solid oxide, alkaline and pyrolysis electrolyser producers, and in both onshore and offshore hydrogen transport equipment manufacturers, and hydrogen production businesses in Norway and Germany.

# Portfolio summary

Company	Country of incorporation	Value of investment £'000
<b>Private Hydrogen Assets held by the Limited Partnership at 31 December 2022</b>		
Sunfire GmbH	Germany	21,763
HiiROC Limited	United Kingdom	12,914
NanoSUN Limited	United Kingdom	11,519
Bramble Energy Limited	United Kingdom	10,032
Gen2 Energy	Norway	3,421
Cranfield Aerospace Solutions Limited	United Kingdom	6,296
Elcogen plc	United Kingdom	20,430
HH2E AG	Germany	5,134
Strohm	The Netherlands	11,606
<b>Total</b>		<b>103,115</b>

Company	Country of main listing	Market value £'000	% of net assets
<b>Listed Hydrogen Assets held by the Company at 31 December 2022</b>			
SFC Energy AG-BR	Germany	572	0.4
Hexagon Purus ASA	Norway	375	0.3
Doosan Fuel Cell Co Ltd	South Korea	366	0.3
Hydrogen-Refueling-Solutions SA	France	361	0.3
S-Fuelcell Co Ltd	South Korea	301	0.2
McPhy Energy SA	France	297	0.2
Aker Horizons AS	Norway	234	0.2
Fuelcell Energy Inc	United States	207	0.2
AFC Energy plc	United Kingdom	197	0.2
Cell Impact AB	Sweden	151	0.1
Ceres Power Holdings plc	United Kingdom	148	0.1
Ballard Power Systems Inc	Canada	136	0.1
Green Hydrogen Systems A/S	Denmark	132	0.1
ITM Power plc	United Kingdom	96	0.1
Powercell Sweden AB	Sweden	79	0.1
Enapter AG	Germany	15	0.0
<b>Total listed investments</b>		<b>3,667</b>	<b>2.9</b>

<b>Private assets investment held by the Company at 31 December 2022</b>			
HydrogenOne Capital Growth Investments (1) LP	United Kingdom	103,006	82.2
<b>Total investments</b>		<b>106,673</b>	<b>85.1</b>
Cash		18,192	14.5
Other net assets/(liabilities)		488	0.4
<b>Total net assets</b>		<b>125,353</b>	<b>100.0</b>

All investment is in equity securities unless otherwise stated.



# Portfolio review, performance and valuation

## Portfolio review

During FY2022, the Company has invested a total of £54.3 million (FY2021: £48.6 million) in Hydrogen Assets, which are the foundation of a diversified, multi-asset portfolio for investors in clean hydrogen and related technologies.

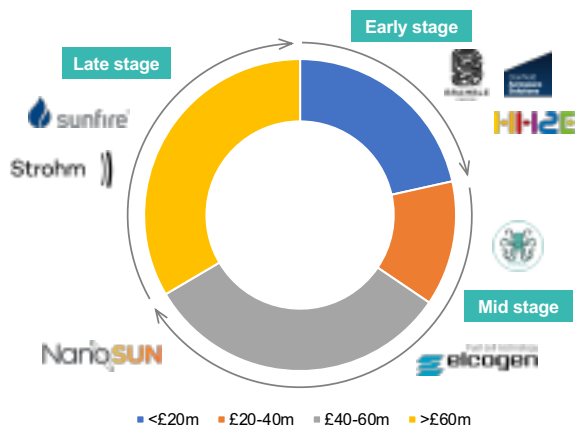
At 31 December 2022, the Company's portfolio comprised nine private investments and 16 listed investments in hydrogen assets in the UK and Europe with an aggregate value of £107 million.

During the year, the portfolio continued to perform in line with the expectations of the Investment Adviser. Seven of the Company's private investments are revenue-generating, producing equipment and technology solutions for clean hydrogen production and consumption. Aggregate revenue from these investments was £33m in 2022, an increase of 110% from 2021 on a pro-forma basis. The remaining two private investments were made into hydrogen developers in Norway and Germany, which are expected to be cash generative around the middle of the decade, as production comes online. The Company's ownership of equity in the project developers comes with follow-on investment rights directly into very large-scale green hydrogen projects.

## Growing value for investors



### Annual revenue of portfolio companies



Segments on NAV basis, HGEN invested stake in portfolio as of Dec 2022. 2024E revenues

### 10-15% average NAV growth target<sup>1</sup>

- Growth delivery in invested companies
- Follow-on investment at higher valuation
- Exit via IPO or trade sale

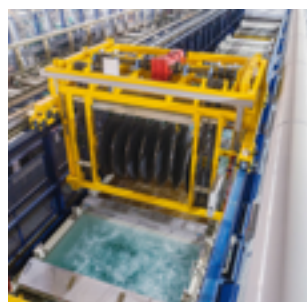
	% of portfolio (31.12.22)	2021-22 revenue growth (%)	Target holding period (years)
Early stage	22%	n/a	>5
Mid stage	45%	+364%	3-5
Late stage	33%	+77%	<3
		<b>2022: £33m (+110% vs 2021)</b>	

Private company revenues, pro-forma. 100%. Source: Investment Adviser)

<sup>1</sup> 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.

# Portfolio review, performance and valuation

## Our portfolio



### Word from the top

*"We aim for replacing fossil fuels with renewables in all areas of life – creating a sustainable future for generations to come. We deliver on our purpose through developing, manufacturing and servicing high-quality electrolysis solutions. By providing renewable hydrogen and syngas as substitutes for fossil energy sources, we enable the transformation of carbon-intensive sectors towards net zero."*

Nils Aldag, CEO



### Sunfire GmbH

[www.sunfire.de](http://www.sunfire.de)

**A German industrial electrolyzer producer, which offers both pressure alkaline (AEL) and solid oxide electrolisers (SOEC).**

Total investment size	£20.2m
% of NAV	17.5%
Date of investment	October 2021
Co-investors	Planet First Partners, Lightrock, SMS, Neste, Copenhagen Infrastructure Partners, Carbon Direct Capital Management, Blue Earth Capital, Amazon Climate Pledge Fund
Why invested	<ul style="list-style-type: none"> <li>• Industry-leading electrolyser manufacturer, investing for growth and technology development</li> <li>• Material alkaline and solid oxide business, with revenues from a growing international customer base in the global industrial electrolyser market</li> <li>• Strong product credentials backed by existing customer base and generated by high quality in-house engineering and product design</li> <li>• 500MW / annum electrolyzer production site in EU – with a further extension to gigawatt-scale already in planning</li> </ul>
Total Addressable Market	>£40bn (by 2030)
Value catalysts	<ul style="list-style-type: none"> <li>• &gt;GW scale alkaline + SOEC manufacturing scale up</li> <li>• Conversion of strong revenue growth to EBITDA to underpin eventual exit for investors</li> </ul>
Performance since investment	<ul style="list-style-type: none"> <li>• Sunfire has delivered strong growth momentum in 2022 Sunfire continued to scale its alkaline electrolysis manufacturing capacity in Germany and Switzerland</li> <li>• Planning is underway to further increase Sunfire's production capacity from megawatt to gigawatt-scale, providing key industrial customers with access to large scale hydrogen generation plants</li> <li>• In April 2022, Sunfire secured further growth capital, partnering with Copenhagen Infrastructure Partners, Blue Earth Capital, increasing its Series D capital to €195 million. In addition, the company received another investment from Amazon's Climate Pledge Fund in July 2022</li> <li>• In October 2022, Sunfire officially announced the successful completion of the EU-funded GrInHy2.0 ("Green Industrial Hydrogen") project. As part of this project, Sunfire installed the world's first multi-megawatt high-temperature solid oxide electrolyzer, which produced a record of nearly 100 tons of green hydrogen for the climate-neutral production of green steel</li> <li>• Sunfire continues to consolidate their EU and global market position with increased order book</li> </ul>



### Word from the top

*"We believe the fuel of the future is green hydrogen and our technology is a key enabler in making this transition affordable for everyone. We develop and manufacture the world's most efficient solid oxide technology, allowing our customers and partners to deliver emission-free electricity, green hydrogen and energy storage solutions. This investment from HydrogenOne will enable us to continue to develop our cutting-edge technology, grow our customer base and revenues, and scale production to drive net-zero ambitions forward."*

Enn Öunpuu, CEO



## Elcogen plc

[www.elcogen.com](http://www.elcogen.com)

### Fuel cell and electrolyser manufacturer with presence in Estonia and Finland

Total investment size	£20.5m
% of NAV	16.4%
Date of investment	May 2022
Co-investors	Biofuel OÜ, VNTM Powerfund II
Why invested	<ul style="list-style-type: none"> <li>• Industry-leading innovator and supplier of solid oxide cells and stacks, with manufacturing facilities in Finland and Estonia, ready for expansion</li> <li>• High end offering based on advanced solid oxide (SO) technology with low operating temperatures and superior economics</li> <li>• Developed a reversible ceramic technology that converts hydrogen into emission-free electricity and vice versa</li> <li>• Over 10-year track record</li> <li>• Over 60 established industrial customers worldwide</li> </ul>
Total Addressable Market	>£40bn (by 2030)
Value catalysts	<ul style="list-style-type: none"> <li>• Expansion of manufacturing facilities from 100MW/year, rising to 200MW/year</li> </ul>
Performance since investment	<ul style="list-style-type: none"> <li>• Elcogen progressed with the factory expansion with plans initiated and finalised</li> <li>• The company strengthened the management team with key C-suite hires CFO, COO and CTO</li> <li>• Elcogen's order book continued to increase, with multiple agreements signed during the year</li> <li>• Post year end, Elcogen has signed Memorandum of Understanding ("the MOU") with Korea Shipbuilding and Offshore Engineering (KSOE), a member of Hyundai Heavy Industries Group ("HHI Group"), and the Germany based Fraunhofer Institute for Ceramic Technologies and Systems (IKTS)</li> </ul>

# Portfolio review, performance and valuation

## Our portfolio



### Word from the top

"HiiROC's technology brings a truly differentiated proposition to the hydrogen story. We will produce low cost, zero emission hydrogen, delivered to customers on a modular, scalable basis at the point of demand, avoiding transportation and storage costs. We're building the infrastructure and working with our strategic partners to allow deployment of the initial pilot units in selected industry segments. The recent funding ensures we're well positioned to move forward with both the technical and commercial development of the business."

Tim Davies, CEO



### HiiROC Limited

[www.hiiroc.com](http://www.hiiroc.com)

**UK-based thermal plasma electrolysis developer, with world-leading (IP-protected) technology for low-cost, zero-emission hydrogen, also enabling flare/waste gas mitigation and CO2 capture using biomethane.**

Total investment size	£10.0m
% of NAV	10.4%
Date of investment	November 2021
Co-investors	Melrose Industries, Centrica, Hyundai, Kia, Wintershall Dea, VNG, Cemex
Why invested	<ul style="list-style-type: none"> <li>Proprietary technology to convert natural gas, flare gas and biomethane into hydrogen and solid carbon black</li> <li>Multiple applications across all sectors of hydrogen use from blending in natural gas grids to industrial decarbonisation to transport</li> <li>Opportunity to support methane reduction targets through the global imperative to halt gas flaring and venting</li> <li>Industrial off-takers of the product such as Centrica, Hyundai and CEMEX also on the shareholder register</li> <li>Highly scalable modular solution, producing 100kg / day of hydrogen from a single unit through to large plants capable of 100's of tonnes / day of hydrogen, alongside carbon black</li> </ul>
Total Addressable Market	>£40bn (by 2030)
Value catalysts	<ul style="list-style-type: none"> <li>Demonstrator deployed in 2022. Pilot units contracted for deployment through 2023 across a range of hydrogen use cases</li> </ul>
Performance since investment	<ul style="list-style-type: none"> <li>HiiROC made solid progress against the objectives for 2022, with demonstrator deployed, pilot phase and certification plan on track</li> <li>As part of Government grants and projects, HiiROC and Centrica, won the first UK project to inject Hydrogen at Brigg Gas Fired Power station, as part of the Net Zero Technology Centre's £8 million Open Innovation Programme</li> <li>HiiROC won the KPMG Global Tech Innovator 2022 award, overcoming fierce competition from over 1250 applicants across 22 countries and jurisdictions during the national stages, and was also awarded the FT's Tech Champion for Energy 2022. At COP 27, HiiROC entered into an MOU with Egypt's EGAS for flare gas mitigation</li> </ul>



### Word from the top

"NanoSUN's mission is to accelerate the adoption of hydrogen fuel as key element of the transition to clean energy. Our strategy is to bridge the gap between low-cost, green sources of hydrogen and hydrogen vehicles by providing operators with safe, low-cost and convenient refuelling products and services."

Dean O'Connor, CEO



## NanoSUN Limited

[www.nanosun.co.uk](http://www.nanosun.co.uk)

UK-based developer of hydrogen distribution and mobile refueling equipment

Total investment size	£9.1 m
% of NAV	9.2%
Date of investment	December 2021
Co-investors	Westfalen Group
Why invested	<ul style="list-style-type: none"> <li>NanoSUN technology allows for shipping of clean hydrogen from production sites to customers, both cheaply and safely</li> <li>Provides flexible and low-cost connection between hydrogen customers such as truck stops, and concentrated hydrogen supply sources</li> <li>Flat-bed solution with 60% lower cost than alternative systems</li> <li>Accelerating large-scale roll out of fleets of hydrogen buses, trucks, vans and forklifts</li> <li>High quality order book with clients such as Westfalen, and Octopus Hydrogen</li> </ul>
Total Addressable Market	£800m (2025 UK/EU) to >£20bn (2030 globally)
Value catalysts	<ul style="list-style-type: none"> <li>Continued roll out and delivery of pioneer units to hydrogen refueling customers, driving financial growth</li> <li>Germany distribution agreement pending</li> <li>Pathway to market entry across Europe, in Asia and US</li> </ul>
Performance since investment	<ul style="list-style-type: none"> <li>NanoSUN achieved a key milestone by completing the first serial production and delivery unit of its enhanced Pioneer Mobile Hydrogen Refueling Stations</li> <li>Solid progress has been made in research and development for the next generation refueler which will be lower cost, higher capacity and more easily adapted to penetrate markets outside of Europe</li> <li>Received significant funding from the Department for Business, Energy &amp; Industrial Strategy (BEIS) to develop its Pioneer Mobile Hydrogen Refuelling Station (HRS) as a low-carbon alternative to red diesel applications</li> <li>NanoSun has a strong order book for 2023-2024</li> <li>Post year end, HGEN signed an agreement for £1.5m Convertible Loan facility with NanoSUN</li> </ul>

# Portfolio review, performance and valuation

## Our portfolio



### Word from the top

*"We recognised the fit between clean hydrogen and offshore wind at an early stage, and developed a compelling pipe solution to support it. TCP can transfer up to nine times the amount of energy compared to a cable, and can be used to store hydrogen, thereby increasing the uptime of offshore wind farms. The pipe's flexibility, lack of corrosion, fatigue and embrittlement make it the superior pipeline solution for offshore wind farms, generating hydrogen. The investment by HydrogenOne allows us to increase our capacity to service this exciting and growing market."*

Martin van Onna, CEO

**Strohm** 

### Strohm Holding B.V

[www.strohm.eu](http://www.strohm.eu)

#### The Netherlands-based hydrogen pipeline company

Total investment size	£9.5m
% of NAV	8.7%
Date of investment	August & December 2022
Co-investors	Shell Ventures, Chevron Technology Ventures, Evonik Venture Capital, ING Corporate Investments
Why invested	<ul style="list-style-type: none"> <li>• Industry leaders in offshore hydrogen and CO2 pipelines, where we see 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>
Total Addressable Market	c. £700m (2030) to >£1.7b (2040)
Value catalysts	<ul style="list-style-type: none"> <li>• Grow revenues from energy transition including hydrogen to over 50% by 2025</li> </ul>
Performance since investment	<ul style="list-style-type: none"> <li>• Strohm completed a €29m investment round with a €10m investment by ING Corporate Investments</li> <li>• The company increased its order book and signed a Memorandum of Understanding with State Power Investment Corporation of China</li> <li>• In November 2022, Strohm was awarded a contract from EConnect to provide more than 11km of TCP for the TES Wilhelmshaven Green Gas Terminal in Germany. These pipes will be used for CO2 export, following an initial usage period for natural gas import</li> <li>• Post year end, Strohm secured its largest order in history from ExxonMobil to supply more than 24 of its TCP 'Jumpers on Demand' for ExxonMobil's offshore operations in the Americas</li> </ul>





### Word from the top

*"At Bramble Energy we aim to enable the transition from diesel to hydrogen by providing high-performance, affordable technology solutions. PCBFC™ is the first of our platform technologies to reach the market and we continue to develop core offerings in sensing and electrolysis."*

Tom Mason, CEO



## Bramble Energy Limited

[www.brambleenergy.com](http://www.brambleenergy.com)

### UK-based fuel cell and portable power solutions company

Total investment size	£10.0m
% of NAV	8.1%
Date of investment	February 2022
Co-investors	IP Group, BGF, Parkwalk, UCL Technology Fund
Why invested	<ul style="list-style-type: none"> <li>• Pioneering revolutionary fuel cell design and manufacturing techniques</li> <li>• Novel printed circuit board design PCBFC™ - low cost, scalable and recyclable fuel cell modules</li> <li>• Leading global automotive businesses working closely with Bramble to scale up product offering</li> <li>• Developing high-power density, mobility fuel cell systems</li> </ul>
Total Addressable Market	>£100bn (by 2030)
Value catalysts	<ul style="list-style-type: none"> <li>• Upgraded to a new facility as part of scaling up of units to 30kw-100kw</li> <li>• Mobility technology development and testing of novel printed circuit board design by end users in automotive</li> </ul>
Performance since investment	<ul style="list-style-type: none"> <li>• Launched the Software-defined everything (SDX) portable power unit into the market targeting remote lighting &amp; surveillance targeting the 15W-60W low power segment</li> <li>• With funding from the Advanced Propulsion Centre UK (APC) will be developing a robust and detailed business case to manufacture Bramble Energy's printed circuit board fuel cell (PCBFC™) for the automotive sector in the UK</li> <li>• Milestone achieved with first 10kW PCBFC™ and control system being integrated into a donor BEV light commercial vehicle</li> <li>• Awarded government funding from: <ul style="list-style-type: none"> <li>• Department for Business, Energy &amp; Industrial Strategy (BEIS) as part of the £40 million Red Diesel Replacement competition; and</li> <li>• Won the Scale-up Readiness Validation, SuRV, competition which will aid Bramble Energy's PCBFC™ pilot-scale-up Clean Maritime Demonstration Competition (CMD) to design a hydrogen powered, zero emission Uncrewed Surface Vessel (USV)</li> </ul> </li> </ul>

# Portfolio review, performance and valuation

## Our portfolio



### Word from the top

"Phase 1 of Cranfield Aerospace Solutions' zero emissions aircraft roadmap is "Project Fresson" – the conversion of a Britten-Norman Islander 9-seat aircraft from conventional fossil fuel to that of gaseous hydrogen propulsion. This development is set to deliver the world's first fully certified, truly green, passenger-carrying aircraft using hydrogen fuel cell technology. The end solution will deliver emissions-free commercial air travel and is planned to be certified for passenger flight in 2026."

Paul Hutton, CEO

Cranfield  
Aerospace  
Solutions

### Cranfield Aerospace Solutions Limited

[www.cranfieldaerospace.com](http://www.cranfieldaerospace.com)

**UK-based passenger flight innovator, powering turboprop flight with hydrogen**

Total investment size	£7.0m
% of NAV	6.2%
Date of investment	March 2022
Co-investors	Safran Ventures, Tawazun Strategic Development Fund, Motus Ventures
Why invested	<ul style="list-style-type: none"> <li>• Cranfield is a technology leader in delivering hydrogen powered turboprop flight</li> <li>• Market leader in the design and manufacture of new aircraft design concepts, complex modifications to existing aircraft and integration of cutting-edge technologies</li> <li>• Working on CAA certification of the Britten-Norman Islander passenger aircraft using hydrogen powered fuel cells supplying electricity to DC motors for rotational power</li> </ul>
Total Addressable Market	£1.4bn (by 2030)
Value catalysts	<ul style="list-style-type: none"> <li>• Test flight 2024</li> <li>• Commercial certification 2026</li> </ul>
Performance since investment	<ul style="list-style-type: none"> <li>• Achieved the preliminary design milestones for 2022</li> <li>• Continued to increase the customer order book by signing numerous commitments for modification kits to convert Britten-Norman Islanders to hydrogen-electric power</li> <li>• Secured further investment from the Strategic Development Fund (SDF), the investment arm of the Tawazun Economic Council of the UAE, and Motus Ventures</li> </ul>



### Word from the top

"HH2E is a new green energy company in Germany established to change the game of energy. HH2E's technology mix can turn a fluctuating input of solar or wind energy into a constant supply of green hydrogen, heat, and carbon-free electricity at competitive prices to serve local industries and communities."

Alexander Voigt, Founder of HH2E AG



## HH2E AG

[www.hh2e.de](http://www.hh2e.de)

German green hydrogen project developer with a focus on industrial customers

Total investment size	£5.1m
% of NAV	4.1%
Date of investment	May 2022
Co-investors	Foresight Group LLP
Why invested	<ul style="list-style-type: none"> <li>• A prominent leader in Germany focused on green hydrogen and battery storage project development</li> <li>• HH2E has secured attractive German brownfield sites close to hydrogen offtake with grid connections capable of 1 GW capacity</li> <li>• Provides HGEN with investment rights in multiple large-scale green hydrogen based decarbonization projects</li> <li>• The battery and alkaline electrolyser combination enables near-constant production using the cheapest hours of renewable electricity supply</li> </ul>
Total Addressable Market	>£100bn (based on German government forecasts for green hydrogen demand by 2045)
Value catalysts	<ul style="list-style-type: none"> <li>• First hydrogen projects Thierbach and Lubmin expected to reach Final Investment Decision in 2023, for mid-decade commercial launch</li> </ul>
Performance since investment	<ul style="list-style-type: none"> <li>• HH2E continued to develop projects throughout the year, with focus on Thierbach and Lubmin but also a strong pipeline of 2nd wave projects</li> <li>• Technology innovation using batteries and electrolysers side-by-side, to capture the advantage of price volatility in renewable power</li> <li>• Investment of 1m euros into Stoff2, an early stage technology firm developing a combined battery-electrolyser product which HH2E could deploy from 2026 onwards</li> <li>• Signed purchase agreement with Nel for 120MW electrolyzer</li> </ul>

# Portfolio review, performance and valuation

## Our portfolio



### Word from the top

"We target to develop, build, own and operate large scale facilities for production of zero emission green hydrogen and develop an integrated hydrogen value chain. Norway, our home market, has a strong advantage for hydrogen production with both cheap and base load renewable energy available, and our large-scale facilities allows for economies of scale while transporting the volumes to Europe."

Jonas Meyer, CEO



### Gen2 Energy

[www.gen2energy.com](http://www.gen2energy.com)

#### Norwegian green hydrogen project developer

Total investment size	£3.5m
% of NAV	2.7%
Date of investment	March 2022
Co-investors	HyCap, Vitol, Hoegh LNG, Knutsen Group
Why invested	<ul style="list-style-type: none"> <li>• The leading Norwegian green hydrogen project developer, with clear plans to convert low-cost hydroelectric power to hydrogen, for export and domestic use</li> <li>• Up to 700MW green hydrogen projects in Norway, with expected production in 2025-2027</li> <li>• Specialist in low-cost 24/7 hydroelectric power</li> <li>• Co-invested with Norwegian LNG and ship operators that provides input to the Gen2 hydrogen export solution</li> <li>• HGEN has follow-on investment rights in multiple project SPVs</li> </ul>
Total Addressable Market	>£100bn
Value catalysts	<ul style="list-style-type: none"> <li>• Final Investment Decision at Mosjoen project expected 2024</li> <li>• 100MW green hydrogen</li> </ul>
Performance since investment	<ul style="list-style-type: none"> <li>• Continued to mature green hydrogen development projects, with core focus on the c.100MW plant at Nesbruket in Mosjøen</li> <li>• Completed a feasibility study of the plant, demonstrating that the business case of green hydrogen production based on cheap renewable energy in Northern Norway and exporting it to Europe is attractive</li> <li>• The project is currently in a front-end engineering and design (FEED) phase, with expected completion in the first half of 2023</li> <li>• Gen2E's business case is to build multiple hydrogen production sites, and in November 2022, the company signed an agreement with Åfjord municipality for large-scale production and shipping of green hydrogen, increasing the total portfolio to approximately 900MW</li> </ul>

## Listed Hydrogen Assets

The Company invested in 19 global hydrogen sector listed equities in the prior year with an average market capitalisation of £1.5 billion with minimum market capitalisation of £200 million. The aggregate investment in these listed companies was £9.5 million at the time of investment. These companies are key players in the electrolysis, fuel cell and clean hydrogen projects sectors.

During the year, three of these holdings have been sold at a gain of £0.1 million.

## Post year-end investments

Since 1 January 2023, the Company has made further investments in Private Hydrogen Assets amounting to £7m, including in the green hydrogen production project at Thierbach:



### Word from the top

*"Domestic green hydrogen production is essential to secure cost-competitive energy supply and deliver energy sovereignty and decarbonisation. Building a plant in Thierbach (Saxony), on the site of a former coal power station, is a tangible step towards sustainable green energy in Germany."*

Mark Page, CFO HH2E AG and Managing Director HH2E Thierbach

## Thierbach project

### Green hydrogen production project in Germany

Total investment size	£2.4m
Date of investment	January 2023
Co-investors	Foresight Group LLP, HH2E
Why invested	<ul style="list-style-type: none"> <li>First direct project investment by the Company</li> <li>Large-scale green hydrogen production opportunity with leading players in the mobility sector, energy and industrial consumers as potential offtakers</li> <li>The technology mix and design developed by the operator (HH2E AG) enables constant production of cost-competitive green hydrogen without a permanent supply of power</li> </ul>
Total Addressable Market	Via pipeline connections Thierbach will be able to serve the German market (value >£100bn) but its customers will be mainly based in central/eastern Germany
Value catalysts	<ul style="list-style-type: none"> <li>Confirmation of key regulatory dimensions (e.g. RED II, GHG certificates, pipeline admixture)</li> <li>Final Investment Decision – 2023</li> <li>Phase 1 (100MW): c.6,000 Htpa ~ 60,000tpa avoided GHGs</li> </ul>
Performance since investment	<ul style="list-style-type: none"> <li>Preliminary Investment Decision (PID) approved by the consortium of HH2E, Foresight and HydrogenOne. Enables detailed technical planning, stakeholder engagement, planning/permit applications and engagement with key component suppliers and offtakers</li> </ul>

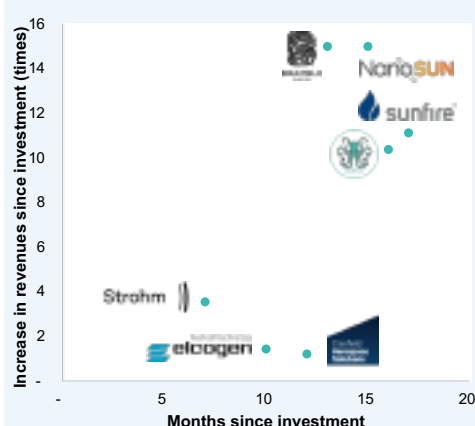
# Portfolio review, performance and valuation

## Performance

**Our portfolio is revenue generating and has produced consistent growth**



Growth in revenues since investment

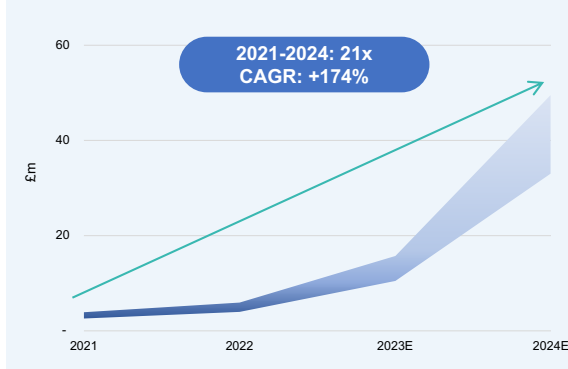


- Seven of our private investments, representing 89% of the invested portfolio by value, are revenue-generating
- The aggregate revenue from these investments was c. £33m in for 2022, an increase of 110% from 2021 on a pro-forma basis
- A further two private hydrogen production companies, representing 8% of the invested portfolio, located in Norway and Germany, are expected to generate material cash flow from the middle of the decade as projects come on line
- Additional investment in strategic, global hydrogen equities representing 3% of the invested portfolio, in revenue generating businesses

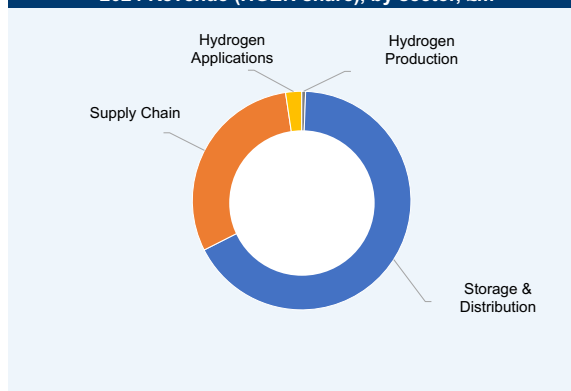
## Growth delivery and outlook



Revenue potential of private portfolio (HGEN share)



2024 Revenue (HGEN share), by sector, £m



- We see significant financial growth potential from our portfolio companies. This is driven by expansion of production volumes in supply chains such as electrolyzers, fuel cells and transportation equipment

*The projections stated are projections only and not profit forecasts. The projections are internal based on estimates and assumptions and information sourced from third parties. The projections are unaudited and inherently subject to significant uncertainties and contingencies. There can be no assurance that these projections will be met.*

## Valuation

As set out in note 3 of the Financial Statements, the Investment Adviser has carried out fair market valuations of the Private Hydrogen Assets at 31 December 2022, which have been reviewed by the Valuation Committee, and the Directors have satisfied themselves as to the methodology used, the discount rates and key assumptions applied, and the valuation.

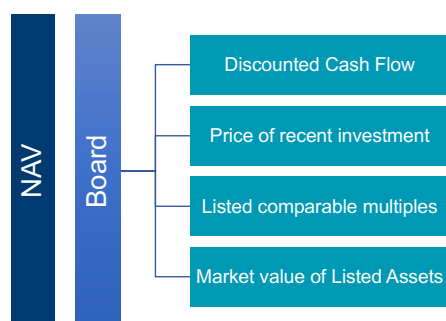
The Private Hydrogen Assets at 31 December 2022 have been valued using either the discounted cash flow ('DCF') methodology or a combination of the discounted cash flow methodology and the Price of Recent Investment methodology as described by IPEV.



## HGEN valuation methodology



### Valuations using IPEV Guidelines



Listed Hydrogen Assets are valued at fair value, which is the bid market price, or, if bid price is unavailable, last traded price on the relevant exchange.

### Analysis of financial results

The Financial Statements of the Company for the year ended 31 December 2022 are set out on pages 83 to 112.

#### Net assets

Net assets increased from £102.8 million at 31 December 2021 to £125.4 million at 31 December 2022. In April 2022 the Company completed an accelerated bookbuild, raising £21m net of fees. The remainder of the increase in net assets was driven primarily by an increase in the value of the Private Hydrogen Assets, offset by the fall in global stocks generally and the hydrogen sector more specifically.

The net assets of £125.4 million comprise £106.7 million portfolio value of investments, including the holding in the HydrogenOne Partnership, and the Company's cash balances of £18.2 million, and other net assets of £0.5 million.

The Limited Partnership's net assets of £103.0 million comprise £103.1 million portfolio value of investments, cash balances of £1.5 million, and other net liabilities of £1.6 million.

#### Cash

At 31 December 2022, the Company had a total cash balance of £19.7 million (2021: £55.5 million), including £1.5 million in the HydrogenOne Partnership, which is included in the Company's balance sheet within 'investments held at fair value through profit or loss'.

### Our approach to valuation remains consistent

- Valuations updated for all Private Hydrogen Assets on a quarterly basis, approved by the AIFM and Board
- The Private Hydrogen Assets are principally valued using either the DCF method, or a combination of the DCF method and the price of recent investment. The DCF valuations are also benchmarked against listed peer group valuations
- Discount rates are calculated using market parameters for each investment domicile. The portfolio average discount rate for December 2022 was 12.9%, compared to 12.5% in 2021
- HGEN's valuation is audited annually by KPMG

#### Profit for period

The Company's total profit before tax for the year ended 31 December 2022 is £1.6 million (period ended 31 December 2021: loss of £2.4 million), generating a return per Ordinary Share of 1.27 pence (period ended 31 December 2021: losses of 3.78 pence per share).

In the year to 31 December 2022, the gains on fair value of investments were £3.2 million (period ended 31 December 2021: loss of £1.6 million).

The expenses included in the income statement for the year were £1.7 million, in line with expectations. These comprise £0.3 million Investment Adviser fees and £1.4 million operating expenses. The details on how the Investment Adviser fees are charged are as set out in note 6 to the Financial Statements.

#### Ongoing charges

The 'ongoing charges' ratio is an indicator of the costs incurred in the day-to-day management of the Company.

The ongoing charges percentage for the year to 31 December 2022 was 2.51% (period to 31 December 2021: 2.06%). The ongoing charges have been calculated, in accordance with AIC guidance, as annualised ongoing charges (i.e. excluding acquisition costs and other non-recurring items) divided by the average published undiluted Net Asset Value in the period. The calculation is provided on page 114 of the annual report. The ongoing charges percentage has been calculated on the amalgamated basis and therefore takes into consideration the expenses of HydrogenOne Partnership as well as the Company.

# Market commentary and outlook

**Policy makers and industry are converging on clean hydrogen as a core technology to deliver Net Zero, improved air quality and energy security. The Paris Agreement has led 39 countries to set out hydrogen policies and over \$70 billion of funding as part of Net Zero targets to deliver the Energy Transition to a low carbon economy.**

In the Sustainable Development Scenario of the International Energy Agency, which models future energy systems consistent with delivery of the 2016 Paris Agreement, clean hydrogen supply is expected to grow from 0.36 million tonnes per annum ("mtpa") in 2019 to up to 7.92 mtpa in 2030. A 200x increase in clean hydrogen supply is anticipated from 2019 to 2030, and 500x to 2050, as the scale-up of renewable power alongside the phase-out of fossil fuels takes effect. Under the Net Zero Scenario of the International Energy Agency, 2050 demand for clean hydrogen could exceed 600 mtpa by 2050 and over 20% of final energy demand.

Delivering this pathway will require significant and sustained investment and policy support for clean hydrogen and strong growth in the supply chains behind it. The Investment Adviser believes that clean hydrogen supply could reach in excess of 200 mtpa by 2050, representing over US\$1 trillion in annual sales by 2040 and potentially US\$2.5 trillion in 2050.

## Hydrogen supply and current position

Hydrogen is a naturally occurring gas which has been widely used for decades as a feedstock in industrial manufacturing processes such as oil refining and ammonia production. Today's hydrogen feedstock market is large in size and global in reach, at least 90 mtpa, manufactured almost entirely from the reforming of fossil fuels, with consequent greenhouse gas emissions estimated to be c.830 mtpa.

A series of fundamental geopolitical and economic changes are underway in energy markets which the Investment Adviser believes are having a significant and positive impact on the outlook for the hydrogen industry.

At the same time, new technologies have matured that can manufacture hydrogen without GHG emissions, use hydrogen as a way to store energy derived from wind and solar power and as an energy carrier for distribution over long distances, and as a fuel to make electricity using fuel cells and turbines.

## 2016 Paris Agreement and Net Zero targets

In the aftermath of the 2016 Paris Agreement, governments and regions are setting out plans and targets to decarbonise their economies and deliver 'net zero' GHG emissions. At the end of 2022, at least 39 countries have published hydrogen roadmaps, and governments have announced over US\$70 billion in funding for hydrogen. All of this is to mitigate the impact of anthropogenic climate change. Critical to these plans is a growing consensus

that hydrogen can have a material impact as a fuel in the clean-up and balancing of hard-to-decarbonise energy systems, such as heavy and long-distance transport, power generation and heating, as well as the clean-up of today's hydrogen feedstock supply.

Despite some 45 years of commercial operation and strong growth, modern renewables such as wind and solar power represent less than five per cent. of world-wide primary energy supply, with the remainder met by traditional biomass, nuclear, hydro and fossil fuels.

Decarbonising the energy system and achieving the goals set out in the 2016 Paris Agreement represents a daunting task for policy makers, corporations and society, and is driving a significant acceleration of clean energy policy and investment, and multiple sources of clean energy supply.

## Impetus to improve air quality

According to the World Health Organisation (the "WHO"), some 4.2 million deaths per year are caused by poor ambient air quality, and 91 per cent. of the world's population live in places which do not meet the WHO's air quality guidelines. Much of this pollution is as a result of emissions from internal combustion engines ("ICE") and fossil fuel power plants.

Many countries and cities have announced relatively near-term plans to phase out ICE from transport, to improve urban air quality, as well as to contribute to GHG reduction plans.

More than 20 countries have announced sales bans on ICE vehicles before 2035. More than 35 cities covering over 100 million cars are setting new, stricter emission limits, and over 25 cities have pledged to buy only zero-emission buses from 2025 onwards. Globally, countries anticipate having 4.5 million fuel electric cell vehicles by 2030, with China, Japan and Korea leading the roll-out. In parallel, stakeholders are targeting 10,500 hydrogen refuelling sites ("HRS") by 2030 to power these vehicles. As an example, the United Kingdom has banned the sale of new ICE vehicles from 2030, as have Denmark, Sweden, the Netherlands and Ireland.

These legislative changes are requiring the transport industry and fuel supply chain to adapt quickly to low-emissions solutions. In particular, this is resulting in the increasing penetration of battery electric vehicles for light and short distance routes, alongside hydrogen fuel cell vehicles for heavier trucks and trains and over longer distances and reduction of the use of heavy fuel oil and coking coal in industry generally. In the medium term, there

is also potential for hydrogen converted to ammonia to decarbonise shipping fuel and for fuel cells and synthetic fuel derived from hydrogen to decarbonise flight.

### Improving energy security

The 2022 Russian invasion of Ukraine has compelled decision makers across the world to focus on the importance of sustained investment and policy support for domestic energy production and, crucially, less reliance on energy imports from overseas. This new drive is further amplifying the demand pull for clean hydrogen from energy transition and air quality needs. As a result, governments and industries have responded with new initiatives in 2022 to deliver affordable, secure, and sustainable low-carbon energy, with clean hydrogen set to play a vital role.

Many countries are now focusing on developing energy supplies that are not reliant on imports from Russia, and at the same time an acceleration of the transition to low carbon energy, from renewable power and clean hydrogen.

Alongside this, 2022 has seen a significant increase in fossil fuels prices, with Brent oil prices for example increasing from between US\$60 and US\$80 per barrel to between US\$100 and US\$120 per barrel. This change, combined with similar increases in regional natural gas prices, has improved the relative economics of clean hydrogen compared to grey hydrogen, which is currently the lowest cost and most polluting form of hydrogen supply. Whereas the cost of fossil fuel feedstocks used to make grey hydrogen has increased, the cost outlook for clean hydrogen continues to improve, with larger scale and more efficient electrolyzers coming to the market.

In 2022, the EU reshaped its energy policy to the REPowerEU 2030 plan, which calls for over 300GW of clean hydrogen by 2030, compared to 80GW in previous plans. Some EUR 5.4 billion in hydrogen subsidies have recently been approved under Important Projects of Common European Interest ('IPCEI'), which are expected to unlock a further EUR 8.8 billion of private investment. The Hy2Tech scheme, also announced in 2022, links 41 projects and 35 companies building out the hydrogen sector, and has qualified for IPCEI funding.

In the United States, the Department of Energy has announced a US\$8 billion programme to develop clean regional hydrogen hubs across the country, as part of net zero ambitions by 2050. The 2022 Inflation Reduction Act set aside US\$369 billion for climate and energy proposals. Within this Act, there is a tax credit for clean hydrogen of US\$0.6/kg to US\$3/kg, depending on life cycle emissions. This is expected to make green hydrogen cost competitive with grey hydrogen, and make US clean hydrogen amongst the lowest cost in the world.

In India, in early 2023, the Government announced the Strategic Interventions for Green Hydrogen Transition Programme (SIGHT). This programme envisages c. \$100bn

of investment to 2030, 60-100GW of electrolyser capacity, resulting in 5 million tonnes per annum of green hydrogen production. This is initially planned to address GHG emissions from the fertiliser, refining and iron and steel sectors, by replacing grey hydrogen there.

In the UK, 2030 clean hydrogen targets have been doubled this year to 10GW. The UK Government has recently announced a national clean hydrogen subsidy scheme called Hydrogen Business Model ('HBM'), which will use a contracts-for-difference style set-up to help fund an initial 1GW of clean hydrogen projects in 2023, as part of the target to reach 10GW of low-carbon hydrogen by 2030, in a potentially £9 billion sector. This is in addition to the Net Zero Hydrogen Fund ('NZHF') with up to £240 million of grant funding to support the upfront costs of developing and building low carbon hydrogen production projects.

In Denmark, a Hydrogen and Power-to-X strategy was announced in March 2022, calling for 4GW to 6GW of installed hydrogen electrolysis by 2030, using wind and solar power, putting DKK 1.25 billion of subsidy funding in place, and the policy and regulatory frameworks that are required for this.

As a further example, in 2019 the Netherlands set targets for 3GW to 4GW of electrolysis by 2030 with multi-billion-euro funding support announced by the Netherlands government. The government is providing EUR 750 million of funding support for a 'hydrogen backbone', retrofitting existing natural gas pipelines to transport hydrogen between five industrial clusters in the Netherlands, and at cross-border connection points.

Access to clean hydrogen is a priority for refiners and steel and ammonia producers as they address GHG emissions. These heavy industries are under tremendous pressure to reduce or eliminate grey hydrogen from processes, to reduce the GHG emissions that result from this.

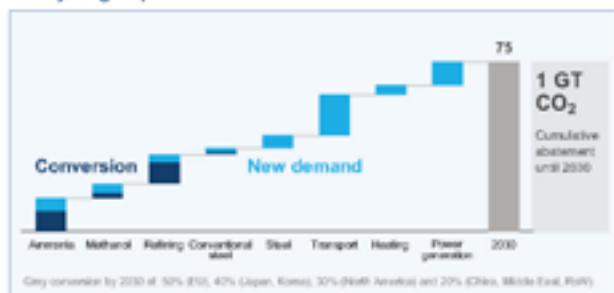
Most of today's demand for clean hydrogen is for a clean-up of grey hydrogen. In the future, the Directors believe that clean hydrogen can displace fossil fuels in hard to decarbonise sectors, either by burning it in power plants to replace natural gas, coal, and oil, or by converting it to electricity through hydrogen fuel cells.

Water vapour is the only by-product of using hydrogen as a fuel. Hydrogen can store and transport intermittent renewable power at a grid scale. As wind and solar become a large percentage of electricity supply over time, the electric grid will need large scale electricity storage to offset periods of low wind and low light. By converting electricity to hydrogen, the energy can be stored over long periods of time either in pipelines and tanks, or in underground salt caverns.

# Market commentary and outlook

## Accelerating demand outlook for hydrogen to deliver Net Zero

Clean hydrogen end-use demand in 2030, MT hydrogen p.a.



- Significant step-up in clean hydrogen demand to deliver Net Zero targets
- Clean-up of industrial 'grey' hydrogen
- Hydrogen roll-out into transport, heat, power

Announced and required direct investments into hydrogen USD billion until 2030



Source: Hydrogen Council, McKinsey: Hydrogen for Net-Zero. A critical cost-competitive energy sector. November 2021

## Sources of hydrogen



\$175 billion "grey" market today...

- Industrial gas: refining, steel, cement, ammonia
- Cleaning up 830mtpa GHG emissions



...and >\$2 trillion clean hydrogen growth

- Replacing oil: buses, trucks, ships, forklift, portable power
- Gas grid blending: eventual shift to 100% H
- Grid balancing via H storage

Total addressable market, \$b	2030	2050
Hydrogen Production	600	1,650
Storage & Distribution	20	75
Supply Chain	40	525
Hydrogen Applications	30	350
Total	690	2,600

\*USA \$1-5/kg including up to \$3/kg green hydrogen tax credit (PTC) under 2022 IRA

A series of technology developments in recent decades are rapidly reaching the stage where they can be deployed commercially, and at scale, to clean up today's hydrogen feedstock sector and to use hydrogen as a low emission fuel.

*Grey hydrogen:* over 95 per cent. of today's industrial hydrogen is manufactured by reforming of fossil fuels – coal, oil and, particularly, natural gas. This source of hydrogen is generally termed "grey" hydrogen, and is made in large scale industrial sites using techniques such as steam methane reforming ("SMR").

*Blue hydrogen:* capturing the GHG emissions derived from SMR and other manufacturing processes and storing them geologically using Carbon Capture and Storage ("CCS") results in a cleaner form of hydrogen, known as "blue" hydrogen.

*Green hydrogen:* in order to manufacture hydrogen without the use of fossil fuels as a feedstock, the "green" hydrogen process takes electricity sourced from renewables such as wind and solar, and uses electrolysis to split water into oxygen and hydrogen. These technologies are well established and the Investment Adviser believes that the industry is on the cusp of a significant phase of growth.

A combination of factors is driving strong growth in the uptake of green hydrogen for the future, including upscaling and consequent lower unit costs in renewable electricity and electrolyzers, increased penalties and regulatory barriers to further growth in fossil fuels and the potential to use green hydrogen as a storage medium for intermittent renewable power and as a long-distance energy carrier.

*Turquoise hydrogen:* methane pyrolysis (or "turquoise" hydrogen) which uses pyrolysis of natural gas to make hydrogen with a solid carbon by-product.

*Emerging clean hydrogen technologies:* there are a number of emerging technologies that could result in low-cost clean hydrogen supplies in the future. These include, atmospheric distillation, SMR with CCS facilities, gasification or plasma processes applied to city and agricultural waste to produce methane and hydrogen. Surplus electricity from nuclear power plants can be converted to hydrogen via electrolysis ("yellow" hydrogen). The Investment Adviser intends to monitor these developments for potential investment by the Company in the longer term.

## Outlook

At the end of 2022, the Investment Adviser identified an Investible Universe of over £23 billion in Private Hydrogen Assets, in operational companies and hydrogen projects. This large and distinctive opportunity set has only continued to grow, with over 200 Private Hydrogen Assets opportunities now identified, compared to 120 at the time of the 2021 IPO, and the sizes of potential investments has also increased. The Investment Adviser believes that the Investible Universe represents less than 25% of the total worldwide hydrogen opportunities and represents a 'long list' of potential investments for the Company that have been reviewed by the Investment Adviser.

Today the Company has an active Pipeline of over £500 million of private opportunities for potential investment including a near term pipeline in excess of £200 million of potential transactions under Non-Disclosure Agreement ("NDA"). This is a strong and distinctive opportunity set for investors and underscores the Company's strong growth potential.

The Investment Adviser continues to monitor the development of the green hydrogen production sector.

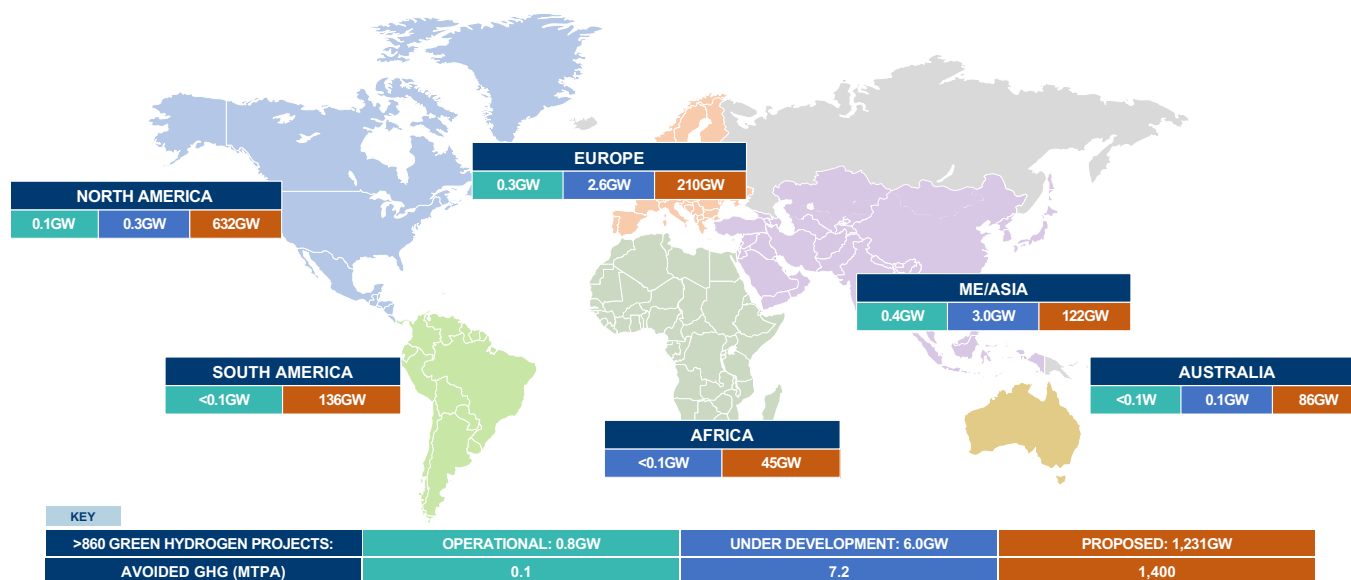
Some 240 projects, totalling 0.8 GW electrolyser capacity and c. 120 tonnes per year of hydrogen output, are online globally today, the capacity of which is dwarfed by the development pipeline of new projects.

At the end of 2022, there were c. 620 projects planned in this decade costing c. US\$3 trillion globally. From this, about 60 projects totalling 6GW are currently under development, incurring significant third-party spend such as Front-End Engineering Design ("FEED"), or undergoing construction having taken final investment decision, and could cost over US\$13 billion to build. These projects should consume 28 GWh/year of power, produce 840k tonnes/year of green hydrogen and result in 7.2 million tonnes of CO<sub>2</sub> per year of avoided GHG emission.

The other 560 projects, totalling 1,230 GW of power input, are at an earlier stage, and could ultimately cost over US\$2.5 trillion. These could add 470 tonnes per day of clean hydrogen by 2030 and offset over 1.4 trillion tonnes of CO<sub>2</sub> per year.



# Market commentary and outlook



HydrogenOne has investment rights on >7GW of green hydrogen projects in Germany and Norway

## Case study – Germany leading the way in green hydrogen development and production in Europe

Germany has recently taken the lead in hydrogen policy in Europe. The need to replace 55 billion cubic metres of Russian natural gas imports every year has greatly accelerated the energy transition in Germany, in a way that most people only a year ago thought impossible.

### Biogas Quota reduction

In January 2023, the German government announced a draft bill on the planned amendment to the GHG quota reduction act. If the bill gets approved as currently drafted, it will no longer be possible to use conventional biofuels from agricultural feedstocks such as corn, grain, rape, or sunflowers to meet the national GHG quota from 2030.

The draft bill also calls for a four-fold credit for electric vehicle charging power and a three-fold credit for green hydrogen and electricity-based fuels. The GHG quota will also be modified from 2024 to 2026, or potentially even increased further. If this law is enacted, which it is expected to be by the latest autumn 2023, it will have a significant impact on the viability of green hydrogen companies - the faster phase-out of biofuels will drive up demand for GHG certificates from green hydrogen and overall demand for green hydrogen molecules.

## Hydrogen infrastructure

Germany has set a goal of having 125,000 commercial hydrogen/fuel cell vehicles on the road by 2030 and has mandated that hydrogen filling stations must be located every 100 km or less on the Autobahn and along the major four lane state roads. Each station must always keep a minimum sales capacity of two tonnes of hydrogen a day.

In December 2022, Germany announced its first dedicated hydrogen pipeline. The pipeline, which is set to become operational in mid-2025, will be 1150 km in length and will run through many of Germany's major cities and industrial areas, making use of over 900 km of existing gas pipelines that will be retrofitted.

## Gas blending with Hydrogen

In December 2022, the German parliament decided to allow the mixing of green hydrogen into existing gas networks at a maximum of 10% vol. share, while maintaining the "green hydrogen" identity throughout the network, distribution and exit point. This policy will be in effect until 2032 and is expected to be a major demand driver for energy players seeking to decarbonise their existing gas operations.

# Environmental, Social and Governance ("ESG")



**Simon Hogan**  
Chairman

3 April 2023

## Introduction from the Chair

Our commitment to investing in clean hydrogen for a positive environmental impact is at the core of everything we do at HydrogenOne. In just over a year, we have seen the conversation around hydrogen's potential for fueling the global energy transition jump to the top of the climate and political agenda. As a climate impact fund, the greatest contribution we can make to achieving the goals of the Paris Climate Agreement is through our investing activities and engagement with portfolio companies to promote our ESG principles.

A key focus of 2022 was classification as an Article 9 fund, the highest classification under EU SFDR. This means our investments align with the EU taxonomy, and we have begun collecting baseline data for our ESG KPIs. I am delighted that we were able to achieve this classification status and to be presenting to the shareholders our first reporting in alignment with the SFDR and the draft ISSB frameworks. It marks a significant achievement in how we measure and report our sustainability impact.

We were also pleased our Investment Adviser became a signatory of the PRI. With our new certifications and signatories, we will push forward with our sustainable investment objective as we continue to deploy capital in the low-carbon growth opportunities and deliver meaningful climate change mitigation through the reduction of harmful emissions.



# Environmental, Social and Governance ("ESG")



## ESG highlights:

HGEN is a climate impact fund with an ESG policy integrated in investment decisions and asset monitoring;

The Company is classified as an Article 9 Fund under the SFDR and EU Taxonomy Regulation;

Completed EU taxonomy alignment assessment on the Private Hydrogen Assets – 89% of which aligned with EU taxonomy regulation at 31 December 2022;

The Investment Adviser became a signatory of the PRI in 2022. The first PRI reporting will be published during 2023;

Published the first reporting of the Company's performance in accordance with the SFDR and the draft ISSB frameworks;

Continued stewardship activity with portfolio companies to further enhance ESG credentials and reporting; and

The Company was carbon neutral in 2022.

The Company's Board diversity (50% female).

## Our Impact:

### £102.9 million

deployed in low-carbon growth;

### +42,716 tCO<sub>2</sub>e

emissions avoided in FY2022 (73% by Sunfire, 24.3% by NanoSun, 2.5% by Elcogen and 0.2% by Strohm) and 50,579 tCO<sub>2</sub>e since IPO (77% by Sunfire, 21% by NanoSun and 2% by Elcogen);

### 201,000 MWh

Potential MWh lifetime clean energy capacity in FY2022 and 226,000 MWh since IPO;

### 3.4 MW

of units sold (fuel cells and electrolyzers) in FY2022 and 3.8 MW since IPO – all adjusted for the Company's shareholding;

### 1,135

jobs supported;

## Displace fossil fuels

Most of the Company's investments either directly or indirectly displace fossil fuels, making a clear contribution to achieving the Paris Accord's target of limiting global temperature rises to below 2 degrees and ideally limit them to 1.5 degrees; and

## Established methodology to measure the avoided emissions

The Company has put in place a consequential methodology to measure the avoided emissions achieved based on the International Financial Institution Framework for a Harmonized Approach to Greenhouse Gas Accounting, which incorporates the Greenhouse Gas Protocol guidance on Estimating and Reporting Avoided Emissions.

# Metrics and methodology

## Metrics

### Greenhouse gas emissions:

Scope 1	48 tCO <sub>2</sub> e
Scope 2	28 tCO <sub>2</sub> e
Scope 3*	134 tCO <sub>2</sub> e
Carbon footprint	1.9 tCO <sub>2</sub> e / £m
GHG intensity	823.36 kgCO <sub>2</sub> e / £m
Avoided 2022	42,716 tCO <sub>2</sub> e
Avoided cumulative	50,579 tCO <sub>2</sub> e
Energy use – UK**	93,383 kWh
Energy use – Global	750,563 kWh

The greenhouse gas emissions set out above have been calculated in line with the requirements of EU SFDR. This means that the Scope 1 - 3 metrics are the sum of Private Hydrogen Assets emissions for those scopes (adjusted for the Company's equity holding in them). Ordinarily, these would be considered scope 3 to the Company. The Company itself does not have any scope 1 - 2 emissions since it is an investment trust with no employees or operational activities. More detail on the methodology is set out below. The avoided emissions are calculated using a consequential methodology which means lifetime emissions of products sold are recognised. In the current year no projects directly producing hydrogen were operational, avoided emissions from such projects will be disclosed in future years. The kWh energy use is in accordance with UK Streamlined Energy and Carbon Reporting requirements using the equity share methodology (e.g. if the Company owns 10% of the equity then 10% of the energy/emissions are reported). Data supporting this disclosure was collected as part of the greenhouse gas calculations. The quality of data supporting energy usage in particular was considered high and is typically taken directly from utility bills.

The scope 1 and 2 greenhouse gas emissions are relatively low. A number of portfolio companies are at an early stage of growth, so we would expect absolute emissions to increase in future, assuming no mitigation action is taken. Several portfolio companies have pro-actively sought to reduce their emission by securing renewable energy supply, this is reflected in the scope 2 metric.

There are some limitations, in the form of estimates or data gaps, in the scope 3 metric. This is within expectations for the first period of reporting and the Company is working with the Private Hydrogen Assets to enhance the data quality for these emissions.

The avoided emissions clearly demonstrate the Company's impact on achieving its sustainable investment objective. Nevertheless, the Company is engaging with the Private Hydrogen Assets to reduce the actual emissions.

## Methodology

The greenhouse gas emissions have been calculated in accordance with the Greenhouse Gas Protocol equity share approach. Each portfolio company has been engaged during the year to develop a greenhouse gas inventory. This process includes the identification of appropriate data sources for each inventory item. Data has been collected, reviewed and processed to calculate the emissions by an external provider. In line with expectations there are limitations to data (gaps or quality), these are addressed in accordance with the Greenhouse Gas Protocol via the use of estimates and each portfolio company receives feedback on data quality based on relevance, completeness, availability, consistency, transparency and accuracy. Recommendations to improve quality are also provided and their implementation will be monitored on a quarterly basis as data is collected throughout the year.

Estimates form a necessary part of the greenhouse gas emission process and emission factors are central to this. Primarily the UK Department for Environment Food and Rural Affairs ("DEFRA") emission factors have been used or, where more appropriate, the Intergovernmental Panel on Climate Change ("IPCC") emission factors can be relied upon. Both of these sources are recognised by the Greenhouse Gas Protocol.

Avoided emissions have been calculated on a consequential basis using the International Financial Institution Framework for a Harmonised Approach to Greenhouse Gas Accounting. The membership behind this approach includes the United Nations Climate Change Secretariat, the World Bank, the European Investment Bank and many others constituting 25 financial institutions. This standard also produces and updates a data set on grid emissions for many countries, this has been used as a key input into the estimation process. In accordance with the framework, portfolio companies who provide products (e.g. fuel cells or electrolyzers) take the expected lifetime emissions of those products as sold. During the year, no projects were operationally producing hydrogen yet as they are still under development. When they do the annual avoided emissions from the hydrogen produced will be reported.

\* Notwithstanding any mitigation action in the respective supply chains, we expect that scope 3 emissions will increase as data gaps are closed and use of estimates are reduced as more reliable data from Private Hydrogen Assets becomes available.

\*\* Statutory Streamlined Energy and Carbon Reporting (SECR) disclosure.

# Strategy

## Strategy

### Hydrogen and climate change mitigation

The Company's sustainable investment objective is to deliver an attractive level of capital growth by investing, directly or indirectly, in a diversified portfolio of hydrogen and complementary hydrogen focused assets whilst contributing to climate change mitigation by integrating core ESG principles into its decision making and ownership process.

The sustainability opportunity in hydrogen is set out in the Company's strategic report and benefits from the transition to a net zero greenhouse gas economy. There are also sustainability risks which the Company considers through the investment and ownership process. These are specific to each investment but include a focus on the scope 1, 2 and 3 emissions of portfolio companies, the management of waste during manufacturing processes and human rights in the supply chain. Physical risk resulting from climate change has also been considered in the short (< 5 years) and medium (5-10 years) term but no specific risks have been identified that would materially impact the cash flows of portfolio companies.

The risk management section sets out the Company's approach to managing these risks and currently there is no expectation of a material impact to the business model or cash flows of portfolio companies arising from them.

To implement the Company's ESG strategy, the Board have taken two key actions in the year: classifying the Company under Article 9 of the EU SFDR; and becoming a signatory to UN Principles of Responsible Investment ("UN PRI").

Classification under Article 9 of EU SFDR has led the Company to set a target for the portfolio to be at least 75% aligned with the EU Taxonomy at the time of investment. This provides a balanced assessment of the sustainability impacts of each portfolio company to ensure that they align with the goal of climate change mitigation and, do no significant harm to any of the other sustainable objectives set out in the EU Taxonomy. In addition, the Company must consider the portfolio's compliance with minimum safeguards set out in the EU Taxonomy which focus on human rights, anti-corruption, fair taxation and competition.

The UN PRI requires a commitment to six principles. These require the Company to integrate sustainability into the investment decision making process, monitor sustainability performance post-acquisition and promote the integration of sustainability within portfolio companies.

Together, the EU SFDR regulation and the UN PRI initiative provide a framework for the Company to implement its sustainable investment objective - climate change mitigation.

### Alignment with Paris Accord's target

The sustainable investment objective of climate mitigation is aligned with the Paris Accords target of limiting global temperature rises to below 2 degrees and ideally limit them to 1.5 degrees. The Company does this through engagement with portfolio companies.

During the year, the Company has required its Private Hydrogen Assets to measure their scope 1, 2 and 3 greenhouse gas emissions. This is the first step towards reducing emissions. The Company will continue to engage with portfolio companies to develop and implement carbon reduction plans.

Avoided emissions are the primary sustainability opportunity from the investments. Many of the Company's investments either directly or indirectly displace fossil fuels, making a clear contribution to achieving the Paris Accord's target. The Company has put in place a methodology to measure the avoided emissions achieved based on the International Financial Institution Framework for a Harmonized Approach to Greenhouse Gas Accounting.



## Case Study – Sunfire

**17.36%**  
**NAV**

Investment size

**31,199**  
**tCO<sub>2</sub>e**

Avoided emissions (adjusted for the Company's holding)

**200,963**  
**MWh**

Total lifetime MWh of units sold (Company's share)

### Profile

**Sunfire is a global leader for industrial electrolyzers. Their innovative and proven solutions are addressing a key challenge of today's energy system: Providing renewable hydrogen and Syngas as substitutes for fossil energy sources.**

Their electrolyzers enable the transformation of energy-intensive sectors such as the chemical, fuel and steel industries. Sunfire employs more than 500 people in Germany and Switzerland.

### Electrolyzers

An electrolyzer splits water into hydrogen and oxygen gas using electricity. The hydrogen produced with renewable electricity can then be used to decarbonize industries through substituting fossil resource inputs. Sunfire produces two types of electrolyzers, alkaline and solid oxide (applicability depends on steam availability). Both have a modular design which can scale to meet demand.



[1]



[2]

Energy-intensive industries are increasingly opting for green hydrogen as part of their decarbonization efforts – however, the necessary equipment to produce the gas is still in short supply. Sunfire is now one of the first companies to start series production of electrolyzers.

In 2021 Sunfire provided Europe's largest single-stack pressurized alkaline electrolyzer which went into operation in 2022. Electrolysis cells – core components of the electrolyzers – are metal-coated in the electroplating lines. This step is crucial for the efficiency, robustness, and durability of Sunfire's electrolyzers and therefore differentiates the company from other suppliers.

To bring the core process of manufacturing alkaline electrolyzers in-house, Sunfire acquired electroplating specialist MTV NT GmbH in January 2022. The long-established company coated components for the mining industry for decades and is now embarking on a green future within the electrolysis business.

[1] <https://www.sunfire.de/en/news/detail/demo4grid-project-partners-successfully-install-a-3-2-mw-pressurized>

[2] <https://www.sunfire.de/en/news/detail/hydrogen-pioneer-sunfire-launches-serial-production>

# Strategy



*Leveraging existing competencies*

Sunfire will reach its annual production capacity for alkaline electrolyzers of 500 MW before the end of 2023. Expansion into the gigawatt scale is already in planning. One reason for the rapid expansion of Sunfire's manufacturing capacity is the hydrogen pioneer's forward-looking scaling strategy: "We're not starting from scratch by constructing a greenfield factory but are initially building on existing expertise and facilities along the entire value chain," explains CEO Nils Aldag. The Solingen site is a prime example.

*Sunfire invests EUR 30 million in its Solingen site*

Sunfire is investing around EUR 30 million in expanding its Solingen site. The company is also to receive financial support from the Important Projects of Common European Interest (IPCEI). The funds are to be provided by both the German Federal Ministry of Economics and Climate Protection and the federal state of North Rhine-Westphalia.

In March 2023 Sunfire celebrated the launch of industrial production at their site in Solingen with high-ranking guests from politics and industry.

**Avoided emissions:**

Below is an example of the avoided emissions for one 10 MW Alkaline electrolyser.

<b>195</b> kg/h	<b>90,000</b> hours	<b>Germany</b>	<b>313</b> gCO <sub>2</sub> /kWh	<b>184,570</b> tCO <sub>2</sub> e
Net production rate	Lifetime	Location	Grid emission factor	Lifetime avoided emissions

Sunfire's total avoided emissions for the year was **732,383 tCO<sub>2</sub>e**, of which the Company's share was **31,199 tCO<sub>2</sub>e**. These represent the lifetime emissions from **80MW** of electrolyzers sold during the year.

# Environmental, Social and Governance ("ESG")

## ESG policy

The Company has set out that ESG criteria will be fully considered in its investment and divestment decisions, and in its asset monitoring. The Board has oversight of and monitors the compliance of the AIFM, and the Investment Adviser and any undertaking advised by the Investment Adviser in which it invests, with the Company's ESG policy, and ensures that the ESG policy is kept up-to-date with developments in industry and society.

## Our ESG Principles



## The Company has embedded the following ESG principles into its policy:

### Allocating capital to low-carbon growth

The Company is focused on investing for a climate-positive environmental impact, accelerating the energy transition and the drive for cleaner air. The Directors will prioritise this long-term goal over short-term maximisation of shareholder returns or corporate profits. The Company will enable investors to back innovators in low carbon industries by supporting the access of such companies to the capital markets.

### Screening and due diligence

Prior to investment, the Company will undertake an initial screen of the prospective investment's economic activity. This will focus on core services or products, to establish provisional alignment with the EU Taxonomy. During the detailed sustainability due diligence stage, the turnover, operating expenses and capital expenditure will be assessed for alignment with the EU Taxonomy environmental objectives. The relevant "do no significant harm" and minimum safeguard requirements will also be assessed.

Once EU Taxonomy compliance is established, the principle adverse indicators (as defined in the Regulatory Technical Standards to the EU Sustainable Finance Disclosure Regulation) will be considered, to the extent possible, for their potential impact. The performance of the prospective investment against these criteria will be considered by the investment committee.

### Engagement to deliver effective boards

The Company prioritises positive and proactive engagement with the boards of its Private Hydrogen Assets. The Directors recognise that structure and composition cannot be uniform but must be aligned with long term investors while supporting managements to innovate and grow. The presence of effective and diverse independent directors is important to the Company, as are simple and transparent pay structures that reward superior outcomes.

### Encourage sustainable business practices

The Company expects its Hydrogen Assets to be transparent and accountable and to uphold strong ethical standards. This includes a demonstrated awareness of the interests of material stakeholders and engagement to deliver positive impacts on the environment and society. Hydrogen Assets should support the letter, and spirit, of regional laws and regulations. The Company and the Investment Adviser will encourage the adoption of initiatives, including but not limited to, the Task Force on Climate-related Financial Disclosures and EU Sustainable Finance Taxonomy and will encourage transparency and alignment of lobbying activities.

During 2023, the Private Hydrogen Assets will be engaged with to report against principle adverse indicators.

### ESG in the Company

Given the nature of its investments, the Company has committed to disclosing key performance metrics ("KPIs") that describe the environmental impact of its portfolio, guided by frameworks and regulations such as the draft ISSB standards and SFDR. The Company is particularly focused on the greenhouse gas emissions from investments and the emissions that have been avoided ("avoided emissions") as a result of the investments, and has actively engaged with portfolio companies to adopt an appropriate reporting framework.

The Company frames its investments around positive contributions to UN Sustainable Development Goals ("UN SDGs") and works within responsible frameworks such as those promoted by the UN Global Compact ("UN GC"), the London Stock Exchange's Green Economy Mark, and the UN Principles for Responsible Investment ("UN PRI").

The Company has no direct employees, operations or permanent office space. As a result, there are no scope 1 or 2 emissions. Material scope 3 emissions are that of the investment portfolio of the Private Hydrogen Assets which are the focus of this report. As is typical of scope 3 measurements, we note that there are some data gaps and use of estimates when the Private Hydrogen Assets report these figures. Efforts are ongoing to enhance data quality in this reporting.

Mandatory disclosures under Streamlined Energy and Carbon Reporting are made on page 39 and subject to the methodology outlined on the next page.



# Environmental, Social and Governance ("ESG")

## ESG KPIs

### KPIs

### 2022 progress

## Environmental

### Investing capital in low-carbon growth

£102.9 million invested in low-carbon growth during the year.

### GHG emissions avoided

42,716 tCO<sub>2</sub>e avoided during the year and 50,579 tCO<sub>2</sub>e avoided since IPO.

### GHG emissions on a look-through basis (aggregate scope 1 and 2 of portfolio companies) – see page 39 for methodology

76 tCO<sub>2</sub>e (Scope 1 - 48 tCO<sub>2</sub>e and Scope 2 - 28 tCO<sub>2</sub>e).

### Lifetime clean energy capacity developed

201,000 MWh in FY2022 and 226,000 MWh since IPO.

### The Company's share of MW capacity sold in fuel cells and electrolyzers

3.4 MW in FY2022 and 3.8 MW since IPO.

## Social

### Jobs supported

Backing innovators in low carbon industries – six new investments completed during the year. In aggregate, the Company's Private Hydrogen Assets were employing 1,135 full-time staff at 31 December 2022.

### The Company's Board Independence and Diversity

The Company appointed a Board of independent, non-executive directors to represent shareholder interests and promote the success of the company. Diversity is considered a key component of a successful Board and the Company currently has two male and two female Board members. HGEN's Board independence (100%) and diversity (50% female).

### Portfolio Companies Board Independence and Diversity

The Company continued to promote the benefits of independence and diversity on Private Hydrogen Asset Boards through engagement. Currently, 78% of Private Hydrogen Asset Boards have at least one independent Board member and 56% have female representation. Women accounted for 17% of senior roles (excludes directorships) across our Private Hydrogen Assets.

### Work on human rights

A review of the human rights policies in place at each Private Hydrogen Asset was undertaken and recommendations made for improvement. These primarily focus on human rights in the supply chain.



## Governance

### Engagement to deliver effective boards

Positive and proactive engagement with the boards:

Upon initial investment, the Investment Adviser representative would typically be appointed either as a director or a Board Observer to the boards of the invested Private Hydrogen Assets and would be actively engaged in ESG matters in these businesses. As the invested company reaches a certain level of maturity, the Investment Adviser representative may step down from their position as a director or a Board Observer at an appropriate time.

The Investment Adviser representatives were appointed as Directors on eight Private Hydrogen Assets and as an observer on one Private Hydrogen Asset (100% representation).

The Company and the Investment Adviser continue to support the UK Stewardship code issued by the Financial Reporting Council.

The Investment Adviser voted on behalf of the Company at all meetings where they were able to exercise the Company's vote. During the year, the Company was represented at 100% of Private Hydrogen Asset board meetings and votes.

### Site visits

28 site visits on invested positions were completed during the year as part of the oversight and stewardship approach. This covered 89% of the Private Hydrogen Assets.

### Simple and transparent pay structures that reward superior outcomes

Strong linkage to long-term value creation ahead of short-term outcomes by use of share options and other incentive programmes.

### Encourage sustainable business practices and ethics

Each Private Hydrogen Asset had been through a review process covering their supply chain due diligence, waste management and circular economy considerations.

Recommendations for improvement were made and implementation will be monitored going forward.

### Stewardship

Each Private Hydrogen Asset had been engaged with during the year to begin the reporting process on principle adverse indicators and key metrics to support our climate change mitigation investment objective.

Data quality and process recommendations were made to improve this information going forward. For example, the capture of business travel, supplied goods delivery and landlord-supplied energy are all areas where improved processes are being implemented.

The governance structures within each Private Hydrogen Asset had been reviewed and policy recommendations made to strengthen safeguards in key areas, such as anti-bribery/corruption, human rights and tax risk.

# HydrogenOne's approach to ESG

## Our approach to ESG

The Company closely monitors developments in sustainability reporting standards and supports the progress being made by the International Sustainability Standards Board ("ISSB"). The Company is not directly in scope for mandatory reporting under the Task Force on Climate-related Financial Disclosures ("TCFD") but notes the close alignment with ISSB and the UK Government's stated intent to make ISSB the backbone of future sustainability reporting. Although these standards are still being developed, the draft General Requirements for Disclosure of Sustainability-related Financial Information (S1) has been followed in the preparation of this report, including its structure under the pillars of Governance, Strategy, Risk Management and Metrics. The Company intends to adopt future ISSB standards as they are finalised, which will align with TCFD and other initiatives.

## Governance Structure

The Board maintains overall responsibility for the oversight of sustainability related risks and opportunities. The Board consists of four non-executive Directors who are independent of the Investment Adviser to ensure appropriate oversight. The Board's gender diversity through 2022 was 50% male and 50% female. The Alternative Investment Fund Manager ("AIFM") is kept informed of any key risks and compliance with sustainability regulation such as the EU Sustainable Finance Disclosure Regulation ("EU SFDR"). During the year, the Board and AIFM met six times to discuss sustainability related matters (including the Company's recent conversion to an Article 9 classification under the EU SFDR).

To assist in the execution of sustainability related matters the Board delegates to the Investment Adviser. The Investment Adviser operates an internal governance process to appoint and oversee an executive responsible for sustainability. That individual engages directly with the Portfolio Company's nominated leads on sustainability and also with any third-party consultants and advisors as required.

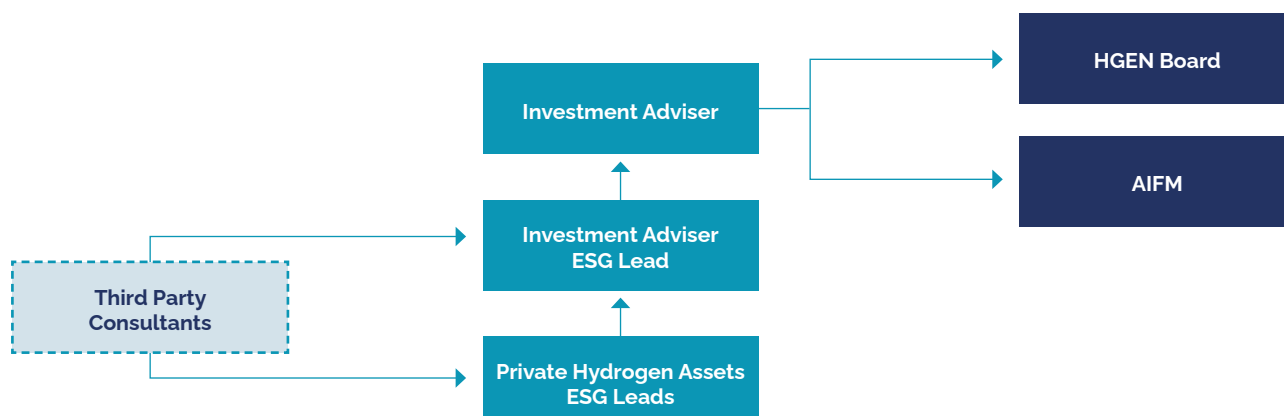
The Investment Adviser has appointed Dr JJ Traynor as the ESG Lead, whose relevant experience includes establishment of Shell's ESG practice, reporting and engagement with markets 2005-2017, including:

- Climate change policy and emissions reporting. Introduced reporting of Shell's strategy for energy transition, asset resilience to climate change and CDP;
- Clean energy strategy – strategy team that designed Shell's New Energies business;
- Human rights, environmental policy and fringe community relations in Nigeria, Russia, Canada, Alaska, Ireland, including multiple site visits with stakeholders and community engagement. Spanned a period where Shell had multiple challenges from stakeholders and NGOs in these very complex themes;
- Engagement with Norway Council on Ethics and other stakeholders regarding Shell's human rights and oil spills track record in Nigeria;
- Multiple visits to Alaska North Slope and the Aleutian Islands, including assessment of a drilling rig damaged by a towing accident, and engagement with local politicians;
- Development of Shell's principles for fracking operations including water, land use and chemicals;
- Engagement with multiple local and international stakeholders regarding the impact of oil sands mining on CO2 emissions and boreal forest footprint;
- Executive compensation and improving the linkage to delivery of performance targets; and
- Vedanta Resources and WintershallDea 2017-21: senior advisor for ESG policy and reporting. Included launch of WintershallDea's first Sustainability Report and climate change targets (2020).

## Board oversight responsibilities

The Board exercises its oversight responsibilities through the review and approval of the Company's sustainability strategy and risk management approach. To ensure appropriate skills and competencies are utilised in the execution of strategy and risk management, third party advisors and consultants are engaged as appropriate.

## Governance structure



The Board is kept up to date on progress via regular reporting from the Investment Adviser and, from relevant third parties directly in order for the Board to challenge the approach and maintain its oversight.

During the year, the Board met to consider the Company's sustainable investment objective and classification under the EU SFDR. As part of this process the Board received reporting on the portfolio's alignment with the EU Taxonomy regulation and, for all future major transactions, will receive reporting on the alignment of potential acquisitions with the EU Taxonomy. Broader sustainability risks and opportunities related to acquisitions are also considered by the Investment Adviser as part of the acquisition due diligence process and outcomes are reported to the Board.

In classifying the Company under Article 9 of EU SFDR the Board set a target that the Company's portfolio at the time of investment will be a minimum of 75% aligned with the EU taxonomy and that the remaining 25% will do no significant harm to any of the EU Taxonomy sustainable objectives. The Board monitors compliance with this target on a regular basis and will consider further sustainability related targets for the portfolio in the future as appropriate.

### Investment Adviser responsibilities

The Investment Adviser has delegated responsibility for the execution of the strategy and risk management. The Principals of the Investment Adviser oversee this process and are accountable to the Board. An executive of the Investment Adviser has day to day responsibility for these matters and engages directly with portfolio companies and external advisors. The Investment Adviser also has oversight of the data collection and reporting process for the monitoring of performance. This has been outsourced to a third-party service provider.

## Risk Management



### Pre-investment

The Company incorporates sustainability risks and opportunities into the investment process. The Board delegate this to the Investment Adviser who operates a screening and due diligence process as well as considering regulatory compliance, in particular with the EU SFDR. The results of this work are considered by the investment committee prior to making a recommendation to the Board.

## ESG screens

### Allocating capital to low carbon growth

- >50% revenue from hydrogen & related technologies
- Contributes to avoided GHG emissions
- Excludes fossil fuels extraction

### Engagement for effective boards

- Effective board
- Alignment with long term minorities
- Alignment of executive pay with long term shareholders
- Independence of AC
- Board qualifications (skills, tenure, diversity)

### Encourage sustainable business practices

- Board oversight of Health, Safety, Security & Environment ("HSSE") process and reporting
- Transparency
- Company policy and disclosure of supply chain practices
- The United Nations Global Compact principles
- Bloomberg ESG score (where available)

### Article 9 Compliance

- Investment portfolio is >75% aligned to EU Taxonomy
- Principle adverse indicators have been reviewed
- Investee agrees to provide data for SFDR periodic disclosure

### Mapping vs UNSDGs

- 3.9 Reduce deaths from pollution
- 7.1 Increase access to electricity
- 7.2 Increase renewables in the energy mix
- 7.3 Increase energy efficiency
- 9.4 Upgrade industries for sustainability
- 9.5 Increase R&D in industrial technologies
- 11.6 Reduce environmental impact of cities
- 12.6 Adopt sustainable practices and reporting
- 14.3 Reduce acidification (water)
- 15.3 Desertification and land degradation

### ESG in the Company

- KPIs including avoided emissions
- Mapping vs UNSDGs
- Manage the Company's own carbon footprint

### Screening and due diligence

At origination the investment characteristics are positively screened for alignment with the Company's sustainable investment objective, being climate change mitigation through hydrogen and complementary hydrogen focused assets. The investment is also passed through an initial assessment of the significant contribution criteria to climate-mitigation-aligned activities in the EU Taxonomy.

# HydrogenOne's approach to ESG

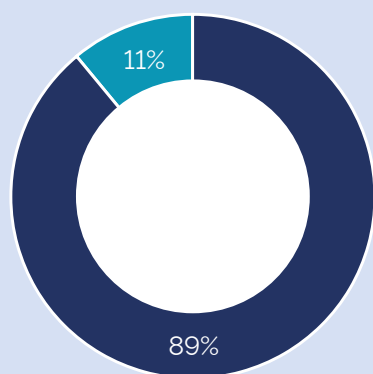
As the acquisition process advances, detailed due diligence is undertaken. As part of this assessment the Principle Adverse Indicators ("PAIs"), which are sustainability metrics defined by the EU SFDR to detect harm, are considered. There are over 60 PAIs set out in EU SFDR, the majority of which are considered only when material. The PAIs cover climate (e.g. GHG emissions), nature (e.g. pollutants and hazardous waste), human rights (e.g. compliance with global standards), social impact (e.g. gender pay gap) and many more. There is not always sufficient data to undertake a comprehensive review; in this scenario estimates and judgments are used to consider the likely impact of these indicators. This work not only informs the acquisition decision but also the ownership priorities if acquired.

Consideration of PAIs is a new process introduced during 2022 as part of the Company's classification under Article 9 of EU SFDR. A finding resulting from this process does not immediately lead to withdrawing from the acquisition process. The finding is reviewed for potential mitigation that could be implemented with the investee during the ownership period.

## EU Taxonomy alignment

Following the initial screen, a detailed assessment of alignment with the EU Taxonomy is undertaken. This considers the potential investment's economic activity (turnover, operating expenses and capital expenditure) against the technical screening criteria in the EU Taxonomy. Once substantial contribution criteria are established, an assessment of the do no significant harm criteria is undertaken to ensure the other sustainability objectives in the EU Taxonomy are not inadvertently harmed by the investment's activities.

### Aggregate EU Taxonomy Alignment



■ Aligned  
■ Non-aligned

Engagement with the potential investee's management team is required to complete this assessment as it typically requires data that is not available publicly. Some inputs into this work are also qualitative and interviews with management provide the most insight.

The final step in this assessment is consideration of the minimum safeguards. The EU Taxonomy requires compliance with the OECD Guidelines for Multinational Enterprises and UN Guidelines for Business and Human Rights. Guidance from the EU Commission is applied in reviewing this. A significant part of this review covers social considerations, with a focus on human rights. All portfolio companies provide affirmation that they have no convictions for any human rights offences and all operate in developed jurisdictions with labour law compliance obligations. During the review, a focus was placed on the policies and procedures each company had in place to detect human rights abuses in the supply chain. This led to recommendations for improvement in some companies, an example would be the introduction of enhanced supplier due diligence.

During the year, the Company assessed its material existing investments for compliance with the EU Taxonomy as part of its classification as Article 9 under EU SFDR.

At the time of the assessment, the Company was compliant with the 75% minimum threshold it has set for alignment. As at 31 December 2022 the Company remains compliant with the portfolio 89% aligned with the EU Taxonomy. The 11% of non-alignment has been assessed against the relevant do no significant harm criteria in the EU Taxonomy and complies with these requirements. The non-alignment primarily relates to pre-existing revenue streams in one portfolio company that is separate from the core hydrogen focus.

## Post-investment

The Company establishes an engagement and monitoring process to ensure the sustainability strategy is achieved and that any findings from the pre-investment due diligence process are addressed.

The Company has set its key metrics for achieving its sustainable investment objective as scope 1, 2 and 3 greenhouse gas emissions and avoided emissions. These metrics form the basis for monitoring the performance of the portfolio, in addition the relevant PAIs will be tracked.

In order to monitor these metrics, the Company has undertaken a significant engagement strategy with its material portfolio companies during the year. This has sought commitment from these companies to collect and provide data. The Company has also engaged a third party to assist with the data collection, processing and reporting of these metrics. For many portfolio companies this represents the first year that their greenhouse gas emission will be calculated, making it the baseline. The work undertaken during the year will enable greenhouse gas reduction strategies to be developed over the next 12 months.

# Environmental, Social and Governance ("ESG")

## Case Study – Strohm

***"It is in our genes to disrupt, innovate and lead for the better. This includes working toward a net zero society"*** – Martin van Onna, Strohm CEO.

## 9.26% NAV

Investment size

## 105 tCO<sub>2</sub>e

Avoided emissions  
(adjusted for the Company's  
holding)

### Profile

**Strohm is the world's first and leading manufacturer of fully bonded, Thermoplastic Composite Pipe.**

The lightweight, high strength and corrosion-resistant composite pipes provide cost and, operational benefits in renewable energy and conventional oil and gas applications. These pipes displace a traditional carbon steel alternative. Strohm has been carbon neutral since 2020 and continues to reduce its operational emissions.

### Decarbonising the oil and gas sector

It is widely recognised that there is a need for fossil fuels in the short term to meet energy demand and, in the long term, within the global carbon budget. This industry, like all others, must play its part in the transition to net zero and that requires the decarbonisation of operational activity. There are various workstreams to address this issue, including work from the Science Based Targets Initiative to develop a net zero standard for the sector. Low carbon technologies, such as Strohm's Thermoplastic Composite Pipe, play a central role in helping this sector to decarbonize.

### Thermoplastic Composite Pipe

Strong, lightweight, spoolable and corrosion resistant, Thermoplastic Composite Pipe provides a wide variety of financial, operational, and environmental benefits in subsea production and oil field service applications. An ISO 14067 lifecycle greenhouse gas assessment has been conducted on the pipe. Comparing it to the alternative technology, carbon steel pipe, shows the Thermoplastic Composite Pipe to be 55% lower in carbon. The superior corrosion resistance properties of the pipe also reduce the risk of leaks and pollution to the environment.

### Application to renewables

As offshore wind developments increase their distance from shore to access better wind resources, the loss of power and high cost of High Voltage Direct Current Cable is restrictive. A viable solution is to convert the power to hydrogen at the offshore location and transport that instead. One Thermoplastic Composite Pipe can transfer up to 10 times (order of magnitude) as much energy as an equivalent cable can, and it can store the energy. Application to transporting green hydrogen is a key growth strategy for Strohm.





# Environmental, Social and Governance ("ESG")

## Case Study – Thierbach project (post year-end acquisition)

### Regenerating former coal mining sites and decarbonising the industry

The Thierbach green hydrogen development project is located in the region of Borna, near Leipzig in Germany. The project is scheduled to reach final investment decision in 2023 subject to technical and commercial studies, and funding.

The region of Borna played an important role in the industrialisation of Germany during the 19th century, with several historic brown-coal mines located here. For the last 20 years, there have been significant efforts to revegetate this landscape by flooding these opencast pits and creating new lakes, as well as planting thousands of trees. In addition, large solar power generation parks are being built, from where the renewable power needed to produce green hydrogen in the region will come.

A step up in these regeneration activities is underway, driven by Thierbach green hydrogen production site. The project will be built and operated by HH2E, a specialist in developing projects to decarbonise industry using green hydrogen. Once completed, it will serve green hydrogen customers and offtakers, including leading players in the mobility sector, large-scale energy and industrial consumers such as the chemical industry and commercial air and road transport operators. According to federal government's estimation, green hydrogen demand in Germany is expected to grow from current 1.65 million tonnes per year to 13-20 million tonnes per year by 2045.

The technology mix developed by HH2E harnesses the volatility of renewable energy production by combining an alkaline electrolyser with a high-capacity battery, which enables constant production of cost-competitive green hydrogen without a permanent supply of power. This way, HH2E can effectively utilize surplus renewable power to produce green hydrogen and green heat, making use of all the installed renewable power generation capacity and not just a percentage of it. This will not only boost green hydrogen production at competitive costs, it will also help stabilize power grids and prevent energy waste.

The Thierbach project will be built on site of the demolished coal power station, benefiting from the existing infrastructure including critical power and water supply. Green hydrogen production can play an important role in repurposing locations such as Thierbach and can act as an economic spur to attract various other industries and enterprises and generating new jobs and opportunities.

Thierbach is projected to have the capacity to produce c.6,000 tonnes of green hydrogen per year by 2025, displacing fossil fuels and, therefore, avoiding harmful greenhouse gas emissions. Further expansion phases could increase production to more than 60,000 tonnes in the medium term, which could result in over 10 million tonnes of GHGs avoided over the life of the project.










# ESG Credentials

## United Nations Sustainable Development Goals

In 2015, the member states of the United Nations adopted Agenda 2030. A key component of the Agenda 2030 are the seventeen UN SDGs. These long-term goals are designed to end poverty, improve health and education, reduce inequality, create sustainable economic growth and combat climate change. They are intended to create incentives to implement measures in the interests of people, the planet and prosperity, and therefore contribute to changing the world significantly by 2030.

The Company's investment objective and investment policy is closely aligned with seven of these goals, namely Good Health and Wellbeing (Goal 3), Affordable and Clean Energy (Goal 7), Industry, Innovation and Infrastructure (Goal 9), Sustainable cities and communities (Goal 11), Responsible Production and Consumption (Goal 12), Life Below Water (Goal 14), and Life on Land (Goal 15).

Goal	UN SDG target	The Company's focus
<b>3</b> GOOD HEALTH AND WELL-BEING 	<ul style="list-style-type: none"> <li>Reduce deaths from pollution (3.9)</li> </ul>	<i>Fuel cell vehicles to displace diesel and fuel oil. Direct use in industrial activities to displace fuel oil and coal. Demonstrated through avoided emissions.</i>
<b>7</b> AFFORDABLE AND CLEAN ENERGY 	<ul style="list-style-type: none"> <li>Increase access to electricity (7.1)</li> <li>Increase renewable energy in the global energy mix (7.2)</li> <li>Increase energy efficiency (7.3)</li> </ul>	<i>Enable the expansion of renewable energy through direct use of clean hydrogen and as a form of energy storage. Exclude those involved in the production of fossil fuels.</i>
<b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE 	<ul style="list-style-type: none"> <li>Upgrade industries for sustainability (9.4)</li> <li>Increase R&amp;D in industrial technologies (9.5)</li> </ul>	<i>Enabling the decarbonisation of processes in heavy industry and enhancing innovation in transport and for a more circular economy.</i>
<b>11</b> SUSTAINABLE CITIES AND COMMUNITIES 	<ul style="list-style-type: none"> <li>Reduce the environmental impacts of cities (11.6)</li> </ul>	<i>Enabling the adoption of cleaner fuels for transportation and in heavy industry to reduce pollution and advance a more sustainable economy.</i>
<b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION 	<ul style="list-style-type: none"> <li>Adopt sustainable practices and reporting (12.6)</li> </ul>	<i>Engagement for good governance and transparency across the portfolio.</i>
<b>14</b> LIFE BELOW WATER 	<ul style="list-style-type: none"> <li>Reduce acidification (14.3)</li> </ul>	<i>Enabling the replacement of fossil fuels, to reduce CO2 emissions and the corresponding negative impacts on ocean chemistry.</i>
<b>15</b> LIFE ON LAND 	<ul style="list-style-type: none"> <li>Combatting desertification and land degradation (15.3)</li> </ul>	<i>Enabling the replacement of fossil fuels to reduce GHG emissions and the associated acceleration of global warming.</i>



# ESG Credentials



## Principles for Responsible Investment

As part of its commitment to sustainable investing, during the year the Investment Adviser has signed the United Nations-supported Principles for Responsible Investment ("PRI"). PRI is recognised as the leading global network for investors who are committed to integrating ESG considerations into their investment practices and ownership policies. The Company will be publishing disclosures required under PRI during 2023.



## LSE Green Economy Mark

The Company has been awarded the London Stock Exchange's Green Economy Mark, which recognises companies that derive 50% or more of their total annual revenues from products and services that contribute to the global green economy. The underlying methodology incorporates the Green Revenues data model developed by FTSE Russell, which helps investors understand the global industrial transition to a green and low carbon economy with consistent, transparent data and indexes.

## SDR

The Company closely monitors regulatory developments that it may be in scope for. In October 2022 the Financial Conduct Authority issued a consultation on Sustainability Disclosure Requirements (SDR) and investment labels. This regulation will introduce general anti-greenwashing rules and creates three labels for different types of sustainability fund (Transitioning, Aligned and Impact). The Company supports measures to reduce greenwashing and clarify sustainability for investors. These proposed rules are expected to be finalised by June 2023 and the Company will review the final version before deciding on its response.

## Carbon Neutral

The Company achieved a carbon neutral status for the year to 31 December 2022 through the offsetting (at portfolio and Company level) of scope 1 and 2 CO<sub>2</sub>e emissions. The Company considers the term carbon neutral in line with the UN Climate Change secretariat guidance, being the offsetting of emissions for the period. Whilst the Company is actively working on setting a net zero target through carbon reduction, it is important to recognise the emissions that have already occurred and take action to address these. The Company does not believe offsetting is the long-term solution to climate change, however it is part of the action that can be taken in the short to medium term as reduction actions are implemented. To achieve the offset, the Company purchased credits from certified carbon removal projects where there is transparency over the measurement and allocation of sequestration.

Total scope 1 and 2: 76 tCO<sub>2</sub>e

Offset by Private Hydrogen Assets: 30 tCO<sub>2</sub>e

Offset by the Company: 48 tCO<sub>2</sub>e

## Annex 5

Periodic disclosures required under EU SFDR (Annex 5) are now available on the Company's website: <https://hydrogenonecapitalgrowthplc.com/sustainability/sustainability-related-disclosures/>.

# Stakeholder engagement (Section 172 Statement)

The Directors have a statutory duty to promote the success of the Company, whilst also having regard to certain broader matters, including the need to engage with employees, suppliers, customers, and others to their interests.

The Company has no employees and no customers in the traditional sense. In accordance with the Company's nature as an investment trust the Board's principal concern is the interests of the Company's shareholders taken as a whole. In doing so, it has due regard to the impact of its actions on shareholders, the environment and the wider community.

The Investment Adviser (in addition to the Board) has significant dealings with our stakeholders and, therefore, is an integral point of contact between the Company and our stakeholders. The Company's Corporate Broker, Barclays Bank PLC, are also an integral point of contact between the Company and our shareholders and, together with the Investment Adviser ensure that any shareholder feedback or observations are collated.

The following disclosure describes how the Directors have had regard to the matters set out in section 172(1)(a) to (f) when performing their duty under s172 of the Companies Act 2006 and forms the Directors' statement required under section 414CZA of the Companies Act 2006.

Stakeholder group	Why is it important to engage?	How has the Board communicated and engaged?	Key topics of engagement and decisions made by the Board
<b>Shareholders</b>	<p>The significant shareholders of the Company are set out on page 65.</p> <p>The Investment Adviser and the Board believe that Shareholders and their support is critical to the continuing existence of the business and delivery of its long-term investment strategy.</p> <p>It is important to the Company's continued success to have the potential to access equity capital in order to expand the Company's portfolio over time in order to further diversify the investment portfolio and create economies of scale.</p>	<ul style="list-style-type: none"> <li>- Annual and Interim Reports;</li> <li>- Quarterly factsheets;</li> <li>- Market announcements, including quarterly NAV announcements;</li> <li>- Investor webcasts and presentations (through the Investment Adviser);</li> <li>- Institutional investor meetings (one-to-one and group), primarily through the Investment Adviser and corporate broker;</li> <li>- Regular institutional investor feedback received from the Investment Adviser and corporate broker;</li> <li>- Research analyst presentations through the Investment Adviser.</li> <li>- AGM;</li> <li>- Website;</li> <li>- First Capital Markets Day held in February 2023.</li> </ul>	<p>Shareholder engagement was rewarded by support for the Company's growth and diversification strategy through the issue of new shares in April 2022 and shareholder approval at a general meeting held in October 2022 for the Share Issuance Programme.</p>
<b>Investment Adviser</b>	<p>The Investment Adviser is the most significant service provider to the Company and a description of its role can be found on page 63.</p>	<ul style="list-style-type: none"> <li>- Board and Committee meetings;</li> <li>- Regular reports and presentations from the Investment Adviser;</li> <li>- Ad hoc meetings and calls.</li> </ul>	<p>In addition to all matters related to the execution of the Company's Investment Objective, the Board engaged with the Investment Adviser in regards to the Company's SFDR reporting and Article 9 classification as well as the Company's capital raise in April 2022. The Board held a strategy day in early 2023 to which the Investment Adviser was invited to present and discuss with the Board the Company's future strategy.</p>
<b>AIFM</b>	<p>The AIFM is a critical service provider for the Company's long-term success and engages with the Board and the Investment Adviser for the purpose of providing investment advisory services to the Company.</p> <p>The Board regularly monitors the Company's investment performance in relation to its objectives, investment policy and strategy.</p>	<ul style="list-style-type: none"> <li>- Board and Committee meetings;</li> <li>- Regular reports and presentations from the AIFM.</li> </ul>	<p>The AIFM is responsible for monitoring the risks faced by the Company and these are regularly discussed at meetings.</p>

# Stakeholder engagement (Section 172 Statement)

Stakeholder group	Why is it important to engage?	How has the Company communicated and engaged?	Key topics of engagement and decisions made
<b>Other key service providers</b>	<p>The Company does not have any direct employees and works closely with a number of key service providers, including the Administrator, Company Secretary, auditor and corporate broker.</p> <p>The independence, quality and timeliness of their service provision is critical to the success of the Company.</p>	<ul style="list-style-type: none"> <li>– Board and Committee meetings;</li> <li>– Ad hoc meetings and calls;</li> <li>– Annual review of performance based on a questionnaire;</li> <li>– The Company undertakes regular reviews of all material contracts for service quality and value through the activities of the Management Engagement Committee.</li> </ul>	<p>The feedback given by the service providers is used to review the Company's policies and procedures to ensure open lines of communication, and operational efficiency.</p> <p>The Company is able to identify and resolve problems with service provider relationships, should they arise, via this process.</p> <p>During the Company's annual report production, the Audit and Risk Committee has engaged with the Company's external auditors to obtain feedback on the quality and accuracy of the reporting and to ensure the reporting process was undertaken effectively by all service providers.</p> <p>The Board sought advice from the Company's corporate broker in respect of various matters, including equity raise.</p>
<b>Portfolio investments</b>	<p>The Board considers each proposal against the Company's investment objective, and investment policy as disclosed on pages 9 and 10 and with consideration for the wider group of stakeholders.</p>	<ul style="list-style-type: none"> <li>– The Company's Board is presented with potential investment opportunities that have been identified by the Investment Adviser and which have undergone a process of analysis, including considerations relating to environmental, social and governance issues.</li> <li>– The Board reviews the financial and operating performance of the Company's portfolio companies on a regular basis.</li> <li>– In many cases, investments in Private Hydrogen Assets are linked to operational and financial targets, which the Board monitors.</li> <li>– A quarterly update on performance of portfolio companies is provided in the Investment Adviser's Report within the Board Packs.</li> </ul>	<p>As at 31 December 2022, over 82% of the capital raised was invested. 6 new investments were completed during the year. Other investment opportunities were reviewed but were rejected as they did not pass the investment screening process.</p> <p>As part of the ongoing portfolio performance monitoring, the feedback given by the Investment Adviser is used to review the Company's policies and procedures to ensure open lines of communication, and operational efficiency regarding its Portfolio Companies.</p>
<b>Society and the environment</b>	<p>Ensuring our investment positively contributes to climate change mitigation with an ESG policy integrated in investment decisions and asset monitoring.</p>	<p>See ESG section of the report on pages 37 to 52.</p>	<p>See ESG section of the report on pages 37 to 52.</p>

## Other Matters

### Modern slavery disclosure

The Company is committed to maintaining the highest standards of ethical behaviour and expects the same of its business partners. The use of slavery and human trafficking is unacceptable and entirely incompatible with its ethics as a business. The Company believes that all efforts should be made to eliminate it from its supply chains.

The majority of services supplied to or on behalf of the Company are from the financial services, energy and construction industries and other services associated with those industries. Given what the Company understands to be a low risk profile of anyone supplying it with services being involved in slavery and/or human trafficking, it believes its current procedures and ability to rely on regulatory oversight in relation to professional services are sufficient in this regard.

### Social, community and human rights issues

The Investment Adviser screens the Company's Investable Universe as part of the Environmental Social and Governance analysis for any breaches of the principles of the UN Global Compact, including human rights, labour rights, environmental breaches and corruption. Any non-compliant companies are excluded from investment.

### Anti-bribery and corruption

In accordance with the UK Bribery Act 2010, the Company has developed appropriate anti-bribery policies and procedures. The Company has a zero-tolerance policy towards bribery and is committed to carrying out its business fairly, honestly and openly. The anti-bribery policies and procedures apply to all its officers and to those who represent the Company (including its business partners). The Company expects those providing services to it, or on its behalf, to undertake their business without bribery.

### Prevention of the facilitation of tax evasion

The Criminal Finances Act (Commencement No. 1) Regulations 2017 (SI 2017/739) brought Part 3 of the Criminal Finances Act 2017, the corporate offences of failure to prevent facilitation of tax evasion, into force on 30 September 2017. The Company does not tolerate tax evasion in any of its forms in its business. The Company complies with the relevant UK law and regulation in relation to the prevention of facilitation of tax evasion and supports efforts to eliminate the facilitation of tax evasion worldwide, and works to make sure its business partners share this commitment.

# Risk and risk management

## Company information

HydrogenOne Capital Growth plc (the "Company" or "Parent") was incorporated in England and Wales on 16 April 2021 with registered number 13340859 as a public company limited by shares and is an investment company within the terms of Section 833 of the Companies Act 2006 (the "Act"). The Company is listed and began trading on the Main Market of the London Stock Exchange and was admitted to the premium segment of the Official List on 30 July 2021 (the "IPO"). The Company is an approved investment trust under sections 1158 and 1159 of the Corporation Tax Act 2010 and Part 2 Chapter 1 of Statutory Instrument 2011/2999.

## Asset allocation at year end

The breakdown of the structure of the portfolio at the Company's year end is shown on page 3.

## Dividends and dividend policy

The Ordinary Shares carry a right to receive dividends. Interim dividends are determined by the Board and a final dividend is subject to shareholder approval at the AGM.

## Dividend policy

The Company is targeting a Net Asset Value total return of 10 to 15% per annum over the medium to long-term with further upside potential. The Company intends to invest in Hydrogen Assets with cash flow typically re-invested for further accretive growth.

The Company only intends to pay dividends in order to satisfy the ongoing requirements under the Investment Trust (Approved Company) (Tax) Regulations 2011 for it to be approved by HMRC as an investment trust save that, in the medium term, the Company's Hydrogen Assets may also generate free cash flow which the Company may decide not to re-invest and, in such case(s), the Company currently intends to distribute these amounts to Shareholders.


The Company's revenue return after tax for the year amounted to a loss of £1,405,000 (Period from incorporation on 16 April 2021 to 31 December 2021: £805,000). The Company made a capital gain after tax of £2,959,000 (2021: loss of £1,612,000). Therefore the total return after tax for the Company was a profit of £1,554,000 (2021: loss of £2,417,000). No dividends have been paid or are proposed for the year to 31 December 2022.

## Principal risks and uncertainties

The Board, through delegation to the Audit and Risk Committee, has carried out a robust assessment of the emerging and principal risks facing the Company. These include those that would threaten its business model, future performance, solvency and liquidity (see Audit and Risk Committee Report on pages 73 and 74). The Audit and Risk Committee reviews ongoing monitoring of both risks and controls. This ensures heightened and emerging risks are identified outside of the normal cycle of Board and Audit and Risk Committee meetings. The Audit and Risk Committee undertook a comprehensive review of the Company's risk management framework and controls during the year. The risks are documented on a risk register and each risk is rated by impact and probability with the assessed risk given a risk score and a residual rating. The risk register is reviewed on an ongoing basis in an attempt to capture all risks and put appropriate mitigation in place. The review takes into account changing factors including, but not restricted to, changes to markets (both macro and micro), stakeholders, operations, regulation and emerging risks. The top risks identified by this process are set out in the table below together with the mitigated approach, and the Board considers these to be the principal risks of the Company.



Principal Risks and Uncertainties	Mitigation	Risk Status
<b>Regulatory</b> Changes in political or environmental conditions in the hydrogen sector (for example, changes in government policy or support) could affect the Company's prospects.	The Board and Investment Adviser has significant experience in the energy sector and is familiar with its volatile political and regulatory environment. Extensive contacts across the sector inform its ongoing monitoring of these risks, which are reported to the Board at least quarterly. More specific due diligence occurs prior to any investments and during the lifetime of their ownership.  The Administrator has a strong track record in administering listed companies and the various rules and regulation required to be adhered to.	
<b>Policy support</b> The technologies required to produce and use green hydrogen need policy support to underpin the scale needed to drive stand-alone cost competitiveness. Governments worldwide are showing such support today, but that may be volatile over the investment time horizon of the Company.	As noted under 'regulatory', the Investment Adviser has longstanding experience in the energy sector and monitors the policy environment closely. Such experience and awareness is also present among the Company's Non-Executive Directors. It is the intent of the Investment Adviser to access a range of hydrogen projects in different countries and at different points in the emerging value chain, to further mitigate the risk of policy volatility.	

Principal Risks and Uncertainties	Mitigation	Risk Status
<b>Power price</b> <p>The income and value of the Company's investments may be affected by changes in the market prices of electricity and hydrogen, both current and expected.</p> <p>Risks include refinancing risk, exposure to interest rate risk due to fluctuations in the prevailing market rates, covenant breaches and possible enhanced loss on poor performing assets.</p> <p>Risk assessment has increased from volatility in electricity prices and higher interest rates and inflation.</p>	<p>The Investment Adviser monitors the outlook for electricity and hydrogen prices. The exposure to fluctuating electricity and hydrogen prices may be hedged at the hydrogen project level.</p> <p>As a result, the Investment Adviser oversee power revenues and monitor regularly against expectations.</p> <p>Portfolio allocations are monitored on an ongoing basis by both the Investment Adviser and AIFM, to ensure compliance with investment limits. Reporting by the Investment Adviser and AIFM are provided to the Board at least quarterly.</p>	
<b>Operational</b> <p>Initial pre-deal due diligence may not uncover all risks associated to a transaction.</p> <p>Investments are subject to operating and technical risks. While the Company will seek investments with creditworthy and appropriately insured counterparties who bear the majority of these risks, there can be no assurance that all risks can be mitigated.</p> <p>In addition, the long-term profitability of hydrogen investments will be partly dependent upon the efficient operation and maintenance of the assets. Inefficiency, or limitations in the skills, experience or resources of operating companies, may reduce revenue.</p> <p>As a result, profitability of the Company may be impaired leading to reduced returns for Shareholders.</p>	<p>The Investment Adviser conducts a vigorous due diligence process and works very closely with external and technically skilled consultancy firms to review all potential transactions, with an aim to provide a fully scoped and informed recommendation.</p> <p>The portfolio is constantly monitored by the Investment Adviser and the AIFM to address risks as they are identified.</p> <p>Diversification in counterparties and service providers ensures any impact is limited. Furthermore, the Company invests in a diversified portfolio.</p>	
<b>Performance</b> <p>Underperforming investment or investment strategy can lead to underperformance to the Company's target return and ultimate investment objective.</p> <p>Risk assessment has increased from macroeconomic impacts on portfolio investments from higher inflation and interest rates.</p>	<p>The Board reviews at least quarterly the portfolio performance as well as underlying key asset risks identified as part of the Company's risk register and how those risks are actively being mitigated which include but is not limited to:</p> <ul style="list-style-type: none"> <li>• Non Controlling interest risk</li> <li>• Interest rate risk</li> <li>• Market risk</li> <li>• Inflation risk</li> </ul> <p>At each Board meeting a report on risks, portfolio performance and any macro and micro considerations is provided by the Investment Adviser and the AIFM, and reviewed accordingly with the aim to mitigate such risks.</p> <p>New investment recommendations are reviewed and approved in line with the investment policy agreed with the Company and key parties.</p>	
<b>Future acquisitions and capital raises</b> <p>Ongoing capital raises are intended. The Company's share price trading at an excessive discount to its net asset value may mean it is difficult to raise further capital through share issues for onward investment.</p> <p>Risk assessment has increased due to share price trading at a discount to net asset value.</p>	<p>The Company's Broker monitors the market for the Company's shares and reports at quarterly meetings. The Board regularly reviews the relative level of discount against the sector and has the authority to buy back shares.</p> <p>The Board and AIFM oversee the investment pipeline and monitor its progress in relation to Company targets.</p> <p>Certain assets will be identified in advance by the Investment Adviser as being potentially available for acquisition by the Company.</p> <p>The pipeline is managed by the Investment Adviser and monitored by the AIFM, with onward reporting to the Board.</p> <p>The Board is unlikely to agree to capital raises without a strong pipeline.</p>	

# Risk and risk management

Principal Risks and Uncertainties	Mitigation	Risk Status
<b>Refinancing</b> The operational risks of the Company including market, counterparty, credit and liquidity risk. Extreme market volatility can disrupt capital raising process and ability to raise monies to repay a debt demand in full. Investments in Private Hydrogen Assets are illiquid in nature and may take a longer period of time to realise in order to fund the Company's operations or meet its expenses. The Company may be forced to sell liquid assets to meet its expenses at a time when valuations are low. Risk assessment has increased due to market volatility and the Company's share price trading at a discount to net asset value, delaying the Company's ability to raise capital. Higher interest rates will increase the cost of finance to the Company.	The Investment Adviser closely monitors the liquidity in the market and portfolio valuations. Should new credit not be forthcoming, liquidity may be gained through a capital raise, or liquidation of an asset including the Company's Listed Hydrogen Assets. The Investment Adviser, AIFM and the Board continuously monitor forecast and actual cashflows from operating, financing, and investing activities to consider payment of dividends, or further investing activities.	
<b>Service providers</b> Disruption to, or failure of the Company's Administrator or other parties to complete their role efficiently, on time and in line with expectation	All counterparties to the Company are reviewed as part of the risk register. A material credit risk is that of banks holding un-invested cash, the credit rating and credit worthiness of these are considered. A review of operational counterparties such as the Administrator for operational procedures, disaster recovery and system security is undertaken. Counterparties of Company's Special Purpose Vehicles ("SPV") and underlying assets are carried out as part of the investment due diligence process.	
<b>Portfolio valuation</b> Risk that portfolio asset valuations published do not represent the Fair Market Values in accordance with the accounting requirements. Investment valuations are based on modelling / financial projections for the relevant investments. Projections will primarily be based on the Investment Adviser's assessment and are only estimates of future results based on assumptions made at the time of the projection. Actual results may vary significantly from the projections, which may reduce the profitability of the Company leading to reduced returns to Shareholders. A rise in interest rates will lead to an increase in the Discount Rate applied to the Private Hydrogen Assets' valuation, leading to a reduction in the Company's net asset value.	The Investment Adviser has significant experience in valuation of these assets. The discount rate used in the valuations incorporates spot gilt rates for each free cashflow based on maturity and country which mitigates the longer term impact of rises in interest rates. The valuation policies will be reviewed by the Valuation Committee on a quarterly basis, together with signing off on the Private Hydrogen Asset values.	
<b>Key person</b> The Investment Adviser is a newly formed Company, with minimum employees. As such, there are significant Key Person risks at this time and should they become unavailable, this could have a negative impact on the Company's ability to achieve its investment objective.	The Investment Adviser is committed to expand its business/ staffing levels in order to diversify knowledge across the expanding team. This risk is covered in the risk register and reported on at each Board meeting.	
<b>Tax</b> Breaches of Section 1158 of the Corporation Tax Act could result in loss of investment trust status. Changes in tax legislation such as BEPS, WHT rules and structural requirements result in increased tax and resulting in a drop in returns from the Company's investments.	The corporate structure of the Company is reviewed periodically by the Company and its advisors. All investments receive professional structural advice prior to investment.	
<b>Political and associated economic risk</b> Exposure to Russia and/or Ukraine within the investment portfolio could lead to losses on investments. The impact on the global equity markets, and hydrogen stocks in particular, of a prolonged downturn caused by the situation, could lead to reduced valuations of the Company	The Board and Investment Adviser have reviewed the portfolio for exposure and will continue to keep this under review.	



## Viability statement

The Directors have assessed the viability of the Group for the period to 31 December 2027 (the "Viability Period"). The Board believes that the Viability Period, being approximately five years, is an appropriate time horizon over which to assess the viability of the Group, particularly when taking into account the long-term nature of the Group's investment strategy, of investing in private equity stakes of unlisted companies with a 3-5 year exit plan for each investment, the principal risks outlined on pages 56 to 58 and the next continuation vote.

In accordance with the Articles, the continuation of the Company is subject to the approval of shareholders every five years, with the first vote to be proposed as an ordinary resolution at the Company's AGM in 2026. If passed, the Articles provide that the Directors propose an ordinary resolution that the Company continue its business as presently constituted at each fifth annual general meeting thereafter. Since the Company's IPO, the Company has raised further equity capital of £21m, demonstrating the continued support for the Company's investment objective and therefore the Directors have no reason to believe that the vote will not pass.

In its assessment of the prospects of the Group, the Board carried out a robust assessment of the emerging and principal risks and considered each of the uncertainties set out on pages 56 to 58 which included consideration of severe but plausible downside scenarios (such as a long-term market downturn, significantly increased costs, delays in the realisation of assets and the liquidity and solvency of the Group). The Board also considered the Group's income and expenditure projections and cash projections. These metrics were subjected to stress testing of the assumptions to evaluate the potential impact on the Group, including long term downturn of the listed equity markets, longer investment hold periods and increased inflation. Portfolio changes, market developments, level of premium / discount to NAV and share buybacks / share issues are discussed at quarterly Board meetings. The internal control framework of the Group is subject to a formal review on at least an annual basis.

The level of the ongoing charges is dependent to a large extent on the level of net assets, the most significant contributor being the Investment Adviser fee. The Group's cash realisable from the sale of its investments and expected dividend income from investments provide cover to the Group's operating expenses, and any other costs likely to be faced by the Group over the Viability Period of their assessment.

The Director's assessment considered the market risks associated with the Russian invasion of Ukraine in February 2022. The ongoing market volatility and uncertainty this has caused, including higher inflation and interest rates, has been considered and will continue to be monitored. The Investment Adviser has reviewed the investment portfolio for exposure and while limited exposure has been identified the Board will keep the situation under continued review.

Based on this assessment, the Directors have a reasonable expectation that the Group will be able to continue to operate and to meet its liabilities as they fall due over the Viability Period.

## Employees

The Company has no employees. As at the date of this report, the Company had four Directors, of whom two are male and two are female.

## Outlook

The outlook for the Company is described in the Chairman's Statement and the Investment Adviser's Report.

## Strategic report

The Strategic Report set out on pages 1 to 59 of this Annual Report was approved by the Board of Directors on 3 April 2023.

For and on behalf of the Board

**Simon Hogan**  
Chairman

3 April 2023

# Governance

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# Board of Directors

## Simon Hogan<sup>1,3</sup>

*(Chairman of the Board and  
Nomination Committee)*  
Appointed 20 May 2021

Mr Hogan has significant capital markets, legal and management experience. He was previously a Managing Director of Morgan Stanley and Chief Operating Officer across their Commodities, Fixed Income and Equity divisions. Mr Hogan has held multiple board positions and was a member of the FCA Practitioners committee.

Mr Hogan's contribution is invaluable to the Company in formulating its short-term and long-term strategic direction as well as managing a newly established Board and Company.



## Afkenel Schipstra<sup>1,3</sup>

*(Chairman of the Audit and Risk  
Committee and the Valuation  
Committee)*  
Appointed 20 May 2021

Mrs Schipstra has over 19 years' experience in Energy in Europe and Sub-Sahara Africa. Afkenel was previously SVP of Hydrogen Business Development for the Netherlands at ENGIE, and held senior positions at Gasunie, Shell and NAM.

Mrs Schipstra's extensive knowledge of hydrogen projects strengthens the Board's commercial knowledge of the sector.



## Abigail Rotheroe<sup>1,3</sup>

*(Chairman of the Management  
Engagement Committee and the  
Remuneration Committee)*  
Appointed 8 February 2022

Ms Rotheroe has over 20 years of investment experience and was previously Investment Director at Snowball Impact Management, a sustainable and impact focussed asset manager. Ms Rotheroe was a Director of Threadneedle Investment, following positions at HSBC Asset Management and Schroders and has experience of institutional and retail investment. Ms Rotheroe is a non-executive director of Baillie Gifford Shin Nippon plc and Templeton Emerging Markets Investment Trust plc.

Ms Rotheroe also brings knowledge of fund governance, manager selection and impact measurement.



## David Bucknall<sup>2,3</sup>

*(Non-Executive Director)*  
Appointed 20 May 2022

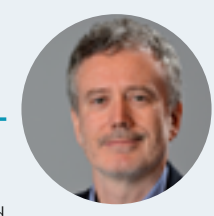
Mr Bucknall is currently Chief Executive Officer of the INEOS Energy group of companies and has been nominated as the Board representative of INEOS Offshore BCS Limited ("INEOS Energy") pursuant to the relationship and co-investment agreement entered into between, inter alia, INEOS Energy and the Company at launch. Mr Bucknall brings a wealth of commercial experience through his role held at INEOS Energy.



## The Principals of the Investment Adviser

### Dr JJ Traynor

Dr John Joseph "JJ" Traynor has extensive experience in energy, capital markets, project management, and M&A. He has held a series of senior energy and banking sector positions, including Executive Vice President at Royal Dutch Shell, where he led investor relations and established the company's ESG programme; Managing Director at Deutsche Bank, where he was the number one ranked analyst in European and Global oil & gas; Geologist at BP, in the North Sea, West Africa and Asia Pacific. He has a Geology BSc from Imperial College, a PhD from Cambridge University. He attended the INSEAD Advanced Management Programme, and is a Fellow of the Geological Society of London.



### Richard Hulf

Richard Hulf is a fund manager with corporate finance and engineering background. Richard has 30 years of experience in the Utilities and Energy sectors and is a Chartered Engineer, originally from Babcock Power and latterly Exxon. In addition, his financial experience spans stock broking, corporate finance and fund management with Henderson Crosthwaite, Ernst & Young and Artemis Investment Management, where he invested into renewables companies. He has an MSc in Petroleum Engineering from Imperial College.



1. Member of the Audit and Risk, Valuation, Management Engagement, Nomination and Remuneration Committees.
2. Mr Bucknall is not a member of the committees of the Board but attends by invitation. Considered independent by the Board. Refer to page 66 for an assessment of independence for David Bucknall.
3. Each Director has also been appointed as a Director of HydrogenOne Capital Growth (GP) Limited (a wholly owned subsidiary of the Company which has been appointed as the general partner of the Limited Partnership) in order to ensure that the Board are in a position to effectively monitor and manage the performance of the service providers of the HydrogenOne Partnership in accordance with the Listing Rules.

# Directors' Report

## The Directors present their report and accounts for the Company and Group for the year ended 31 December 2022.

### Strategic report

The Directors' Report should be read in conjunction with the Strategic Report on pages 1 to 59.

### Corporate governance

The Corporate Governance Statement on pages 66 to 69 forms part of this report.

### Legal and taxation status

The Company is an investment company within the meaning of Section 833 of the Companies Act 2006. The Company conducts its affairs in order to meet the requirements for approval as an investment trust under section 1158 of the Corporation Tax Act 2010. The Company has received approval as an investment trust and the Company must meet eligibility conditions and ongoing requirements in order for investment trust status to be maintained. In the opinion of the Directors, the Company has met the conditions and requirements for approval as an investment trust for the year ended 31 December 2022.

### Risk and risk management

The Principal Risks and Uncertainties for the Company and their mitigation on pages 56 to 58 forms part of this report.

### Viability statement

The Viability Statement is on page 59.

### Market information

The Company's Ordinary Shares are premium listed on the London Stock Exchange ("LSE"). The NAV per Ordinary Share is calculated in Pound Sterling. Up to 14 November 2022, the NAV per Ordinary Share was calculated on a daily basis based upon the quarterly valuation of the Private Hydrogen Assets and daily valuation of the Listed Hydrogen Assets. Since 15 November 2022 the NAV per Ordinary Share has been calculated on a quarterly basis based upon the quarterly valuation of the Private Hydrogen Assets and Listed Hydrogen Assets, the first quarterly NAV being as at 31 December 2022. The quarterly NAV per Ordinary Share is published through a regulatory information service.

### Retail distribution promotion

As a result of the Financial Conduct Authority ("FCA") rules determining which investment products can be promoted to retail investors, certain investment products are classified as 'non-mainstream pooled investment' products and face restrictions on their promotion to retail investors.

The Company has concluded that the distribution of its shares, being shares in an investment trust, is not restricted as a result of the FCA rules described above.

The Company currently conducts its affairs so that the shares issued by the Company can be recommended by financial advisers to retail investors and intends to continue to do so for the foreseeable future.

### Shareholder relations and Annual General Meeting (AGM)

The Board encourages all shareholders to attend the AGM and generally seeks to provide twenty one clear days' notice of that meeting.

The Notice of AGM sets out the business of the AGM and any special business is explained in the Directors' Report on pages 62 and 63. Separate resolutions are proposed for each substantive issue. The Investment Adviser has a programme of meetings with shareholders and reports back to the Board on its findings. The Board also welcomes direct feedback from shareholders. The Chairman is available to meet shareholders and may be contacted by email via the Company Secretary at [hydro1cosec@apexfs.group](mailto:hydro1cosec@apexfs.group).

The Company's AGM will be held at 11:30am on 23 May 2023 and the Chairman's Statement on page 5 sets out the arrangements for the meeting. Details of how shareholders can cast their votes can be found in the Notes to the Notice of Annual General Meeting on pages 119 to 123. Shareholders will also have the opportunity to hear a presentation from the Investment Adviser, and ask questions of the Board and the Investment Adviser.

### Special business of the AGM

#### Authority to issue and purchase own shares

The Board recommends that the Company be granted a new authority to allot up to a maximum of 12,881,999 Ordinary Shares (representing approximately 10% of the Ordinary Shares in issue at the date of this document) and to dis-apply pre-emption rights when allotting those Ordinary Shares and/or selling Ordinary Shares from treasury. Ordinary resolution 9 and special resolution 10 will be put to shareholders at the AGM. Ordinary Shares will be issued under this authority only at the Board's discretion and when it is deemed to be in the best interests of shareholders as a whole to do so. The advantages are to lower the Company's ongoing charges as expenses are diluted and, in the short term, to address volatility in the share price. Unless otherwise authorised by shareholders, new Ordinary Shares will not be issued at less than NAV and Ordinary Shares held in treasury will not be sold at less than NAV.

The maximum number of Ordinary Shares which can be admitted to trading on the London Stock Exchange without the publication of a prospectus is 20% of the Ordinary Shares on a rolling previous 12-month basis at the time of admission of the Ordinary Shares.

The Directors recommend that a new authority to purchase up to 19,310,117 Ordinary Shares (subject to the condition that not more than 14.99% of the Ordinary Shares in issue at the date of the AGM are purchased) be granted and special resolution 11 to that effect will be put to the AGM. Any Ordinary Shares purchased will either be cancelled or, if the Directors so determine, held in treasury. Ordinary Shares are purchased at the discretion of the Board and when it is deemed to be in the best interests of shareholders. Ordinary

Shares will be purchased for cancellation or for treasury only when the Ordinary Shares are trading at a discount to the Net Asset Value.

The Companies Act 2006 allows companies to hold shares acquired by way of market purchases as treasury shares, rather than having to cancel them. This gives the Company the ability to sell Ordinary Shares quickly and cost effectively, thereby improving liquidity and providing the Company with additional flexibility in the management of its capital base. At the year end and at the date of this report, no Ordinary Shares were held in treasury.

### Notice of General Meetings

Special resolution 12 in the notice to the AGM is required to reflect the requirements of the Shareholder Rights Directive. The Company is currently able to call general meetings, other than an AGM, on 14 clear days' notice and would like to preserve this ability. In order to be able to do so, shareholders must have given their prior approval.

Special resolution 12 seeks such approval, which would be effective until the Company's next AGM, when it is intended that a similar resolution will be proposed. The Company will ensure that it offers the facility for shareholders to vote by electronic means, and that this facility is accessible to all shareholders, if it is to call general meetings on 14 days' notice. Short notice of this kind will be used by the Board only under appropriate circumstances.

### Continuation vote

The Articles of Association require that an ordinary resolution be proposed at every fifth AGM of the Company that the Company should continue as an investment trust for a further five-year period. In accordance with the Articles of Association, the initial vote for the continuation of the Company will be proposed at the AGM to be held in 2026. In the event that such a resolution is not passed, the Directors are required to draw up proposals for shareholders' approval for the voluntary liquidation or unitisation or other reorganisation of the Company, which would require a special resolution of shareholders.

### Articles of association

Amendments to the Company's Articles of Association require an Ordinary Resolution to be passed by Shareholders.

## Management

### The Board

The independent Board is responsible to Shareholders for the overall management of the Company. The Board has adopted a Schedule of Matters Reserved for the Board which sets out the division of responsibilities between the Board and its various committees, the Chairman and the Chairmen of the various committees, together with the duties of the Board, further details can be found on pages 66 and 67.

Through the Committees and the use of external independent advisers, the Board manages risk and governance of the Company.

### Appointment of Board Members

The rules concerning the appointment of Directors are contained in the Company's Articles of Association which require that a Director shall be subject to election at the first AGM after appointment and annual re-election thereafter. Further details of the Board's process for the appointment of Board members can be found on page 67.

### Alternative Investment Fund Manager ("AIFM")

FundRock Management Company (Guernsey) Limited, formerly known as Sanne Fund Management (Guernsey) Limited, has been appointed as the Company's and Limited Partnership's AIFM. The AIFM has delegated the provision of portfolio management services to the Investment Adviser pursuant to the Investment Adviser Agreement.

The AIFM Agreement shall continue in force until terminated by either the AIFM or the Company by giving to the other no less than six months' prior written notice, provided that such notice may not be served earlier than the date being twelve months from the date of the AIFM Agreement. The AIFM Agreement may be terminated earlier by either party with immediate effect in certain circumstances, including, if the other party shall go into liquidation or an order shall be made or a resolution shall be passed to put the other party into liquidation or the other party has committed a material breach of any obligation the AIFM Agreement, and in the case of a breach which is capable of remedy fails to remedy it within 30 days. Details of the fee the AIFM is entitled to receive are given in note 14 to the Financial Statements.

The AIFM shall maintain, at its cost, professional indemnity insurance to cover any professional liability which it may incur under the AIFM Agreement, with a limit not less than £5,000,000. The Company has granted to the AIFM and certain other indemnified parties, a customary indemnity against losses which may arise in relation to the AIFM's performance of its duties under the AIFM Agreement.

The Board confirms that it has reviewed whether to retain FundRock Management Company (Guernsey) Limited as the AIFM of the Company. It has been concluded that it is in the best interests of shareholders as a whole to continue with the AIFM's engagement.

### Investment Adviser

The AIFM has appointed HydrogenOne Capital LLP as the Investment Adviser. The Investment Adviser has been given responsibility for investment advisory services in respect of any Private Hydrogen Assets the Company invests in directly or indirectly through holding entities and the Listed Hydrogen Assets (including uninvested cash) in accordance with the Company's investment policy, subject to the overall control and supervision of the AIFM. Details of the Investment Advisory fees are given in note 6 to the Financial



# Directors' Report

Statements. As at 31 December 2022, Dr JJ Traynor held 100,000 Ordinary Shares and Mr Richard Hulf held 100,000 Ordinary Shares in the Company.

The Limited Partnership has entered into a Limited Partnership Investment Adviser Agreement dated 5 July 2021 and as amended on 26 November 2021 (the "Limited Partnership Investment Adviser Agreement") between the General Partner (in its capacity as general partner of the Limited Partnership), the AIFM and the Investment Adviser, pursuant to which the Investment Adviser has been given responsibility for investment advisory services in respect of the Private Hydrogen Assets in accordance with the investment policy of the Limited Partnership, subject to the overall control and supervision of the AIFM.

The Investment Adviser Agreements are for an initial term of four years from the date of Admission and thereafter subject to termination on not less than twelve months' written notice by any party. The Investment Adviser Agreements can be terminated at any time in the event of, inter alia, the insolvency of the Company, the AIFM or the Investment Adviser or if certain key members of the Investment Adviser's team cease to be involved in the provision of services to the Company and are not replaced by individuals satisfactory to the Company (acting reasonably).

The Company and the Limited Partnership have given an indemnity in favour of the Investment Adviser (subject to customary exceptions) in respect of the Investment Adviser's potential losses in carrying on its responsibilities under the Investment Adviser Agreement.

The Board confirms that it has reviewed whether to retain HydrogenOne Capital LLP as the Investment Adviser of the Company and the Limited Partnership. It has been concluded that, given the Investment Adviser's depth of knowledge in the sector and the recent growth and performance record of the Company, it is in the best interests of shareholders as a whole to continue with the Investment Adviser's engagement.

## Alternative Investment Fund Portfolio Managers' Directive ("AIFMD")

In accordance with the AIFMD, the AIFM must ensure that an annual report containing certain information on the Company is made available to investors for each financial year. The investment funds sourcebook of the FCA (the "Sourcebook") details the requirements of the annual report. All the information required by those rules are included in this Annual Report or will be made available on the Company's website.

## Company Secretary and Administrator

Apex Listed Companies Services (UK) Limited (formerly Sanne Fund Services (UK) Limited), has been appointed to provide company secretarial and administration services to the Company.

## Custodian

The Northern Trust Company has been appointed as the Company's custodian for the Listed Hydrogen Assets.

## Registrar

Computershare Investor Services plc has been appointed as the Company's registrar.

## Continuing appointment of service providers

The Board has committed to undertake a detailed review of the continued appointment of these service providers on an annual basis to ensure these are in the best long term interests of the Company's Shareholders and undertook a comprehensive service provider review during the year ended 31 December 2022, concluding it was in the best interest of shareholders to continue to engage the services of the Company's appointed service providers.

## Capital structure and voting rights

At the year end and to the date of this report, the Company's issued share capital comprised 128,819,999 Ordinary Shares, with no Ordinary Shares held in treasury. Each Ordinary Share held entitles the holder to one vote. All Ordinary Shares carry equal voting rights and there are no restrictions on those voting rights. Voting deadlines are stated in the Notice of Meeting and Form of Proxy and are in accordance with the Companies Act 2006. There are no restrictions on the transfer of Ordinary Shares, nor are there any limitations or special rights associated with the Ordinary Shares.



## Notifiable interest

As at 31 December 2022 and 3 April 2023, the Directors have been formally notified of the following shareholdings comprising 3% or more of the issued share capital of the Company.

Company	Holding of Ordinary Shares – As at 31 December 2022	% Holding – As at 31 December 2022	Holding of Ordinary Shares – As at 3 April 2023	% Holding – As at 3 April 2023
INEOS Offshore BCS Limited	25,000,000	19.4	25,000,000	19.4
Rathbone Investment Management International Ltd	7,990,757	6.20	7,990,757	6.20
City of Bradford - West Yorkshire Pension Fund	6,500,000	5.05	6,500,000	5.05
Stichting Juridisch Eigendom Privium Sustainable Impact Fund	6,040,000	4.69	6,040,000	4.69
Investec Wealth & Investment Limited	5,296,197	4.93	5,376,857	4.93
FS Wealth Management Limited	3,670,000	3.42	3,670,000	3.42

## Political donations

There were no political donations made during the financial year to 31 December 2022.

## Disclosure required by listing rule 9.8.4

The above rule requires listed companies to report certain information in a single identifiable section of their annual financial reports. The Company confirms that, other than the allotment of equity securities for cash (LR 9.8.4(7)) which is detailed in note 11 to the Financial Statements, all such reporting applied only to non-applicable events for the year ended 31 December 2022.

## Future trends

Details of the main trends and factors likely to affect the future development, performance and position of the Company's business can be found in the Investment Adviser's Report section of this Strategic Report. Further details as to the risks affecting the Company are set out in the 'Principal Risks and Uncertainties' on pages 56 to 58.

## Directors' indemnities

Subject to the provisions of the Companies Act 2006 and certain provisions contained in the deeds of indemnity issued by the Company, the Company has indemnified each of the Directors against all liabilities which each Director may suffer or incur arising out of or in connection with any claim made or proceedings taken against them, or any application made under sections 661(3), 661(4) or 1157 of the Companies Act 2006 by them, on the grounds of their negligence, default, breach of duty or breach of trust, in relation to the Company or any associated company. The indemnities would provide financial support from the Company after the level of cover provided by the Company's Directors' and Officers' insurance policy has been fully utilised.

## Going concern

The Directors consider that it is appropriate to adopt the going concern basis in preparing the Financial Statements. Details of the Directors' assessment of the going concern status of the Company and Group, which considered the adequacy of the Company and Group's resources, the macro-economic effects, such as higher inflation and interest rates that have occurred following the Russian invasion of Ukraine and secondary impacts of the COVID-19 pandemic, are given in note 2 to the Financial Statements.

## Auditor information

Each of the Directors at the date of the approval of this report confirms that:

- so far as the Director is aware, there is no relevant audit information of which the Company's auditor is unaware; and
- the Director has taken all steps that he or she ought to have taken as Director to make himself or herself aware of any relevant information and to establish that the Company's auditor is aware of that information.

This confirmation is given and should be interpreted in accordance with the provisions of Section 418 of the Companies Act 2006.

## Appointment of auditor

In accordance with Section 489 of the Companies Act 2006, a resolution will be put forward at the forthcoming AGM on 23 May 2023 to re-appoint KPMG Channel Islands Limited ("KPMG") as auditor.

By order of the Board

**Brian Smith**

For and on behalf of Apex Listed Companies Services (UK) Limited Company Secretary

3 April 2023

# Corporate Governance

## Introduction

This Corporate Governance statement forms part of the Directors' Report.

The Listing Rules and the Disclosure Guidance and Transparency Rules of the UK Listing Authority require listed companies to disclose how they have applied the principles and complied with the provisions of The UK Corporate Governance Code 2018 (the "UK Code"), as issued by the Financial Reporting Council ("FRC"). The UK Code can be viewed on the FRC's website.

The Board has considered the principles and provisions of the AIC Code of Corporate Governance 2019 (the "AIC Code") which addresses those set out in the UK Code, as well as setting out additional provisions on issues that are of specific relevance to the Company, as an investment trust.

The Board considers that reporting against the AIC Code, which has been endorsed by the Financial Reporting Council, provides more relevant information to shareholders.

The AIC Code is available on the AIC website ([www.theaic.co.uk](http://www.theaic.co.uk)). It includes an explanation of how the AIC Code adapts the Principles and Provisions set out in the UK Code to make them relevant for investment companies.

The Company has complied with the AIC Code and the relevant provisions of the UK Code, except as set out below.

The UK Code includes provisions relating to:

- the role of the chief executive (provision 14);
- the need for an internal audit function (provision 25); and
- executive Directors' remuneration (provision 33).

The Board considers these provisions are not relevant to the Company, being an externally managed investment company with no employees. The Company has therefore not reported further in respect of these provisions, other than the need for an internal audit function specific to the Company, which has been addressed on page 74.

## The Board

### Composition

At the date of this report the Board consists of four Non-Executive Directors. The Chairman is Simon Hogan, and the Directors are Afskenel Schipstra, Abigail Rotheroe and David Bucknall. Mrs Schipstra is the Chairman of the Audit and Risk Committee and the Valuation Committee and Ms Rotheroe is the Chairman of the Management Engagement Committee and Remuneration Committee. Mr Hogan is

Chairman of the Nomination Committee. Due to the size and nature of the Company's business, the Board has not deemed it necessary to appoint a Senior Independent Director as the role can be performed by the Board as a whole.

Ms Rotheroe was appointed as a Non-Executive Director on 8 February 2022 and Mr Bucknall was appointed as Non-Executive Director on 20 May 2022 following the retirement of Mr Roger Bell from the Board on 4 May 2022. Mrs Caroline Cook retired from the Board on 7 April 2022.

The Board believes that during the year ended 31 December 2022 its composition was appropriate for an investment company of the Company's nature and size. All of the Directors are independent of the Investment Adviser and are able to allocate sufficient time to the Company to discharge their responsibilities effectively. In accordance with the Co-Investment Agreement between INEOS Energy and the Company, Mr Bucknall will recuse himself from any decision relating to a transaction by the Company or any member of the Group with INEOS Energy or any of its Associates. The Board has noted the inference of the provisions in the AIC Code that Non-Executive Directors who represent a significant shareholder should be presumed not to be independent. However, it is the Board's assessment that the provisions in place to manage actual or potential situational conflicts of interest are sufficiently robust and always promote the success of the Company. The Board has concluded that Mr Bucknall continues to demonstrate independence of character and judgement. His skills and experience have added significantly to the strength of the Board and his continued service is invaluable to the long-term success of the Company. The Directors have a broad range of relevant experience to meet the Company's requirements and their biographies are given on page 61.

In line with the AIC Code and the Articles of Association, each Director is subject to election at the first AGM following their appointment and annual re-election thereafter by shareholders. The Board recommends all the Directors for election or re-election.

The Directors have appointment letters which do not provide for any specific term. Copies of the Directors' appointment letters are available on request from the Company Secretary. Upon joining the Board, any new Director will receive an induction and relevant training is available to Directors on an ongoing basis.

A policy of insurance against Directors' and Officers' liabilities is maintained by the Company.

The Directors, in the furtherance of their duties, may take independent professional advice at the expense of the Company.

### Board Committees

The Board decides upon the membership and chairmanship of its committees. Each Committee has adopted formal terms of reference, which are reviewed at least annually, and copies of these are available on the Company's website or on request from the Company Secretary.

#### Audit and Risk Committee

A report on pages 73 and 74 provides details of the role and composition of the Audit and Risk Committee together with a description of the work of the Audit and Risk Committee in discharging its responsibilities.

#### Remuneration Committee

All of the Directors, except Mr Bucknall, are members of this Committee, and Ms Rotheroe is the Chairman. The Remuneration Committee has been established to meet formally on at least an annual basis to review the remuneration policy of the Company and consider the fees of the Non-Executive Directors.

The Directors' Remuneration Implementation Report is included on pages 71 and 72.

#### Management Engagement Committee ("MEC")

All of the Directors, except Mr Bucknall, are members of the MEC, and Ms Rotheroe is the Chairman. The MEC has been established to conduct a formal annual review of the AIFM and the Investment Adviser, assessing investment and other performance, the level and method of their remuneration and the continued appointment of them as AIFM and Investment Adviser to the Company. The MEC met and reviewed the AIFM and Investment Adviser's performance and remuneration structure. In conclusion the Committee's recommendation to the Board was that it was in the best interests of shareholders as a whole to continue with their engagements and that the current management fee structure remained appropriate. (See page 64 for further details).

During the year, the MEC also conducted the first annual detailed service review of the main service providers to the Company and concluded that their continued appointment remained in the best interest of shareholders.

#### Nomination Committee

All of the Directors, except Mr Bucknall, are members of this Committee and Mr Hogan is the Chairman. The Nomination Committee has been established for the purpose of identifying and putting forward candidates for the office of Director of the Company. The Nomination Committee considers job specifications and assesses whether candidates have the necessary skills and time available to

devote to the job. It also undertakes an annual performance evaluation of the Board. An evaluation requiring the Directors to complete detailed questionnaires on the operation of the Board, its Committees and the individual contribution of Directors as well as the performance of the Chairman was undertaken during the year. The results of the evaluation were reviewed by the Chairman and discussed with the Board. Based upon the conclusions of the of the most recent performance evaluation, which were positive and demonstrated that the Directors showed the necessary commitment for the effective fulfilment of their duties, the Committee recommended that each of the Directors be re-elected or elected at the forthcoming AGM.

The Board succession plan is reviewed and maintained through the Nomination Committee to promote regular refreshment and diversity, whilst maintaining stability and continuity of skills and knowledge on the Board.

#### Valuation Committee

All of the Directors, except Mr Bucknall, are members of this Committee, and Mrs Schipstra is the Chairman. The Valuation Committee has been established to meet formally on at least a quarterly basis to formulate valuation policies for investments of the Company, consider whether independent valuation of the portfolio is required and approve the valuations or valuation methodology of the Private and Listed Hydrogen Assets. A summary of the valuation of the Company's investment portfolio is given on page 18.

# Corporate Governance

## Meeting attendance

	Board	Audit and Risk Committee	Remuneration Committee	Management Engagement Committee	Nomination Committee	Valuation Committee
Number of meetings held in 2022	6	3	1	1	2	4
Simon Hogan	6	3	1	1	2	4
Afkenel Schipstra	5	2	1	-	1	3
Abigail Rotheroe <sup>1</sup>	5	3	1	1	2	4
David Bucknall <sup>2</sup>	3	2	1	1	1	2
Caroline Cook <sup>3</sup>	2	1	-	-	1	1
Roger Bell <sup>3</sup>	1	-	-	-	-	1

1. Ms Rotheroe was appointed as a Non-Executive Director on 8 February 2022.

2. Mr Bucknall was appointed as a Non-Executive Director effective 20 May 2022. Mr Bucknall is not a member of the committees of the Board but attends by invitation. He was unable to attend one Board meeting due to prior commitments following his appointment.

3. Mrs Cook and Mr Bell resigned effective 7 April 2022 and 4 May 2022 respectively.

In addition, a number of ad hoc Board and committee meetings were held to deal with administrative matters and the formal approval of documents.

## Board diversity

Appointments are based on merit with due regard to the benefits of diversity. The Board considers many factors, including the balance of skills, knowledge, experience, gender, ethnicity, cognitive and personal strengths when reviewing its composition and appointing new Directors. The aim of the policy is to identify those with the best range of skills and experience to complement existing Directors in order to provide effective oversight of the Company and constructive support and challenge to the Investment Adviser. Summary biographical details of the Directors, including their relevant experience, are set out on page 61.

The Board currently comprises four Non-Executive Directors of which two are female thereby constituting 50% female representation and complies with the Hampton Alexander target of 33% female membership. However, although the Board has considered the recommendations of the Davies and Hampton-Alexander reviews as well as the Parker review, it does not consider it appropriate to establish targets or quotas in these regards. The Company has no employees. The Board is however mindful of the FCA Listing Rule 9.8.6R (9)(a) requirements in respect of certain targets on board diversity. This new requirement applies to accounting periods commencing on or after 1 April 2022 and therefore the Company intends to report against these diversity targets for the year ending 31 December 2023.

## Tenure policy

It is the Board's policy that all Directors, including the Chairman, shall normally have tenure limited to nine years from their appointment to the Board, except that the Board may determine otherwise if it is considered that the continued participation on the Board of an individual Director is in the best interests of the Company and its shareholders. This is also subject to the Director's re-election annually by shareholders. The Board considers that this policy encourages regular refreshment and is conducive to fostering diversity.

## Internal control

The Board is responsible for establishing the Company's system of internal controls and for monitoring their effectiveness. The system of internal controls is designed to manage rather than eliminate the risk of failure to achieve business objectives. It can provide only reasonable assurance against material misstatement or loss. The Board, through the Audit and Risk Committee, regularly reviews the effectiveness of the internal control systems to identify, evaluate and manage the Company's significant risks. If any significant failings or weaknesses are identified the Board, and where required the Investment Adviser, ensure that necessary action is taken to remedy the failings. Taking into account the principal risks and uncertainties section on pages 56 to 58 during the year, the Board – through the Audit and Risk Committee – established the Company's risk management framework and controls. This identified a detailed number of risks facing the Company and resulted in enhanced risk documentation and reporting to the Board and Audit and Risk Committee. Following its review, the Board is not aware of any significant failings or weaknesses arising in the year under review.

The Board believes that the existing arrangements, including those set out below, represent an appropriate framework to meet the internal control requirements. By these procedures the Directors have kept under review the effectiveness of the internal control system throughout the year and up to the date of this report.

### Financial aspects of internal control

These are detailed in the Report of the Audit and Risk Committee.

### Other aspects of internal control

The Board holds at least four regular meetings each year, plus additional meetings as required. Between these meetings there is regular contact with the Investment Adviser and the Company's Administrator and Company Secretary.

The Administrator, Apex Listed Companies Services (UK) Limited (formerly Sanne Fund Services (UK) Limited), reports separately in writing to the Board concerning risks and internal control matters within its remit, including internal financial control procedures and company secretarial matters. Additional ad hoc reports are received as required and Directors have access at all times to the advice and services of the Company Secretary, which is responsible to the Board for ensuring that Board procedures are followed and that applicable rules and regulations are complied with.

The contact with the Investment Adviser, the AIFM and the Administrator enable the Board to monitor the Company's progress towards its objectives and encompass an analysis of the risks involved. The effectiveness of the Company's risk management and internal controls systems is monitored regularly and a formal review, utilising a detailed risk assessment programme, takes place at least annually. This includes review of the internal controls reports of the Administrator, the AIFM and the Registrar.

### Principal risks

The Directors confirm that they have carried out a robust assessment of the Company's emerging and principal risks, including those that would threaten its business model, future performance, solvency or liquidity. The principal risks and how they are being managed are set out in the Strategic Report on pages 56 to 58.

# Directors' Remuneration Policy

The remuneration policy (the "Policy") must be put forward for shareholder approval at its first AGM and thereafter at a maximum interval of three years. The Policy was last approved by shareholders at the AGM held on 23 May 2022 and will continue in force until the Annual General Meeting to be held in May 2025. The provisions set out in the Policy apply until they are next submitted for shareholder approval. In the event of any proposed material variation to the Policy, shareholder approval will be sought for the proposed new policy prior to its implementation. The Policy sets out the principles the Company follows in remunerating Directors and the result of the shareholder vote on the Policy is binding on the Company. The Remuneration Committee will take account of any views expressed by shareholders in formulating this policy.

All the Directors are Non-Executive Directors and the Company has no other employees.

## Service contracts

The Directors do not have service contracts with the Company. The Directors have appointment letters and, following initial election by shareholders, are subject to annual re-election.

## Fees

Directors' fees are determined by the Board according to their duties and responsibilities and by reference to the time commitment required by each Director to carry out their roles effectively. In setting fees, the Board also has regard to the need to recruit and retain Directors with appropriate knowledge and experience, the fees paid to Directors of the Company's peers and industry practice. Directors' fees are also subject to the aggregate annual limit set out in the Company's Articles of Association (the "Articles"), which is currently £300,000. The aggregate limit of Directors' fees in the Articles can only be amended by an ordinary resolution put to shareholders at a general meeting.

Directors are not eligible for bonuses, pension benefits, share benefits, share options, long-term incentive schemes or other benefits.

Directors' fees are paid at fixed annual rates and do not have any variable elements. Directors are also entitled to be reimbursed for all reasonable out-of-pocket expenses incurred in performance of their duties. These expenses are unlikely to be of a significant amount.

Fees are payable from the date of appointment as a Director of the Company and cease on the date of termination of appointment. Any new Directors will be paid at the same rate as existing Directors. Directors are not entitled to compensation for loss of office, and there is no notice period upon early termination of appointment.

No incentive fees will be paid to any person to encourage them to become a Director of the Company. The Company may, however, pay fees to external agencies to assist the Board in the search and selection of Directors or in reviewing remuneration. Where a consultant is appointed, the consultant shall be identified in the Annual Report alongside a statement about any other connection it has with the Company or individual Directors. No consultants were appointed during the year. Independent judgement will be exercised when evaluating the advice of external third parties.

## Statement of consideration of conditions elsewhere in the Company

As stated above, the Company has no employees. Therefore, the process of consulting with employees on the setting of the Remuneration Policy is not applicable.

## Review of the Policy

This Policy will be reviewed on an annual basis by the Remuneration Committee and any changes approved by the Board. As part of the review, the Remuneration Committee will consider whether the Policy supports the long-term success of the Company and takes into consideration all relevant regulatory requirements. Any material change to the Policy must be approved by shareholders.

## Effective date

The Policy is effective from the date of approval by shareholders.

## Current and future policy

Component	Director	Purpose of reward	Operation
Annual fee	Chair of the Board	For services as Chairman of a plc	Determined by the Board
Annual fee	Other Directors	For services as Non-Executive Directors of a plc	Determined by the Board
Additional fee	Chair of the Audit Committee	For additional responsibility and time commitment	Determined by the Board
Expenses	All Directors	Reimbursement of expenses incurred in the performance of duties	Submission of appropriate supporting documentation



# Directors' Remuneration Implementation Report

This Directors' Remuneration Implementation Report ("the Report") has been prepared in accordance with Schedule 8 of the Large and Medium-sized Companies and Groups (Accounts and Reports) (Amendment) Regulation 2013. An ordinary resolution for the approval of this Report will be put forward at the forthcoming AGM.

The Report is put forward for approval by shareholders on an annual basis. The result of the shareholder resolution on the Report is non-binding on the Company, although it gives shareholders an opportunity to express their views, which will be taken into account by the Board and the Remuneration Committee.

The law requires the Company's auditor to audit certain of the disclosures provided. Where disclosures are audited they are indicated as such. The auditor's opinion is shown on pages 76 to 81.

## Remuneration Committee

The Company currently has four (2021: five) Non-Executive Directors.

In accordance with clause 5 of the Relationship and Co-Investment Agreement, INEOS Energy is entitled to nominate one Non-Executive Director for appointment to the Board. David Bucknall replaced Roger Bell during the year, having been nominated for this purpose, and as set out in his appointment letter, is not remunerated for his role as a Non-Executive Director.

During the year, the annual fee payable to the Chair of the Board was £65,000, the Chair of the Audit and Risk and Valuation Committees, £55,000 and Chair of the Management Engagement and Remuneration Committees, £45,000. The Remuneration Committee reviewed the level of Directors' fees and recommended to the Board a 5% increase in the level of fees to be paid to Directors effective 1 January 2023.

The Remuneration Committee believes that the level of fees appropriately reflects prevailing market rates for an investment trust of the Company's complexity and size, the increasing complexity of regulation and resultant time spent by the Directors on matters, and will also enable the Company to attract appropriately experienced additional Directors in the future.

The annual fees of the Directors from 1 January 2023 are as follows:

Name	Role	Fee
Simon Hogan	Chair	£68,250
Afkenel Schipstra	Chair of the Audit and Valuation Committees	£57,750
Abigail Rotheroe	Chair of the Remuneration and Management Engagement Committee	£47,250
David Bucknall	Non-Executive Director	–

The Remuneration Committee comprises the whole Board. Further detail on the duties of the Remuneration Committee can be found in the Corporate Governance statement on page 67.

The maximum level of fees payable, in aggregate, to the Directors of the Company is currently £300,000 per annum as set out in the Company's Articles of Association.

## Directors' appointment letters and shareholding rights

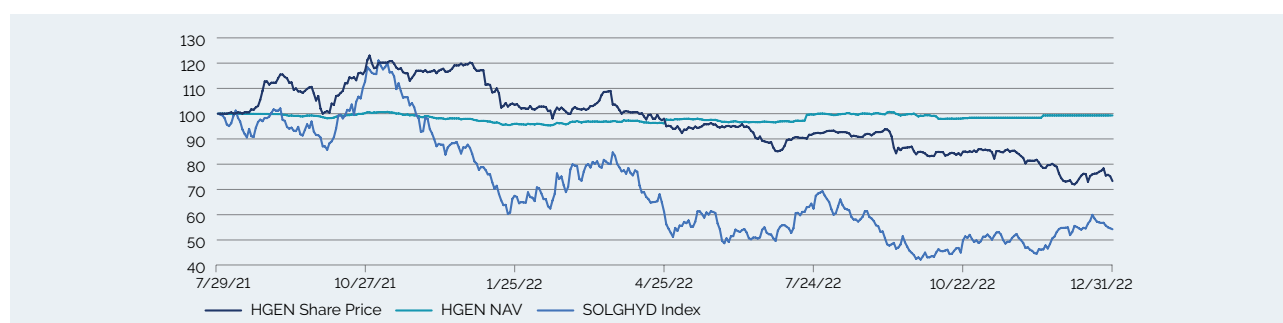
The Directors have appointment letters which do not provide for any specific term. The Directors are not entitled to compensation on loss of office. There are no restrictions on transfers of the Company's Ordinary Shares held by the Directors or any special rights attached to such shares.

## Performance

The chart below shows the performance of the Company's share price by comparison to the Solactive Hydrogen Economy Index on a total return basis. The Company does not have a specific benchmark but has deemed the Solactive Hydrogen Economy Index to be the most appropriate as at least 60% of the companies included in the index generate 100% of their revenue from clean Hydrogen.

### Total return performance

HGEN Share Price vs NAV from date of listing to 31 December 2022



# Directors' Remuneration Implementation Report

## Directors' emoluments for the year (Audited)

The Directors who served during the year received the following remuneration for qualifying services, commencing from the date of their appointment. The comparative period is from the 20 May 2021, being the date of appointment of the Directors after the Company's incorporation, to the 31 December 2021.

	2022			2021			% change in Directors remuneration
	Fees £	Taxable benefits £	Total £	Fees £	Taxable benefits £	Total £	
Simon Hogan	65,000	–	65,000	39,917	–	39,917	72.8
Roger Bell <sup>1</sup>	–	–	–	–	–	–	–
David Bucknall <sup>2</sup>	–	–	–	–	–	–	–
Caroline Cook <sup>3</sup>	14,808	342	15,150	33,776	–	33,776	-56.2
Abigail Rotheroe <sup>4</sup>	40,096	–	40,096	–	–	–	–
Afkenel Schipstra <sup>5</sup>	52,282	2,261	54,543	27,634	–	27,634	89.2
Total	172,186	2,603	174,789	101,327	–	101,327	–

1. Appointed as a Non-Executive Director on 1 October 2021 and resigned on 4 May 2022 and was not remunerated for his services.
2. Appointed as a Non-Executive Director on 20 May 2022 and is not remunerated for his services.
3. Appointed as a Non-Executive Director on 20 May 2021 and resigned on 7 April 2022.
4. Appointed as a Non-Executive Director on 8 February 2022 and appointed Chair of the Remuneration and Management Engagement Committees 7 April 2022.
5. Appointed as a Non-executive Director on 20 May 2021 and appointed Chair of the Audit and Valuation Committees 7 April 2022.

There are no other taxable benefits payable by the Company other than certain expenses which may be deemed to be taxable such as travel expenses. None of the above fees were paid to third parties.

The following table sets out the total level of Directors' remuneration compared to the distributions to shareholders by way of dividends and share buybacks, and the management fees and other expenses incurred by the Company during the year to 31 December 2022 (see Statement of Comprehensive Income). The comparative period is from the date of the Company's incorporation 16 April 2021 to 31 December 2021.

	2022 £'000	2021 £'000
Spend on Directors' fees	174,789	101,326
Management fees and other expenses	1,502,000	807,000
Dividends paid to shareholders	–	–

The disclosure of the information in the table above is required under The Large and Medium-sized Companies and Groups (Accounts and Reports) (Amendment) Regulations 2013 with the exception of management fees and other expenses which have been included to show the total operating expenses of the Company.

## Directors' holdings (Audited)

At 31 December 2022 and at the date of this report the Directors had the following holdings in the Company. All holdings were beneficially owned.

	Ordinary Shares at 31 Dec 2022	Ordinary Shares at 3 April 2023
Simon Hogan	40,000	40,000
David Bucknall	–	–
Abigail Rotheroe	10,000	10,000
Afkenel Schipstra	10,100	10,100

## Statement

On behalf of the Board and in accordance with Part 2 of Schedule 8 of the Large and Medium-sized Companies and Groups (Accounts and Reports) (Amendment) Regulations 2013, I confirm that the above Remuneration Report and Remuneration Policy summarises, as applicable, for the year to 31 December 2022:

1. the major decisions on Directors' remuneration;
2. any substantial changes relating to Directors' remuneration made during the year; and
3. the context in which the changes occurred and decisions have been taken.

**Abigail Rotheroe**  
Chair of the Remuneration Committee

3 April 2023

# Report of the Audit and Risk Committee

**As Chairman of the Audit and Risk Committee (the “Committee”), I am pleased to present the Committee’s report to shareholders for the year ended 31 December 2022.**

## The Audit and Risk Committee

### Composition

All of the Directors, except David Bucknall, are members of the Committee. In accordance with the UK Code, the Chairman of the Board should not be a member. However, the AIC Code permits the Chairman of the Board to be a member of, but not chair the Committee if they were independent on appointment – which the Chairman was and continues to be. In view of the size of the Board, the Directors feel it is appropriate for him to continue as a member, so that the Committee can continue to benefit from his experience and knowledge.

The members of the Committee consider that they have the requisite skills and experience to fulfil the responsibilities of the Committee. The Committee considers that at least one of its members has recent and relevant financial experience and competence relevant to the sector in which the Company operates.

### Role and responsibilities

The main role and responsibilities of the Committee are set out in the Committee’s terms of reference. The terms are updated annually and are available on the Company’s website or on request from the Company Secretary.

The Committee meets formally at least twice a year for the purpose, amongst other things, of advising the Board on the appointment, effectiveness, independence, objectivity and remuneration of the external auditor. The Committee monitors the integrity of the Financial Statements of the Company and any formal announcements relating to the Company’s financial performance, reviewing significant financial reporting judgements contained in them. The Committee also reviews the Company’s risk management, internal financial controls and internal control systems and reviews the Investment Adviser’s whistleblowing arrangements. The provision of non-audit services by the auditor are reviewed against the Committee’s policy described overleaf.

### Meetings

There were three Committee meetings during the year ended 31 December 2022. In addition, the Committee met the auditor, without any other party present, for a private discussion and the Chairman of the Committee met with the auditor prior to the Audit Committee meeting in March 2023.

## Financial statements and significant accounting matters

The Committee reviewed the Financial Statements and considered the following significant accounting matters in relation to the Company’s Financial Statements for the year ended 31 December 2022.

## Valuation of Private Hydrogen Assets investments

The Company’s investment through the Limited Partnership at 31 December 2022 was £103,006,069 representing a substantial portion of the Company’s net assets and as such is the biggest factor in relation to the accuracy of the Financial Statements. The valuation of the Company’s Private Hydrogen Assets held through the Limited Partnership is the most material matter in the production of the Financial Statements.

The Board has appointed a Valuation Committee which sets out the valuation policies and process. The Committee met four times during the year to review the valuations at each quarter end date. The process includes considering and approving valuations or valuation methodology made by the Investment Adviser and provided to the AIFM, using fair market valuations of the Listed and Private Hydrogen Assets on a quarterly basis as at 31 March, 30 June, 30 September and 31 December each year. The valuation principles used to calculate the fair value of the Private Hydrogen Assets are based on IPEV Guidelines.

For Private Hydrogen Assets, as the Company typically invests in early stage, pre or early revenue investments, a number of valuation methodologies in line with IPEV Guidelines have been considered and employed to value the investments including Discounted Cash Flow and Price of Recent Investment. The Valuation Committee reviewed and approved the appropriateness of the valuation methodology employed and the assumptions and made in the calculation of the fair value of each of the Private Hydrogen Assets. Details of the valuation methodology and assumptions used for each of the Private Hydrogen Assets at 31 December 2022 are given in note 3 to the Financial Statements.

The Audit and Risk Committee reviewed, along with the Valuation Committee, the procedures in place for ensuring the appropriate valuation of investments and approved the valuation of the Company’s Private Hydrogen Assets at the year end with the Investment Adviser and AIFM.

## Emerging risks

The Committee considered the risks and economic impacts including higher inflation and interest rates arising from the Russian invasion of Ukraine and secondary impacts from the COVID-19 pandemic, on the Company’s ability to continue in operation and impact on the Company’s portfolio and concluded that these had been properly reflected in the portfolio companies valuations and the Company’s Financial Statements.

As part of the annual report review, the Committee:

- obtained assurances from the Investment Adviser and the Administrator that the Financial Statements had been prepared appropriately;

# Report of the Audit and Risk Committee

- reviewed the consistency of, and any changes to, accounting policies;
- reviewed the tax compliance of the Company during the year with the eligibility conditions and ongoing requirements in order for investment trust status to be maintained;
- reviewed the Company's financial resources and concluded that it is appropriate for the Company's Financial Statements to be prepared on a going concern basis as described in the Directors' Report on page 65;
- considered the risk to the Company from economic conditions such as higher interest rates and inflationary pressures and market volatility arising from the ongoing war in Ukraine and secondary effects of the pandemic. The Board and the Investment Adviser have reviewed the investment portfolio and identified limited direct impact on the portfolio but continue to monitor any impact to the Company, the Group, its investee companies and overall valuations; and
- concluded that the Annual Report for the year ended 31 December 2022, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Company's position and performance, business model and strategy. The Committee reached this conclusion through a process of review of the document and enquiries to the various parties involved in the production of the Annual Report, and the external auditor's report thereon.

The Committee reported the results of this work, including its assessment that the Annual Report is fair, balanced and understandable, to the Board.

## External auditor

This year's audit was the second conducted by KPMG Channel Islands Limited ("KPMG") and by David Alexander as audit Director, since KPMG was selected as the Company's auditor at the Company's launch and formal appointment on 15 June 2021. The appointment of the auditor is reviewed annually by the Audit and Risk Committee and the Board and is subject to approval by Shareholders. In accordance with the FRC guidance, the audit will be put out to tender within ten years of the initial appointment of KPMG. Additionally, the audit Director must be rotated every five years and is next eligible for rotation in 2026.

## Effectiveness of audit

The Committee reviewed the audit planning and the standing, skills and experience of the firm and the audit team. The Committee also considered the independence of KPMG and the objectivity of the audit process. KPMG has confirmed that it is independent of the Company and has complied with relevant auditing standards. No modifications were required to the external audit approach. The Audit Plan was presented to the Audit and Risk Committee at its November 2022 Committee meeting, ahead of the commencement of the Company's year end audit. The Audit Plan set out the audit process, materiality scope and significant risks. A presentation of the results of the audit following completion of the main audit testing was provided

at the March 2023 meeting. Additionally, the Committee received feedback from the Investment Adviser and Administrator regarding the effectiveness of the external audit process.

The Committee is satisfied that KPMG has provided effective independent challenge in carrying out its responsibilities. After due consideration, the Committee recommended the reappointment of KPMG and a resolution will be put forward to the Company's shareholders at the 2023 AGM.

## Provision of non-audit services

The Committee has put in place a policy on the supply of any non-audit services provided by the external auditor. Non-audit services are considered on a case-by-case basis and may only be provided to the Company if such services meet the requirements of the FRC's Revised Ethical Standard 2019, including: at a reasonable and competitive cost; do not constitute a conflict of interest for the auditor; and all non-audit services must be approved in advance.

KPMG LLP UK provided reporting accountant services in respect of the Company's secondary share issuances including the share issuance Circular and Prospectus published in September 2022. The reporting accounting services are considered a non-recurring service and KPMG LLP UK are a separate team independent of the audit team and the audit team place no reliance on the output of the reporting accountant services provided.

The Audit and Risk Committee does not believe that the provision of these services affect the independence of KPMG. The auditor has provided assurance that they complied with the relevant UK professional and regulatory requirements. Details of the fees paid in respect of reporting accountant services in the year to 31 December 2022 are given in note 7 to the Financial Statements.

## Internal audit

The Audit and Risk Committee has considered the need for an internal audit function and considers that this is not appropriate given the nature and circumstances of the Company as an externally managed investment company with external service providers. The Audit and Risk Committee keeps the need for an internal audit function under periodic review.

## Afkenel Schipstra

Audit and Risk Committee Chairman

3 April 2023

# Statement of Directors' Responsibilities

The Directors are responsible for preparing the Annual Report and the Group and Parent Company Financial Statements in accordance with applicable laws and regulations.

Company law requires the Directors to prepare Group and Parent Company financial statements for each financial year. Under that law they are required to prepare the Group Financial Statements in accordance with UK-adopted international accounting standards and applicable law and have elected to prepare the parent Company financial statements on the same basis.

Under company law the Directors must not approve the Financial Statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Parent Company and of the Group's profit or loss for that year. In preparing each of the Group and Parent Company Financial Statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates which are reasonable relevant and reliable;
- state whether they have been prepared in accordance with UK-adopted international accounting standards;
- assess the Group and Parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- use the going concern basis of accounting unless they either intend to liquidate the Group or the Parent Company or to cease operations, or have no realistic alternative but to do so.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions and which disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that its financial statements comply with the Companies Act 2006. They are responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error, and have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Group and to prevent and detect fraud and other irregularities.

Under applicable law and regulations, the Directors are also responsible for preparing a Strategic Report, Directors' Report, Directors' Remuneration Report and Corporate Governance Statement that complies with that law and those regulations.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the Company's website. Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

## Responsibility statement of the Directors in respect of the annual report

The Directors each confirm to the best of their knowledge that:

- the Financial Statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation taken as a whole; and
- the Strategic Report includes a fair review of the development and performance of the business and the position of the issuer and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

The Directors consider the annual report and accounts, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy.

For and on behalf of the Board

**Simon Hogan**  
Chairman

3 April 2023

# Independent auditor's report

to the members of HydrogenOne Capital Growth plc

## Our opinion is unmodified

We have audited the parent and consolidated financial statements of HydrogenOne Capital Growth plc (the "Company" or "Parent") and its subsidiary (together, the "Group"), which comprise the parent and the consolidated statement of financial position as at 31 December 2022, the parent and the consolidated statements of comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising significant accounting policies and other explanatory information.

### In our opinion, the accompanying parent and consolidated financial statements:

- give a true and fair view of the state of the Group's and of the Company's affairs as at 31 December 2022 and of the Group's and the Company's profit for the year then ended;
- are properly prepared in accordance with UK-adopted international accounting standards; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

## Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities are described below. We believe that the audit evidence we have obtained is a sufficient and appropriate basis for our opinion. Our audit opinion is consistent with our report to the Audit and Risk Committee.

We were first appointed as auditor by the Directors on 15 June 2021. The period of total uninterrupted engagement is for the two financial periods ended 31 December 2022. We have fulfilled our ethical responsibilities under, and we remain independent of the Company and Group in accordance with UK ethical requirements including the FRC Ethical Standard as applied to public interest entities. No non-audit services prohibited by that standard were provided.

## Key audit matters: our assessment of the risks of material misstatement

Key audit matters are those matters that, in our professional judgment, were of most significance in the audit of the parent and consolidated financial statements and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by us, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. We summarise below the key audit matters (unchanged from 2021), in arriving at our audit opinion above, together with our key audit procedures to address those matters and, as required for public interest entities, our results from those procedures. These matters were addressed, and our results are based on procedures undertaken, in the context of, and solely for the purpose of, our audit of the parent and consolidated financial statements as a whole, and in forming our opinion thereon, and consequently are incidental to that opinion, and we do not provide a separate opinion on these matters.



Key audit matter	The risk	Our response
<p><b>Valuation of Private Hydrogen Assets held through HydrogenOne Capital Growth Investments (1) LP (the "Limited Partnership")</b></p> <p><b>£103,115,000; (2021 £39,321,000)</b></p> <p>Refer to the Report of the Audit and Risk Committee (page 73), note 3 (significant accounting policies), note 4 (investments held at fair value through profit or loss) and note 15 (financial instruments and capital disclosures).</p>	<p><b>Basis:</b></p> <p>The Group and Company's investment in the Limited Partnership is carried at fair value through profit or loss and represents a substantial portion of the Group and Company's net assets. The fair value of the Limited Partnership has been determined as its net asset value, the most significant component of which is its underlying portfolio of non-controlling positions in unquoted hydrogen assets valued at £103,115,000 (2021: £39,231,000) ("Private Hydrogen Assets").</p> <p>As Private Hydrogen Assets are unquoted and illiquid, their fair values are determined through the application of valuation techniques. The application of valuation techniques requires the exercise of judgements in relation to the selection of the valuation technique employed and the assumptions and data used in their application.</p> <p>For the year ended 31 December 2022, Private Hydrogen Assets are valued, in accordance with the International Private Equity and Venture Capital Valuation 2022 ("IPEV") Guidelines, using the approach laid out in the valuation of the Limited Partnership policy on pages 92 to 93, which utilises either a discounted cash flow ("DCF") technique; or a weighting of the DCF technique and the price of recent investment ("PORI"), (the "Valuation Model").</p> <p><b>Risk:</b></p> <p>The valuation of Private Hydrogen Assets is a significant risk area of our audit given that they represent a substantial portion of the Group and Company's net assets, and the selection and application of valuation techniques requires the exercise of judgements.</p> <p>The judgements inherent in the valuation approach may also expose the valuation of Private Hydrogen Assets to management bias.</p> <p>Therefore, there is a risk of material misstatement through error as well as a potential for fraud through possible management bias.</p>	<p><b>Our audit procedures included:</b></p> <p><b>Control evaluation</b></p> <p>We assessed the design and implementation of the Valuation Committee's review control in relation to the valuation of Private Hydrogen Assets.</p> <p><b>Challenging management's valuation approach</b></p> <p>For each of the Private Hydrogen Assets, with the support of our KPMG valuation specialist, we:</p> <ul style="list-style-type: none"> <li>held discussions with the Investment Adviser to understand the valuation approach; and</li> <li>assessed and challenged the appropriateness of the valuation approach applied for compliance with IPEV.</li> </ul> <p><b>Valuation Model integrity, inputs and assumptions</b></p> <p>For each of the Private Hydrogen Assets, we:</p> <ul style="list-style-type: none"> <li>tested the Valuation Model for mathematical accuracy including but not limited to material formula errors;</li> <li>corroborated material inputs used in the Valuation Model to supporting documentation; and</li> <li>with the support of our KPMG valuation specialist, benchmarked the discount rate and key macro-economic assumptions applied in the Valuation Model to observable market data and our KPMG valuation specialist's experience in valuing similar investments.</li> </ul> <p><b>Assessing disclosures</b></p> <p>We considered the appropriateness of the Group and Company's investment valuation policies and the adequacy of the Group and Company's disclosures in relation to the use of estimates and judgements in arriving at fair value.</p> <p>We assessed whether the disclosures around the sensitivities to changes in key assumptions reflect the risks inherent in the valuation of the Private Hydrogen Assets.</p> <p><b>Our results</b></p> <p>As a result of our procedures, we found the valuation of Private Hydrogen Assets and related disclosures to be acceptable.</p>

# Independent auditor's report

## Our application of materiality and an overview of the scope of our audit

Materiality for the parent and consolidated financial statements as a whole was set at £2,480,000, determined with reference to a benchmark of net assets of £125,353,000, of which it represents approximately 2.0% (2021: 2.0%).

In line with our audit methodology, our procedures on individual account balances and disclosures were performed to a lower threshold, performance materiality, so as to reduce to an acceptable level the risk that individually immaterial misstatements in individual account balances add up to a material amount across the parent and consolidated financial statements as a whole. Performance materiality for the Group and the Company was set at 75% (2021: 75%) of materiality for the parent and consolidated financial statements as a whole, which equates to £1,860,000. We applied this percentage in our determination of performance materiality because we did not identify any factors indicating an elevated level of risk.

We reported to the Audit and Risk Committee any corrected or uncorrected identified misstatements exceeding £124,000, in addition to other identified misstatements that warranted reporting on qualitative grounds.

Our audit of the Group and Company was undertaken to the materiality level specified above, which has informed our identification of significant risks of material misstatement and the associated audit procedures performed in those areas as detailed above.

## Going concern

The directors have prepared the parent and consolidated financial statements on the going concern basis as they do not intend to liquidate the Group or the Company or to cease their operations, and as they have concluded that the Group and the Company's financial position means that this is realistic. They have also concluded that there are no material uncertainties that could have cast significant doubt over their ability to continue as a going concern for at least a year from the date of approval of the parent and consolidated financial statements (the "going concern period").

In our evaluation of the directors' conclusions, we considered the inherent risks to the Group and the Company's business model and analysed how those risks might affect the Group and the Company's financial resources or ability to continue operations over the going concern period. The risk that we considered most likely to affect the Group and the Company's financial resources or ability to continue operations over this period was the availability of capital to meet operating costs and other financial commitments.

We considered whether this risk could plausibly affect the liquidity in the going concern period by comparing severe, but plausible downside scenarios that could arise from this risk against the level of available financial resources indicated by the Company's financial forecasts.

We considered whether the going concern disclosure in note 2 to the parent and consolidated financial statements gives a full and accurate description of the directors' assessment of going concern.

Our conclusions based on this work:

- we consider that the directors' use of the going concern basis of accounting in the preparation of the parent and consolidated financial statements is appropriate;
- we have not identified, and concur with the directors' assessment that there is not, a material uncertainty related to events or conditions that, individually or collectively, may cast significant doubt on the Group and the Company's ability to continue as a going concern for the going concern period;
- we have nothing material to add or draw attention to in relation to the directors' statement in the notes to the parent and consolidated financial statements on the use of the going concern basis of accounting with no material uncertainties that may cast significant doubt over the Group and the Company's use of that basis for the going concern period, and that statement is materially consistent with the parent and consolidated financial statements and our audit knowledge; and
- the related statement under the Listing Rules set out on page 65 is materially consistent with the parent and consolidated financial statements and our audit knowledge.

However, as we cannot predict all future events or conditions and as subsequent events may result in outcomes that are inconsistent with judgements that were reasonable at the time they were made, the above conclusions are not a guarantee that the Group and the Company will continue in operation.

## Fraud and breaches of laws and regulations – ability to detect

### Identifying and responding to risks of material misstatement due to fraud

To identify risks of material misstatement due to fraud ("fraud risks") we assessed events or conditions that could indicate an incentive or pressure to commit fraud or provide an opportunity to commit fraud. Our risk assessment procedures included:

- enquiring of management as to the Group's policies and procedures to prevent and detect fraud as well as enquiring whether management have knowledge of any actual, suspected or alleged fraud;
- reading minutes of meetings of those charged with governance; and
- using analytical procedures to identify any unusual or unexpected relationships.

As required by auditing standards, and taking into account possible incentives or pressures to misstate performance and our overall knowledge of the control environment, we perform procedures to address the risk of management override of controls, in particular the risk that management may be in a position to make inappropriate accounting entries, and the risk of bias in accounting estimates such as valuation of Private Hydrogen Assets. On this audit we do not believe there is a fraud risk related to revenue recognition because the Group and Company's revenue streams are simple in nature with respect to accounting policy choice, and are easily verifiable to external data sources or agreements with little or no requirement for estimation from management. We did not identify any additional fraud risks.

We performed procedures including:

- identifying journal entries and other adjustments to test based on risk criteria and comparing any identified entries to supporting documentation;
- incorporating an element of unpredictability in our audit procedures; and
- assessing significant accounting estimates for bias

Further detail in respect of valuation of Private Hydrogen Assets is set out in the key audit matter section of this report.

### Identifying and responding to risks of material misstatement due to non-compliance with laws and regulations

We identified areas of laws and regulations that could reasonably be expected to have a material effect on the parent and consolidated financial statements from our sector experience and through discussion with management (as required by auditing standards), and from inspection of the Group's regulatory and legal correspondence, if any, and discussed with management the policies and procedures regarding compliance with laws and regulations. As the Group is regulated, our assessment of risks involved gaining an understanding of the control environment including the entity's procedures for complying with regulatory requirements.

The Group is subject to laws and regulations that directly affect the parent and consolidated financial statements including financial reporting legislation and taxation legislation and we assessed the extent of compliance with these laws and regulations as part of our procedures on the related financial statement items.

The Group is subject to other laws and regulations where the consequences of non-compliance could have a material effect on amounts or disclosures in the parent and consolidated financial statements, for instance through the imposition of fines or litigation or impacts on the Group and the Company's ability to operate. We identified financial services regulation as being the area most likely to have such an effect, recognising the regulated nature of the Group's activities and its legal form. Auditing standards limit the required audit procedures to identify non-compliance with these laws and regulations to enquiry of management and inspection of regulatory and legal correspondence, if any. Therefore if a breach of operational regulations is not disclosed to us or evident from relevant correspondence, an audit will not detect that breach.

### Context of the ability of the audit to detect fraud or breaches of law or regulation

Owing to the inherent limitations of an audit, there is an unavoidable risk that we may not have detected some material misstatements in the parent and consolidated financial statements, even though we have properly planned and performed our audit in accordance with auditing standards. For example, the further removed non-compliance with laws and regulations is from the events and transactions reflected in the parent and consolidated financial statements, the less likely the inherently limited procedures required by auditing standards would identify it.

In addition, as with any audit, there remains a higher risk of non-detection of fraud, as this may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls. Our audit procedures are designed to detect material misstatement. We are not responsible for preventing non-compliance or fraud and cannot be expected to detect non-compliance with all laws and regulations.

### Other information

The Directors are responsible for the other information, which comprises the strategic report, the Directors' report and the

# Independent auditor's report

other information included in the annual report, but does not include the parent and consolidated financial statements and our auditor's report thereon. Our opinion on the parent and consolidated financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except as explicitly stated below, any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether, based on our parent and consolidated financial statements audit work, the information therein is materially misstated or inconsistent with the parent and consolidated financial statements or our audit knowledge. Based solely on that work:

- we have not identified material misstatements in the other information;
- in our opinion the information given in the strategic report and the Directors' report for the financial year is consistent with the parent and consolidated financial statements; and
- in our opinion those reports have been prepared in accordance with the Companies Act 2006.

## Directors' remuneration report

In our opinion the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006.

## Disclosures of emerging and principal risks and longer term viability

We are required to perform procedures to identify whether there is a material inconsistency between the directors' disclosures in respect of emerging and principal risks and the viability statement, and the parent and consolidated financial statements and our audit knowledge. We have nothing material to add or draw attention to in relation to:

- the directors' confirmation within the Viability Statement (page 59) that they have carried out a robust assessment of the emerging and principal risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity;
- the emerging and principal risks disclosures describing these risks and explaining how they are being managed or mitigated;
- the directors' explanation in the Viability Statement (page 59) as to how they have assessed the prospects of the Group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

We are also required to review the Viability Statement, set out on page 59 under the Listing Rules. Based on the above procedures, we have concluded that the above disclosures are materially consistent with the parent and consolidated financial statements and our audit knowledge.

## Corporate governance disclosures

We are required to perform procedures to identify whether there is a material inconsistency between the directors' corporate governance disclosures and the parent and consolidated financial statements and our audit knowledge.

Based on those procedures, we have concluded that each of the following is materially consistent with the parent and consolidated financial statements and our audit knowledge:

- the directors' statement that they consider that the annual report and parent and consolidated financial statements taken as a whole is fair, balanced and understandable, and provides the information necessary for shareholders to assess the Group and Company's position and performance, business model and strategy;
- the section of the annual report describing the work of the Audit and Risk Committee, including the significant issues that the Audit and Risk Committee considered in relation to the financial statements, and how these issues were addressed; and
- the section of the annual report that describes the review of the effectiveness of the Group and Company's risk management and internal control systems.

We are required to review the part of Corporate Governance Statement relating to the Group and Company's compliance with the provisions of the UK Corporate Governance Code specified by the Listing Rules for our review. We have nothing to report in this respect.

## We have nothing to report on other matters on which we are required to report by exception

Under the Companies Act 2006, we are required to report to you if, in our opinion:

- adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent company financial statements and the part of the Directors' Remuneration Report to be audited are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

We have nothing to report in these respects.

## Respective responsibilities

### Directors' responsibilities

As explained more fully in their statement set out on page 75, the directors are responsible for: the preparation of the parent and consolidated financial statements including being satisfied that they give a true and fair view; such internal control as they determine is necessary to enable the preparation of parent and consolidated financial statements that are free from material misstatement, whether due to fraud or error; assessing the Group and Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and using the going concern basis of accounting unless they either intend to liquidate the Group or the Company or to cease operations, or have no realistic alternative but to do so.

### Auditor's responsibilities

Our objectives are to obtain reasonable assurance about whether the parent and consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue our opinion in an auditor's report. Reasonable assurance is a high level of assurance, but does not guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the parent and consolidated financial statements.

A fuller description of our responsibilities is provided on the FRC's website at [www.frc.org.uk/auditorsresponsibilities](http://www.frc.org.uk/auditorsresponsibilities).

## The purpose of this report and restrictions on its use by persons other than the Company's members as a body

This report is made solely to the Company's members, as a body, in accordance with chapter 3 of part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and its members, as a body, for our audit work, for this report, or for the opinions we have formed.

**David Alexander** (Senior Statutory Auditor)  
For and on behalf of KPMG Channel Islands Limited (Statutory Auditor)  
Chartered Accountants  
Guernsey

3 April 2023

# Financial statements

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# Parent and consolidated statement of comprehensive income

For the year ended 31 December 2022

	Notes	Year ended 31 December 2022			Period from incorporation on 16 April 2021 to 31 December 2021		
		Revenue £'000	Capital £'000	Total £'000	Revenue £'000	Capital £'000	Total £'000
Gains/(losses) on investments	4	–	3,177	3,177	–	(1,608)	(1,608)
Gains on currency movements		–	1	1	–	1	1
<b>Gross investment gains/(losses)</b>		–	3,178	3,178	–	(1,607)	(1,607)
Income	5	97	–	97	–	–	–
<b>Total gain/(loss)</b>		97	3,178	3,275	–	(1,607)	(1,607)
Investment Adviser fee	6	(343)	–	(343)	(265)	–	(265)
Other expenses	7	(1,159)	(219)	(1,378)	(540)	(5)	(545)
<b>(Loss)/profit before finance costs and taxation</b>		(1,405)	2,959	1,554	(805)	(1,612)	(2,417)
Finance costs		–	–	–	–	–	–
Operating (loss)/profit before taxation		(1,405)	2,959	1,554	(805)	(1,612)	(2,417)
Taxation	8	–	–	–	–	–	–
<b>(Loss)/profit for the year/period</b>		(1,405)	2,959	1,554	(805)	(1,612)	(2,417)
<b>Return per Ordinary Share (basic and diluted)</b>	12	(1.14)p	2.41p	1.27p	(1.26)p	(2.52)p	(3.78)p

There is no other comprehensive income and therefore the 'Profit/(loss) for the Year/Period' is the total comprehensive income for the year or period.

The total column of the above statement is the Parent and Consolidated Statement of Comprehensive Income, including the return per Ordinary Share, which has been prepared in accordance with IFRS. The supplementary revenue and capital columns, including the return per Ordinary Share, are prepared under guidance from the Association of Investment Companies.

All revenue and capital items in the above statement derive from continuing operations. The following notes on pages 87 to 112 form an integral part of these Financial Statements.

# Parent and consolidated statement of financial position

As at 31 December 2022

	Notes	31 December 2022 £'000	31 December 2021 £'000
<b>Assets</b>			
<b>Non-current assets</b>			
Investments held at fair value through profit or loss	4	106,673	68,830
<b>Current assets</b>			
Cash and cash equivalents		18,192	34,019
Trade and other receivables	9	641	183
<b>Total current assets</b>		18,833	34,202
<b>Total assets</b>		125,506	103,032
<b>Current liabilities</b>			
Trade and other payables	10	(153)	(246)
<b>Total liabilities</b>		(153)	(246)
<b>Net assets</b>		125,353	102,786
<b>Equity</b>			
Share capital	11	1,288	1,074
Share premium account		124,928	104,129
Capital reserve		1,347	(1,612)
Revenue reserve		(2,210)	(805)
<b>Total equity</b>		125,353	102,786
<b>Net asset value per Ordinary Share</b>	13	97.31p	95.75p

Approved by the Board of Directors on and authorised for issue 3 April 2023 and signed on their behalf by:

**Simon Hogan**  
Director

HydrogenOne Capital Growth plc is incorporated in England and Wales with registration number 13340859.

The following notes pages 87 to 112 form an integral part of these Financial Statements.

# Parent and consolidated statement of changes in equity

For the year ended 31 December 2022

	Notes	Share Capital £'000	Share premium account £'000	Capital reserve £'000	Revenue reserve £'000	Total £'000
Opening balance as at 1 January 2022		1,074	104,129	(1,612)	(805)	102,786
Issue of Ordinary Shares	11	214	21,255	–	–	21,469
Ordinary Share issue costs	11	–	(456)	–	–	(456)
Profit/(loss) for the year		–	–	2,959	(1,405)	1,554
<b>Closing balance as at 31 December 2022</b>		<b>1,288</b>	<b>124,928</b>	<b>1,347</b>	<b>(2,210)</b>	<b>125,353</b>

For the period from incorporation on 16 April 2021 to 31 December 2021

	Notes	Share Capital £'000	Share premium account £'000	Capital reserve £'000	Revenue reserve £'000	Total £'000
Opening balance as at 16 April 2021		–	–	–	–	–
Issue of Ordinary Shares	11	1,074	106,276	–	–	107,350
Ordinary Share issue costs		–	(2,147)	–	–	(2,147)
Loss for the period		–	–	(1,612)	(805)	(2,417)
<b>Closing balance as at 31 December 2021</b>		<b>1,074</b>	<b>104,129</b>	<b>(1,612)</b>	<b>(805)</b>	<b>102,786</b>

The following notes pages 87 to 112 form an integral part of these Financial Statements.

# Parent and consolidated statement of cash flows

For the year ended 31 December 2022

	Notes	Year ended 31 December 2022 £'000	Period from incorporation on 16 April 2021 to 31 December 2021 £'000
<b>Cash flows from operating activities</b>			
Investment income		97	–
Management expenses		(1,734)	(810)
Foreign exchange gains		1	1
Increase in trade and other receivables		(445)	(183)
(Decrease)/increase in trade and other payables		(93)	246
<b>Net cash flow used in operating activities</b>		<b>(2,174)</b>	<b>(746)</b>
<b>Cash flows from investing activities</b>			
Purchase of investments		(36,718)	(70,438)
Sale of investments		2,052	–
<b>Net cash flow used in investing activities</b>		<b>(34,666)</b>	<b>(70,438)</b>
<b>Cash flows from financing activities</b>			
Proceeds from issue of Ordinary Shares	11	21,469	107,350
Ordinary Share issue costs	11	(456)	(2,147)
<b>Net cash flow from financing activities</b>		<b>21,013</b>	<b>105,203</b>
<b>(Decrease)/increase in cash and cash equivalents</b>		<b>(15,827)</b>	<b>34,019</b>
Cash and cash equivalents at start of year/period		34,019	–
<b>Cash and cash equivalents at end of year/period</b>		<b>18,192</b>	<b>34,019</b>

The following notes pages 87 to 112 form an integral part of these Financial Statements.

# Notes to the parent and consolidated financial statements

## 1. General information

### Company information

HydrogenOne Capital Growth plc (the "Company" or "Parent") was incorporated in England and Wales on 16 April 2021 with registered number 13340859 as a public company limited by shares and is an investment company within the terms of Section 833 of the Companies Act 2006 (the "Act"). The Company is listed and began trading on the Main Market of the London Stock Exchange and was admitted to the premium segment of the Official List on 30 July 2021 (the "IPO"). The Company has applied for and been accepted as an approved investment trust under sections 1158 and 1159 of the Corporation Tax Act 2010 and Part 2 Chapter 1 of Statutory Instrument 2011/2999.

FundRock Management Company (Guernsey) Limited (formerly Sanne Fund Management (Guernsey) Limited) acts as the Company's Alternative Investment Fund Manager ("AIFM").

Apex Listed Companies Services (UK) Limited (formerly Sanne Fund Services (UK) Limited) (the "Company Secretary and Administrator") provides administrative and company secretarial services to the Company.

The Company's Investment Adviser is HydrogenOne Capital LLP.

The Company's registered office is 6th Floor, 125 London Wall, London, EC2Y 5AS.

### Investment objective

The Company's investment objective is to deliver an attractive level of capital growth by investing, directly or indirectly, in a diversified portfolio of hydrogen and complementary hydrogen focussed assets whilst integrating core environmental, social and governance ("ESG") principles into its decision making and ownership process.

### Company structure

The Company makes its investments in unquoted Hydrogen Assets ("Private Hydrogen Assets") through HydrogenOne Capital Growth Investments (1) LP (the "Limited Partnership"), in which the Company is the sole Limited Partner. The Limited Partnership registered as a private fund limited partnership in England and Wales under the Limited Partnerships Act 1907 with registered number LP021814. The Limited Partnership has been established pursuant to the Limited Partnership Agreement dated 5 July 2021 as amended and restated on 26 November 2021 (the "Limited Partnership Agreement") in order to make investments pursuant to the investment policy of the Limited Partnership. The Limited Partnership's investment policy and restrictions are consistent with the Company's investment policy and restrictions for Private Hydrogen Assets.

The General Partner of the Limited Partnership is HydrogenOne Capital Growth (GP) Limited (the "General Partner"), a wholly owned subsidiary of the Company. The General Partner was incorporated in England and Wales on 19 May 2021 with company registered number 13407844. The General Partner undertakes the responsibility for the management, operation and administration of the business and affairs of the Limited Partnership. The General Partner's Profit Share for each accounting period shall be an amount equal to 15% per annum of the prevailing NAV of the Limited Partnership, which shall be allocated to the General Partner as a first charge on the profits of the Limited Partnership. For so long as the Company is the sole Limited Partner, the General Partner's Profit Share shall be allocated and distributed to the Company rather than the General Partner.

The carried interest partner of the Limited Partnership is HydrogenOne Capital Growth (Carried Interest) LP (the "Carried Interest Partner") which, in certain circumstances, will receive carried interest on the realisation of Private Hydrogen Assets by the Limited Partnership. The Carried Interest Partner has been set up for the benefit of the principals of the Investment Adviser.

### Private Hydrogen Assets

The Company invests via the Limited Partnership in Private Hydrogen Assets, which may be operational companies or hydrogen projects. Investments are mainly in the form of equity, although investments may be made by way of debt and/or convertible securities. The Company may acquire a mix of controlling and non-controlling interests in Private Hydrogen Assets, however the Company invests principally in non-controlling positions (with suitable minority protection rights to, inter alia, ensure that the Private Hydrogen Assets are operated and managed in a manner that is consistent with the Company's investment policy).

# Notes to the parent and consolidated financial statements

The Company acquires Private Hydrogen Assets via the Limited Partnership. In due course, the Company may acquire Private Hydrogen Assets directly or by way of holdings in special purpose vehicles or intermediate holding entities (including successor limited partnerships established on substantially the same terms as the Limited Partnership) or, if the Company is considered a 'feeder fund' under the Listing Rules, other undertakings advised by the Investment Adviser and, in such circumstances, the investment policy and restrictions will also be applied on a look-through basis and such undertaking(s) will also be managed in accordance with the Company's investment policy.

## Listed Hydrogen Assets

The Company also invests directly in quoted or traded Hydrogen Assets, which are predominantly equity securities but may also be corporate debt and/or other financial instruments ("Listed Hydrogen Assets"). The Company has the ability to invest in Listed Hydrogen Assets in any market or country with a market capitalisation (at the time of investment) of at least US\$100 million. The Company's approach is to be a long-term investor and does not ordinarily adopt short-term trading strategies.

## Liquidity reserve

During the initial Private Hydrogen Asset investment period after a capital raise and/or a realisation of a Private Hydrogen Asset, the Company intends to allocate the relevant net proceeds of such capital raise/realisation to cash (in accordance with the Company's cash management policy) and/or additional Listed Hydrogen Assets and related businesses pending subsequent investment in Private Hydrogen Assets (the "Liquidity Reserve").

The Company anticipates holding cash to cover the near-term capital requirements of the pipeline of Private Hydrogen Assets and in periods of high market volatility.

## 2. Basis of preparation

The principal accounting policies are set out below:

### Reporting entity

These Parent and Consolidated Financial Statements (the "Financial Statements") present the results of both the Parent; and the Parent and the General Partner (together referred to as the "Group").

As at 31 December 2022, the statement of financial position of the General Partner consisted of issued share capital and corresponding share capital receivable in the amount of £1. The General Partner had no income, expenditure or cash flows for the year.

Due to the immaterial balances of the General Partner there is no material difference between the results of the Parent and the results of the Group. As a result, the Financial Statements as presented represent both the Parent's and the Group's financial position, performance and cash flows.

### Basis of accounting

The Financial Statements have been prepared in accordance with UK-adopted international accounting standards ("IFRS") and the applicable legal requirements of the Companies Act 2006.

The Financial Statements have also been prepared as far as is relevant and applicable to the Company and Group in accordance with the Statement of Recommended Practice ("SORP") issued by the Association of Investment Companies ("AIC") in July 2022.

The Financial Statements are prepared on the historical cost basis, except for the revaluation of financial instruments measured at fair value through profit or loss.

Fair value is the price that would be received on sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or liability, the Company and Group take into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these Financial Statements is determined on such a basis.

The Financial Statements are presented in Pounds Sterling because that is the currency of the primary economic environment in which the Company and Group operate.

The principal accounting policies adopted are set out below. These policies are consistently applied.



### Accounting for subsidiaries

The Board of Directors has determined that the Company has all the elements of control as prescribed by IFRS 10 in relation to:

1. the Limited Partnership; as the Company is the sole limited partner in the Limited Partnership (100% of the Limited Partnership's commitments are held by the Company), is exposed to and has rights to the returns of the Limited Partnership, and has the ability through its control of the General Partner to affect the amount of its returns from the Limited Partnership; and
2. the General Partner; as the Company wholly owns the General Partner, is exposed to and has rights to the returns of the General Partner, and has the ability through its control of the General Partner's activities to affect the amount of its returns from the General Partner.

The Investment entities exemption requires that an investment entity that has determined that it is a parent under IFRS 10 shall not consolidate certain of its subsidiaries; instead, it is required to measure its investment in these subsidiaries at fair value through profit or loss in accordance with IFRS 9. The criteria which define an investment entity are as follows:

- (i) the company obtains funds from one or more investors for the purpose of providing those investors with investment management services;
- (ii) the company commits to its investors that its business purpose is to invest funds solely for returns from capital appreciation, investment income, or both; and
- (iii) the company measures and evaluates the performance of substantially all of its investments on a fair value basis.

The Company is an investment company, providing investors exposure to a diversified portfolio of hydrogen and complementary hydrogen focussed assets that are managed for investment purposes. The investments were made in line with the stated objective of the Company to deliver an attractive level of capital growth in accordance with the strategy that has been set by the Directors.

In assessing whether the Company meets the definition of an investment entity set out in IFRS 10 the Directors' note that:

- (i) the Company has multiple investors with shares issued publicly on the London Stock Exchange and obtains funds from a diverse group of shareholders who would otherwise not have access individually to investing in hydrogen focussed assets;
- (ii) the Company's purpose is to invest funds for capital appreciation but with potential for some investment income. The Limited Partnership has a ten-year life however the underlying assets have minimal residual value because they do not have unlimited lives, are not to be held indefinitely and have appropriate exit strategies in place; and
- (iii) the Company measures and evaluates the performance of all of its investments on a fair value basis which is the most relevant for investors in the Company. The Directors use fair value information as a primary measurement to evaluate the performance of all of the investments and in decision making.

The Directors assess each new investment carefully to determine whether the Company as a whole continues to meet the definition of an investment entity.

The Board of Directors has determined that the Company meets all the typical characteristics of an investment entity and therefore meets the definition set out in IFRS 10.

### Accounting for the Limited Partnership

The Limited Partnership serves as an asset holding entity and does not provide investment-related services. Therefore, when the Limited Partnership is assessed based on the overall structure as a means of carrying out the Company's activities, the Board of Directors has determined that the Limited Partnership meets the definition of an investment entity. Accordingly, the Company is required under IFRS 10 to hold its investment in the Limited Partnership at fair value through the Statement of Comprehensive Income rather than consolidate them. The Company has determined that the fair value of the Limited Partnership is its net asset value and has concluded that it meets the definition of an unconsolidated subsidiary under IFRS 12 and has made the necessary disclosures in these Financial Statements.

### Accounting for the General Partner

The General Partner provides investment related services to the Limited Partnership on behalf of the Company. IFRS 10 requires subsidiaries that provide services that relate to the investment entity's investment activities to be consolidated. Accordingly, the Company is required under IFRS 10 to consolidate the results of the General Partner.

The Directors agree that the investment entity accounting treatment outlined above appropriately reflects the Company's activities as an investment trust and provides the most relevant information to investors.

# Notes to the parent and consolidated financial statements

## Going concern

The Directors consider that it is appropriate to adopt the going concern basis in preparing the Financial Statements. In reaching this conclusion, the Directors considered the income and expense projections and the liquidity of the investment portfolio, and considered the impact to the Company and portfolio of investments from the economic conditions such as higher interest rates and inflationary pressures and market volatility arising from the ongoing war in Ukraine and secondary effects of the COVID-19 pandemic.

The Company and Group continue to meet day-to-day liquidity needs through its cash resources. The Company and Group had at 31 December 2022 unrestricted cash of £18.2 million (2021: £34.0 million) as well as £3.7 million (2021: £8.2 million) in Listed Hydrogen Assets. The Company and Group's net assets at 31 December 2022 were £125.4 million (£102.8 million) and total expenses for the year ended 31 December 2022 were £1.7 million (2021: £0.8 million), which represented approximately 1.5% (2021: 0.8%) of the average net assets value of the Company in the year to 31 December 2022 of £116.8 million (period from the Company's IPO on 22 June 2021 to the 31 December 2021 £104.6 million).

Following the declaration of the Company's Net Asset Value as at the 31 December 2022 on the 8 February 2023, the Company's share price was 77.4p representing a 20.5% discount to the Net Asset Value (31 December 2021: premium of 24.8%).

At the date of approval of these Financial Statements, the Company and Group had cash resources of £12.6 million and annual expenses are estimated to be £3.4 million.

The Directors also recognise that the continuation of the Company is subject to the approval of shareholders at the Annual General Meeting ("AGM") in 2026, and every fifth AGM thereafter. The Board has considered the long term prospects of the Company and has no reason to believe that the continuation vote will fail.

Based on the foregoing, the Directors have adopted the going concern basis in preparing the Financial Statements. The Directors have a reasonable expectation that the Company and Group have adequate operational resources to continue in operational existence for at least twelve months from the date of approval of these Financial Statements.

## Critical accounting judgements, estimates and assumptions

The preparation of Financial Statements in accordance with IFRS requires the Directors to make judgements, estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the Financial Statements and the reported amounts of income and expense during the period. Actual results could differ from those estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision only affects that period or in the period and future periods if the revision affects both current and future periods.

## Judgements

### Investment entity

In accordance with the Investment Entities exemption contained in IFRS 10, the Board has determined that the Company satisfies the criteria to be regarded as an investment entity and that the Company provides investment related services and, as a result, measures its investment in the Limited Partnership at fair value.

The Limited Partnership serves as an asset holding entity and does not provide investment-related services. Therefore, when the Limited Partnership is assessed based on the overall structure as a means of carrying out the Company's activities, the Board of Directors has determined that the Limited Partnership meets the definition of an investment entity. Accordingly, the Company is required under IFRS 10 to hold its investment in the Limited Partnership at fair value through the Statement of Comprehensive Income rather than consolidate them.

The General Partner provides investment related services to the Limited Partnership on behalf of the Company. IFRS 10 requires subsidiaries that provide services that relate to the investment entity's investment activities to be consolidated. Accordingly, the Board of Directors have determined that the Company is required under IFRS 10 to consolidate the results of the General Partner. As described in the Reporting Entity section, the Financial Statements as presented represent both the Parent's and the Group's financial position, performance and cash flows.

These conclusions involved a degree of judgement and assessment as to whether the Company, the Limited Partnership and the General Partner met the criteria outlined in the accounting standards.

## Estimates

### *Investment valuations*

The key estimate in the Financial Statements is the determination of the fair value of the Private Hydrogen Assets, held by the Limited Partnership, by the Investment Adviser for consideration by the Directors. This estimate is key as it significantly impacts the valuation of the Limited Partnership at the year end. The fair valuation process involves estimation using subjective inputs that are unobservable (for which market data is unavailable). The key inputs considered in the valuation are described in note 15.

## Comparatives

Comparative information is included as at 31 December 2021 or for the period since incorporation on 16 April 2021 to 31 December 2021, whereas the current period is from 1 January 2022 to 31 December 2022. Both periods are therefore not comparable.

## New standards, interpretations and amendments adopted from 1 January 2022

### *Effective in the current financial year*

The Board have assessed those new standards, interpretations, and/or amendments which became effective during the financial year under review and concluded they have no material impact to the Company.

## New standards and amendments issued but not yet effective

There are a number of new standards, interpretations, and/or amendments, which did not become effective during the financial year under review.

At the date of approval of these Financial Statements, the following standards and interpretations were amended during the year:

- IAS 1 and IFRS Practice Statement 2 – Disclosure of Accounting policies (effective 1 January 2023).
- IAS 8 – Definition of Accounting Estimates (effective 1 January 2023).
- IAS 12 – Deferred tax related to assets and liabilities arising from a single transaction

The Board have assessed new but not yet effective standards applicable to the Company and have concluded that they will not have a material impact to the Company.

## 3. Significant accounting policies

### (a) Financial instruments

#### *Financial assets – Classification, recognition, derecognition and measurement*

The Company and Group's financial assets principally comprise of: investments held at fair value through profit or loss (Listed Hydrogen Assets and the Limited Partnership); and trade and other receivables, which are initially recognised at fair value and subsequently measured at amortised cost.

Financial assets are recognised in the Statement of Financial Position when the Company or Group become a party to the contractual provisions of the instrument. Transaction costs that are directly attributable to the acquisition or issue of financial assets (other than financial assets at fair value through profit or loss) are added to or deducted from the fair value of the financial assets, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets at fair value through profit or loss are recognised immediately in profit or loss.

Subsequent to initial recognition, financial assets at fair value through profit or loss are measured at fair value. Gains and losses resulting from the movement in fair value are recognised in the Statement of Comprehensive Income at each valuation point within 'gains/(losses) on investments'.

Financial assets are derecognised when the rights to receive cash flows from the investments have expired or the Company or Group have transferred substantially all risks and rewards of ownership.

#### *Financial liabilities – Classification, recognition, derecognition and measurement*

The Company and Group's financial liabilities include trade and other payables and other short term monetary liabilities which are initially recognised at fair value and subsequently measured at amortised cost.

# Notes to the parent and consolidated financial statements

Financial liabilities are recognised in the Statement of Financial Position when the Company or Group become a party to the contractual provisions of the instrument. Transaction costs that are directly attributable to the acquisition or issue of financial liabilities (other than financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial liabilities at fair value through profit or loss are recognised immediately in profit or loss. Financial liabilities are subsequently measured at amortised cost.

A financial liability (in whole or in part) is derecognised when the Company or Group have extinguished the contractual obligations, it expires or is cancelled.

## *Valuation of Listed Hydrogen Assets*

Upon initial recognition Listed Hydrogen Assets are classified by the Company and Group 'at fair value through profit or loss'. They are accounted for on the date they are traded and are included initially at fair value which is taken to be their cost. Subsequently they are valued at fair value, which is the bid market price, or if bid price is unavailable, last traded price on the relevant exchange.

## *Valuation of the Limited Partnership*

The Company may make investments in Private Hydrogen Assets directly, via the Limited Partnership and/or by way of holdings in special purpose vehicles or intermediate holding entities. These vehicles will be measured at fair value through profit or loss based on their Net Asset Value ("NAV") at the period end, which is principally derived from the valuation of their Private Hydrogen Assets.

The Company and Group has determined that the fair value of the Limited Partnership is the Limited Partnership's NAV. The NAV of the Limited Partnership is prepared in accordance with accounting policies that are consistent with IFRS and consists of the fair value of its Private Hydrogen Assets, and the carrying value of its assets and liabilities.

The Investment Adviser values the Private Hydrogen Assets according to IPEV Guidelines. The valuation techniques available under IPEV Guidelines are set out below and are followed by an explanation of how they are applied to the Private Hydrogen Assets:

- Discounted cash flows ("DCF");
- Multiples;
- Industry Valuation Benchmarks; and
- Available Market Prices.

The nature of the Private Hydrogen Assets will influence the valuation technique applied. The valuation approach recognises that, as stated in the IPEV Guidelines, the price of a recent investment, if resulting from an orderly transaction, generally represents fair value as at the transaction date and may be an appropriate starting point for estimating fair value at subsequent measurement dates. Consideration is given to the facts and circumstances as at the subsequent measurement date such as changes in the market or performance of the investee company including whether maintainable revenues and/or earnings have been established. Milestone analysis is used, where appropriate, to incorporate the operational progress of the investee company into the valuation.

As a result, various techniques may be employed to assess the valuations. However, an absence of relevant industry peers may preclude the application of the industry valuation benchmarks technique and an absence of observable prices may preclude the available market prices approach. All valuations are calibrated and are cross-checked for reasonableness by employing relevant alternative techniques.

As at 31 December 2022, the Private Hydrogen Assets have principally been valued using either the DCF method; or a combination of the DCF method and the price of recent investment. The valuations are weighted towards the DCF method based on the time since the price of recent investment until the full DCF valuation is applied (typically the valuations are tapered from the price of recent investment to the full DCF valuation over four calendar quarters after the price of recent investment). The impact of this weighted approach is that there will be either an effective discount or a premium to the full DCF valuation over the tapering period. The valuations derived from this approach have been assessed for reasonableness against relevant market comparables, where available, and calibrated against specific milestones for indications of positive or negative performance which may impact valuations.

In a DCF valuation, the fair value represents the present value of the investment's expected future cash flows, based on appropriate assumptions for revenues and costs, and suitable cost of capital assumptions. Judgement is applied in arriving at appropriate discount rates, based on the knowledge of the market, taking into account market intelligence gained from bidding activities, discussions with financial advisers, consultants, accountants and lawyers and publicly available information.

A range of sources are reviewed in determining the underlying assumptions to apply in a DCF valuation used in calculating the fair value of a Private Hydrogen Asset. These sources include but are not limited to:

- macroeconomic projections adopted by the market as disclosed in publicly available resources;
- macroeconomic forecasts provided by expert third party economic advisers;
- discount rates publicly disclosed in the global renewables sector;
- discount rates applicable to comparable infrastructure asset classes, which may be procured from public sources or independent third-party expert advisers;
- discount rates publicly disclosed for comparable market transactions of similar assets; and
- capital asset pricing model outputs and implied risk premia over relevant risk free rates. Where available, assumptions are based on observable market and technical data.

#### **(b) Foreign currency**

##### *Functional and presentation currency*

Items included in the Financial Statements are measured using the currency of the primary economic environment in which the entity operates, the functional currency. The Financial Statements are presented in Pounds Sterling which is the Company and Group's functional and presentation currency.

##### *Transactions and balances*

Foreign currency transactions are translated into Pounds Sterling using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the Statement of Comprehensive Income.

#### **(c) Income**

Investment income has been accounted for on an ex-dividend basis or when the right to the income is established. Special dividends are credited to capital or revenue in the Statement of Comprehensive Income, according to the circumstances surrounding the payment of the dividend. Overseas dividends are included gross of withholding tax recoverable.

#### **(d) Dividend payable**

Interim dividends are recognised when the Company pays the dividend. Final dividends are recognised in the period in which they are approved by the shareholders.

#### **(e) Expenses**

All expenses are accounted for on an accruals basis. Expenses directly related to the acquisition or disposal of an investment (transaction costs) are taken to the Statement of Comprehensive Income as a capital item. All other expenses, including Investment Adviser fees, are taken to the Statement of Comprehensive Income as a revenue item.

#### **(f) Taxation**

The tax expense represents the sum of the tax currently payable and deferred tax. The tax currently payable is based on the taxable profit for the period. Taxable profit differs from net profit as reported in the Statement of Comprehensive Income because it excludes items of income or expenses that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. The Company's liability for current tax is calculated using tax rates that were applicable at the financial reporting date.

Where expenses are allocated between capital and revenue any tax relief in respect of the expenses is allocated between capital and revenue returns on the marginal basis using the Company's effective rate of corporation taxation for the relevant accounting period.

# Notes to the parent and consolidated financial statements



Deferred taxation is recognised in respect of all timing differences that have originated but not reversed at the financial reporting date, where transactions or events that result in an obligation to pay more tax in the future or right to pay less tax in the future have occurred at the financial reporting date. This is subject to deferred tax assets only being recognised if it is considered more likely than not that there will be suitable profits from which the future reversal of the timing differences can be deducted. Deferred tax assets and liabilities are measured at the rates applicable to the legal jurisdictions in which they arise.

Since the General Partner does not have any income or expenditure in the period, the Group tax position is the same as the Company tax position.

## (g) Segmental reporting

The Board has considered the requirements of IFRS 8 – 'Operating Segments'. The Company has entered into an Investment Advisory Agreement with the Investment Adviser under which the Investment Adviser is responsible for the management of the Company's investment portfolio, subject to the overall supervision of the Board of Directors. Subject to its terms and conditions, the Investment Advisory Agreement requires the Investment Adviser to manage the Company's investment portfolio in accordance with the Company's investment guidelines as in effect from time to time, including the authority to purchase and sell investments and to carry out other actions as appropriate to give effect thereto. However, the Board retains full responsibility to ensure that the Investment Adviser adheres to its mandate. Moreover, the Board is fully responsible for the appointment and/or removal of the Investment Adviser. Accordingly, the Board is deemed to be the 'Chief Operating Decision Maker' of the Company.

The Directors are of the opinion that the Company is engaged in a single segment of business being investment into the hydrogen focussed investments. Segment information is measured on the same basis as that used in the preparation of the Company's Financial Statements.

## (h) Cash and cash equivalents

Cash comprises cash and demand deposits. Cash equivalents, include bank overdrafts, and short-term, highly liquid investments that are readily convertible to known amounts of cash, are subject to insignificant risks of changes in value, and are held for the purpose of meeting short-term cash commitments rather than for investment or other purposes.

## (i) Nature and purpose of equity and reserves:

Share capital represents the 1p nominal value of the issued share capital.

The share premium account arose from the net proceeds of new shares issued. Costs directly attributable to the issue of new shares are charged against the value of the ordinary share premium.

The capital reserve reflects any:

- gains or losses on the disposal of investments;
- exchange movements of a capital nature;
- the increases and decreases in the fair value of investments which have been recognised in the capital column of the Statement of Comprehensive Income; and
- expenses which are capital in nature.

The revenue reserve reflects all income and expenditure recognised in the revenue column of the Statement of Comprehensive Income and is distributable by way of dividend.

The Company's distributable reserves consist of the revenue reserve and the capital reserve. However any gains in the fair value of investments that are not readily convertible to cash are treated as unrealised gains in the capital reserve and are non-distributable.

Ordinary Shares are classified as equity.



#### 4. Investments held at fair value through profit or loss

##### (a) Summary of valuation

	31 December 2022 £'000	31 December 2021 £'000
<b>Investments held at fair value through profit or loss</b>		
Listed Hydrogen Assets	3,667	8,233
Limited Partnership	103,006	60,597
<b>Closing valuation of financial assets at fair value through profit or loss</b>	<b>106,673</b>	<b>68,830</b>

##### (b) Movements in valuation

	£'000	£'000
Opening valuation of financial assets at fair value through profit or loss	68,830	–
Opening unrealised loss on investments	1,608	–
Opening cost of financial assets at fair value through profit or loss	70,438	–
Additions, at cost – Listed Hydrogen Assets	137	9,461
Additions, at cost – Limited Partnership	36,581	60,977
Disposals, at cost – Listed Hydrogen Assets	(1,909)	–
Cost of financial assets at fair value through profit or loss at the end of the year/period	105,247	70,438
Unrealised losses on investments – Listed Hydrogen Assets	(4,022)	(1,228)
Unrealised gains/(losses) on investments – Limited Partnership	5,448	(380)
<b>Closing valuation of financial assets at fair value through profit or loss</b>	<b>106,673</b>	<b>68,830</b>

##### (c) Gain/(loss) on investments

	£'000	£'000
Movement in unrealised loss – Listed Hydrogen Assets	(2,794)	(1,228)
Movement in unrealised gains/(losses) – Limited Partnership	5,828	(380)
Realised gains on investments – Listed Hydrogen Assets	143	–
<b>Total gain/(loss) on investments</b>	<b>3,177</b>	<b>(1,608)</b>

Under IFRS 13 'Fair Value Measurement', an entity is required to classify investments using a fair value hierarchy that reflects the significance of the inputs used in making the measurement decision.

The following shows the analysis of financial assets recognised at fair value based on:

##### Level 1

The unadjusted quoted price in an active market for identical assets or liabilities that the entity can access at the measurement date.

##### Level 2

Inputs other than quoted prices included within Level 1 that are observable (i.e. developed using market data) for the asset or liability, either directly or indirectly.

# Notes to the parent and consolidated financial statements

## Level 3

Inputs are unobservable (i.e. for which market data is unavailable) for the asset or liability.

Transfers between levels of the fair value hierarchy are recognised as at the end of the reporting period during which the change has occurred. There have been no transfers between levels during the year ended 31 December 2022 (2021: no transfers).

The classification of the Company and Group's investments held at fair value through profit or loss is detailed in the table below:

	31 December 2022			
	Level 1 £'000	Level 2 £'000	Level 3 £'000	Total £'000
Listed Hydrogen Assets	3,667	–	–	3,667
Limited Partnership	–	–	103,006	103,006
	3,667	–	103,006	106,673

	31 December 2021			
	Level 1 £'000	Level 2 £'000	Level 3 £'000	Total £'000
Listed Hydrogen Assets	8,233	–	–	8,233
Limited Partnership	–	–	60,597	60,597
	8,233	–	60,597	68,830

The Company and Group's Level 3 investment is the investment in the Limited Partnership. The NAV of the Limited Partnership as of 31 December 2022 is £103,006,000 (2021: £60,597,000). The movement on the Level 3 investments during the year/period is shown below:

	31 December 2022 £'000	31 December 2021 £'000
Opening balance	60,597	–
Investment in Limited Partnership	36,581	60,977
Unrealised gains/(losses) on investment in Limited Partnership	5,828	(380)
Closing balance	103,006	60,597

## Look-through financial information

The NAV of the Limited Partnership consists of the fair value of its Private Hydrogen Assets and the carrying value of its assets and liabilities. As at the year end, the Limited Partnership held nine Private Hydrogen Assets (2021: three).

The following table reconciles the fair value of the Private Hydrogen Assets and the NAV of the Limited Partnership.

	31 December 2022 £'000	31 December 2021 £'000
Investment in Private Hydrogen Assets	103,115	39,231
Plus/(minus): net current assets/(liabilities)	(109)	21,366
NAV of the Limited Partnership	103,006	60,597

The Level 3 Private Hydrogen Assets are valued by the Investment Adviser using either the DCF methodology or a combination of the DCF and Price of Recent Investment methodology, as outlined in note 3. The key inputs considered in the valuation are described in note 15.

At 31 December 2022, the valuations of the Limited Partnership's underlying investments in Private Hydrogen Assets were determined as follows:

Name	Country of Incorporation	Value of Investment £'000	Primary valuation technique	Significant unobservable inputs	Range input
Sunfire GmbH	Germany	21,763	Weighted DCF and Price of Recent Investment	Discount rates applied in full DCF valuation Weighting between Price of Recent Investment and DCF valuation <sup>1</sup>	12.1%-12.4% (4%)
Elcogen Group plc	United Kingdom	20,430	Weighted DCF and Price of Recent Investment	Discount rates applied in full DCF valuation Weighting between Price of Recent Investment and DCF valuation <sup>1</sup>	12.5%-13.0% 4%
HiiROC Limited	United Kingdom	12,914	DCF	Discount rates	13.5%
Bramble Energy Limited	United Kingdom	10,032	Weighted DCF and Price of Recent Investment	Discount rates applied in full DCF valuation Weighting between Price of Recent Investment and DCF valuation <sup>1</sup>	13.4%-13.6% 24%
NanoSUN Limited	United Kingdom	11,519	Weighted DCF and Price of Recent Investment	Discount rates applied in full DCF valuation Weighting between Price of Recent Investment and DCF valuation <sup>1</sup>	13.4%-13.6% (10%)
Cranfield Aerospace Solutions Limited	United Kingdom	6,296	Weighted DCF and Price of Recent Investment	Discount rates applied in full DCF valuation Weighting between Price of Recent Investment and DCF valuation <sup>1</sup>	13.5% (20%)
HH2E AG	Germany	5,134	Weighted DCF and Price of Recent Investment	Discount rates applied in full DCF valuation Weighting between Price of Recent Investment and DCF valuation <sup>1</sup>	12.1%-12.4% 6%
GEN2 Energy AS	Norway	3,421	Weighted DCF and Price of Recent Investment	Discount rates applied in full DCF valuation Weighting between Price of Recent Investment and DCF valuation <sup>1</sup>	13.0% (10%)
Strohm Holding BV	The Netherlands	11,606	Weighted DCF and Price of Recent Investment	Discount rates applied in full DCF valuation Weighting between Price of Recent Investment and DCF valuation <sup>1</sup>	12.5%-12.8% (31%)

<sup>1</sup> This is the effective discount or premium to the full DCF valuation, as a result of application of the weighted valuation in line with the valuation methodology described in note 3. A negative percentage denotes that the weighted valuation is at a discount to the full DCF valuation; whilst a positive percentage denotes that the weighted valuation is at a premium to the full DCF valuation.

# Notes to the parent and consolidated financial statements

The following table shows the Directors best estimate of the sensitivity of the Level 3 Private Hydrogen Assets to changes in the principle unobservable input, with all other variables held constant.

Unobservable input	Effect on fair value of investments £'000		
	Possible reasonable change in input	31 December 2022	31 December 2021
Discount rates applied in full DCF valuation	+1%	(6,515)	n/a
	-1%	7,815	n/a
Weighting between Price of Recent Investment and full DCF valuation	plus one calendar quarter of tapering from Price of Recent Investment to full DCF valuation	(324)	n/a
	minus one calendar quarter of tapering from Price of Recent Investment to full DCF valuation	286	n/a

The European Central Bank ('ECB') and the Bank of England ('BOE') base rates at 31 December 2022 were 2.5% and 3.5% respectively. We anticipate that the terminal base rate hikes (based on independent research) could reach 3.75% for ECB and 4.75% for BOE. As such, we have performed sensitivities of +/- 1% on the discount rate assumptions.

The valuations are weighted towards the full DCF valuation based on the time since the price of recent investment until the full DCF valuation is applied (typically the valuations are tapered from the price of recent investment to the full DCF valuation over four calendar quarters after the price of recent investment). Accordingly, we have applied a sensitivity of +/- one calendar quarter of this weighting as this is deemed the most likely period by which the tapering may be delayed or brought forward.

For those investments that have been fair valued using the price of a recent investment based on unadjusted third-party pricing information, the Company is not required to disclose any quantitative information regarding the unobservable inputs as they have not been developed by the Company and are not reasonably available to the Company.

## 5. Income

	Year ended 31 December 2022 £'000	Period from incorporation on 16 April 2021 to 31 December 2021 £'000
Overseas dividend income	1	-
Bank interest	96	-
<b>Total income</b>	<b>97</b>	<b>-</b>

## 6. Investment Adviser fee

	Year ended 31 December 2022			Period from incorporation on 16 April 2021 to 31 December 2021		
	Revenue £'000	Capital £'000	Total £'000	Revenue £'000	Capital £'000	Total £'000
<b>Investment Adviser fee</b>	<b>343</b>	<b>-</b>	<b>343</b>	<b>265</b>	<b>-</b>	<b>265</b>

At 31 December 2022 an amount of £12,554 (2021: £48,349) was payable to the Investment Adviser in respect of the Investment Adviser fee.

Additionally, the Company agreed with the Investment Adviser that the costs and expenses of the IPO would be capped at 2% of the gross proceeds received, with any cost above this amount to be paid by the Investment Adviser by way of rebate of its adviser fee. At 31 December 2022, £111,432 in respect of excess IPO issue costs is due to be received from the Investment Adviser (2021: £141,493).

### Investment Adviser fee

The Company has entered into an Investment Adviser Agreement dated 5 July 2021 between the Company, the AIFM and

the Investment Adviser (the "Investment Adviser Agreement"), pursuant to which the Investment Adviser has been given responsibility for investment advisory services in respect of any Private Hydrogen Assets the Company invests in directly and the Listed Hydrogen Assets (including Listed Hydrogen Assets forming part of the Liquidity Reserve and uninvested cash) in accordance with the Company's investment policy, subject to the overall control and supervision of the AIFM.

Under the Investment Adviser Agreement, the Investment Adviser receives from the Company, quarterly in advance, an advisory fee equal to:

- i. 1.0% of the Net Asset Value per annum of the Listed Hydrogen Assets up to £100 million;
- ii. 0.8% of the Net Asset Value per annum of the Listed Hydrogen Assets from £100 million (save that the Investment Adviser has agreed to reduce this fee to 0.5% in respect of the Liquidity Reserve pending their investment in Private Hydrogen Assets for 18 months following Admission to 30 January 2023);
- iii. 1.5% of the Net Asset Value per annum of any Private Hydrogen Assets held by the Company directly (i.e. not held by the Limited Partnership or any other undertaking advised by the Investment Adviser where the Investment Adviser is receiving a separate advisory fee); and
- iv. for so long as the Company is not considered a 'feeder fund' for the purposes of the Listing Rules, 1.5% per annum of the Net Asset Value of the Private Hydrogen Assets held by the Limited Partnership.

The Limited Partnership has entered into a Limited Partnership Investment Adviser Agreement dated 5 July 2021 (the "Limited Partnership Investment Adviser Agreement") between the General Partner (in its capacity as general partner of the Limited Partnership), the AIFM and the Investment Adviser, pursuant to which the Investment Adviser has been given responsibility for investment advisory services in respect of the Private Hydrogen Assets in accordance with the investment policy of the Limited Partnership, subject to the overall control and supervision of the AIFM.

Under the Limited Partnership Investment Adviser Agreement, the Investment Adviser, if the Company was considered a 'feeder fund' for the purposes of the Listing Rules by virtue of additional investors co-investing via the Limited Partnership in the future, shall receive from the Limited Partnership an advisory fee equal to 1.5% per annum of the Net Asset Value of the Private Hydrogen Assets held by the Limited Partnership, payable quarterly in advance. Advisory fees paid or payable by the Limited Partnership are reflected through the NAV of the Limited Partnership.

No performance fee is paid or payable to the Investment Adviser under either the Investment Adviser Agreement or the Limited Partnership Investment Adviser Agreement but the principals of the Investment Adviser are, subject to certain performance conditions being met, entitled to carried interest fees from the Limited Partnership. Refer to 'Carried Interest Partner Fees' section below.

### Carried Interest Partner Fees

Pursuant to the terms of the Limited Partnership Agreement dated 5 July 2021 as amended and restated on 26 November 2021 (the "Limited Partnership Agreement"), the Carried Interest Partner is, subject to the limited partners of the Limited Partnership receiving an aggregate annualised 8% realised return (i.e. the Company and, in due course, any additional co-investors), entitled to a carried interest fee in respect of the performance of the Private Hydrogen Assets.

Subject to certain exceptions, the Carried Interest Partner will receive, in aggregate, 15% of the net realised cash profits from the Private Hydrogen Assets held by the Limited Partnership once the limited partners of the Limited Partnership (i.e. the Company and, in due course, any additional co-investors) have received an aggregate annualised 8% realised return. This return is subject to a 'catch-up' provision in Carried Interest Partner's favour. Any realised or unrealised carried interest fee paid or payable to the Carried Interest Partner is reflected through the NAV of the Limited Partnership. During the year there was no realised or unrealised carried interest fee paid or payable (period to 31 December 2021: £nil).

20% of any carried interest received (net of tax) will be used by the principals of the Investment Adviser to acquire Ordinary Shares in the market. Any such acquired shares will be subject to a 12-month lock-up from the date of purchase.

### General Partner's priority profit share

Under the Limited Partnership Agreement, the General Partner of the Limited Partnership shall be entitled to a General Partner's Profit Share ("GPS"). The GPS for each accounting period shall be an amount equal to 1.5% of the prevailing NAV of the Limited Partnership. For so long as the Company is the sole limited partner of the Limited Partnership, the GPS shall be distributed to the Company rather than the General Partner. The Company is currently the sole limited partner of the Limited Partnership. Therefore, under the Investment Adviser Agreement, the investment adviser fee in relation to the Private Hydrogen Assets held by the Limited Partnership is settled by the Company which for the year totalled £1,181,069 (period to 31 December 2021: £71,558). During the year the Limited Partnership did not call any GPS from the Company as the net effect of the calling and distributing GPS from/to the Company is £nil (period to 31 December 2021: £nil).

# Notes to the parent and consolidated financial statements

## 7. Other expenses

	Year ended 31 December 2022 £'000	Period from incorporation on 16 April 2021 to 31 December 2021 £'000
Administration & Secretarial Fees	193	94
AI/ML Fees	83	45
Directors' Fees	173	101
Custodian Charges	50	21
Brokers Fees	60	24
Registrar's Fees	23	9
Website Fees	44	–
Legal Fees	21	8
LSE Fees	11	–
Audit Fees	118	135
D & O Insurances	49	21
PR & Marketing	212	36
Printing Fees	30	–
Other expenses	92	46
<b>Total revenue expenses</b>	<b>1,159</b>	<b>540</b>
<b>Expenses charged to capital:</b>		
Capital transaction costs	219	5
<b>Total expenses</b>	<b>1,378</b>	<b>545</b>

During the year, KPMG received £75,000 and KPMG LLP UK received £150,000 (including VAT of £25,000) for non-audit services in relation to secondary share issuances, including the share issuance Circular and Prospectus published in September 2022 (the "share issuance Circular and Prospectus").

Where non-audit services were carried out in relation to a secondary share issuance that was aborted, the costs (KPMG received 75,000; and KPMG UK LLP received £90,000 including VAT of £18,000) have been treated as a capital expense (abort costs) disclosed in the Statement of Comprehensive Income.

Non-audit service costs applicable to the share issuance Circular and Prospectus (KPMG UK LLP received £42,000 including VAT of £7,000) have been treated as an other debtor and will be reclassified and included in share issue costs disclosed in the Statement of Changes in Equity when shares are issued; or reclassified as abort costs in the Statement of Comprehensive Income should no shares be issued at the share issuance Circular and Prospectus expiry date.

In the period to 31 December 2021, the KPMG UK LLP received £138,000 (including VAT of £23,000) for non-audit initial public offering services, which were treated as a capital expense and included in 'share issue costs' disclosed in the Statement of Changes in Equity.

Each of these services are required by law or regulation and are therefore permissible non-audit services under the FRC Ethical Standard.



## 8. Taxation

### (a) Analysis of charge in the year

	Year ended 31 December 2022			Period from incorporation on 16 April 2021 to 31 December 2021		
	Revenue £'000	Capital £'000	Total £'000	Revenue £'000	Capital £'000	Total £'000
Overseas tax	-	-	-	-	-	-
Total tax charge for the year/ period	-	-	-	-	-	-

### Factors affecting total tax charge for the year

	Year ended 31 December 2022			Period from incorporation on 16 April 2021 to 31 December 2021		
	Revenue £'000	Capital £'000	Total £'000	Revenue £'000	Capital £'000	Total £'000
Profit/(loss) on ordinary activities before taxation	(1,405)	2,959	1,554	(805)	(1,612)	(2,417)
Corporation tax at 19%	(267)	562	295	(153)	(306)	(459)
Effects of:						
Non-taxable (gains)/losses on investments	-	(604)	(604)	-	306	306
Excess management expenses not utilised in year	267	-	267	153	-	153
Disallowable expenses	-	42	42	-	-	-
Overseas tax	-	-	-	-	-	-
Total tax charge	-	-	-	-	-	-

The Company is not liable to tax on capital gains due to its status as an investment trust. The Company and Group has an unrecognised deferred tax asset of £600,000 (2021: £201,000) as a result of excess management expenses of £2,400,000 (2021: 896,000), based on the long term prospective corporation tax rate of 25%. The March 2021 Budget announced an increase to the main rate of corporation tax to 25% from 1st April 2023. This increase in the standard rate of corporation tax was substantively enacted on 24th May 2021.

This asset has accumulated because deductible expenses exceeded taxable income for the year ended 31 December 2022. No asset has been recognised in the Financial Statements because, given the composition of the Company and Group's portfolio, it is not likely that this asset will be utilised in the foreseeable future.

## 9. Trade and other receivables

	31 December 2022 £'000	31 December 2021 £'000
Prepayments	37	24
Other receivables	604	159
	641	183

Other receivables includes £470,000 in respect of costs applicable to the share issuance Circular and Prospectus (£470,000) published in September 2022 and expiring in September 2023. These costs will be reclassified and included in 'share issue costs' disclosed in the Statement of Changes in Equity when shares are issued or reclassified as abort costs in the Statement of Comprehensive Income should no shares be issued at the Circular and Prospectus expiry date.

# Notes to the parent and consolidated financial statements

## 10. Trade and other payables

	31 December 2022 £'000	31 December 2021 £'000
Amounts falling due within one year:		
Accrued expenses	153	246
	153	246

## 11. Share capital

	31 December 2022		31 December 2021	
	No. of shares	Nominal value of shares (£)	No. of shares	Nominal value of shares (£)
Allotted, issued and fully paid:				
Brought forward	107,350,000	1,073,500.00	–	–
Allotted upon incorporation				
Ordinary Shares of 1p each	–	–	1	0.01
Management Shares of £1.00 each	–	–	50,000	50,000.00
Allotted/redeemed following admission to LSE				
Ordinary Shares issued	21,469,999	214,699.99	107,349,999	1,073,499.99
Management Shares redeemed	–	–	(50,000)	(50,000.00)
Closing balance as at 31 December 2022	128,819,999	1,288,199.99	107,350,000	1,073,500.00

During the year 21,469,999 shares were issued by way of a Placing at an issue price of 100 pence per Ordinary Share, raising net proceeds of £21.0 million.

The Company is permitted to hold Ordinary Shares acquired by way of market purchase in treasury, rather than having to cancel them. Such Ordinary Shares may be subsequently cancelled or sold for cash. No Ordinary Shares have been repurchased during the year therefore there were no Treasury shares at the end of the year.

Each Ordinary Share held entitles the holder to one vote. All shares carry equal voting rights and there are no restrictions on those voting rights.

During the year, costs of £1,145,000 were incurred in respect of secondary share issuances, including the share issuance Circular and Prospectus published in September 2022.

- Costs incurred in respect of shares issued by way of Placing (£456,000) are included in 'share issue costs' disclosed in the Statement of Changes in Equity.
- Where costs were incurred and no shares have been subsequently issued, the costs (£219,000) have been treated as a capital expense (abort costs) disclosed in the Statement of Comprehensive Income.
- Costs applicable to the share issuance Circular and Prospectus (£470,000) have been treated as an other debtor and will be reclassified and included in 'share issue costs' disclosed in the Statement of Changes in Equity when shares are issued or reclassified as abort costs in the Statement of Comprehensive Income should no shares be issued at the Circular and Prospectus expiry date.

## 12. Return per ordinary share

Return per share is based on the weighted average number of Ordinary Shares in issue during the year ended 31 December 2022 of 122,878,985 (period to 31 December 2021: 63,997,115).

	Year ended 31 December 2021			Period from incorporation on 16 April 2021 to 31 December 2021		
	Revenue £'000	Capital £'000	Total £'000	Revenue £'000	Capital £'000	Total £'000
Profit/(loss) for the year/period (£'000)	(1,405)	2,959	1,554	(805)	(1,612)	(2,417)
Return per Ordinary Share	(1.14)p	2.41p	1.27p	(1.26)p	(2.52)p	(3.78)p

There is no dilution to return per share as the Company has only Ordinary Shares in issue.

## 13. Net asset value per ordinary share

	31 December 2022 £'000	31 December 2021 £'000
Net Asset Value (£'000)	125,353	102,786
Ordinary Shares in issue	128,819,999	107,350,000
NAV per Ordinary Share	97.31p	95.75p

There is no diluted Net Asset Value per share as the Company has only Ordinary Shares in issue.

## 14. Related party transactions and material contracts

### Directors

During the year fees were payable to the Directors at an annual rate of £65,000 to the Chairman, £55,000 to the Chairman of the Audit and Risk Committee and £45,000 to the other Directors with the exception of Mr Bucknall who is not remunerated for his role as a Non-Executive Director. These fees were effective from the date of appointment of each Director being 20 May 2021 for each Board member with the exception of Mr Bucknall who was appointed 20 May 2022 and Ms Rotheroe who was appointed 8 February 2022. Details of the Directors remuneration paid during the year is given in note 7. At the year end, the Directors had the following holdings in the Company:

	Ordinary Shares at 31 December 2022	Ordinary Shares at 31 December 2021
Simon Hogan	40,000	40,000
Afkenel Schipstra	10,100	10,100
Abigail Rotheroe <sup>1</sup>	10,000	–
David Bucknall <sup>2</sup>	–	–
Roger Bell <sup>3</sup>	–	–
Caroline Cook <sup>4</sup>	–	20,100

1. Abigail Rotheroe was appointed as a Non-Executive Director on 8 February 2022.

2. David Bucknall was appointed as a Non-Executive Director on 20 May 2022

3. Roger Bell retired as a Non-Executive Director on 4 May 2022

4. Caroline Cook retired as a Non-Executive Director on 7 April 2022.

# Notes to the parent and consolidated financial statements

## Investment Adviser

Fees payable to the Investment Adviser are shown in the Statement of Comprehensive Income. Fees details of the Investment Adviser are shown in note 6. At 31 December 2022, the principals of the Investment Adviser, Dr JJ Traynor and Mr R Hulf, each held 100,000 Ordinary Shares of the Company. Transactions between the Company and the Investment Adviser during the year are disclosed in note 6.

## INEOS Energy

The Relationship and Co-Investment Agreement dated 19 June 2021 between INEOS UK E&P Holdings Limited ("INEOS Energy"), the Investment Adviser, the Company and the General Partner (acting in its capacity as the general partner of the Limited Partnership), pursuant to which the parties agreed that: (i) INEOS Energy would subscribe for and/or shall procure that its associates shall subscribe for at least 25 million Ordinary Shares in the IPO; (ii) such Ordinary Shares subscribed by INEOS Energy would be subject to a 12 month lock-up from the date of purchase pursuant to which INEOS Energy agreed that it will not sell, grant options over or otherwise dispose of any interest in any such Ordinary Shares purchased by them (subject to the usual carve-outs); (iii) INEOS Energy was entitled to nominate one Non-Executive Director for appointment to the Board; (iv) prior to making any co-investment opportunity in relation to a Private Hydrogen Assets that is a project to any limited partner of the Limited Partnership, the Company and the Investment Adviser will give INEOS Energy a right of first refusal to acquire up to 100% of such co-investment opportunity (provided that the 'related party transaction' requirements set out in the Listing Rules are complied with); (v) INEOS Energy are provided with certain information rights relating to Private Hydrogen Assets and co-investment opportunities; and (vi) INEOS Energy shall be entitled to second one or more employees to the Investment Adviser from time-to-time. INEOS Energy has agreed that all transactions between INEOS Energy and its associates and any member of the Company and Group and/or the Investment Adviser are conducted at arm's length on normal commercial terms.

At the IPO, INEOS Energy subscribed for and received 25 million Ordinary Shares of the Company. On 31 October 2022, INEOS Energy transferred its holding of 25 Million Ordinary Shares to its immediate parent, INEOS Offshore BCS Limited. At 31 December 2022, INEOS Offshore BCS held 25 million Ordinary Shares of the Company.

David Bucknall is currently Chief Executive Officer of the INEOS Energy group of companies and was appointed as the Board representative of INEOS Energy on 20 May 2022 pursuant to the Relationship and Co-Investment Agreement entered into between, inter alia, INEOS Energy and the Company at the Company's launch.

## Alternative Investment Fund Manager

FundRock Management Company (Guernsey) Limited (formerly Sanne Fund Management (Guernsey) Limited is appointed to act as the Company's and the Limited Partnership's alternative investment fund manager (the "AIFM") for the purposes of the UK AIFM Rules. The AIFM has delegated the provision of portfolio management services to the Investment Adviser. The AIFM, Company Secretary and Administrator are part of the same Apex Group.

Under the AIFM Agreement between the AIFM and the Company dated 5 July 2021, and with effect from Admission, the AIFM shall be entitled to receive from the Company a fee of 0.05% of Net Asset Value per annum up to £250 million, 0.03% of Net Asset Value per annum from £250 million up to £500 million and 0.015% of Net Asset Value per annum from £500 million, in each case adjusted to exclude any Net Asset Value attributable to any Private Hydrogen Assets held through the Limited Partnership and subject to a minimum annual fee of £85,000.

Under the AIFM Agreement between the AIFM and the Limited Partnership dated 5 July 2021, the AIFM receives from the Limited Partnership a fee of 0.05% of the net asset value of the Limited Partnership per annum up to £250 million, 0.03% of the net asset value of the Limited Partnership per annum from £250 million up to £500 million and 0.015% of the net asset value of the Limited Partnership per annum from £500 million, subject to a minimum annual fee of £25,000. AIFM fees paid or payable by the Limited Partnership are reflected through the NAV of the Limited Partnership.

The AIFM is also entitled to reimbursement of reasonable expenses incurred by it in the performance of its duties.

## Administration and Company Secretarial services fee

The Company has entered into an Administration and Company Secretarial Services Agreement dated 5 July 2021 (the "Administrator and Company Secretary Agreement") between the Company and Apex Listed Companies Services (UK) Limited (formerly Sanne Fund Services (UK) Limited (the "Company Secretary and Administrator")) pursuant to which the Company Secretary and Administrator has agreed to act as Company secretary and administrator to the Company.

Under the terms of the Administration and Company Secretarial Services Agreement, the Company Secretary and Administrator receives a fee from the Company of 0.06% of Net Asset Value per annum up to £250 million, 0.05% of Net Asset Value per annum from £250 million up to £500 million and 0.025% of Net Asset Value per annum from £500 million and subject to a minimum annual fee of £135,000 plus a further £10,000 per annum to operate the Company's Liquidity Reserve.

Under the terms of the Limited Partnership Administration Agreement 5 July 2021, pursuant to which the Company Secretary and Administrator has agreed to act as administrator to the Limited Partnership, the Company Secretary and Administrator receives an annual fee from the Limited Partnership of £62,500 and of £15,000 (excluding VAT) in respect of the General Partner. Administration fees paid or payable by the Limited Partnership are reflected through the NAV of the Limited Partnership. For so long as the Company is the sole Limited Partner, the administration fee in respect of the General Partner shall be allocated settled by the Company rather than the General Partner.

#### **Custodian fee**

The Company has entered into a Custodian Agreement between the Company and The Northern Trust Company (the "Custodian") dated 23 June 2021 (the "Custodian Agreement"), pursuant to which the Custodian has agreed to act as custodian to the Company.

The Custodian is entitled to a minimum annual fee of £50,000 (exclusive of VAT) per annum. The Custodian is also entitled to a fee per transaction taken on behalf of the Company.

#### **Registrar fee**

The Company utilises the services of Computershare Investor Services plc (the "Registrar") as registrar to the transfer and settlement of Ordinary Shares. Under the terms of the Registrar Agreement dated 5 July 2021, the Registrar is entitled to a fee calculated based on the number of shareholders, the number of transfers processed and any Common Reporting Standard on-boarding, filings or changes. The annual minimum fee is £4,800 (exclusive of VAT). In addition, the Registrar is entitled to certain other fees for ad hoc services rendered from time to time.

## **15. Financial instruments and capital disclosures**

### **Risk Management Policies and Procedures**

The Board of Directors has overall responsibility for the establishment and oversight of the Company and Group's risk management framework. The risk management policies are established to identify and analyse the risks faced by the Company and Group, to set appropriate risk limits and controls and to monitor risks and adherence to limits. Risk management policies are reviewed regularly to reflect changes in market conditions and the Company and Group's activities.

The Investment Adviser, AIFM and the Administrator report to the Board on a quarterly basis and provide information to the Board which allows it to monitor and manage financial risks relating to its operations. The Company and Group's activities expose it to a variety of financial risks: market risk (including currency risk, interest rate risk and price risk), credit risk, liquidity risk and operational risk. These risks are monitored by the AIFM. Below is a non-exhaustive summary of the risks that the Company and Group are exposed to as a result of its use of financial instruments:

# Notes to the parent and consolidated financial statements

The objectives, policies and processes for managing the risks, and the methods used to measure the risks, are set out below:

## Market Risks

### (i) Currency risk

Foreign currency risk is defined as the risk that the fair values of future cashflows will fluctuate because of changes in foreign exchange rates. The financial assets and liabilities are predominantly denominated in Pounds Sterling and substantially all revenues and expenses are in Pounds Sterling. As at the 31 December 2022 and 31 December 2021, the Company and Group had the following currency exposures, all of which are included in the Statement of Financial Position at fair value based on the exchanges rates at the year end.

Currency	31 December 2022				31 December 2021			
	Investments £'000	Cash £'000	Other assets & liabilities £'000	Total £'000	Investments £'000	Cash £'000	Other assets & liabilities £'000	Total £'000
Danish Krone	132	–	–	132	444	–	–	444
Euro	1,246	–	–	1,246	1,485	–	–	1,485
Korean Won	667	–	–	667	957	–	–	957
Norwegian Krone	609	–	–	609	1,515	–	–	1,515
Swedish Krona	230	–	–	230	937	–	–	937
US Dollar	344	–	–	344	1,541	–	–	1,541
	3,228	–	–	3,228	6,879	–	–	6,879

The Company and Group mitigate the risk of loss due to exposure to a single currency by way of diversification of the portfolio. The Limited Partnership's non Pound Sterling denominated assets have currency exposure hedged by Forward Exchange Contracts so that impact from currency exchange rate movements will be mitigated. The Company and Group may in future decide not to hedge the value of non Pound Sterling denominated investments. This would increase foreign currency risk and may increase volatility of the Company and Group's net asset value.

At 31 December 2022, an exchange rate movement of +/-5% against Pounds Sterling, which is a reasonable approximation of possible changes based on observed volatility during the year, would have increased or decreased net assets and total return by £161,400 (2021: £344,000).

### (ii) Interest rate risk

The Company and Group's interest rate risk on interest bearing financial assets is limited to interest earned on cash balances. At the year end, the Company and Group had cash balances of £18,192,000 (£2021: £34,019,000). An increase in interest rates of 3.0%, which is reasonable based upon changes in interest rates observed in the year, would impact the profit or loss and net assets of the Company and Group positively by £545,760, with a decrease of 3.0% having an equal and opposite effect (2021: an increase or decrease of 0.5% would have had an positive or negative affect of £170,095).



The Company and Group's interest and non-interest bearing assets and liabilities as at 31 December 2022 and 31 December 2021 are summarised below:

	31 December 2022			31 December 2021		
	Interest bearing £'000	Non-interest bearing £'000	Total £'000	Interest bearing £'000	Non-interest bearing £'000	Total £'000
<b>Assets</b>						
Cash and cash equivalents	18,192	–	18,192	34,019	–	34,019
Trade and other receivables	–	641	641	–	183	183
Investments held at fair value through profit or loss – Listed Hydrogen Assets	–	3,667	3,667	–	8,233	8,233
Investments held at fair value through profit or loss – Limited Partnership	–	103,006	103,006	–	60,597	60,597
<b>Total assets</b>	<b>18,192</b>	<b>107,314</b>	<b>125,506</b>	<b>34,019</b>	<b>69,013</b>	<b>103,032</b>
<b>Liabilities</b>						
Trade and other payables	–	(153)	(153)	–	(246)	(246)
<b>Total liabilities</b>		<b>(153)</b>	<b>(153)</b>	<b>–</b>	<b>(246)</b>	<b>(246)</b>

### (iii) Price risk

#### Listed Hydrogen Assets

Price risk is defined as the risk that the fair value of a financial instrument held by the Company or Group will fluctuate. Listed Hydrogen Assets are measured at fair value through profit or loss. As of 31 December 2022, the Company and Group held Listed Hydrogen Assets with an aggregate fair value of £3,667,000 (2021: £8,233,000).

All other things being equal, the effect of a 10% increase or decrease in the value of the investments held at the year end would have been an increase or decrease of £366,700 in the Company and Group's loss after taxation for the year ended 31 December 2022 and the Company and Group's net assets at 31 December 2022 (£2021: 823,300).

At 31 December 2022, the sensitivity rate of 10% is regarded as reasonable due to the actual market price volatility experienced as a result of the economic impact on the Listed Hydrogen Assets.

#### Private Hydrogen Assets

The Limited Partnership's portfolio of Private Hydrogen Assets is not necessarily affected by market performance, however the valuations may be affected by the performance of the underlying investments in line with the valuation criteria in note 3.

The Private Hydrogen Assets sensitivity analysis in note 4 recognises that the valuation methodologies employed involve different levels of subjectivity in their inputs primarily driven by changes in discount rate assumptions and weighting of the techniques employed.

#### Key variable inputs of Private Hydrogen Assets

The variable inputs applicable to each broad category of valuation basis will vary depending on the particular circumstances of each Private Hydrogen Asset valuation. An explanation of each of the key variable inputs is provided below and includes an indication of the range in value for each input, where relevant.

#### Selection of appropriate discount rates

The selection of an appropriate discount rate is assessed individually for each Private Hydrogen Asset. Publicly disclosed discount rates in the relevant sector and comparable asset classes, which may be procured from public sources or independent third-party expert advisers or for comparable market transactions of similar assets are used where available.

# Notes to the parent and consolidated financial statements

## *Selection of appropriate benchmarks*

The selection of appropriate benchmarks is assessed individually for each Private Hydrogen Asset. The industry and geography of each Private Hydrogen Asset are key inputs to the benchmark selection, with either one or two key indices or benchmarks being used for comparison.

## *Selection of comparable companies*

The selection of comparable companies is assessed individually for each Private Hydrogen Asset at the point of investment, and the relevance of the comparable companies is continually evaluated at each valuation point. The key criteria used in selecting appropriate comparable companies are the industry sector in which they operate and the geography of the Private Hydrogen Asset's operations.

## *Application of valuation basis*

Each Private Hydrogen Asset is assessed, and the valuation basis applied will vary depending on the circumstances of each Private Hydrogen Asset. DCF will be considered where appropriate forecasts are available. The valuation will also consider any recent transactions, where appropriate. For those Private Hydrogen Assets where a trading multiples approach can be taken, the methodology will factor in revenue, earnings or net assets as appropriate for the Private Hydrogen Asset.

## *Estimated sustainable earnings and cash flows*

The selection of sustainable revenue or earnings and cash flows will depend on whether the Private Hydrogen Asset is sustainably profitable or not, and where it is not then sustainable revenues will be used in the valuation. The valuation approach will typically assess Private Hydrogen Assets based on the last twelve months of revenue or earnings, as they are the most recent available and therefore viewed as the most reliable. Where a Private Hydrogen Asset has reliably forecasted earnings previously or there is a change in circumstance at the business which will impact earnings going forward, then forward estimated revenue or earnings may be used instead.

## *Application of liquidity discount*

A liquidity discount may be applied either through the calibration of a valuation against the most recent transaction, or by application of a specific discount.

## **Credit risk**

The Company and Group are exposed to credit risk in respect of Listed Hydrogen Assets, Private Hydrogen Assets, trade and other receivables and cash at bank. For risk management reporting purposes, the Company and Group considers and aggregates all elements of credit risk exposure (such as individual obligation default risk, country risk and sector risk).

	31 December 2022 £'000	31 December 2021 £'000
Investments at fair value through profit or loss – Listed Hydrogen Assets	3,667	8,233
Investments at fair value through profit or loss – Limited Partnership	103,006	60,597
Trade and other receivables	641	183
Cash and cash equivalents	18,192	34,019
<b>Total</b>	<b>125,506</b>	<b>103,032</b>

At 31 December 2022 the Listed Hydrogen Assets of the Company and Group, excluding their investment into the Limited Partnership, are held by Northern Trust Bank (the "Custodian"). Bankruptcy or insolvency of the Custodian may cause the Company and Group's rights with respect to securities held by the Custodian to be delayed or limited. This risk is managed by monitoring the credit quality and financial positions of the Custodian.

Credit risk of the Private Hydrogen Assets held by the Limited Partnership is assessed from time to time by the Investment Adviser on a look-through basis. The Company and Group's policy on credit risk mirrors that of the Limited Partnership, which is to minimise its exposure to counterparties with perceived higher risk of default by dealing only with counterparties that meet the credit standards set out in the Company's prospectus. The Investment Adviser seeks to manage this risk by providing diversification in terms of underlying investments, issuer sector, geography and maturity profile.

As of the 31 December 2022, nine Private Hydrogen Assets are held by the Limited Partnership as shown in note 16 (2021: three).

The cash and cash equivalents are held with Northern Trust Bank, EFG International Bank, Royal Bank of Scotland and

through the Goldman Sachs- Liquid reserve fund. The Fitch Rating credit rating of Northern Trust Bank is AA (2021: AA), EFG international Bank is A (2021: A), Royal Bank of Scotland A+ (2021: A+) and the Goldman Sachs Liquid reserve fund is AAA (2021: AAA)..

At the year end there were no trade and receivables past due. The credit risk exposure is minimised by dealing with financial institutions with investment grade credit ratings.

### Liquidity risks

Liquidity risk is the risk that the Company or Group may not be able to meet a demand for cash or fund an obligation when due. The Investment Adviser, AIFM and the Board continuously monitor forecast and actual cashflows from operating, financing and investing activities to consider payment of dividends, or further investing activities.

Financial assets and liabilities by maturity at the year end are shown below:

	31 December 2022			31 December 2021		
	Less than 1 year £'000	1-5 years £'000	Total £'000	Less than 1 year £'000	1-5 years £'000	Total £'000
<b>Assets</b>						
Investments at fair value through profit or loss – Listed Hydrogen Assets	3,667	–	3,667	8,233	–	8,233
Investments at fair value through profit or loss – Limited Partnership	–	103,006	103,006	–	60,597	60,597
Trade and other receivables	641	–	641	183	–	183
Cash and cash equivalents	18,192	–	18,192	34,019	–	34,019
<b>Total assets</b>	<b>22,500</b>	<b>103,006</b>	<b>125,506</b>	<b>42,435</b>	<b>60,597</b>	<b>103,032</b>
<b>Liabilities</b>						
Trade and other payables	(153)	–	(153)	(246)	–	(246)
<b>Total liabilities</b>	<b>(153)</b>	<b>–</b>	<b>(153)</b>	<b>(246)</b>	<b>–</b>	<b>(246)</b>

### Operational risk

Operational risk is the risk of direct or indirect loss arising from a wide variety of causes associated with the processes, technology and infrastructure supporting the activities relating to financial instruments, either internally or on the part of service providers, and from external factors other than credit, market and liquidity risks such as those arising from legal and regulatory requirements and generally accepted standards of investment management behaviour.

Operational risk is managed so as to balance the limiting of financial losses and reputational damage with achieving the investment objective of generating returns to investors. The AIFM works with the Board to identify the risks facing the Company and the Limited Partnership. The key risks are documented and updated in the Risk Matrix by the AIFM. The primary responsibility for the development and implementation of controls over operational risk rests with the Board.

This responsibility is supported by the development of overall standards for the management of operational risk, which encompasses the controls and processes at the service providers and the establishment of service levels with the service providers. The Directors' assessment of the adequacy of the controls and processes in place at service providers with respect to operational risk is carried out through having discussions with and reviewing reports, including those on their internal controls, from the service providers.

# Notes to the parent and consolidated financial statements

## Capital Management Policies and Procedures

The Company and Group's capital management objectives are to ensure that the Company and Group will be able to continue as a going concern while maximising the return to equity shareholders.

In accordance with the investment objective, the principal use of cash (including the proceeds of the IPO and placings) is investing in hydrogen focussed assets, as well as expenses related to the share issue when they occur, ongoing operational expenses and payment of dividends and other distributions to shareholders in accordance with the Company's dividend policy.

The Company and Group considers their capital to comprise share capital, distributable reserves and retained earnings. The Company and Group are not subject to any externally imposed capital requirements. The Company and Group's share capital, distributable reserves and retained earnings are shown in the Statement of Financial Position at a total £125,353,000 (2021: £102,786,000).

## 16. Subsidiary and related entities

### Subsidiary

The Company owns 100% of HydrogenOne Capital Growth (GP) Limited as at 31 December 2022 and 31 December 2021..

Subsidiary name	Effective ownership	Country of ownership	Principal activity	Issued share capital	Registered address
HydrogenOne Capital Growth (GP) Limited	100%	United Kingdom	General partner of HydrogenOne Capital Growth Investments (1) LP	£1	6th Floor, 125 London Wall, London, EC2Y 5AS

### Related entities

The Company holds Private Hydrogen Assets through its investment in the Limited Partnership, which has not been consolidated as a result of the adoption of IFRS 10: Investment entities exemption to consolidation. There is a cross guarantee in place between the Company and the Limited Partnership in respect of margin requirements on the Limited Partnership's forward currency contracts. At 31 December 2022 the exposure to forward exchange contracts was £1,451,927. There are no other cross guarantees amongst related entities. Below are details of the unconsolidated Private Hydrogen Asset held through the Limited Partnership.

31 December 2022

Name	Purpose of the entity	Country of Incorporation	Value of investment £'000	Total assets as at 31 December 2022 (unaudited) £'000	Effective ownership (% rounded)	Registered address
Sunfire GmbH	Electrolyser producer	Germany	21,763	137,838	4%	Gasanstaltstraße 2 01237 Dresden, Germany
Elcogen Group plc	Solid oxide fuel cell supply	United Kingdom	20,430	22,306	11%	Highdown House, Yeoman Way, Worthing, West Sussex, BN99 3HH
HiiROC Limited	Supplier of clean hydrogen production technology	United Kingdom	12,914	21,423	6%	22 Mount Ephraim, Tunbridge Wells, Kent, TN4 8AS
Bramble Energy Limited	Printed Circuit Board fuel cell solutions	United Kingdom	10,032	33,814	12%	6 Satellite Business Village, Fleming Way, Crawley, England, RH10 9NE
NanoSUN Limited	Supplier of mobile hydrogen storage and refueling systems	United Kingdom	11,519	7,150	23%	Abraham Heights Farm, Westbourne Road, Lancaster, LA1 5EF
Cranfield Aerospace Solutions Limited	Aviation design and maintenance	United Kingdom	6,296	6,248	29%	Hanger 2, Cranfield Airport, Cranfield, Bedfordshire, MK43 0AL
HH2E AG	Supplier of green electrolysis and energy storage facilities	Germany	5,134	6,107	11%	HRB 167243, Kaiser-Wilhelm-Straße 93, 20355 Hamburg
GEN2 Energy AS	Green Hydrogen development	Norway	3,421	12,065	7%	Raveien 205, 3184 Borre, Norway
Strohm Holding BV	Supplier of thermoplastic composite pipe	The Netherlands	11,606	90,257	24%	Monnickendamkade 1, 1976 EC IJmuiden

# Notes to the parent and consolidated financial statements

31 December 2021

Name	Purpose of the entity	Country of Incorporation	Value of investment £'000	Total assets as at 31 December 2021 (unaudited) £'000	Effective ownership (% rounded)	Registered address
Sunfire GmbH	Electrolyser producer	Germany	20,180	141,674	5%	Gasanstaltstraße 2 01237 Dresden, Germany
HiiROC Limited	Supplier of clean hydrogen production technology	United Kingdom	10,001	27,137	6%	22 Mount Ephraim, Tunbridge Wells, Kent, TN4 8AS
NanoSUN Limited	Supplier of mobile hydrogen storage and refuelling systems	United Kingdom	9,050	14,454	23%	Abraham Heights Farm, Westbourne Road, Lancaster, LA1 5EF

The maximum exposure to loss from the unconsolidated entities is the carrying amount of the financial assets held.

During the year the Company did not provide financial support and has no intention of providing financial or other support to the subsidiary and the unconsolidated Private Hydrogen Assets held through the Limited Partnership.

## 17. Post balance sheet events

At 31 December 2022, the Company had a commitment of GBP 1,400,000 to Cranfield Aerospace Solutions Limited, in respect of second completion. This investment was made on 5 January 2023.

On 12 January 2023, Barclays Bank PLC was appointed as the Company's sole Broker, replacing Panmure Gordon (UK) Limited.

Since 31 December 2022, the Company has made additional investments in and commitments to Private Hydrogen Assets amounting to £4.0m and £1.8m respectively.

# Other information

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# Alternative Performance Measures ("APM")

APMs are often used to describe the performance of investment companies although they are not specifically defined under IFRS. APM calculations for the Company are shown below.

## (Discount)/Premium

The amount, expressed as a percentage, by which the share price is less/more than the Net Asset Value per Ordinary Share.

At 31 December		Page	2022	2021
NAV per Ordinary Share (pence)	a	2	97.31	95.75
Share price (pence)	b	2	79.30	119.50
(Discount)/Premium	(b÷a)-1		(18.5)%	24.8%

## Ongoing charges

A measure, expressed as a percentage of average net assets during the year, of the regular, recurring annual costs of running an investment company.

Year/period ended 31 December		Page	2022	2021
Average NAV	a	n/a	116,822,568	104,565,796
Annualised expenses	b	n/a	2,932,566	2,155,500
Ongoing charges	(b÷a)		2.51%	2.06%

The ongoing charges percentage is on a consolidated basis and therefore takes into consideration the expenses of the Limited Partnership as well as the Company and is calculated in accordance with the methodology set out by the AIC. The recurring expenses of the Company and of the Limited Partnership charged in the period since incorporation on 16 April 2021 to 31 December 2021 have been annualised for the ongoing charges calculation.

## Total return

A measure of performance that includes both income and capital returns. This takes into account capital gains and reinvestment of dividends paid out by the Company into the Ordinary Shares of the Company on the ex-dividend date.

Year ended 31 December 2022		Page	Share price <sup>1</sup>	NAV <sup>2</sup>
Opening at 1 January 2022 (p)	a	n/a	119.50	95.75
Closing at 31 December 2022 (p)	b	2	79.30	97.31
Total return	(b÷a)-1		(33.6)%	1.6%

1. Share price total return is based on an opening share price of 119.50p.

2. NAV total return is based on an opening NAV of 95.75p per Ordinary Share.

3. N/a = not applicable.

Period ended 31 December 2021		Page	Share price <sup>1</sup>	NAV <sup>2</sup>
Opening at 30 July 2021 (p)	a	n/a	100.00	98.00
Closing at 31 December 2021 (p)	b	2	119.50	95.75
Total return	(b÷a)-1		19.5%	(2.3)%

1. Share price total return is based on an opening share price of 100p.

2. NAV total return is based on an opening NAV after launch expenses of 98.0p per Ordinary Share.

3. N/a = not applicable

# Glossary

<b>Admission</b>	First admission of the Company's Ordinary Shares to the London Stock Exchange on 30 July 2021.
<b>AIC</b>	Association of Investment Companies.
<b>Alternative Investment Fund or "AIF"</b>	An investment vehicle under AIFMD. Under AIFMD (see below) HydrogenOne Capital Growth plc is classified as an AIF.
<b>Alternative Investment Fund Managers Directive or "AIFMD"</b>	A European Union directive which came into force on 22 July 2013 and has been implemented in the UK.
<b>Annual General Meeting or "AGM"</b>	A meeting held once a year which shareholders can attend and where they can vote on resolutions to be put forward at the meeting and ask the Directors questions about the company in which they are invested.
<b>the Company</b>	HydrogenOne Capital Growth plc ("HGEN").
<b>Custodian</b>	An entity that is appointed to safeguard a company's assets.
<b>Discount/premium</b>	The amount, expressed as a percentage, by which the share price is less/more than the net asset value per share.
<b>Dividend</b>	Income receivable from an investment in shares.
<b>Ex-dividend date</b>	The date from which you are not entitled to receive a dividend which has been declared and is due to be paid to shareholders.
<b>ESG</b>	Environmental, Social and Governance ("ESG") criteria are a set of standards for a company's operations that socially conscious investors use to screen potential investments. Environmental criteria consider how a company performs as a steward of nature. Social criteria examine how it manages relationships with employees, suppliers, customers, and the communities where it operates. Governance deals with a company's leadership, executive pay, audits, internal controls, and shareholder rights.
<b>Financial Conduct Authority or "FCA"</b>	The independent body that regulates the financial services industry in the UK.
<b>GCC</b>	The Cooperation Council for the Arab States of the Gulf, also known as the Gulf Cooperation Council.
<b>GHG</b>	Greenhouse Gases.
<b>Gross Asset Value or GAV</b>	The aggregate value of the total assets of the Company, including the gross asset value of any investments held in the HydrogenOne Partnership attributable to the Company's interest in the HydrogenOne Partnership on a look-through basis from time-to-time, calculated in accordance with the Company's valuation policy.
<b>Index</b>	A basket of stocks which is considered to replicate a particular stock market or sector.
<b>Investment company</b>	A company formed to invest in a diversified portfolio of assets.
<b>Investment Trust</b>	An investment company which is based in the UK and which meets certain tax conditions which enables it to be exempt from UK corporation tax on its capital gains. The Company is an investment trust.
<b>Liquidity</b>	The extent to which investments can be sold at short notice.
<b>Listed Hydrogen Assets</b>	Investments in quoted or traded Hydrogen Assets, which will predominantly be equity securities but may also be corporate debt and/or other financial instruments.
<b>Net assets or net asset value ("NAV")</b>	An investment company's assets less its liabilities.

# Glossary

NAV per Ordinary Share	Net assets divided by the number of Ordinary Shares in issue (excluding any shares held in treasury).
Offtaker	A purchaser of electricity and/or renewable obligation.
Ordinary Shares	The Company's ordinary shares in issue.
Portfolio	A collection of different investments held in order to deliver returns to shareholders and to spread risk.
Private Hydrogen Assets	Investments in unquoted Hydrogen Assets, which may be operational companies or hydrogen projects (completed or under construction).
Relative performance	Measurement of returns relative to an index.
Share buyback	A purchase of a company's own shares. Shares can either be bought back for cancellation or held in treasury.
Share price	The price of a share as determined by a relevant stock market.
Treasury shares	A company's own shares which are available to be sold by a company to raise funds.
Volatility	A measure of how much a share moves up and down in price over a period of time.

# Directors and advisers

## Directors (all Non-Executive)

Simon Hogan (Chairman)  
Afkenel Schipstra  
Abigail Rotheroe  
David Bucknall

## Administrator and Company Secretary

Apex Listed Companies Services (UK) Limited  
(formerly Sanne Fund Services (UK) Limited)  
6th Floor  
125 London Wall  
London  
EC2Y 5AS

## Alternative Investment Fund Manager (AIFM)

FundRock Management Company (Guernsey) Limited  
(formerly Sanne Fund Management (Guernsey) Limited)  
1 Royal Plaza  
Royal Avenue  
St Peter Port  
Guernsey  
GY1 2HL

## Broker

Barclays Bank PLC  
1 Churchill Place  
London  
E14 5RB

## Solicitors to the Company

Gowling WLG (UK) LLP  
4 More London Riverside  
London  
SE1 2AU

## Registered office\*

6th Floor  
125 London Wall  
London  
EC2Y 5AS

\*Registered in England and Wales –  
No 13340859

## Investment Adviser

HydrogenOne Capital LLP  
5 Margaret Street  
London  
W1W 8RG

## Custodian

The Northern Trust Company  
50 Bank Street  
Canary Wharf  
London  
E14 5NT

## Registrar

Computershare Investor Services PLC  
The Pavilions  
Bridgwater Road  
Bristol  
BS13 8AE

## Independent Auditor

KPMG Channel Islands Limited  
Glategny Court  
Glategny Esplanade  
Guernsey  
GY1 1WR

# Report of the Alternative Investment Fund Manager

## Material change

FundRock Management Company (Guernsey) Limited (formerly Sanne Fund Management (Guernsey) Limited) as AIFM) must disclose in the Annual Report, details of material changes to the information set out under AIFMD. For these purposes, there are no material changes effective during the period to be noted to the information set out in the Prospectus.

## Remuneration disclosures

The Company is categorised as an EU Alternative Investment Fund ("AIF"). The AIFMD seeks to regulate managers of AIFs, such as the Company. It imposes obligations on AIFMs who manage AIFs in a member state of the European Economic Area ("EEA state"), or who market shares in AIFs to investors who are domiciled, or with a registered office, in an EEA state. Under the AIFMD, an AIFM must be appointed and must comply with various organisational, operational and transparency requirements.

On 5 July 2021, the Company appointed FundRock Management Company (Guernsey) Limited (formerly Sanne Fund Management (Guernsey) Limited) to act as AIFM to the Company. FundRock Management Company (Guernsey) Limited is responsible for fulfilling the role of the AIFM and ensuring the Company complies with the AIFMD requirements. Details of the total amount of remuneration for the financial year, split into fixed and variable remuneration, paid by the AIFM to its staff, and the number of beneficiaries, are made available to Shareholders on request.

# Notice of Annual General Meeting

## Annual General Meeting

In line with the requirements of the Companies Act 2006, the Company will hold an Annual General Meeting of shareholders to consider the resolutions laid out in the Notice of Meeting below.

## Notice of Meeting

Notice is hereby given that the Annual General Meeting of HydrogenOne Capital Growth plc will be held at 6th Floor, 125 London Wall, London EC2Y 5AS on 23 May 2023 at 11:30am for the following purposes:

To consider and if thought fit pass the following resolutions of which resolutions 1 to 10 will be proposed as ordinary resolutions and resolutions 11 to 13 will be proposed as special resolutions.

1. To receive the Company's annual accounts for the year ended 31 December 2022.
2. To approve the Directors' Remuneration Report included in the Annual Report for the year ended 31 December 2022.
3. To re-elect Simon Hogan as a Director of the Company.
4. To re-elect Afkenel Schipstra as a Director of the Company.
5. To re-elect Abigail Rotheroe as a Director of the Company.
6. To elect David Bucknall as a Director of the Company.
7. To reappoint KPMG Channel Islands Limited as auditor to the Company.
8. To authorise the Directors to fix the remuneration of the auditor until the conclusion of the next Annual General Meeting of the Company.
9. That
  - a. the Directors be generally and unconditionally authorised pursuant to section 551 of the Companies Act 2006 (the "Act") to allot shares in the Company, or to grant rights to subscribe for or convert any security into shares in the Company, up to a maximum nominal amount of £128,819 or, if less, the amount that represents 10% of the nominal value of the Company's issued share capital (excluding treasury shares) on the date on which this resolution is passed; and
  - b. the authority given by this resolution:
    - i. shall be in addition to all pre-existing authorities under section 551 of the Act; and
    - ii. unless renewed, revoked or varied in accordance with the Act, shall expire at the conclusion of the Annual General Meeting of the Company to be held in 2023 or, if earlier, on the expiry of 15 months from the date of passing of this resolution save that the Company may, before such expiry, make any offer or enter into an agreement which would or might require the allotment of shares in the Company, or the grant of rights to subscribe for or to convert any security into shares in the Company, after such expiry and the Directors may allot shares in the Company or grant rights to subscribe for or to convert any security into shares in the Company in pursuance of such an offer or agreement as if such authority had not expired.

# Notice of Annual General Meeting

10. That, subject to the passing of resolution 9 set out in this Notice of Annual General Meeting (the "Allotment Authority"), the Directors be given power pursuant to sections 570 and 573 of the Companies Act 2006 (the "Act") to allot equity securities (within the meaning of section 560(1) of the Act) for cash pursuant to the Allotment Authority, and to sell treasury shares for cash, as if section 561(1) of the Act did not apply to such allotment or sale, provided that such power:
- shall be limited to the allotment of equity securities or the sale of treasury shares up to an aggregate nominal amount of £128,819 or, if less, the amount that represents 10% of the nominal value of the Company's issued share capital (excluding treasury shares) on the date on which this resolution is passed;
  - shall be in addition to all pre-existing powers under sections 570 and 573 of the Act; and
  - shall expire at the same time as the Allotment Authority, save that the Company may, before expiry of the power conferred on the Directors by this resolution, make an offer or agreement which would or might require equity securities to be allotted or treasury shares to be sold after such expiry and the Directors may allot equity securities or sell treasury shares in pursuance of such an offer or agreement as if such power had not expired.
11. That the Company be and is hereby generally and unconditionally authorised in accordance with section 701 of the Companies Act 2006 (the "Act") to make market purchases (within the meaning of section 693(4) of the Act) of its Ordinary Shares of 1p each, provided that:
- the maximum number of Ordinary Shares hereby authorised to be purchased shall be 19,310,117 (representing 14.99% of the Company's issued Ordinary Share capital (excluding shares held in treasury) at the date of the notice of this meeting);
  - the minimum price (exclusive of any expenses) which may be paid for an Ordinary Share is 1p;
  - the maximum price (excluding expenses) which may be paid for an Ordinary Share is not more than the higher of (i) 5% above the average of the middle market quotations for the Ordinary Shares for the five business days immediately before the day on which it purchases that share and (ii) the higher of the price of the last independent trade and the highest current independent bid for the Ordinary Shares;
  - the authority hereby conferred shall expire at the conclusion of the Annual General Meeting of the Company in 2023 or, if earlier, on the expiry of 15 months from the passing of this resolution, unless such authority is renewed prior to such time; and
  - the Company may make a contract to purchase Ordinary Shares under the authority hereby conferred prior to the expiry of such authority, which will or may be executed wholly or partly after the expiration of such authority and may make a purchase of Ordinary Shares pursuant to any such contract.
12. That a general meeting of the Company other than an Annual General Meeting may be called on not less than 14 clear days' notice, provided that this authority shall expire at the conclusion of the Company's next Annual General Meeting after the date of the passing of this resolution.

**By order of the Board**

Brian Smith  
For and on behalf of Apex Listed Companies  
Services (UK) Limited  
Company Secretary

**Registered office:**

6th Floor  
125 London Wall  
London  
EC2Y 5AS

3 April 2023



# Notes to the notice of Annual General Meeting

## Website address

1. Information regarding the meeting, including the information required by section 311A of the Companies Act 2006, is available from [www.hydrogenonecapitalgrowthplc.com](http://www.hydrogenonecapitalgrowthplc.com).

## Entitlement to attend and vote

2. Only those holders of Ordinary Shares registered on the Company's register of members at 11:30am on 19 May 2023 or, if this meeting is adjourned, at 11:30am on the day two days prior to the adjourned meeting, shall be entitled to vote at the meeting.

## Appointment of Proxies

3. Members entitled to vote at the meeting (in accordance with Note 2 above) are entitled to appoint a proxy to vote in their place. It is recommended that shareholders appoint the 'Chairman of the Meeting' as their proxy where possible. If you wish to appoint a proxy, please follow the instructions at note 6 below if you wish to appoint a proxy through the CREST electronic proxy appointment service. In the case of joint members, only one need sign the Form of Proxy. The vote of the senior joint member will be accepted to the exclusion of the votes of the other joint members. For this purpose, seniority will be determined by the order in which the names of the members appear in the register of members in respect of the joint shareholding.
4. You can appoint the Chairman of the Meeting as your proxy using the voting methods in notes 6 and 7.
5. You can instruct your proxy how to vote on each resolution by marking the resolutions For and Against using the voting methods stated in notes 6 and 7. If you wish to abstain from voting on any resolution, please mark these resolutions withheld. It should be noted that a vote withheld is not a vote in law and will not be counted in the calculation of the proportion of votes 'For' and 'Against' a resolution. If you do not indicate how your proxy should vote, he/she can exercise his/her discretion as to whether, and if how so how, he/she votes on each resolution, as he/she will do in respect of any other business (including amendments to resolutions) which may properly be conducted at the meeting.

## Appointment of proxy

6. You can vote either:
  - by logging on to [www.investorcentre.co.uk/eproxy](http://www.investorcentre.co.uk/eproxy) and following the instructions;
  - by completing a hard copy form of proxy that accompanies this annual report; or
  - in the case of CREST members, by utilising the CREST electronic proxy appointment service in accordance with the procedures set out below.

In order for a proxy appointment to be valid a form of proxy must be completed. In each case the form of proxy must be received by Computershare Investor Services PLC, The Pavilions, Bridgwater Road, Bristol BS99 6ZY by no later than 11:30am on 19 May 2023.

## Appointment of Proxy through CREST

7. CREST members who wish to appoint a proxy or proxies through the CREST electronic proxy appointment service may do so for the meeting to be held on the above date and any adjournment(s) thereof by using the procedures described in the CREST Manual. CREST Personal Members or other CREST sponsored members, and those CREST members who have appointed a voting service provider(s), should refer to their CREST sponsor or voting service provider(s), who will be able to take the appropriate action on their behalf.

In order for a proxy appointment or instruction made using the CREST service to be valid, the appropriate CREST message (a "CREST Proxy Instruction") must be properly authenticated in accordance with Euroclear UK & International Limited's specifications and must contain the information required for such instructions, as described in the CREST Manual. The message, regardless of whether it constitutes the appointment of a proxy or an amendment to the instruction given to a previously appointed proxy, must, in order to be valid, be transmitted so as to be received by the Company's agent (ID: 3RA50) by the latest time(s) for receipt of proxy appointments specified in the Notice of Meeting. For this purpose, the time of receipt will be taken to be the time (as determined by the timestamp applied to the message by the CREST Applications Host) from which the Company's agent is able to retrieve the message by enquiry to CREST in the manner prescribed by CREST. After this time any change of instructions to a proxy's appointee through CREST should be communicated to the appointee through other means.

CREST members and, where applicable, their CREST sponsors or voting service providers should note that Euroclear UK & International Limited does not make available special procedures in CREST for any particular messages. Normal system timings and limitations will therefore apply in relation to the input of CREST Proxy Instructions.

# Notes to the notice of Annual General Meeting

It is the responsibility of the CREST member concerned to take (or, if the CREST member is a CREST personal member or sponsored member or has appointed a voting service provider(s), to procure that this CREST sponsor or voting service provider(s) take(s) such action as shall be necessary to ensure that a message is transmitted by means of the CREST system by any particular time. In this connection, CREST members and, where applicable, their CREST sponsors or voting service providers are referred, in particular, to those sections of the CREST Manual concerning practical limitations of the CREST system and timings.

The Company may treat as invalid a CREST Proxy Instruction in the circumstances set out in Regulation 35(5)(a) of the Uncertificated Securities Regulations 2001.

All messages relating to the appointment of a proxy or an instruction to a previously appointed proxy, which are to be transmitted through CREST, must be lodged by 11:30am on 19 May 2023 in respect of the meeting. Any such messages received before such time will be deemed to have been received at such time. In the case of an adjournment, all messages must be lodged with Computershare Investor Services no later than 48 hours before the rescheduled meeting.

## Appointment of a proxy through Proxymity

8. If you are an institutional investor you may be able to appoint a proxy electronically via the Proxymity platform, a process which has been agreed by the Company and approved by the Registrar. For further information regarding Proxymity, please go to [www.proxymity.io](http://www.proxymity.io). Your proxy must be lodged no later than 48 hours before the time of the Annual General Meeting, in order to be considered valid. Before you can appoint a proxy via this process you will need to have agreed to Proxymity's associated terms and conditions. It is important that you read these carefully as you will be bound by them and they will govern the electronic appointment of your proxy. Proxymity will then contract with your underlying institutional account holder directly to accept their vote instructions through the platform.

## Termination of proxy appointments

9. In order to revoke a proxy instruction, you will need to inform the Company. Please send a signed hard copy notice clearly stating your intention to revoke your proxy appointment to by Computershare Investor Services PLC, The Pavilions, Bridgwater Road, Bristol BS99 6ZY. In the case of a member which is a company, the revocation notice must be executed under its common seal or otherwise in accordance with section 44 of the Companies Act 2006 or by signature on its behalf by an officer or attorney whose power of attorney or other authority should be included with the revocation notice.

If you attempt to revoke your proxy appointment but the revocation is received after the time specified in note 2 above then, subject to the paragraph directly below, your proxy will remain valid.

If you submit more than one valid proxy appointment in respect of the same Ordinary Shares, the appointment received last before the latest time for receipt of proxies will take precedence.

## Nominated persons

10. If you are a person who has been nominated under section 146 of the Companies Act 2006 to enjoy information rights:
  - You may have a right under an agreement between you and the member of the Company who has nominated you to have information rights (Relevant Member) to be appointed or to have someone else appointed as a proxy for the meeting.
  - If you either do not have such a right or if you have such a right but do not wish to exercise it, you may have a right under an agreement between you and the Relevant Member to give instructions to the Relevant Member as to the exercise of voting rights.
  - Your main point of contact in terms of your investment in the Company remains the Relevant Member (or, perhaps, your custodian or broker) and you should continue to contact them (and not the Company) regarding any changes or queries relating to your personal details and your interest in the Company (including any administrative matters). The only exception to this is where the Company expressly requests a response from you.

If you are not a member of the Company but you have been nominated by a member of the Company to enjoy information rights, you do not have a right to appoint any proxies under the procedures set out in the notes to the form of proxy.

### Questions at the meeting

11. Under section 319A of the Companies Act 2006, the Company must answer any question you ask relating to the business being dealt with at the meeting unless:
- answering the question would interfere unduly with the preparation for the meeting or involve the disclosure of confidential information;
  - the answer has already been given on a website in the form of an answer to a question; or
  - it is undesirable in the interests of the Company or the good order of the meeting that the question be answered.

### Issued Shares and total voting rights

12. The total number of shares in issue in the Company is 128,819,999 Ordinary Shares of 1p each. Therefore, the total number of Ordinary Shares with voting rights is 128,819,999. On a vote by a show of hands, every holder of Ordinary Shares who (being an individual) is present by a person, by proxy or (being a corporation) is present by a duly authorised representative, not being himself a member, shall have one vote. On a poll every holder of Ordinary Shares who is present in person or by proxy shall have one vote for every Ordinary Share held by him.

### Communication

13. Except as provided above, members who have general queries about the meeting should use the following means of communication (no other methods of communication will be accepted):
- Computershare's helpline on 0370 707 1346 (or +44 370 707 1346 from outside the UK). Lines are open 8:30am to 5:30pm Monday to Friday (excluding public holidays in England and Wales. Charges for '03' numbers are determined by the caller's service provider. Calls may be recorded and monitored randomly for security and training purposes);
  - in writing to Computershare.

You may not use any electronic address provided either in this Notice of Meeting or in any related documents (including the Form of Proxy for this meeting) to communicate with the with the Company for any purposes other than those expressly stated.

Designed and  
printed by:



[perivan.com](http://perivan.com)

