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ceres

2021 Annual Report

Clean energy starts with Ceres

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Welcome to our 2021 Annual Report, covering the 12-month period to 31 December 2021.

Ceres is a leader in climate technology, enabling the world's most progressive companies to deliver clean energy solutions at scale and at speed through a high-margin, asset-light licensing business model.

REVENUE[1]

£32m

(CY2020: £22m; 18mths 2020: £33m)

CASH, CASH EQUIVALENTS AND INVESTMENTS

£250m

(2020: £110m)

1. Revenue and other income for the 12 months ended 31 December 2021, compared with Calendar Year 2020 (see page 36 for definition and reconciliation to 18 months results) and the 18 months ended 31 December 2020.

Low res image

Clean energy technology to address climate change

Our purpose

Clean energy for a clean world.

Our ultimate purpose is to help sustain a clean, green planet by ensuring there is clean energy everywhere in the world.

Our purpose shapes our values, personality and ESG commitments.

Our values

- We commit wholeheartedly
- We are creative collaborators
- We pioneer with precision

Our personality

- We are serious about the future
- We have a different dynamic
- We make the complex simple

Ceres in summary

250MW
Planned partner capacity by 2024

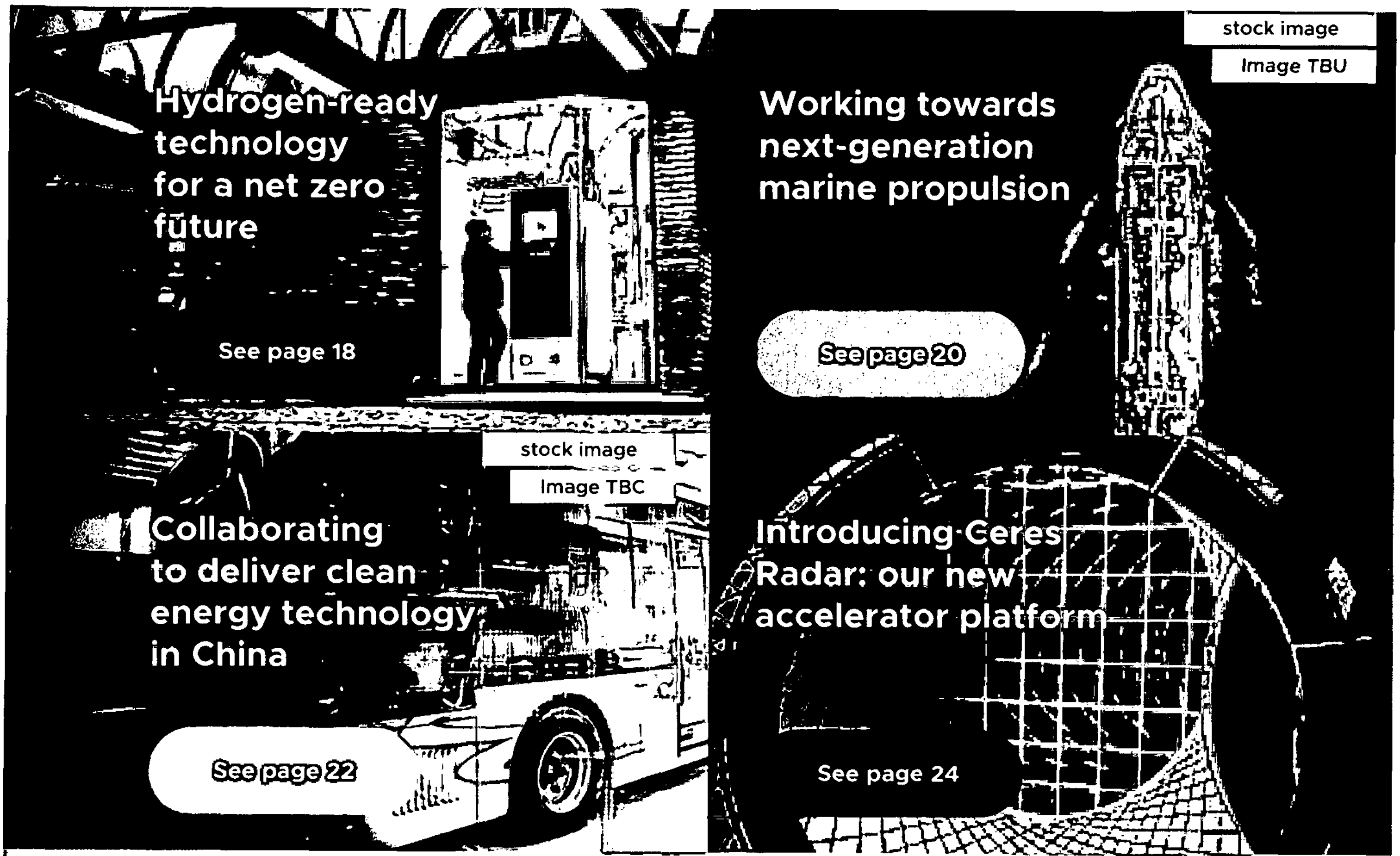
Zero
CO_2, SOx, NOx and particulate emissions when Ceres fuel cell stack operated on pure hydrogen

489
employees,
as at 31 December 2021
2020: 325 employees

Ceres' Quality Management System is certified to ISO9001:2015. Certificate number FS 738105.

Ceres is listed on the AIM market of the London Stock Exchange and is classified by the LSE Green Economy Mark, which recognises listed companies that derive more than 50% of their activity from the green economy.

Ceres is honoured to be a recipient of this year's Queen's Awards for Enterprise recognising its excellence in International Trade.



Hydrogen-ready technology for a net zero future

See page 18

Working towards next-generation marine propulsion

See page 20

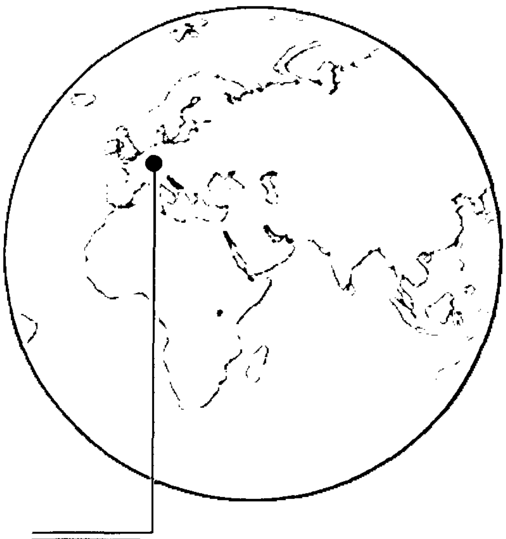
Collaborating to deliver clean energy technology in China

See page 22

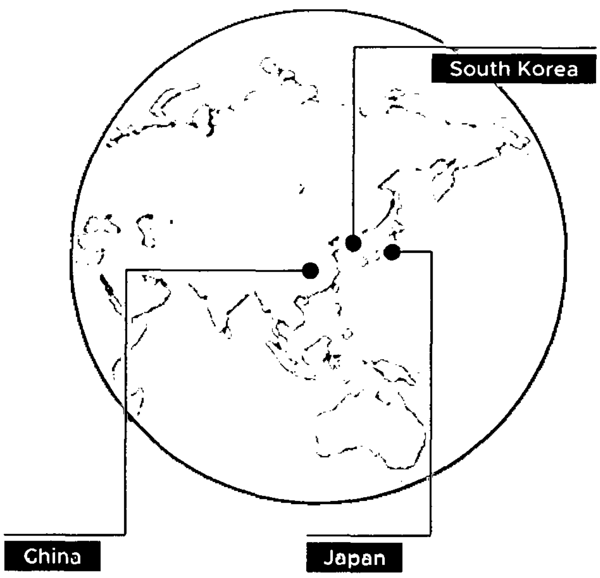
Introducing Ceres Radar: our new accelerator platform

See page 24

Global reach with our partners



United Kingdom
Germany
Austria



Chairman's statement

Dear Shareholders

Despite the current geopolitical instability in Europe, the world around us continues to pivot towards a green economy and we see rising demand for clean energy technologies. Ceres' clear purpose is more relevant than ever for the societies in which we live and work.

Urgency around climate action is providing a supportive environment, but we should not understate the challenges presented by Covid-19 over the last two years, and it is testament to the people that work across the Ceres business that we have continued to expand the business and grow value for our partners.

Ceres has again delivered double-digit revenue growth, reflecting its strong commercial partnerships, and it has continued the transition to a high-performing operational business, under the leadership of Phil Caldwell. I am fortunate to be the Chairman of an exciting and growing business that continues to deliver year-on-year, with much still to do.

Expanding our strategy

During the year, we accelerated the development of our core fuel cell business, committed to major expansion of our electrolysis activities, strengthened the management and grew the Ceres team, adding over 100 highly skilled engineering and technical jobs across our UK operations. To support our growth strategy we raised £179m of new equity.

2021 also marked 20 years since Ceres was spun out from Imperial College London and the year in which global partners began scaling our technology in earnest. Today, our partners Bosch and Doosan are planning to construct as much as 250MW of cell and stack manufacturing capacity by 2024, a significant validation of our technology and of our asset-light licensing approach.

During the year we set out ambitious plans to broaden the application of the core technology, committing £100 million to the development of its application to electrolysis for green hydrogen. I am pleased to say we have made great strides in executing on this strategy and we are confident we will see the first announcements in the coming months.

During the last 20 years, Ceres has also built tremendous capability around commercialising technology in the energy space and we have an opportunity to leverage this capability by identifying and investing in innovative technologies which are consistent with our Company purpose. This will help us to remain at the forefront of technological development and enhance our future growth. Our first agreement was announced in November 2021 when we acquired an investment in RFC Power, which has a promising technology for flow batteries for long-duration energy storage. I encourage you to read the Chief Executive's report on pages 6 to 9 for more detail on all these strategic developments.

Shaping the future of energy

The transition of the global energy system is no small undertaking, and there is clear recognition of the requirement for hydrogen to achieve deep decarbonisation alongside electrification. More than 30 countries have now published hydrogen roadmaps and 75 have net zero ambitions with more than US$70 billion in public funding committed to green investment.

Sustainability

Alongside the role our technology plays in enabling the energy system to decarbonise, we also need to lead the charge in decarbonising our own business. This year the Company has engaged Ricardo Energy & Environment to establish a Science-Based Targets (SBT) pathway to reduce greenhouse gas (GHG) emissions in line with SBTi guidelines. The full report and analysis to establish our carbon reduction pathway to 2040 will be published in due course.

I am also pleased to report that independent Non-Executive Director, Julia King, will be supporting the ESG Committee as an adviser this year, adding her tremendous expertise on climate change, as we look to transition from the AIM to the Main Market of the London Stock Exchange.

Ceres is working in many of the most advanced markets for clean energy technologies – Germany, Korea and Japan and we are glad to be able to share the detail of our planned expansion in the Chinese market alongside our long-standing partners Weichai and Bosch. It is important to remember that through the licensing model we create partnerships for the long term, and only through those partnerships are we able to deliver our technology at the scale and pace needed to deliver a net zero future.

Board of Directors

We have seen four changes to the Board since the last report. In March 2021 we welcomed Tudor Brown, followed in June by Professor Dame Julia King, Baroness Brown of Cambridge and in March of this year Trine Borum Bojsen, all as Non-Executive Directors. Caroline Hargrove stepped down from the Board on being appointed Chief Technology Officer and joined the Executive team. We thank her for her contribution to the Board and wish her all the best in her new role. Following the year end, Eric Lakin joined the Board and the Executive team as Chief Financial Officer, replacing Richard Preston who leaves Ceres after 14 years with our gratitude for all he has achieved and our best wishes for the future.

Looking ahead

Finally, I would like to thank you for your continued support for Ceres. The Company is committed to delivering value to its shareholders through sustainable growth and by leveraging its asset-light, licensing business model. I believe we enter 2022 stronger as a business, stronger as a team and better positioned than ever before to take the Company forward.

Warren Finegold
Chairman

£179m
New equity raised to support our growth strategy

20%
Female representation on the Board of Directors

40%
Female representation on the Executive team

Warren Finegold
Chairman

> “As the world around us pivots towards a green economy, we continue to see rising demand for clean energy technologies and Ceres' clear purpose is more relevant than ever for the societies in which we live and work.

Growing a global clean energy technology business

Phil Caldwell
Chief Executive Officer

> "We have delivered a year of strong growth; with a 44%[1] increase in revenue[2], a £179 million fundraise to support an expanded strategy and a step-change in the ambition of our partners to scale our technology for mass production.

Summary

- Technology being scaled globally through Bosch, Doosan and Weichai
- Revenue[2] for 2021 grew by 44%[1] over the prior year
- Strong cash[3] balance of £250 million as at 31 December 2021

Overview

The recent global volatility has only served to highlight the urgency for energy security around the world, with governments under increasing pressure to decarbonise their societies and hydrogen now widely acknowledged as an essential part of the route to net zero.

We need a different energy landscape and Ceres' purpose to deliver technology that enables a clean and efficient energy future is absolutely aligned with that goal. We have made significant progress on our growth ambitions this year, to establish Ceres as a leading player in the sector.

We have yet again delivered strong growth; with a 44%[1] increase in revenue[2], a £179 million fundraising completed to support an expanded strategy for green hydrogen and a step-change in the ambition of our partners to scale our technology for mass production.

It is the urgency of the climate change agenda that requires us to act now and to deploy clean technologies at scale and pace – and Ceres is achieving that through collaboration with some of the world's most progressive companies.

Collaboration with global partners

Having worked in the industry for almost 20 years, I can see the demand for hydrogen and fuel cell technologies has never been as great. This is down to a combination of three factors: the need for corporates to transition from existing technologies such as combustion engines towards a net zero future, government policies aligned with a low-carbon future and a shift in investing, providing unprecedented levels of capital for companies with strong ESG credentials. It is not a coincidence that Ceres' first commercial partnerships have been in locations with more progressive targets around climate action and ambitious plans for deployment of fuel cell and hydrogen technologies.

Ceres aims to achieve scale through partnerships and the ecosystem is growing, with Bosch targeting 200MW of production capacity in Germany, Doosan installing 50MW as a first step of capacity in South Korea, and now a planned collaboration with Bosch and Weichai scaling up in China. Ceres has deep expertise in hydrogen and fuel cell technology, but to realise our ambition for our technology to impact the climate challenge, we must work with partners who know how to industrialise products for mass production on a global scale.

Weichai, Bosch and Ceres form strategic collaboration for the Chinese market

In February 2022, we were pleased to share our progress on the formation of a three-way collaboration with Weichai and Bosch to access the substantial opportunities that exist for fuel cell technologies in the Chinese market. We believe it could be the largest market for our technology as China addresses its goals towards a low-carbon future.

History tells us that companies in China know how to scale, how to mass produce and how to drive down cost curves. Whilst China accounts for 30% of global emissions, it also represents a key part of how we achieve net zero.

Following the period end, we signed non-binding Heads of Terms setting out plans for two separate joint ventures in China. It is intended that a three-way system Joint Venture ("System JV") will be set up for the development and manufacture of SOFC system products, with Weichai as the majority shareholder and Bosch and Ceres as minority shareholders. Ceres will invest around £20 million over time and hold a maximum 10% share with Board representation.

Separately, a stack manufacturing JV ("Stack JV") will be jointly established between Bosch and Weichai, with Bosch as the majority shareholder. Ceres will not be a shareholder but will receive royalties from this JV on the sale of stacks. The Stack JV would be the second manufacturing facility for Bosch and the build is planned to follow its initial 200MW facility in Germany, where start of production is anticipated for 2024.

We have every confidence in our collaboration with Weichai and, with the addition of Bosch's expertise in industrialisation and manufacturing, we have the potential to establish one of the strongest partnerships in the fuel cell industry globally.

250MW

Manfacturing production capacity targeted by our partners for 2024

£100m

Committed to developing megawatt scale, high efficiency electrolysers

1. Comparison against Calendar Year 2020 results, see page 36 for definition.
2. Revenue and other income.
3. Cash balance comprises cash, short-term and long-term investments.

Market Opportunities

Ceres has a proprietary technology that is truly reversible. Running in one direction it can use multiple fuels to generate power highly efficiently when and where it is needed. Run in reverse, it generates green hydrogen at high efficiencies and low cost.

We have established a leading technology position in fuel cells that is being demonstrated in multiple applications and geographies with established global partners. Now, we have the potential to address an even greater market for electrolysis through a highly efficient, low-cost production method for hydrogen in a market where the requirement for hydrogen is predicted to double each decade between 2030 and 2050.

Across our energy systems, there is a need to reinforce power grids that are coming under increasing demand from electrification. Stationary fuel cell systems, such as those developed by Miura, Doosan and Bosch using Ceres' Solid Oxide Fuel Cell ("SOFC") technology provides highly efficient, scalable, fuel-flexible and environmentally friendly power generation systems for use in many applications. As an example, Bosch's product achieves electrical efficiency of over 60% and provides useful temperatures for heating and hot water, delivering a total efficiency greater than 85%, versus 55% efficiencies for the most modern combined-cycle gas turbines. The Bosch system is scalable providing flexible, decentralised power for cities, data centres, electrical charging infrastructure or in industrial or commercial settings. Bosch is aiming for production capacity of about 200 megawatts output per year from 2024, enough to supply around 400,000 people with household electricity.

In transportation, batteries are a good fit for lighter vehicles in an urban environment. As you require more power density for heavier vehicles a hybrid battery and fuel cell system, such as the 30kW range extender for buses and commercial vehicles we are developing with Weichai Power for the Chinese market, is ideal. Especially for high-utilisation, long-distance applications, or vehicles with heavy payloads.

Similarly, in decarbonising heavier transportation such as shipping we are seeing strong interest in our fuel flexible technology as a route to decarbonisation. Ceres is working with two maritime consortia in the UK to carry out separate feasibility studies on the use of SOFC technology in ship architecture. South Korea is one of the biggest shipbuilding nations in the world; here our partner Doosan has signed a letter of intent with Shell and the shipping division of Hyundai Heavy Industries, looking to apply Ceres' fuel cell technology to auxiliary and even prime propulsion in ships, with international shipping accounting for around 2% of global energy-related CO2 emissions according to the International Energy Agency.

Expanding our strategy

Globally, industry accounts for 24% of carbon dioxide emissions and electrification is not a credible route to decarbonise many processes. For steel (accounting for 7% of global carbon emissions), ammonia and cement (2% each), hydrogen provides an economic solution to address parts of the energy system that cannot be directly electrified, where we rely on fossil fuels today. We need to start working on these hard-to-abate areas now as they are significant problems with major infrastructure challenges.

In early 2021, we took the decision to broaden the addressable market of the Company, moving into the production of green hydrogen using Ceres' technology through electrolysis. To do that we are committing £100 million to develop megawatt-scale, high-efficiency Ceres electrolysers. Importantly, solid oxide electrolysers such as Ceres' aim to produce hydrogen at efficiencies around 20% greater than other technologies, in the range from mid-80s to 90% efficiency where it is possible to make use of waste heat in industrial processes to drive this high efficiency. We believe we have a pathway to produce green hydrogen at $1.5/kg, which is the point at which electrolysis becomes competitive with blue and grey hydrogen produced using fossil fuels, at a price point that is key to making green hydrogen commercially viable.

Estimates suggest hydrogen could eventually account for 18% of primary energy. That is a big opportunity – according to McKinsey[1] it is a $2.5 trillion opportunity. In March last year, we raised £179 million in the public markets to support our growth. I am seeing a change in the capital markets, certainly from when I took over as Chief Executive of Ceres in 2013, with recognition that greater investment is needed to scale companies like Ceres, and others, to meet the climate challenge. I believe we have a very strong investment case.

Our licensing business model differentiates us from a pure play fuel cell or electrolyser manufacturing company. As a licensing business committed to delivering clean energy for a net zero future, it is imperative that alongside delivering our fuel cell and hydrogen electrolysis businesses, we continue to drive innovation to create future value, both through investment in further progressing our own technology and partnering in new areas, which are aligned with our purpose. That is why we have now formed Ceres Radar, which is seeking to capitalise on the deep experience our team has built in identifying technologies aligned with our purpose where we can employ our expertise in technology development and licensing to accelerate these towards commercialisation.

Our first investment, announced in November 2021, is in long-duration energy storage with RFC Power, an early-stage company that has a strategy to develop the world's lowest-cost flow battery – a hybrid between a fuel cell and a battery that decouples power from energy. Long-duration energy storage technologies, such as hydrogen and flow batteries, have an important role to play in decarbonising the energy system. Before we decide to increase our ownership, we are going to work with RFC for up to a year, giving us time to get to know the Company and the technology and to more fully understand the commercial opportunity.

1. Hydrogen Scaling Up: report by the Hydrogen Council with analytical support from McKinsey & Company - https://hydrogencouncil.com/wp-content/uploads/2017/11/Hydrogen-scaling-up-Hydrogen-Council.pdf

In meeting the challenge of the scale and pace required to meet a net zero future, not everything we do at Ceres will be organic. We now have considerable capability we can deploy into new areas in developing unique and often difficult and IP-rich technologies, and scaling through our licensing partnerships model.

In March 2022, we announced a multi-million pound investment to establish a state-of-the-art fuel cell and electrolysis test facility in partnership with global engineering and testing consultancy, Horiba Mira. The agreement expands Ceres' test stand capacity and includes development of next-generation testing infrastructure to support Ceres' core technology and systems to be delivered at scale and pace with global partners. The partnership combines best-in-class UK expertise and our commitment to grow jobs and value for the UK economy through delivering clean energy technology to global markets.

Our people

The war in Ukraine has put many things into perspective and at Ceres I feel so proud to be a high-growth UK company with such a talented, multi-cultural workforce, including team members from Ukraine. We went into lockdown in 2020 with around 200 people and have emerged with nearly 500 operating across two sites in the UK and also many now remotely, both in the UK and internationally. At Ceres we have a strong culture and we were proud to be the recipient of a Queen's Awards for Enterprise in 2021 recognising our people's commitment to excellence in International Trade.

To support the Company's growth, we also developed and launched a new Ceres Academy platform designed and tailored around our core purpose, strategy and values. It sits at the heart of nurturing and developing our people through onboarding, general e-learning and tailored high-potential programmes. We also strengthened our management – with the arrival of Eric Lakin as Chief Financial Officer, Caroline Hargrove as Chief Technology Officer and Deborah Grimason as General Counsel and Company Secretary – who bring fresh perspective to our existing, talented team.

I would like to take the opportunity to thank all the Ceres employees for their hard work during the year and add my personal thanks to Richard Preston, who became CFO as I joined the Company in 2013 and has made a major contribution to the success of the business over the last nine years.

The UK is a science and technology powerhouse: as a nation we have invented some of the world's best technology that we still deploy widely around us today. I believe the same thing can be true of hydrogen and fuel cell technology. At Ceres we are world leaders in this technology, and through our global partners we can scale at pace to deliver clean energy for society and for all our benefit.

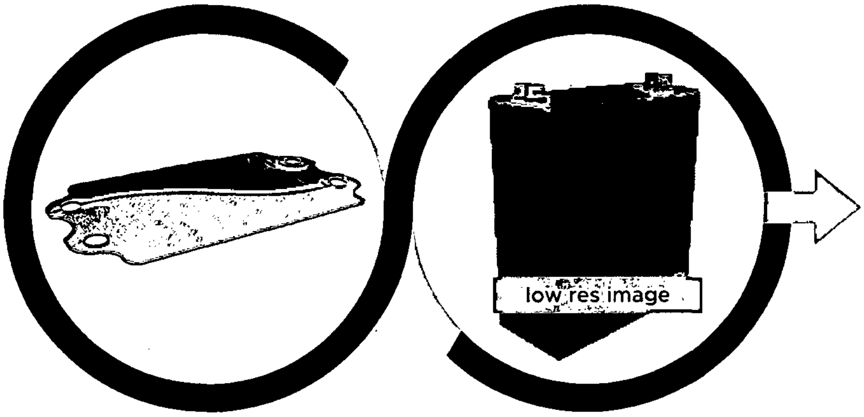
Phil Caldwell
Chief Executive

Left
Phil Caldwell (centre) attends the Queen's Awards reception at Windsor.

Leveraging Ceres' technology into global markets

Ceres' technology and competences span applications for the energy transition. Its core cell technology enables high-efficiency energy conversion at low cost, and is able to operate in either fuel cell or electrolysis mode, providing a single product to multiple applications and markets.

Our scalable technology



Solid oxide cell

Ceres' core cell is based on low-cost materials: a ceria ceramic electrolyte, a stainless-steel substrate and interconnect.

Solid oxide stack

Highly differentiated stack technology platform with strong and growing intellectual property and distinct advantages of robustness, efficiency and cost.

Our operating businesses

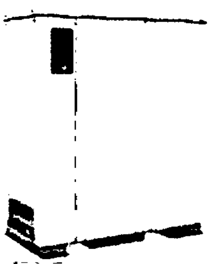
ceres POWER

Leading technology position in solid oxide fuel cells, being demonstrated in multiple applications and geographies through established global partnerships. Growing demand for higher-power systems and broadening applications in hard-to-abate sectors such as maritime.

ceres HYDROGEN

Now addressing the potentially even greater market for electrolysis through a differentiated offering for hydrogen, with distinct advantages in efficiency, coupling with industrial processes that are high emitters of carbon dioxide today.

Our end markets



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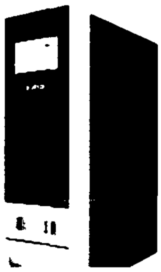
MIURA

Miura system aimed at the commercial building sector. Japan is a leading global player in fuel cells and green hydrogen, reflected in its Strategic Energy Plan.



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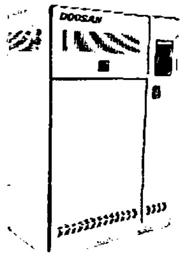
BOSCH

Targeting 200MW capacity by 2024 in Germany, with China manufacturing to follow. 10kW scalable system for decentralised power, data centres, EV charging or industrial power.



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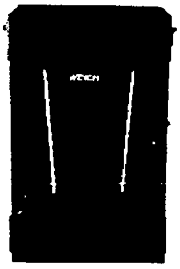
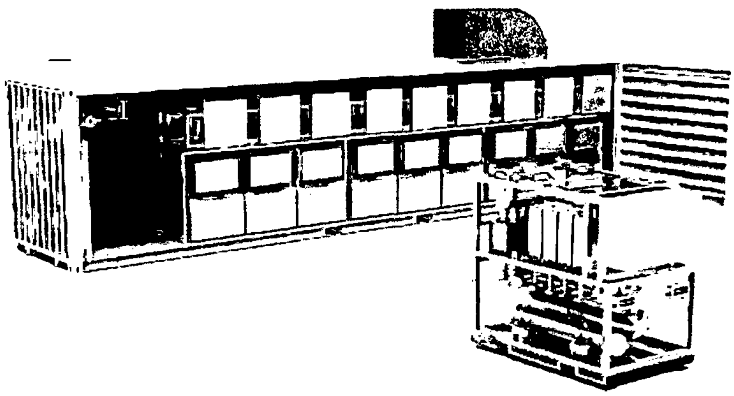
DOOSAN

Manufacturing licence with a target capacity of 50MW in 2024. Extended systems partnership to target higher power for utility scale applications and marine.



WEICHAI

Heads of Terms signed for Weichai, Bosch and Ceres collaboration in China. Significant market opportunity in both stationary and mobile applications to meet China's 2060 carbon neutral target.

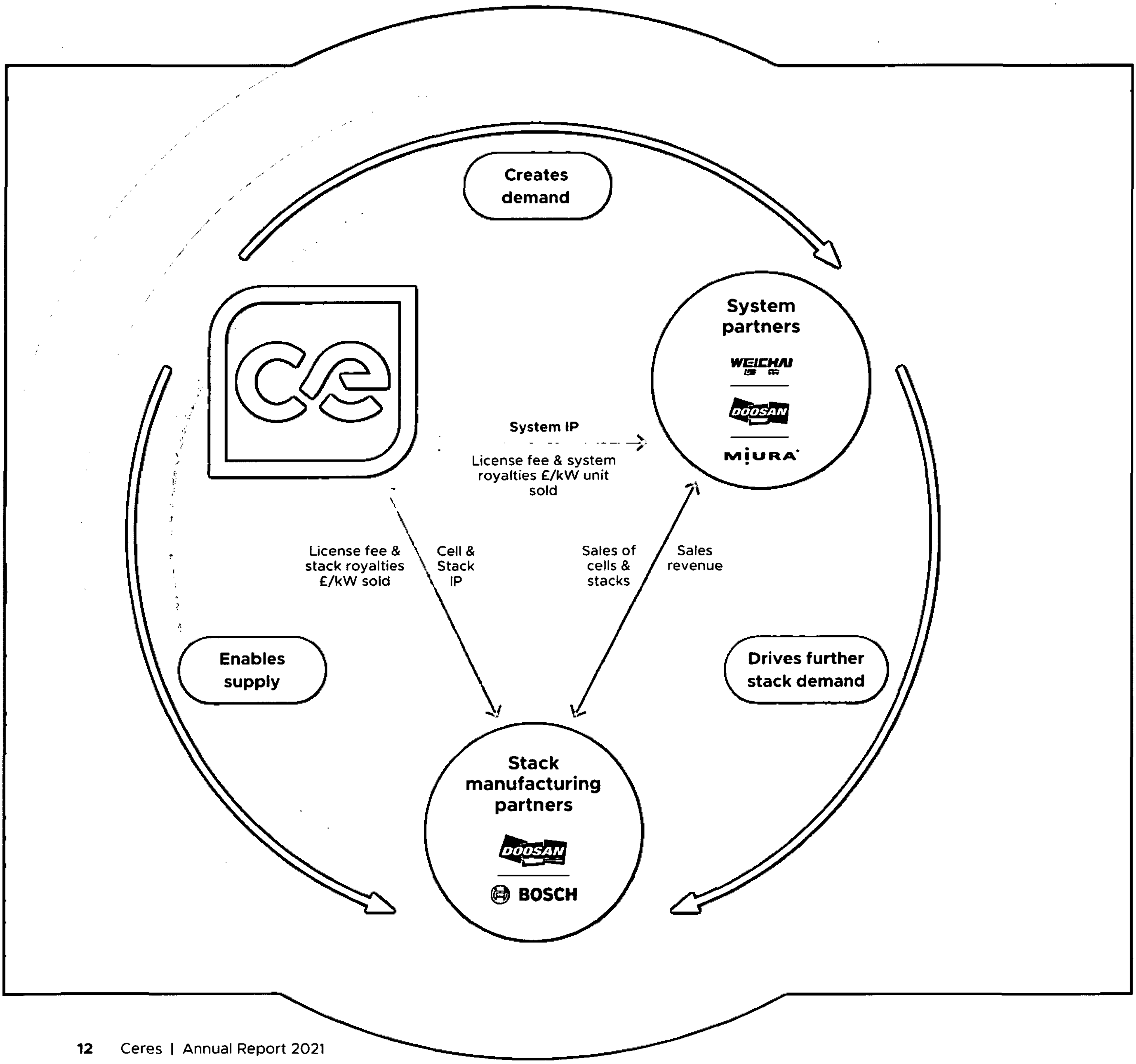


We are looking to demonstrate and commercialise our technology through engagement with global majors in oil & gas, industrial gas and clean energy.

We are targeting a levelised cost of hydrogen of <$1.50, with potential to access royalty streams from the significant electrolysis market, which is forecast to reach US$2.5 trillion by 2050.

Building a sustainable ecosystem around Ceres' technology

Ceres aims to build an ecosystem where manufacturing partners, today Bosch and Doosan, will supply stacks to system partners, generating royalties on both the stacks and systems sold. Ceres aims to:
- Enable system partners to embed the technology into as many applications as possible;
- Enable manufacturing partners to establish global supply to meet this demand; and
- Stay ahead on technology through continuous innovation and investment in R&D.



How our business model works

Ceres has an asset-light licensing business model which is intended to generate high-margin revenues at all stages of engagement with prospective partners. These include engineering services fees to help develop products, licence fees to access our IP, providing prototype stacks to enable development of products, and royalty fees based on kWs of sales by partners into their end markets.

This allows manufacturing partners to license the core cell and stack technology for mass manufacture, and systems partners to license the system technology for integration into clean energy technology products. Currently, Ceres' pilot production facility in the UK is providing stacks into our partners' development programmes and some into early commercial sales of products.

Future revenues will be based largely on royalties from products made by partners. This model allows Ceres to focus on its research and development programmes, with licensee partners providing the industrialisation and manufacturing skills and marketing capabilities.

Stakeholder engagement

Creating value for stakeholders

Operating sustainably is not simply about preserving and improving the environment in which we live, but also about ensuring that we make a positive societal contribution and maintain strong governance standards – for the benefit for all of our stakeholders. We also strive to create a positive work environment for our people, helping to ensure wellbeing across the Company. We work closely with trusted partners to support them in their ambitions to help build a better world. When these all come together the value created benefits us all.

Further details on Ceres' environmental beliefs and impact can be found in the Sustainability section on pages 26-31.

Wider society

We aim to play a central role in the global transition to clean, affordable power, to help tackle climate change and air pollution. This will bring health and sustainability benefits to societies around the world as they progress to zero emissions targets. Ceres stacks can create power while emitting low or even zero carbon and minimal emissions. We also look to use stacks to make green hydrogen, a key enabler to net zero.

Shareholders

Shareholders of Ceres can expect to gain investment returns from a high-growth, technology-driven company. Ceres has a globally critical purpose and a culture that is closely aligned to the UN's Sustainable Development Goals. Our licensing model delivers high-margin revenues in the power generation space and we have opportunities with Solid Oxide Electrolysis Cell ("SOEC")for the significant green hydrogen markets of the future.

Employees

Ceres is an inspiring place to work and our people are as dynamic, flexible and innovative as our technology. We collaborate with some of the world's most progressive and demanding companies. We embrace equal opportunities for everyone and, with the Ceres Academy, have employee development and talent management programmes.

Suppliers and partners

We aim to play a central role in the transition to clean, affordable power and green hydrogen to help tackle the effects of climate change and air pollution. By collaborating closely with suppliers and partners, we are developing fuel-flexible SOFC stacks that enable them to start this transition today as well as future-proof them for the fuels of tomorrow.

Further details on how the Board engages with stakeholders can be found on page 32.

A clear strategic vision

Our ultimate purpose is to help sustain a clean, green planet by ensuring there's clean energy everywhere in the world.

Our strategy is to:

1. Embed our solid oxide technology in the power products of world-class companies.
2. Develop our IP to power efficient electrolysis stacks that produce future fuels cost effectively.

Our plans and targets align with our purpose and link to achieving our 2030 goal – to have multi gigawatts of manufacturing capacity enabled by our partners.

Our strategy is based on three drivers:

Enabling our licensees to succeed

We aim to support our manufacturing partners to start mass production by 2024 through delivery of our Gen 2 stacks.

We are supporting Bosch and Doosan as they scale up their production capabilities towards mass market launch in 2024.

We also continue to work with our system partners to help them bring innovative products to their respective markets.

Actions

Our partners are investing in manufacturing our technology as our teams work together towards the market launches.

Our prime focus is on delivering on existing programmes and achieving planned milestones with our partners in 2022.

To support the programme delivery, we have expanded our engineering and specialist teams.

Link to KPIs

1 2 5

Link to risks

1 2 6

Commercial scale

We create commercial scale by generating more demand though increasing commercial partnerships and licences, growing applications and addressing new markets.

We aim to bring in new manufacturing partners as well as secure the manufacturing entity in China.

We aim to attract multiple system partners and OEMs to drive demand of the Ceres fuel cell stack in volume.

Actions

Heads of Terms for a three-way collaboration in China with Weichai and Bosch have been agreed.

We continue to build a strong pipeline of commercial opportunities, including those linked to solid oxide electrolysis.

We plan to scale up our pilot production capacity from 2MW to 5MW over the coming years to meet demand.

We also expect to widen the licences of our current partners into SOEC in due course.

Link to KPIs

2 3 4

Link to risks

3

Licensing technology leadership

We maintain our technology leadership in both SOFC and SOEC and drive further innovation.

We engage in technology demonstrations and data-sharing initiatives that offer early evidence of the benefits of Ceres' SOFC and SOEC technology

We continue to innovate our IP for both fuel cell and electrolysers.

Actions

Our first-of-a-kind solid oxide electrolyser (SOEC) demonstrator is planned to be operational in 2022.

We took a small stake in RFC Power, with an option to acquire it, as a long-duration energy storage opportunity.

Link to KPIs

6

Link to risks

4 5

Underpinning these three drivers is our plan to invest in and grow the business, which includes additional test and manufacturing capacity, digitalisation and growing our people and capabilities (linked to risks 5 and 6).

For more information on risks, please see page 39.

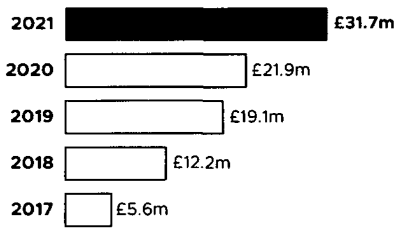
Our key performance indicators

The Board monitors the Group's progress against its strategic objectives and the financial performance of the Group's operations.

In line with the expanded strategy, the Board has changed some of the non-financial KPIs to be more relevant to the business, and the following details the principal financial and non-financial KPIs used by the Group.

Financial KPIs

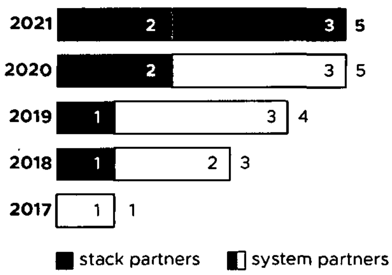
1 Revenue and other income



Description

Ceres continues to deliver strong revenue growth year on year, at high margins.

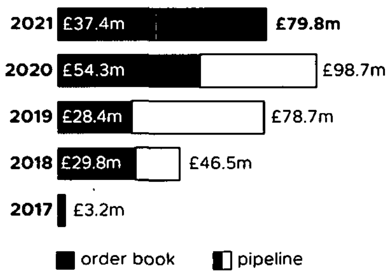
2 Number of licensing partners (at period end)



Description

Doosan and Bosch are our stack manufacturing partners, with Weichai, Doosan and Miura as system partners

3 Order book and pipeline (at period end)



Description

'Order book' refers to confirmed contracted revenue and other income, while 'pipeline' is contracted revenue and other income which management estimates is contingent upon options not under the control of Ceres.

Non-Financial KPIs

4 Overall Manufacturing capacity

2021 performance

250 MW

Description

Planned stack manufacturing capacity from our partners.

5 Partner programmes delivery

2021 performance

Bosch and Doosan programmes on track for 2024

Description

We aim to ensure that our manufacturing partners start mass production as planned.

6 Demonstrate SOEC

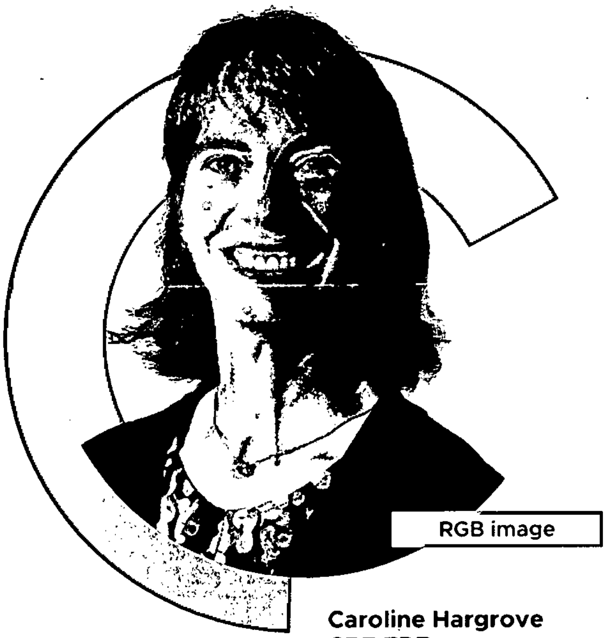
2021 performance

On track for demonstration at module level in 2022 and at 1MW scale in 2023

Description

We are looking to demonstrate SOEC at 1 MW scale.

Talking innovation



Caroline Hargrove CBE FREng
Chief Technology Officer

“
Partners are relying on us to do the deep technology innovation, so that it becomes increasingly economical to deploy this clean technology at scale and pace across different applications and markets.

What is innovation and what does it mean for Ceres?

CH Innovation is the art of creating value from good ideas and particularly from good science and engineering. You need great people, ambitious goals and the right environment, including being equipped with the right tools, to drive innovation. As a licensing company, innovation happens everywhere in Ceres – it's in our DNA from the way we do things to the technology we provide. We are very disciplined so that we innovate in line with our major programmes of solid oxide fuel cell and hydrogen technologies.

MS In my new role as Chief Innovation Officer, I am focused on looking at all the resources in Ceres; from our commercial insights, to our deep tech competence, to our management experience and looking at how we expand our technology portfolio to more effectively enable a transition to a net zero future and do it in a very deliberate way that creates tangible value for all our stakeholders.

Caroline, what are your first impressions moving to an executive role with Ceres? And, Mark you have been here 16 years now, what keeps you interested?

CH I had been on the Board of Ceres for three years so I was already familiar with the business and when the opportunity came up to join the team full time, I couldn't resist. It's a very exciting company, and you would have to live under a rock not to realise that right now we need technologies like Ceres', to solve the climate crisis. When you're an engineer, having the opportunity to work first hand on these valuable problems alongside a brilliant team is so exciting. While we have many challenges ahead, I am now in a position to have a greater impact on our mission to develop clean energy for a clean world.

MS I've always been an evangelist for the power of engineering and science to change our world and reimagine it as a better, cleaner, more efficient future. The opportunity, the need, and our capability, to do that has never been greater and the big difference today is I'm not the only one who thinks so! What we've been working on is now viewed by really credible, global partners as the leading technology in this space – that is hugely inspiring and only raises aspirations for the impact I think we, as a team, can achieve. That's pretty inspiring, let alone "interesting".

Mark Selby
Chief Innovation Officer

What do you view as the biggest opportunities for Ceres?

MS The world is starting to realise that there are some parts of the economy that are really hard to decarbonise. We and our partners know that the Ceres technology is well-suited to that, and highly differentiated in a whole range of those big problem areas, whether that is marine decarbonisation with green fuels or the production of green ammonia and steel, these opportunities are many, broad and valuable.

CH Absolutely, you can have the best technology in the world, but the biggest impact will come through the ability to commercialise and scale a technology such as ours. Part of my job is to optimise our technology to make it the most efficient and cost-effective way to decarbonise our energy system, and in particular those hard-to-abate sectors. We don't want to be a generic solution; we are focusing our efforts on optimising the technology for where it is best suited.

How important is it for our partners that we remain innovative?

MS When a licensee cements a partnership with Ceres, staying at the leading edge of our technology is ultimately what they buy. A licence isn't a static thing that comes off the shelf, that's only a starting point; the relationship is based on Ceres developing technology and embedding it with our partners to ensure they stay ahead of their competitors and in return they commit to invest and to deploy it broadly.

CH Innovation is fundamental to our partnerships. Partners are relying on us to do the deep technology innovation, to continuously improve performance of our core cells, so that it becomes increasingly economical to deploy this clean technology at scale and pace across different applications and markets.

How does digitalisation play a role in helping us to innovate faster?

CH The gold standard for any commercial products is that they work for ten years or more in operation, and as innovators of our technology, we cannot afford to wait around for ten years to get full validation before we roll out new and upgraded technologies. It is crucial that we develop trusted digital twins, or models, to give us faster insights into our performance, allowing us to predict with reliable accuracy how it will perform under a wide range of operating conditions. To do this well, we are integrating our infrastructure to capture data across every aspect of the development, manufacturing and running of our technology, so that we can continuously update and improve our digital twins and drive innovation faster and across wider applications of the technology.

Why now for Ceres Radar?

CH We are a growing company with a bold purpose. As we mature, we need to think about our long-term future, and start scanning the horizon and planting shoots for the next branches of technology that could solve big problems. They need to be unique and valuable and fit with Ceres' approach of licensing technology to global partners.

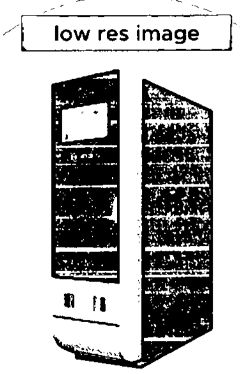
MS "Now" is always the right time to make the world better and we have a great team and great technology to deliver on this ambition. It's important to recognise that the technologies required for clean energy for a clean world are broader than those we have today. The ones we have today are now at the deployment phase with our partners which is a huge, exciting, milestone and we will continue to grow their application, geographic reach and performance. But beyond that, we have developed great capabilities to get technology out of the lab and into the world, changing it.

What other technologies do you see having an interesting role in the energy transition?

MS As with all predictions, the only thing I'm sure of is that we will be, at least in part, wrong! However, I think there are three things that are crystal clear to me: first a lot of our primary energy is going to come from intermittent renewables and there are several consequences of that, which all create valuable opportunities from storage to grid reinforcement to electrifying things where energy is normally supplied as a chemical. The second, is that our chemicals in the broadest sense, can *no longer come from fossil fuels and so a bridge* between electrons and molecules is really important. What more can our technology do beyond simply creating hydrogen? Can we use it to synthesise higher-value chemicals or do it at lower cost or are there other adjacent technologies that make these products broader and more applicable? Thirdly, all zero-carbon futures are likely to be more expensive, at least during the transition, so there is a clear economic driver for efficiency. Due to the scale and the conservatism of the energy markets, change can take a long time. But the current situation of "needing" to change means that it is likely to come under pressure. We will look at these three classes of problems and, in conjunction with our capabilities, look to sow seeds of future value.

Hydrogen-ready technology for a net zero future

Together, Bosch and Ceres are combining their expertise in fuel cell technology to create highly efficient, scalable, fuel-flexible and environmentally friendly power generation systems for use in multiple applications.



Unique technology

Ceres has transferred its proprietary SOFC technology to Bosch, to develop a scalable system that generates very high-efficiency electricity at the point of use. The 10kW system achieves electrical efficiency of over 60% and capturing waste heat from the exhaust stream can provide hot water and heating, delivering a total efficiency > 85%.

Collaborating for impact

Bosch has been collaborating with Ceres since 2018 – and is planning to invest over €400 million and expand annual production capacity to ~200MW by 2024, enough to supply around 400,000 people with household electricity. The technology provides highly efficient electricity generation with near zero air pollutants when running on natural gas, hydrogen or a blend of these.

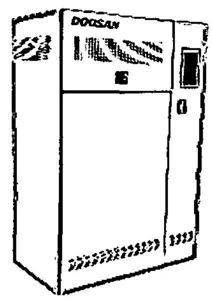
Applications

The fuel cell systems can be used in a scalable manner as small, decentralised power plants in cities, to supply power to data centres, to reinforce the electrical charging infrastructure or to supply energy in the industrial or commercial sector. Image right shows the system installed in Bamberg, providing power and heat to commercial units at the train station.

Working towards next-generation marine propulsion

Ceres' strategic collaboration with Doosan has expanded from development of a 10kW SOFC system through to a full licence agreement, and a commitment to build a pilot 50MW facility for the mass manufacture under licence of Ceres' fuel cell stacks in Korea by 2024.

low res image



Unique technology

Doosan has now completed the development of the 10kW SOFC system and is planning a soft launch of the product commercially on a small scale in 2022. The system, using two of Ceres' 5kW SOFC stacks, delivers highly efficient power generation, 40% greater than Doosan's existing PEM-based technology.

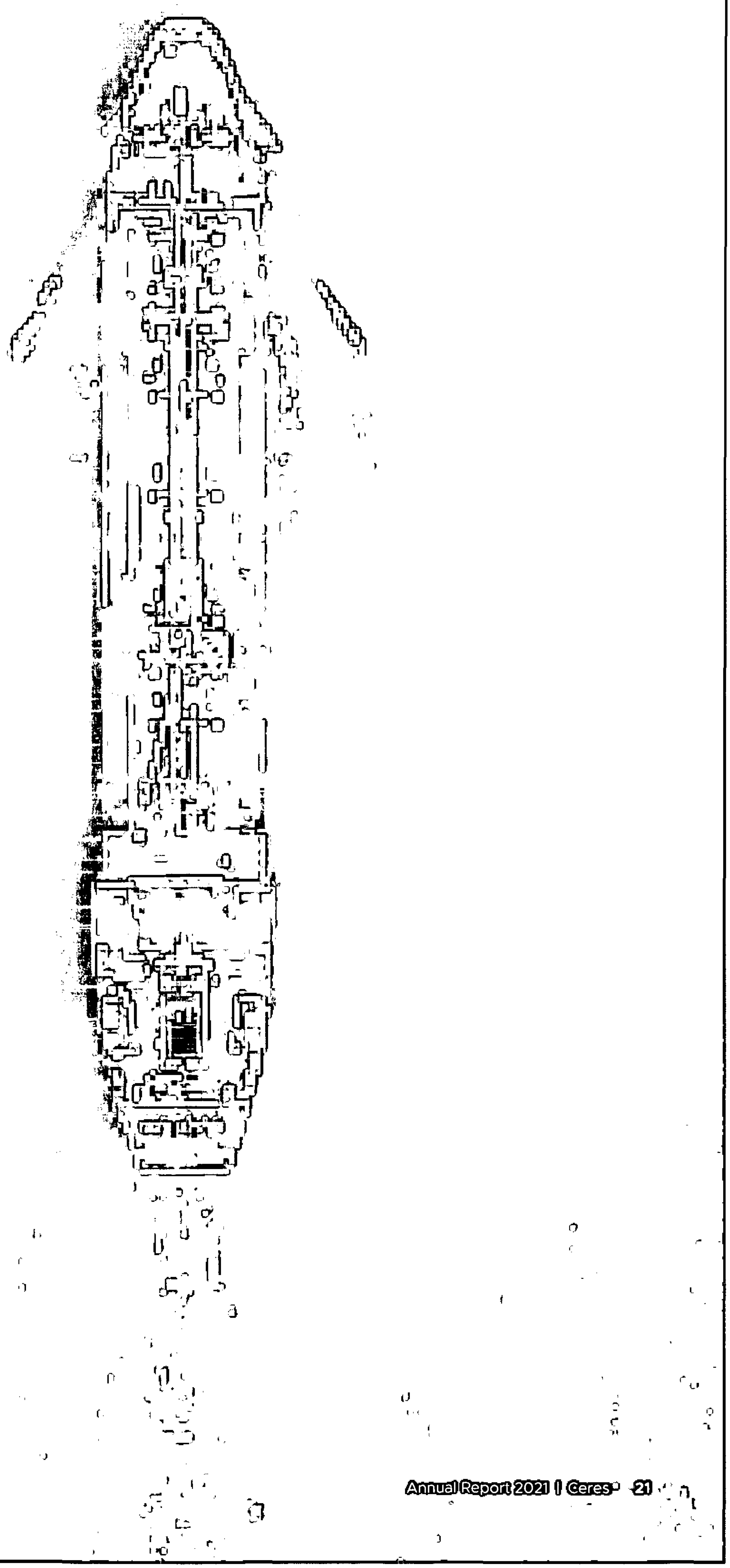
Collaborating for impact

In Korea, the fuel cell market for commercial buildings is expanding because of a combination of zero-energy building certification and mandatory renewable energy policy. Korea will be a leading market for hydrogen and fuel cells, and Ceres' collaboration with Doosan is another example of enabling the energy transition through embedding unique technology in the products of world-class companies.

Applications

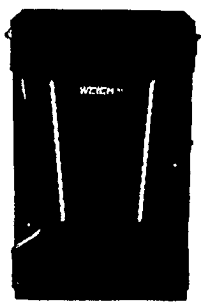
Doosan has secured a domestic supply chain and laid the foundations for growth beyond the 10kW system into higher power applications. South Korea is one of the biggest shipbuilding nations in the world, and Doosan has signed an MOU with the shipping division of Hyundai Heavy Industries, looking to apply Ceres' SOFC technology to auxiliary and even prime propulsion in ships.

Image (stock) – TBC



Collaborating to deliver clean energy technology in China

Weichai is both a significant commercial partner and a strategic investor in Ceres, investing over £100 million to acquire a 20% share of the business since the first long-term strategic agreements were signed in 2018.



Unique technology

Weichai is one of the world's leading automotive and industrial manufacturing companies and a key partner for Ceres. It is adopting SOFC technology for use in transportation and stationary applications, successfully demonstrating a 30kW range extender for electric buses with potential to move into higher power applications. These systems are powered by natural gas but can also run on hydrogen blends.

Collaborating for impact

As announced in February 2022, Ceres intends to form a joint venture with Weichai and Bosch for the Chinese market, providing a staged path to high-volume manufacturing potentially for buses, commercial vehicles and stationary applications in China. It represents an important step in Ceres' ambitions for the Chinese market and a critical part of growing global capacity for its technology.

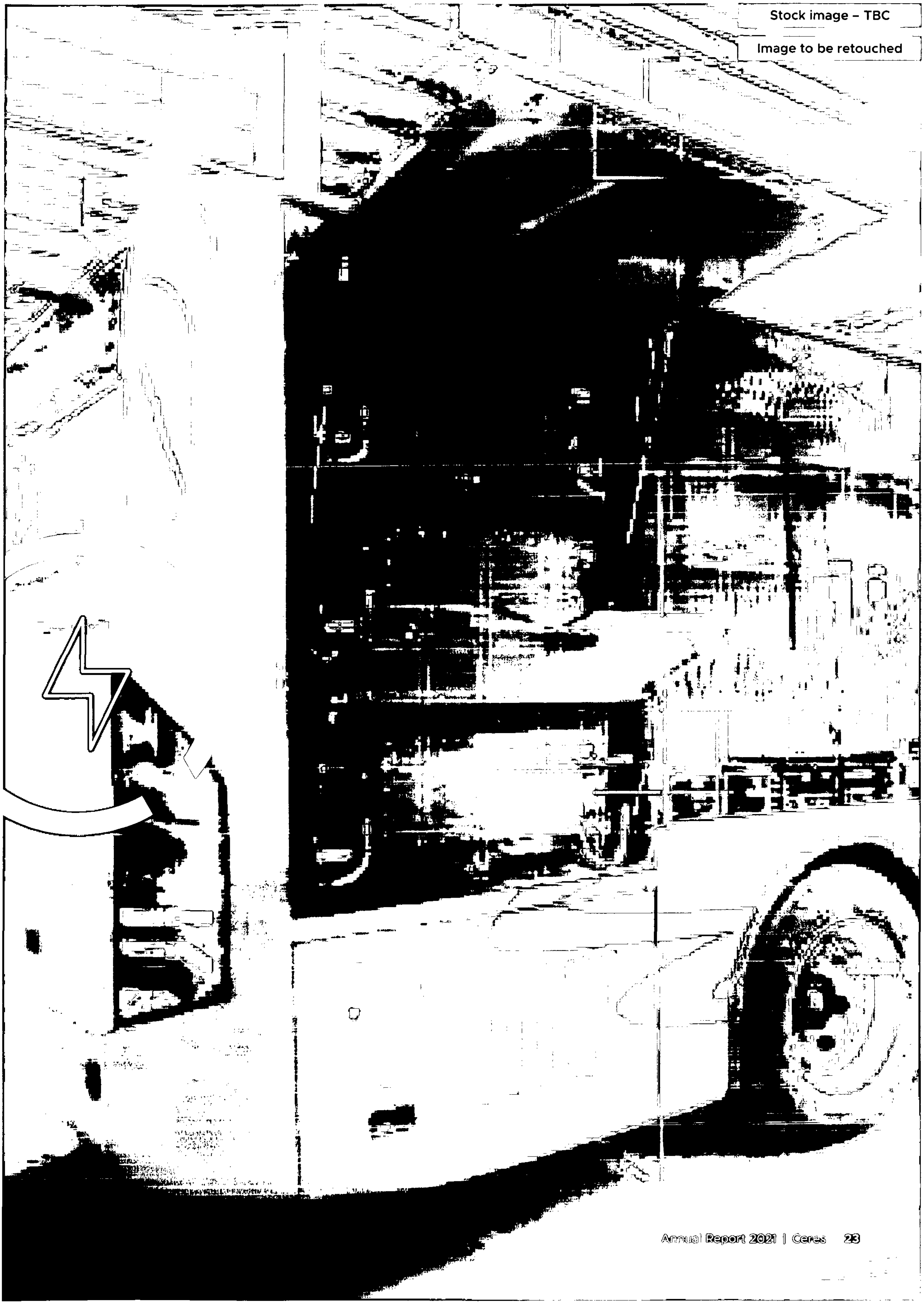
Applications

The joint development of a 30kW SOFC range extender, using compressed natural gas for electric buses, has progressed well with over 60,000km driven by the fleet whilst generating power.

A new programme has now commenced for a 30kW stationary power module, expanding the scope of our collaboration alongside transportation.

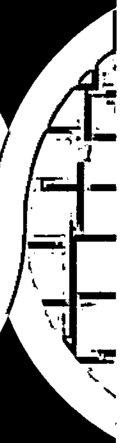
Stock image – TBC

Image to be retouched



Introducing Ceres Radar: our new accelerator platform

The launch of Ceres Radar allows us to leverage our great people and deep technical competence to deliver on our ambition to provide clean energy for a clean world. Radar's remit will be to identify opportunities that can make a real impact, developing technologies from early propositions through to deployment and commercialisation at pace and scale.



Why now?

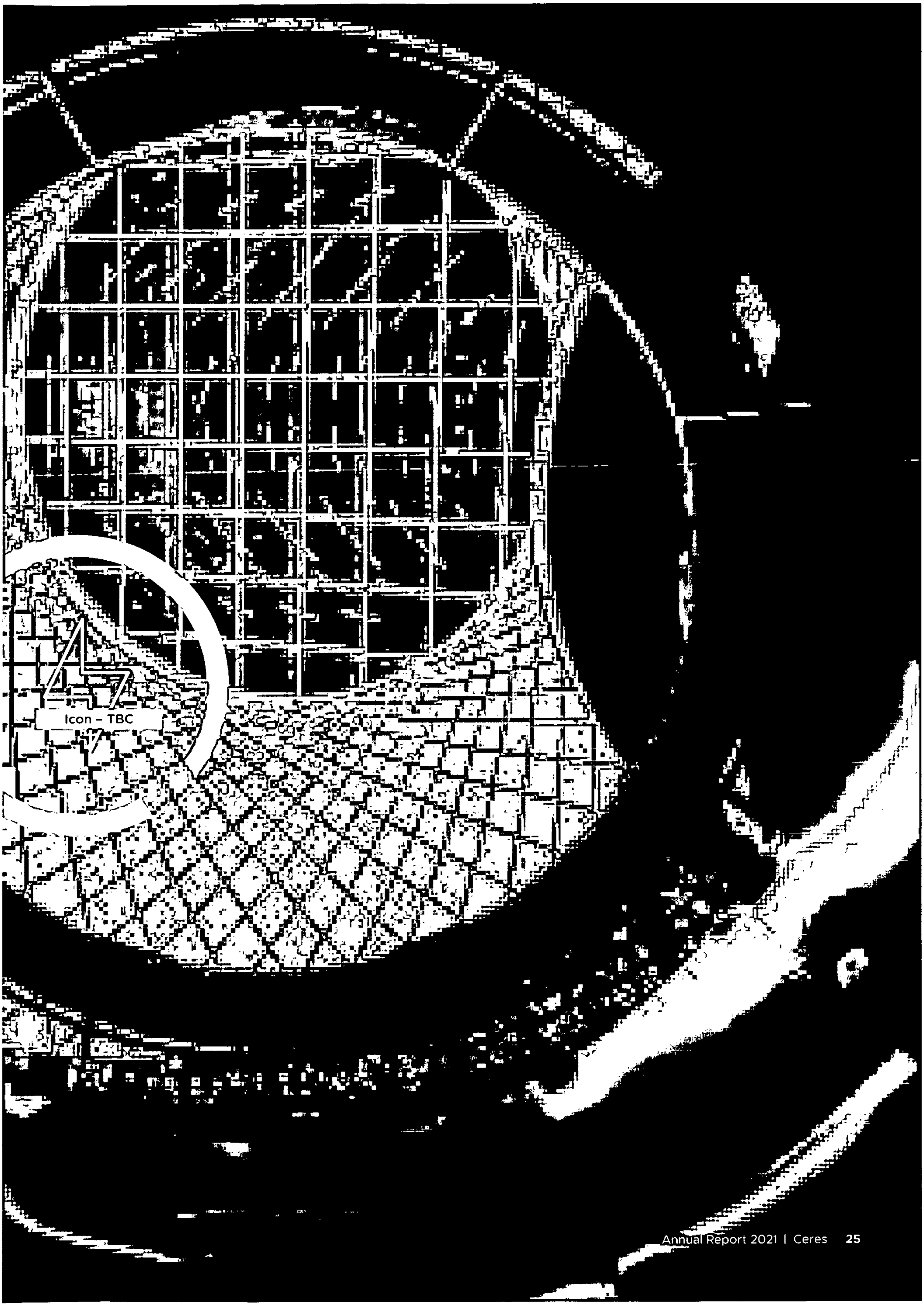
We recognise that technologies required to combat climate change are broader than those that exist today. In Ceres Radar, we combine pioneering spirit with technical precision, commercial savvy and our collaborative culture to get technology out of the lab and into the real world. Technology that is unique and valuable and fits with Ceres' approach of licensing technology to global partners.

Our vision for Radar

As the name 'Radar' reflects, when certain technologies emerge, they can change everything. We are a growing company with a bold purpose. As we mature, we have started to scan the horizon to plant shoots for the next sets of technology that could solve big problems and provide further growth for our long-term future.

First investment in RFC Power

RFC is an early-stage company with a strategy to develop the world's lowest-cost flow battery – a hybrid between a fuel cell and a battery, that decouples power from energy. Ceres aims to accelerate RFC's technology, sharing its capabilities in electrochemistry and device engineering in exchange for an 8.4% shareholding. We have a 12-month option to acquire the balance for up to £25 million.


Icon – TBC

Sustainability at Ceres

Ceres is a world-leading developer of power generation and hydrogen technologies. Tackling climate change is what drives us, both as a business, and for employees across our business – we are committed to enabling clean energy for a net zero world.

Our own technology can help accelerate the transition to a clean future, both as a means of converting fuels such as hydrogen, ammonia and other sustainable fuels into clean power, but also as a means of producing green hydrogen through electrolysis. We are already working with some of the world's largest engineering and technology companies, such as Bosch in Germany, Doosan in Korea and Weichai in China, to deploy our technology in systems and products that address climate change and air quality challenges for industry, data centres, transportation and everyday living. Our ambition is to enable the world to transition to cleaner more sustainable forms of energy and in doing so make big savings in carbon emissions as our partners scale up from the mid-2020s.

Alongside the role our technology plays in enabling the energy system to decarbonise, we also need to act sustainably in decarbonising our own business. This is small when compared to the impact our technology can have, but important because we are committed to being consistent with our values when it comes to climate change.

As we grow over the next few years our own emissions will inevitably increase through the investment in extra manufacturing and testing capacity. Nevertheless, we plan to reduce our carbon intensity – or emissions per £ of turnover.

In 2021, we are reporting on our Scopes 1, 2 and limited Scope 3 emissions, having engaged Ricardo Energy & Environment ("Ricardo") to undertake external verification as part of the Streamlined Energy and Carbon Reporting (SECR) process.

We are also working with Ricardo to establish a science-based pathway to reduce greenhouse gas emissions (GHGs) in line with the Science Based Target initiative's guidance. This will provide Ceres with a detailed understanding of all its Scopes 1, 2 and 3 emissions, a key milestone on our journey to achieve net zero. Further details will be published in our inaugural ESG Report due to be published this year.

The Ceres ESG Committee is Chaired by Phil Caldwell and its members include the Chief Operating Officer, General Counsel, People Director, Director of Investor and Corporate Communications and the Chair of the employee group, Connect. It meets at least quarterly, and regularly reports to the Plc Board. Going forward, Non-Executive Director Julia King will be supporting the Committee and providing valuable advice on its position and progress.

As a technology licensing business, we achieve the greatest environmental benefit through partners adopting and deploying our technology at scale and pace. We cannot ignore that scaling technology comes with an environmental cost, but with a dedicated team of scientists and engineers, alongside world-leading industrial partners and investors focused on creating a cleaner energy future for all, the final effect of Ceres' technology will outweigh the initial R&D and factory scaling investment within a few years.

Here are some of the key components of our reporting and direction over the coming months

Streamlined Energy and Carbon Reporting (SECR)

The ESG Committee has implemented the first phase of our SECR disclosures on carbon emissions as set out in this report. We are working on a detailed picture of our full Scopes 1, 2 and 3 emissions with the support of Ricardo.

Science Based Target initiative (SBTi)

To establish a science-based pathway to reduce greenhouse gas emissions (GHGs) in line with the Science Based Target initiative's guidance, Ceres engaged Ricardo Energy & Environment in 2021. The full report and analysis to establish our carbon reduction pathway to 2040 will be published in due course.

Task Force for Climate-related Financial Disclosures (TCFD)

Ceres has disclosed the intention to transition from its UK AIM listing to a Premium Listing on the Main Market of the London Stock Exchange, falling under the Financial Conduct Authority requirements for TCFD. We are assessing our readiness and preparing for this next step.

Aligning to the Sustainability Accounting Standards Board (SASB) framework

Ceres is using SASB guidance on the disclosure of financially material sustainability measures, refining and adapting the metrics to align with our business.

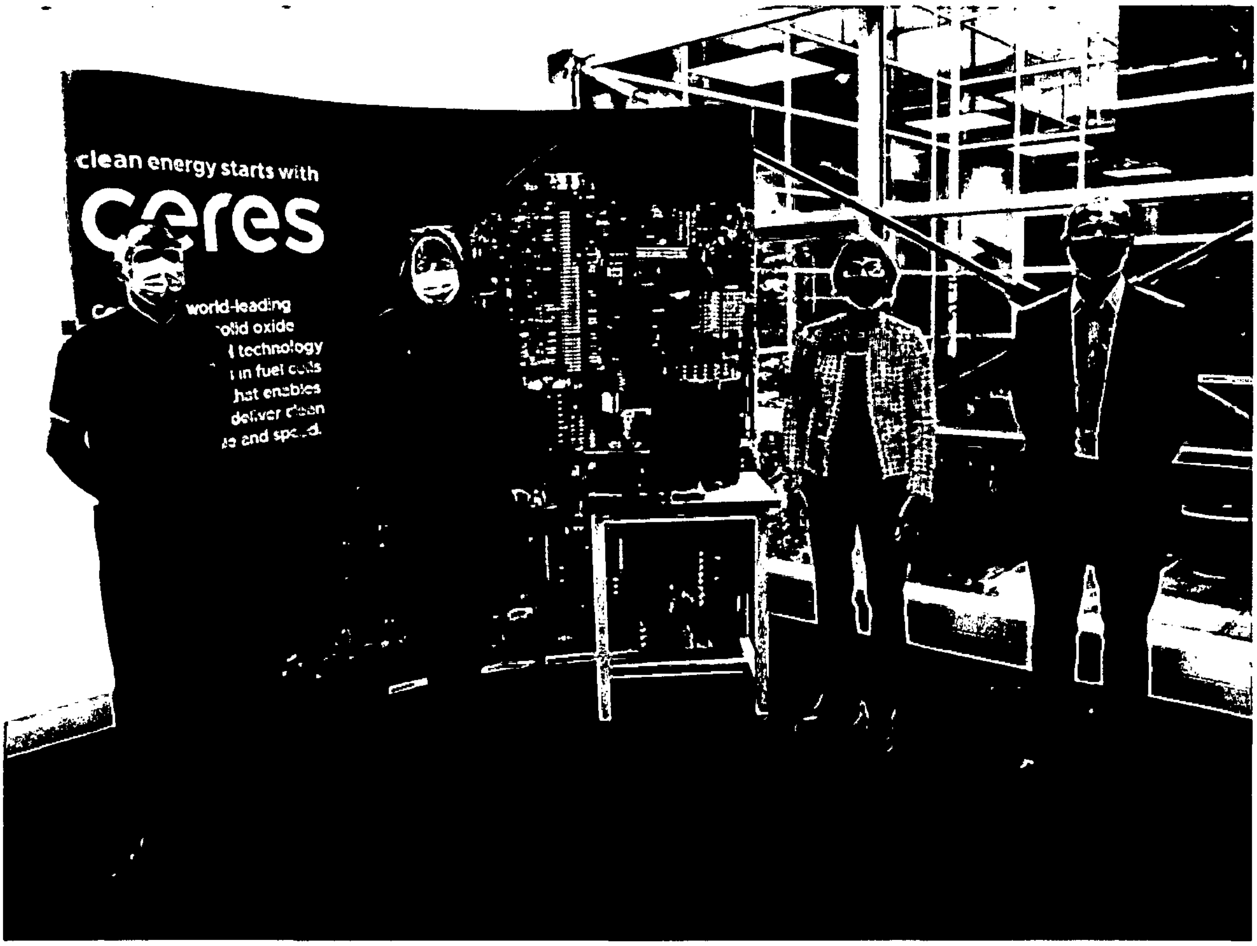
Materiality matrix

Ceres conducted a materiality analysis in summer 2021 to support, appraise and align the economic, social and environmental issues that are most important to our business and our stakeholders.

See our materiality matrix on page 30 for details.

ISO 9001 Certification

Ceres' Quality Management System is certified to ISO9001:2015. Certificate number FS 738105. The defined scope is 'The design, manufacture and supply of SteelCell fuel cells and stacks for use in the transport, commercial, data centre and residential markets'. ISO 14001 (Environmental Management) will follow this year.



Above
The Rt Hon Anne-Marie Trevelyan MP, The Secretary of State of International Trade, visits Ceres' Redhill facility to discuss job creation and the transfer of UK clean energy technology under licence to global partners.

Social and governance disclosures

Operating sustainably is not simply about preserving and improving the environment in which we live, but also about ensuring that we make a positive societal contribution and maintain strong governance standards - for the benefit of our stakeholders. To read more on Ceres' approach to Governance, please refer to the report starting on page 41.

We strive to create a positive work environment for our people, helping to ensure wellbeing across the Company. Ceres is guided by three core principles in our relationships with each other and our partners, where we:

- Conduct our business in a socially responsible manner, contribute to the communities in which we operate and respect the needs of our employees and stakeholders.
- Encourage diversity and equal opportunity for all people in relation to recruitment, selection and career development. *We now have 42 different nationalities across our workforce.*
- Respect human rights and do not tolerate modern slavery in our business or supply chain.

Our Connect employee group plays an important role in supporting and safeguarding our people, for example this year Connect is undertaking a specific project on diversity, equality and inclusion with the support of an external consultant. To date Ceres has used dip surveys, to provide feedback and guidance on certain aspects of our Company and approach. With the growth of the team, we will be using Group-wide employee engagement going forward, starting with a Gallup 12 Engagement Survey in June 2022.

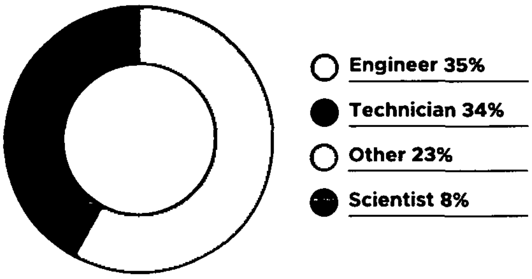
Share options are used as part of long-term incentivisation to retain employees most critical to the business. In addition, we also have a Sharesave share plan which allows employees to buy Ceres shares at a discount to the market. In 2021, we had participation from 64% of our workforce and recently received the ProShare award for the 'Most Effective Communication of an Employee Share Plan: Up to 500 employees'.

In 2021, we rolled out the Ceres Academy - designed around our core purpose, strategy and values - providing a range of onboarding, general e-learning material, and three tailored high-potential leadership development programmes. We have also expanded our graduate and intern programmes, and grown our involvement in STEM activities led by our STEM ambassadors. In September we launched, in collaboration with STEM Learning UK, REIMAGINE, a science animation competition for secondary schools in the southeast of England. The aim is to inspire the next generation of innovators and creatives to think about the global climate challenge and to bring their own creativity to tackling the mission for net zero. In an industry that tends not to attract many females, we are delighted to have five incredible women from across science and engineering as our judging panel for this year's competition. The final awards will be held in June at the Science Museum in London.

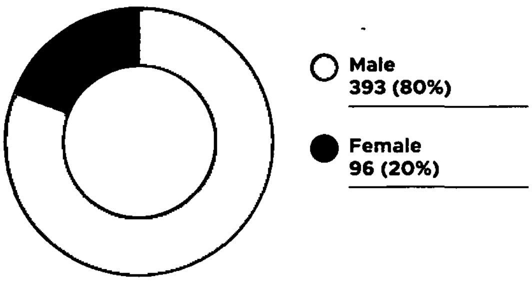
We are pleased to report that we have also continued to improve our gender diversity, with 20% of Ceres roles being held by women as at 31 December 2021, compared to 17% last year, against a UK average in engineering of 15%. Our Gender Pay Gap report can be viewed on the Ceres website.

Above
Ceres' employee group, Connect.

Split by roles



Gender split



Health and safety

Ceres is committed to ensuring the health and safety of everyone who works for the Company and also of everyone who may come in contact with its activities including visitors, clients, contractors, and the general public.

The Ceres health and safety team is present and visible across both UK sites and is instrumental in guiding the process of completing and reviewing Risk Assessments and CoSHH assessments on an ongoing basis. Accidents, incidents, near misses and safety improvements are recorded electronically through our HSE Issue Reporting System. Weekly safety reports are provided to the Executive Management for review and both UK sites are subject to monthly Safety Audits. Health and safety is a standing agenda item at weekly delivery meetings, every All Hands (monthly all Company meeting), and for meetings of the Board of Directors.

It is hard to think of the ways that the pandemic has not affected our lives over the last two years. The health, safety and welfare of all employees has remained our priority throughout this period and effective systems, plans and training have ensured that all risks are properly assessed and controlled, so far as is reasonably practicable.

Summary of our 2021 carbon reporting and planned activity for 2022

Ceres' fuel cell technology enables up to a 45% reduction in CO_2 emissions compared to the carbon emissions produced by consuming electricity from the centralised grid in an average G20 country with 2018 levels of renewables. In 2021, Ceres increased its own manufacturing capacity to 3MW, which if run continuously would offset over 4,500 tonnes of CO_2 a year. With partners now targeting capacity of 250MW by 2024 and growth beyond, we have a clear line of sight of the positive impact of our technology.

There is more to do to evaluate our carbon footprint and we are working closely with Ricardo to bring together the results of our Science Based Target-led initiative (SBTi) project, which utilises a top down carbon estimation approach, and the bottom up life cycle assessment of our 1kW and 5kW fuel cell stacks, alongside improved reporting methodologies, to refine our Scope 3 emissions calculations. Ricardo will complete an SECR verification of our full Scope 3 carbon emissions for 2021 on the conclusion of this work.

Streamlined Energy and Carbon Reporting (SECR) for the 12 months to December

		2020		2021	
Disclosure	**Description**	**Emissions[4]**	**Energy**	**Emissions[4]**	**Energy**
Scope 1 Direct emissions	Fuel used in transport and consumption of natural gas[1]	368 tonnes CO_2e	1,988,842 kWh	441 tonnes CO_2e	2,168,437 kWh
Scope 2 Indirect emissions	Electricity purchased and used for operations[2]	861 tonnes CO_2e	4,901,240 kWh	0 tonnes CO_2e[5]	5,481,294 kWh
Scope 3 Other indirect emissions	Fuel used by company-funded staff vehicles[3]	14 tonnes CO_2e	59,185 kWh	12 tonnes CO_2e	50,014 kWh
Total		1,243 tonnes CO_2e	6,949,267 kWh	453 tonnes CO_2e	7,699,745 kWh
Carbon intensity	Total carbon emissions for Scope 1, 2 & 3 per £100k revenue	5.7 tonnes CO_2e/£100k revenue		1.5 tonnes CO_2e/£100k revenue	

Boundary condition explanation:
1. Other gas use and emissions from test stands and international travel excluded.
2. From October 2020, 100% of our electricity has been sourced from zero-carbon sources.
3. Upstream supply chain and downstream in-use emissions excluded.
4. CO_2e calculated from fuel used in company vehicles, electricity purchased for ongoing operations and natural gas consumed for buildings and testing, converted to CO_2e using government-approved conversion factors.
5. Emissions calculated using the market-based method (per note 3. above). For comparison, had electricity not been sourced from zero-carbon sources, and the location-based method applied, the equivalent value would have been 1,164 tonnes CO_2e.

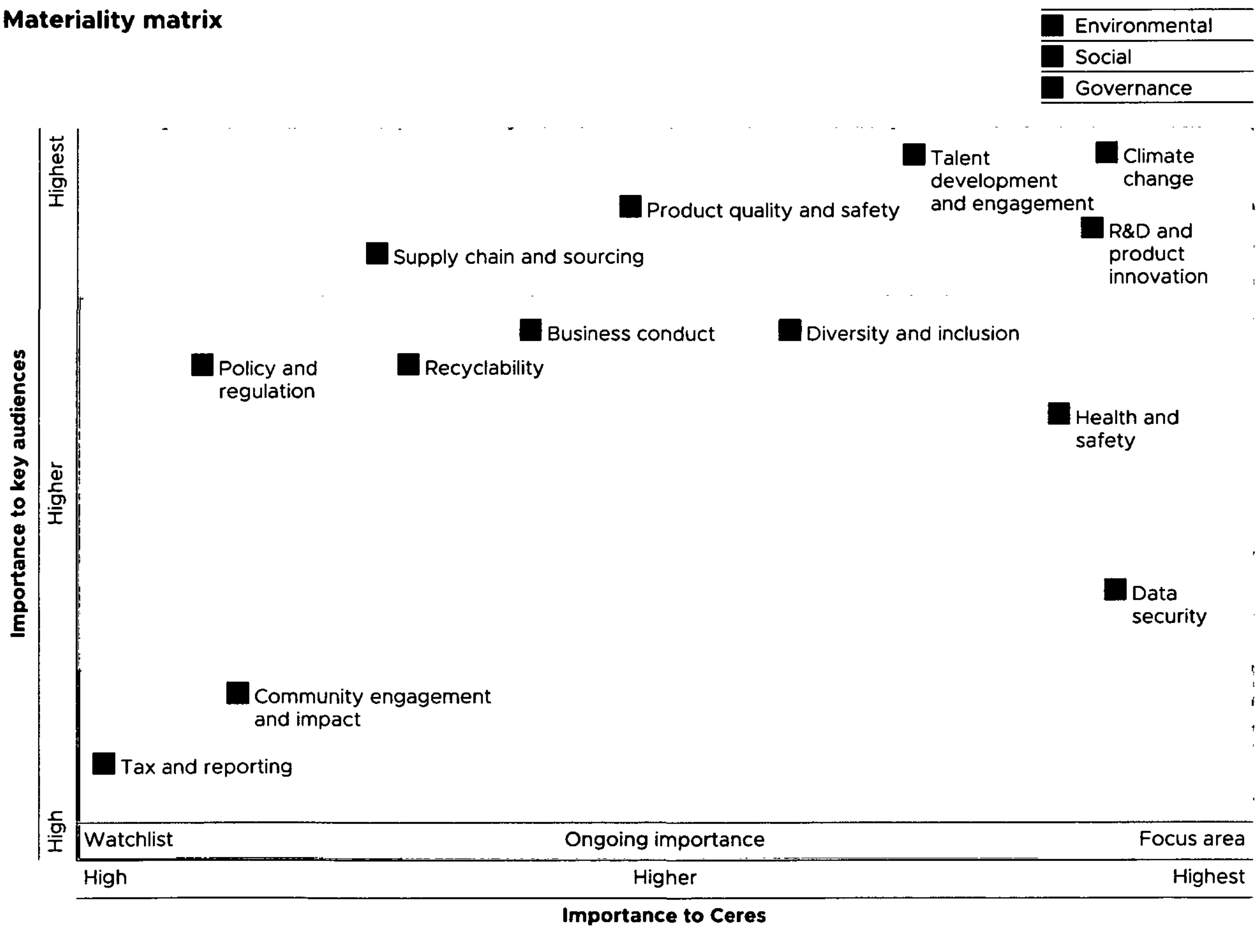
Our 2021 materiality assessment

We know that the world is ever changing, and that Ceres' purpose sits right at the centre of the low-carbon transition; however we must continue to ensure that our activities are meeting the expectations of our stakeholders, customers and the communities in which we work. To support this, we undertook a materiality assessment in 2021 with our senior management team and ESG Committee, working in partnership with an independent third party to ensure integrity, a robust process and impartiality in the verification process.

This process has supported the verification of our business strategy to ensure wider sustainability issues were incorporated into the risks and opportunities under consideration across the Ceres business. This materiality assessment will be used to support the Ceres management team to prioritise activities for the business, to ensure the areas on which we focus are most material to our business and our stakeholders as we work towards tangibly contributing to a healthy and more sustainable planet and a range of the UN Sustainable Development Goals.

The first Ceres materiality matrix is included here, with the top 13 business issues included and ranked against their importance to Ceres and their importance to our aggregated stakeholders. Already this information is being reflected in our decision-making, with actions relating to R&D Product and Innovation being the introduction of Ceres Radar and the expansion of test capability through our new relationship with Horiba Mira. We will continue to review, manage and reflect changing stakeholder attitudes towards our business through our management team and ESG Committee, along with updating our materiality analysis each year to ensure we remain committed and focused in our aim to create a net-positive impact for our shareholders, partners, communities and the planet.

Materiality matrix



Our global environmental impact aligns to the following SDGs:

United Nations Sustainable Development Goals

Ceres' technology can provide real and tangible benefits globally and make a significant contribution to sustainable development. This is a motivating goal that inspires us to continually align our business strategy with making the world a better place through the provision of clean energy for a clean world.

A critical part of our guidance comes from the United Nations Sustainable Development Goals (SDGs), which encompass poverty, inequality, climate, environmental degradation, prosperity, peace and justice. These goals, which are increasingly shared by investors and corporates, frame our thinking on how we can play our part in creating a better and fairer world by the UN's target date of 2030. Our business purpose and inclusive culture allow us to contribute to a number of primary SDGs, where we believe we can really make a positive difference.

	2030 Goal	Ceres activities
Affordable and clean energy	– Increase substantially the share of renewable energy in the global energy mix – Double the global rate of improvement in energy efficiency – Enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	Ceres aims to play a central role in the global energy transition to affordable clean power. We are passionate about our ground-breaking technology and ensuring it is available to all. Ceres has now signed agreements with leading global partners seeking to scale up to hundreds of megawatts of annual SOFC power generation capability, and we are expanding our technology into electrolysis for the creation of green hydrogen.
Industry, innovation and infrastructure	– Promote inclusive and sustainable industrialisation – Upgrade infrastructure and retrofit industries to make them sustainable – Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries	Ceres' hydrogen-ready technology provides electrical efficiency of 60% with zero air pollutants. Even running on today's natural gas infrastructure, the system emits no SOx, NOx or particulates, and delivers power at a 30% carbon reduction when compared to the combustion engine, supporting a clean air future.
Sustainable cities and communities	– Provide access to safe, affordable, accessible and sustainable transport systems for all	Our vision is to help to provide secure, clean, affordable energy to the next generation of cities within transportation, commercial and data centre requirements. Ceres' partner Bosch is now scaling this technology, aiming for a production capacity of 200MW per year in Germany from 2024, enough to supply around 400,000 people with household electricity.
Responsible production and consumption	– Achieve the sustainable management and efficient use of natural resources – Achieve the environmentally sound management of chemicals and all wastes throughout their life cycle	By harnessing the considerable efficiency gains of our technology, we are able to cut the energy consumption across multiple applications such as data centres, EV recharging, distributed power and heavy transportation, and so reduce GHG emissions with high levels of recyclability inherent in the core Ceres SOFC architecture. We are working across our supply chain to ensure sustainable sourcing and operating practices are employed.
Climate action	– Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	We are monitoring our own energy consumption as well as carbon emissions of our upstream and downstream activities, while continually ensuring our newest innovations minimise the impact of energy generation.

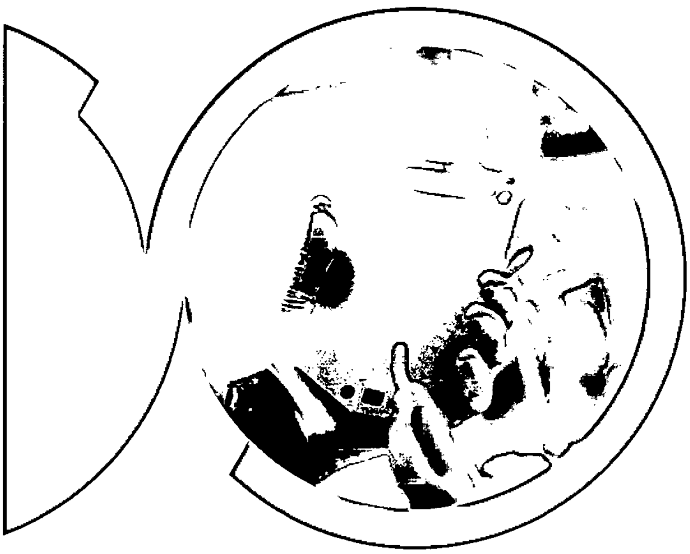
Board engagement with stakeholders

Statement by the Directors in performance of their duties in accordance with s172(1) Companies Act 2006

This statement sets out how the Board has had regard to the matters set out in s172(1) Companies Act 2006 ("s172") when performing its duties under s172 for the year ended 31 December 2021.

The Board is responsible for creating long-term sustainable value for the Company's shareholders. It acknowledges the importance of engaging with and considering the interests of the Company's wider stakeholders when making decisions, as the Company's success is linked closely with the wellbeing and success of all stakeholders. The Directors consider that they have acted in the way that they judge, in good faith, would be most likely to promote the success of the Company for the benefit of its members as a whole. In doing so, they consider that they have borne in mind the interests of key stakeholder groups, identified as being those most likely to be affected by the principal decisions of the Board, which include employees, suppliers and partners and the impact of the Company's operations on the community and environment. The Directors acknowledge the importance of high standards of business conduct.

People throughout the Company, including the Board, engage with and consider the interests of the Company's stakeholders when making decisions (more details can be found on page 33). We set out the stakeholders that we consider key, the issues that we consider matter to them, and how and why we engage with them:



Shareholders

Key issues

To ensure shareholders understand and have confidence in the Company's strategy and performance, purpose and culture. To build strong relationships with our shareholders and understand the issues that are important to them.

How the Board engages

- Annual General Meeting
- Direct meetings and calls with the Executive Directors, and as necessary with the Chairman and Senior Independent Director
- Capital Markets days
- Our website
- The Annual Report and results announcements and presentations
- Meeting analysts and getting feedback from our brokers
- RNS and RNS Reach announcements

Outcome

- We aim to build a purposeful, successful and sustainable business. We are a leading ESG company, having been awarded the Green Economy Mark by the London Stock Exchange, and as reflected in our ESG & Sustainability policy.
- We raised net £179m through an oversubscribed fundraise, to extend the Group's strategy to include SOEC as well as additional markets in SOFC.
- Our communications to shareholders reflect our integrity, culture, values and behaviours and we are clear on our planned strategy and achievement against it.
- We apply best practice governance where appropriate and have gone beyond the disclosures necessary in this Annual Report to more closely align with disclosures required on the Main Market.

Suppliers and partners

Key issues

To ensure the Company, its partners and our supply chain are aligned to the achievement of the Company's strategy, ensuring all parties understand and benefit. To create an ecosystem which will aid the achievement of our goals.

How the Board engages

- Through regular engagement across the Company including our commercial operations and technical people and the Chairman and CEO, where relevant
- We have Company representatives in all the countries where our key partners are located

Outcome

- Our strategy is transparent to our suppliers and partners, promoting alignment with them.
- Ceres aims to be an ethical business which deals fairly with customers and suppliers, as per our Code of Conduct and Business Ethics Policy. We pay our suppliers on time and work with them on fair terms.
- We prohibit bribery and corruption and comply with all laws, rules and regulations including the Bribery Act 2010.

Employees

Key issues

To attract, develop, incentivise and retain the best people to help us achieve our strategy and vision, and create a strong and supportive culture.

How the Board engages

- Attending All Hands meetings and all-employee off-site events where possible
- New joiner lunch sessions with CEO
- Offer share options to employees
- Sought feedback from Connect, Ceres' employee working group, on working arrangements during Covid-19

Outcome

- Strong alignment with our strategy and culture, including employee recognition awards.
- Strong communications including an employee newsletter.
- Introduced a new Equality and Diversity Policy and health and wellbeing initiatives.
- We offer competitive, fair and equitable remuneration and benefits through our remuneration policy, including LTIP participation and an employee Sharesave scheme.
- Rolled out Ceres Academy and began our Senior Leader development programme. These offer talent management and promote opportunities for career progression and development.

Wider society

Key issues

To generate social and environmental impact, which is part of the Company's core purpose.

How the Board engages

- Through our website and public reporting
- By improving ESG reporting in our Annual Report

Outcome

- Our strategy is to develop clean energy for a clean world and we aim to build a purposeful, successful and sustainable business with positive societal impact.
- Our Equality and Diversity Policy promotes equal opportunities and does not stand for bullying or harassment.
- We are setting up a Charitable and Political Contributions Policy where we can give back to the societies where we operate, i.e. those aligned with the Group's purpose or for the benefit of local communities. Ceres does not make political contributions.

Principal decisions during the year

As stated on page 49, the principal decisions of the Board during the year related to the following:

Approved raising net £179 million capital through the issue of new equity to expand our strategy in SOEC and support innovation and new markets in SOFC

The Board took into account the significant long-term strategic value this would bring to all stakeholders by investing to open up new markets to Ceres. This includes the opportunities to our people, partners and suppliers with the associated growth of the business. The Board also opened the fundraise up to a wide group of shareholders including retail by using PrimaryBid.

Approved the acquisition of 8.4% of RFC Power and the option to acquire the remaining shares

The Board considered the impact of this agreement and potential acquisition on the business and our people, particularly on any potential integration into the business, and on the wider strategic value to our shareholders.

Approved Horiba Mira as our multi-year test partner to help expand our test capacity and capability

The Board considered how best to expand and improve Ceres' internal test capability at pace, primarily considering our strategy and the need to prove the technology in new and different fields as we expand into them. It also considered the impact of this outsourcing on our people, noting this decision enables growth of the Group.

Strengthened the Board

We have added greater expertise with the appointment of new Non-Executive Directors, which is relevant to Ceres now and as we grow our operations and licensing partnerships to deliver climate change solutions.

Approved the Ceres Academy for development of our executives, senior leadership team and the wider organisation

The Board set up the Ceres Academy to enable our people to learn, grow and thrive at Ceres. It is set up to help with succession planning and offers specific development programmes and capability development plans to support people on their career path. Although the Academy offers different programmes for all our people, it is targeted at developing our future leaders.

Board approval

The Strategic Report as set out on pages 2 to 40 has been approved by the Board.

On behalf of the Board

Eric Lakin
Chief Financial Officer

Strong top-line growth and balance sheet strengthened to fund future growth

£31.7m
revenue and other income in 2021 (CY2020: £22.0m)

£34.9m
investment in the future[1] in 2021 (CY2020: £26.0m)

£250m
cash and investments at 31 December 2021 (2020: £110m)

Eric Lakin
Chief Financial Officer

> "The Group is well positioned to address the broadening opportunities we see across fuel cells, electrolysis and other clean energy technology solutions.

Introduction

2021 was another successful year for Ceres, with strong top-line growth arising from continued engagement with our strategic partners. In March 2021, Ceres completed a successful equity fundraise of net £179 million in which our partners Weichai and Bosch both maintained their equity stakes in the Company, underpinning their continued commitment to their relationships. Furthermore, as announced in February 2022, both of these partners demonstrated their ambition to collaborate with Ceres and access the Chinese markets by signing Heads of Terms to establish a three-way Systems Joint Venture in China, along with a new Stack Joint Venture between Bosch and Weichai to manufacture stacks in country.

We have made significant investment in the business during 2021 to drive innovation and support future growth in areas such as prototype and test capacity, energy materials, product and systems engineering and future fuels capabilities, as well as expansion into solid oxide electrolyser cell (SOEC) development, which is a significant step. Supported by the fundraise, I expect this investment to accelerate in 2022 as we set the Group up for success in what we expect to be rapidly expanding market opportunities: broadening the addressable markets in the solid oxide fuel cell (SOFC) business, in addition to entering the electrolyser market. These investments also enable Ceres to de-risk areas of the business that could otherwise become capacity constrained within this high-growth environment.

Notwithstanding this wider range of activities, we retain a focus on executing our current contracts and supporting our strategic partners to access the various end markets for stationary power and transportation applications around the world.

Reporting on the results

The Group saw strong top-line growth of 44% in 2021 compared to the previous 12-month period, with revenues and other income of £31.7 million (CY2020: £22.0 million and 18-month period to 31 December 2020: £33.0 million). All revenue in 2021 related to the fuel cell business and the growth was driven by licence fee income, principally from our partner Doosan. Gross margins remained high at 66% (CY2020 and 18-month period to 31 December 2020: 67%), driven by a high proportion of licence fee revenue recognised in the year.

Order book and pipeline[2] fell to £79.8 million at 31 December 2021 from £98.7 million at 31 December 2020; much of this decrease was a result of recognising licence fees from the Doosan contract during the year. Going forwards, the order book and pipeline will continue to vary depending on the timing of contracts won and revenue earned from them.

Segmental reporting: Fuel cells and electrolysis

During the year we began to report SOEC as a separate segment to the SOFC business as we started our SOEC activities in earnest. This is in line with internal reporting, which we have done to separate the progress in both parts of the business, that are at different stages of commercialisation.

The SOFC part of the business, which had strong sales and gross profit growth of £9.1 million and £5.8 million respectively, compared to CY2020, reduced its adjusted EBITDA[3] loss by £3.8 million to £4.5 million (CY2020: £8.3 million). There will be continued investment in SOFC to support future expansion, and so the level of losses or future profitability of this part of the business will continue to be highly influenced by the level of SOFC licence fee revenue recognised in a given period until royalty revenue streams become material.

Our SOEC business showed an adjusted EBITDA[3] loss of £12.2 million (CY2020: £1.6 million), reflecting research and development activities as well as the initial costs of setting up the 1MW demonstration unit.

Focused investment for the future

The underlying theme across both segments of the business in 2021 was investments to drive innovation and future growth, including capital investments and strategic resources. We have put focus on building the commercial, engineering, test and energy materials science teams. Overall, our employee base grew as planned, with 489 people employed at 31 December 2021 compared to 325 people as at 31 December 2020. Overall research and development costs increased by 38% and £6.3 million compared to CY2020.

Capitalised development in the year, which only relates to ongoing SOFC development, increased to £4.6 million compared to £2.7 million for CY2020 and we hold net £8.5 million capitalised to date. Amortisation of this to the income statement increased, as expected, to £1.0 million from £0.2 million in the 18-month period to 31 December 2020.

Our investment in property, plant and machinery of £7.4 million (CY2020: £6.7 million) was principally on manufacturing improvement and capacity expansion, as well as expanding our test infrastructure. This continued investment also resulted in increased depreciation of £4.8 million in 2021 compared to CY2020 of £3.6 million.

Going forward, we plan to accelerate growth of our test capability significantly over the coming year to support the expected growth of our partners, and also cater for additional market opportunities including SOEC and new SOFC applications such as marine and alternative fuels. We also intend to expand our manufacturing capacity for prototypes and demonstrators for both SOFC and SOEC products. Consequently, we expect our capital expenditure to increase significantly in 2022 from 2021 levels.

Overall, this "investment in the future" (R&D costs, capitalised development and capital expenditure) increased 34% to £34.9 million (CY2020: £26.0 million). The £34.9 million comprises £22.9 million in R&D (excluding depreciation, amortisation and share-based payments), £7.4 million in capital expenditure and £4.6 million in capitalised development. Of the £34.9 million, £10.7 million was investment in SOEC (CY2020: £1.3 million).

As a result of these investments and increased amortisation and depreciation, the Group reported an increased operating loss of £23.4 million in 2021, up from a loss of £14.8 million in CY2020 (£17.6 million in the 18-month period to 31 December 2020).

1. The Group defines investment in the future as being the total of the Group's R&D (excluding depreciation, amortisation and share-based payments), capitalised R&D and capital expenditure.
2. Order book refers to confirmed contracted revenue and other income while pipeline is contracted revenue and other income which management estimates is contingent upon options not under the control of Ceres.
3. See page 37 for the definition of Adjusted EBITDA, which is an Alternative Performance Measure.

Strong financial position: the foundation for continued progressive growth

The Group ended the year with a strong cash position of £250 million in cash and investments as at 31 December 2021 (31 December 2020: £110 million) reflecting the equity fundraise of £179 million during the year.

Equity free cash outflow (defined and reconciled to net cash from operating activities on page 37) was £32.0 million (CY2020: £11.8 million), being driven by net cash used in operating activities of £20.3 million, capital expenditure of £7.4 million, capitalised development of £4.6 million with the balance from interest payments and exchange rate movements. The net cash used in operating activities in the year was adversely impacted by a movement in net contract assets of £9.7 million due to timing differences between invoicing and recognising revenue on contracts.

Other significant movements in the balance sheet included inventories increasing to £3.1 million (31 December 2020: £2.1 million) due to increased activity at our manufacturing facility and trade and other payables reducing to £2.8 million (31 December 2020: £9.1 million) reflecting the payment of receipts received in December 2020 relating to the exercise of certain share options.

Financial outlook

I am confident about Ceres' future. Significant opportunities exist as the Group invests in innovative electrochemical technology and expands its relationships with international strategic partners to build a pioneering position in the global energy transition away from the dependency on hydrocarbons.

Strong top-line growth is expected to continue into 2022 and the phasing of revenue in the year will be materially influenced by the timing of the new China Joint Venture formation. We are planning to significantly increase our investments in R&D and capital investment in 2022 to drive Ceres' future growth including electrolysis and new application capabilities in line with our strategy. The Group is well positioned to address the broadening opportunities we see across fuel cells, electrolysis and other clean energy technology solutions. We continue to work with our partners to enable them to access the end markets in volume, as planned for 2024 and beyond.

I would like to thank Richard Preston, the previous CFO, for his stewardship of the Group over the past almost 14 years, and his invaluable support over the last few months during the handover period.

Eric Lakin
Chief Financial Officer

Non-GAAP Alternative Performance Measures (APMs)

The comparable audited period of accounts to the year ended 31 December 2021 is the 18-months ended 31 December 2020. Management has prepared comparative calendar year results to enable a more consistent like-for-like review of the trading performance of the business. The 2020 calendar year results (CY2020) are Alternative Performance Measures and the basis of preparation applied to these results is set out below. They are reconciled to the Group's Statutory IFRS Results on page 38.

Basis of preparation

The comparative CY2020 results have been derived from the audited IFRS results for the 18 months ended 31 December 2020 (as set out on pages 70 and 72), less the unaudited results for the six months ended 31 December 2019.

Consolidated statement of profit and loss

for the 12 months ended 31 December 2021 and 12 months ended 31 December 2020

Unaudited	CY2021 £'000	CY2020 £'000
Revenue	**30,776**	21,671
Cost of sales	**(10,427)**	(7,085)
Gross profit	**20,349**	14,586
Other operating income	**924**	276
Operating costs	**(44,703)**	(29,650)
Operating loss	**(23,430)**	(14,788)
Finance income	**438**	698
Finance expense	**(380)**	(434)
Loss before taxation	**(23,372)**	(14,524)
Taxation credit	**1,970**	1,353
Loss for the financial period	**(21,402)**	(13,171)
Adjusted EBITDA[1]	**(16,675)**	(9,955)

1. See page 37 for the definition of Adjusted EBITDA, which is an Alternative Performance Measure.

Segmental reporting: analysis of results between fuel cells and electrolysis

During the year we began to report SOEC as a separate segment to the SOFC business as we started our SOEC activities in earnest. The results of each part of the business are reported below, down to Adjusted EBITDA level.

	CY2021			CY2020		
	SOFC £'000	SOEC £'000	Total £'000	SOFC £'000	SOEC £'000	Total £'000
Revenue	**30,776**	–	**30,776**	21,671	–	21,671
Cost of sales	**(10,427)**	–	**(10,427)**	(7,085)	–	(7,085)
Gross profit	**20,349**	–	**20,349**	14,586	–	14,586
Other operating Income	**924**	–	**924**	276	–	276
Operating costs (Excluding adjusting items)	**(25,765)**	**(12,183)**	**(37,948)**	(23,174)	(1,643)	(24,817)
Adjusted EBITDA[1]	**(4,492)**	**(12,183)**	**(16,675)**	(8,312)	(1,643)	(9,955)

Consolidated cash flow statement

for the 12 months ended 31 December 2021 and 12 months ended 31 December 2020

Unaudited	CY2021 £'000	CY2020 £'000
Loss before income tax	**(23,372)**	(14,524)
Non-cash adjustments	**6,697**	4,732
Movements in working capital	**(6,745)**	5,075
Income tax received	**3,078**	2,460
Net cash used in operating activities	**(20,342)**	(2,257)
Investing activities		
Purchase of property, plant and equipment	**(7,377)**	(6,656)
Capitalised development expenditure	**(4,573)**	(2,719)
Decrease/(Increase) in long-term investments	**3,000**	(8,000)
Net increase in short-term investments	**(23,898)**	(29,231)
Finance income received	**438**	669
Net cash used in investing activities	**(32,410)**	(45,937)
Financing activities		
Proceeds from issuance of ordinary shares	**181,472**	50,249
Expenses from issuance of ordinary shares	**(2,572)**	(344)
Cash (paid)/received on behalf of employees on the sale of share options	**(7,490)**	7,490
Repayment of lease liabilities	**(405)**	(389)
Finance interest paid	**(316)**	(434)
Net cash generated from financing activities	**170,689**	56,572
Net increase in cash and cash equivalents	**117,937**	8,378
Exchange gains/(losses) on cash and cash equivalents	**563**	(29)
Cash and cash equivalents at beginning of year	**32,955**	24,606
Cash and cash equivalents at end of year	**151,455**	32,955
Short-term investments	**93,129**	69,231
Long-term investments	**5,000**	8,000
Cash, cash equivalents, short- and long-term investments	**249,584**	110,186

Reconciliation between operating loss and Adjusted EBITDA

Management believes that presenting Adjusted EBITDA loss allows for a more direct comparison of the Group's performance against its peers and provides a better understanding of the underlying performance of the Group by excluding non-recurring, irregular and one-off costs. The Group currently defines Adjusted EBITDA loss as the operating loss for the period excluding depreciation and amortisation charges, share-based payment charges, unrealised losses on forward contracts and exchange gains/losses.

	12 months ended 31 Dec 2021 CY2021 £'000	18 months ended 31 Dec 2020 £'000	12 months ended 31 Dec 2020 CY2020 £'000
Operating loss	**(23,430)**	(17,634)	(14,788)
Depreciation and amortisation	**5,760**	4,804	3,809
Share-based payment charges	**2,615**	1,378	942
Exchange (gains)/losses	**(563)**	139	29
Unrealised (gains)/losses on forward contracts	**(1,057)**	(55)	53
Adjusted EBITDA	**(16,675)**	(11,368)	(9,955)

Equity-free cash flow

The Group defines equity-free cash flow as net cash from operating activities plus capital expenditure and adjusted for interest payments and receipts and exchange rate movements. The table below reconciles net cash from operating activities to equity-free cash flow for each period.

Reconciliation between net cash from operating activities and equity-free cash flow

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000	12 months ended 31 Dec 2020 CY2020 £'000
Net cash from operating activities	**(20,342)**	(5,824)	(2,257)
Capital expenditure (total)	**(11,950)**	(13,051)	(9,375)
Interest payments (net)	**(283)**	(64)	(154)
Exchange rate movements	**563**	(139)	(29)
Equity-free cash flow	**(32,012)**	(19,078)	(11,815)

Reconciliation of the consolidated statement of profit and loss

between the 18-month period ending 31 December 2020 and the 12-month period ending 31 December 2020

	18 months ended 31 Dec 2020 Audited £'000	Less 6 months ended 31 Dec 2019 Unaudited £'000	12 months ended 31 Dec 2020 CY2020 Unaudited £'000
Revenue	31,682	10,011	**21,671**
Cost of sales	(10,355)	(3,270)	**(7,085)**
Gross profit	21,327	6,741	**14,586**
Other operating income	1,305	1,029	**276**
Operating costs	(40,266)	(10,616)	**(29,650)**
Operating loss	(17,634)	(2,846)	**(14,788)**
Finance income	989	291	**698**
Finance expense	(664)	(230)	**(434)**
Loss before taxation	(17,309)	(2,785)	**(14,524)**
Taxation credit	2,493	1,140	**1,353**
Loss for the financial period	(14,816)	(1,645)	**(13,171)**
Adjusted EBITDA[1]	(11,368)	(1,413)	**(9,955)**

1. See page 37 for an explanation and reconciliation of Adjusted EBITDA, which is an Adjusted Performance Measure.

Reconciliation of the consolidated cashflow statement

between the 18-month period ending 31 December 2020 and the 12-month period ending 31 December 2020

	18 months ended 31 Dec 2020 Audited £'000	Less 6 months ended 31 Dec 2019 Unaudited £'000	12 months ended 31 Dec 2020 CY2020 Unaudited £'000
Loss before income tax	(17,309)	(2,785)	**(14,524)**
Non-cash adjustments	5,941	1,209	**4,732**
Movements in working capital	3,084	(1,991)	**5,075**
Income tax received	2,460	–	**2,460**
Net cash used in operating activities	(5,824)	(3,567)	**(2,257)**
Investing activities			
Purchase of property, plant and equipment	(9,256)	(2,600)	**(6,656)**
Capitalised development expenditure	(3,795)	(1,076)	**(2,719)**
Increase in long-term investments	(8,000)	–	**(8,000)**
Net change in short-term investments	(5,531)	23,700	**(29,231)**
Finance income received	1,123	454	**669**
Net cash (used in)/generated by investing activities	(25,459)	20,478	**(45,937)**
Financing activities			
Proceeds from issuance of ordinary shares	50,851	602	**50,249**
Expenses from issuance of ordinary shares	(344)	–	**(344)**
Cash received on behalf of employees on the sale of share options	7,490	–	**7,490**
Repayment of lease liabilities	(523)	(134)	**(389)**
Finance interest paid	(664)	(230)	**(434)**
Net cash generated from financing activities	56,810	238	**56,572**
Net increase in cash and cash equivalents	25,527	17,149	**8,378**
Exchange losses on cash and cash equivalents	(139)	(110)	**(29)**
Cash and cash equivalents at beginning of period	7,567	7,567	**24,606**
Cash and cash equivalents at end of period	32,955	24,606	**32,955**

Our approach to risk

The Audit Committee plays a central role in the review of the Group's risk and internal control processes, supporting the Board's role in overseeing an enterprise-wide approach to risk identification, management, and mitigation.

Risk management process

The Board is responsible for the Group's risk framework and aims to ensure that the Group's ability to achieve its objectives outweighs its risk exposure. However, the Group's risk management programme can only provide reasonable, but not absolute, assurance that principal risks are managed to an acceptable level. The Audit Committee assists the Board in monitoring the effectiveness of our risk management and internal control policies, procedures, and systems.

The Executive Directors are responsible for identifying, managing, and mitigating the risks to the Company. The Executive Directors review the risks facing the Company at Executive committee meetings and with senior management across operations as a core part of day-to-day operations of the business. There is a quarterly review process to assess the risk register at corporate level, and programme and project specific risks are reviewed at project level.

The Board and its Committees review key risks and mitigations and the Audit Committee subsequently puts them to the Board annually for inclusion in the Annual Report.

Principal business risks and mitigation actions are set out below. This summary is not intended to include all risks that could ultimately impact our business and the risks are presented in no particular order. We have considered possible risks relating from the conflict in Ukraine, including potential disruption to our supply chain, and following internal investigations do not believe any new principal risks need to be captured. Beyond these, our business has other operational risks that we manage as part of our daily operations, such as health, safety and environmental, financial, commercial, legal, and regulatory. Finance risks are discussed in Note 20 of the financial statements.

Trend directions

Increasing ↑ Decreasing ↓ Unchanged —

Principal risks	There is a risk that...	Actions taken by management/mitigations	Change	Link to strategy
1 Core technology development	We may not be able to develop and apply the Company's technology successfully to potential products at the right cost point or performance, in the time frame anticipated.	Management is working to achieve agreed performance level and cost points under ongoing programmes, with increased dedicated resources deployed to meet milestone requirements. Verification of stack attributes and collaboration with partners and suppliers is ongoing. Stack test expansion strategy Is being Implemented.	— Risk remains high due to short timescales and the risk of late changes driven by development issues, delayed test validation and maturing manufacturing processes.	*Enabling licensees to succeed*
2 Partners' market launch	We may not be able to meet the timeframes agreed with the partners for the market launch of the Company's technology, for example due to stack product maturity not keeping up with commercialisation.	We continue to work in close collaboration with partners in their trials and early market launches. Project teams on both sides have been enhanced and issue resolution / escalation process have been implemented.	— Risk remains high as development and validation of stack attributes may take longer than planned which would impact go-to-market timing or revenue linked to specific milestones.	*Enabling licensees to succeed*

Trend directions

Increasing ⬆ Decreasing ⬇ Unchanged ⊖

Principal risks	There is a risk that...	Actions taken by management/mitigations	Change	Link to strategy
3 **Commercial**	Our partners may not choose to use our technology in their products or go to market slower than anticipated. We may not be able to continually attract new partners. We may be unable to finalise a strategic partnership to access China market. We may be unable to establish SOEC as a credible technology, in part due to the competition risk.	We work in close partnership with Doosan and Bosch to achieve the 2024 go-to-market timeline. Our commercial progress is continuing across regions and applications. We monitor competitor activity, diversification of applications and market developments. Joint Venture Heads of Terms have been agreed for our entry into China, with full contracts expected in 2022. We plan to ensure SOEC leadership through development, demonstrations, and partnerships.	Decreasing. Significant progress has been made to access the Chinese markets. Expanding our offering into the SOEC space is reducing the risk.	*Commercial scale*
4 **Long-term competition and market**	The value proposition of our technology may become eroded or it may become irrelevant, impacting on the Group's future profitability and growth opportunities. We may not be successful in our research and development efforts and may not be able to create new intellectual property.	We are developing the electrolyser application of the technology with the intention to prove this at a MW scale in 2022. We address different geographical markets, which we believe will decarbonise at different rates, and we are broadening the applications available, mitigating failure in a single market or product. We dedicated resources for pursuing disruptive innovation and continue to develop our university network.	Decreasing. We continue to increase our pipeline of customers which mitigates the impact of individual customers choosing not to move forward.	*Licensing technology leadership*
5 **Intellectual property (IP) protection**	The Company's competitive advantage could be at risk from: successful challenges to its patents; unauthorised parties using the Group's technology in their own products; Ceres not harvesting IP from partners; and others infringing existing Ceres intellectual property rights (IPRs). Also, a risk that the Group will unwittingly infringe valid IPRs of others, which could limit full commercialisation of the technology.	We have internal procedures and controls in place to capture and exploit all intellectual property (IP) as well as to protect, limit and control disclosure to third parties and partners. Contractual provisions with partners and IP insurance provide additional protection to the Group for agreement, pursuit and defence of IP. We perform freedom-to-operate searches to minimise this risk. Improvement of our information security and company culture is ongoing, aided by independent reviews of the programme.	Increasing. This risk is increasing as our technology approaches commercialisation, and as we increasingly disclose more of our technology to partners and the supply chain.	*Enabling licensees to succeed*
6 **Operational execution**	The Company may be unable to satisfy customer contracts and scale-up, with an increasingly complex partner structure. This may be due to organisational growth management, testing capacity, supply chain, short-term manufacturing or technical issues.	We have reinforced our engineering and supply chain teams and are establishing improved processes to support growth. We have created partnerships in engineering and testing to enable scaling up more quickly. We are continuing to expand capacity and capability of our facilities that support research and development activities, developing over time to support the move to a digitalised business environment.	Unchanged. We are building up the business to be in a better position to meet the challenges of our customers' expectations.	*Licensing technology leadership*

Chairman's introduction to governance

Warren Finegold
Chairman

"The development of the Board and the Executive team broadens our expertise and improves gender diversity and I am confident this will have an ongoing positive impact on corporate culture and the business.

The Board embodies and promotes a corporate culture based on sound ethical values and behaviours from the top down.

No practical or commercial interest overrides the safety and wellbeing of our people.

Ceres is committed to a high standard of corporate governance. As a Company listed on AIM, we apply the updated 2018 Quoted Companies Alliance Corporate Governance Code (the 2018 QCA Code) and its ten principles. How we apply them is described on our website (www.ceres.tech/about-us/corporate-governance/). We are not required to follow the UK Corporate Governance Code (the Code), however we look to apply best practice as set out in the Code where appropriate. Ceres is subject to the UK City Code on Takeovers and Mergers and is committed to applying the spirit of good corporate governance as envisaged by the Financial Reporting Council (FRC) and in compliance with the 2006 Companies Act.

The Board recognises that it is accountable to the Company's shareholders and effective governance is critical to business integrity. Maintaining investors' trust, as well as considering all stakeholders in decision-making, as set out in more detail on pages 32 and 33, is essential for both the long-term sustainable growth of the business and to support the execution of the Group's strategy, which is laid out in the Strategic Report.

We set out how the Board discharges its governance responsibilities over the following pages and in the Remuneration Committee, Audit Committee and Nominations and Governance Committee reports.

Corporate values

The Board embodies and promotes a corporate culture based on sound ethical values (as set out on page 2) and behaviours from the top down, and this guides the Group's objectives and strategy. This is disclosed in more detail in the Sustainability section of this report and the Group's ESG policy reflects the Group's values and culture. The development of the Board and the Executive team over the past year broadens our expertise and improves gender diversity and I am confident this will have an ongoing positive impact on corporate culture.

Where possible, we look to adopt these values in our relations with customers and suppliers, compliance and internal controls, employee management, engagement and reward systems, and responsibility to the environment and local community.

Our commitment to health and safety is non-negotiable. No practical or commercial interest is permitted to override the safety and wellbeing of our people and this is reinforced by continuous reviews of our processes and plant, accurate reporting of incidents and "near-misses", and root-cause investigations. Reports are provided to the Executive and Board at every meeting to track incidents and to ensure remedial actions are taken as necessary.

Shareholder communications and engagement

Interest in the sector remained strong in the year and the level of shareholder engagement and interest in the Group's progress and wider strategy was significant.

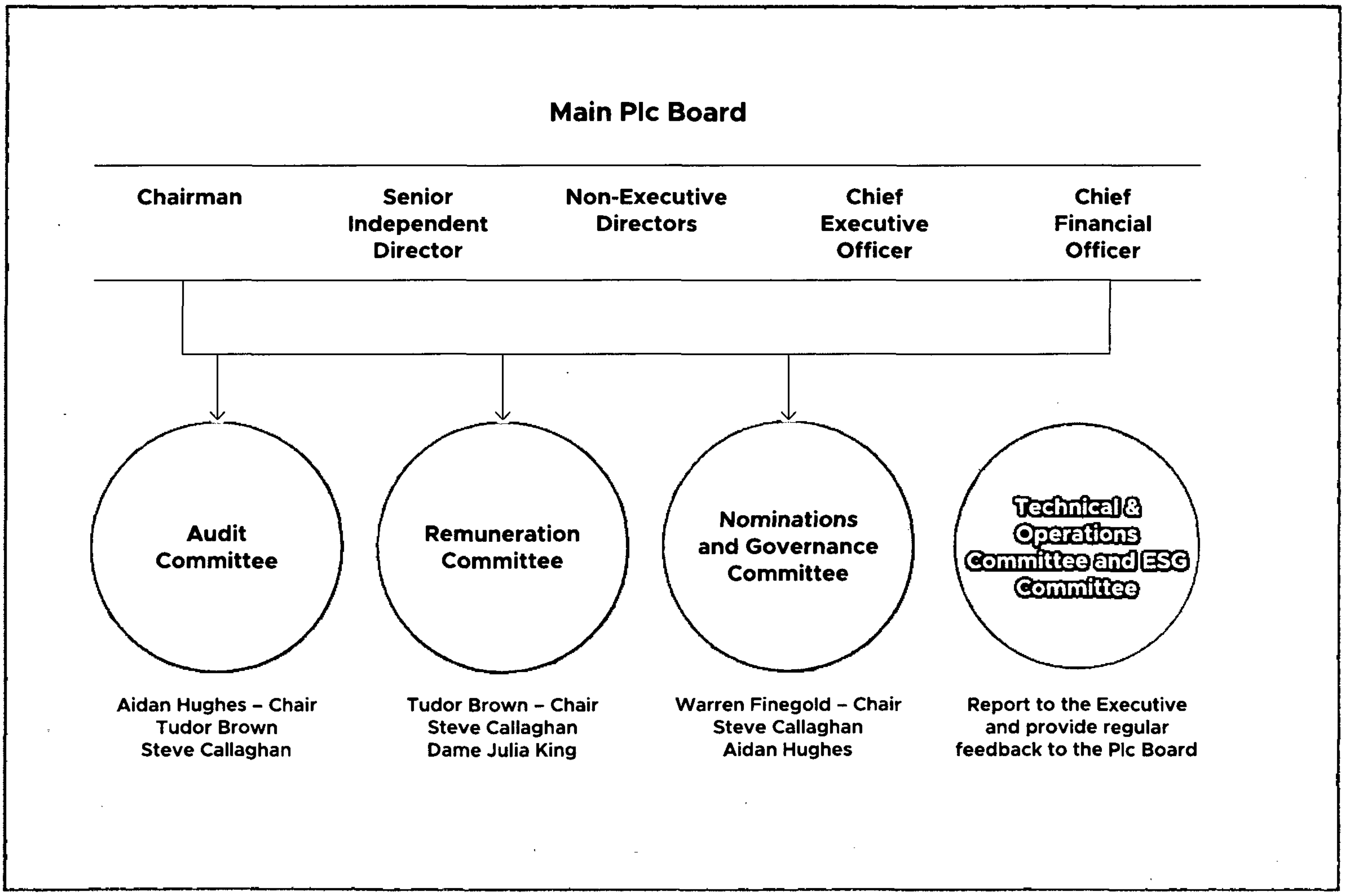
Active relations and communications with our shareholders, and understanding their views, needs, expectations and feedback, are vital to us – as is gaining the shareholders' understanding of the Company's circumstances, plans and constraints.

We regularly communicate with our shareholders through a variety of channels: public announcements and press releases using the London Stock Exchange's Regulatory News Service (RNS), analyst briefings, face-to-face meetings with significant institutional shareholders, capital market events, presentations at investor conferences, press interviews and the Company's social media channels.

We also continually update our website (www.ceres.tech). It is the primary source of information about the Group, giving an overview of activities as well as detailing all recent announcements, significant developments, presentations and our Annual Reports.

We welcome contact from shareholders to raise any concern or question and encourage investors to participate at the Annual General Meeting and any general meetings.

Warren Finegold
Chairman



Board of Directors

Committee key

- R Remuneration
- A Audit
- NG Nominations and Governance

RGB image – TBU

Phil Caldwell
Chief Executive Officer

Phil joined the Company in September 2013 as CEO. He was previously Corporate Development Director at Intelligent Energy Limited, a company specialising in PEM fuel cell systems. He led commercial and strategic business development activities including securing OEM partners, executing licence deals and joint ventures. Prior to that role, Phil was responsible for business development for the electrochemical technology business within ICI. He holds a Master's degree in Chemical Engineering from Imperial College, an MBA from IESE Barcelona and is a Sainsbury Management Fellow.

What Phil brings to the Board

Depth of experience commercialising fuel cells across multiple markets and geographies. Successful track record delivering clear strategic goals. Expertise in building strong teams.

Eric Lakin
Chief Financial Officer

Eric joined Ceres as Chief Financial Officer in January 2022, prior to which he was at FTSE 100 engineering group Smiths Group plc for ten years, latterly as CFO of Smiths Interconnect.

Previously Eric held roles in operational and corporate finance, strategy and M&A through his career at Smiths and prior roles in private equity and finance. He has broad international experience including a secondment to the US and a Board position in a joint venture in China. Eric is a Chartered Management Accountant and holds a Master's in Engineering and Information Sciences from the University of Cambridge.

What Eric brings to the Board

Significant credentials in operational and corporate finance, strategy and M&A with strong international track record. Knowledge of public markets, investor relations and listed company governance requirements.

Warren Finegold
Chairman

Warren joined the Board as an independent Non-Executive Director in March 2020 and succeeded Alan Aubrey as Chairman in June 2020. He was a member of the Vodafone Group Executive Committee for ten years, serving principally as Group Strategy and Business Development Director. Previously, he was a Managing Director of UBS Investment Bank, where he held several senior positions, most recently as Head of the Technology Team in Europe. Warren is a Senior Independent Director and Chair of the Nominations Committee at Avast plc. He has an MA in Philosophy, Politics and Economics from Oxford University and a Master's degree in Business Administration from London Business School.

What Warren brings to the Board

Significant expertise in global business development, as well as strong plc board experience and active knowledge of governance and regulatory matters. Experience in strategy development, capital markets and M&A.

NG

Steve Callaghan
Senior Independent Director

Steve joined the Company as CEO in December 2012 and led the turnaround phase. He was appointed Senior Independent Director in March 2014. He is also Chairman of Marston Holdings, and Vice Chairman of NEC Software Solutions, formerly Northgate Public Services, appointed on 31 March 2021 having been CEO for five years. Steve has held a number of CEO positions in public and private businesses over a period of 25 years in parallel with a small number of non-executive roles. He has a degree in Electrical and Electronic Engineering from Cranfield University.

What Steve brings to the Board

Excellent knowledge of the Company. Business transformation leadership. Track record in delivering successful business performance through commercial rigour and focused execution.

R NG A

retouching required

Trine Borum Bojsen
Non-Executive Director

Trine joined Ceres in March 2022. She brings over 25 years of experience in the renewable energy space, and from May 2022 will be SVP of North Sea Renewables at Equinor. Previously she was Chief Operating Officer of Copenhagen Offshore Partners, a leading provider of project development, construction management, and operational management services to offshore wind projects worldwide. Prior to that, Trine held senior management posts at Ørsted and also served on a number of boards and key committees within the company. She is currently a Non-Executive Director of MacArtney A/S Denmark. Trine has an M.Sc in Engineering from the Technical University of Denmark.

What Trine brings to the Board

Strength in market knowledge, technical expertise and experience in delivering complex global energy projects, coupled with experience building stakeholder relationships critical to successful growth strategies.

retouching required

Tudor Brown
Non-Executive Director

Tudor joined the Board in April 2021. He is one of the founding members of ARM Holdings plc, where he was on the board of directors and President until May 2012. Tudor sits as an Independent Non-executive Director and as Chair of the Compensation Committee on the boards of Lenovo Group and of SMIC, both listed on HKSE and Marvell Semiconductor, listed on Nasdaq. Tudor received an MA degree in Electrical Sciences from Cambridge University. He is a Fellow of the Institution of Engineering and Technology and a Fellow of the Royal Academy of Engineering. He was awarded as Member of the Order of the British Empire (MBE) on June 15, 2013.

What Tudor brings to the Board

Significant relevant expertise from establishing and growing a technology licensing business and breadth and depth of skills in technology and global industry.

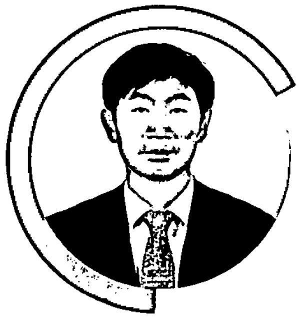
A R

Uwe Glock
Non-Executive Director

Uwe joined Ceres in June 2020 following the relationship agreement signed with Robert Bosch GmbH ("Bosch") and is the Bosch-nominated Non-Executive Director. He is a Member of the Board of Management of Bosch Thermotechnik GmbH, the commercial and residential building equipment and systems division that encompasses Worcester Bosch in the UK. Uwe brings over 40 years of experience from across Bosch and holds a leading position in the wider German and European energy and building industry. He is currently President of the German Heating Association (BDH) and Vice President of the German Building Technology Association (VdZ). Uwe completed his Study of Business Administration at the Business Management Academy Stuttgart.

What Uwe brings to the Board

Brings over 35 years of experience from across the Bosch business, latterly from 13 years in the Bosch Thermotechnik division. Ceres benefits from Uwe's leading role in the wider German and European energy and building industry.



Qinggui Hao
Non-Executive Director

Qinggui joined Ceres in June 2020 and is the Weichai-nominated Non-Executive Director as part of the strategic collaboration agreement with Weichai Power. He is the Investment Director of Shandong Heavy Industry Group Co., Ltd., the parent of Weichai Power. Qinggui joined Weichai in 2004 and held various positions across the business including Linde Hydraulics GmbH & K.G., as Deputy General Manager of Weichai Power (Luxembourg) Holding S.àr.l., and as Secretary of the Board and Director of the capital operation department of Weichai Power Co., Ltd. He holds dual Bachelor degrees in Law and Economics.

What Qinggui brings to the Board

Strengthens Ceres' relationship with Weichai and guides Ceres' technologies in the important Chinese market.

retouching required

Aidan Hughes
Non-Executive Director

Aidan joined Ceres in February 2015 as Non-Executive Director and Chairman of the Audit Committee. He has over 25 years of senior finance experience in a variety of listed companies, including as Finance Director at the Sage Group Plc from 1993 to 2000 and as a director of Communisis Plc from 2001 to 2004. Between 2004 and 2018 he was Non-Executive Director of Dialog Semiconductors plc, where during his tenure Aidan chaired its Audit Committee. He is also an investor and adviser to a number of private technology and media companies. Aidan is a Fellow of the Institute of Chartered Accountants in England and Wales.

What Aidan brings to the Board

Extensive experience working within listed companies. Strong credentials in corporate governance and risk management.

NG A

Julia King DBE
Non-Executive Director

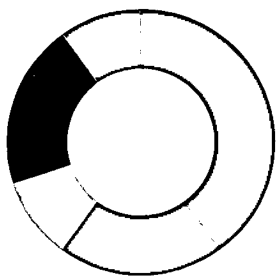
Julia joined the Board as an independent Non-Executive Director in June 2021. Julia is an engineer with immense experience across industry, academia and government and a focus on climate change and the low-carbon economy. She has held roles at Rolls-Royce, Cambridge University, Imperial College and as Vice Chancellor and Chief Executive of Aston University. She is currently Chair of The Carbon Trust, a Non-Executive Director of Ørsted, Chair of the Adaptation Committee of the Climate Change Committee and a member of the BEIS Hydrogen Advisory Council. Julia is a Fellow of the Royal Academy of Engineering and the Royal Society and was awarded a DBE for services to higher education and technology. She sits in the House of Lords as the Baroness Brown of Cambridge where she chairs the Science and Technology Select Committee.

What Julia brings to the Board

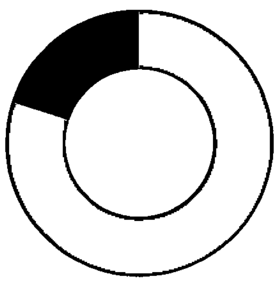
A distinguished career across industry and academia with significant expertise in climate change.

R

Tenure



Board of Directors gender



Executive team

Phil Caldwell and Eric Lakin are also members of the Executive team. To read their biographies please see the Board of Directors on page 43. The Executive team also consists of:

Geraint Castleton-White
Chief Programmes Officer

Geraint joined Ceres as Chief Programmes Officer in 2021, having been working in an interim role for Ceres since 2018. He started his career as a graduate apprentice at Ford Motor Company and has subsequently worked for established OEMs and early start-ups, including Lotus, Cosworth and TWR. He has an honours degree in Mechanical Engineering from Southampton University and is a Chartered Engineer and Fellow of the IMechE.

What Geraint brings to the team

Geraint brings Ceres a wealth of project and operational management experience in manufacturing and technology development, both in early start-ups and large established OEMs.

Tony Cochrane
Chief Commercial Officer

Tony joined Ceres in August 2015. Previously, he was at Ballard Power Systems for 17 years, where he held leadership positions in manufacturing, product engineering, technology strategy and strategic marketing. Most recently Tony was Commercial Director for Dantherm Power A/S and Director of Product Line Management at Ballard, where he built the stationary power business globally. Tony is a registered professional engineer and holds a BSCE in Mechanical Engineering.

What Tony brings to the team

A successful commercialisation record and a deep-set knowledge of the fuel cell industry. Extensive licensing experience in Asia, Europe and North America.

Clarissa de Jager
Chief of Intellectual Property

Clarissa joined in 2018, bringing over 25 years of commercial legal experience, having worked in transport and new energy at Ricardo, in medical technology at Elekta with Philips, and in logistics and distribution at Royal Mail. Clarissa also chairs the Ceres Power Intellectual Property Company board.

What Clarissa brings to the team

A blend of commercial, legal and IP skill sets and a proven track record in innovation, technology, change and transformation management, and IP strategy.

Mark Garrett
Chief Operating Officer

Mark joined Ceres in 2020. Prior to this he was at Ricardo plc for 22 years holding a variety of leadership positions including Chief Operating and Chief Strategy Officer roles. Mark is Non-Executive Chairman of SBD Automotive Limited, an automotive sector consultancy and is a Fellow of the Institution of Mechanical Engineers and the Royal Academy of Engineering.

What Mark brings to the team

Mark has considerable experience in bringing new products to market, operational performance and IP-based innovation in the transport and energy sectors.

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Deborah Grimason
General Counsel
Company Secretary

Deborah was appointed as General Counsel and Company Secretary of Ceres in January 2022 and has overall responsibility for the Legal team as well as Ceres' Corporate Governance requirements, working closely with the plc Board. Previously, Deborah was General Counsel and Company Secretary at V.Group and Travis Perkins plc., before which she held senior legal and company secretarial positions at Lafarge, The BOC Group, Nokia and Royal Mail.

What Deborah brings to the team

Substantial experience of legal and corporate advisory, mergers and acquisitions, joint ventures and other significant commercial transactions.

Caroline Hargrove CBE
Chief Technology Officer

Caroline joined the Executive in 2021 as Chief Technology Officer following three years as a Non-Executive Director of the Company. She was previously CTO of Babylon Health, and a founding member of McLaren Applied Technologies which was set up to exploit McLaren technology and expertise to new markets. She has worked in a range of sectors from motorsport to health, elite sports, manufacturing and energy. Caroline is a Fellow of the Royal Academy of Engineering, was Visiting Professor at Oxford from 2015 to 2018 and holds a PhD in Applied Mechanics from the University of Cambridge. She received a CBE for services to Engineering in 2020.

What Caroline brings to the team

Wide-ranging experience in the creation and development of products derived from digitalisation and innovative technology solutions.

Dr Mark Selby
Chief Innovation Officer

Mark joined the Company in January 2006 and played a pivotal role in establishing the Company as a global technology leader in the fuel cell industry. Mark previously worked as the Company's Chief Technology Officer and moved to a new position as Chief Innovation Officer in September 2021, in which he provides leadership for Ceres on innovation of new technologies beyond the established solid oxide portfolio. As Chief Innovation Officer, Mark focuses his efforts on developing new and future opportunities for Ceres, building the team and relationships to make this happen.

What Mark brings to the team

Unrivalled knowledge of the Ceres technology and system architecture. Hands-on and inspiring leadership.

Michelle Traynor
People Director

Michelle joined Ceres in 2019 and is responsible for all aspects of the people strategy to support the ongoing growth of the business. With over 20 years' experience gained across technology, manufacturing and professional services, her skillset encompasses all aspects of HR and expands beyond this into wider business operations. Prior to Ceres, she was Chief Operating Officer for ASB Law, having initially joined as Head of Human Resources and Development. Michelle is a chartered member of the CIPD and holds a Masters degree in Personnel Management.

What Michelle brings to the team

Team player approach with a passion to unlock and harness the power of people, blended with a calm, pragmatic can-do attitude.

Corporate governance report

Ceres prides itself on sound corporate governance, providing stakeholders with accurate disclosure and appropriate levels of transparency across all aspects of our business.

The Board of Directors

Board roles and responsibilities

The Board is responsible for setting the vision and strategy for the Company to deliver value to its shareholders through implementing its business plan. The Board recognises that this includes ensuring that necessary resources are in place, performance against key indicators is monitored, planning for Board and senior management succession, overseeing risk management, setting governance values, and helping to embed the Group's purpose, culture and values.

The Directors are responsible for promoting the long-term success of the Group, taking into account the interests of shareholders and all relevant stakeholders. All Board members share collective responsibility for corporate governance arrangements, bearing in mind the separate roles as Executive Directors and Non-Executive Directors. The Non-Executive Directors are responsible for constructively challenging and contributing to proposals on strategy and scrutinising the performance of management. They must also satisfy themselves of the integrity of financial information and that appropriate financial controls and risk management systems are in place. The Board's powers and obligations are governed by the UK Companies Act 2006.

Composition of the Board

At 31 December 2021 the Board comprised nine Directors: the Non-Executive Chairman, the Senior Independent Director, five other Non-Executive Directors, the Chief Executive Officer and the Chief Financial Officer. At the date of signing these accounts the Board had one additional Non-Executive Director. Biographical information for each Director and their contribution to the business is set out on pages 43 to 45.

There were several changes to the Board during the year and after the year end:

Tudor Brown and Dame Julia King were appointed independent Non-Executive Directors in April and June 2021 respectively. Caroline Hargrove stepped down from the Board to become CTO of the Company in October 2021. Eric Lakin replaced Richard Preston as CFO in January 2022 and Trine Borum Bojsen joined the Board as a Non-Executive Director in March 2022.

In addition, Deborah Grimason joined Ceres in January 2022 as Company Secretary and General Counsel, replacing Tim Anderson, the previous Company Secretary.

Independence of Non-Executive Directors

The Board considers that Warren Finegold, Tudor Brown, Trine Borum Bojsen, Steve Callaghan, Aidan Hughes and Dame Julia King are independent in accordance with the recommendations of the QCA Code and are independent of management and free of any relationship or circumstance which could materially influence or interfere with, or affect, or appear to affect, the exercise of their independent judgement. Although Steve Callaghan has been on the Board for more than nine years, the Board considers that he remains independent as he continues to exhibit the necessary independence of character and judgement.

It is the opinion of the Board that Mr Glock and Mr Hao were not independent during the period to 31st December 2021 according to the QCA Code as they are nominees of Bosch and Weichai Power respectively.

The Board believes that it has sufficient independent Non-Executive Directors of good standing and judgement to balance the Board, and for it to be considered effective, and when Steve Callaghan rotates off the Board in due course he is expected to be replaced by another independent Non-Executive Director.

The Non-Executive Directors do not participate in any of the Company pension or bonus arrangements, and they do not receive any remuneration from the Company other than Directors' fees and reimbursement of expenses.

The roles of the Chairman and the Chief Executive Officer

There is a clear division of responsibilities between the Chair and Chief Executive Officer, details of which can be found on our website. The Chief Executive Officer and Chairman have a very good working relationship, speaking regularly outside of scheduled Board meetings to discuss strategy and performance, and, with the Company Secretary, to ensure that Board meetings cover relevant matters. This relationship and regular dialogue helps to underpin the working of the Board, providing a forum in which matters are discussed openly and robustly.

Board support

All Directors have the right to seek independent legal and other professional advice at the Company's expense concerning any aspect of the Company's operations or undertakings. Newly appointed Directors are made aware of their responsibilities through the Company Secretary and the Company's Nominated Adviser. The Company offers formal training of new Directors as necessary and provides an induction into the Group in all relevant areas. Directors can attend ad hoc training, seminars and/or conferences relevant to their specific skills, professional qualifications and roles within the Board. All members of the Board have access to appropriate professional development courses to support them in meeting their obligations and duties. They also receive ongoing briefings on current developments, including updates on governance and regulatory issues.

Conflicts of interest

Under the Company's Articles of Association, the Board has the authority to manage and approve any conflicts or potential conflicts of interest of Directors. During the period, on the recommendation of the Nominations and Governance Committee, certain Board meetings were only attended by independent Non-Executive Directors and Executive Directors in order to deal with matters concerning potential conflicts of interest relating to non-independent members of the Board.

Schedule of matters

The Board's responsibilities are set out in more detail in the "Schedule of matters reserved for the Board" which is available on the Company's website. It includes considering and developing Group strategy against progress; setting annual operating budgets and approving major expenditure; approval of financial results; changes in Board composition; acquisitions and disposals; significant IP-related contracts; capital structure and approval of raising of new equity and share schemes; treasury policy; dividends; material litigation and various statutory and regulatory approvals.

Apart from the schedule of matters, the Board has delegated other matters and the management of the Group's operations to the Executive team.

Board effectiveness

External Board reviews usually take place every three years, internal reviews are held regularly, and the Directors monitor the Board's performance on an ongoing basis. In 2020 the Board decided to defer the external Board effectiveness review to 2021, to enable the Board to bed down due to the several changes to it in 2020. Accordingly an external review was conducted in 2021 by EquityCulture Ltd and the conclusions and recommendations were discussed at the January 2022 Board meeting. At that meeting it was considered appropriate to increase the number of Board meetings from seven to eight a year, of which two or three would be virtual. There were a number of recommendations of a house-keeping nature to improve the ability of the Board to work at its best including standardising reports which will be put in place during 2022. In addition, as you will see in the 2022 AGM notice, the Board will be recommending the removal of the cap of ten Directors to give the Board some flexibility in its succession planning and onboarding of new Directors.

The Board and Non-Executive Directors make a point of visiting the two Company sites in Horsham and Redhill regularly, although this has not been possible in 2021 due to the pandemic. The Executive Team joins the Board for the strategy meetings and individually updates the Board on their areas of responsibility. The Board tracks progress against KPIs, and identifies potential risks and issues to ensure that the Company meets its strategic goals and maximises shareholder value. The Board received updates on AIM rules and other governance, regulatory and financial matters as published during the year. The Executive Board meets monthly.

The Board's Committees also regularly carry out their own internal evaluations, and in this reporting period confirmed that their respective compositions, skills and experience are still considered appropriate and effective. During these evaluations, in June, Warren Finegold stepped down from the Remuneration Committee, Tudor Brown and Dame Julia King joined the Remuneration Committee and Tudor Brown joined the Audit Committee. In September Warren Finegold was appointed as Chair of the Nominations and Governance Committee (in place of Caroline Hargrove who stepped down from the Board to become CTO of the Company in October). The membership and key activities of each Committee are set out later in each Committee's report.

Key areas of focus in the year and since the year end

During the year the Board met formally on seven occasions, attended a two-day strategy meeting and undertook several conference calls to cover matters which included those shown below.

The Chief Executive Officer, Chief Financial Officer and Company Secretary are responsible for keeping the Board advised of significant developments, and the Board receives papers prior to Board meetings to enable constructive discussion.

Principal decisions

- Approved the raising of £179 million net capital through the issue of new equity to accelerate investment in and development of SOEC technology and to invest in and accelerate innovation and technology leadership in the core SOFC business
- Approved the investment in and option to acquire RFC Power
- Approved outsourcing of some testing capability to Horiba Mira to increase capacity
- Approved the Ceres Academy for development of our executives and senior leadership team

Board and Committees

- Approved the appointments of Tudor Brown and Dame Julia King as Non-Executive Directors and Eric Lakin as CFO, and of Trine Borum Bojsen as a Non-Executive Director after the year end
- Approved the appointment of Warren Finegold as Chair of the Nominations and Governance Committee, Tudor Brown and Dame Julia King as members of the Remuneration Committee and Tudor Brown as a member of the Audit Committee
- Approved revising the annual fees of the Chairman, Non-Executive Directors, Senior Independent Director and Chairs and members of the major Committees to be in line with the AIM 100

Strategy and risk

- Continued to develop the Company's China strategy and, in particular, the proposed collaboration and Joint Venture with Weichai and Bosch, which was approved and announced in February 2022
- Reviewed risks to the business including emerging and macro risks and their mitigations, and information security risk
- Appointed a new Group Internal Audit Manager
- Agreed to further develop Ceres' operating model as an IP licensing company
- Reviewed operational structure and manufacturing capacity
- Considered the SOEC partnering strategy to accelerate the programme
- Reviewed the Company's approach to Covid-19 and in particular the protection and wellbeing of our people whilst minimising disruption to the business

Corporate governance

- Considered and undertook an external evaluation of the Board
- Appointed a full-time combined General Counsel and Company Secretary to enhance corporate governance
- Began articulating the Company's ESG strategy and plan

Director appointments and rotation

Directors are subject to election by shareholders at the first Annual General Meeting (AGM) following their initial appointment, and at each AGM at least one third of the Directors retire by rotation and put themselves forward for re-election. As the Senior Independent Director, Steve Callaghan offers himself up for re-election annually to ensure that shareholders are comfortable with his being on the Board.

Non-Executive Directors are appointed for an initial three-year term which is subject to renewal. Renewals of terms for a Non-Executive Director take into account ongoing performance, continuing independence and the needs and balance of the Board as a whole. Where it is in the Company's interests to do so, Non-Executive Director appointments can be extended beyond the best practice period of nine years with the approval of the Nominations and Governance Committee, the Board and the individual Director concerned. In this context Steve Callaghan's appointment was considered and extended to retain corporate knowledge in the Board considering that three new Non-Executives have joined the Board since the beginning of the financial year. He is expected to rotate off the Board in due course.

Steve Callaghan, Aidan Hughes and Uwe Glock will stand for re-election and Dame Julia King, Eric Lakin and Trine Borum Bojsen will stand for election at the 2022 AGM. Their biographies and contribution to the business are set out on pages 43 to 45.

The Company reviews annually the level of Directors' and Officers' liability insurance cover required.

Committees of the Board

The Board delegates certain items of business to its Committees. At the period end, these were the Audit Committee, Remuneration Committee and Nominations and Governance Committee. The Technical and Operations Committee and ESG Committee, which report into the Executive Board, provide updates to the Board during the year. Each Board Committee operates under clear terms of reference, which are available on the Company's website.

Each Board Committee is authorised to seek any information it requires from any employee of the Company in order to perform its duties. It can also obtain outside legal or other professional advice on any matter within its terms of reference. Each of these Committees meets on a regular basis throughout the year as appropriate, and each is accountable to the Board. Each Committee regularly reviews its own performance, constitution and terms of reference to ensure it is operating effectively and recommends any changes it considers necessary to the Board for approval.

The Audit Committee, Remuneration Committee and Nominations and Governance Committee have prepared separate reports as set out on pages 52 to 61.

Board attendance

The attendance of members of the Board and Committees at scheduled Board and Committee meetings during the year is shown in the table below. There were further ad hoc meetings when required.

Committee	Main plc Board	Audit Committee	Remuneration Committee	Noms and Gov Committee
Meetings held in the period	7	3	4	4
Executive Directors				
Phil Caldwell	7	n/a	n/a	n/a
Richard Preston	7	n/a	n/a	n/a
Non-Executive Directors				
Tudor Brown[1]	5	1	3	n/a
Steve Callaghan[1]	7	2	4	3
Qinggui Hao	7	n/a	n/a	n/a
Caroline Hargrove[1]	6	2	n/a	4
Aidan Hughes	7	3	4	4
Warren Finegold[1]	7	n/a	1	4
Uwe Glock	7	n/a	n/a	n/a
Dame Julia King[1]	4	n/a	3	n/a

1. In respect of all new Board appointments and new Committee appointments or those Directors stepping down from the Board or stepping down from a Committee, all attended all their available meetings during the period.

In addition, other members of the Executive team and other senior management are invited to Board and Committee meetings as appropriate.

Internal controls and risks

The Group and the implementation of its strategy are subject to a number of key risks and uncertainties. The Board collectively identifies and evaluates these risks. It has a framework for reviewing and assessing risk, and taking mitigating actions, which is laid out, alongside the key risks and uncertainties of the Group, on pages 39 and 40.

The Audit Committee is responsible for oversight of the Group's system of internal financial controls, although the full Board acknowledges its responsibility for establishing and maintaining them. These are designed to safeguard the assets of the Group, and to ensure the reliability of financial information, for both internal and external use. The Board approves annual operating budgets annually and reviews performance against budgets at each formal meeting.

It is understood that any system of internal control can only provide reasonable, and not absolute, assurance that material financial irregularities will be detected, or that risk of failure to achieve business objectives is eliminated.

The Directors, having reviewed the effectiveness of the system of internal financial, operational and compliance controls and risk management, consider that the systems of internal control operated effectively throughout the financial year and up to the date that the financial statements were signed.

As reported in the last Annual Report, the Group has now put in place an internal audit function and this appointment was made in 2021.

Articles of Association

Changes to the Articles will be put to shareholders at the 2022 AGM to make them more compatible with the proposed move to the Main Market and for other practical purposes.

AGM

Due to the pandemic, the 2021 AGM was held virtually for most shareholders. It is very much hoped that the 2022 AGM will once again be held in person and one at which all shareholders are welcome and given the opportunity to engage and ask the Board questions about the Group's activities. It is the Board's intention to comply with best practice for future General Meetings and virtual-only meetings will only be held in exceptional circumstances.

Audit Committee report

Chair's overview

The Audit Committee plays a central role in the review of the Group's financial reporting, risk review and internal control processes. As a Committee, our role is to assist the Board in its oversight of the financial stewardship of the Group. The Audit Committee also takes specific responsibility for considering certain key areas of risk management and supports the Board's role in overseeing an enterprise-wide approach to risk identification, management and mitigation. The Board has continued to consider and assess the implications of the Covid-19 pandemic with respect to the Group's operations and financial performance. The Audit Committee met three times during the year.

Committee membership

The Audit Committee is composed entirely of Non-Executive Directors and is chaired by Aidan Hughes. Tudor Brown joined the Committee on 27 September 2021 and at that point Steve Callaghan stepped down from the Committee. Following her appointment as the Group's CTO on 25 October 2021, Caroline Hargrove stepped down from the Committee and Steve Callaghan re-joined the Committee on the same date.

The Committee is considered to have sufficient, recent and relevant financial experience and competence to discharge its responsibilities. Aidan Hughes, who has served as Non-Executive Director and Chair of the Committee since 2015, has significant senior financial experience, which is further detailed in his biography on page 45.

Responsibilities

The Audit Committee's role is to assist the Board in its oversight of the financial stewardship of the Group. It is responsible for ensuring the effective financial integrity of the Group through the regular review of its financial processes and performance, and by remaining up to date with the latest regulatory changes and evolution of best practice. Alongside the non-Board Technical and Operations Committee, it is also responsible for ensuring that the Group has appropriate risk management and internal controls, and that external audit processes are robust.

At the invitation of the Committee, its meetings are attended by the external auditor, the Chief Executive Officer, the Chief Financial Officer and others (including the Company Chairman and Group Internal Audit Manager) as appropriate. The Committee meets with the external auditor on a regular basis without the Executive Directors being present.

The Audit Committee's main responsibilities include:

- to satisfy itself as to the integrity of the financial statements and other formal announcements relating to the Group's financial performance, ensuring compliance with applicable accounting standards, regulations and rules;
- to monitor and review the effectiveness of the Group's internal financial controls and risk management policies and systems (noting the non-Board Technical and Operations Committee's responsibility relating to technical, operational, business continuity and health and safety-related risks);
- to monitor and review the going concern status of the Group;
- to satisfy itself of the independence and effectiveness of the external auditor, and to make recommendations to the Board in relation to the appointment and remuneration of the external auditor, and the policy relating to their non-audit services;
- to monitor the activity, role and effectiveness of the Group's recently appointed Internal Audit Manager; and
- to consider the Group's whistleblowing procedures to ensure that employees are able to raise concerns, in confidence, about possible wrongdoing or malpractice.

Significant financial reporting matters

During the year, the Committee received and considered reports from the Chief Financial Officer in respect of the Group's critical accounting estimates and judgements and subsequently approved the disclosure set out in Note 1 to the Group's financial statements.

The Committee considered the following significant financial reporting matters, estimates and judgements, amongst others, when approving the Group financial statements for the year ended 31 December 2021:

Revenue recognition in respect of existing and new customer contracts

During the year, the Group recognised revenue of £30.8 million (18 months ended 31 December 2020: £31.7 million) relating to commercial and development contracts with customers. Further details are set out in Note 2 to the Group financial statements.

The Group's material contracts generally involve the provision of a number of services typically including engineering services, access to or sale of technology hardware and licences. Significant judgement is required in allocating revenue between and valuing the different services provided. The Audit Committee reviewed the judgements and estimates applied by management during the year when accounting for revenue recognition and considers them to be appropriate.

In particular, during the year, the Committee has reviewed management's judgements applied to recognising revenue for the significant Doosan and Bosch collaboration agreements, signed in late 2020. The Committee considered input from the external auditor and following discussions in Committee meetings, considers management's treatment to be appropriate.

Intangible assets (capitalised development costs)

The Group began capitalising development costs as internally generated assets from 2019 in accordance with IAS 38. Since then the Group has reviewed and assessed all customer and internal development programme expenditure to ascertain whether it is appropriate to capitalise development costs under IAS 38.

The assessment process requires significant judgement to be applied by management in respect of identifying whether a particular project has passed the relevant milestone gate to begin capitalisation, confirming when development activities are completed and therefore ceasing capitalisation of costs, in assessing appropriate periods of amortisation and considering the need for any impairments.

The Audit Committee has reviewed and agreed the Group's accounting policy with respect to the capitalisation of development costs, as set out in Note 12 of the Group's financial statements. The Committee has reviewed management reports summarising the treatment of capitalised costs during the year, together with reviewing reporting from the external auditors on the subject, and is satisfied that the accounting treatment and disclosure of capitalised development costs is appropriate. Further details setting out the accounting policies relating to capitalised development costs and the amounts capitalised during the period are provided in Note 12 to the Group financial statements.

Provisions relating to warranty and dilapidations

As at 31 December 2021, the Group held provisions of £1.8 million for property dilapidations and £1.3 million for warranties. The Committee reviewed the approach for assessing these provisions with management, noting that professional advisers contributed to the assessment of the dilapidations provision. The warranty provision consists of a mix of contractual and constructive obligations and the Committee reviewed management's assessment of provision, which was based on past performance, customer expectations and a weighting of outcomes. Further details around provisions are set out in Note 22 to the Group financial statements.

Valuation of inventory

As at 31 December 2021, the Group held £3.1 million of inventory, relating to raw materials, work in progress and finished goods. During the year, the Committee reviewed reports from, and held discussions with, both management and the Group's external auditors to consider the Group's processes in relation to processing, counting and reporting inventory.

The valuation of inventory requires certain judgements and estimates to be made in respect of future expectations of yield and classification. The Audit Committee has reviewed these judgements and estimates and is satisfied that the valuation of inventory as at 31 December 2021 is appropriate. Further details around inventory are set out in Note 14 to the Group financial statements.

Re-measurement of property lease term

As at 31 December 2021, the Group reported lease liabilities of £3.0 million primarily relating to leases of two properties. During the first half of the year, the Group revised the expected term on one of its property leases, recognising an adjustment of £1.0 million to reduce the related lease liability and right-of-use asset. The Audit Committee considered the events and circumstances that led management to revise the lease term against the relevant guidance set out in IFRS 16 Leases and determined the judgements and resultant treatment to be appropriate. Further details around the Group's leases are set out in Note 21 to the Group financial statements.

Segmental reporting

In the Group's 2020 Annual Report, the expectation was set out that SOEC results would be reported separately to the Group's existing SOFC results. The Group's interim results for the six months ended 30 June 2021 included a segmental reporting note separately reporting the Group's Adjusted EBITDA between SOEC and SOFC, effectively introducing a new segment to the Group's external reporting, which has been repeated for the Group's 2021 financial statements. The Committee discussed the change in segmental reporting with management, reviewed segmental results and proposed disclosures and considered the revised operating segment note to be appropriate.

Risk management and internal controls

The Committee has monitored the Group's risk management processes, including reviewing the Group-wide risk register and reviewing and reporting on the effectiveness of the Group's internal controls. The Audit Committee is also responsible for oversight of the Group's system of internal controls, which the Committee discharges alongside the non-Board Technical and Operations Committee. The Committee makes recommendations to the Board in relation to risk management and internal control matters. The Committee also reviews the Group's policies and procedures in relation to ethics, whistleblowing and the prevention of fraud and bribery.

During the year, the Committee considered the Group's wider internal control environment and, during the second half of the year, oversaw the appointment of our Group Internal Audit Manager to lead the Group's internal audit function. The Internal Audit Manager presented the Group's 2022 internal audit plan at the Committee meeting in January 2022, which the Committee approved.

Whistleblowing

The Group is committed to the highest standards of openness, integrity and accountability. It seeks to conduct its affairs in a responsible manner taking into account the requirements of customers, employees and wider stakeholders. The Company operates an independent whistleblowing service to allow employees to raise concerns – in a constructive way and without fear of recrimination. In accordance with a clearly documented procedure, all reports go to the Company Secretary and Senior Independent Director and are investigated independently. During the year ended 31 December 2021 there were no whistleblowing reports.

External audit

External auditor

At the Group's AGM in June 2021, BDO LLP were re-appointed as the Group's external auditor for the year to 31 December 2021, to hold office until the 2022 AGM. Nick Poulter is the lead audit partner.

During the year, the Committee reviewed BDO's audit plan including the scope of work to be undertaken as well as their reports on external audit findings, with particular focus on the areas set out above.

Effectiveness of the external audit process and independence and objectivity of the external auditor

The Committee also assessed the effectiveness of the external auditor, BDO LLP, and was satisfied that the advice the Company received has been objective and independent. The Audit Committee has put in place, and regularly reviews, a policy on external auditor independence to ensure objectivity and independence are safeguarded and the Audit Committee assessed that BDO were independent during the year.

Non-audit services

Audit and non-audit fees paid to BDO during the year are disclosed in Note 4 to the financial statements in this Annual Report. Non-audit fees for the year ended 31 December 2021 were 34% (18 months ended 31 December 2020: 48%) of audit fees and primarily consisted of a reporting engagement to support the Group's Main Market listing, as well as assurance reviews of grant returns. The Audit Committee is satisfied that BDO has only provided non-audit services that are included in the FRC ethical standard 'white list'.

Aidan Hughes
Chair of the Audit Committee

Nominations and Governance Committee

Chair's overview

The Nominations and Governance Committee plays a central role in overseeing the composition and balance of the Board and of its Committees, identifying and recommending to the Board the appointment of new Executive Directors and Committee members.

2021 saw considerable movement and activity in relation to the membership of the Board and its Committees and changes to each of the Board Committees are laid out in their reports. We welcomed Tudor Brown and Dame Julia King to the Board during the first half of the year and saw Caroline Hargrove transition from her Non-Executive Director position to an Executive role as Chief Technology Officer during the last quarter of the year. Finally we were pleased to appoint Trine Borum Bojsen to the Board in March 2022.

As Committee Chair I look forward to continuing to build on the composition of the Board and to working closely with my Committee members and Deborah Grimason, our new General Counsel and Company Secretary, in implementing the recommendations resulting from our recent independent Board review.

Committee membership

The Nominations and Governance Committee is composed entirely of Non-Executive Directors and is chaired by Warren Finegold, who was appointed as Chair part way through the year as successor to Caroline Hargrove following her transition off the Board to the role of Chief Technology Officer. Stephen Callaghan and Aidan Hughes are the other members of the Committee.

Responsibilities

The Nominations and Governance Committee is responsible for reviewing the composition and structure of the Board and for identifying and recommending candidates for Executive and Non-Executive Director positions.

At the invitation of the Committee, its meetings are attended by the Chief Executive Officer, the Company Secretary, and the People Director in support of succession and search activities.

The Committee's main responsibilities include:

- Structure and Balance: regularly reviewing the structure, size, balance and composition required of the Board, while understanding the benefits that diversity brings, and to make recommendations to the Board regarding any changes;
- Appointments: identifying and nominating potential candidates for new Board positions, the role of the Senior Independent Non-Executive Director and members of the Board Committees, for approval of the Board;
- Succession Planning: reviewing and considering the leadership needs and succession planning for Directors and other senior executives and the independence of its members, to ensure the continued ability of the Ceres to deliver to its strategy;
- Governance: monitoring trends and best practice in corporate governance, reviewing Ceres' own corporate governance policies and procedures, and making recommendations for changes to the Board.

The Committee's terms of reference clearly set out its authority and duties. These are reviewed annually and can be found on the Company website.

Board and executive search and appointments

As part of the Committee's remit to lead the process for Board appointments, the Committee conducted a search for two Non-Executive Directors during 2021. Both searches were supported by Russell Reynolds Associates, who worked closely with the Committee to establish clear briefs in respect of the skills and experience to be sought, based on the existing skills, experience and composition of the Board. The Committee asked Russell Reynolds Associates to ensure that the list of candidates reflected diversity of gender and ethnicity, as well as broader diversity in its fullest sense.

The first search, which was initiated at the end of 2020, resulted in the appointment of Tudor Brown as a Non-Executive Director to the Board effective from 1 April 2021. Tudor Brown was one of over 40 candidates reviewed and considered by the Committee and Russell Reynolds Associates. The Committee and Board were satisfied that Tudor Brown met and exceeded the selection criteria and was a standout candidate, offering a wealth of experience and substantial relevant expertise from establishing and growing ARM, with a similar technology licensing business model to Ceres. In addition to his appointment as Non-Executive Director, the Committee and Board approved his addition to and membership of the Audit Committee and appointment as Chair of the Remuneration Committee.

The second search, which was initiated in March 2021, resulted in the appointment of Professor Dame Julia King, Baroness Brown of Cambridge as a Non-Executive Director to the Board effective from 17 June 2021. Julia King was one of over 20 female candidates reviewed and considered by the Committee and Russell Reynolds Associates. The calibre of female candidates was deemed to be very high and strong by the Committee. The Committee and Board felt that Julia King brought immense experience across industry, academia and government and her clear focus on climate change adaptation and mitigation and the low-carbon economy held great relevance for Ceres. In addition to her appointment as Non-Executive Director, the Committee and Board approved her addition to and membership of the Remuneration Committee and adviser to the non-Board Technical and Operations Committee.

In addition to the two Non-Executive appointments during 2021, the Committee also oversaw two Executive searches during the year. These searches related to the appointment of a new Chief Financial Officer and a new General Counsel and Company Secretary.

The search for a new Chief Financial Officer (CFO) was supported by Russell Reynolds Associates and resulted in the appointment of Eric Lakin, who joined Ceres on 10 January 2022. Eric joined Ceres from Smiths Group plc, bringing extensive experience in operational finance and corporate development within engineering and technology companies making him the ideal choice as CFO for the next stage in the Company's growth. Eric replaces Richard Preston as CFO. The Committee and Board thank Richard for his tremendous service and stewardship of Ceres over the past 14 years.

The search for a new General Counsel and Company Secretary was supported by Hedley May and resulted in the appointment of Deborah Grimason who joined Ceres on 17 January 2022. Deborah was previously General Counsel and Company Secretary at V.Group and Travis Perkins. Deborah has joined the Executive team and assumes overall responsibility for the Legal team as well as Ceres' Corporate Governance requirements working closely with the plc Board. Deborah took over the Company Secretarial duties from Tim Anderson.

The final noteworthy change of roles that the Committee oversaw during the year, was the transition of Caroline Hargrove from Non-Executive Director to Chief Technology Officer (CTO) effective from 25 October 2021 as a result of Mark Selby transitioning from his CTO role to the newly created role of Chief Innovation Officer (CIO) role. The Committee and Board felt confident that Caroline's considerable experience in growing and managing technical teams in fast-moving innovative environments as well as her knowledge and experience of working with Ceres for three years as a Board member made her the ideal candidate to succeed Mark Selby as CTO. The new CIO role for Mark Selby will leverage his considerable knowledge while providing the opportunity for him to focus on establishing future innovative technology.

Board evaluation

An independent Board review was commissioned and conducted by Equity Culture Ltd in the last quarter of the year, allowing time for the new Non-Executive Directors to establish themselves on the Board. The review consisted of one-to-one interviews with each Board member. All Board members including the Company Secretary participated in the review.

The review considered the culture and composition of the Board, which was deemed to be healthy with a robust and balanced set of skills and experiences. It also covered areas including strategy, risk and risk management, the role of the Chairman and the effectiveness of Board meetings and the Committees. Recommendations to maintain and enhance the effectiveness of the Board will be enacted during 2022 under the guidance of the Chair and Company Secretary.

Other governance activities

From an ongoing governance perspective, in addition to overseeing the new Board and Executive appointments outlined above, the Committee also reviewed the Executive-level succession plans and considered the development plans for the Executive team and future leaders. As a result of this, the Committee sponsored the launch of a new senior leader development programme, and approved and supported the appointment of Nicholson McBride Change to work with the Executive team and the Board in relation to ongoing Executive team development, organisational and cultural development, as well as Executive transition and onboarding.

Remuneration Committee report

Dear fellow shareholder,

On behalf of the Board, I am pleased to present the Remuneration Committee (the Committee) report for the year to 31 December 2021. The past year has been one of change at Ceres with the appointment of two Non-Executive Directors (including myself) and a new Chief Financial Officer, and has also been challenging because of the ongoing Covid-19 pandemic.

Having taken over as Chair of the Committee recently, I'd like to express my heartfelt thanks to Steve Callaghan who has done an exceptional job of chairing, steering and presiding over it and its remuneration policy during 2021 and over the past 9 years.

I look forward to continuing to work with the Committee, its advisers and our shareholders in strengthening and enhancing our remuneration policy, practices and reporting.

Remuneration Committee

Terms of reference

The Committee governs all aspects of the Executive Directors' and Chairman's remuneration and reward arrangements and advises on employee benefit structures throughout the Group.

The Committee's main responsibilities include:

- Remuneration policy and framework: regularly reviewing the remuneration policy and framework for the Executive Directors, Chairman and other members of the Executive management team;
- Compensation awards: determining the specific remuneration arrangements and awards for the Executive Directors, Chairman and other members of the Executive management team (encompassing base salary, annual and long-term incentives, other benefits and termination of employment);
- Shareholder engagement: reviewing and considering shareholder feedback and the approach to ongoing shareholder engagement;
- External advice and benchmarking: appointing and monitoring independent remuneration advisers and conducting regular external benchmarking of Executive Directors' compensation.

The Committee's terms of reference clearly set out its authority and duties. These are reviewed annually and can be found on the Company website.

Committee membership and attendance

The Committee is chaired by Tudor Brown who took over from Steve Callaghan in March 2022. Steve remains on the Committee alongside Dame Julia King who joined the Committee with Tudor Brown during 2021. Aidan Hughes served on the Committee during the year and stood down with effect from March 2022. The Committee met four times during 2021 and all Committee members attended all meetings in the year as disclosed on page 50.

Advisers to the Remuneration Committee

The Committee invites individuals to attend meetings to provide advice, so as to ensure that the Committee's decisions are informed and take account of pay and conditions in the Company as a whole as well as external factors and best practice. These individuals, who are not members but may attend by invitation, include the Chairman, the Chief Executive Officer, the Chief Financial Officer, the Company Secretary, the People Director and externally appointed independent advisers.

During 2021, the Committee received advice from independent remuneration committee advisers Mercer Kepler in relation to Executive Directors' pay and benchmarking. The fees in respect of 2021 paid to Mercer Kepler totalled £31,300.

No Director takes part in any decision directly affecting their own remuneration.

Committee activities during 2021

During the year the Committee's key activities included:

- Refreshing the benchmarking of Executive and Non-Executive Directors' remuneration and agreeing adjustments in line with the benchmarking recommendations;
- Reviewing and agreeing the remuneration package for Eric Lakin as incoming CFO for 2022;
- Assessing and approving individual attainment and achievement against performance targets for annual/short-term bonuses and Long Term Incentive Plan (LTIP) awards;
- Considering and agreeing the annual Group-wide salary increase;
- Considering performance criteria and targets for LTIP awards;
- Considering dilution effects of share option schemes in the short, medium and long term;
- Agreeing to grant Sharesave shares available to all eligible employees;
- Reviewing the terms of reference for the Committee.

Remuneration outcomes for 2021

Single total figure of remuneration and prior year comparison

The table below sets out a single figure for the total remuneration received by each of the Directors for the year ended 31 December 2021.

	Salary/fee	Pension	Bonus	Total 12 months ended 31-Dec 2021 £	Annualised equivalent for the period ended 31-Dec 2020 £	Total 18 months ended 31-Dec 2020 £
Executive						
Phil Caldwell	297,812	25,032	180,600	**503,444**	440,905	566,359
Richard Preston	225,260	18,932	96,750	**340,942**	243,485	333,228
Non-Executive Directors						
Warren Finegold[1]	110,000	–	–	**110,000**	n/a	55,538
Steve Callaghan	65,000	–	–	**65,000**	45,555	68,333
Caroline Hargrove[2]	48,058	–	–	**48,058**	40,000	60,000
Aidan Hughes	65,000	–	–	**65,000**	45,555	68,333
Qinggui Hao[3]	47,500	–	–	**47,500**	n/a	12,500
Uwe Glock[3]	47,500	–	–	**47,500**	n/a	12,500
Tudor Brown[4]	43,750	–	–	**43,750**	–	–
Julia King[4]	29,615	–	–	**29,615**	–	–
Haoran Hu[5]	–	–	–	–	n/a	40,000
Alan Aubrey[3]	–	–	–	–	n/a	64,359
Robert Trezona[3]	–	–	–	–	n/a	50,000

1. The remuneration paid to Warren Finegold in the 18-month period to 31 December 2020 accrued from his appointment on 1 March 2020.
2. Caroline Hargrove stepped down from the Board on 25 October 2021.
3. The remuneration paid to Uwe Glock and Qinggui Hao in the 18-month period to 31 December 2020 accrued from their appointment date, being 17 June 2020. Alan Aubrey and Robert Trezona retired from the Board on 28 September 2020.
4. The remuneration paid to Tudor Brown and Julia King accrued from their appointment dates, being 1 April 2021 and 17 June 2021 respectively.
5. Haoran Hu retired from the Board on 17 June 2020.

2021 annual bonus – payable in 2022

The annual bonus award is based on the Committee's assessment of Executive Director's performance against objectives and key performance indicators (KPIs) agreed by the Board at the beginning of the year. It uses a balanced scorecard approach split across top-line financial performance, partner progress and success, technology advancements, and operational delivery and efficiency.

The table below shows the results of the Committee's assessment of the performance delivered in 2021.

Metrics	Weighting	% Achieved	Bonus outcome after weighting
Financial metrics	50%	39%	19.5%
Business and individual metrics	50%	47%	23.5%
Total	**100%**	**43%**	**43.0%**

Quantum of bonus award	CEO	CFO
Value in cash	£180,600	£96,750

Long Term Incentive Plan

The 2018 LTIP award was subject to performance conditions assessed to 30 June 2021. The performance criteria were fully met and as such the awards vested in full. These are subject to a two-year holding period for the Executive Directors as per the scheme rules.

Directors' interests

	At 31-Dec-20 number	Granted number	Exercised	Lapsed/ surrendered number	At 31-Dec-21 number	Exercise price	Exercise period
Phil Caldwell							
Options	123,313	–	–	–	123,313	£0.85	Nov 2019 – Nov 2023
Options (unapproved)	80,424	–	–	–	80,424	£0.85	Jul 2017 – Jul 2024
Options (unapproved)	100,000	–	–	–	100,000	£0.85	Jul 2018 – Jul 2024
Options (unapproved)	100,000	–	–	–	100,000	£0.85	Jul 2019 – Jul 2024
Options (unapproved)	100,000	–	–	–	100,000	£0.85	Jul 2020 – Jul 2024
Sharesave options (approved)	7,109	–	–	–	7,109	£1.27	Jun – Nov 2022
Sharesave options (approved)	4,610	–	–	–	4,610	£1.95	Feb – Jul 2023
LTIP	558,593	–	–	–	558,593	£0.10	Sep 2019 – Sep 2026
LTIP	87,000	–	–	–	87,000	£0.10	Oct 2020 – Oct 2027
LTIP	138,530	–	–	–	138,530	£0.10	Oct 2021 – Oct 2028
LTIP	161,700	–	–	–	161,700	£0.10	Oct 2022 – Oct 2029
LTIP	114,107	–	–	–	114,107	£0.10	Dec 2023 – Dec 2030
	1,575,386	-	-	-	1,575,386		

	At 1 July 2020 number	Granted number	Exercised	Lapsed/ surrendered number	At 31-Dec-21 number	Exercise price	Exercise period
Richard Preston							
Options (unapproved)	37,500	–	–	–	37,500	£0.99	Apr 2019 – Apr 2023
Options (unapproved)	37,500	–	–	–	37,500	£0.85	Jul 2018 – Jul 2024
Options (unapproved)	37,500	–	–	–	37,500	£0.85	Jul 2019 – Jul 2024
Options (unapproved)	37,500	–	–	–	37,500	£0.85	Jul 2020 – Jul 2024
Sharesave options (approved)[1]	8,491	–	(8,491)	–	–	£1.06	Feb – July 2021
Sharesave options (approved)	7,109	–	–	–	7,109	£1.27	Jun – Nov 2022
Sharesave options (approved)	–	915	–	–	915	£9.83	Jun – Nov 2024
LTIP	111,770	–	–	–	111,770	£0.10	Sep 2019 – Sep 2026
LTIP	47,000	–	–	–	47,000	£0.10	Oct 2020 – Oct 2027
LTIP	75,560	–	–	–	75,560	£0.10	Oct 2021 – Oct 2028
LTIP	91,340	–	–	–	91,340	£0.10	Oct 2022 – Oct 2029
LTIP	55,016	–	–	–	55,016	£0.10	Dec 2023 – Dec 2030
	546,286	915	(8,491)	-	538,710		

1. Richard Preston exercised 8,491 Options (approved) at an exercise price of £1.06 on 1 April 2021, making a gain of £97,635 and retained the shares.

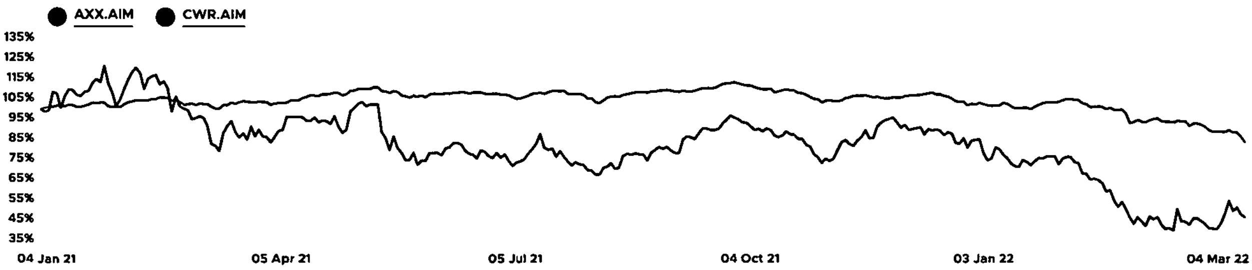
Directors' interests in shares

The Directors had the following interests in shares in the Company as at the date of signing of this Annual Report:

- Phil Caldwell: 60,564 shares;
- Steve Callaghan: 149,352 shares;
- Warren Finegold: 10,004 shares;
- Uwe Glock: 4,000 shares; and
- Aidan Hughes: 31,520 shares.

Performance graph

The following graph shows the Group's performance, measured by total shareholder return (TSR), compared with the performance of the FTSE AIM for the period from 1 January 2021 to 11 March 2022. One key measure of the LTIP is TSR, measured over a three-year performance period.



CEO pay ratio

The table below illustrates the ratio of Chief Executive total pay to average employee pay for 2021.

Year	Method	25th percentile pay ratio	50th percentile pay ratio	75th percentile pay ratio
2021	B: gender pay gap methodology	16.5	11.9	8.5
2020	B: gender pay gap methodology	16.0	11.7	8.2

Payments for loss of office and to past directors

There were no payments for loss of office made to Executive Directors during the year.

Implementation of Directors' remuneration policy for 2022

Executive Directors' remuneration

Base salary

Salaries are reviewed annually taking into account market benchmarks for executives of comparable status, responsibility and skill.

Base salary of Executive Directors

Base salary at	CEO	CFO*
01 January 2022	£350,000	£275,000
01 January 2021	£280,000	£225,000

* 2022 base salary of the CFO took effect when Eric Lakin joined as CFO on 10 January 2022.

Annual bonus

The maximum bonus opportunity for 2022 for the CEO and CFO represents 150% of base salary. The following table outlines the performance metrics and weightings applied to the Executive Directors for the annual bonus in 2022. Targets will be disclosed retrospectively in the Annual Report for the year ended 31 December 2022.

Metrics	Objective	Weighting
Financial performance	Growth in revenue and order book	20%
Licensee success	Partner progress to start of production	25%
Commercial scale	New licensees, markets and territories	25%
Technology advancement	SOEC and SOFC innovation programmes	15%
Key business enablers	Business capability and operational delivery	15%
Total		**100%**

Long Term Incentive Plan

The 2022 LTIP awards, covering the period from 1 January 2022 to 31 December 2024, will be granted in March 2022 after the date of this report. The Executive Directors' LTIP awards will be granted on the basis of 250% of base salary for the CEO and 300% of base salary for the CFO, which includes a one-off uplift (from 200%) on the year of joining the Company.

The performance criteria associated with the 2022 LTIP award will be split equally between the following four elements to be finalised: cumulative revenue and other income; launch of partner mass production in 2024; new licensees and partnerships; and share price increase.

Non-Executive Directors' fees

Following a review with comparable external benchmarking, adjustments were made to the Non-Executive Directors' fees as outlined in the table below.

Position	2022	2021
Chair of the Board*	£120,000	£80,000
Board fee (incorporating membership of one Committee)	£55,000	£40,000
Senior Independent Director	£10,000	£10,000
Committee Chair	£10,000	£10,000
Additional Committee membership	£5,000	N/A

* Chairman fees will increase to £180,000 when the Company moves up to the Main Market.

Remuneration policy

Remuneration principles

Ceres has adopted a set of remuneration principles that apply across the whole Company. Remuneration arrangements for our Executive Directors have been developed with the following principles in mind:

- Strategic alignment: reward will be linked to achieving Ceres' long-term strategy, growth and sustainability;
- Cultural alignment: reward will be linked to our purpose and values;
- Performance related: reward outcomes will be based on performance measured against clear targets and criteria;
- Market competitive: comprised of fixed pay around the median and variable pay capable of delivering remuneration at upper quartile;
- Balanced and fair: reflective of best practice and aligned to the UK Corporate Governance Code;
- Sustainable: reflective of the sustainability of the Company and our contribution to a broader sustainable future

Executive Directors' remuneration policy

The remuneration of the Executive Directors comprises base salary, participation in an annual bonus plan and a Long Term Incentive Plan, along with a range of benefits aligned with the wider Company as set out in the table below:

Component	Purpose	Operation	Opportunity	Performance metrics
Base salary	To provide appropriate remuneration based on role, remit and contribution to leadership and Company strategy.	Salaries are reviewed annually and set at median levels, taking into account market ranges for executives in companies of a similar size and industry sector.	Typically salary increases are kept in line with the rest of the Company. Increases in excess of the wider workforce are driven by market data and conditions.	None
Pension	To provide an opportunity for Executives and employees to build up income on retirement.	Executives participate in the Group Personal Pension (GPP) plan or a similar cash allowance is provided for those exceeding HMRC pension allowances.	Employer pension contributions are the same rate as all employees, at up to 8%.	None
Benefits	To provide market-competitive employee benefits.	Benefits encompass health and travel-related benefits and insurances. These are reviewed and benchmarked on a periodic basis.	Executive benefits mirror those of all employees.	None
Sharesave	To encourage UK-based employees to own shares in Ceres Power Holdings.	The Ceres Power Holdings Sharesave scheme is an all-employee plan which the Executive Directors can participate in.	Savings capped at HMRC limits.	None

Component	Purpose	Operation	Opportunity	Performance metrics
Annual bonus	To incentivise and reward strong performance against annual business goals and objectives.	Performance targets and measures are set at the start of each year. The Committee considers the extent to which these have been achieved and determines the award level.	The target award is 150% of salary. The maximum award is 125% of target.	Using a weighted scorecard approach, performance is measured against agreed targets and KPIs covering financial performance, partner success, technology advancements and operational delivery and efficiency. The Committee retains the discretion to adjust the bonus if it considers that the formulaic outcome does not reflect underlying business performance.
Long Term Incentive Plan (LTIP)	To engage and motivate Executive Directors to deliver on KPIs that support the long-term strategy in order to deliver long-term returns to shareholders.	An annual award of Ceres Power Holdings share options, exercisable subject to performance criteria over a three-year performance period. An additional holding period of two years applies following vesting for PDMRs.	The maximum annual grant is reviewed by the Committee on an annual basis as part of benchmarking activities.	The vesting of awards is linked to agreed performance criteria which may include but are not limited to: – Financial performance (e.g. cumulative revenue) – Partner success (new and existing) – Key business and technology milestones – Share price (awards vest at 10% on the basis of achieving a minimum threshold level and pro rata on a straight-line basis up to 100% if the share price equals or exceeds the target) Weightings may vary from year to year. The Committee has discretion to amend the performance criteria in exceptional circumstances if it considers it appropriate to do so with appropriate justification and disclosure.
Shareholding requirements	To ensure sustained alignment between the interests of the Executive Directors and our shareholders, The CEO and other executives are required to build their shareholding and value of exercisable share options to 150% and 100% of their salaries respectively. At the year end Phil Caldwell, Tony Cochrane, Clarissa de Jager and Mark Selby met the minimum shareholdings policy.			
Malus and clawback	The Committee may apply malus and/or clawback to variable pay in certain specified circumstances including: *misconduct, material misstatement of financial results affecting the assessment of a performance condition,* or where there has been an error or inaccuracy relating to the determination of variable pay.			

Executive Director service agreements

All Executive Directors have service agreements that terminate on six months' notice.

Non-Executive Directors remuneration policy

Ceres seeks to attract and retain Non-Executive Directors of a high calibre who have the expertise, responsibility and the time commitment to be able to contribute to an effective Board and deliver long-term sustainable shareholder value. All Non-Executive Directors have formal letters of appointment that can be terminated on one month's written notice by either side.

The Chairman is paid a single fee for all responsibilities. The Non-Executive Directors are paid a basic fee which encompasses membership of one Board Committee, with Committee Chairs, the Senior Independent Director and members of additional Board Committees paid an additional fee to reflect their extra responsibilities. The Chair and Non-Executive Directors receive no other pay or benefits, except for reimbursement of expenses, and do not participate in incentive plans. Fees are reviewed on an annual basis.

Tudor Brown
Non-Executive Director

Directors' report

for the year ended 31 December 2021

The Directors present their Annual Report and the audited financial statements for the year ended 31 December 2021.

Principal activities

Ceres is a leader in the electrochemical technology sector, enabling the world's most progressive companies to deliver clean energy at scale and at speed through a high-margin, asset-light licensing business model.

Review of business and future developments

A review of the Group's business, including events since the year end and the outlook ahead, is set out in detail in the Chairman's statement on page 4 and the Chief Executive's review on pages 6 to 9.

Results and dividends

The consolidated results of the Group for the year are set out in the Consolidated Statement of Profit and Loss on page 70.

The Directors do not recommend the payment of a dividend (2020: £nil).

Research and development

During the year ended 31 December 2021, the Group incurred expenditure of £31,290,000 (18 months ended 31 December 2020: £27,820,000) on research and development which was expensed to the Consolidated Statement of Profit and Loss. In addition, £4,573,000 of development costs relating to the design, development, protection and configuration of the Group's core technology and manufacturing processes were capitalised as a development intangible in the year ended 31 December 2021 (18 months ended 31 December 2020: £3,795,000).

Principal risks and uncertainties

In addition to financial risk management which is detailed in Note 20 to the financial statements, there are a number of risks and uncertainties which could have a material impact on the execution of the Group's strategy. These are set out in the Strategic Report on pages 39 and 40.

Branches outside the UK

As at 31 December 2021, the Group has branches in Weifang, China and in Seoul, South Korea, supporting the Group's business development strategy in those territories.

Events after the reporting date

In February 2022, the Group announced the intention to form a three-way collaboration between Ceres, Weichai and Bosch to access the substantial opportunities that exist for fuel cell technologies in the Chinese market. Heads of Terms have been signed, with the agreements expected to be signed during the second half of 2022. For more details, please see page 7.

On 8 March 2022, the Group announced that it had signed a multi-million pound, long-term agreement with Horiba Mira to be our fuel cell and electrolysis partner and supplier of test stands.

Corporate and social responsibility

Details on the Group's policies, activities and aims with regard to its corporate and social responsibilities, including streamlined energy and carbon reporting, are included in the Sustainability section on pages 26 to 31.

Charitable and political donations

The Group made no charitable or political donations in the current year or prior period.

Employee information

The Company engages with employees in a number of ways, including regular 'All Hands' meetings and social events, the Connect employee forum and by providing learning and development opportunities via the Ceres Academy.

The Group encourages diversity and equal opportunity for all people in relation to recruitment, selection and career development. This includes giving full and fair consideration to applications for employment by disabled persons and the continued employment of anyone incurring a disability while employed by the Group.

Directors

The Directors of the Company, who served during the year ended 31 December 2021 and up to the date of signing the financial statements, unless otherwise stated, are as follows:

- Trine Borum Bojsen (Non-Executive Director) - appointed to the Board 15 March 2022
- Tudor Brown (Non-Executive Director) – appointed to the Board 1 April 2021
- Phil Caldwell (Chief Executive Officer)
- Steve Callaghan (Senior Independent Director)
- Warren Finegold (Non-Executive Chairman)
- Uwe Glock (Non-Executive Director)
- Caroline Hargrove (Non-Executive Director) – retired from the Board 25 October 2021
- Qinggui Hao (Non-Executive Director)
- Aidan Hughes (Non-Executive Director)
- Professor Dame Julia King (Non-Executive Director) – appointed to the Board 17 June 2021
- Eric Lakin (Chief Financial Officer) - appointed to the Board 10 January 2022
- Richard Preston (Chief Financial Officer) - retired from the Board 10 January 2022

A summary of the process followed by the Nominations and Governance Committee in respect of the appointment and replacement of Directors and of Directors' powers can be found on page 54. Details of Directors' interests in the Company's ordinary shares and options held over ordinary shares are set out on page 58.

Directors' and Officers' liability insurance

The Company maintains liability insurance for its Directors and Officers as permitted by the Companies Act 2006. During the year, the Group granted qualifying third-party indemnity provisions for the benefit of its Directors, which remain in force at the date of this report.

Substantial shareholders

The Company has been notified of the following holdings of 3% or more of the 190,729,638 ordinary shares of £0.10 each of the Company on 16 March 2022:

Investor	Number of £0.10 ordinary shares	Percentage
Weichai Power	37,965,262	19.9%
Robert Bosch	33,790,880	17.7%
Fidelity Management & Research Company	9,683,325	5.1%

Policy and practice on payment of creditors

It is the Group's policy for all suppliers to agree payment terms in advance of the supply of goods and services and to adhere to those payment terms. Trade creditors of the Group as at 31 December 2021, as a proportion of amounts invoiced by suppliers during the previous year, represented 34 days (31 December 2020: 34 days based on the previous 18 months). Trade creditors of the Company as at 31 December 2021, as a proportion of amounts invoiced by suppliers during the previous year, represented 7 days (31 December 2020: 12 days based on the previous 18 months).

Corporate governance

The Directors recognise the importance of good corporate governance. The principles of how we have applied the updated 2018 Quoted Companies Alliance Corporate Governance Code (the 2018 QCA Code) and other corporate governance guidelines are set out in the Corporate Governance section of this report, and on the Company's website (https://www.ceres.tech/about-us/corporate-governance/).

Financial instruments

As at 31 December 2021, the Group did not have any complex financial instruments. The financial instruments it does have primarily comprise cash and liquid resources, forward exchange contracts and other various short-term assets and liabilities, such as trade receivables and trade payables which are used to manage the Group's operations. Further details of the Group's financial instruments are set out in Note 20 to the consolidated financial statements.

Statement of Directors' responsibilities in respect of the Annual Report, Strategic Report, the Directors' Report and the financial statements

The Directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare financial statements for each financial year. Under that law the directors are required to prepare the Group and Parent Company financial statements in accordance with UK adopted international accounting standards.

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 profit or loss of the Group and Parent Company for that period.

In preparing these financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether they have been prepared in accordance with UK adopted international accounting standards subject to any material departures disclosed and explained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the group and the company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that the financial statements comply with the requirements of the Companies Act 2006. They are also responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Website publication

The Directors are responsible for ensuring the Annual Report and the financial statements are made available on a website. Financial statements are published on the Company's website in accordance with legislation in the United Kingdom governing the preparation and dissemination of financial statements, which may vary from legislation in other jurisdictions. The maintenance and integrity of the Company's website is the responsibility of the directors. The Directors' responsibility also extends to the ongoing integrity of the financial statements contained therein.

Going concern

Having reviewed the Group's cash and short-term investments, forecast income and expenditure, performing appropriate sensitivity and scenario analyses, and after making appropriate enquiries, the Directors have a reasonable expectation that the Group and Company have adequate resources to progress their established strategy. Accordingly, they continue to adopt the going concern basis in preparing these financial statements.

Directors' statement on disclosure of information to auditor

The Directors who held office at the date of approval of this Directors' Report confirmed that as far as each Director is aware, there is no relevant audit information of which the Company's auditor is unaware. Each Director has taken all the steps that they ought to have taken as a Director in order to make themselves aware of any relevant audit information and to establish that the Company's auditor is aware of that information.

Auditor

A resolution to re-appoint BDO LLP as the Group's external auditor for the year to 31 December 2022, and for their remuneration to be agreed by the Audit Committee, will be submitted to the 2022 AGM.

By order of the Board

Eric Lakin
Chief Financial Officer
16 March 2022

Viking House
Foundry Lane
Horsham
RH13 5PX

Independent auditor's report to the members of Ceres Power Holdings plc

Opinion on the financial statements

In our opinion:

- the financial statements give a true and fair view of the state of the Group's and of the Parent Company's affairs as at 31 December 2021 and of the Group's loss for the year then ended;
- the Group financial statements have been properly prepared in accordance with UK adopted international accounting standards;
- the Parent Company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements of Ceres Power Holdings plc (the 'Parent Company') and its subsidiaries (the 'Group') for the year ended 31 December 2021 which comprise the Consolidated statement of profit and loss and other comprehensive income, the Consolidated statement of financial position, the Consolidated cash flow statement, the Consolidated statement of changes in equity, the Company balance sheet, the Company statement of changes in equity and notes to the financial statements, including a summary of significant accounting policies.

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law and UK adopted international accounting standards. The financial reporting framework that has been applied in the preparation of the Parent Company financial statements is applicable law and United Kingdom Accounting Standards, including Financial Reporting Standard 101 Reduced Disclosure Framework (United Kingdom Generally Accepted Accounting Practice).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remain independent of the Group and the Parent Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the Directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate. Our evaluation of the Directors' assessment of the Group and the Parent Company's ability to continue to adopt the going concern basis of accounting included:

- Assessment of assumptions within the projected cash flows; we evaluated the reasonableness of the assumptions and future plans modelled within the Board approved going concern forecasts, covering the period to 31 March 2022 and including the impact of strategic initiatives. We considered whether the forecasts aligned with how the Group had traded throughout the year and post year end.
- Sensitivity analysis: evaluation of sensitivities of the Group's cash flow forecasts. The analysis considered reasonably possible adverse effects that could arises as well as a stress test to considered the level of future revenue reduction and costs increases the Group could support.
- Post year end trading performance: comparison of the post year end trading results to the forecasts so as to evaluate the accuracy and achievability of the forecasts planned.
- Disclosures: evaluation of the adequacy of the disclosures in relation to the risks posed and scenarios the Directors have considered in reaching their going concern assessment.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Group and the Parent Company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the Directors with respect to going concern are described in the relevant sections of this report.

Overview

Coverage	100% (2020: 100%) of Group loss before tax 100% (2020: 100%) of Group revenue 100% (2020: 100%) of Group total assets		
Key audit matters		2021	2020
	Revenue recognition - incorrect application of IFRS 15	☑	☑
	Revenue recognition - revenue spreadsheet	☑	☑
	Inventory valuation	☑	☑
	Capitalisation and amortisation of development costs	☑	☑
Materiality	*Group financial statements as a whole* £462,000 (18 month period ended 31 December 2020: £317,000) based on 1.5% (18 month period ended 31 December 2020: 1%) of revenue		

An overview of the scope of our audit

Our Group audit was scoped by obtaining an understanding of the Group and its environment, including the Group's system of internal control, and assessing the risks of material misstatement in the financial statements. We also addressed the risk of management override of internal controls, including assessing whether there was evidence of bias by the Directors that may have represented a risk of material misstatement.

The Group operates solely in the United Kingdom. The Group financial statements are a consolidation of six companies. The Group is made up of four trading companies and supported by two holding companies, one of which being the Parent Company. In establishing the overall approach to the Group audit, we determined the type and amount of work that needed to be performed on each Company on the basis that all the components were considered significant.

Based on our assessment we performed a full scope audit of the complete financial information of all entities within the Group. The same audit team completed all audit work and no reliance was placed on component auditors.

In our audit, we tested and examined information, using sampling and other auditing techniques, to the extent we considered necessary to provide a reasonable basis for us to draw conclusions.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified, 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. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter 1		How the scope of our audit addressed the key audit matter
Revenue **Recognition – incorrect application of IFRS 15: Revenue from contracts with customers** **(Accounting policies, Note 2- Revenue £30,776k)**	The Group has agreed a small number of material new complex revenue contracts with multiple performance obligations. The application of IFRS 15 to the financial statements is therefore significant. The application of IFRS 15 to revenue and related balance sheet items including contract assets and liabilities, involves a significant degree of judgement. Where new contracts are agreed there is a risk that IFRS 15 is incorrectly applied; the performance obligations are incorrectly identified; the allocation of revenue is not appropriate; and/or the basis of recognition of the related revenue is incorrect.	For all material new contracts in the year we completed the following: – Obtained the contract and reviewed this, understanding the revenue to be recognised and the performance obligations. – Worked through the guidance within IFRS 15 and compared this to the conclusions reached by management. We challenged management where judgements and assumptions have been made, and discussed these with relevant project managers. **Key observations:** As a result of the testing above we did not find any material matters to report with regards to the application of IFRS 15 to new contracts.

Key audit matter 2		How the scope of our audit addressed the key audit matter
Revenue **Recognition – revenue spreadsheet errors** **(Accounting policies, Note 2 - Revenue £30,776k)**	The Group use a spreadsheet to calculate revenue related balances. Due to this manual process, there is a risk that the revenue spreadsheet is incorrectly completed, manually manipulated or there are errors in the spreadsheet leading to incorrect revenue recognition.	We verified a sample of revenue recognised for each of the three revenue streams and agreed the revenue through to supporting documentation to ensure the revenue has been correctly recognised and in the correct period. We performed data analytics on the spreadsheet to check formulae and functionality, to ensure there was no data corruption. **Key observations:** As a result of the testing above we did not find any material matters to report with regards to the Group's revenue spreadsheet.

Key audit matter 3		How the scope of our audit addressed the key audit matter
Inventory Valuation **(Accounting policies, Note 14 – Inventories £3,145k)**	The Group's inventory is valued using standard costing. Therefore the inventory recorded includes an element of direct labour and overheads. Furthermore an inventory provision which includes a high level of judgement is recognised to reduce the value to the lower of cost and net realisable value. We considered there to be a risk in relation to the estimates applied when calculating the standard costing of the stock inventory as well as the estimates required to calculate the inventory provision.	Our audit procedures included: – We reviewed the standard costing applied to the valuation of inventory. The inputs to the calculation were verified and the assumptions used tested to ensure they are accurate. – We reviewed the underlying data and assumptions which management used to determine the proportion of inventory to be written down as well as the basis for this calculation. – We reviewed and considered the need for an inventory provision, looking at the inventory data including for a sample of stock lines the ageing, post year-end sales and the margins being achieved throughout the year and post year end. **Key observations:** As a result of the testing above we did not find any material matters to report with regards to the valuation of inventory.

Key audit matter 4		How the scope of our audit addressed the key audit matter
Capitalisation and amortisation of development costs **(Accounting policies, Note 12 – Intangibles, Customer and internal development programmes £7,369k)**	The Group capitalise an element of the development costs as intangible assets on the basis that the technology has been commercially viable with the commencement of material licencing contracts with customers over the last two years. Management review the costs incurred against the requirements of the accounting standards and consider if the capitalisation criteria has been met. Once capitalisation has commenced further judgement is required as to when the amortisation of the asset should begin and the development is complete. There is a risk that costs are incorrectly capitalised as judgement is required as to whether the capitalisation criteria are met. Further there is a risk that management sets an inappropriate useful economic life for the newly capitalised assets. There is also a risk that new products capitalised might render predecessor versions obsolete and therefore create an impairment risk.	Our audit procedures included the following: – A review of the capitalised costs to interrogate the rationale behind capitalisation and the likelihood of future benefits to be drawn from the costs incurred. – On a sample basis we vouched underlying expenditure to invoices and other support. – We tested costs expensed to the profit or loss account during the year to ascertain whether they should have been capitalised. – We have considered the risk of impairment of assets, in particular for Gen 1 technology as this is being progressively phased out and superseded by Gen 2 technology, utilising forecast performance and profitability to demonstrate the economic value of Gen 1 up until 2024 when Gen 2 is forecast to start to generate revenues. – Challenged the useful economic lives applied to the intangibles capitalised in the year with reference to the period of expected future economic benefit through forecasts. **Key observations:** As a result of the testing above we did not find any material matters to report with regards to the capitalisation and amortisation of the intangibles.

Our application of materiality

We apply the concept of materiality both in planning and performing our audit, and in evaluating the effect of misstatements. We consider materiality to be the magnitude by which misstatements, including omissions, could influence the economic decisions of reasonable users that are taken on the basis of the financial statements.

In order to reduce to an appropriately low level the probability that any misstatements exceed materiality, we use a lower materiality level, performance materiality, to determine the extent of testing needed. Importantly, misstatements below these levels will not necessarily be evaluated as immaterial as we also take account of the nature of identified misstatements, and the particular circumstances of their occurrence, when evaluating their effect on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the financial statements as a whole and performance materiality as follows:

	Group financial statements		Parent company financial statements	
	2021 £	2020 £	2021 £	2020 £
Materiality	462,000	317,000	438,900	301,150
Basis for determining materiality	1.5% of revenue	1% of revenue	Determined with reference to 95% of Group materiality	Determined with reference to 95% of Group materiality
Rationale for the benchmark applied	We continue to consider revenue to be the most appropriate benchmark as the Group remains in the research and development stage of their growth and as such are not generating profits consistent with the operations and size of the business.		The parent company does not trade substantially in its own right and is therefore a holding company. Considered appropriate in the context of both the Group financial statements and Ceres Power Holdings plc Company balance sheet.	
Performance materiality	277,000	190,000	263,150	180,690
Basis for determining performance materiality	In setting the level of performance materiality we considered a number of factors including the expected total value of known and likely misstatements, the amount of areas of estimation within the financial statements, the lack of previous experience auditing the Group and the type of audit testing to be completed. Performance materiality set at 60% of materiality (2020: 60%)		In setting the level of performance materiality we considered a number of factors including the expected total value of known and likely misstatements, the amount of areas of estimation within the financial statements, the lack of previous experience auditing the Group and the type of audit testing to be completed. Performance materiality set at 60% of materiality (2020: 60%).	

Component materiality

We set materiality for each component of the Group based on a percentage of between 29% and 95% (2020: 25-95%) of Group materiality dependent on the size and our assessment of the risk of material misstatement of that component. Component materiality ranged from £132,000 to £438,900 (2020: £79,000 to £301,150). In the audit of each component, we further applied performance materiality levels of 60% (2020: 60%) of the component materiality to our testing to ensure that the risk of errors exceeding component materiality was appropriately mitigated.

Reporting threshold

We agreed with the Audit Committee that we would report to them all individual audit differences in excess of £9,000 (18 month period ended 31 December 2020: £6,000). We also agreed to report differences below this threshold that, in our view, warranted reporting on qualitative grounds.

Other information

The directors are responsible for the other information. The other information comprises the information included in the annual report other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon. Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Other Companies Act 2006 reporting

Based on the responsibilities described below and our work performed during the course of the audit, we are required by the Companies Act 2006 and ISAs (UK) to report on certain opinions and matters as described below.

Strategic report and Directors' report	In our opinion, based on the work undertaken in the course of the audit: – the information given in the Strategic report and the Directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and the Strategic report and the Directors' report have been prepared in accordance with applicable legal requirements. – In the light of the knowledge and understanding of the Group and Parent Company and its environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the Directors' report.
Matters on which we are required to report by exception	We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion: – adequate accounting records have not been kept by the Parent Company, or returns adequate for our audit have not been received from branches not visited by us; or – the Parent Company financial statements 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.

Responsibilities of Directors

As explained more fully in the Statement of Directors' Responsibilities, the Directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors are responsible for assessing the Group's and the Parent 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 the Directors either intend to liquidate the Group or the Parent Company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a 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 the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Extent to which the audit was capable of detecting irregularities, including fraud

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below:

- We gained an understanding of the legal and regulatory framework applicable to the Group and the industry in which it operates, and considered the risk of acts by the Group which were contrary to applicable laws and regulations, including fraud. These included but were not limited to compliance with Companies Act 2006, AIM listing rules, the principles of the QCA Corporate Governance Code, and IFRSs.
- We agreed the financial statement disclosures to underlying supporting documentation.
- We made enquiries of management and those charged with governance of any known, reported or indications of non-compliance with laws and regulations including fraud occurring within the Group and its operations.
- We reviewed and assessed the accounting estimates for possible bias and obtained an understanding of the business rationale for significant transactions that are outside the normal course of the business for the Group and those that appear to be unusual.
- *We also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members and* remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.
- We tested journal entries, focusing on journal entries containing characteristics of audit interest, year end consolidation journals, journals processed by users with priviledged IT access rights and those relating to revenue.
- We tested and challenged the key estimates and judgements made by management in preparing the financial statements for indications of bias or management override when presenting the results and financial position of the Group.
- We assessed the susceptibility of the Group and Parent Company's financial statements to material misstatement, including how fraud might occur by considering the key risks impacting the financial statements. We identified a fraud risk with respect to management override in relation to inappropriate revenue journals and incomplete or inaccurate revenue recognition through inappropriate treatment of contracts under IFRS15 or through manual overriding of the revenue recognition spreadsheet.

Our audit procedures were designed to respond to risks of material misstatement in the financial statements, recognising that the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery, misrepresentations or through collusion. There are inherent limitations in the audit procedures performed and the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely we are to become aware of it.

A further description of our responsibilities is available on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Use of our report

This report is made solely to the Parent 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 Parent 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 Parent Company and the Parent Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

DocuSigned by:
CF887AE4183C463...

Nick Poulter

(Senior Statutory Auditor)

For and on behalf of BDO LLP, Statutory Auditor

Guildford

16 March 2022

BDO LLP is a limited liability partnership registered in England and Wales (with registered number OC305127).

Consolidated statement of profit and loss and other comprehensive income

for the 12 months ended 31 December 2021

	Note	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Revenue	2	30,776	31,682
Cost of sales		(10,427)	(10,355)
Gross profit		20,349	21,327
Other operating income	4	924	1,305
Operating costs	4	(44,703)	(40,266)
Operating loss		(23,430)	(17,634)
Finance income	5	438	989
Finance expense	5	(380)	(664)
Loss before taxation	4	(23,372)	(17,309)
Taxation credit	8	1,970	2,493
Loss for the financial period and total comprehensive loss		(21,402)	(14,816)
Loss per £0.10 ordinary share expressed in pence per share:			
– basic and diluted	9	(11.53)p	(9.12)p

The notes on pages 74 to 97 are an integral part of these consolidated financial statements.

Consolidated statement of financial position

as at 31 December 2021

	Note	As at 31 Dec 2021 £'000	As at 31 Dec 2020 £'000
Assets			
Non-current assets			
Property, plant and equipment	10	18,141	14,979
Right-of-use assets	11	2,438	3,971
Intangible assets	12	8,478	4,909
Long-term investments	17	5,000	8,000
Investment in associates	13	500	–
Other receivables	15	741	741
Total non-current assets		35,298	32,600
Current assets			
Inventories	14	3,145	2,107
Contract assets	2	7,331	864
Other current assets	16	1,133	1,002
Derivative financial instruments	20	1,073	59
Current tax receivable		3,531	3,124
Trade and other receivables	15	4,865	5,570
Short-term investments	17	93,129	69,231
Cash and cash equivalents	17	151,455	32,955
Total current assets		265,662	114,912
Liabilities			
Current liabilities			
Trade and other payables	18	(2,783)	(9,112)
Contract liabilities	2	(4,290)	(7,505)
Other current liabilities	19	(5,818)	(2,675)
Derivative financial instruments	20	–	(43)
Lease liabilities	21	(754)	(823)
Provisions	22	(1,579)	(612)
Total current liabilities		(15,224)	(20,770)
Net current assets		250,438	94,142
Non-current liabilities			
Lease liabilities	21	(2,285)	(3,622)
Provisions	22	(1,828)	(1,610)
Total non-current liabilities		(4,113)	(5,232)
Net assets		281,623	121,510
Equity attributable to the owners of the parent			
Share capital	23	19,073	17,217
Share premium		404,726	227,682
Capital redemption reserve	24	3,449	3,449
Merger reserve	24	7,463	7,463
Accumulated losses		(153,088)	(134,301)
Total equity		281,623	121,510

The notes on pages 74 to 97 are an integral part of these consolidated financial statements.

The financial statements on pages 70 to 97 were approved by the Board of Directors on 16 March 2022 and were signed on its behalf by:

Phil Caldwell
Chief Executive Officer

Eric Lakin
Chief Financial Officer

Ceres Power Holdings plc
Registered Number: 5174075

Consolidated cash flow statement

for the year ended 31 December 2021

	Note	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Cash flows from operating activities			
Loss before taxation		(23,372)	(17,309)
Adjustments for:			
Finance income	5	(438)	(989)
Finance expense	5	380	664
Depreciation of property, plant and equipment	4	4,215	3,820
Depreciation of right-of-use assets	4	541	776
Amortisation of intangibles	4	1,004	208
Net foreign exchange (gains)/losses	4	(563)	139
Net change in fair value of financial instruments at fair value through profit or loss	4	(1,057)	(55)
Share-based payments	25	2,615	1,378
Operating cash flows before movements in working capital and provisions		(16,675)	(11,368)
Decrease/(increase) in trade and other receivables and other current assets		22	(2,338)
Increase in inventories		(1,038)	(704)
Increase in trade and other payables and other liabilities		2,832	752
Increase in contract assets		(6,467)	(142)
(Decrease)/increase in contract liabilities		(3,215)	4,444
Increase in provisions		1,121	1,072
Net cash used in operations		(23,420)	(8,284)
Taxation received		3,078	2,460
Net cash used in operating activities		(20,342)	(5,824)
Investing activities			
Purchase of property, plant and equipment		(7,377)	(9,256)
Capitalised development expenditure		(4,573)	(3,795)
Decrease/(increase) in long-term investments		3,000	(8,000)
Increase in short-term investments		(62,898)	(74,380)
Repayment of short-term investments		39,000	68,849
Finance income received		438	1,123
Net cash used in investing activities		(32,410)	(25,459)
Financing activities			
Proceeds from issuance of ordinary shares		181,472	50,851
Expenses from issuance of ordinary shares		(2,572)	(344)
Cash (paid)/received on behalf of employees on the sale of share options		(7,490)	7,490
Repayment of lease liabilities	21	(405)	(523)
Finance interest paid	21	(316)	(664)
Net cash generated from financing activities		170,689	56,810
Net increase in cash and cash equivalents		117,937	25,527
Exchange gains/(losses) on cash and cash equivalents		563	(139)
Cash and cash equivalents at beginning of year/period		32,955	7,567
Cash and cash equivalents at end of year/period	17	151,455	32,955

The notes on pages 74 to 97 are an integral part of these consolidated financial statements.

Consolidated statement of changes in equity

for the year ended 31 December 2021

	Note	Share capital £'000	Share premium £'000	Capital redemption reserve £'000	Merger reserve £'000	Accumulated losses £'000	Total £'000
At 1 July 2019		15,277	179,116	3,449	7,463	(120,863)	84,442
Comprehensive income							
Loss and total comprehensive loss for the financial period		–	–	–	–	(14,816)	(14,816)
Total comprehensive loss		–	–	–	–	(14,816)	(14,816)
Transactions with owners							
Issue of shares, net of costs	23	1,940	48,566	–	–	–	50,506
Share-based payments	25	–	–	–	–	1,378	1,378
Total transactions with owners		1,940	48,566	–	–	1,378	51,884
At 31 December 2020		17,217	227,682	3,449	7,463	(134,301)	121,510
Comprehensive income							
Loss and total comprehensive loss for the financial year		–	–	–	–	(21,402)	(21,402)
Total comprehensive loss		–	–	–	–	(21,402)	(21,402)
Transactions with owners							
Issue of shares, net of costs	23	1,856	177,044	–	–	–	178,900
Share-based payments	25	–	–	–	–	2,615	2,615
Total transactions with owners		1,856	177,044	–	–	2,615	181,515
At 31 December 2021		19,073	404,726	3,449	7,463	(153,088)	281,623

The notes on pages 74 to 97 are an integral part of these consolidated financial statements.

Notes to the consolidated financial statements

for the year ended 31 December 2021

1. Accounting policies used in the preparation of the financial statements

The Company is incorporated and domiciled in the United Kingdom and is registered on the AIM Market of the London Stock Exchange.

The accounting policies applied in the preparation of these consolidated financial statements are set out below and at the start of the respective notes to these consolidated financial statements. These policies have been consistently applied to all the years presented, unless otherwise stated.

Basis of preparation

The consolidated financial statements of the Group have been prepared on a going concern basis, in accordance with UK-adopted international accounting standards ("IFRS") and with the requirements of the Companies Act 2006 as applicable to companies reporting under those standards.

On 31 December 2020, IFRS as adopted by the European Union at that date was brought into the UK law and became UK-adopted international accounting standards, with future changes being subject to endorsement by the UK Endorsement Board. The Group transitioned to UK-adopted international accounting standards in its consolidated financial statements on 1 January 2021. There was no impact or changes in accounting from the transition.

The Company has elected to prepare its entity financial statements in accordance with Financial Reporting Standard 101 Reduced Disclosure Framework (FRS 101) and these are presented on pages 98 to 102.

In 2020, the Group extended its accounting period from the 12 months ended 30 June 2020 to the 18 months ended 31 December 2020. As a result, the comparative period covers the 18-month period ended 31 December 2020.

The consolidated financial statements have been prepared on a historical cost basis except that the following assets and liabilities are stated at their fair value: derivative financial instruments and financial instruments classified as fair value through profit and loss.

Foreign currencies

The consolidated financial statements are presented in pounds sterling, which is the Company's functional currency and the Group's presentational currency. Transactions denominated in foreign currencies are translated into sterling at the exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated into sterling at the foreign exchange rate prevailing at the period end. Foreign exchange differences arising on translation are recognised in the Consolidated Statement of Profit and Loss.

Basis of consolidation

The consolidated financial statements of Ceres Power Holdings plc include the results of the Company, subsidiary entities which are controlled by the Group and the Group's interest in associates. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. In assessing control, the Group takes into consideration potential voting rights that are currently exercisable. The acquisition date is the date on which control is transferred to the acquirer. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

Intra-Group balances and transactions, and any unrealised income and expenses arising from intra-Group transactions, are eliminated.

Associates

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operational policy decisions of the investee but is not control or joint control over those policies. The Group's share of the results of associates is included in the Group's Consolidated Statement of Profit or Loss using the equity method of accounting.

Investments in associates are recognised in the Group's Consolidated Statement of Financial Position at cost plus post-acquisition changes in the Group's share of the entity's net assets, less any impairment in value. If the Group's share of losses in an associate equals or exceeds its investment in the associate, the Group does not recognise further losses, unless it has incurred obligations to do so or made payments on behalf of the associate.

Unrealised gains arising from transactions with associates are eliminated to the extent of the Group's interest in the entity.

Going concern

The Group has reported a loss after tax for the year ended 31 December 2021 of £21.4m and net cash used in operating activities of £20.3m. At 31 December 2021, following the receipt of c.£179m of funds from the equity placement in March 2021, it held cash and cash equivalents and investments of £250m. The Directors have prepared annual budgets and cash flow projections that extend 15 months from the date of approval of this report. These projections were supported by stress testing forecast cash flows considering the impact of different scenarios including the Group's expectation of the potential continued future impact of Covid-19. In each case the projections demonstrated that the Group is expected to have sufficient cash reserves to meet its liabilities as they fall due and to continue as a going concern. For the above reasons, the Directors continue to adopt the going concern basis in preparing the financial statements.

Critical accounting judgements and estimates

The preparation of financial statements in conformity with IFRS requires management to make judgements, estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Although these estimates are based on management's best knowledge of the amount, event or actions, actual results may ultimately differ from these 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.

Significant judgements

The judgements made by management in applying accounting policies that are considered to have the most significant impact on the Group's assets and liabilities are the following:

- Revenue from customer contracts
- Capitalisation and amortisation of development costs
- Determination of the term of the lease as a lessee in the event of agreements with termination options

Revenue from customer contracts

The Group has recognised revenue from customer contracts of £30.8m in the 12 months ended 31 December 2021 (18 months ended 31 December 2020: £31.7m) and net contract assets of £3.0m (2020: liabilities of £6.6m) as at 31 December 2021. Note 2 sets out the Group's accounting policies in respect of revenue from customer contracts.

Customer contracts typically include engineering services, access to or sale of technology hardware and licences. Judgement is required when identifying the performance obligations in a contract as well as when determining the basis on which to allocate revenue between each performance obligation.

In determining the revenue recognition for licence components of customer contracts, judgements must be made as to the nature of the licences (right to access or right to use) and the number and timing of performance obligations associated with those licences. These judgements are made based on the interpretation of key clauses and conditions within each customer contract. For example, where a contract confers the customer with the right to benefit from existing background IP as at a specific date, that is generally treated as a right to use licence. In contrast, where a contract confers the customer with the right to benefit from future IP developments as they occur, that is more likely to be treated as a right to access licence. Judgement is also required when determining the point at which the benefit of the IP is fully transferred to the customer, which can depend on a number of factors including the customer's prior experience with fuel cell technology.

During the current year, these judgements have been applied to the agreement entered into with Bosch in December 2020. The contract has a total value of c.£23m, including c.£6m contingent on the Group achieving certain KPIs during the contract term.

Key judgements applied to the revenue recognition of this contract included the identification of separate performance obligations for engineering services, supply of hardware and licence to use our IP, and to the treatment of variable consideration. Once determined, the transaction price was allocated between each performance obligation in accordance with our accounting policy, which was also applied to determine the appropriate timing of revenue recognition for each performance obligation, including the treatment of the IP licence as a right to access licence and therefore recognising related revenue over time.

Capitalisation and amortisation of development costs

When determining the criteria for starting, and subsequently ceasing, the capitalisation of development costs as an internally generated asset, IAS 38 requires that strict criteria are met; in particular, that it is probable that future economic benefits will result from the development asset.

Following the signing of commercial contracts with the Group's strategic partners in 2018, management determined that the probability threshold had been met, and the Group implemented processes to continuously review and assess all customer and internal development programme expenditure to ascertain whether it is appropriate to capitalise development costs under IAS 38.

Determining when capitalisation should commence and cease is a critical judgement, as is the basis for the appropriate stage at which to cease capitalising ongoing costs and to commence amortising the capitalised asset.

Within the Group there is an established Technology and Product Development Process with gated milestones that assesses the technology and product viability and maturity. Generally, until a programme has passed the required milestone gate, all expenditure is deemed "Research" and expensed as incurred. Expenses incurred after the milestone gate is passed are capitalised within the parameters set out in the accounting policy. Once a programme has passed another milestone gate, confirming development activities are completed, the capitalisation of costs ceases. Any further expenditure is expensed, and amortisation of the intangible asset commences.

Application of the above policy requires management's judgement around key areas such as future commercial feasibility of the development and that future economic benefit will be derived from the development. The Executive Board regularly reviews the critical judgements around capitalisation and useful economic life of development projects.

During the year ended 31 December 2021, the application of these judgements resulted in development costs of £4.3m (18 months ended 31 December 2020: £3.8m) being capitalised (see Note 12). The net book value of capitalised development costs as at 31 December 2021 increased to £8.2m (31 December 2020: £4.9m), and amortisation of £1.0m (18 months ended 31 December 2020: £0.2m) was charged during the year. In addition, judgement was applied to expense the majority of costs involved in our research and development activities around our SOEC technology given the early stage of our investment.

Determination of the term of the lease as a lessee in the event of agreements with termination options

Ceres determines the term of the lease as the non-cancellable period for which the lessee has the right to use the asset as well as periods covered by termination options if Ceres is reasonably certain that it will not exercise that option. Both leases for premises contain a break clause. Ceres applies judgement in evaluating whether it is reasonably certain that an option to renew will be exercised or that an option to terminate the lease will not be exercised. In this context, Ceres considers all relevant facts and circumstances that create an economic incentive for Ceres to exercise, or not to exercise, the termination option, respectively.

During the year, the Group revised the expected term on one of its property leases, recognising an adjustment of £1.0m to reduce the right-of-use asset, with a corresponding adjustment to the lease liability.

1. Accounting policies used in the preparation of the financial statements *continued*

Significant estimates and assumptions

Significant estimates and associated assumptions are those that have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year. Although these estimates are based on management's best knowledge of the amount, event or actions, actual results may ultimately differ from these 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.

The most significant estimates, assumptions and sources of uncertainty applicable in preparing the Group's 2021 consolidated financial statements are set out below:

- Determination of period-related revenue recognition over the course of customer contracts
- Recognition and measurement of warranty provisions
- Recognition and measurement of dilapidation provisions

Determination of period-related revenue recognition over the course of customer contracts

Customer contracts typically include engineering services, access to or sale of technology hardware and licences. Revenue is allocated to these key components based on initial cost estimates to deliver the obligations under the contract and established margins for the different components. Management has established a range of margins to apply to contract components where the costs can be reliably estimated. Given the sometimes complex and long-term nature of customer contracts, these forecast cost estimations and margins are considered a significant area of estimation when valuing and allocating revenue to key components.

Revenue for engineering services is recognised based on the percentage of completion method and is measured based on the total contract costs at each reporting period compared to the estimated total contract costs to deliver the service over the contract life. The assessment of the total project costs to deliver the contracted service is updated during the term of the contract by project managers and is subject to internal reviews, including comparison to previous forecasts and past experience. Changes in these estimates may impact revenue recognised at the reporting date.

The actual recognition of wholly or partially unsatisfied performance obligations may ultimately differ from the estimate made at the reporting date and it is reasonably possible that outcomes on these contracts within the next reporting period could differ, adversely or favourably, in aggregate to those estimated. The estimated costs to complete each contract reflect management's best estimate at that point in time and no individual estimate is expected to have a materially different outcome. If the costs incurred for all of the Group's engineering services contracts were 10% higher or lower for the year ended 31 December 2022, revenue recognised in 2022 could be up to £0.8m higher or lower as a result.

Recognition and measurement of warranty provisions

As at 31 December 2021, the Group recognised warranty provisions of £1.3m (31 December 2020: £0.4m). When recognising and measuring provisions, assumptions are required about probability of occurrence, maturity and level of risk. Determining whether a current obligation exists is usually based on review by internal experts. The amount of provision is based on expected expenses, and is either calculated by assessing the specific case in the light of empirical values, outcomes from comparable circumstances, or else estimated by experts.

During the year production volumes from our manufacturing facility in Redhill have further increased, and we continue to ship higher volumes of technology hardware to customers. Following the identification of certain issues in a small population of hardware shipped during 2020, the Group incurred warranty costs of £0.4m during 2021. The cause of these issues has been identified and rectified, however given the relative immaturity of the product there is an ongoing risk that performance or other issues might be identified during the next financial year which would require further rectification costs to be incurred. Management believes that, based on existing knowledge, it is reasonably possible that warranty costs could be up to 50% higher than expected. This could result in the Group incurring additional costs of up to c.£0.6m over the next 12 months as a result. Note 22 sets out further details around the Group's warranty provisions.

Recognition and measurement of dilapidation provisions

As at 31 December 2021, the Group has recognised dilapidation provisions of £1.8m (31 December 2020: £1.6m). The amount of provision is based on the expected cost at the termination of the lease agreements, to bring the leasehold properties back to their original condition. The provision has been based on an independent surveyor's report, however management has applied judgement and interpretation to determine the best estimate of the expenditure required to settle the Group's probable liability based on this valuation, as well as to determine an appropriate discount rate to apply. If total dilapidation costs ended up being 10% higher than expected, additional costs incurred would be in the order of £0.2m. Note 22 sets out further details around the Group's dilapidation provisions.

New standards and amendments applicable as of 1 January 2021

The Group has adopted all standards, interpretations amended or newly issued by the IASB that were effective in the year. Their adoption has not had any material effect on the condensed consolidated financial statements.

New standards and amendments issued but not yet effective

The following adopted IFRSs have been issued, have an effective date for annual periods beginning after 1 January 2022 and have not been applied by the Group in these financial statements. Their adoption is not expected to have a material effect on the financial statements unless otherwise indicated:

The following amendments are effective for the period beginning 1 January 2022:

- Onerous Contracts – Cost of Fulfilling a Contract (Amendments to IAS 37);
- Property, Plant and Equipment: Proceeds before Intended Use (Amendments to IAS 16);
- Annual Improvements to IFRS Standards 2018-2020 (Amendments to IFRS 1, IFRS 9, IFRS 16 and IAS 41); and
- References to Conceptual Framework (Amendments to IFRS 3).

The following amendments are effective for the period beginning 1 January 2023:

- Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2);
- Definition of Accounting Estimates (Amendments to IAS 8); and
- Deferred Tax Related to Assets and Liabilities arising from a Single Transaction (Amendments to IAS 12).

2. Revenue

Revenue and direct costs

Revenue comprises the fair value of the consideration received or receivable for the provision of goods and services in the ordinary course of the Group's activities. Revenue is shown net of value added tax, other sales taxes and after eliminating sales within the Group.

Revenue primarily consists of amounts received or receivable under evaluation, development, supply and licence contracts. The nature of goods and services provided under these contracts consists of engineering services, access to or sale of technology hardware and licences to access and use intellectual property (IP).

Engineering services are provided under evaluation and development agreements. The nature of the work typically comprises engineering staff time for design, development, modelling and test analysis. The performance obligation in relation to this work is deemed to be satisfied over time based on a percentage of completion basis.

Technology hardware is provided to customers under evaluation, development and supply agreements. Where access to the hardware is provided under an evaluation agreement, the performance obligation is deemed to be satisfied on a straight-line basis over the period that the customer's preferred technology performance attributes are verified under the evaluation agreement. Where access to the hardware is provided under development and supply agreements, the performance obligation is satisfied at the point in time that the hardware is delivered.

Access to intellectual property (IP) is provided to customers under licence agreements. The nature of the licences (right to access or right to use) is determined based on the interpretation of key clauses and conditions within each customer contract. The performance obligation is the disclosure of IP under the licence and is based on the number and timing of disclosures associated with those licences. For a right to use licence the performance obligation is satisfied at a point in time when the IP is disclosed. For a right to access licence the performance obligation is satisfied over the time that access is granted to IP developed.

Revenue is allocated to engineering services and access to or sale of technology hardware based on initial cost estimates to deliver the obligations under the contract and established margins for the different components (cost-plus margin). Management has established a range of margins to apply to contract components where the costs can be reliably estimated. Given the sometimes complex and long-term nature of customer contracts, these forecast cost estimations and margins are considered a significant area of judgement when valuing and allocating revenue to key components.

Revenue is allocated to licences on a stand-alone selling price basis where observable. Where the licence forms part of a wider contract for the provision of engineering services and technology hardware, the Group uses a cost-plus margin approach for revenue allocated to engineering services and technology hardware components and a residual approach for allocating revenue to licences.

Revenue allocated to key components of contracts is recognised when performance obligations in relation to the key components are satisfied. *Performance obligations are deemed to be satisfied as follows:*

- Access to technology hardware – either on delivery or over time access is granted
- Sale of technology hardware – on delivery
- Engineering services – percentage of completion
- Right-to-use licence – at the point in time the IP is disclosed
- Right-to-access licence – over time that access is granted to IP developed

Percentage of completion is measured based on the total contract costs at each reporting period compared to the estimated total contract costs to deliver the service over the contract life. The assessment of the total project costs to deliver the contracted service are updated during the term of the contract by project managers and are subject to internal reviews, including comparison to previous forecasts and past experience.

Material differences in the amount of revenue in any given period may result if the judgements or estimates prove to be incorrect or if management's estimates change on the basis of development of the business or market conditions. To date there have been no material differences arising from these judgements and estimates.

The revenue recognition is subject to certainty of receipt of cash, or when any specific conditions in agreements have been met. Where there is a timing difference between the recognition of revenue and invoicing under a contract, a contract asset or liability is recognised.

If a loss is expected in respect of a contract, the entire loss is recognised immediately in the Consolidated Statement of Profit and Loss.

Variable consideration, such as for the achievement of performance targets or variation requests under negotiation with the customer at the reporting date, can be included in the transaction price together with the estimated costs to perform the associated obligations. These estimates of the expected value or most likely amount are recognised to the extent that it is highly probable that there will not be a significant reversal in the amount of cumulative revenue recognised in a future reporting period.
Contract modifications are treated as a separate contract if the scope of the contract increases because of the addition of distinct goods or services, and the price of the contract increases by an amount of consideration that reflects the stand-alone selling price of the additional promised goods or services.

Where a contract modification does not meet these criteria, it is accounted for as an adjustment to the existing contract, either prospectively, where the remaining goods or services are distinct from the goods and services transferred before the modification, or through a cumulative catch-up adjustment, where the remaining services are not distinct and are part of a single performance obligation that is only partially satisfied when the contract is modified.

The Group's revenue is disaggregated by geographical market, major product/service lines, and timing of revenue recognition:

Geographical market

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Europe	7,676	14,228
Asia	22,748	16,613
North America	109	841
Rest of World	243	–
	30,776	31,682

For the year ended 31 December 2021, the Group has identified three major customers (defined as customers that individually contributed more than 10% of the Group's total revenue) that accounted for approximately 59%, 25% and 11% of the Group's total revenue recognised in the year (18 months ended 31 December 2020: three customers that accounted for approximately 27%, 44% and 18% of the Group's total revenue for that period).

2. Revenue *continued*

Major product/service lines

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Engineering services	6,777	10,866
Provision of technology hardware	7,353	10,297
Licences	16,646	10,519
	30,776	31,682

Timing of transfer of goods and services

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Products and services transferred at a point in time	15,326	15,280
Products and services transferred over time	15,450	16,402
	30,776	31,682

Contract-related assets and liabilities

	Note	31 Dec 2021 £'000	31 Dec 2020 £'000
Trade receivables	15	2,612	3,328
Contract assets – accrued income		7,010	837
Contract assets – deferred costs		321	27
Contract assets		7,331	864
Total contract-related assets		9,943	4,192
Contract liabilities – deferred income		(4,290)	(7,505)

No material expected credit losses were recognised against trade receivables or contract assets in either the current year or prior period. Further details regarding the composition of trade receivables can be found in Note 15.

The contract assets – accrued income – primarily relate to consideration for work completed but not billed at the reporting date. The contract assets are transferred to trade receivables when the rights become unconditional, which is generally when work is invoiced. The increase in the balance compared with 31 December 2020 primarily relates to one customer, and includes the recognition of revenue relating to variable consideration following the achievement of KPIs during the year, which was invoiced and paid in early 2022.

The contract assets – deferred costs – relate to the cost to provide technology hardware to customers under evaluation agreements. The cost is deferred and recognised on a straight-line basis over the period of access as the customers' preferred technology performance attributes are verified under the agreement.

The contract liabilities – deferred income – primarily relate to invoices raised or consideration received in advance from customers. There are no significant financing components associated with deferred income. The decrease in balance compared with the prior period is primarily due to timing differences between revenue recognised on work performed and raising invoices to customers.

Revenue recognised in the current year that was included in the contract liabilities – deferred income – balance at the beginning of the year was £5,199,000 (18 months ended 31 December 2020: £3,061,000).

There were no significant amounts of revenue recognised in the year ended 31 December 2021 arising from performance obligations satisfied in previous periods (18 months ended 31 December 2020: no significant amounts).

Significant changes in the contract assets and the contract liabilities balances during the year/period are as follows:

	Contract assets 2021 £'000	Contract liabilities 2021 £'000
Revenue recognised that was included in the contract liability balance at the beginning of the year		5,199
Increases due to cash received, excluding amounts recognised as revenue during the year		(1,985)
Transfers from contract assets recognised at the beginning of the year to receivables	(837)	
Increases as a result of changes in the measure of progress	7,010	

	Contract assets 2020 £'000	Contract liabilities 2020 £'000
Revenue recognised that was included in the contract liability balance at the beginning of the period		3,061
Increases due to cash received, excluding amounts recognised as revenue during the period		(7,505)
Transfers from contract assets recognised at the beginning of the period to receivables	(306)	
Increases as a result of changes in the measure of progress	837	

The revenue expected to be recognised in future years for evaluation and development, supply and licence agreements in respect of performance obligations that are unsatisfied (or partially unsatisfied) at the year end is:

	2022 £'000	2023 £'000	2024 £'000
Evaluation, development, supply and licence agreements[1]	23,982	10,311	1,988

[1] Excluding future royalties receivable from partners and expected revenue from the planned collaboration with Weichai and Bosch in China.

The comparatives as at 31 December 2020 are as follows:

	2021 £'000	2022 £'000	2023 £'000
Evaluation, development, supply and licence agreements	27,478	17,047	10,386

The above analysis excludes revenue which is contracted but contingent upon milestones or decision criteria which are at the customers' discretion.

The Company applies the practical expedient in IFRS 15.121 and does not disclose information about remaining performance obligations that have original expected durations of one year or less.

3. Segmental analysis

In accordance with IFRS 8, the Group identifies reporting segments based on internal management reporting information that is regularly reviewed by the chief operating decision maker, which the Group considers to be the Executive team.

Historically, the Group has reported its performance in a single segment, reflecting the Group's solid oxide fuel cell (SOFC) technology. For the current year, following increased investment in and development of the Group's solid oxide electrolysis cell (SOEC) technology, the Group has introduced segmental reporting internally that separately discloses the results of the two segments, down to adjusted EBITDA level, to the Executive team.

Following the change of segmental reporting during the year, comparatives for the 18 month period ended 31 December 2020 have been represented accordingly.

	12 months ended 31 Dec 2021			18 months ended 31 Dec 2020		
	SOFC £'000	SOEC £'000	Total £'000	SOFC £'000	SOEC £'000	Total £'000
Revenue	30,776	–	30,776	31,682	–	31,682
Cost of sales	(10,427)	–	(10,427)	(10,355)	–	(10,355)
Gross profit	20,349	–	20,349	21,327	–	21,327
Other operating income	924	–	924	1,305	–	1,305
Operating costs (excluding adjusting items)	(25,765)	(12,183)	(37,948)	(31,695)	(2,305)	(34,000)
Adjusted EBITDA[1]	(4,492)	(12,183)	(16,675)	(9,063)	(2,305)	(11,368)
Adjusting items:						
Depreciation and amortisation			(5,760)			(4,804)
Share-based payment charge			(2,615)			(1,378)
Net foreign exchange losses/(gains)			563			(139)
Fair value adjustment			1,057			55
Operating loss			(23,430)			(17,634)
Finance income			438			989
Finance expense			(380)			(664)
Loss before taxation			(23,372)			(17,309)
Taxation credit			1,970			2,493
Loss for the financial year			(21,402)			(14,816)

1. Adjusted EBITDA is an alternative performance measure, as defined on page 37.

All of the Group's non-current assets are located in the UK (2020: all in the UK).

4. Loss before taxation

Research and development

The Group undertakes research and development activities either on its own behalf or in conjunction with customers.

Group and customer-funded expenditure on research, and on development activities not meeting the conditions for capitalisation (see Note 12), are written off as incurred and charged to the Consolidated Statement of Profit and Loss.

Government grants

Grants are recognised on a case-by-case basis. Revenue grants are recognised in the Consolidated Statement of Profit and Loss as other operating income as the related costs are incurred and expensed. The reimbursement of the cost of an item of plant and equipment or intangible by way of a capital grant is presented as deferred income and recognised in the Consolidated Statement of Profit and Loss as other operating income on a basis consistent with the depreciation or amortisation of the asset over its estimated useful life.

For grants with no technical milestones, and where recovery is reasonable, the grant is recognised on an accruals basis in order to match the associated expenditure with the grant income. For grants with technical milestones, these grants are held on the Consolidated Statement of Financial Position as deferred income and are recognised only when the relevant milestone has been achieved and the associated cash has been received.

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Operating costs are split as follows:		
Research and development costs	31,290	27,820
Administrative expenses	11,245	10,060
Commercial expenses	2,168	2,386
	44,703	40,266
Loss before taxation is stated after (crediting)/charging:		
Other operating income – grant income	(924)	(1,305)
Staff costs, including share-based payments (Note 6)	26,992	23,592
Cost of inventories recognised as expense (Note 14)	5,867	8,715
Depreciation of property, plant and equipment (Note 10)	4,215	3,820
Depreciation of right-of-use assets (Note 11)	541	776
Amortisation of intangibles (Note 12)	1,004	208
Repairs expenditure on property, plant and equipment	589	558
Net change in fair value of financial instruments at fair value through profit or loss	(1,057)	(55)
Net foreign exchange (gain)/loss	(563)	139
RDEC tax credit	(1,304)	(1,265)

Services provided by the Group's auditor

During the period the Group obtained the following services from the Group's auditor as detailed below:

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Fees payable to the Company's auditor for the audit of parent Company and consolidated financial statements	25	20
Fees payable to the Company's auditor for other services:		
– the audit of the Company's subsidiaries	65	50
– audit-related assurance services – review of interim financial results, including audit assurance	134	75
– audit-related assurance services – grants and awards	21	38
– taxation compliance services	–	58
– advisory services in relation to the Group's potential move to the Main Market	96	–
– other – training services provided to Group employees	–	34
	341	275

5. Finance income and expense

Interest income and expense

Interest income is recognised in the Consolidated Statement of Profit and Loss in the period in which it is earned.

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Interest receivable on cash and cash equivalents, and investments	438	989
Interest on lease liabilities	(316)	(664)
Unwinding of discount on provisions	(64)	–
Total interest expense	(380)	(664)

6. Employees and Directors

The average number of persons (including Executive Directors) employed by the Group during the period was:

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
By activity:		
Research and development	204	135
Prototype production	145	89
Administration	58	39
Commercial	7	5
	414	268

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Staff costs (for the above persons) comprised:		
Wages and salaries, including compensation for loss of office	20,613	19,131
Social security costs	2,390	1,762
Other pension costs (Note 7)	1,374	1,321
Share-based payments (Note 25)	2,615	1,378
	26,992	23,592

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Directors' emoluments:		
Aggregate emoluments	1,248	1,281
Company contributions to defined contribution pension schemes	44	50
Gain on exercise of share options and other share schemes[1,2]	98	6,779
	1,390	8,110

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Highest-paid Director:		
Aggregate emoluments	478	537
Company contributions to defined contribution pension schemes	25	29
Gain on exercise of share options and other share schemes[1]	–	5,092
	503	5,658

1. The gain on exercise of share options for the 18 months ended 31 December 2020 includes the gain on disposal of the plc shares, received on the sale of the ESS shares in the Company's subsidiary, Ceres Power Intermediate Holdings Ltd, which were granted as a modification to the unexercised 2004 Employees' Share Scheme options in 2014. Further details on the ESS share scheme are provided in Note 25(a).
2. The Directors had LTIPs with an aggregate value of £10,018,452 exercisable as at 31 December 2021 (31 December 2020: £10,537,155).

Two Directors (2020: two Directors) have retirement benefits accruing under defined contribution pension schemes.

Additional information on the emoluments of the Directors, together with information regarding the share interests and share options of the Directors, is included in the Remuneration report on pages 56 to 61, which form part of these audited financial statements.

Key management compensation

The Directors consider that the key management of the Group comprises the Executive Board and Non-Executive Directors. The key management compensation is summarised in the following table:

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Salaries and other short-term employment benefits	2,298	2,386
Post-employment benefits	92	102
Share-based payments	1,502	662
	2,391	3,150

7. Pensions

Pension scheme arrangements

The Group operates a defined contribution pension plan for employees. The assets of the scheme are held separately from those of the Group in independently administered funds. The plan is a post-employment benefit plan under which the Group pays fixed contributions during the employee's service and will have no legal or constructive obligation to pay amounts after the employee's service ends. Obligations for contributions to defined contribution pension plans are recognised as an expense in the Consolidated Statement of Profit and Loss in the period during which services are rendered by employees.

The pension charge represents contributions payable by the Group to the funds and amounted to £1,374,000 (18 months ended 31 December 2020: £1,321,000). A total of £219,000 was payable to the funds as at 31 December 2021 (31 December 2020: £148,000).

8. Taxation and deferred taxation

Taxation

The taxation credit for the year comprises current and deferred tax and any adjustment to tax payable or receivable in respect of previous years. Tax is recognised in the Consolidated Statement of Profit and Loss except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.

Current tax receivable is the expected tax receivable on the activities for the period, using tax rates enacted or substantively enacted at the period end. The current tax receivable represents the Directors' best estimate of tax due to the Group at the period end under the SME R&D tax and the RDEC credit regimes.

Deferred taxation

Deferred tax is provided on temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The following temporary differences are not provided for: the initial recognition of assets or liabilities that affect neither accounting nor taxable profit other than in a business combination; and differences relating to investments in subsidiaries to the extent that they will probably not reverse in the foreseeable future. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the period end.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the temporary difference can be utilised.

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
UK corporation tax	(2,917)	(3,124)
Foreign tax suffered	973	798
Adjustment in respect of prior periods	(26)	(167)
Taxation credit	(1,970)	(2,493)

No corporation tax liability has arisen during the period (2020: £nil) due to the losses incurred.

The current tax rate of 19% is unchanged (2020: 19%)

A tax credit has arisen as a result of expenditure surrendered and claimed under the SME R&D and RDEC tax credit regimes in the current year and prior period. Foreign tax relates to withholding tax arising on licence income received from customers based in China and South Korea.

The tax result for the year is different from the standard rate of small profits UK corporation tax of 19.00% (2020: 19.00%). The differences are explained below:

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Loss before taxation	(23,372)	(17,309)
Loss before taxation multiplied by the UK tax rate of 19.00% (2020: 19.00%)	(4,441)	(3,289)
Effects of:		
Losses carried forward	6,895	3,627
Enhanced tax deductions for R&D expenditure	(4,366)	(2,486)
Expenses not deductible	120	164
Fixed asset differences	456	380
Effect of overseas tax rates	788	647
Adjustment in respect of prior periods – R&D tax credit	(26)	(167)
Difference between R&D tax credit and small company tax rate	1,199	1,044
Tax on RDEC credit	251	239
Share option timing differences	(2,846)	(2,652)
Total taxation credit	(1,970)	(2,493)

Deferred taxation

Potential deferred tax assets have not been recognised. The temporary differences are set out below:

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Temporary differences:		
Difference between capital allowances and depreciation	(6,587)	(8,836)
Deductions relating to share options	(50,773)	(73,438)
Other timing differences	(238)	(19)
Losses carried forward	(125,820)	(89,330)
	(183,418)	(171,623)

The deferred tax assets have not been recognised as the Directors consider that it is unlikely that the asset will be realised in the foreseeable future. The element of the RDEC credit that can only be set off against future UK Corporation tax liability is £716,000 (2020: £452,000) and has not been recognised as the Directors consider that it is unlikely that this asset will be realised in the foreseeable future.

9. Loss per share

Basic and diluted loss per £0.10 ordinary share of 11.53p for the year ended 31 December 2021 (18 months ended 31 December 2020: 9.12p) is calculated by dividing the loss for the financial period attributable to ordinary shareholders by the weighted average number of ordinary shares in issue during the year. Given the losses reported during the year, there is no dilution of losses per share for the year ended 31 December 2021 (18 months ended 31 December 2020: no dilution).

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Loss for the financial year/period attributable to shareholders	(21,402)	(14,816)
Weighted average number of shares in issue	185,689,432	162,474,146
Loss per £0.10 ordinary share (basic and diluted)	(11.53)p	(9.12)p

10. Property, plant and equipment

Property, plant and equipment

Property, plant and equipment is stated at cost less accumulated depreciation and accumulated impairment losses. The cost includes all expenditure that is directly attributable to the acquisition of the assets. Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the asset will flow to the Group and the cost of the asset can be measured reliably. All other repairs and maintenance costs are charged to the Consolidated Statement of Profit and Loss during the financial period in which they are incurred. The Directors annually consider the need to impair these assets.

Depreciation is charged to the income statement on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment. Land is not depreciated. The estimated useful lives are as follows:

Leasehold improvements	Ten years or the lease term if shorter
Plant and machinery	Three to ten years
Computer equipment	Three years
Fixtures and fittings	Three to ten years
Motor vehicles	Three to five years

Depreciation methods, useful lives and residual values are reviewed, and adjusted if appropriate, at each balance sheet date.

The carrying values of property, plant and equipment are reviewed on an ongoing basis for any indication of impairment. Where any indication of impairment exists, the recoverable value of the assets is estimated. An impairment loss is recognised in the Consolidated Statement of Profit and Loss whenever the carrying value of property, plant and equipment exceeds its recoverable amount.

Assets under construction represents the cost of purchasing, constructing and installing property, plant and equipment ahead of their productive use. The category is temporary, pending completion of the assets and their transfer to the appropriate and permanent category of property, plant and equipment. As such, no depreciation is charged on assets under construction.

	Leasehold improvements £'000	Plant and machinery £'000	Computer equipment £'000	Fixtures and fittings £'000	Assets under construction £'000	Motor vehicles £'000	Total £'000
Cost							
At 1 July 2019	2,222	10,846	1,458	69	6,803	12	21,410
Additions	708	5,904	603	35	1,780	–	9,030
Transfers	2,958	4,659	–	210	(7,827)	–	–
Disposals	(5)	–	–	–	–	–	(5)
At 31 December 2020	5,883	21,409	2,061	314	756	12	30,435
Additions	1,529	3,521	502	34	1,791	–	7,377
Transfers	–	572	–	–	(572)	–	–
At 31 December 2021	7,412	25,502	2,563	348	1,975	12	37,812
Accumulated depreciation							
At 1 July 2019	2,096	8,478	998	69	–	–	11,641
Charge for the period	621	2,718	400	80	–	1	3,820
Disposals	(5)	–	–	–	–	–	(5)
At 31 December 2020	2,712	11,196	1,398	149	–	1	15,456
Charge for the year	646	3,089	392	83	–	5	4,215
At 31 December 2021	3,358	14,285	1,790	232	–	6	19,671
Net book value							
At 31 December 2021	4,054	11,217	773	116	1,975	6	18,141
At 31 December 2020	3,171	10,213	663	165	756	11	14,979
At 30 June 2019	126	2,368	460	–	6,803	12	9,769

Assets under construction primarily comprise plant and machinery and leasehold improvements related to the Group's manufacturing facility.

11. Right-of-use assets

The Group holds material leases for premises and smaller leases for IT equipment, with lease terms ranging from six months to ten years. The Group recognises right-of-use assets and lease liabilities (i.e. leases are recognised on the Consolidated Statement of Financial Position) for all leases other than for short-term leased plant and machinery.

Lease liabilities are initially measured at the present value of the remaining lease payments discounted at the Group's incremental borrowing rate. Subsequently, lease liabilities are measured by adjusting to reflect interest on the lease liability, reducing the liability to reflect lease payments made and to reflect any re-assessment or lease modifications, or revised in-substance fixed lease payments (refer to Note 21).

The associated right-of-use asset for property leases and other assets is initially measured at the amount equal to the lease liability adjusted for the amount of any prepaid or accrued lease payments relating to that lease. Subsequently, right-of-use assets are measured at cost less any accumulated depreciation and adjusted for any re-measurement of the lease liability.

Right-of-use assets are depreciated over the shorter of the lease term and the relevant useful economic life following the periods set out in the property, plant and equipment depreciation policy. Where the lease transfers ownership of the underlying asset to the lessee by the end of the lease term or the cost of the right-of-use asset reflects that the lessee will exercise a purchase option, the right-of-use asset is depreciated over its useful economic life.

Right-of-use assets are tested for impairment by applying IAS 36 'Impairment of Assets'.

	Land and buildings £'000	Computer equipment £'000	Total £'000
Cost			
At 1 July 2019	–	–	–
Initial recognition on adoption of IFRS 16	4,729	18	4,747
At 31 December 2020	4,729	18	4,747
Additions	–	43	43
Adjustment of lease term	(1,035)	–	(1,035)
Disposals	–	(18)	(18)
At 31 December 2021	3,694	43	3,737
Accumulated depreciation			
At 1 July 2019	–	–	–
Charge for the period	766	10	776
At 31 December 2020	766	10	776
Charge for the year	523	18	541
Disposals	–	(18)	(18)
At 31 December 2021	1,289	10	1,299
Net book value			
At 31 December 2021	2,405	33	2,438
At 31 December 2020	3,963	8	3,971
At 30 June 2019	–	–	–

During the year ended 31 December 2021, the Group revised the expected term on one of its property leases, recognising an adjustment of £1,035,000 to reduce the right-of-use asset, with a corresponding adjustment to the lease liability.

12. Intangible assets

Research and development

Expenditure incurred on research and development is distinguished as relating to a research phase or development phase with reference to the Group's technology and product development process.

All research phase expenditure is recognised in the Consolidated Statement of Profit and Loss as an expense when incurred (see Note 4).

Development phase expenditure is capitalised from the point that all of the following conditions are met:

- the product or process under development is technically and commercially feasible;
- the Group intends to and has the technical ability and sufficient resources to complete the development;
- future economic benefits are probable; and
- the Group can measure reliably the expenditure attributable to the asset during its development.

Development phase activities involve a plan or design for the production of new or substantially improved products or processes in relation to the Group's core fuel cell and system technology and intellectual property. The expenditure capitalised includes the cost of materials, direct labour and an appropriate proportion of overheads.

Capitalisation of development phase activities continues until the point at which the product or process under development meets its originally mandated technical specification. For product and process development, this is at the point where the production design version is approved or the development is completed.

Subsequent expenditure is capitalised where it enhances the functionality of the asset and demonstrably generates an enhanced economic benefit to the Group. All other subsequent expenditure on the product or process is expensed as incurred.

Where development activities are funded through government grants and the cost of those activities is capitalised under this policy, the grants received are considered Capital Grants and are presented as deferred income and recognised in the Consolidated Statement of Profit and Loss as other operating income on a basis consistent with the depreciation or amortisation of the asset over its estimated useful life.

Patent costs incurred in the procurement of patents in relevant territories are capitalised where the Group considers those patents relate to technology that is deemed to be commercially feasible. Other patent costs and costs to maintain patents once granted in those territories, are expensed to in the Consolidated Statement of Profit and Loss as incurred.

Subsequent to recognition, internally generated intangible assets are reported at cost less accumulated amortisation and accumulated impairment losses. Amortisation is recognised on a straight-line basis over their estimated useful lives and is presented within operating costs. The estimated useful lives are reviewed and adjusted as appropriate, at each balance sheet date. Intangible assets which are not yet available for use are tested for impairment at each balance sheet date.

The following useful lives are used in the calculation of amortisation:

Capitalised development	Two to seven years
Patent costs	Three to ten years

The carrying values of intangible assets are reviewed on an ongoing basis for any indication of impairment. Where any indication of impairment exists, the recoverable value of the assets is estimated. An impairment loss is recognised in the Consolidated Statement of Profit and Loss whenever the carrying value of an intangible asset exceeds its recoverable amount.

	Internal developments in relation to manufacturing site £'000	Customer and internal development programmes £'000	Perpetual software licences £'000	Patent costs £'000	Total £'000
Cost					
At 1 July 2019	234	1,101	–	–	1,335
Additions	177	3,323	–	295	3,795
At 31 December 2020	411	4,424	–	295	5,130
Additions	–	3,983	252	338	4,573
At 31 December 2021	411	8,407	252	633	9,703
Accumulated depreciation					
At 1 July 2019	–	13	–	–	13
Charge for the period	82	126	–	–	208
At 31 December 2020	82	139	–	–	221
Charge for the year	82	899	23	–	1,004
At 31 December 2021	164	1,038	23	–	1,225
Net book value					
At 31 December 2021	247	7,369	229	633	8,478
At 31 December 2020	329	4,285	–	295	4,909
At 30 June 2019	234	1,088	–	–	1,322

The customer and internal development intangible relates to the design, development and configuration of the Company's core solid oxide fuel cell and system technology. Amortisation of capitalised development commences once the developed technology is complete and is available for use.

13. Subsidiary undertakings and associates

Details of the Group's subsidiaries and associates at 31 December 2021 are as follows:

Name of undertaking	Country of incorporation	Description of shares held	Proportion of nominal value of shares held by the Company	Type of entity
Ceres Power Ltd	England and Wales	£0.001 ordinary shares	100%[1]	Subsidiary
Ceres Intellectual Property Company Ltd	England and Wales	£1.00 ordinary shares	100%[1]	Subsidiary
Ceres Power Intermediate Holdings Ltd	England and Wales	£0.01 ordinary shares	100%	Subsidiary
Ceres Power Licence Company Ltd	England and Wales	£1.00 ordinary shares	100%[1]	Subsidiary
Ceres Engineering Consulting (Shanghai) Co Ltd	Shanghai, China	£1.00 ordinary shares	100%[2]	Subsidiary
RFC Power Ltd	England and Wales	£0.001 ordinary shares	8.4%[3]	Associate

1. Ceres Power Ltd, Ceres Intellectual Property Company Ltd and Ceres Power Licence Company Ltd are 100% held directly by Ceres Power Intermediate Holdings Ltd. Registered address is Viking House, Foundry Lane, Horsham, West Sussex, RH13 5PX.
2. 100% held directly by Ceres Power Ltd. Registered address is Office 1903i, Floor 19/F, Tower B, No.1065 West Zhongshan Road, Changning District, Shanghai, China.
3. 8.4% held directly by Ceres Power Intermediate Holdings Ltd. Registered address is Imperial College, White City Incubator Translation and Innovation Hub, London, W12 0BZ.

The principal activity of Ceres Power Ltd is the commercialisation and continued development of the Group's fuel cell and electrochemical technology. The principal activity of Ceres Intellectual Property Company Ltd is the administration of registered intellectual property developed within the Group. The principal activity of Ceres Power Intermediate Holdings Ltd is as a holding company to the other Group companies and to manage the Group's cash, cash equivalents and investments. The principal activity of Ceres Power Licence Company Ltd is the provision of overseas licence and royalty services.

On 23 August 2021, the Group established a Wholly Foreign Owned Entity (WFOE), Ceres Engineering Consulting (Shanghai) Co Ltd in Shanghai, China. The company is a 100% owned subsidiary of Ceres Power Ltd. The principal activity of the company is to provide business development and technical support to our business and partners in China.

On 11 November 2021 Ceres Power Intermediate Holdings Ltd acquired an 8.4% shareholding in RFC Power Ltd in exchange for consultancy services performed, and the Group recognised an investment in associate of £0.5m accordingly. Ceres has an option to acquire the balance of the outstanding share capital for up to £25m, payable in Ceres shares, exercisable from May to November 2022. RFC Power specialises in developing novel flow battery chemistries for energy storage systems.

The results of Ceres Power Ltd, Ceres Intellectual Property Company Ltd, Ceres Power Intermediate Holdings Ltd, Ceres Engineering Consulting (Shanghai) Co Ltd and Ceres Power Licence Company Ltd are included within these consolidated financial statements. The Group's share of the results of RFC Power Ltd are included within these consolidated financial statements by applying the equity method of accounting, as set out in Note 1. The Group's share of RFC's results since acquiring the shareholding is not material and has therefore not been disclosed separately.

On 9 February 2022, the Group announced the intention to collaborate with Weichai and Bosch to access the substantial opportunities that exist for fuel cell technologies in the Chinese market. This is likely to include a three-way system collaboration to be set up in Shandong province in China to develop and manufacture SOFC system products, with Weichai being the majority shareholder and Bosch and Ceres minority shareholders. Ceres is expected to take up a holding of 10%. Detailed non-binding Heads of Terms have been signed by all parties and full contracts are expected to be agreed in 2022.

14. Inventories

Inventories

Inventories consist of raw materials, work in progress and finished goods.

Inventories are stated at the lower of cost and net realisable value. Cost comprises direct material cost and, where applicable, direct labour costs and direct overheads that have been incurred. Cost is calculated using the first-in, first-out (FIFO) method. Net realisable value represents the estimated selling price less all estimated costs to completion and selling costs to be incurred.

	31 Dec 2021 £'000	31 Dec 2020 £'000
Current:		
Raw materials	1,299	1,016
Work in progress	969	838
Finished goods	877	253
	3,145	2,107

Inventories have increased in line with the continued ramp up in manufacturing capacity in the year and to ensure the Group can satisfy expected customer demand for technology hardware in 2022.

During the year ended 31 December 2021, inventories of £5.9m (18 months ended 31 December 2020: £8.7m) were recognised as an expense and included in cost of sales.

15. Trade and other receivables

Trade and other receivables

Trade receivables are recognised initially at fair value and subsequently held at amortised cost using the effective interest method, less loss allowances. Loss allowances are calculated using the simplified approach to determine expected credit losses, taking into account both historical payment profiles and any credit losses experienced, together with forward-looking macroeconomic factors. The carrying amount of these balances approximates to fair value due to the short maturity of amounts receivable. Payment terms generally range between 30 and 60 days depending on the customer.

Although the Group's past experience of significant credit losses on these assets has been negligible, the impairment assessment performed by the Group considers both past experience and future expectations of credit losses. As a result of this assessment, the Group considers the risk of expected credit losses on trade receivables and contract assets to be immaterial. Further details on this assessment are provided in Note 20.

	31 Dec 2021 £'000	31 Dec 2020 £'000
Current:		
Trade receivables	2,612	3,328
Other receivables	2,253	2,242
	4,865	5,570
Non-current:		
Other receivables	741	741

Other receivables primarily consist of amounts invoiced and recoverable in respect of grants, rent deposits, VAT and the RDEC tax credit. There is no material difference between the fair value of trade and other receivables and their carrying values and they are not materially overdue at the period end. There are no expected credit losses recognised during the year ended 31 December 2021 (18 months ended 31 December 2020: £nil). The carrying amounts of the Group's trade and other receivables are primarily denominated in pounds sterling, euros and US dollars (as set out in Note 20).

16. Other current assets

	31 Dec 2021 £'000	31 Dec 2020 £'000
Current:		
Prepayments	673	648
Accrued interest income	322	129
Accrued other income	138	225
	1,133	1,002

Accrued interest consists of interest receivable on short-term and long-term bank deposits, the carrying value of accrued interest is classified at amortised cost which approximates to fair value. Accrued other income relates to consideration for work completed on grant-funded contracts but not billed at the reporting date. The accrued other income is transferred to other receivables when the rights become unconditional.

17. Cash, cash equivalents and investments

Cash and cash equivalents

Cash and cash equivalents includes cash at bank and in hand, pooled money market funds and short-term deposits with an original maturity of less than or equal to one month.

Long-term investments

Long-term investments include bank deposits with a maturity greater than 12 months as at the date of the Consolidated Statement of Financial Position.

	31 Dec 2021 £'000	31 Dec 2020 £'000
Long-term bank deposits greater than 12 months	5,000	8,000

Short-term investments

Short-term investments include bank deposits with an original maturity greater than one month and a maturity as at the date of the Consolidated Statement of Financial Position of less than or equal to 12 months.

	31 Dec 2021 £'000	31 Dec 2020 £'000
Cash at bank and in hand	4,957	20,684
Money market funds	146,498	12,271
Cash and cash equivalents	151,455	32,955
Short-term bank deposits greater than one month and less than 12 months	93,129	69,231
	244,584	102,186

The Group holds surplus funds in accordance with the treasury policy, as set out in Note 20.

	Interest rate type	31 Dec 2021 £'000	31 Dec 2020 £'000
Interest rate risk profile of the Group's financial assets:			
Cash at bank and in hand	Floating	4,957	20,684
Money market funds	Floating	146,498	12,271
Short-term bank deposits greater than one month and less than or equal to 12 months	Fixed and floating	93,129	69,231
Long-term bank deposits greater than 12 months	Fixed	5,000	8,000
		249,584	110,186

During the year ended 31 December 2021 the fixed rate short-term bank deposits were primarily designated in pounds sterling, had remaining terms of between 32 days and 12 months and earned interest of between 0.05% and 1.8%. Also included in short-term bank deposits was a deposit of CNH68m (c.£8m) with a remaining term of 6 months earning interest of approximately 1.8%. The fixed rate long-term bank deposit in pounds sterling has a term of 13 months and earns interest of 0.61%. Floating rate cash deposits, money market funds and other bank deposits earned interest based on relevant UK LIBID-related equivalents. The credit quality of financial assets has been assessed by reference to external credit ratings.

18. Trade and other payables

Trade and other payables

Trade and other payables are initially recognised at fair value. Where considered necessary they are subsequently measured at amortised cost using the effective interest method.

	31 Dec 2021 £'000	31 Dec 2020 £'000
Current:		
Trade payables	2,425	1,752
Taxation and social security	–	713
Other payables	358	6,647
	2,783	9,112

At 31 December 2020, taxation and social security and other payables primarily comprised timing differences on payments relating to the exercise of certain share options in December 2020. These amounts were paid in January 2021.

19. Other liabilities

	31 Dec 2021 £'000	31 Dec 2020 £'000
Current:		
Accruals	4,803	1,464
Deferred income	1,015	1,211
	5,818	2,675

Accruals are recognised at invoiced cost and have increased when compared with the prior period reflecting timing differences relating to invoices received for certain significant costs incurred during the second half of the year. There is no material difference between the invoiced value and the value calculated on an amortised cost basis or fair value. Deferred income consists of grant income deferred in relation to associated development costs which have been capitalised as an intangible asset. Grant income is recognised in the Consolidated Statement of Profit and Loss in the same period as the expenditure to which the grant relates.

20. Financial instruments

Derivative financial instruments

The Group's activities expose it primarily to the financial risks of changes in foreign currency exchange rates. The Group uses forward contracts, and in limited circumstances options, to hedge against foreign currency-denominated income and expenditure commitments. The use of financial derivatives is governed by the Group's treasury policy, as approved by the Board. The Group does not use derivative financial instruments for speculative purposes. Details of financial instruments are shown later in this note.

Derivative financial instruments are recognised at fair value. The gains or losses on remeasurement to fair value are recognised immediately in the Consolidated Statement of Profit and Loss as they arise and are shown in Note 4.

The Group only uses derivative financial instruments to hedge foreign currency exposures which arise from an underlying current or anticipated business requirement. The Group does not currently use derivative instruments to manage its interest rate risk. The Group does not trade in financial instruments.

Fair values of financial assets and financial liabilities

There is no difference between the fair value and the carrying value of the Group's financial assets and financial liabilities. Carrying value approximates to fair value because of the short maturity periods of these financial instruments.

The fair value of forward exchange contracts is estimated by discounting the difference between the contractual forward price and the current forward price for the residual maturity of the contract using a risk-free interest rate (based on government bonds). The fair value of currency options is estimated using the Black–Scholes pricing model based on the strike price with reference to the future exchange rate, spot rate and risk-free interest rate. Forward exchange contracts and options are included in the Level 2 classification.

Other than the forward contracts and options noted below, none of the Group's assets and liabilities were measured at fair value at 31 December 2021 (31 December 2020: none).

The fair values of all financial assets and financial liabilities by class, together with their carrying amounts shown in the balance sheet, are as follows:

	Fair value hierarchy	Carrying amount 31 Dec 2021 £'000	Fair value 31 Dec 2021 £'000	Carrying amount 31 Dec 2020 £'000	Fair value 31 Dec 2020 £'000
Financial assets at amortised cost					
Trade and other receivables		4,175	4,175	6,311	6,311
Cash, cash equivalents and investments		249,584	249,584	110,186	110,186
Financial assets measured at fair value through profit or loss					
Forward exchange contracts	Level 2	321	321	55	55
Non-deliverable forward	Level 2	752	752	–	–
Currency options	Level 2	–	–	4	4
		1,073	1,073	59	59
Financial liabilities measured at amortised cost					
Trade and other payables and accruals		(7,586)	(7,586)	(9,863)	(9,863)
Financial liabilities measured at fair value through profit or loss					
Forward exchange contracts	Level 2	–	–	(9)	(9)
Non-deliverable forward contracts	Level 2	–	–	(32)	(32)
Currency options	Level 2	–	–	(2)	(2)
		–	–	(43)	(43)
Total financial instruments		248,246	248,246	106,650	106,650

Financial risk management

The Group's operations expose it to a variety of financial risks that include credit risk and market risk arising from changes to interest rates and foreign currency exchange rates. The Board reviews and agrees policies for managing each of these risks.

The principal risks addressed are as follows:

Credit risk

The Group's exposure to credit risk arises from holdings of cash, cash equivalents and investments, and if a counterparty or customer fails to meet its contractual obligations.

The Group's primary objective to manage credit risk from its holdings of cash, cash equivalents and investments is to minimise the risk of a loss of capital and eliminate loss of liquidity having a detrimental effect on the business. The Group places surplus funds of no more than £30m per institution into pooled money market funds with same-day access and of no more than £10m per institution for bank deposits with durations of up to 24 months. During the period the Group's treasury policy restricted investments in short-term money market funds to those which carry short-term credit ratings of at least two of AAAm (Standard & Poor's), Aaa-mf (Moody's) and AAAmmf (Fitch) and deposits with banks with minimum long-term rating of A-/A3/A and short-term rating of A-2/P-2/F-1 for banks in which the UK Government holds less than 10% ordinary equity.

Trade receivables at the period end relate to five customers (31 December 2020: four) of which £697,000 relates to the Europe geographic region, £274,000 to North America and £1,641,000 to Asia (31 December 2020: £2,377,000 related to the Europe geographic region, £nil to North America and £951,000 to Asia).

Contract assets at the period end related to five customers of which £1,459,000 relates to the Europe geographic region, £321,000 to North America and £5,551,000 to Asia (31 December 2020: related to three customers of which £170,000 relates to the Europe geographic region, £nil to North America and £667,000 to Asia).

The Group's customers are generally large multinational companies or research institutions and are consequentially not considered to add significantly to the Group's credit risk exposure. All trade receivables are due within the agreed credit terms for the current year and preceding period and are consequently stated at cost.

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables and other contract assets (primarily unbilled work in progress).

To measure expected credit losses, trade receivables and other contract assets are analysed based on their credit risk characteristics including days past due and the specific payment profile of the customer to determine a suitable historical loss rate. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors that the Group considers could affect the ability of its customers to settle the receivables.

The Group has followed this approach as at 31 December 2021 and as a result has not recognised a loss allowance for trade receivables or other contract assets (31 December 2020: no loss allowance). Management does not consider that a reasonably possible change in the estimation of expected credit losses would have a material impact on the results of the following year.

Interest rate risk

Interest rate risk on the Group's liabilities is minimal.

The Group's finance income is sensitive to changes in interest rates. A change of 0.5% in interest rates would have impacted the finance income by £494,000 for the year ended 31 December 2021 (for the 18 months ended 31 December 2020 a change of 0.5% in interest rates would have impacted the finance income by £200,000). This analysis considers the effect of financial instruments with variable interest rates. The increase in sensitivity to interest rate changes is driven by the increase in cash, cash equivalents and investments held at the balance sheet date when compared with 31 December 2020. Interest rate risk is mitigated by investing in deposit accounts of different durations ranging from 32 days to 24 months.

Liquidity risk

Liquidity risk is the risk arising from the Group not being able to meet its financial obligations. The Group manages its liquidity needs by preparing cash flow forecasts, including forecasting of the Group's liquidity requirements, to ensure the Group has sufficient cash to meet its operational needs.

The following are the contractual maturities of financial liabilities, including estimated interest payments and excluding the effect of netting agreements:

	31 Dec 2021 £'000						31 Dec 2020 £'000					
	Carrying amount £'000	Contractual cash flows £'000	1 year or less £'000	1 to 2 years £'000	2 to 5 years £'000	>5 years £'000	Carrying amount £'000	Contractual cash flows £'000	1 year or less £'000	1 to 2 years £'000	2 to 5 years £'000	>5 years £'000
Non-derivative financial liabilities												
Trade and other payables and accruals	(8,601)	(8,601)	(8,601)	–	–	–	(11,787)	(11,787)	(11,787)	–	–	–
Lease liabilities	(3,040)	(3,602)	(833)	(832)	(1,303)	(634)	(4,445)	(6,111)	(823)	(817)	(2,447)	(2,024)
Derivative financial liabilities												
Forward exchange contracts:												
(Outflow)	–	(536)	(536)	–	–	–	(9)	(244)	(244)	–	–	–
Inflow	547	1,081	552	529	–	–	–	238	238	–	–	–

Foreign currency exposures

The Group's primary transaction currency is pound sterling. Exposures to foreign currency-denominated contracted receivables and commitments arise from the Group's overseas sales and purchases, which are primarily denominated in euros, US dollars, Canadian dollars and Japanese yen. During the prior period, the Group entered into a fixed term deposit denominated in Chinese renminbi, to fund the expected initial investment of CNH68m (c.£8m) in the proposed collaboration with Weichei Power Co. Ltd). This deposit has been rolled forward following the ongoing discussions around the final form of the collaboration which are expected to complete during 2022.

The Group seeks to mitigate its foreign currency exposure by entering into forward currency exchange contracts, and in limited circumstances, currency options in accordance with the Group's treasury policy. Where the amounts to be paid and received in a specific currency are expected to largely offset one another, no further hedging activity is undertaken. Forward currency exchange contracts and options are primarily entered into for significant foreign currency exposures that are not expected to be offset by other currency transactions. The Group's objectives and policies are largely unchanged in the reporting periods under review.

During the prior period, the Group entered into a non-deliverable forward (NDF) to hedge an exposure to KRW related to a long-term customer contract. As at 31 December 2021, gross cashflows totalling £10.3m remained under the hedge (2020: £15.6m), which is due to be net-settled in pound sterling during 2022. Forward exchange contracts include forward currency contracts to sell 4.0m euros in total, and buy pounds sterling, over the next 12 months.

20. Financial instruments *continued*

The table below shows the extent to which the Group has monetary assets and liabilities in currencies other than pounds sterling. Foreign exchange differences arising on the retranslation of these monetary assets and liabilities are taken to the Consolidated Statement of Profit and Loss.

31 December 2021	Euro £'000	US dollar £'000	Canadian dollar £'000	Japanese yen £'000	Chinese renminbi £'000	Other £'000
Exposures to foreign currency risk:						
Cash and cash equivalents	1,687	505	38	565	103	29
Fixed term bank deposits	–	–	–	–	8,179	–
Trade receivables	474	274	–	–	–	–
Trade payables and payments on account	(287)	(393)	–	(9)	(25)	(10)
Other payables	–	–	–	–	(30)	–
Forward currency contracts – (outflow)/inflow	(5,421)	744	237	–	–	–
Balance sheet exposure	(3,547)	1,130	275	556	8,227	19

31 December 2020	Euro £'000	US dollar £'000	Canadian dollar £'000	Japanese yen £'000	Chinese renminbi £'000	Other £'000
Exposures to foreign currency risk:						
Cash and cash equivalents	897	83	75	36	–	26
Fixed term bank deposits	–	–	–	–	7,774	–
Trade receivables	1,186	–	–	–	–	–
Trade payables and payments on account	(408)	53	–	–	–	(19)
Other payables	–	–	(903)	–	–	–
Forward currency contracts – (outflow)/inflow	(3,978)	112	58	68	–	–
Balance sheet exposure	(2,303)	248	(770)	104	7,774	7

A 10% weakening of the following currencies against pound sterling at 31 December 2021 (or 31 December 2020) would have resulted in a profit or loss charge to the Consolidated Statement of Profit and Loss by the amounts shown below. This calculation assumes that the change occurred at the balance sheet date and had been applied to risk exposures existing at that date.

This analysis assumes that all other variables, in particular other exchange rates and interest rates, remain constant. The analysis is performed on the same basis for the comparative period.

	Profit or (loss)	
	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Euro	(314)	(152)
US dollar	(38)	(12)
Canadian dollar	(4)	75
Japanese yen	(56)	(2)
Chinese Renminbi	(734)	(707)
Other	(3)	–

A 10% strengthening of the above currencies against pound sterling at 31 December 2021 (or 31 December 2020) would have had the equal but opposite effect on the above currencies to the amounts shown above, on the basis that all other variables remain constant.

21. Lease liabilities

The Group leases certain assets under lease agreements. The lease liability consists of leases of land and buildings and computer equipment. The leases expire between March 2022 and November 2028. Full details of the accounting policy under which leases are recognised are in Note 11.

	£'000
Balance as at 1 July 2019	–
Leases recognised on the adoption of IFRS 16	4,971
Lease payments	(1,190)
Interest expense	664
Balance as at 31 December 2020	4,445
New finance leases recognised	41
Lease payments	(721)
Interest expense	316
Adjustment to lease term (see Note 11)	(1,042)
Balance as at 31 December 2021	3,039
Current	754
Non-current	2,285
Balance as at 31 December 2021	3,039
Current	823
Non-current	3,622
Balance as at 31 December 2020	4,445

Lease liability contractual maturities (representing undiscounted contractual cash-flows) are set out in Note 20.

22. Provisions

Provisions

A provision is recognised in the Consolidated Statement of Financial Position when the Group has a present legal or constructive obligation as a result of a past event that can be reliably measured and it is probable that an outflow of economic benefits will be required to settle the obligation where relevant.

Property dilapidations

Provisions have been made for future dilapidation costs on the leased properties. This provision is the Directors' best estimate as the actual costs and timing of future cash flows are dependent on future events and are updated periodically. The estimate is supported by advice received from professional advisers. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects risks specific to the liability. Any difference between expectations and the actual future liability will be accounted for in the period when such determination is made.

Warranties

As at the year end, only a small proportion of technology hardware supplied or sold to customers was provided with contractual warranties. The majority of technology hardware supplied or sold to customers has been provided without contractual warranties, however where a constructive obligation is considered to have been created through an expectation or past practice, a provision for the associated costs of future claims has been included at the year end. The Group recognises a provision for both contractual and constructive obligation warranties when the underlying products and services are sold. The provision is based on the past performance of the technology hardware, management's knowledge, customer expectations and a weighting of possible outcomes against their associated probabilities.

Contract losses

The Group holds provisions for expected contractual costs that it expects to incur over the life of the contract. Management exercises judgement to determine the value of the costs to be incurred and the amount of the provision to be made. Each provision is considered separately and the amount provided reflects the best estimate of the most likely amount to be incurred. Provision is made when the contractual or constructive obligation occurs. The provision is released to the Consolidated Statement of Profit and Loss over time or at the point in time that the actual costs are incurred.

22. Provisions *continued*

The movement in provisions charged to the Consolidated Statement of Profit and Loss for the year ended 31 December 2021 is set out below along with the value of provisions at 31 December 2021:

	Property dilapidations £'000	Warranties £'000	Contract losses £'000	Total £'000
At 1 January 2021	1,610	418	194	2,222
Movements in the Consolidated Statement of Profit and Loss:				
Amounts used	–	(404)	(175)	(579)
Unwinding of discount	64	–	–	64
Increase in provision	154	1,239	307	1,700
At 31 December 2021	1,828	1,253	326	3,407
Current	–	1,253	326	1,579
Non-current	1,828	–	–	1,828
At 31 December 2021	1,828	1,253	326	3,407
Current	–	418	194	612
Non-current	1,610	–	–	1,610
At 31 December 2020	1,610	418	194	2,222

The dilapidation provision at 31 December 2021 represents the present value of costs to be incurred in making good the Group's leasehold properties at the break points of the leases in approximately two to three years' time. The main uncertainty relates to estimating the cost that will be incurred at the end of the respective leases.

The warranty provision at the year end is primarily the result of a constructive obligation and reflects the Directors' best estimate of the cost required to fulfil these obligations with respect to a number of the Group's customer contracts. Subsequent to their initial recognition, warranty provisions are utilised or released over the periods of the various warranty obligations, which are expected to be less than two years. There are several areas of uncertainty supporting the provision, including determining the amount of technology hardware that may require repairing or replacing and respective timing as manufacturing costs are expected to reduce over time. In addition, as most of the Group's warranty provisions relate to constructive rather than contractual obligation and there is limited history of warranty claims with the Group's current customers, any final warranty obligation will be subject to negotiation with the respective customer.

Following the identification of certain issues in a small population of technology hardware shipped during 2020, the Group incurred warranty costs of £0.4m during the year. An additional provision of £1.2m was recognised to reflect the increased levels of technology hardware shipped to customers during the year and the potentially higher costs involved in rectifying faulty items as evidenced by the warranty charge recognised in the year.

As at 31 December 2021, the contract loss provision relates to one contract for the provision of technology hardware. The existing loss provision at 1 January 2021 was utilised in the year as expected against final customer shipments. An additional loss provision was then recognised to reflect a new contract with the same customer for the provision of technology hardware that is expected to be substantially utilised during 2022. The main uncertainties relate to the timing of hardware delivery and the underlying manufacturing costs which are expected to reduce over time as the Group's production facility matures.

23. Share capital

	31 Dec 2021 £'000		31 Dec 2020 £'000	
	Number of £0.10 Ordinary shares	£'000	Number of £0.10 Ordinary shares	£'000
Allotted and fully paid				
At 1 January 2021/1 July 2019	172,171,527	17,217	152,769,812	15,277
Allotted £0.10 Ordinary shares on exercise of employee share options	1,490,531	149	4,024,665	402
Allotted £0.10 Ordinary shares on cash placing (see below)	17,067,580	1,707	15,377,050	1,538
At 31 December	190,729,638	19,073	172,171,527	17,217

On 17 March 2021 the Group announced a fundraise that would allot 17,067,580 new ordinary shares of £0.10 each in the Company, for a total gross cash consideration of £180,916,340. In conjunction with the placing, 12,967,629 shares were allotted on 17 March 2021 which included Bosch and certain Directors of the Company subscribing for 3,649,150 and 24,376 shares respectively. On 19 May 2021 Weichai subscribed for and were allotted the remaining 4,099,951 shares.

During the year ended 31 December 2021, 1,490,531 ordinary £0.10 shares were allotted for cash consideration of £705,636 on the exercise of employee share options (18 months ended 31 December 2020: 4,024,665 ordinary £0.10 shares were allotted for cash consideration of £1,581,148) (see Note 25).

24. Reserves

The Consolidated Statement of Financial Position includes a merger reserve and a capital redemption reserve. The merger reserve represents a reserve arising on consolidation using book value accounting for the acquisition of Ceres Power Limited at 1 July 2004. The reserve represents the difference between the book value and the nominal value of the shares issued by the Company to acquire Ceres Power Limited. The capital redemption reserve was created in the year ended 30 June 2014 when 86,215,662 deferred ordinary shares of £0.04 each were cancelled.

25. Share options

Share-based payments

The Group has a number of employee and executive share option and award schemes under which it makes equity-settled share-based payments.

The fair value of share-based payment awards granted to employees is recognised as an employee expense, with a corresponding increase in equity, over the period in which the employees become unconditionally entitled to the awards. The fair value of the awards granted is measured using option valuation models, taking into account the terms and conditions upon which the awards were granted. The fair value of the share-based payment, determined at the grant date, is measured to reflect vesting and non-vesting conditions and for market-related vesting conditions there is no true-up for differences between expected and actual outcomes.

Where the parent Company grants options over its own shares to the employees of the Group, these are accounted for as equity-settled in the consolidated accounts of the Group.

The total charge recognised in the year ended 31 December 2021 relating to employee share-based payments was £2,615,000 (18 months ended 31 December 2020: £1,378,000).

The Company has a number of share option schemes and savings-related share option plans for its employees and a separate historical scheme for Executive Directors.

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
a) 2004 Employees' share option scheme	–	39
b) Sharesave schemes	384	317
c) Long Term Incentive Plan (LTIP)	2,231	1,022
	2,615	1,378

a) 2004 Employees' share option scheme

In previous years the Company issued share options under this scheme for Directors and employees, under which approved and unapproved share options were granted. The Company adopted the "Ceres Power Holdings Ltd 2004 Employees' share option scheme" at the time of listing in November 2004.

Under this scheme, Directors and employees hold options to subscribe for £0.10 ordinary shares in Ceres Power Holdings plc at prices ranging from £0.10 to the closing mid-market price on the day preceding the share option grant. All options are equity-settled. The vesting period for all options is generally between three and six years. If the options remain unexercised after a period of ten years from the date of the grant, the options expire. Options are forfeited if the employee chooses to leave the Group before the options vest.

Movements in the total number of share options outstanding and their relative weighted average exercise price are as follows:

	12 months ended 31 Dec 2021 £'000		18 months ended 31 Dec 2020 £'000	
	Number ('000)	Weighted average exercise price	Number ('000)	Weighted average exercise price
Outstanding at 1 January / 1 July	2,425	£0.66	5,808	£0.49
Exercised	(946)	£0.52	(3,073)	£0.64
Lapsed	(3)	£0.85	(310)	£0.86
Outstanding at 31 December	1,476	£0.75	2,425	£0.66
Exercisable	1,476	£0.75	2,425	£0.66

The weighted average share price on the exercise date of options was £12.50 (2020: £4.64).

The range of exercise prices for options outstanding at the end of the period is as follows:

	12 months ended 31 Dec 2021 £'000		18 months ended 31 Dec 2020 £'000	
Expiry date – 31 December	Number ('000)	Weighted average exercise price	Number ('000)	Weighted average exercise price
2022	–	–	75	£0.10
2023	611	£0.62	1,166	£0.50
2024	801	£0.84	1,002	£0.83
2025	37	£0.90	105	£0.86
2026	27	£0.55	27	£0.55
2027	–	–	50	£1.35

The options outstanding at the end of the period have a weighted average contractual life of 2.15 years (2020: 3.04 years).

During the 2016 and 2014 years, certain option-holders under the 2004 share option scheme were awarded Employee Shareholder Status (ESS) shares in the Company's subsidiary, Ceres Power Intermediate Holdings Ltd. The ESS shares were granted as a modification to the unexercised 2004 Employees' share scheme options providing the relevant employees with additional exercise rights. The issue of the ESS shares has not changed the vesting period or exercise price of the unexercised 2004 Employees' share scheme options granted. The total fair value charge of these options remains unchanged and the gross benefit received cannot exceed the gain realisable under the original share options and it cannot be received at an earlier time. Shares granted in Ceres Power Intermediate Holdings Ltd under the ESS scheme have minimal rights attached to them.

25. Share options *continued*

b) Sharesave scheme

During 2019 a new HMRC-approved savings-related share option scheme was implemented, under which employees save on a monthly basis, over a three-year period, towards the purchase of shares at a fixed price determined when the option is granted. This price is set at a 20% discount to the market price. The options must be exercised within six months of maturity of the savings contract, otherwise they lapse.

Movements in the total number of share options outstanding and their relative weighted average exercise price are as follows:

	12 months ended 31 Dec 2021 £'000		18 months ended 31 Dec 2020 £'000	
	Number ('000)	Weighted average exercise price	Number ('000)	Weighted average exercise price
Outstanding at 1 January / 1 July	1,042	£1.43	1,092	£0.68
Granted	162	£9.83	324	£1.95
Exercised	(202)	£1.06	(271)	£0.63
Lapsed/cancelled	(18)	£4.91	(103)	£1.16
Outstanding at 31 December	984	£2.83	1,042	£1.43
Exercisable	–	–	–	–

The weighted average share price on the exercise date of options was £11.01 (2020: £4.00).

The weighted average fair value of options granted in the period was £5.50 (2020: £1.09).

The expiry dates of options outstanding at the end of the period are as follows:

	12 months ended 31 Dec 2021 £'000		18 months ended 31 Dec 2020 £'000	
Expiry date – 31 December	Number ('000)	Weighted average exercise price	Number ('000)	Weighted average exercise price
2021	–	–	202	£1.06
2022	516	£1.27	523	£1.27
2023	313	£1.95	317	£1.95
2024	155	£9.83	–	–

The options outstanding at the end of the period have a weighted average contractual life of 1.44 years (2020: 1.86 years).

c) LTIP

During 2016 a Long Term Incentive Plan (LTIP) was implemented by the Remuneration Committee. Participation in the LTIP is at the invitation of the Committee and is intended to be used to incentivise the performance and retention of the Company's Executives and certain key employees.

The maximum awards for all participants are determined by the Remuneration Committee with appropriate input from independent advisers. Performance is based on achieving targets. Targets are major milestones which are aligned to the Group's strategic plan and also a sliding scale of Total Shareholder Return (TSR), which is measured over a period of three years with an additional holding period of two years for Executives. Malus, hold and clawback conditions apply.

Movements in the total number of share options outstanding and their relative weighted average exercise price are as follows:

	12 months ended 31 Dec 2021 £'000		18 months ended 31 Dec 2020 £'000	
	Number ('000)	Weighted average exercise price	Number ('000)	Weighted average exercise price
Outstanding at 1 January / 1 July	4,315	£0.10	3,354	£0.10
Granted	–	–	1,923	£0.10
Exercised	(342)	£0.10	(521)	£0.10
Lapsed	(10)	£0.10	(441)	£0.10
Outstanding at 31 December	3,963	£0.10	4,315	£0.10
Exercisable	2,134	£0.10	1,696	£0.10

The weighted average fair value of options granted in the 18 month period ending 31 December 2020 was £3.17.

The weighted average share price on the exercise date of options was £12.36 (2020: £4.27).

The expiry dates of options outstanding at the end of the period are as follows:

	12 months ended 31 Dec 2021 £'000		18 months ended 31 Dec 2020 £'000	
Expiry date – 31 December	Number ('000)	Weighted average exercise price	Number ('000)	Weighted average exercise price
2026	1,141	£0.10	1,253	£0.10
2027	336	£0.10	442	£0.10
2028	657	£0.10	787	£0.10
2029	1,116	£0.10	1,120	£0.10
2030	713	£0.10	713	£0.10

The options outstanding at the end of the year have a weighted average contractual life of 6.88 years (2020: 7.68 years).

Assumptions

The fair values of the 2004 and Sharesave schemes were measured by use of the Black–Scholes pricing model. The inputs to the Black–Scholes model were as follows:

Grant date	Sharesave scheme 2021 30 April 2021	Sharesave scheme 2020 22 January 2020	Sharesave scheme 2019 29 April 2019	Adjusted Sharesave scheme 2018 6 December 2017
Share price at date of grant (£)	12.290	2.440	1.583	1.330
Exercise price (£)	9.832	1.95	1.266	1.060
Expected volatility (%)	53%	53%	53%	55%
Expected option life (years)	3.25 years	3.25 years	3.25 years	3.25 years
Average risk-free interest rate (%)	1.00%	1.00%	1.00%	1.75%
Expected dividend yield	Nil	Nil	Nil	Nil

The exercise prices of options are stated above. The expected life of the options is based on the best estimate of the average number of years expected from grant to exercise. The expected volatility is based on historical volatility of the Company's shares since the Company restructured in 2012. The risk-free rate of return is management's estimate of the yield on zero-coupon UK Government bonds of a term consistent with the expected option life.

The fair values of the LTIP schemes were measured using a binomial pricing model and Monte Carlo simulation model.

The inputs to the Monte Carlo simulation model were as follows:

Grant date	LTIP 2020 (2) 10-21 December 2020	LTIP 2020 (1) 10 October 2019	LTIP 2019 10 October 2018
Share price at date of grant (£)	10.52–11.56	2.16	1.89
Exercise price (£)	0.1	0.1	0.1
Expected volatility (%)	31%	21%	54%
Expected option life (years)	up to 7 years	up to 7 years	Up to 7 years
Average risk-free interest rate (%)	1.00%	1.00%	1.75%
Expected dividend yield	Nil	Nil	Nil

26. Events after the balance sheet date

On 9 February 2022, the Group announced the intention to collaborate with Weichai and Bosch to access the substantial opportunities that exist for fuel cell technologies in the Chinese market. This is likely to include a three-way system collaboration to be set up in Shandong province in China to develop and manufacture SOFC system products, with Weichai being the majority shareholder and Bosch and Ceres minority shareholders. Ceres is expected to take up a holding of 10%. Detailed non-binding Heads of Terms have been signed by all parties and full contracts are expected to be agreed in 2022.

On 8 March 2022, the Group announced that it had signed a multi-million pound, long-term agreement with Horiba Mira to be our fuel cell and electrolysis test partner and supplier of test stands.

27. Capital commitments

Capital expenditure that has been contracted for but has not been provided for in the financial statements amounts to £8,086,000 as at 31 December 2021 (31 December 2020: £1,142,000), in respect of the acquisition of property, plant and equipment, primarily related to the Group's planned test stand expansion.

28. Related party transactions

As at 31 December 2021 the Group's related parties were its Directors. During the year one Director exercised and retained 8,491 share options under the Company's employee Sharesave scheme. There were no other transactions between the Company and the Directors during the period.

In the 18 months ended 31 December 2020, the following Directors exercised share options:

Date of exercise	Name	Relationship	Type of shares	Total number of options exercised[1]	Weighted average market price at exercise	Total gain on exercise	Number of shares retained
30 October 2019	Phil Caldwell	Director and shareholder	£0.10 ordinary shares	249,637	£2.112	£314,172	nil
30 October 2019	Richard Preston	Director and shareholder	£0.10 ordinary shares	92,875	£2.112	£186,883	nil
4 February 2020	Phil Caldwell	Director and shareholder	£0.10 ordinary shares	242,497	£3.989	£760,107	nil
4 February 2020	Richard Preston	Director and shareholder	£0.10 ordinary shares	75,000	£3.989	£285,731	nil
6 February 2020	Phil Caldwell	Director and shareholder	£0.10 ordinary shares	116,631	£4.055	£373,359	nil
1 April 2020	Phil Caldwell	Director and shareholder	£0.10 ordinary shares	13,636	£3.510	£38,863	13,636
10 December 2020	Phil Caldwell	Director and shareholder	£0.10 ordinary shares	387,007	£10.171	£3,605,620	nil
10 December 2020	Richard Preston	Director and shareholder	£0.10 ordinary shares	131,784	£10.171	£1,214,260	nil

1. The number of options exercised includes a number of shares sold in Ceres Power Holdings plc which were granted to Phil Caldwell and Richard Preston on the sale of Employee Shareholder Status (ESS) shares in the Company's subsidiary, Ceres Power Intermediate Holdings Ltd, which were granted as a modification to the unexercised 2004 Employees' Share Scheme options in 2014.

Company balance sheet

as at 31 December 2021

	Note	31 Dec 2021 £'000	31 Dec 2020 £'000
Fixed assets			
Investments	3	380,996	199,278
Current assets			
Debtors: amounts falling due within one year	4	14,892	4,515
Cash at bank and in hand	5	468	6,636
		15,360	11,151
Creditors: amounts falling due within one year	6	(8,309)	(2,583)
Net current assets		7,051	8,568
Net assets		388,047	207,846
Capital and reserves			
Called up share capital	8	19,073	17,217
Share premium		404,726	227,682
Capital redemption reserve	9	3,449	3,449
Profit and loss account		(39,201)	(40,502)
Shareholders' funds		388,047	207,846

The Company made a loss after taxation of £1.3m in the year (18 months ended 2020: profit of £10.5m).

The notes on pages 100 to 102 are an integral part of these Company financial statements.

The financial statements on pages 98 to 102 were approved by the Board of Directors on 16 March 2022 and were signed on its behalf by:

Phil Caldwell
Chief Executive Officer

Eric Lakin
Chief Financial Officer

Ceres Power Holdings plc
Registered Number: 5174075

Company statement of changes in equity

for the year ended 31 December 2021

	Note	Share capital £'000	Share premium £'000	Capital redemption reserve £'000	Profit and loss account £'000	Total £'000
At 1 July 2019		15,277	179,116	3,449	(52,341)	145,501
Comprehensive income						
Profit for the financial period		–	–	–	10,461	10,461
Total comprehensive loss		–	–	–	10,461	10,461
Transactions with owners						
Issue of shares, net of costs	8	1,940	48,566	–	–	50,506
Share-based payments charge	8	–	–	–	1,378	1,378
Total transactions with owners		1,940	48,566	–	1,378	51,884
At 31 December 2020		17,217	227,682	3,449	(40,502)	207,846
Comprehensive income						
Loss for the financial year		–	–	–	(1,314)	(1,314)
Total comprehensive loss		–	–	–	(1,314)	(1,314)
Transactions with owners						
Issue of shares, net of costs	8	1,856	177,044	–	–	178,900
Share-based payments charge	8	–	–	–	2,615	2,615
Total transactions with owners		1,856	177,044	–	2,615	181,515
At 31 December 2021		19,073	404,726	3,449	(39,201)	388,047

The notes on pages 100 to 102 are an integral part of these Company financial statements.

1. Accounting policies used in the preparation of the financial statements

Basis of preparation

The financial statements of the Company have been prepared in accordance with Financial Reporting Standard 101 Reduced Disclosure Framework (FRS 101).

In preparing these financial statements, the Company applies the recognition, measurement and disclosure requirements of International Accounting Standards, but makes amendments where necessary in order to comply with the Companies Act 2006 and has set out below where advantage of the FRS 101 disclosure exemptions has been taken.

Under section s408 of the Companies Act 2006 the Company is exempt from the requirement to present its own profit and loss account.

In these financial statements, the Company has applied the exemptions available under FRS 101 in respect of the following disclosures:

- Cash Flow Statement and related notes;
- Comparative period reconciliations for share capital;
- Disclosures in respect of transactions with wholly owned subsidiaries;
- Disclosures in respect of capital management;
- The effects of new but not yet effective IFRSs;
- Disclosures in respect of the compensation of Key Management Personnel; and
- Disclosures of transactions with a management entity that provides key management personnel services to the Company.

As the consolidated financial statements include the equivalent disclosures, the Company has also taken the exemptions under FRS 101 available in respect of the following disclosures:

- IFRS 2 Share-based Payments in respect of Group-settled share-based payment; and
- IFRS 7 Financial Instrument Disclosure.

The accounting policies set out below have, unless otherwise stated, been applied consistently to all periods presented in these financial statements.

The financial statements are prepared on the historical cost basis.

Critical accounting judgements and estimates

The preparation of financial statements under FRS 101 requires the Company's management to make judgements and estimates that affect the reported amounts of assets, liabilities, revenues and costs. Although these estimates are based on management's best knowledge of the amount, events or actions, actual results may ultimately differ from these 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.

The judgements that are considered to have the most significant impact on the Company's assets and liabilities are set out below.

The review of amounts owed by Group undertakings involved judgement when determining the credit risk of fellow Group undertakings and their ability to repay loans. As at 31 December 2021, management determined that Ceres Power Limited remains unable to repay any amounts in excess of the carrying value of the loan and therefore the historical provision of £59.3m was maintained.

Management's review of the Company's investments to determine whether an indicator of impairment exists requires estimates to be used when evaluating the carrying value of investments against their value-in-use. The value-in-use is estimated using a discounted cash flow valuation. The basis for the projected cash flows is the Group's business plan, which is prepared by management. As at 31 December 2021, this review resulted in management determining that the value-in-use continues to be in excess of its carrying value, and no impairment is therefore required.

2. Loss for the period

The Company has taken advantage of the exemption available under section 408 of the Companies Act 2006 and has not presented its profit and loss account. The Company's result for the year ended 31 December 2021 was a loss of £1.3m (18 months ended 31 December 2020: profit of £10.5m), which is stated after charging £66,000 (2020: £20,000) for remuneration receivable by the Company's auditor for the auditing of the financial statements and £134,000 (2020: £30,000) in relation to the audit of the interim financial information.

3. Fixed asset investments

Investments in equity securities

Fixed asset investments in subsidiaries are carried at cost less impairment.

Share-based payments

The Group in which the Company is associated has a number of employee and executive share option and award schemes under which it makes equity-settled share-based payments.

The fair value of share-based payment awards granted to employees is recognised as an employee expense, with a corresponding increase in equity, over the period in which the employees become unconditionally entitled to the awards. The fair value of the awards granted are measured using option valuation models, taking into account the terms and conditions upon which the awards were granted. The fair value of the share-based payment, determined at the grant date, is measured to reflect vesting and non-vesting conditions and there is no true-up for differences between expected and actual outcomes.

Where the Company grants options over its own shares to the employees of its subsidiaries it recognises an increase in the cost of investment in its subsidiaries with the corresponding credit being recognised directly in equity.

Impairment of fixed asset investments

Investments are stated at cost and reviewed for impairment if there are indicators that the carrying value may not be recoverable. An impairment loss is recognised to the extent that the carrying amount cannot be recovered either by selling the asset or by continuing to hold the asset and benefiting from the net present value of the future cash flows of the investment.

Investment in Group undertakings:

	31 Dec 2021 £'000	31 Dec 2020 £'000
Cost		
At 1 January	199,278	147,049
Capital contributions arising from share-based payment charge	2,613	1,378
Additional investment in shares of Ceres Power Intermediate Holdings Ltd	179,104	50,851
At 31 December	380,996	199,278

The Directors have reviewed the investment in its subsidiary for indicators of impairment at the year end, including considering the progress of technical development, funds held and the positive performance of the Group, as well as the Group's market capitalisation. Accordingly, no indicators of impairment were identified and the Directors continue to believe that the recoverable value of the investment exceeds its carrying value.

The Company's investments comprise interests in the following entities:

Name of undertaking	Country of incorporation	Description of shares held	Proportion of nominal value of shares held by the Company	Type of entity
Ceres Power Ltd	England and Wales	£0.001 ordinary shares	100%[1]	Subsidiary
Ceres Intellectual Property Company Ltd	England and Wales	£1.00 ordinary shares	100%[1]	Subsidiary
Ceres Power Licence Company Ltd	England and Wales	£1.00 ordinary shares	100%	Subsidiary
Ceres Power Intermediate Holdings Ltd	England and Wales	£0.01 ordinary shares	100%[1]	Subsidiary
Ceres Engineering Consulting (Shanghai) Co Ltd	Shanghai, China	£1.00 ordinary shares	100%[2]	Subsidiary
RFC Power Ltd	England and Wales	£0.001 ordinary shares	8.4%[3]	Associate

1. Ceres Power Ltd, Ceres Intellectual Property Company Ltd and Ceres Power Licence Company Ltd are 100% held directly by Ceres Power Intermediate Holdings Ltd. Registered address is Viking House, Foundry Lane, Horsham, West Sussex, RH13 5PX.
2. 100% held directly by Ceres Power Ltd. Registered address is Office 1903i, Floor 19/F, Tower B, No.1065 West Zhongshan Road, Changning District, Shanghai, China.
3. 8.4% held directly by Ceres Power Intermediate Holdings Ltd. Registered address is Imperial College, White City Incubator Translation and Innovation Hub, London, W12 0BZ.

On 11 November 2021 Ceres Power Intermediate Holdings Ltd acquired an 8.4% shareholding in RFC Power Ltd in exchange for consultancy services performed, and the Group recognised an investment in associate of £0.5m accordingly. Ceres has an option to acquire the balance of the outstanding share capital for up to £25m, payable in Ceres shares, exercisable from May to November 2022. RFC Power specialises in developing novel flow battery chemistries for energy storage systems.

On 23 August 2021 the Group established a Wholly Foreign Owned Entity (WFOE), Ceres Engineering Consulting (Shanghai) Co Ltd in Shanghai, China. The company is a 100% owned subsidiary of Ceres Power Ltd. The principal activity of the company is to provide business development and technical support to our business and partners in China.

On 2 September 2019, Ceres Power Licence Company Ltd was incorporated in England and Wales. The company is a 100% owned subsidiary of Ceres Power Intermediate Holdings Ltd. The principal activity of the company is the provision of overseas licence and royalty services.

The principal activity of Ceres Power Ltd is the commercialisation and continued development of the Group's fuel cell and electrochemical technology. The principal activity of Ceres Intellectual Property Company Ltd is the administration of registered intellectual property developed within the Group. The principal activity of Ceres Power Intermediate Holdings Ltd is as a holding company to the other Group companies and to manage the Group's cash, cash equivalents and short-term investments.

The results of Ceres Power Ltd, Ceres Intellectual Property Company Ltd, Ceres Power Licence Company Limited, Ceres Power Intermediate Holdings Ltd and Ceres Engineering Consulting (Shanghai) Co Ltd are included within the consolidated financial statements. The Group's share of the results of RFC Power Ltd are included within the consolidated financial statements by applying the equity method of accounting, as set out in Note 1. The Group's share of RFC's results since acquiring the shareholding is not material and has therefore not been disclosed separately.

4. Debtors: amounts falling due within one year

Trade and other debtors

Trade and other debtors are recognised initially at fair value. Where considered necessary they are subsequently measured at amortised cost using the effective interest method, less any impairment losses. The Company applies the general approach for the impairment review of loans to subsidiaries.

	31 Dec 2021 £'000	31 Dec 2020 £'000
Other debtors	97	1
Prepayments and accrued income	23	19
Amounts owed by Group undertakings	14,772	4,495
	14,892	4,515

The amounts owed by Group undertakings comprise inter-company loans and recharges. No specific repayment or interest terms are associated with these amounts. As of 31 December 2021, a loss allowance of £59,316,000 (31 December 2020: £59,316,000) has been recognised against the inter-company loan to Ceres Power Ltd, reflecting management's best estimate of the expected credit losses for that balance.

A subordination agreement exists between the Company and Ceres Power Ltd. As at 31 December 2021, amounts owed by Ceres Power Ltd to the Company of £60,676,000 (31 December 2020: £60,676,000) are subordinated to all other creditors of Ceres Power Ltd.

5. Cash and cash equivalents

Cash and cash equivalents comprise cash balances.

6. Creditors: amounts falling due within one year

Trade and other creditors

Trade and other creditors are recognised initially at fair value. Where considered necessary they are subsequently measured at amortised cost using the effective interest method.

	31 Dec 2021 £'000	31 Dec 2020 £'000
Trade creditors	23	27
Other creditors	71	–
Accruals	221	206
Amounts owed to Group undertakings	7,994	2,350
	8,309	2,583

7. Taxation

Taxation

Tax on the profit or loss for the year comprises current and deferred tax and any adjustment to tax payable in respect of previous years. Tax is recognised in the profit and loss account except to the extent that it relates to items recognised directly in equity or other comprehensive income, in which case it is recognised directly in equity or other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the balance sheet date.

Deferred taxation

Deferred tax is provided on temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The following temporary differences are not provided for: the initial recognition of assets or liabilities that affect neither accounting nor taxable profit other than in a business combination; and differences relating to investments in subsidiaries to the extent that they will probably not reverse in the foreseeable future. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the balance sheet date.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the temporary difference can be utilised.

Potential deferred tax assets have not been recognised but are set out below:

	31 Dec 2021 £'000	31 Dec 2020 £'000
Tax effect of timing differences because of:		
Short-term timing differences	(5)	(4)
Losses carried forward	(1,688)	(1,457)
	(1,693)	(1,461)

The deferred tax assets have not been recognised as the Directors consider that it is unlikely that the asset will be realised in the foreseeable future. The potential deferred tax assets are calculated using the estimated future UK tax rate of 25% (2020: 19%). The gross amount of losses carried forward as at 31 December 2021 was £6.8m (31 December 2020: £7.7m), which do not have an expiry date.

8. Called-up share capital

	31 Dec 2021 £'000		31 Dec 2020 £'000	
	Number of £0.10 Ordinary shares	£'000	Number of £0.10 Ordinary shares	£'000
Allotted and fully paid:				
Ordinary shares at 31 December	190,729,638	19,073	172,171,527	17,217

Details of shares issued in the period are provided in Note 23 to the Group financial statements. Details of share options are disclosed in Note 25 to the Group financial statements.

9. Capital redemption reserve

The capital redemption reserve was created in the year ended 30 June 2014 when 86,215,662 deferred ordinary shares of £0.04 each were cancelled.

10. Employees

The Company has no employees other than the Non-Executive Directors (including the Chairman), whose remuneration is set out on page 57.

Directors and advisers

Directors of Ceres Power Holdings plc

- Trine Borum Bojsen (Non-Executive Director)
- Tudor Brown (Non-Executive Director)
- Phil Caldwell (Chief Executive Officer)
- Steve Callaghan (Senior Independent Director)
- Warren Finegold (Chairman)
- Uwe Glock (Non-Executive Director)
- Qinggui Hao (Non-Executive Director)
- Aidan Hughes (Non-Executive Director)
- Professor Dame Julia King (Non-Executive Director)
- Eric Lakin (Chief Financial Officer)

Registered number

5174075

Company Secretary

Deborah Grimason

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www.ceres.tech

"Ceres", "Ceres Power", "Clean Energy Starts With Ceres" and "SteelCell" are registered trademarks belonging to the Group.

Glossary

Biofuel
A fuel derived from biomass, rather than by the very slow geological processes involved in the formation of fossil fuels. Most common biofuels include bio-ethanol (from sugar or starch crops) and biodiesel (from oils and fats).

Combined heat and power (CHP)
A unit that generates electricity while at the same time capturing usable heat that is created during this process. This heat can then be used to provide hot water or central heating for example, improving the efficiency of the device.

Decarbonisation
The process of lowering the amount of greenhouse gas emissions (mostly carbon dioxide, CO_2) produced by the burning of fossil fuels.

Efficiency, electrical/thermal
The amount of electricity/heat that is produced by a process for every unit of energy supplied to the process, often expressed as a percentage.

Efficiency, total
The amount of useful energy in any form that a process produces for every unit of energy supplied to the process, often expressed as a percentage.

Electrolyser
A device that uses an electric current to drive a chemical reaction, the reverse process to that of a fuel cell. There are several types of electrolysis technologies:

- **Alkaline electrolysis (AEL):**In use for more than 100 years, it uses a liquid alkaline electrolyte solution and operates at low temperature with liquid water. It is the largest scale and lowest cost technology today, but is not as efficient as other technologies.
- **Proton Exchange Membrane Electrolysis (PEME):** Uses a solid electrolyte that requires expensive rare metal catalysts. It can operate at high current densities at low temperature with liquid water and has a high dynamic response
- **Solid Oxide Electrolysis Cell (SOEC):** Least mature technology, it works at high temperature on steam, giving it significantly higher efficiency and lower operating costs than other technologies when using waste heat, and when integrating it with existing processes such as steel, ammonia and synthetic fuel.

Energy
In physics, the capacity for doing work. It may exist in potential, kinetic, thermal, electrical, chemical, nuclear or other various forms. Measured in Joules or Watt-Hours.

Flow battery (or Redox Flow Battery)
An electrochemical method of storing and generating electricity with flexible storage capacity and flexible discharge electricity rate. A flow battery may be used like a fuel cell or a rechargeable battery, with the electrolyte stored outside of the cell. Unlike a battery, the storage capacity is de-coupled from the cell and the electrolyte can be fed at different rates to generate varying amount of electricity.

Fuel cell
A device for converting chemical energy (fuel) directly into electrical energy without the need for combustion. There are several fuel cell technology families, classified by their operating temperature and the type of electrolyte used. These include:

- **Alkaline fuel cell (AFC):** relatively low operating temperature (60-80 Celsius) and one of the oldest designs for fuel cells, used in the United States space program since the 1960s. AFCs require pure hydrogen as fuel
- **Polymer exchange membrane (PEM) fuel cell:** relatively low operating temperature (60-80 Celsius). The low operating temperature means that it doesn't take very long for the fuel cell to warm up and begin generating electricity. Requires pure hydrogen as fuel
- **Phosphoric acid fuel cell (PAFC):** operate at around 200 Celsius, mature technology and most often used in stationary power generation systems. It has relatively low efficiency and so is typically only used in CHP systems
- **Solid oxide fuel cell (SOFC):** high operating temperatures (up to 950 Celsius) but highly efficient and able to generate electrical power from multiple fuel types including natural gas, biofuels, hydrogen blends and pure hydrogen. However, these cells are typically expensive as they are constructed from exotic (but fragile) materials resistant to the high operating temperatures.

Stack
An assembly of individual fuel cells into a device that can deliver a large amount of electrical power. Ceres stacks are currently manufactured in 1kW and 5kW units. These can be connected in a modular manner to create higher power systems.

Greenhouse gas
A gas that absorbs infrared radiation (net heat energy) emitted from Earth's surface and reradiates it back contributing to rising surface temperature, or the greenhouse effect. The most common greenhouse gases are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O) and water vapour (H_2O).

Hydrogen
A highly abundant naturally occurring gas commonly cited as a fuel for the future as it has a high chemical energy content for its mass and creates no harmful emissions when it is burned to release this energy. Hydrogen is currently used as a feedstock for a number of industrial processes (such as metal smelting or fertiliser production) and is commercially defined by its method of production and the treatment of the waste gases produced:

- Brown: produced by using coal where the emissions are released to the air
- Grey: produced from natural gas where the associated emissions are released to the air
- Blue: produced from natural gas, where the emissions are captured using carbon capture and storage
- Pink: produced from electrolysis powered by nuclear energy
- Green: produced from electrolysis powered by renewable electricity

Intellectual property (IP)
An asset that is created by the innovative activities of people and businesses. IP can be in the form of inventions, literary and artistic works, designs and symbols, names and images used in commerce. In business, unique IP is often the basis of competitive advantage and is therefore closely protected for example by calling out a copyright, registering a trade mark, or filing a patent. Intellectual Property Rights are protected by law and allow the holder to assert control over how they are used through contracts and licences.

Natural gas
A fossil fuel energy source that is formed deep beneath the earth's surface. The largest component of natural gas is methane, composed of carbon and hydrogen. When natural gas is burned or used in a fuel cell, it produces energy and waste carbon dioxide.

NOx or Nitrous Oxide
A gas that is often formed as an unwanted biproduct of combustion: the higher the temperature or pressure of the combustion, the more NOx is formed. It is a significant cause of poor air quality.

Glossary

OEM, Original Equipment Manufacturer

A company that manufactures and sells products or part of a product to another company.

SOFC system

An assembly that is made up of the fuel cell, fuel input handling components and components engineered to manage the electrical power output and waste heat and gases.

SOx or Sulphur Oxide

The gaseous substance that is formed when sulphur compounds, such as those found in many fossil fuels, are burned. Before low-sulphur fuels ere regulated, they were a significant cause of poor air quality from vehicles.

Watt

The unit by which power is measured. The amount of energy (measured in Joules) is delivered in a fixed amount of time, Joules per Second. Units are typically expressed in kilowatts (1kW = 1,000 watts); megawatts (1MW = 1,000kW); gigawatts (1GW = 1,000MW).

Zero emission

Refers to a vehicle, engine, motor, process or some other energy source, that emits no waste products that pollute the environment or disrupt the climate.

Consolidated statement of profit and loss and other comprehensive income

for the 12 months ended 31 December 2021

	Note	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Revenue	2	30,776	31,682
Cost of sales		(10,427)	(10,355)
Gross profit		20,349	21,327
Other operating income	4	924	1,305
Operating costs	4	(44,703)	(40,266)
Operating loss		(23,430)	(17,634)
Finance income	5	438	989
Finance expense	5	(380)	(664)
Loss before taxation	4	(23,372)	(17,309)
Taxation credit	8	1,970	2,493
Loss for the financial period and total comprehensive loss		(21,402)	(14,816)
Loss per £0.10 ordinary share expressed in pence per share:			
– basic and diluted	9	(11.53)p	(9.12)p

The notes on pages 74 to 97 are an integral part of these consolidated financial statements.

Consolidated statement of financial position

as at 31 December 2021

	Note	As at 31 Dec 2021 £'000	As at 31 Dec 2020 £'000
Assets			
Non-current assets			
Property, plant and equipment	10	18,141	14,979
Right-of-use assets	11	2,438	3,971
Intangible assets	12	8,478	4,909
Long-term investments	17	5,000	8,000
Investment in associates	13	500	–
Other receivables	15	741	741
Total non-current assets		35,298	32,600
Current assets			
Inventories	14	3,145	2,107
Contract assets	2	7,331	864
Other current assets	16	1,133	1,002
Derivative financial instruments	20	1,073	59
Current tax receivable		3,531	3,124
Trade and other receivables	15	4,865	5,570
Short-term investments	17	93,129	69,231
Cash and cash equivalents	17	151,455	32,955
Total current assets		265,662	114,912
Liabilities			
Current liabilities			
Trade and other payables	18	(2,783)	(9,112)
Contract liabilities	2	(4,290)	(7,505)
Other current liabilities	19	(5,818)	(2,675)
Derivative financial instruments	20	–	(43)
Lease liabilities	21	(754)	(823)
Provisions	22	(1,579)	(612)
Total current liabilities		(15,224)	(20,770)
Net current assets		250,438	94,142
Non-current liabilities			
Lease liabilities	21	(2,285)	(3,622)
Provisions	22	(1,828)	(1,610)
Total non-current liabilities		(4,113)	(5,232)
Net assets		281,623	121,510
Equity attributable to the owners of the parent			
Share capital	23	19,073	17,217
Share premium		404,726	227,682
Capital redemption reserve	24	3,449	3,449
Merger reserve	24	7,463	7,463
Accumulated losses		(153,088)	(134,301)
Total equity		281,623	121,510

The notes on pages 74 to 97 are an integral part of these consolidated financial statements.

The financial statements on pages 70 to 97 were approved by the Board of Directors on 16 March 2022 and were signed on its behalf by:

Phil Caldwell
Chief Executive Officer

Eric Lakin
Chief Financial Officer

Ceres Power Holdings plc
Registered Number: 5174075

Consolidated cash flow statement

for the year ended 31 December 2021

	Note	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Cash flows from operating activities			
Loss before taxation		(23,372)	(17,309)
Adjustments for:			
Finance income	5	(438)	(989)
Finance expense	5	380	664
Depreciation of property, plant and equipment	4	4,215	3,820
Depreciation of right-of-use assets	4	541	776
Amortisation of intangibles	4	1,004	208
Net foreign exchange (gains)/losses	4	(563)	139
Net change in fair value of financial instruments at fair value through profit or loss	4	(1,057)	(55)
Share-based payments	25	2,615	1,378
Operating cash flows before movements in working capital and provisions		(16,675)	(11,368)
Decrease/(increase) in trade and other receivables and other current assets		22	(2,338)
Increase in inventories		(1,038)	(704)
Increase in trade and other payables and other liabilities		2,832	752
Increase in contract assets		(6,467)	(142)
(Decrease)/increase in contract liabilities		(3,215)	4,444
Increase in provisions		1,121	1,072
Net cash used in operations		(23,420)	(8,284)
Taxation received		3,078	2,460
Net cash used in operating activities		(20,342)	(5,824)
Investing activities			
Purchase of property, plant and equipment		(7,377)	(9,256)
Capitalised development expenditure		(4,573)	(3,795)
Decrease/(increase) in long-term investments		3,000	(8,000)
Increase in short-term investments		(62,898)	(74,380)
Repayment of short-term investments		39,000	68,849
Finance income received		438	1,123
Net cash used in investing activities		(32,410)	(25,459)
Financing activities			
Proceeds from issuance of ordinary shares		181,472	50,851
Expenses from issuance of ordinary shares		(2,572)	(344)
Cash (paid)/received on behalf of employees on the sale of share options		(7,490)	7,490
Repayment of lease liabilities	21	(405)	(523)
Finance interest paid	21	(316)	(664)
Net cash generated from financing activities		170,689	56,810
Net increase in cash and cash equivalents		117,937	25,527
Exchange gains/(losses) on cash and cash equivalents		563	(139)
Cash and cash equivalents at beginning of year/period		32,955	7,567
Cash and cash equivalents at end of year/period	17	151,455	32,955

The notes on pages 74 to 97 are an integral part of these consolidated financial statements.

Consolidated statement of changes in equity

for the year ended 31 December 2021

	Note	Share capital £'000	Share premium £'000	Capital redemption reserve £'000	Merger reserve £'000	Accumulated losses £'000	Total £'000
At 1 July 2019		**15,277**	**179,116**	**3,449**	**7,463**	**(120,863)**	**84,442**
Comprehensive income							
Loss and total comprehensive loss for the financial period		–	–	–	–	(14,816)	(14,816)
Total comprehensive loss		–	–	–	–	(14,816)	(14,816)
Transactions with owners							
Issue of shares, net of costs	23	1,940	48,566	–	–	–	50,506
Share-based payments	25	–	–	–	–	1,378	1,378
Total transactions with owners		1,940	48,566	–	–	1,378	51,884
At 31 December 2020		17,217	227,682	3,449	7,463	(134,301)	121,510
Comprehensive income							
Loss and total comprehensive loss for the financial year		–	–	–	–	(21,402)	(21,402)
Total comprehensive loss		–	–	–	–	(21,402)	(21,402)
Transactions with owners							
Issue of shares, net of costs	23	1,856	177,044	–	–	–	178,900
Share-based payments	25	–	–	–	–	2,615	2,615
Total transactions with owners		1,856	177,044	–	–	2,615	181,515
At 31 December 2021		19,073	404,726	3,449	7,463	(153,088)	281,623

The notes on pages 74 to 97 are an integral part of these consolidated financial statements.

Notes to the consolidated financial statements

for the year ended 31 December 2021

1. Accounting policies used in the preparation of the financial statements

The Company is incorporated and domiciled in the United Kingdom and is registered on the AIM Market of the London Stock Exchange.

The accounting policies applied in the preparation of these consolidated financial statements are set out below and at the start of the respective notes to these consolidated financial statements. These policies have been consistently applied to all the years presented, unless otherwise stated.

Basis of preparation

The consolidated financial statements of the Group have been prepared on a going concern basis, in accordance with UK-adopted international accounting standards ("IFRS") and with the requirements of the Companies Act 2006 as applicable to companies reporting under those standards.

On 31 December 2020, IFRS as adopted by the European Union at that date was brought into the UK law and became UK-adopted international accounting standards, with future changes being subject to endorsement by the UK Endorsement Board. The Group transitioned to UK-adopted international accounting standards in its consolidated financial statements on 1 January 2021. There was no impact or changes in accounting from the transition.

The Company has elected to prepare its entity financial statements in accordance with Financial Reporting Standard 101 Reduced Disclosure Framework (FRS 101) and these are presented on pages 98 to 102.

In 2020, the Group extended its accounting period from the 12 months ended 30 June 2020 to the 18 months ended 31 December 2020. As a result, the comparative period covers the 18-month period ended 31 December 2020.

The consolidated financial statements have been prepared on a historical cost basis except that the following assets and liabilities are stated at their fair value: derivative financial instruments and financial instruments classified as fair value through profit and loss.

Foreign currencies

The consolidated financial statements are presented in pounds sterling, which is the Company's functional currency and the Group's presentational currency. Transactions denominated in foreign currencies are translated into sterling at the exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated into sterling at the foreign exchange rate prevailing at the period end. Foreign exchange differences arising on translation are recognised in the Consolidated Statement of Profit and Loss.

Basis of consolidation

The consolidated financial statements of Ceres Power Holdings plc include the results of the Company, subsidiary entities which are controlled by the Group and the Group's interest in associates. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. In assessing control, the Group takes into consideration potential voting rights that are currently exercisable. The acquisition date is the date on which control is transferred to the acquirer. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

Intra-Group balances and transactions, and any unrealised income and expenses arising from intra-Group transactions, are eliminated.

Associates

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operational policy decisions of the investee but is not control or joint control over those policies. The Group's share of the results of associates is included in the Group's Consolidated Statement of Profit or Loss using the equity method of accounting.

Investments in associates are recognised in the Group's Consolidated Statement of Financial Position at cost plus post-acquisition changes in the Group's share of the entity's net assets, less any impairment in value. If the Group's share of losses in an associate equals or exceeds its investment in the associate, the Group does not recognise further losses, unless it has incurred obligations to do so or made payments on behalf of the associate.

Unrealised gains arising from transactions with associates are eliminated to the extent of the Group's interest in the entity.

Going concern

The Group has reported a loss after tax for the year ended 31 December 2021 of £21.4m and net cash used in operating activities of £20.3m. At 31 December 2021, following the receipt of c.£179m of funds from the equity placement in March 2021, it held cash and cash equivalents and investments of £250m. The Directors have prepared annual budgets and cash flow projections that extend 15 months from the date of approval of this report. These projections were supported by stress testing forecast cash flows considering the impact of different scenarios including the Group's expectation of the potential continued future impact of Covid-19. In each case the projections demonstrated that the Group is expected to have sufficient cash reserves to meet its liabilities as they fall due and to continue as a going concern. For the above reasons, the Directors continue to adopt the going concern basis in preparing the financial statements.

Critical accounting judgements and estimates

The preparation of financial statements in conformity with IFRS requires management to make judgements, estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Although these estimates are based on management's best knowledge of the amount, event or actions, actual results may ultimately differ from these 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.

Significant judgements

The judgements made by management in applying accounting policies that are considered to have the most significant impact on the Group's assets and liabilities are the following:

- Revenue from customer contracts
- Capitalisation and amortisation of development costs
- Determination of the term of the lease as a lessee in the event of agreements with termination options

Revenue from customer contracts

The Group has recognised revenue from customer contracts of £30.8m in the 12 months ended 31 December 2021 (18 months ended 31 December 2020: £31.7m) and net contract assets of £3.0m (2020: liabilities of £6.6m) as at 31 December 2021. Note 2 sets out the Group's accounting policies in respect of revenue from customer contracts.

Customer contracts typically include engineering services, access to or sale of technology hardware and licences. Judgement is required when identifying the performance obligations in a contract as well as when determining the basis on which to allocate revenue between each performance obligation.

In determining the revenue recognition for licence components of customer contracts, judgements must be made as to the nature of the licences (right to access or right to use) and the number and timing of performance obligations associated with those licences. These judgements are made based on the interpretation of key clauses and conditions within each customer contract. For example, where a contract confers the customer with the right to benefit from existing background IP as at a specific date, that is generally treated as a right to use licence. In contrast, where a contract confers the customer with the right to benefit from future IP developments as they occur, that is more likely to be treated as a right to access licence. Judgement is also required when determining the point at which the benefit of the IP is fully transferred to the customer, which can depend on a number of factors including the customer's prior experience with fuel cell technology.

During the current year, these judgements have been applied to the agreement entered into with Bosch in December 2020. The contract has a total value of c.£23m, including c.£6m contingent on the Group achieving certain KPIs during the contract term.

Key judgements applied to the revenue recognition of this contract included the identification of separate performance obligations for engineering services, supply of hardware and licence to use our IP, and to the treatment of variable consideration. Once determined, the transaction price was allocated between each performance obligation in accordance with our accounting policy, which was also applied to determine the appropriate timing of revenue recognition for each performance obligation, including the treatment of the IP licence as a right to access licence and therefore recognising related revenue over time.

Capitalisation and amortisation of development costs

When determining the criteria for starting, and subsequently ceasing, the capitalisation of development costs as an internally generated asset, IAS 38 requires that strict criteria are met; in particular, that it is probable that future economic benefits will result from the development asset.

Following the signing of commercial contracts with the Group's strategic partners in 2018, management determined that the probability threshold had been met, and the Group implemented processes to continuously review and assess all customer and internal development programme expenditure to ascertain whether it is appropriate to capitalise development costs under IAS 38.

Determining when capitalisation should commence and cease is a critical judgement, as is the basis for the appropriate stage at which to cease capitalising ongoing costs and to commence amortising the capitalised asset.

Within the Group there is an established Technology and Product Development Process with gated milestones that assesses the technology and product viability and maturity. Generally, until a programme has passed the required milestone gate, all expenditure is deemed "Research" and expensed as incurred. Expenses incurred after the milestone gate is passed are capitalised within the parameters set out in the accounting policy. Once a programme has passed another milestone gate, confirming development activities are completed, the capitalisation of costs ceases. Any further expenditure is expensed, and amortisation of the intangible asset commences.

Application of the above policy requires management's judgement around key areas such as future commercial feasibility of the development and that future economic benefit will be derived from the development. The Executive Board regularly reviews the critical judgements around capitalisation and useful economic life of development projects.

During the year ended 31 December 2021, the application of these judgements resulted in development costs of £4.3m (18 months ended 31 December 2020: £3.8m) being capitalised (see Note 12). The net book value of capitalised development costs as at 31 December 2021 increased to £8.2m (31 December 2020: £4.9m), and amortisation of £1.0m (18 months ended 31 December 2020: £0.2m) was charged during the year. In addition, judgement was applied to expense the majority of costs involved in our research and development activities around our SOEC technology given the early stage of our investment.

Determination of the term of the lease as a lessee in the event of agreements with termination options

Ceres determines the term of the lease as the non-cancellable period for which the lessee has the right to use the asset as well as periods covered by termination options if Ceres is reasonably certain that it will not exercise that option. Both leases for premises contain a break clause. Ceres applies judgement in evaluating whether it is reasonably certain that an option to renew will be exercised or that an option to terminate the lease will not be exercised. In this context, Ceres considers all relevant facts and circumstances that create an economic incentive for Ceres to exercise, or not to exercise, the termination option, respectively.

During the year, the Group revised the expected term on one of its property leases, recognising an adjustment of £1.0m to reduce the right-of-use asset, with a corresponding adjustment to the lease liability.

1. Accounting policies used in the preparation of the financial statements *continued*

Significant estimates and assumptions

Significant estimates and associated assumptions are those that have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year. Although these estimates are based on management's best knowledge of the amount, event or actions, actual results may ultimately differ from these 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.

The most significant estimates, assumptions and sources of uncertainty applicable in preparing the Group's 2021 consolidated financial statements are set out below:

- Determination of period-related revenue recognition over the course of customer contracts
- Recognition and measurement of warranty provisions
- Recognition and measurement of dilapidation provisions

Determination of period-related revenue recognition over the course of customer contracts

Customer contracts typically include engineering services, access to or sale of technology hardware and licences. Revenue is allocated to these key components based on initial cost estimates to deliver the obligations under the contract and established margins for the different components. Management has established a range of margins to apply to contract components where the costs can be reliably estimated. Given the sometimes complex and long-term nature of customer contracts, these forecast cost estimations and margins are considered a significant area of estimation when valuing and allocating revenue to key components.

Revenue for engineering services is recognised based on the percentage of completion method and is measured based on the total contract costs at each reporting period compared to the estimated total contract costs to deliver the service over the contract life. The assessment of the total project costs to deliver the contracted service is updated during the term of the contract by project managers and is subject to internal reviews, including comparison to previous forecasts and past experience. Changes in these estimates may impact revenue recognised at the reporting date.

The actual recognition of wholly or partially unsatisfied performance obligations may ultimately differ from the estimate made at the reporting date and it is reasonably possible that outcomes on these contracts within the next reporting period could differ, adversely or favourably, in aggregate to those estimated. The estimated costs to complete each contract reflect management's best estimate at that point in time and no individual estimate is expected to have a materially different outcome. If the costs incurred for all of the Group's engineering services contracts were 10% higher or lower for the year ended 31 December 2022, revenue recognised in 2022 could be up to £0.8m higher or lower as a result.

Recognition and measurement of warranty provisions

As at 31 December 2021, the Group recognised warranty provisions of £1.3m (31 December 2020: £0.4m). When recognising and measuring provisions, assumptions are required about probability of occurrence, maturity and level of risk. Determining whether a current obligation exists is usually based on review by internal experts. The amount of provision is based on expected expenses, and is either calculated by assessing the specific case in the light of empirical values, outcomes from comparable circumstances, or else estimated by experts.

During the year production volumes from our manufacturing facility in Redhill have further increased, and we continue to ship higher volumes of technology hardware to customers. Following the identification of certain issues in a small population of hardware shipped during 2020, the Group incurred warranty costs of £0.4m during 2021. The cause of these issues has been identified and rectified, however given the relative immaturity of the product there is an ongoing risk that performance or other issues might be identified during the next financial year which would require further rectification costs to be incurred. Management believes that, based on existing knowledge, it is reasonably possible that warranty costs could be up to 50% higher than expected. This could result in the Group incurring additional costs of up to c.£0.6m over the next 12 months as a result. Note 22 sets out further details around the Group's warranty provisions.

Recognition and measurement of dilapidation provisions

As at 31 December 2021, the Group has recognised dilapidation provisions of £1.8m (31 December 2020: £1.6m). The amount of provision is based on the expected cost at the termination of the lease agreements, to bring the leasehold properties back to their original condition. The provision has been based on an independent surveyor's report, however management has applied judgement and interpretation to determine the best estimate of the expenditure required to settle the Group's probable liability based on this valuation, as well as to determine an appropriate discount rate to apply. If total dilapidation costs ended up being 10% higher than expected, additional costs incurred would be in the order of £0.2m. Note 22 sets out further details around the Group's dilapidation provisions.

New standards and amendments applicable as of 1 January 2021

The Group has adopted all standards, interpretations amended or newly issued by the IASB that were effective in the year. Their adoption has not had any material effect on the condensed consolidated financial statements.

New standards and amendments issued but not yet effective

The following adopted IFRSs have been issued, have an effective date for annual periods beginning after 1 January 2022 and have not been applied by the Group in these financial statements. Their adoption is not expected to have a material effect on the financial statements unless otherwise indicated:

The following amendments are effective for the period beginning 1 January 2022:

- Onerous Contracts – Cost of Fulfilling a Contract (Amendments to IAS 37);
- Property, Plant and Equipment: Proceeds before Intended Use (Amendments to IAS 16);
- Annual Improvements to IFRS Standards 2018-2020 (Amendments to IFRS 1, IFRS 9, IFRS 16 and IAS 41); and
- References to Conceptual Framework (Amendments to IFRS 3).

The following amendments are effective for the period beginning 1 January 2023:

- Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2);
- Definition of Accounting Estimates (Amendments to IAS 8); and
- Deferred Tax Related to Assets and Liabilities arising from a Single Transaction (Amendments to IAS 12).

2. Revenue

Revenue and direct costs

Revenue comprises the fair value of the consideration received or receivable for the provision of goods and services in the ordinary course of the Group's activities. Revenue is shown net of value added tax, other sales taxes and after eliminating sales within the Group.

Revenue primarily consists of amounts received or receivable under evaluation, development, supply and licence contracts. The nature of goods and services provided under these contracts consists of engineering services, access to or sale of technology hardware and licences to access and use intellectual property (IP).

Engineering services are provided under evaluation and development agreements. The nature of the work typically comprises engineering staff time for design, development, modelling and test analysis. The performance obligation in relation to this work is deemed to be satisfied over time based on a percentage of completion basis.

Technology hardware is provided to customers under evaluation, development and supply agreements. Where access to the hardware is provided under an evaluation agreement, the performance obligation is deemed to be satisfied on a straight-line basis over the period that the customer's preferred technology performance attributes are verified under the evaluation agreement. Where access to the hardware is provided under development and supply agreements, the performance obligation is satisfied at the point in time that the hardware is delivered.

Access to intellectual property (IP) is provided to customers under licence agreements. The nature of the licences (right to access or right to use) is determined based on the interpretation of key clauses and conditions within each customer contract. The performance obligation is the disclosure of IP under the licence and is based on the number and timing of disclosures associated with those licences. For a right to use licence the performance obligation is satisfied at a point in time when the IP is disclosed. For a right to access licence the performance obligation is satisfied over the time that access is granted to IP developed.

Revenue is allocated to engineering services and access to or sale of technology hardware based on initial cost estimates to deliver the obligations under the contract and established margins for the different components (cost-plus margin). Management has established a range of margins to apply to contract components where the costs can be reliably estimated. Given the sometimes complex and long-term nature of customer contracts, these forecast cost estimations and margins are considered a significant area of judgement when valuing and allocating revenue to key components.

Revenue is allocated to licences on a stand-alone selling price basis where observable. Where the licence forms part of a wider contract for the provision of engineering services and technology hardware, the Group uses a cost-plus margin approach for revenue allocated to engineering services and technology hardware components and a residual approach for allocating revenue to licences.

Revenue allocated to key components of contracts is recognised when performance obligations in relation to the key components are satisfied. Performance obligations are deemed to be satisfied as follows:

- Access to technology hardware – either on delivery or over time access is granted
- Sale of technology hardware – on delivery
- Engineering services – percentage of completion
- Right-to-use licence – at the point in time the IP is disclosed
- Right-to-access licence – over time that access is granted to IP developed

Percentage of completion is measured based on the total contract costs at each reporting period compared to the estimated total contract costs to deliver the service over the contract life. The assessment of the total project costs to deliver the contracted service are updated during the term of the contract by project managers and are subject to internal reviews, including comparison to previous forecasts and past experience.

Material differences in the amount of revenue in any given period may result if the judgements or estimates prove to be incorrect or if management's estimates change on the basis of development of the business or market conditions. To date there have been no material differences arising from these judgements and estimates.

The revenue recognition is subject to certainty of receipt of cash, or when any specific conditions in agreements have been met. Where there is a timing difference between the recognition of revenue and invoicing under a contract, a contract asset or liability is recognised.

If a loss is expected in respect of a contract, the entire loss is recognised immediately in the Consolidated Statement of Profit and Loss.

Variable consideration, such as for the achievement of performance targets or variation requests under negotiation with the customer at the reporting date, can be included in the transaction price together with the estimated costs to perform the associated obligations. These estimates of the expected value or most likely amount are recognised to the extent that it is highly probable that there will not be a significant reversal in the amount of cumulative revenue recognised in a future reporting period.
Contract modifications are treated as a separate contract if the scope of the contract increases because of the addition of distinct goods or services, and the price of the contract increases by an amount of consideration that reflects the stand-alone selling price of the additional promised goods or services.

Where a contract modification does not meet these criteria, it is accounted for as an adjustment to the existing contract, either prospectively, where the remaining goods or services are distinct from the goods and services transferred before the modification, or through a cumulative catch-up adjustment, where the remaining services are not distinct and are part of a single performance obligation that is only partially satisfied when the contract is modified.

The Group's revenue is disaggregated by geographical market, major product/service lines, and timing of revenue recognition:

Geographical market

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Europe	7,676	14,228
Asia	22,748	16,613
North America	109	841
Rest of World	243	–
	30,776	31,682

For the year ended 31 December 2021, the Group has identified three major customers (defined as customers that individually contributed more than 10% of the Group's total revenue) that accounted for approximately 59%, 25% and 11% of the Group's total revenue recognised in the year (18 months ended 31 December 2020: three customers that accounted for approximately 27%, 44% and 18% of the Group's total revenue for that period).

2. Revenue *continued*

Major product/service lines

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Engineering services	6,777	10,866
Provision of technology hardware	7,353	10,297
Licences	16,646	10,519
	30,776	31,682

Timing of transfer of goods and services

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Products and services transferred at a point in time	15,326	15,280
Products and services transferred over time	15,450	16,402
	30,776	31,682

Contract-related assets and liabilities

	Note	31 Dec 2021 £'000	31 Dec 2020 £'000
Trade receivables	15	2,612	3,328
Contract assets – accrued income		7,010	837
Contract assets – deferred costs		321	27
Contract assets		7,331	864
Total contract-related assets		9,943	4,192
Contract liabilities – deferred income		(4,290)	(7,505)

No material expected credit losses were recognised against trade receivables or contract assets in either the current year or prior period. Further details regarding the composition of trade receivables can be found in Note 15.

The contract assets – accrued income – primarily relate to consideration for work completed but not billed at the reporting date. The contract assets are transferred to trade receivables when the rights become unconditional, which is generally when work is invoiced. The increase in the balance compared with 31 December 2020 primarily relates to one customer, and includes the recognition of revenue relating to variable consideration following the achievement of KPIs during the year, which was invoiced and paid in early 2022.

The contract assets – deferred costs – relate to the cost to provide technology hardware to customers under evaluation agreements. The cost is deferred and recognised on a straight-line basis over the period of access as the customers' preferred technology performance attributes are verified under the agreement.

The contract liabilities – deferred income – primarily relate to invoices raised or consideration received in advance from customers. There are no significant financing components associated with deferred income. The decrease in balance compared with the prior period is primarily due to timing differences between revenue recognised on work performed and raising invoices to customers.

Revenue recognised in the current year that was included in the contract liabilities – deferred income – balance at the beginning of the year was £5,199,000 (18 months ended 31 December 2020: £3,061,000).

There were no significant amounts of revenue recognised in the year ended 31 December 2021 arising from performance obligations satisfied in previous periods (18 months ended 31 December 2020: no significant amounts).

Significant changes in the contract assets and the contract liabilities balances during the year/period are as follows:

	Contract assets 2021 £'000	Contract liabilities 2021 £'000
Revenue recognised that was included in the contract liability balance at the beginning of the year		5,199
Increases due to cash received, excluding amounts recognised as revenue during the year		(1,985)
Transfers from contract assets recognised at the beginning of the year to receivables	(837)	
Increases as a result of changes in the measure of progress	7,010	

	Contract assets 2020 £'000	Contract liabilities 2020 £'000
Revenue recognised that was included in the contract liability balance at the beginning of the period		3,061
Increases due to cash received, excluding amounts recognised as revenue during the period		(7,505)
Transfers from contract assets recognised at the beginning of the period to receivables	(306)	
Increases as a result of changes in the measure of progress	837	

The revenue expected to be recognised in future years for evaluation and development, supply and licence agreements in respect of performance obligations that are unsatisfied (or partially unsatisfied) at the year end is:

	2022 £'000	2023 £'000	2024 £'000
Evaluation, development, supply and licence agreements[1]	23,982	10,311	1,988

[1] Excluding future royalties receivable from partners and expected revenue from the planned collaboration with Weichai and Bosch in China.

The comparatives as at 31 December 2020 are as follows:

	2021 £'000	2022 £'000	2023 £'000
Evaluation, development, supply and licence agreements	27,478	17,047	10,386

The above analysis excludes revenue which is contracted but contingent upon milestones or decision criteria which are at the customers' discretion.

The Company applies the practical expedient in IFRS 15.121 and does not disclose information about remaining performance obligations that have original expected durations of one year or less.

3. Segmental analysis

In accordance with IFRS 8, the Group identifies reporting segments based on internal management reporting information that is regularly reviewed by the chief operating decision maker, which the Group considers to be the Executive team.

Historically, the Group has reported its performance in a single segment, reflecting the Group's solid oxide fuel cell (SOFC) technology. For the current year, following increased investment in and development of the Group's solid oxide electrolysis cell (SOEC) technology, the Group has introduced segmental reporting internally that separately discloses the results of the two segments, down to adjusted EBITDA level, to the Executive team.

Following the change of segmental reporting during the year, comparatives for the 18 month period ended 31 December 2020 have been represented accordingly.

	12 months ended 31 Dec 2021			18 months ended 31 Dec 2020		
	SOFC £'000	SOEC £'000	Total £'000	SOFC £'000	SOEC £'000	Total £'000
Revenue	30,776	–	30,776	31,682	–	31,682
Cost of sales	(10,427)	–	(10,427)	(10,355)	–	(10,355)
Gross profit	20,349	–	20,349	21,327	–	21,327
Other operating income	924	–	924	1,305	–	1,305
Operating costs (excluding adjusting items)	(25,765)	(12,183)	(37,948)	(31,695)	(2,305)	(34,000)
Adjusted EBITDA[1]	(4,492)	(12,183)	(16,675)	(9,063)	(2,305)	(11,368)
Adjusting items:						
Depreciation and amortisation			(5,760)			(4,804)
Share-based payment charge			(2,615)			(1,378)
Net foreign exchange losses/(gains)			563			(139)
Fair value adjustment			1,057			55
Operating loss			(23,430)			(17,634)
Finance income			438			989
Finance expense			(380)			(664)
Loss before taxation			(23,372)			(17,309)
Taxation credit			1,970			2,493
Loss for the financial year			(21,402)			(14,816)

1. Adjusted EBITDA is an alternative performance measure, as defined on page 37.

All of the Group's non-current assets are located in the UK (2020: all in the UK).

4. Loss before taxation

Research and development

The Group undertakes research and development activities either on its own behalf or in conjunction with customers.

Group and customer-funded expenditure on research, and on development activities not meeting the conditions for capitalisation (see Note 12), are written off as incurred and charged to the Consolidated Statement of Profit and Loss.

Government grants

Grants are recognised on a case-by-case basis. Revenue grants are recognised in the Consolidated Statement of Profit and Loss as other operating income as the related costs are incurred and expensed. The reimbursement of the cost of an item of plant and equipment or intangible by way of a capital grant is presented as deferred income and recognised in the Consolidated Statement of Profit and Loss as other operating income on a basis consistent with the depreciation or amortisation of the asset over its estimated useful life.

For grants with no technical milestones, and where recovery is reasonable, the grant is recognised on an accruals basis in order to match the associated expenditure with the grant income. For grants with technical milestones, these grants are held on the Consolidated Statement of Financial Position as deferred income and are recognised only when the relevant milestone has been achieved and the associated cash has been received.

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Operating costs are split as follows:		
Research and development costs	31,290	27,820
Administrative expenses	11,245	10,060
Commercial expenses	2,168	2,386
	44,703	40,266
Loss before taxation is stated after (crediting)/charging:		
Other operating income – grant income	(924)	(1,305)
Staff costs, including share-based payments (Note 6)	26,992	23,592
Cost of inventories recognised as expense (Note 14)	5,867	8,715
Depreciation of property, plant and equipment (Note 10)	4,215	3,820
Depreciation of right-of-use assets (Note 11)	541	776
Amortisation of intangibles (Note 12)	1,004	208
Repairs expenditure on property, plant and equipment	589	558
Net change in fair value of financial instruments at fair value through profit or loss	(1,057)	(55)
Net foreign exchange (gain)/loss	(563)	139
RDEC tax credit	(1,304)	(1,265)

Services provided by the Group's auditor

During the period the Group obtained the following services from the Group's auditor as detailed below:

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Fees payable to the Company's auditor for the audit of parent Company and consolidated financial statements	25	20
Fees payable to the Company's auditor for other services:		
– the audit of the Company's subsidiaries	65	50
– audit-related assurance services – review of interim financial results, including audit assurance	134	75
– audit-related assurance services – grants and awards	21	38
– taxation compliance services	–	58
– advisory services in relation to the Group's potential move to the Main Market	96	–
– other – training services provided to Group employees	–	34
	341	275

5. Finance income and expense

Interest income and expense

Interest income is recognised in the Consolidated Statement of Profit and Loss in the period in which it is earned.

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Interest receivable on cash and cash equivalents, and investments	438	989
Interest on lease liabilities	(316)	(664)
Unwinding of discount on provisions	(64)	–
Total interest expense	(380)	(664)

6. Employees and Directors

The average number of persons (including Executive Directors) employed by the Group during the period was:

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
By activity:		
Research and development	204	135
Prototype production	145	89
Administration	58	39
Commercial	7	5
	414	268

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Staff costs (for the above persons) comprised:		
Wages and salaries, including compensation for loss of office	20,613	19,131
Social security costs	2,390	1,762
Other pension costs (Note 7)	1,374	1,321
Share-based payments (Note 25)	2,615	1,378
	26,992	23,592

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Directors' emoluments:		
Aggregate emoluments	1,248	1,281
Company contributions to defined contribution pension schemes	44	50
Gain on exercise of share options and other share schemes[1,2]	98	6,779
	1,390	8,110

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Highest-paid Director:		
Aggregate emoluments	478	537
Company contributions to defined contribution pension schemes	25	29
Gain on exercise of share options and other share schemes[1]	–	5,092
	503	5,658

1. The gain on exercise of share options for the 18 months ended 31 December 2020 includes the gain on disposal of the plc shares, received on the sale of the ESS shares in the Company's subsidiary, Ceres Power Intermediate Holdings Ltd, which were granted as a modification to the unexercised 2004 Employees' Share Scheme options in 2014. Further details on the ESS share scheme are provided in Note 25(a).
2. The Directors had LTIPs with an aggregate value of £10,018,452 exercisable as at 31 December 2021 (31 December 2020: £10,537,155).

Two Directors (2020: two Directors) have retirement benefits accruing under defined contribution pension schemes.

Additional information on the emoluments of the Directors, together with information regarding the share interests and share options of the Directors, is included in the Remuneration report on pages 56 to 61, which form part of these audited financial statements.

Key management compensation

The Directors consider that the key management of the Group comprises the Executive Board and Non-Executive Directors. The key management compensation is summarised in the following table:

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Salaries and other short-term employment benefits	2,298	2,386
Post-employment benefits	92	102
Share-based payments	1,502	662
	2,391	3,150

7. Pensions

Pension scheme arrangements

The Group operates a defined contribution pension plan for employees. The assets of the scheme are held separately from those of the Group in independently administered funds. The plan is a post-employment benefit plan under which the Group pays fixed contributions during the employee's service and will have no legal or constructive obligation to pay amounts after the employee's service ends. Obligations for contributions to defined contribution pension plans are recognised as an expense in the Consolidated Statement of Profit and Loss in the period during which services are rendered by employees.

The pension charge represents contributions payable by the Group to the funds and amounted to £1,374,000 (18 months ended 31 December 2020: £1,321,000). A total of £219,000 was payable to the funds as at 31 December 2021 (31 December 2020: £148,000).

8. Taxation and deferred taxation

Taxation

The taxation credit for the year comprises current and deferred tax and any adjustment to tax payable or receivable in respect of previous years. Tax is recognised in the Consolidated Statement of Profit and Loss except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.

Current tax receivable is the expected tax receivable on the activities for the period, using tax rates enacted or substantively enacted at the period end. The current tax receivable represents the Directors' best estimate of tax due to the Group at the period end under the SME R&D tax and the RDEC credit regimes.

Deferred taxation

Deferred tax is provided on temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The following temporary differences are not provided for: the initial recognition of assets or liabilities that affect neither accounting nor taxable profit other than in a business combination; and differences relating to investments in subsidiaries to the extent that they will probably not reverse in the foreseeable future. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the period end.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the temporary difference can be utilised.

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
UK corporation tax	(2,917)	(3,124)
Foreign tax suffered	973	798
Adjustment in respect of prior periods	(26)	(167)
Taxation credit	(1,970)	(2,493)

No corporation tax liability has arisen during the period (2020: £nil) due to the losses incurred.

The current tax rate of 19% is unchanged (2020: 19%)

A tax credit has arisen as a result of expenditure surrendered and claimed under the SME R&D and RDEC tax credit regimes in the current year and prior period. Foreign tax relates to withholding tax arising on licence income received from customers based in China and South Korea.

The tax result for the year is different from the standard rate of small profits UK corporation tax of 19.00% (2020: 19.00%). The differences are explained below:

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Loss before taxation	(23,372)	(17,309)
Loss before taxation multiplied by the UK tax rate of 19.00% (2020: 19.00%)	(4,441)	(3,289)
Effects of:		
Losses carried forward	6,895	3,627
Enhanced tax deductions for R&D expenditure	(4,366)	(2,486)
Expenses not deductible	120	164
Fixed asset differences	456	380
Effect of overseas tax rates	788	647
Adjustment in respect of prior periods – R&D tax credit	(26)	(167)
Difference between R&D tax credit and small company tax rate	1,199	1,044
Tax on RDEC credit	251	239
Share option timing differences	(2,846)	(2,652)
Total taxation credit	(1,970)	(2,493)

Deferred taxation

Potential deferred tax assets have not been recognised. The temporary differences are set out below:

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Temporary differences:		
Difference between capital allowances and depreciation	(6,587)	(8,836)
Deductions relating to share options	(50,773)	(73,438)
Other timing differences	(238)	(19)
Losses carried forward	(125,820)	(89,330)
	(183,418)	(171,623)

The deferred tax assets have not been recognised as the Directors consider that it is unlikely that the asset will be realised in the foreseeable future. The element of the RDEC credit that can only be set off against future UK Corporation tax liability is £716,000 (2020: £452,000) and has not been recognised as the Directors consider that it is unlikely that this asset will be realised in the foreseeable future.

9. Loss per share

Basic and diluted loss per £0.10 ordinary share of 11.53p for the year ended 31 December 2021 (18 months ended 31 December 2020: 9.12p) is calculated by dividing the loss for the financial period attributable to ordinary shareholders by the weighted average number of ordinary shares in issue during the year. Given the losses reported during the year, there is no dilution of losses per share for the year ended 31 December 2021 (18 months ended 31 December 2020: no dilution).

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Loss for the financial year/period attributable to shareholders	(21,402)	(14,816)
Weighted average number of shares in issue	185,689,432	162,474,146
Loss per £0.10 ordinary share (basic and diluted)	(11.53)p	(9.12)p

10. Property, plant and equipment

Property, plant and equipment

Property, plant and equipment is stated at cost less accumulated depreciation and accumulated impairment losses. The cost includes all expenditure that is directly attributable to the acquisition of the assets. Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the asset will flow to the Group and the cost of the asset can be measured reliably. All other repairs and maintenance costs are charged to the Consolidated Statement of Profit and Loss during the financial period in which they are incurred. The Directors annually consider the need to impair these assets.

Depreciation is charged to the income statement on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment. Land is not depreciated. The estimated useful lives are as follows:

Leasehold improvements	Ten years or the lease term if shorter
Plant and machinery	Three to ten years
Computer equipment	Three years
Fixtures and fittings	Three to ten years
Motor vehicles	Three to five years

Depreciation methods, useful lives and residual values are reviewed, and adjusted if appropriate, at each balance sheet date.

The carrying values of property, plant and equipment are reviewed on an ongoing basis for any indication of impairment. Where any indication of impairment exists, the recoverable value of the assets is estimated. An impairment loss is recognised in the Consolidated Statement of Profit and Loss whenever the carrying value of property, plant and equipment exceeds its recoverable amount.

Assets under construction represents the cost of purchasing, constructing and installing property, plant and equipment ahead of their productive use. The category is temporary, pending completion of the assets and their transfer to the appropriate and permanent category of property, plant and equipment. As such, no depreciation is charged on assets under construction.

	Leasehold improvements £'000	Plant and machinery £'000	Computer equipment £'000	Fixtures and fittings £'000	Assets under construction £'000	Motor vehicles £'000	Total £'000
Cost							
At 1 July 2019	2,222	10,846	1,458	69	6,803	12	21,410
Additions	708	5,904	603	35	1,780	–	9,030
Transfers	2,958	4,659	–	210	(7,827)	–	–
Disposals	(5)	–	–	–	–	–	(5)
At 31 December 2020	5,883	21,409	2,061	314	756	12	30,435
Additions	1,529	3,521	502	34	1,791	–	7,377
Transfers	–	572	–	–	(572)	–	–
At 31 December 2021	7,412	25,502	2,563	348	1,975	12	37,812
Accumulated depreciation							
At 1 July 2019	2,096	8,478	998	69	–	–	11,641
Charge for the period	621	2,718	400	80	–	1	3,820
Disposals	(5)	–	–	–	–	–	(5)
At 31 December 2020	2,712	11,196	1,398	149	–	1	15,456
Charge for the year	646	3,089	392	83	–	5	4,215
At 31 December 2021	3,358	14,285	1,790	232	–	6	19,671
Net book value							
At 31 December 2021	4,054	11,217	773	116	1,975	6	18,141
At 31 December 2020	3,171	10,213	663	165	756	11	14,979
At 30 June 2019	126	2,368	460	–	6,803	12	9,769

Assets under construction primarily comprise plant and machinery and leasehold improvements related to the Group's manufacturing facility.

11. Right-of-use assets

The Group holds material leases for premises and smaller leases for IT equipment, with lease terms ranging from six months to ten years. The Group recognises right-of-use assets and lease liabilities (i.e. leases are recognised on the Consolidated Statement of Financial Position) for all leases other than for short-term leased plant and machinery.

Lease liabilities are initially measured at the present value of the remaining lease payments discounted at the Group's incremental borrowing rate. Subsequently, lease liabilities are measured by adjusting to reflect interest on the lease liability, reducing the liability to reflect lease payments made and to reflect any re-assessment or lease modifications, or revised in-substance fixed lease payments (refer to Note 21).

The associated right-of-use asset for property leases and other assets is initially measured at the amount equal to the lease liability adjusted for the amount of any prepaid or accrued lease payments relating to that lease. Subsequently, right-of-use assets are measured at cost less any accumulated depreciation and adjusted for any re-measurement of the lease liability.

Right-of-use assets are depreciated over the shorter of the lease term and the relevant useful economic life following the periods set out in the property, plant and equipment depreciation policy. Where the lease transfers ownership of the underlying asset to the lessee by the end of the lease term or the cost of the right-of-use asset reflects that the lessee will exercise a purchase option, the right-of-use asset is depreciated over its useful economic life.

Right-of-use assets are tested for impairment by applying IAS 36 'Impairment of Assets'.

	Land and buildings £'000	Computer equipment £'000	Total £'000
Cost			
At 1 July 2019	–	–	–
Initial recognition on adoption of IFRS 16	4,729	18	4,747
At 31 December 2020	4,729	18	4,747
Additions	–	43	43
Adjustment of lease term	(1,035)	–	(1,035)
Disposals	–	(18)	(18)
At 31 December 2021	3,694	43	3,737
Accumulated depreciation			
At 1 July 2019	–	–	–
Charge for the period	766	10	776
At 31 December 2020	766	10	776
Charge for the year	523	18	541
Disposals	–	(18)	(18)
At 31 December 2021	1,289	10	1,299
Net book value			
At 31 December 2021	2,405	33	2,438
At 31 December 2020	3,963	8	3,971
At 30 June 2019	–	–	–

During the year ended 31 December 2021, the Group revised the expected term on one of its property leases, recognising an adjustment of £1,035,000 to reduce the right-of-use asset, with a corresponding adjustment to the lease liability.

12. Intangible assets

Research and development

Expenditure incurred on research and development is distinguished as relating to a research phase or development phase with reference to the Group's technology and product development process.

All research phase expenditure is recognised in the Consolidated Statement of Profit and Loss as an expense when incurred (see Note 4).

Development phase expenditure is capitalised from the point that all of the following conditions are met:

- the product or process under development is technically and commercially feasible;
- the Group intends to and has the technical ability and sufficient resources to complete the development;
- future economic benefits are probable; and
- the Group can measure reliably the expenditure attributable to the asset during its development.

Development phase activities involve a plan or design for the production of new or substantially improved products or processes in relation to the Group's core fuel cell and system technology and intellectual property. The expenditure capitalised includes the cost of materials, direct labour and an appropriate proportion of overheads.

Capitalisation of development phase activities continues until the point at which the product or process under development meets its originally mandated technical specification. For product and process development, this is at the point where the production design version is approved or the development is completed.

Subsequent expenditure is capitalised where it enhances the functionality of the asset and demonstrably generates an enhanced economic benefit to the Group. All other subsequent expenditure on the product or process is expensed as incurred.

Where development activities are funded through government grants and the cost of those activities is capitalised under this policy, the grants received are considered Capital Grants and are presented as deferred income and recognised in the Consolidated Statement of Profit and Loss as other operating income on a basis consistent with the depreciation or amortisation of the asset over its estimated useful life.

Patent costs incurred in the procurement of patents in relevant territories are capitalised where the Group considers those patents relate to technology that is deemed to be commercially feasible. Other patent costs and costs to maintain patents once granted in those territories, are expensed to in the Consolidated Statement of Profit and Loss as incurred.

Subsequent to recognition, internally generated intangible assets are reported at cost less accumulated amortisation and accumulated impairment losses. Amortisation is recognised on a straight-line basis over their estimated useful lives and is presented within operating costs. The estimated useful lives are reviewed and adjusted as appropriate, at each balance sheet date. Intangible assets which are not yet available for use are tested for impairment at each balance sheet date.

The following useful lives are used in the calculation of amortisation:

Capitalised development	Two to seven years
Patent costs	Three to ten years

The carrying values of intangible assets are reviewed on an ongoing basis for any indication of impairment. Where any indication of impairment exists, the recoverable value of the assets is estimated. An impairment loss is recognised in the Consolidated Statement of Profit and Loss whenever the carrying value of an intangible asset exceeds its recoverable amount.

	Internal developments in relation to manufacturing site £'000	Customer and internal development programmes £'000	Perpetual software licences £'000	Patent costs £'000	Total £'000
Cost					
At 1 July 2019	234	1,101	–	–	1,335
Additions	177	3,323	–	295	3,795
At 31 December 2020	411	4,424	–	295	5,130
Additions	–	3,983	252	338	4,573
At 31 December 2021	411	8,407	252	633	9,703
Accumulated depreciation					
At 1 July 2019	–	13	–	–	13
Charge for the period	82	126	–	–	208
At 31 December 2020	82	139	–	–	221
Charge for the year	82	899	23	–	1,004
At 31 December 2021	164	1,038	23	–	1,225
Net book value					
At 31 December 2021	247	7,369	229	633	8,478
At 31 December 2020	329	4,285	–	295	4,909
At 30 June 2019	234	1,088	–	–	1,322

The customer and internal development intangible relates to the design, development and configuration of the Company's core solid oxide fuel cell and system technology. Amortisation of capitalised development commences once the developed technology is complete and is available for use.

13. Subsidiary undertakings and associates

Details of the Group's subsidiaries and associates at 31 December 2021 are as follows:

Name of undertaking	Country of incorporation	Description of shares held	Proportion of nominal value of shares held by the Company	Type of entity
Ceres Power Ltd	England and Wales	£0.001 ordinary shares	100%[1]	Subsidiary
Ceres Intellectual Property Company Ltd	England and Wales	£1.00 ordinary shares	100%[1]	Subsidiary
Ceres Power Intermediate Holdings Ltd	England and Wales	£0.01 ordinary shares	100%	Subsidiary
Ceres Power Licence Company Ltd	England and Wales	£1.00 ordinary shares	100%[1]	Subsidiary
Ceres Engineering Consulting (Shanghai) Co Ltd	Shanghai, China	£1.00 ordinary shares	100%[2]	Subsidiary
RFC Power Ltd	England and Wales	£0.001 ordinary shares	8.4%[3]	Associate

1. Ceres Power Ltd, Ceres Intellectual Property Company Ltd and Ceres Power Licence Company Ltd are 100% held directly by Ceres Power Intermediate Holdings Ltd. Registered address is Viking House, Foundry Lane, Horsham, West Sussex, RH13 5PX.
2. 100% held directly by Ceres Power Ltd. Registered address is Office 1903i, Floor 19/F, Tower B, No.1065 West Zhongshan Road, Changning District, Shanghai, China.
3. 8.4% held directly by Ceres Power Intermediate Holdings Ltd. Registered address is Imperial College, White City Incubator Translation and Innovation Hub, London, W12 0BZ.

The principal activity of Ceres Power Ltd is the commercialisation and continued development of the Group's fuel cell and electrochemical technology. The principal activity of Ceres Intellectual Property Company Ltd is the administration of registered intellectual property developed within the Group. The principal activity of Ceres Power Intermediate Holdings Ltd is as a holding company to the other Group companies and to manage the Group's cash, cash equivalents and investments. The principal activity of Ceres Power Licence Company Ltd is the provision of overseas licence and royalty services.

On 23 August 2021, the Group established a Wholly Foreign Owned Entity (WFOE), Ceres Engineering Consulting (Shanghai) Co Ltd in Shanghai, China. The company is a 100% owned subsidiary of Ceres Power Ltd. The principal activity of the company is to provide business development and technical support to our business and partners in China.

On 11 November 2021 Ceres Power Intermediate Holdings Ltd acquired an 8.4% shareholding in RFC Power Ltd in exchange for consultancy services performed, and the Group recognised an investment in associate of £0.5m accordingly. Ceres has an option to acquire the balance of the outstanding share capital for up to £25m, payable in Ceres shares, exercisable from May to November 2022. RFC Power specialises in developing novel flow battery chemistries for energy storage systems.

The results of Ceres Power Ltd, Ceres Intellectual Property Company Ltd, Ceres Power Intermediate Holdings Ltd, Ceres Engineering Consulting (Shanghai) Co Ltd and Ceres Power Licence Company Ltd are included within these consolidated financial statements. The Group's share of the results of RFC Power Ltd are included within these consolidated financial statements by applying the equity method of accounting, as set out in Note 1. The Group's share of RFC's results since acquiring the shareholding is not material and has therefore not been disclosed separately.

On 9 February 2022, the Group announced the intention to collaborate with Weichai and Bosch to access the substantial opportunities that exist for fuel cell technologies in the Chinese market. This is likely to include a three-way system collaboration to be set up in Shandong province in China to develop and manufacture SOFC system products, with Weichai being the majority shareholder and Bosch and Ceres minority shareholders. Ceres is expected to take up a holding of 10%. Detailed non-binding Heads of Terms have been signed by all parties and full contracts are expected to be agreed in 2022.

14. Inventories

Inventories

Inventories consist of raw materials, work in progress and finished goods.

Inventories are stated at the lower of cost and net realisable value. Cost comprises direct material cost and, where applicable, direct labour costs and direct overheads that have been incurred. Cost is calculated using the first-in, first-out (FIFO) method. Net realisable value represents the estimated selling price less all estimated costs to completion and selling costs to be incurred.

	31 Dec 2021 £'000	31 Dec 2020 £'000
Current:		
Raw materials	1,299	1,016
Work in progress	969	838
Finished goods	877	253
	3,145	2,107

Inventories have increased in line with the continued ramp up in manufacturing capacity in the year and to ensure the Group can satisfy expected customer demand for technology hardware in 2022.

During the year ended 31 December 2021, inventories of £5.9m (18 months ended 31 December 2020: £8.7m) were recognised as an expense and included in cost of sales.

15. Trade and other receivables

Trade and other receivables

Trade receivables are recognised initially at fair value and subsequently held at amortised cost using the effective interest method, less loss allowances. Loss allowances are calculated using the simplified approach to determine expected credit losses, taking into account both historical payment profiles and any credit losses experienced, together with forward-looking macroeconomic factors. The carrying amount of these balances approximates to fair value due to the short maturity of amounts receivable. Payment terms generally range between 30 and 60 days depending on the customer.

Although the Group's past experience of significant credit losses on these assets has been negligible, the impairment assessment performed by the Group considers both past experience and future expectations of credit losses. As a result of this assessment, the Group considers the risk of expected credit losses on trade receivables and contract assets to be immaterial. Further details on this assessment are provided in Note 20.

	31 Dec 2021 £'000	31 Dec 2020 £'000
Current:		
Trade receivables	2,612	3,328
Other receivables	2,253	2,242
	4,865	5,570
Non-current:		
Other receivables	741	741

Other receivables primarily consist of amounts invoiced and recoverable in respect of grants, rent deposits, VAT and the RDEC tax credit. There is no material difference between the fair value of trade and other receivables and their carrying values and they are not materially overdue at the period end. There are no expected credit losses recognised during the year ended 31 December 2021 (18 months ended 31 December 2020: £nil). The carrying amounts of the Group's trade and other receivables are primarily denominated in pounds sterling, euros and US dollars (as set out in Note 20).

16. Other current assets

	31 Dec 2021 £'000	31 Dec 2020 £'000
Current:		
Prepayments	673	648
Accrued interest income	322	129
Accrued other income	138	225
	1,133	1,002

Accrued interest consists of interest receivable on short-term and long-term bank deposits, the carrying value of accrued interest is classified at amortised cost which approximates to fair value. Accrued other income relates to consideration for work completed on grant-funded contracts but not billed at the reporting date. The accrued other income is transferred to other receivables when the rights become unconditional.

17. Cash, cash equivalents and investments

Cash and cash equivalents

Cash and cash equivalents includes cash at bank and in hand, pooled money market funds and short-term deposits with an original maturity of less than or equal to one month.

Long-term investments

Long-term investments include bank deposits with a maturity greater than 12 months as at the date of the Consolidated Statement of Financial Position.

	31 Dec 2021 £'000	31 Dec 2020 £'000
Long-term bank deposits greater than 12 months	5,000	8,000

Short-term investments

Short-term investments include bank deposits with an original maturity greater than one month and a maturity as at the date of the Consolidated Statement of Financial Position of less than or equal to 12 months.

	31 Dec 2021 £'000	31 Dec 2020 £'000
Cash at bank and in hand	4,957	20,684
Money market funds	146,498	12,271
Cash and cash equivalents	151,455	32,955
Short-term bank deposits greater than one month and less than 12 months	93,129	69,231
	244,584	102,186

The Group holds surplus funds in accordance with the treasury policy, as set out in Note 20.

	Interest rate type	31 Dec 2021 £'000	31 Dec 2020 £'000
Interest rate risk profile of the Group's financial assets:			
Cash at bank and in hand	Floating	4,957	20,684
Money market funds	Floating	146,498	12,271
Short-term bank deposits greater than one month and less than or equal to 12 months	Fixed and floating	93,129	69,231
Long-term bank deposits greater than 12 months	Fixed	5,000	8,000
		249,584	110,186

During the year ended 31 December 2021 the fixed rate short-term bank deposits were primarily designated in pounds sterling, had remaining terms of between 32 days and 12 months and earned interest of between 0.05% and 1.8%. Also included in short-term bank deposits was a deposit of CNH68m (c.£8m) with a remaining term of 6 months earning interest of approximately 1.8%. The fixed rate long-term bank deposit in pounds sterling has a term of 13 months and earns interest of 0.61%. Floating rate cash deposits, money market funds and other bank deposits earned interest based on relevant UK LIBID-related equivalents. The credit quality of financial assets has been assessed by reference to external credit ratings.

18. Trade and other payables

Trade and other payables

Trade and other payables are initially recognised at fair value. Where considered necessary they are subsequently measured at amortised cost using the effective interest method.

	31 Dec 2021 £'000	31 Dec 2020 £'000
Current:		
Trade payables	2,425	1,752
Taxation and social security	–	713
Other payables	358	6,647
	2,783	9,112

At 31 December 2020, taxation and social security and other payables primarily comprised timing differences on payments relating to the exercise of certain share options in December 2020. These amounts were paid in January 2021.

19. Other liabilities

	31 Dec 2021 £'000	31 Dec 2020 £'000
Current:		
Accruals	4,803	1,464
Deferred income	1,015	1,211
	5,818	2,675

Accruals are recognised at invoiced cost and have increased when compared with the prior period reflecting timing differences relating to invoices received for certain significant costs incurred during the second half of the year. There is no material difference between the invoiced value and the value calculated on an amortised cost basis or fair value. Deferred income consists of grant income deferred in relation to associated development costs which have been capitalised as an intangible asset. Grant income is recognised in the Consolidated Statement of Profit and Loss in the same period as the expenditure to which the grant relates.

20. Financial instruments

Derivative financial instruments

The Group's activities expose it primarily to the financial risks of changes in foreign currency exchange rates. The Group uses forward contracts, and in limited circumstances options, to hedge against foreign currency-denominated income and expenditure commitments. The use of financial derivatives is governed by the Group's treasury policy, as approved by the Board. The Group does not use derivative financial instruments for speculative purposes. Details of financial instruments are shown later in this note.

Derivative financial instruments are recognised at fair value. The gains or losses on remeasurement to fair value are recognised immediately in the Consolidated Statement of Profit and Loss as they arise and are shown in Note 4.

The Group only uses derivative financial instruments to hedge foreign currency exposures which arise from an underlying current or anticipated business requirement. The Group does not currently use derivative instruments to manage its interest rate risk. The Group does not trade in financial instruments.

Fair values of financial assets and financial liabilities

There is no difference between the fair value and the carrying value of the Group's financial assets and financial liabilities. Carrying value approximates to fair value because of the short maturity periods of these financial instruments.

The fair value of forward exchange contracts is estimated by discounting the difference between the contractual forward price and the current forward price for the residual maturity of the contract using a risk-free interest rate (based on government bonds). The fair value of currency options is estimated using the Black–Scholes pricing model based on the strike price with reference to the future exchange rate, spot rate and risk-free interest rate. Forward exchange contracts and options are included in the Level 2 classification.

Other than the forward contracts and options noted below, none of the Group's assets and liabilities were measured at fair value at 31 December 2021 (31 December 2020: none).

The fair values of all financial assets and financial liabilities by class, together with their carrying amounts shown in the balance sheet, are as follows:

	Fair value hierarchy	Carrying amount 31 Dec 2021 £'000	Fair value 31 Dec 2021 £'000	Carrying amount 31 Dec 2020 £'000	Fair value 31 Dec 2020 £'000
Financial assets at amortised cost					
Trade and other receivables		4,175	4,175	6,311	6,311
Cash, cash equivalents and investments		249,584	249,584	110,186	110,186
Financial assets measured at fair value through profit or loss					
Forward exchange contracts	Level 2	321	321	55	55
Non-deliverable forward	Level 2	752	752	—	—
Currency options	Level 2	—	—	4	4
		1,073	1,073	59	59
Financial liabilities measured at amortised cost					
Trade and other payables and accruals		(7,586)	(7,586)	(9,863)	(9,863)
Financial liabilities measured at fair value through profit or loss					
Forward exchange contracts	Level 2	—	—	(9)	(9)
Non-deliverable forward contracts	Level 2	—	—	(32)	(32)
Currency options	Level 2	—	—	(2)	(2)
		—	—	(43)	(43)
Total financial instruments		248,246	248,246	106,650	106,650

Financial risk management

The Group's operations expose it to a variety of financial risks that include credit risk and market risk arising from changes to interest rates and foreign currency exchange rates. The Board reviews and agrees policies for managing each of these risks.

The principal risks addressed are as follows:

Credit risk

The Group's exposure to credit risk arises from holdings of cash, cash equivalents and investments, and if a counterparty or customer fails to meet its contractual obligations.

The Group's primary objective to manage credit risk from its holdings of cash, cash equivalents and investments is to minimise the risk of a loss of capital and eliminate loss of liquidity having a detrimental effect on the business. The Group places surplus funds of no more than £30m per institution into pooled money market funds with same-day access and of no more than £10m per institution for bank deposits with durations of up to 24 months. During the period the Group's treasury policy restricted investments in short-term money market funds to those which carry short-term credit ratings of at least two of AAAm (Standard & Poor's), Aaa-mf (Moody's) and AAAmmf (Fitch) and deposits with banks with minimum long-term rating of A-/A3/A and short-term rating of A-2/P-2/F-1 for banks in which the UK Government holds less than 10% ordinary equity.

Trade receivables at the period end relate to five customers (31 December 2020: four) of which £697,000 relates to the Europe geographic region, £274,000 to North America and £1,641,000 to Asia (31 December 2020: £2,377,000 related to the Europe geographic region, £nil to North America and £951,000 to Asia).

Contract assets at the period end related to five customers of which £1,459,000 relates to the Europe geographic region, £321,000 to North America and £5,551,000 to Asia (31 December 2020: related to three customers of which £170,000 relates to the Europe geographic region, £nil to North America and £667,000 to Asia).

The Group's customers are generally large multinational companies or research institutions and are consequentially not considered to add significantly to the Group's credit risk exposure. All trade receivables are due within the agreed credit terms for the current year and preceding period and are consequently stated at cost.

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables and other contract assets (primarily unbilled work in progress).

To measure expected credit losses, trade receivables and other contract assets are analysed based on their credit risk characteristics including days past due and the specific payment profile of the customer to determine a suitable historical loss rate. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors that the Group considers could affect the ability of its customers to settle the receivables.

The Group has followed this approach as at 31 December 2021 and as a result has not recognised a loss allowance for trade receivables or other contract assets (31 December 2020: no loss allowance). Management does not consider that a reasonably possible change in the estimation of expected credit losses would have a material impact on the results of the following year.

Interest rate risk

Interest rate risk on the Group's liabilities is minimal.

The Group's finance income is sensitive to changes in interest rates. A change of 0.5% in interest rates would have impacted the finance income by £494,000 for the year ended 31 December 2021 (for the 18 months ended 31 December 2020 a change of 0.5% in interest rates would have impacted the finance income by £200,000). This analysis considers the effect of financial instruments with variable interest rates. The increase in sensitivity to interest rate changes is driven by the increase in cash, cash equivalents and investments held at the balance sheet date when compared with 31 December 2020. Interest rate risk is mitigated by investing in deposit accounts of different durations ranging from 32 days to 24 months.

Liquidity risk

Liquidity risk is the risk arising from the Group not being able to meet its financial obligations. The Group manages its liquidity needs by preparing cash flow forecasts, including forecasting of the Group's liquidity requirements, to ensure the Group has sufficient cash to meet its operational needs.

The following are the contractual maturities of financial liabilities, including estimated interest payments and excluding the effect of netting agreements:

	31 Dec 2021 £'000						31 Dec 2020 £'000					
	Carrying amount £'000	Contractual cash flows £'000	1 year or less £'000	1 to 2 years £'000	2 to 5 years £'000	>5 years £'000	Carrying amount £'000	Contractual cash flows £'000	1 year or less £'000	1 to 2 years £'000	2 to 5 years £'000	>5 years £'000
Non-derivative financial liabilities												
Trade and other payables and accruals	(8,601)	(8,601)	(8,601)	–	–	–	(11,787)	(11,787)	(11,787)	–	–	–
Lease liabilities	(3,040)	(3,602)	(833)	(832)	(1,303)	(634)	(4,445)	(6,111)	(823)	(817)	(2,447)	(2,024)
Derivative financial liabilities												
Forward exchange contracts:												
(Outflow)	–	(536)	(536)	–	–	–	(9)	(244)	(244)	–	–	–
Inflow	547	1,081	552	529	–	–	–	238	238	–	–	–

Foreign currency exposures

The Group's primary transaction currency is pound sterling. Exposures to foreign currency-denominated contracted receivables and commitments arise from the Group's overseas sales and purchases, which are primarily denominated in euros, US dollars, Canadian dollars and Japanese yen. During the prior period, the Group entered into a fixed term deposit denominated in Chinese renminbi, to fund the expected initial investment of CNH68m (c.£8m) in the proposed collaboration with Weichei Power Co. Ltd). This deposit has been rolled forward following the ongoing discussions around the final form of the collaboration which are expected to complete during 2022.

The Group seeks to mitigate its foreign currency exposure by entering into forward currency exchange contracts, and in limited circumstances, currency options in accordance with the Group's treasury policy. Where the amounts to be paid and received in a specific currency are expected to largely offset one another, no further hedging activity is undertaken. Forward currency exchange contracts and options are primarily entered into for significant foreign currency exposures that are not expected to be offset by other currency transactions. The Group's objectives and policies are largely unchanged in the reporting periods under review.

During the prior period, the Group entered into a non-deliverable forward (NDF) to hedge an exposure to KRW related to a long-term customer contract. As at 31 December 2021, gross cashflows totalling £10.3m remained under the hedge (2020: £15.6m), which is due to be net-settled in pound sterling during 2022. Forward exchange contracts include forward currency contracts to sell 4.0m euros in total, and buy pounds sterling, over the next 12 months.

20. Financial instruments *continued*

The table below shows the extent to which the Group has monetary assets and liabilities in currencies other than pounds sterling. Foreign exchange differences arising on the retranslation of these monetary assets and liabilities are taken to the Consolidated Statement of Profit and Loss.

31 December 2021	Euro £'000	US dollar £'000	Canadian dollar £'000	Japanese yen £'000	Chinese renminbi £'000	Other £'000
Exposures to foreign currency risk:						
Cash and cash equivalents	1,687	505	38	565	103	29
Fixed term bank deposits	–	–	–	–	8,179	–
Trade receivables	474	274	–	–	–	–
Trade payables and payments on account	(287)	(393)	–	(9)	(25)	(10)
Other payables	–	–	–	–	(30)	–
Forward currency contracts – (outflow)/inflow	(5,421)	744	237	–	–	–
Balance sheet exposure	(3,547)	1,130	275	556	8,227	19

31 December 2020	Euro £'000	US dollar £'000	Canadian dollar £'000	Japanese yen £'000	Chinese renminbi £'000	Other £'000
Exposures to foreign currency risk:						
Cash and cash equivalents	897	83	75	36	–	26
Fixed term bank deposits	–	–	–	–	7,774	–
Trade receivables	1,186	–	–	–	–	–
Trade payables and payments on account	(408)	53	–	–	–	(19)
Other payables	–	–	(903)	–	–	–
Forward currency contracts – (outflow)/inflow	(3,978)	112	58	68	–	–
Balance sheet exposure	(2,303)	248	(770)	104	7,774	7

A 10% weakening of the following currencies against pound sterling at 31 December 2021 (or 31 December 2020) would have resulted in a profit or loss charge to the Consolidated Statement of Profit and Loss by the amounts shown below. This calculation assumes that the change occurred at the balance sheet date and had been applied to risk exposures existing at that date.

This analysis assumes that all other variables, in particular other exchange rates and interest rates, remain constant. The analysis is performed on the same basis for the comparative period.

	Profit or (loss)	
	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
Euro	(314)	(152)
US dollar	(38)	(12)
Canadian dollar	(4)	75
Japanese yen	(56)	(2)
Chinese Renminbi	(734)	(707)
Other	(3)	–

A 10% strengthening of the above currencies against pound sterling at 31 December 2021 (or 31 December 2020) would have had the equal but opposite effect on the above currencies to the amounts shown above, on the basis that all other variables remain constant.

21. Lease liabilities

The Group leases certain assets under lease agreements. The lease liability consists of leases of land and buildings and computer equipment. The leases expire between March 2022 and November 2028. Full details of the accounting policy under which leases are recognised are in Note 11.

	£'000
Balance as at 1 July 2019	-
Leases recognised on the adoption of IFRS 16	4,971
Lease payments	(1,190)
Interest expense	664
Balance as at 31 December 2020	4,445
New finance leases recognised	41
Lease payments	(721)
Interest expense	316
Adjustment to lease term (see Note 11)	(1,042)
Balance as at 31 December 2021	3,039
Current	754
Non-current	2,285
Balance as at 31 December 2021	3,039
Current	823
Non-current	3,622
Balance as at 31 December 2020	4,445

Lease liability contractual maturities (representing undiscounted contractual cash-flows) are set out in Note 20.

22. Provisions

Provisions

A provision is recognised in the Consolidated Statement of Financial Position when the Group has a present legal or constructive obligation as a result of a past event that can be reliably measured and it is probable that an outflow of economic benefits will be required to settle the obligation where relevant.

Property dilapidations

Provisions have been made for future dilapidation costs on the leased properties. This provision is the Directors' best estimate as the actual costs and timing of future cash flows are dependent on future events and are updated periodically. The estimate is supported by advice received from professional advisers. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects risks specific to the liability. Any difference between expectations and the actual future liability will be accounted for in the period when such determination is made.

Warranties

As at the year end, only a small proportion of technology hardware supplied or sold to customers was provided with contractual warranties. The majority of technology hardware supplied or sold to customers has been provided without contractual warranties, however where a constructive obligation is considered to have been created through an expectation or past practice, a provision for the associated costs of future claims has been included at the year end. The Group recognises a provision for both contractual and constructive obligation warranties when the underlying products and services are sold. The provision is based on the past performance of the technology hardware, management's knowledge, customer expectations and a weighting of possible outcomes against their associated probabilities.

Contract losses

The Group holds provisions for expected contractual costs that it expects to incur over the life of the contract. Management exercises judgement to determine the value of the costs to be incurred and the amount of the provision to be made. Each provision is considered separately and the amount provided reflects the best estimate of the most likely amount to be incurred. Provision is made when the contractual or constructive obligation occurs. The provision is released to the Consolidated Statement of Profit and Loss over time or at the point in time that the actual costs are incurred.

22. Provisions *continued*

The movement in provisions charged to the Consolidated Statement of Profit and Loss for the year ended 31 December 2021 is set out below along with the value of provisions at 31 December 2021:

	Property dilapidations £'000	Warranties £'000	Contract losses £'000	Total £'000
At 1 January 2021	1,610	418	194	2,222
Movements in the Consolidated Statement of Profit and Loss:				
Amounts used	–	(404)	(175)	(579)
Unwinding of discount	64	–	–	64
Increase in provision	154	1,239	307	1,700
At 31 December 2021	1,828	1,253	326	3,407
Current	–	1,253	326	1,579
Non-current	1,828	–	–	1,828
At 31 December 2021	1,828	1,253	326	3,407
Current	–	418	194	612
Non-current	1,610	–	–	1,610
At 31 December 2020	1,610	418	194	2,222

The dilapidation provision at 31 December 2021 represents the present value of costs to be incurred in making good the Group's leasehold properties at the break points of the leases in approximately two to three years' time. The main uncertainty relates to estimating the cost that will be incurred at the end of the respective leases.

The warranty provision at the year end is primarily the result of a constructive obligation and reflects the Directors' best estimate of the cost required to fulfil these obligations with respect to a number of the Group's customer contracts. Subsequent to their initial recognition, warranty provisions are utilised or released over the periods of the various warranty obligations, which are expected to be less than two years. There are several areas of uncertainty supporting the provision, including determining the amount of technology hardware that may require repairing or replacing and respective timing as manufacturing costs are expected to reduce over time. In addition, as most of the Group's warranty provisions relate to constructive rather than contractual obligation and there is limited history of warranty claims with the Group's current customers, any final warranty obligation will be subject to negotiation with the respective customer.

Following the identification of certain issues in a small population of technology hardware shipped during 2020, the Group incurred warranty costs of £0.4m during the year. An additional provision of £1.2m was recognised to reflect the increased levels of technology hardware shipped to customers during the year and the potentially higher costs involved in rectifying faulty items as evidenced by the warranty charge recognised in the year.

As at 31 December 2021, the contract loss provision relates to one contract for the provision of technology hardware. The existing loss provision at 1 January 2021 was utilised in the year as expected against final customer shipments. An additional loss provision was then recognised to reflect a new contract with the same customer for the provision of technology hardware that is expected to be substantially utilised during 2022. The main uncertainties relate to the timing of hardware delivery and the underlying manufacturing costs which are expected to reduce over time as the Group's production facility matures.

23. Share capital

	31 Dec 2021 £'000		31 Dec 2020 £'000	
	Number of £0.10 Ordinary shares	£'000	Number of £0.10 Ordinary shares	£'000
Allotted and fully paid				
At 1 January 2021/1 July 2019	172,171,527	17,217	152,769,812	15,277
Allotted £0.10 Ordinary shares on exercise of employee share options	1,490,531	149	4,024,665	402
Allotted £0.10 Ordinary shares on cash placing (see below)	17,067,580	1,707	15,377,050	1,538
At 31 December	190,729,638	19,073	172,171,527	17,217

On 17 March 2021 the Group announced a fundraise that would allot 17,067,580 new ordinary shares of £0.10 each in the Company, for a total gross cash consideration of £180,916,340. In conjunction with the placing, 12,967,629 shares were allotted on 17 March 2021 which included Bosch and certain Directors of the Company subscribing for 3,649,150 and 24,376 shares respectively. On 19 May 2021 Weichai subscribed for and were allotted the remaining 4,099,951 shares.

During the year ended 31 December 2021, 1,490,531 ordinary £0.10 shares were allotted for cash consideration of £705,636 on the exercise of employee share options (18 months ended 31 December 2020: 4,024,665 ordinary £0.10 shares were allotted for cash consideration of £1,581,148) (see Note 25).

24. Reserves

The Consolidated Statement of Financial Position includes a merger reserve and a capital redemption reserve. The merger reserve represents a reserve arising on consolidation using book value accounting for the acquisition of Ceres Power Limited at 1 July 2004. The reserve represents the difference between the book value and the nominal value of the shares issued by the Company to acquire Ceres Power Limited. The capital redemption reserve was created in the year ended 30 June 2014 when 86,215,662 deferred ordinary shares of £0.04 each were cancelled.

25. Share options

Share-based payments

The Group has a number of employee and executive share option and award schemes under which it makes equity-settled share-based payments.

The fair value of share-based payment awards granted to employees is recognised as an employee expense, with a corresponding increase in equity, over the period in which the employees become unconditionally entitled to the awards. The fair value of the awards granted is measured using option valuation models, taking into account the terms and conditions upon which the awards were granted. The fair value of the share-based payment, determined at the grant date, is measured to reflect vesting and non-vesting conditions and for market-related vesting conditions there is no true-up for differences between expected and actual outcomes.

Where the parent Company grants options over its own shares to the employees of the Group, these are accounted for as equity-settled in the consolidated accounts of the Group.

The total charge recognised in the year ended 31 December 2021 relating to employee share-based payments was £2,615,000 (18 months ended 31 December 2020: £1,378,000).

The Company has a number of share option schemes and savings-related share option plans for its employees and a separate historical scheme for Executive Directors.

	12 months ended 31 Dec 2021 £'000	18 months ended 31 Dec 2020 £'000
a) 2004 Employees' share option scheme	–	39
b) Sharesave schemes	384	317
c) Long Term Incentive Plan (LTIP)	2,231	1,022
	2,615	1,378

a) 2004 Employees' share option scheme

In previous years the Company issued share options under this scheme for Directors and employees, under which approved and unapproved share options were granted. The Company adopted the "Ceres Power Holdings Ltd 2004 Employees' share option scheme" at the time of listing in November 2004.

Under this scheme, Directors and employees hold options to subscribe for £0.10 ordinary shares in Ceres Power Holdings plc at prices ranging from £0.10 to the closing mid-market price on the day preceding the share option grant. All options are equity-settled. The vesting period for all options is generally between three and six years. If the options remain unexercised after a period of ten years from the date of the grant, the options expire. Options are forfeited if the employee chooses to leave the Group before the options vest.

Movements in the total number of share options outstanding and their relative weighted average exercise price are as follows:

	12 months ended 31 Dec 2021 £'000		18 months ended 31 Dec 2020 £'000	
	Number ('000)	Weighted average exercise price	Number ('000)	Weighted average exercise price
Outstanding at 1 January / 1 July	2,425	£0.66	5,808	£0.49
Exercised	(946)	£0.52	(3,073)	£0.64
Lapsed	(3)	£0.85	(310)	£0.86
Outstanding at 31 December	1,476	£0.75	2,425	£0.66
Exercisable	1,476	£0.75	2,425	£0.66

The weighted average share price on the exercise date of options was £12.50 (2020: £4.64).

The range of exercise prices for options outstanding at the end of the period is as follows:

	12 months ended 31 Dec 2021 £'000		18 months ended 31 Dec 2020 £'000	
Expiry date – 31 December	Number ('000)	Weighted average exercise price	Number ('000)	Weighted average exercise price
2022	–	–	75	£0.10
2023	611	£0.62	1,166	£0.50
2024	801	£0.84	1,002	£0.83
2025	37	£0.90	105	£0.86
2026	27	£0.55	27	£0.55
2027	–	–	50	£1.35

The options outstanding at the end of the period have a weighted average contractual life of 2.15 years (2020: 3.04 years).

During the 2016 and 2014 years, certain option-holders under the 2004 share option scheme were awarded Employee Shareholder Status (ESS) shares in the Company's subsidiary, Ceres Power Intermediate Holdings Ltd. The ESS shares were granted as a modification to the unexercised 2004 Employees' share scheme options providing the relevant employees with additional exercise rights. The issue of the ESS shares has not changed the vesting period or exercise price of the unexercised 2004 Employees' share scheme options granted. The total fair value charge of these options remains unchanged and the gross benefit received cannot exceed the gain realisable under the original share options and it cannot be received at an earlier time. Shares granted in Ceres Power Intermediate Holdings Ltd under the ESS scheme have minimal rights attached to them.

25. Share options *continued*

b) Sharesave scheme

During 2019 a new HMRC-approved savings-related share option scheme was implemented, under which employees save on a monthly basis, over a three-year period, towards the purchase of shares at a fixed price determined when the option is granted. This price is set at a 20% discount to the market price. The options must be exercised within six months of maturity of the savings contract, otherwise they lapse.

Movements in the total number of share options outstanding and their relative weighted average exercise price are as follows:

	12 months ended 31 Dec 2021 £'000		18 months ended 31 Dec 2020 £'000	
	Number ('000)	Weighted average exercise price	Number ('000)	Weighted average exercise price
Outstanding at 1 January / 1 July	1,042	£1.43	1,092	£0.68
Granted	162	£9.83	324	£1.95
Exercised	(202)	£1.06	(271)	£0.63
Lapsed/cancelled	(18)	£4.91	(103)	£1.16
Outstanding at 31 December	984	£2.83	1,042	£1.43
Exercisable	–	–	–	–

The weighted average share price on the exercise date of options was £11.01 (2020: £4.00).

The weighted average fair value of options granted in the period was £5.50 (2020: £1.09).

The expiry dates of options outstanding at the end of the period are as follows:

	12 months ended 31 Dec 2021 £'000		18 months ended 31 Dec 2020 £'000	
Expiry date – 31 December	Number ('000)	Weighted average exercise price	Number ('000)	Weighted average exercise price
2021	–	–	202	£1.06
2022	516	£1.27	523	£1.27
2023	313	£1.95	317	£1.95
2024	155	£9.83	–	–

The options outstanding at the end of the period have a weighted average contractual life of 1.44 years (2020: 1.86 years).

c) LTIP

During 2016 a Long Term Incentive Plan (LTIP) was implemented by the Remuneration Committee. Participation in the LTIP is at the invitation of the Committee and is intended to be used to incentivise the performance and retention of the Company's Executives and certain key employees.

The maximum awards for all participants are determined by the Remuneration Committee with appropriate input from independent advisers. Performance is based on achieving targets. Targets are major milestones which are aligned to the Group's strategic plan and also a sliding scale of Total Shareholder Return (TSR), which is measured over a period of three years with an additional holding period of two years for Executives. Malus, hold and clawback conditions apply.

Movements in the total number of share options outstanding and their relative weighted average exercise price are as follows:

	12 months ended 31 Dec 2021 £'000		18 months ended 31 Dec 2020 £'000	
	Number ('000)	Weighted average exercise price	Number ('000)	Weighted average exercise price
Outstanding at 1 January / 1 July	4,315	£0.10	3,354	£0.10
Granted	–	–	1,923	£0.10
Exercised	(342)	£0.10	(521)	£0.10
Lapsed	(10)	£0.10	(441)	£0.10
Outstanding at 31 December	3,963	£0.10	4,315	£0.10
Exercisable	2,134	£0.10	1,696	£0.10

The weighted average fair value of options granted in the 18 month period ending 31 December 2020 was £3.17.

The weighted average share price on the exercise date of options was £12.36 (2020: £4.27).

The expiry dates of options outstanding at the end of the period are as follows:

	12 months ended 31 Dec 2021 £'000		18 months ended 31 Dec 2020 £'000	
Expiry date – 31 December	Number ('000)	Weighted average exercise price	Number ('000)	Weighted average exercise price
2026	1,141	£0.10	1,253	£0.10
2027	336	£0.10	442	£0.10
2028	657	£0.10	787	£0.10
2029	1,116	£0.10	1,120	£0.10
2030	713	£0.10	713	£0.10

The options outstanding at the end of the year have a weighted average contractual life of 6.88 years (2020: 7.68 years).

Assumptions

The fair values of the 2004 and Sharesave schemes were measured by use of the Black–Scholes pricing model. The inputs to the Black–Scholes model were as follows:

Grant date	Sharesave scheme 2021 30 April 2021	Sharesave scheme 2020 22 January 2020	Sharesave scheme 2019 29 April 2019	Adjusted Sharesave scheme 2018 6 December 2017
Share price at date of grant (£)	12.290	2.440	1.583	1.330
Exercise price (£)	9.832	1.95	1.266	1.060
Expected volatility (%)	53%	53%	53%	55%
Expected option life (years)	3.25 years	3.25 years	3.25 years	3.25 years
Average risk-free interest rate (%)	1.00%	1.00%	1.00%	1.75%
Expected dividend yield	Nil	Nil	Nil	Nil

The exercise prices of options are stated above. The expected life of the options is based on the best estimate of the average number of years expected from grant to exercise. The expected volatility is based on historical volatility of the Company's shares since the Company restructured in 2012. The risk-free rate of return is management's estimate of the yield on zero-coupon UK Government bonds of a term consistent with the expected option life.

The fair values of the LTIP schemes were measured using a binomial pricing model and Monte Carlo simulation model.

The inputs to the Monte Carlo simulation model were as follows:

Grant date	LTIP 2020 (2) 10-21 December 2020	LTIP 2020 (1) 10 October 2019	LTIP 2019 10 October 2018
Share price at date of grant (£)	10.52–11.56	2.16	1.89
Exercise price (£)	0.1	0.1	0.1
Expected volatility (%)	31%	21%	54%
Expected option life (years)	up to 7 years	up to 7 years	Up to 7 years
Average risk-free interest rate (%)	1.00%	1.00%	1.75%
Expected dividend yield	Nil	Nil	Nil

26. Events after the balance sheet date

On 9 February 2022, the Group announced the intention to collaborate with Weichai and Bosch to access the substantial opportunities that exist for fuel cell technologies in the Chinese market. This is likely to include a three-way system collaboration to be set up in Shandong province in China to develop and manufacture SOFC system products, with Weichai being the majority shareholder and Bosch and Ceres minority shareholders. Ceres is expected to take up a holding of 10%. Detailed non-binding Heads of Terms have been signed by all parties and full contracts are expected to be agreed in 2022.

On 8 March 2022, the Group announced that it had signed a multi-million pound, long-term agreement with Horiba Mira to be our fuel cell and electrolysis test partner and supplier of test stands.

27. Capital commitments

Capital expenditure that has been contracted for but has not been provided for in the financial statements amounts to £8,086,000 as at 31 December 2021 (31 December 2020: £1,142,000), in respect of the acquisition of property, plant and equipment, primarily related to the Group's planned test stand expansion.

28. Related party transactions

As at 31 December 2021 the Group's related parties were its Directors. During the year one Director exercised and retained 8,491 share options under the Company's employee Sharesave scheme. There were no other transactions between the Company and the Directors during the period.

In the 18 months ended 31 December 2020, the following Directors exercised share options:

Date of exercise	Name	Relationship	Type of shares	Total number of options exercised[1]	Weighted average market price at exercise	Total gain on exercise	Number of shares retained
30 October 2019	Phil Caldwell	Director and shareholder	£0.10 ordinary shares	249,637	£2.112	£314,172	nil
30 October 2019	Richard Preston	Director and shareholder	£0.10 ordinary shares	92,875	£2.112	£186,883	nil
4 February 2020	Phil Caldwell	Director and shareholder	£0.10 ordinary shares	242,497	£3.989	£760,107	nil
4 February 2020	Richard Preston	Director and shareholder	£0.10 ordinary shares	75,000	£3.989	£285,731	nil
6 February 2020	Phil Caldwell	Director and shareholder	£0.10 ordinary shares	116,631	£4.055	£373,359	nil
1 April 2020	Phil Caldwell	Director and shareholder	£0.10 ordinary shares	13,636	£3.510	£38,863	13,636
10 December 2020	Phil Caldwell	Director and shareholder	£0.10 ordinary shares	387,007	£10.171	£3,605,620	nil
10 December 2020	Richard Preston	Director and shareholder	£0.10 ordinary shares	131,784	£10.171	£1,214,260	nil

1. The number of options exercised includes a number of shares sold in Ceres Power Holdings plc which were granted to Phil Caldwell and Richard Preston on the sale of Employee Shareholder Status (ESS) shares in the Company's subsidiary, Ceres Power Intermediate Holdings Ltd, which were granted as a modification to the unexercised 2004 Employees' Share Scheme options in 2014.

Company balance sheet

as at 31 December 2021

	Note	31 Dec 2021 £'000	31 Dec 2020 £'000
Fixed assets			
Investments	3	380,996	199,278
Current assets			
Debtors: amounts falling due within one year	4	14,892	4,515
Cash at bank and in hand	5	468	6,636
		15,360	11,151
Creditors: amounts falling due within one year	6	(8,309)	(2,583)
Net current assets		7,051	8,568
Net assets		388,047	207,846
Capital and reserves			
Called up share capital	8	19,073	17,217
Share premium		404,726	227,682
Capital redemption reserve	9	3,449	3,449
Profit and loss account		(39,201)	(40,502)
Shareholders' funds		388,047	207,846

The Company made a loss after taxation of £1.3m in the year (18 months ended 2020: profit of £10.5m).

The notes on pages 100 to 102 are an integral part of these Company financial statements.

The financial statements on pages 98 to 102 were approved by the Board of Directors on 16 March 2022 and were signed on its behalf by:

Phil Caldwell
Chief Executive Officer

Eric Lakin
Chief Financial Officer

Ceres Power Holdings plc
Registered Number: 5174075

Company statement of changes in equity

for the year ended 31 December 2021

	Note	Share capital £'000	Share premium £'000	Capital redemption reserve £'000	Profit and loss account £'000	Total £'000
At 1 July 2019		15,277	179,116	3,449	(52,341)	145,501
Comprehensive income						
Profit for the financial period		–	–	–	10,461	10,461
Total comprehensive loss		–	–	–	10,461	10,461
Transactions with owners						
Issue of shares, net of costs	8	1,940	48,566	–	–	50,506
Share-based payments charge	8	–	–	–	1,378	1,378
Total transactions with owners		1,940	48,566	–	1,378	51,884
At 31 December 2020		17,217	227,682	3,449	(40,502)	207,846
Comprehensive income						
Loss for the financial year		–	–	–	(1,314)	(1,314)
Total comprehensive loss		–	–	–	(1,314)	(1,314)
Transactions with owners						
Issue of shares, net of costs	8	1,856	177,044	–	–	178,900
Share-based payments charge	8	–	–	–	2,615	2,615
Total transactions with owners		1,856	177,044	–	2,615	181,515
At 31 December 2021		19,073	404,726	3,449	(39,201)	388,047

The notes on pages 100 to 102 are an integral part of these Company financial statements.

1. Accounting policies used in the preparation of the financial statements

Basis of preparation

The financial statements of the Company have been prepared in accordance with Financial Reporting Standard 101 Reduced Disclosure Framework (FRS 101).

In preparing these financial statements, the Company applies the recognition, measurement and disclosure requirements of International Accounting Standards, but makes amendments where necessary in order to comply with the Companies Act 2006 and has set out below where advantage of the FRS 101 disclosure exemptions has been taken.

Under section s408 of the Companies Act 2006 the Company is exempt from the requirement to present its own profit and loss account.

In these financial statements, the Company has applied the exemptions available under FRS 101 in respect of the following disclosures:

- Cash Flow Statement and related notes;
- Comparative period reconciliations for share capital;
- Disclosures in respect of transactions with wholly owned subsidiaries;
- Disclosures in respect of capital management;
- The effects of new but not yet effective IFRSs;
- Disclosures in respect of the compensation of Key Management Personnel; and
- Disclosures of transactions with a management entity that provides key management personnel services to the Company.

As the consolidated financial statements include the equivalent disclosures, the Company has also taken the exemptions under FRS 101 available in respect of the following disclosures:

- IFRS 2 Share-based Payments in respect of Group-settled share-based payment; and
- IFRS 7 Financial Instrument Disclosure.

The accounting policies set out below have, unless otherwise stated, been applied consistently to all periods presented in these financial statements.

The financial statements are prepared on the historical cost basis.

Critical accounting judgements and estimates

The preparation of financial statements under FRS 101 requires the Company's management to make judgements and estimates that affect the reported amounts of assets, liabilities, revenues and costs. Although these estimates are based on management's best knowledge of the amount, events or actions, actual results may ultimately differ from these 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.

The judgements that are considered to have the most significant impact on the Company's assets and liabilities are set out below.

The review of amounts owed by Group undertakings involved judgement when determining the credit risk of fellow Group undertakings and their ability to repay loans. As at 31 December 2021, management determined that Ceres Power Limited remains unable to repay any amounts in excess of the carrying value of the loan and therefore the historical provision of £59.3m was maintained.

Management's review of the Company's investments to determine whether an indicator of impairment exists requires estimates to be used when evaluating the carrying value of investments against their value-in-use. The value-in-use is estimated using a discounted cash flow valuation. The basis for the projected cash flows is the Group's business plan, which is prepared by management. As at 31 December 2021, this review resulted in management determining that the value-in-use continues to be in excess of its carrying value, and no impairment is therefore required.

2. Loss for the period

The Company has taken advantage of the exemption available under section 408 of the Companies Act 2006 and has not presented its profit and loss account. The Company's result for the year ended 31 December 2021 was a loss of £1.3m (18 months ended 31 December 2020: profit of £10.5m), which is stated after charging £66,000 (2020: £20,000) for remuneration receivable by the Company's auditor for the auditing of the financial statements and £134,000 (2020: £30,000) in relation to the audit of the interim financial information.

3. Fixed asset investments

Investments in equity securities

Fixed asset investments in subsidiaries are carried at cost less impairment.

Share-based payments

The Group in which the Company is associated has a number of employee and executive share option and award schemes under which it makes equity-settled share-based payments.

The fair value of share-based payment awards granted to employees is recognised as an employee expense, with a corresponding increase in equity, over the period in which the employees become unconditionally entitled to the awards. The fair value of the awards granted are measured using option valuation models, taking into account the terms and conditions upon which the awards were granted. The fair value of the share-based payment, determined at the grant date, is measured to reflect vesting and non-vesting conditions and there is no true-up for differences between expected and actual outcomes.

Where the Company grants options over its own shares to the employees of its subsidiaries it recognises an increase in the cost of investment in its subsidiaries with the corresponding credit being recognised directly in equity.

Impairment of fixed asset investments

Investments are stated at cost and reviewed for impairment if there are indicators that the carrying value may not be recoverable. An impairment loss is recognised to the extent that the carrying amount cannot be recovered either by selling the asset or by continuing to hold the asset and benefiting from the net present value of the future cash flows of the investment.

Investment in Group undertakings:

	31 Dec 2021 £'000	31 Dec 2020 £'000
Cost		
At 1 January	199,278	147,049
Capital contributions arising from share-based payment charge	2,613	1,378
Additional investment in shares of Ceres Power Intermediate Holdings Ltd	179,104	50,851
At 31 December	380,996	199,278

The Directors have reviewed the investment in its subsidiary for indicators of impairment at the year end, including considering the progress of technical development, funds held and the positive performance of the Group, as well as the Group's market capitalisation. Accordingly, no indicators of impairment were identified and the Directors continue to believe that the recoverable value of the investment exceeds its carrying value.

The Company's investments comprise interests in the following entities:

Name of undertaking	Country of incorporation	Description of shares held	Proportion of nominal value of shares held by the Company	Type of entity
Ceres Power Ltd	England and Wales	£0.001 ordinary shares	100%[1]	Subsidiary
Ceres Intellectual Property Company Ltd	England and Wales	£1.00 ordinary shares	100%[1]	Subsidiary
Ceres Power Licence Company Ltd	England and Wales	£1.00 ordinary shares	100%	Subsidiary
Ceres Power Intermediate Holdings Ltd	England and Wales	£0.01 ordinary shares	100%[1]	Subsidiary
Ceres Engineering Consulting (Shanghai) Co Ltd	Shanghai, China	£1.00 ordinary shares	100%[2]	Subsidiary
RFC Power Ltd	England and Wales	£0.001 ordinary shares	8.4%[3]	Associate

1. Ceres Power Ltd, Ceres Intellectual Property Company Ltd and Ceres Power Licence Company Ltd are 100% held directly by Ceres Power Intermediate Holdings Ltd. Registered address is Viking House, Foundry Lane, Horsham, West Sussex, RH13 5PX.
2. 100% held directly by Ceres Power Ltd. Registered address is Office 1903i, Floor 19/F, Tower B, No.1065 West Zhongshan Road, Changning District, Shanghai, China.
3. 8.4% held directly by Ceres Power Intermediate Holdings Ltd. Registered address is Imperial College, White City Incubator Translation and Innovation Hub, London, W12 0BZ.

On 11 November 2021 Ceres Power Intermediate Holdings Ltd acquired an 8.4% shareholding in RFC Power Ltd in exchange for consultancy services performed, and the Group recognised an investment in associate of £0.5m accordingly. Ceres has an option to acquire the balance of the outstanding share capital for up to £25m, payable in Ceres shares, exercisable from May to November 2022. RFC Power specialises in developing novel flow battery chemistries for energy storage systems.

On 23 August 2021 the Group established a Wholly Foreign Owned Entity (WFOE), Ceres Engineering Consulting (Shanghai) Co Ltd in Shanghai, China. The company is a 100% owned subsidiary of Ceres Power Ltd. The principal activity of the company is to provide business development and technical support to our business and partners in China.

On 2 September 2019, Ceres Power Licence Company Ltd was incorporated in England and Wales. The company is a 100% owned subsidiary of Ceres Power Intermediate Holdings Ltd. The principal activity of the company is the provision of overseas licence and royalty services.

The principal activity of Ceres Power Ltd is the commercialisation and continued development of the Group's fuel cell and electrochemical technology. The principal activity of Ceres Intellectual Property Company Ltd is the administration of registered intellectual property developed within the Group. The principal activity of Ceres Power Intermediate Holdings Ltd is as a holding company to the other Group companies and to manage the Group's cash, cash equivalents and short-term investments.

The results of Ceres Power Ltd, Ceres Intellectual Property Company Ltd, Ceres Power Licence Company Limited, Ceres Power Intermediate Holdings Ltd and Ceres Engineering Consulting (Shanghai) Co Ltd are included within the consolidated financial statements. The Group's share of the results of RFC Power Ltd are included within the consolidated financial statements by applying the equity method of accounting, as set out in Note 1. The Group's share of RFC's results since acquiring the shareholding is not material and has therefore not been disclosed separately.

4. Debtors: amounts falling due within one year

Trade and other debtors

Trade and other debtors are recognised initially at fair value. Where considered necessary they are subsequently measured at amortised cost using the effective interest method, less any impairment losses. The Company applies the general approach for the impairment review of loans to subsidiaries.

	31 Dec 2021 £'000	31 Dec 2020 £'000
Other debtors	97	1
Prepayments and accrued income	23	19
Amounts owed by Group undertakings	14,772	4,495
	14,892	4,515

The amounts owed by Group undertakings comprise inter-company loans and recharges. No specific repayment or interest terms are associated with these amounts. As of 31 December 2021, a loss allowance of £59,316,000 (31 December 2020: £59,316,000) has been recognised against the inter-company loan to Ceres Power Ltd, reflecting management's best estimate of the expected credit losses for that balance.

A subordination agreement exists between the Company and Ceres Power Ltd. As at 31 December 2021, amounts owed by Ceres Power Ltd to the Company of £60,676,000 (31 December 2020: £60,676,000) are subordinated to all other creditors of Ceres Power Ltd.

5. Cash and cash equivalents

Cash and cash equivalents comprise cash balances.

6. Creditors: amounts falling due within one year

Trade and other creditors

Trade and other creditors are recognised initially at fair value. Where considered necessary they are subsequently measured at amortised cost using the effective interest method.

	31 Dec 2021 £'000	31 Dec 2020 £'000
Trade creditors	23	27
Other creditors	71	–
Accruals	221	206
Amounts owed to Group undertakings	7,994	2,350
	8,309	2,583

7. Taxation

Taxation

Tax on the profit or loss for the year comprises current and deferred tax and any adjustment to tax payable in respect of previous years. Tax is recognised in the profit and loss account except to the extent that it relates to items recognised directly in equity or other comprehensive income, in which case it is recognised directly in equity or other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the balance sheet date.

Deferred taxation

Deferred tax is provided on temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The following temporary differences are not provided for: the initial recognition of assets or liabilities that affect neither accounting nor taxable profit other than in a business combination; and differences relating to investments in subsidiaries to the extent that they will probably not reverse in the foreseeable future. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the balance sheet date.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the temporary difference can be utilised.

Potential deferred tax assets have not been recognised but are set out below:

	31 Dec 2021 £'000	31 Dec 2020 £'000
Tax effect of timing differences because of:		
Short-term timing differences	(5)	(4)
Losses carried forward	(1,688)	(1,457)
	(1,693)	(1,461)

The deferred tax assets have not been recognised as the Directors consider that it is unlikely that the asset will be realised in the foreseeable future. The potential deferred tax assets are calculated using the estimated future UK tax rate of 25% (2020: 19%). The gross amount of losses carried forward as at 31 December 2021 was £6.8m (31 December 2020: £7.7m), which do not have an expiry date.

8. Called-up share capital

	31 Dec 2021 £'000		31 Dec 2020 £'000	
	Number of £0.10 Ordinary shares	£'000	Number of £0.10 Ordinary shares	£'000
Allotted and fully paid:				
Ordinary shares at 31 December	190,729,638	19,073	172,171,527	17,217

Details of shares issued in the period are provided in Note 23 to the Group financial statements. Details of share options are disclosed in Note 25 to the Group financial statements.

9. Capital redemption reserve

The capital redemption reserve was created in the year ended 30 June 2014 when 86,215,662 deferred ordinary shares of £0.04 each were cancelled.

10. Employees

The Company has no employees other than the Non-Executive Directors (including the Chairman), whose remuneration is set out on page 57.

Directors and advisers

Directors of Ceres Power Holdings plc

- Trine Borum Bojsen (Non-Executive Director)
- Tudor Brown (Non-Executive Director)
- Phil Caldwell (Chief Executive Officer)
- Steve Callaghan (Senior Independent Director)
- Warren Finegold (Chairman)
- Uwe Glock (Non-Executive Director)
- Qinggui Hao (Non-Executive Director)
- Aidan Hughes (Non-Executive Director)
- Professor Dame Julia King (Non-Executive Director)
- Eric Lakin (Chief Financial Officer)

Registered number

5174075

Company Secretary

Deborah Grimason

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www.ceres.tech

"Ceres", "Ceres Power", "Clean Energy Starts With Ceres" and "SteelCell" are registered trademarks belonging to the Group.

Glossary

Biofuel

A fuel derived from biomass, rather than by the very slow geological processes involved in the formation of fossil fuels. Most common biofuels include bio-ethanol (from sugar or starch crops) and biodiesel (from oils and fats).

Combined heat and power (CHP)

A unit that generates electricity while at the same time capturing usable heat that is created during this process. This heat can then be used to provide hot water or central heating for example, improving the efficiency of the device.

Decarbonisation

The process of lowering the amount of greenhouse gas emissions (mostly carbon dioxide, CO_2) produced by the burning of fossil fuels.

Efficiency, electrical/thermal

The amount of electricity/heat that is produced by a process for every unit of energy supplied to the process, often expressed as a percentage.

Efficiency, total

The amount of useful energy in any form that a process produces for every unit of energy supplied to the process, often expressed as a percentage.

Electrolyser

A device that uses an electric current to drive a chemical reaction, the reverse process to that of a fuel cell. There are several types of electrolysis technologies:

- **Alkaline electrolysis (AEL):**In use for more than 100 years, it uses a liquid alkaline electrolyte solution and operates at low temperature with liquid water. It is the largest scale and lowest cost technology today, but is not as efficient as other technologies.
- **Proton Exchange Membrane Electrolysis (PEME):** Uses a solid electrolyte that requires expensive rare metal catalysts. It can operate at high current densities at low temperature with liquid water and has a high dynamic response
- **Solid Oxide Electrolysis Cell (SOEC):** Least mature technology, it works at high temperature on steam, giving it significantly higher efficiency and lower operating costs than other technologies when using waste heat, and when integrating it with existing processes such as steel, ammonia and synthetic fuel.

Energy

In physics, the capacity for doing work. It may exist in potential, kinetic, thermal, electrical, chemical, nuclear or other various forms. Measured in Joules or Watt-Hours.

Flow battery (or Redox Flow Battery)

An electrochemical method of storing and generating electricity with flexible storage capacity and flexible discharge electricity rate. A flow battery may be used like a fuel cell or a rechargeable battery, with the electrolyte stored outside of the cell. Unlike a battery, the storage capacity is de-coupled from the cell and the electrolyte can be fed at different rates to generate varying amount of electricity.

Fuel cell

A device for converting chemical energy (fuel) directly into electrical energy without the need for combustion. There are several fuel cell technology families, classified by their operating temperature and the type of electrolyte used. These include:

- **Alkaline fuel cell (AFC):** relatively low operating temperature (60-80 Celsius) and one of the oldest designs for fuel cells, used in the United States space program since the 1960s. AFCs require pure hydrogen as fuel
- **Polymer exchange membrane (PEM) fuel cell:** relatively low operating temperature (60-80 Celsius). The low operating temperature means that it doesn't take very long for the fuel cell to warm up and begin generating electricity. Requires pure hydrogen as fuel
- **Phosphoric acid fuel cell (PAFC):** operate at around 200 Celsius, mature technology and most often used in stationary power generation systems. It has relatively low efficiency and so is typically only used in CHP systems
- **Solid oxide fuel cell (SOFC):** high operating temperatures (up to 950 Celsius) but highly efficient and able to generate electrical power from multiple fuel types including natural gas, biofuels, hydrogen blends and pure hydrogen. However, these cells are typically expensive as they are constructed from exotic (but fragile) materials resistant to the high operating temperatures.

Stack

An assembly of individual fuel cells into a device that can deliver a large amount of electrical power. Ceres stacks are currently manufactured in 1kW and 5kW units. These can be connected in a modular manner to create higher power systems.

Greenhouse gas

A gas that absorbs infrared radiation (net heat energy) emitted from Earth's surface and reradiates it back contributing to rising surface temperature, or the greenhouse effect. The most common greenhouse gases are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O) and water vapour (H_2O).

Hydrogen

A highly abundant naturally occurring gas commonly cited as a fuel for the future as it has a high chemical energy content for its mass and creates no harmful emissions when it is burned to release this energy. Hydrogen is currently used as a feedstock for a number of industrial processes (such as metal smelting or fertiliser production) and is commercially defined by its method of production and the treatment of the waste gases produced:

- Brown: produced by using coal where the emissions are released to the air
- Grey: produced from natural gas where the associated emissions are released to the air
- Blue: produced from natural gas, where the emissions are captured using carbon capture and storage
- Pink: produced from electrolysis powered by nuclear energy
- Green: produced from electrolysis powered by renewable electricity

Intellectual property (IP)

An asset that is created by the innovative activities of people and businesses. IP can be in the form of inventions, literary and artistic works, designs and symbols, names and images used in commerce. In business, unique IP is often the basis of competitive advantage and is therefore closely protected for example by calling out a copyright, registering a trade mark, or filing a patent. Intellectual Property Rights are protected by law and allow the holder to assert control over how they are used through contracts and licences.

Natural gas

A fossil fuel energy source that is formed deep beneath the earth's surface. The largest component of natural gas is methane, composed of carbon and hydrogen. When natural gas is burned or used in a fuel cell, it produces energy and waste carbon dioxide.

NOx or Nitrous Oxide

A gas that is often formed as an unwanted biproduct of combustion: the higher the temperature or pressure of the combustion, the more NOx is formed. It is a significant cause of poor air quality.

Glossary

OEM, Original Equipment Manufacturer

A company that manufactures and sells products or part of a product to another company.

SOFC system

An assembly that is made up of the fuel cell, fuel input handling components and components engineered to manage the electrical power output and waste heat and gases.

SOx or Sulphur Oxide

The gaseous substance that is formed when sulphur compounds, such as those found in many fossil fuels, are burned. Before low-sulphur fuels ere regulated, they were a significant cause of poor air quality from vehicles.

Watt

The unit by which power is measured. The amount of energy (measured in Joules) is delivered in a fixed amount of time, Joules per Second. Units are typically expressed in kilowatts (1kW = 1,000 watts); megawatts (1MW = 1,000kW); gigawatts (1GW = 1,000MW).

Zero emission

Refers to a vehicle, engine, motor, process or some other energy source, that emits no waste products that pollute the environment or disrupt the climate.