

Governance

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WE ARE

INNOVATIVE



Vesuvius is **always innovating** -
whether it is in safety, reliability,
product performance or any other
area of our business.

Pablo Santucci
Commercial Project Coordinator, Digital Services
Piedade, Brazil

Board of Directors



John McDonough CBE

Chairman

Appointed to the Board 31 October 2012

- > Proven strategic and leadership skills gained in a complex multinational business
- > Strong engineering background and global commercial experience
- > Clear leadership understanding of safety issues
- > Operational and strategic understanding of a range of business environments gained from working in Asia-Pacific, EMEA and the UK
- > Experience as CEO with an international listed company

Current external appointments

John is Chairman of Sunbird Business Services Limited and a Non-executive Director of Cornerstone Property Assets Limited and Inceptum2 Solutions Limited.

Career experience

John spent 11 years as Group Chief Executive Officer of Carillion plc until he retired in 2011. Prior to this, he spent nine years working for Johnson Controls. He served as Chairman of The Vitec Group plc for seven years, retiring from the board in 2019. He has also previously served as a Non-executive Director and Chairman of the Remuneration Committee of Tomkins plc, as a non-executive Director of Exel plc and as a Trustee of Team Rubicon UK.

John was awarded a CBE in 2011 for services to industry.

Key to Board Committee membership

- A Audit Committee
- N Nomination Committee
- R Remuneration Committee
- Committee Chairman

Engagement with the workforce

- E Holly Koeppel serves as the designated Non-executive Director responsible for overseeing engagement with the workforce.



Patrick André

Chief Executive

Appointed to the Board 1 September 2017

- > Global career serving the steel industry
- > Strong background in strategic development and implementation
- > Consumer focus and proven record of delivery, with strong commercial acumen
- > Drive and energy in promoting his strategic vision

Current external appointments – None

Career experience

Patrick joined the Group as President of the Vesuvius Flow Control business unit in 2016, until his appointment as Chief Executive in September 2017. During 2020, Patrick again took direct responsibility for the Flow Control business unit on an interim basis pending the appointment of a permanent successor following the departure of Roel van der Sluis in late 2019.

Before joining the Group, Patrick served as Executive Vice President Strategic Growth, CEO Europe and CEO for Asia, CIS and Africa for Lhoist company, the world leader in lime production. Prior to this, he was CEO of the Nickel division, then CEO of the Manganese division of ERAMET group, a global manufacturer of nickel and special alloys.

Changes to the Board during the year

The Directors named were in office during the year and up to the date of this Annual Report, with the exception of Kath Durrant who was appointed to the Board on 1 December 2020.

Kath Durrant will take over as Chair of the Remuneration Committee when Jane Hinkley steps down as Chair of the Remuneration Committee at the close of the 2021 AGM.

* Cevian Capital is a shareholder of Vesuvius plc and, at 3 March 2021, held 21.11% of Vesuvius’ issued share capital.



Guy Young

Chief Financial Officer

Appointed to the Board 1 November 2015

- > Extensive international experience gained in the mining and industrial sectors
- > Qualified Chartered Accountant, with significant financial and business development experience
- > Drive and energy in managing people and teams
- > Focus on strategic execution and business optimisation

Current external appointments – None

Career experience

Guy was Chief Financial Officer of Tarmac and latterly Lafarge Tarmac, the British building materials company, between 2011 and 2015. Prior to this he spent 13 years working at Anglo American plc in various senior financial and business development positions, including as Chief Financial Officer of Scaw Metals Group, the South African steel products manufacturer.

Guy is qualified with the South African Institute of Chartered Accountants.



Douglas Hurt

Senior Independent Director (SID)

Appointed to the Board 2 April 2015

- > Qualified Chartered Accountant, with recent and relevant financial experience
- > Highly knowledgeable in operational and corporate financial matters, with significant US and European experience
- > Proven management and leadership skills

Current external appointments

SID and Chair of the Audit Committee of Countryside Properties PLC, and a Non-executive Director and Chair of the Audit Committees of Hikma Pharmaceuticals PLC and the British Standards Institution.

Career experience

Douglas was Finance Director of IMI plc, a UK listed company, until 2015. He spent 23 years at GlaxoSmithKline plc where he held senior finance and general management positions. Douglas served as SID and Chair of the Audit Committee of Tate & Lyle plc until 2019.



Friederike Helfer

Non-executive Director

Appointed to the Board 4 December 2019

- > An experienced strategist, with strong analytic capability
- > Commercial acumen and a strong track record of working with a portfolio of companies to identify scope for operational and strategic improvement

Current external appointments

Partner of Cevian Capital* and a Non-executive director of the Supervisory Board of thyssenkrupp AG.

Career experience

Friederike is a Partner of Cevian Capital. She joined Cevian in 2008 and from 2013 to 2017, served on the Board of Directors and the Audit Committee of Valmet, a Finnish engineering company, in which Cevian was also invested. Prior to joining Cevian, Friederike worked at McKinsey & Company. She is a CFA Charterholder.



Kath Durrant

Non-executive Independent Director

Appointed to the Board 1 December 2020

- > 30 years’ experience of people management
- > Strong operational and strategic track record, gained working at a number of large global manufacturing companies
- > Experienced UK governance professional

Current external appointments

Non-executive Director and Chair of the Remuneration Committees of Calisen plc and SIG plc.

Career experience

Kath held various operational and specialist HR roles at GlaxoSmithKline plc and AstraZeneca plc and was Group HR Director of Rolls-Royce plc. She was most recently Group HR Director of Ferguson plc and Chief HR Officer of CRH plc. Kath served as a Non-executive Director and Chair of the Remuneration Committee of Renishaw plc from 2015 to 2018.



Jane Hinkley

Non-executive Independent Director

Appointed to the Board 3 December 2012

- > Proven track record of managing complex global trading business
- > Qualified Chartered Accountant, with significant financial and operational experience in large multinational companies
- > Leadership and global management skills

Current external appointments – None

Career experience

Jane is a Chartered Accountant and was Managing Director of Navion Shipping AS for three years until 2001. Prior to this, she spent her executive career as Chief Financial Officer and Managing Director of Gotaas-Larsen Shipping Corporation. She was previously Chairman of Teekay GP LLC, a Non-executive Director and Chairman of the Remuneration Committee of Premier Oil plc, and a Non-executive Director of Revus Energy ASA.



Hock Goh

Non-executive Independent Director

Appointed to the Board 2 April 2015 and will step down from the Board at the 2021 AGM

- > Strong focus on R&D and technology
- > Wealth of experience in sustainability and safety matters gained from more than 35 years working in the oil and gas industry
- > Strong international commercial experience and in-depth knowledge of Asian markets

Current external appointments

Non-executive Director of AB SKF, Santos Ltd and Stora Enso Oyj.

Career experience

Hock spent 25 years with Schlumberger, serving as President of Network and Infrastructure Solutions in London, President of Asia-Pacific, and Vice President and General Manager of China. He spent seven years as a Partner of Baird Capital Partners Asia, and was Chairman of Advent Energy Ltd and MEC Resources Ltd, and a Non-executive Director of Harbour Energy Ltd.



Holly Koeppel

Non-executive Independent Director

Appointed to the Board 3 April 2017 and will step down from the Board at the 2021 AGM

- > A strong track record of growing businesses and experience in domestic and international utility, power and infrastructure
- > Financial and operational experience managing assets on five continents
- > Global board experience as an independent non-executive director and an investor

Current external appointments

Non-executive Director and Chair of the Audit Committee of British American Tobacco p.l.c., Non-executive Director and Chair of the Governance Committee of The AES Corp. and a Non-executive Director of Arch Coal, Inc.

Career experience

Holly was Chief Financial Officer of American Electric Power Company, Inc. Prior to this, she held management roles at the Consolidated Natural Gas Corporation. Holly was Co-Head of Citi Infrastructure Investors (renamed Gateway) until 2007. She has also served as a Director of Integrys Energy Group, Inc., and Reynolds American Inc.

Group Executive Committee



Guy Young 
Chief Financial Officer
5 years with the Group

For biographical details please see the Board of Directors on page 92.

Henry Knowles 
General Counsel and Company Secretary
7 years with the Group


Appointed as General Counsel and Company Secretary in September 2013. Prior to joining Vesuvius, Henry spent eight years at Hikma Pharmaceuticals PLC, a generic pharmaceutical manufacturer with significant operations in the Middle East, North Africa and the US where he held the roles of General Counsel and Company Secretary. Henry is also responsible for the Group's Intellectual Property function. Henry is based in London, UK.

Agnieszka Tomczak 
Chief HR Officer
2 years with the Group


Appointed as Chief HR Officer in October 2018. Agnieszka has over 25 years of senior leadership experience in multinational companies spanning various business sectors and industries. Prior to joining Vesuvius, she spent 12 years at ICI, which was subsequently acquired by AkzoNobel, in regional and global HR roles. Agnieszka is based in London, UK.

Patrick André 
Chief Executive
5 years with the Group


For biographical details, please see the Board of Directors on page 92.

Pascal Genest 
President, Flow Control
1 month with the Group


Appointed President, Flow Control, 18 January 2021. Pascal joined the Group from GFG Alliance where he held the position of CEO Liberty Ostrava in the Czech Republic. Prior to this he was CEO of SULB in Bahrain. Pascal has more than 15 years' experience working in the steel industry, mainly with ArcelorMittal. He has also worked in consulting, in private equity and in the aluminium industry. Pascal is based in London, UK.

Karena Cancilleri 
President, Foundry
1 year with the Group

Appointed President, Foundry in October 2019. Karena joined the Group from Beaulieu International Group, where she served for six years as VP Engineered Products and latterly President Engineered Products. She has a broad breadth of managerial experience spanning various international leadership roles in companies such as FiberVisions, Kraton Corporation and Shell. Karena is based in London, UK.

Thiago Avelar 
President, Advanced Refractories
2 years with the Group

Appointed President, Advanced Refractories on 1 January 2020. Thiago joined Vesuvius in February 2019 as Regional VP Steel, South America, where he was responsible for Vesuvius' Steel Operations in South America. Prior to joining the Group, he worked for RHI Magnesita and ArcelorMittal in various technical and marketing roles based in Europe and Brazil. Thiago is based in London, UK.

Patrick Bikard 
President, Operations and Technology
13 years with the Group

Appointed President, Operations in January 2014, with responsibility for Technology since 2019. He was previously Vice President for Manufacturing, QHSE, Engineering and Purchasing and, prior to joining Vesuvius, he held senior operational roles at Renault, Alstom and Faurecia. Patrick is based in Ghlin, Belgium.

Corporate Governance Statement

Chairman's governance letter

Dear Shareholder,

On behalf of the Board, I am delighted to present the 2020 Corporate Governance Statement. As a Board, we remain committed to applying the highest standards of corporate governance, recognising that robust governance and culture underpin business success. Within the Corporate Governance Statement we provide investors and other stakeholders with an annual insight into the governance activities of the Board and its Committees.

The COVID-19 pandemic significantly impacted the Board's activities in 2020, curtailing the Non-executive Directors' usual visits to operations and necessitating the holding of a significant number of the Group's Board and Committee meetings online. As the full effects of the crisis began to be felt, the Board held an increased number of shorter and more frequent meetings to oversee the Group's response. However, the Board and its Committees still carried out their scheduled timetable of activities, giving close consideration to the implications of the COVID-19 crisis on the matters that regularly come before the Board.

Opportunities for Board members to engage directly with stakeholders were significantly limited during the year. However, the Board was delighted to see the Group's operations grasp the challenge to strengthen the links with our customers, through a range of initiatives aimed at fully utilising the benefits of virtual communication, and engage with our communities in the supply of PPE and provision of other solutions aimed at responding to the threat of COVID-19. The Group was also able to carry out its second employee engagement survey and was delighted that, despite the challenges presented by remote working, participation in the survey increased by 1% to 92%. Work is currently progressing on communicating the detailed results of the survey and developing action plans for the forthcoming year. Once again, this process engaged management directly, with managers receiving individual reports on their teams, to enable detailed and directly relevant action planning to increase engagement and improve employee experience.

The Nomination Committee has once again focused on succession planning, overseeing the appointment of Kath Durrant to the Board in December 2020 and commencing work on responding to the planned and announced Board rotations of Hock Goh and Holly Koeppel who will both retire at the AGM. In 2021 the Nomination Committee will continue to address succession issues in line with director rotation requirements, including the Senior Independent Director commencing a process for my succession as Chairman. The Committee also continues its focus on encouraging greater diversity among the Group's employees and on supporting the enhancement of the Group's talent pool for senior management.

The Remuneration Committee faced the challenge this year of overseeing the execution of the Group's remuneration programme in the face of the unprecedented impact of the COVID-19 pandemic. In taking decisions throughout the year on the various incentive elements, the Remuneration Committee sought to balance the need to retain, motivate and reward staff with the need to reflect the impact felt across all stakeholders.

In April 2020, the Board oversaw the implementation of a number of cost reduction and cash preservation measures. To show solidarity with the Group's employees the Board, in conjunction with the Group Executive Committee, elected to reduce their fees and salary by 20% for six months, and about 170 further senior managers also agreed a six-month salary sacrifice. The Audit Committee has been focused on carefully assessing the Group's financial situation throughout the year, with a heightened emphasis on the Group's liquidity and debt situation. Further details on the work of each of the Committees can be found in the Committee Reports on pages 106-143.

The Board's formal evaluation process for 2020 was externally facilitated by the corporate advisory firm, Lintstock. The results of the review indicated an improvement in the Board's performance despite the challenges presented by COVID-19, and that the move to online meetings had not curtailed the quality of information or debate at Board meetings. The evaluation concluded that the Board remained strong and effective with a good level of constructive challenge and informed debate. The evaluation highlighted a small number of Board priorities, including the continued need to focus on the Board and senior management succession pipeline and the drive to integrate the Group's new Sustainability initiative into the broader strategy. We look forward to progressing these in 2021.

Yours sincerely

John McDonough CBE
Chairman

3 March 2021

In this section:

➤ **Board leadership and company purpose** on p98

➤ **Division of responsibilities** on p100

➤ **Audit Committee report** on p106

➤ **Nomination Committee report** on p115

➤ **Directors' Remuneration Report** on p120

Also see:

➤ **Group's statement of purpose** on p1

➤ **Strategic Report** on p1-88

Board Report

2018 UK Corporate Governance Code – Information Availability

Board Leadership and Company Purpose	<p>The Corporate Governance statement ('CG Statement') on pages 96-143 gives information on the Group's compliance with Principles relating to the Board's Leadership and Company Purpose.</p> <p>More detailed information on:</p> <ul style="list-style-type: none">> the Group's statement of purpose can be found on page 1> the Group's strategy, resources and the indicators it uses to measure performance can be found on pages 14 and 15, 20 and 21, and 40 and 41, respectively> the Group's engagement with stakeholders and the Group's Section 172(1) Statement is contained in the Section 172(1) Statement and Stakeholder Engagement section on pages 22-29> the Group's approach to workforce matters can be found in the Our people section on pages 74-83, with further details of the Group's approach to employee involvement and engagement contained in the Section 172(1) Statement on pages 23-25 <p>Details of the Group's framework of controls is contained in the Audit Committee report on pages 110 and 111 of the CG Statement and in the Risk, viability and going concern section on pages 32 and 33.</p>
Division of Responsibilities	<p>The CG Statement describes the structure and operation of the Board. The Nomination Committee report, describes on page 118, the process the Company conducts to evaluate the Board, to ensure that it continues to operate effectively, that individual Directors' contributions are appropriate and that the oversight of the Chairman promotes a culture of openness and constructive yet challenging debate.</p>
Composition, Succession and Evaluation	<p>Details of the skills, experience and knowledge of the existing Board members can be found in the Board biographies contained on pages 92 and 93. Information on the Board's appointment process and approach to succession planning and Board evaluation is contained in the Nomination Committee report on pages 116 to 119 of the CG Statement.</p>
Audit, Risk and Internal Control	<p>Information on the policies and procedures the Group has in place to monitor the effectiveness of the Group's Internal and External Audit functions, and the integrity of the Group's financial statements is contained in the Audit Committee report on pages 110 to 113 of the CG Statement, along with an overview of the procedures in place to manage risk and oversee the internal control framework. Further information on the Group's approach to risk management is contained in the Risk, viability and going concern section of the Strategic Review on pages 30-35. The Board believes the 2020 Annual Report to be a fair, balanced and understandable assessment of the Company's position and prospects. A description of the Audit Committee's work in enabling the Board to reach this conclusion is contained in the Audit Committee report on page 110.</p>
Remuneration	<p>The Directors' Remuneration Report section of the CG Statement describes the Group's approach to Directors' remuneration, including the procedure for developing policy and the Remuneration Committee's discretion for authorising remuneration outcomes. Details of linkage of the Directors' Remuneration Policy with long-term strategy is contained on page 120 and also highlighted on pages 40 and 41 in the section on Key Performance Indicators.</p>

Board Report continued

Board leadership and company purpose

The Board is responsible for leading the Group in an efficient and entrepreneurial manner, for establishing the Group's purpose, Values and strategy and satisfying itself that these and the Group's culture are aligned. It focuses primarily upon strategic and policy issues and is responsible for ensuring the long-term sustainable success of the Group. It sets the Group's strategy, oversees the allocation of resources and monitors the performance of the Group. It is responsible for effective risk assessment and management. In performance of these duties, the Board has regard to the interests of the Group's key stakeholders and is cognisant of the potential impact of the decisions it makes on wider society.

Purpose

Vesuvius' purpose is to be a global leader in molten metal flow engineering and technology, servicing process industries operating in challenging high-temperature conditions. In order to achieve this, the Group develops innovative solutions that enable our customers to improve their manufacturing costs, quality and safety performance, whilst helping them to become more efficient in their processes. The Group aims to deliver sustainable, profitable growth, providing its shareholders with a superior return on their investment, whilst providing each of its employees with a safe workplace where they are recognised, developed and properly rewarded.

The Board has identified seven Strategic Objectives for achieving long-term sustainable success. It is currently pursuing four shorter-term key execution priorities, along with a fifth over-riding drive for sustainability, which encapsulate the Group's immediate aims. Further information on these can be found on pages 14 and 15. The Board regularly reviews the Group's performance against a number of Key Performance Indicators (KPIs) which provide information on key aspects of the Group's financial and non-financial performance. This information assists the Board to assess progress with the execution of the Group's strategy and to determine any remedial action that needs to be taken. Detailed information on the Group's KPIs can be found on pages 40 and 41.

The Group has established a framework of controls to enable risk to be assessed and managed, and further information on this can be found in the Audit, risk and internal control section on page 105 of this Board Report.

Sustainability

Vesuvius recognises that lasting business success is measured not only in financial performance but in the way in which the Group deals with its customers, business associates, employees, investors and local communities. In 2020 the Group launched a new Sustainability initiative, aimed at supporting the Group's key Strategic Objectives to create a better tomorrow in a profitable and sustainable way. Having set specific targets for the ways in which the Group can improve its impact on our planet, our communities, our people and our customers, the Board intends to drive change throughout the Group. Further information can be found in the Sustainability Report on pages 56 to 89.

Culture

The Board takes seriously its responsibility for shaping and monitoring the corporate culture of the Group. The Group's CORE Values – Courage, Ownership, Respect and Energy – define our

behaviours across the business and are the practical representation of the culture we seek to foster, aligning with the Company's purpose and strategy, and supporting our governance and control processes. These Values are prominently displayed at all sites. Our CORE Values are reinforced in our performance management systems, which ensures that they are firmly embedded in our day-to-day conversations and behaviours. Further detail can be found on page 64.

The CORE Values are supported by the Group's Code of Conduct which sets out the standards of conduct expected, without exception, of everyone who works for Vesuvius in any of its worldwide operations. The Code of Conduct emphasises the Group's commitment to ethics and compliance with the law, and covers every aspect of Vesuvius' approach to business, from the way that the Group engages with customers, employees, its markets and each of its other stakeholders, to the safety of its employees and places of work. Everyone within Vesuvius is individually accountable for upholding these requirements.

The Board seeks to ensure that the Group's workforce policies and practices are consistent with the Group's long-term sustainable success. Further information about the Group's remuneration practices for senior managers can be found in the Directors' Remuneration Report on pages 120-143, the Group's approach to diversity in the Nomination Committee report on page 117, the Group's approach to HR matters in the Our people section on pages 74-83 and the Group's policies and procedures, including information on the Speak Up confidential employee concern helpline in the Our communities section on pages 84-88.

The Board recognises the need to 'walk the talk' on our CORE Values and all the Directors act with integrity and are fully committed to leading by example to promote the desired culture.

During the year, the Board's assessment of the Group's culture focused on the Group's:

(1) **Adherence to the CORE Values** – Throughout the year the Board received regular feedback on the Group's response to the COVID-19 pandemic. The Group's strong culture and CORE Values were clearly evident in the many and varied initiatives established across the Group to ensure that we continued to provide the same high-quality service to customers. This included offering online training tutorials and utilising virtual reality to provide service support. Towards the end of the year, nominations were once again sought for the Group's Living the Values Awards. The Board was delighted that there were more than 1,200 nominations, showcasing examples of individuals and teams going the 'extra mile' to live the CORE Values. The Group presented both regional and global awards as part of the process.

(2) **Commitment to safety** – In response to the COVID-19 pandemic, at each meeting during the year, the Board requested and received an update on the health and well-being of the Group's employees, including receiving information on the numbers of individuals testing positive for COVID-19 or isolating as a result of contact. The Board was also apprised of the COVID-19-safety initiatives undertaken in plants and the IT practices implemented to enable those employees who could work from home to do so. The Board received monthly updates on the Group's performance against safety targets, and a thorough analysis of all Lost Time Incidents, all of which were reported in detail at the next Board meeting. In addition, the Board received biannual reports on the progress of the Group's safety programmes. A core tenet of the Group's new Sustainability

Charter, is a focus on ensuring the Group affords a safe working environment for its employees. For 2021, a more challenging Group safety target of an LTIFR below 1 was implemented. In addition, the Remuneration Committee included specific safety targets for the Executive Directors as part of their personal objectives for the Annual Incentive Plan.

(3) **Entrepreneurship** – As part of the Board's rolling agenda, the Board received reports from each of the business unit Presidents on their business's strategy, new commercial initiatives and future technology trends. The Board also received reports on the agility of management decision making in response to the pandemic, as travel and face-to-face meetings became impossible, and the fast-moving nature of the pandemic demanded swift responses from empowered regional management. The BU presentations were complemented by a presentation from the President Operations & Technology on R&D activities throughout the Group, including the process of new product launches. In November the Board reviewed the strength and breadth of the R&D teams throughout the Group and subsequently followed up on the structure and experience of these teams. The Board also received reports on the Group's progress on innovation as part of the quarterly reporting on strategic progress.

(4) **Transparency** – The Board was cognisant of the impact that severely reduced travel had on opportunities in the organisation for face-to-face interactions during the year, manifesting itself most clearly by the need to move Board meetings online. As in previous years, the engagement and openness of the employees who contributed in person or virtually to Board meetings over the course of the year was assessed in terms of the Group's culture. These first-hand interactions were complemented by the Board's review of the output of the Group's Speak Up processes, which were updated and recommunicated across the Group during the year. In addition, the Audit Committee sought qualitative feedback from External and Internal Audit on how transparent/engaged managers had been during audit interactions.

(5) **Customer focus** – The Chief Executive undertook regular virtual and telephone meetings with customers in 2020, as well as conducting face-to-face visits wherever this was possible. A critical focus of the Group's response to the pandemic was continuity of supply to customers and the Board received regular reports on the impact of the pandemic on this and the state of the Group's markets. The Board also received regular updates on quality performance, which were supported by a full annual presentation on the Group's ongoing initiatives on quality and a review at each Board meeting of specific quality issues.

(6) **Diversity and respect for local cultures** – During 2020, the Board approved the adoption of a new gender diversity target seeking 30% female representation in the Group Executive Committee and Top Management (the Group Executive Committee plus key direct reports) by 2025. The Board also reviewed the results of the employee engagement survey and subsequent management actions to support its diversity initiatives and support of local cultures.

During 2020, the usually extensive schedule of individual site visits undertaken by the executive and Non-executive Directors was severely curtailed by COVID-19-related travel restrictions. Whilst the Executive Directors undertook a number of essential visits to the Group's sites, the Non-executive Directors' visits were limited to a trip by Holly Koeppel to Charlotte, NC. To seek to replace this face-to-face interaction, the Non-executive Directors held video calls with senior managers in China and Japan in November,

to hear more about the activities of the Group in China and North Asia respectively, and their responses to the pandemic. A number of the Directors also had the opportunity to meet in person with members of the Group Executive Committee at the Board's strategy meeting in October.

Section 172 duties

The Directors are cognisant of the duty they have under Section 172 of the Companies Act 2006, to promote the success of the Company over the long term for the benefit of shareholders as a whole, having regard to a range of other key stakeholders. In performance of its duties throughout the year, the Board has had regard to the interests of the Group's key stakeholders and remained cognisant of the potential impact on these stakeholders of the decisions it has made. The effects of business decisions on the broader stakeholder group were particularly brought into sharp focus by the demands of the pandemic. Details of the Board and the Company's engagement with stakeholders during the year can be found in the Section 172(1) Statement and Our Stakeholders section on pages 22-26.

The Board is committed to communicating with shareholders and other stakeholders in a clear and open manner and seeks to ensure effective engagement through the Company's regular activities.

The Company undertakes an ongoing programme of meetings with investors, which is managed by the Investor Relations team. The majority of meetings with investors are led by the Chief Executive and the Chief Financial Officer. In advance of tabling the new Remuneration Policy at the 2020 AGM, the Company wrote to shareholders inviting engagement, and subsequently entered into dialogue with a number of the Group's larger shareholders to discuss the new Policy. The Group's largest shareholders were also contacted in advance of the AGM inviting discussion on any questions they might like to raise and making the Chairmen of the Board, the Audit Committee and the Remuneration Committee available to meet them should they so wish.

Statement on compliance with the UK Corporate Governance Code

Save as set out below, the Company was fully compliant with the Principles and Provisions of the 2018 UK Corporate Governance Code (the 'Code') for the year ended 31 December 2020. A copy of the Code can be found on the FRC website at: <https://www.frc.org.uk/directors/corporate-governance-and-stewardship/uk-corporate-governance-code>.

Provision 38: The Company is progressing with its plans to align the level of pension allowance for Executive Directors with that applicable to the majority of the workforce. Our incumbent Directors' pension contributions were frozen at the 1 January 2020 amount and will be reduced to 17% at the end of 2022, being the level of the majority of the workforce. Further details can be found on page 122.

Provision 41: During the year, the Remuneration Committee did not engage systematically with the workforce to explain how executive remuneration aligns with wider company pay policies. Further details can again be found on page 122.

Board Report continued

Division of responsibilities

The Board currently comprises nine Directors – the Non-executive Chairman, John McDonough CBE; the Chief Executive, Patrick André; the Chief Financial Officer, Guy Young; and six Non-executive Directors, Kath Durrant, Hock Goh, Friederike Helfer, Jane Hinkley, Douglas Hurt and Holly Koeppel. Douglas Hurt is the Senior Independent Director. Henry Knowles is the Company Secretary. Kath Durrant joined the Board on 1 December 2020 and will take over from Jane Hinkley as Chair of the Remuneration Committee at the close of the 2021 AGM. Holly Koeppel and Hock Goh have signalled their desire to step down from the Board at the close of the 2021 AGM, following 4 years and 6 years of service as Non-executive Directors, respectively.

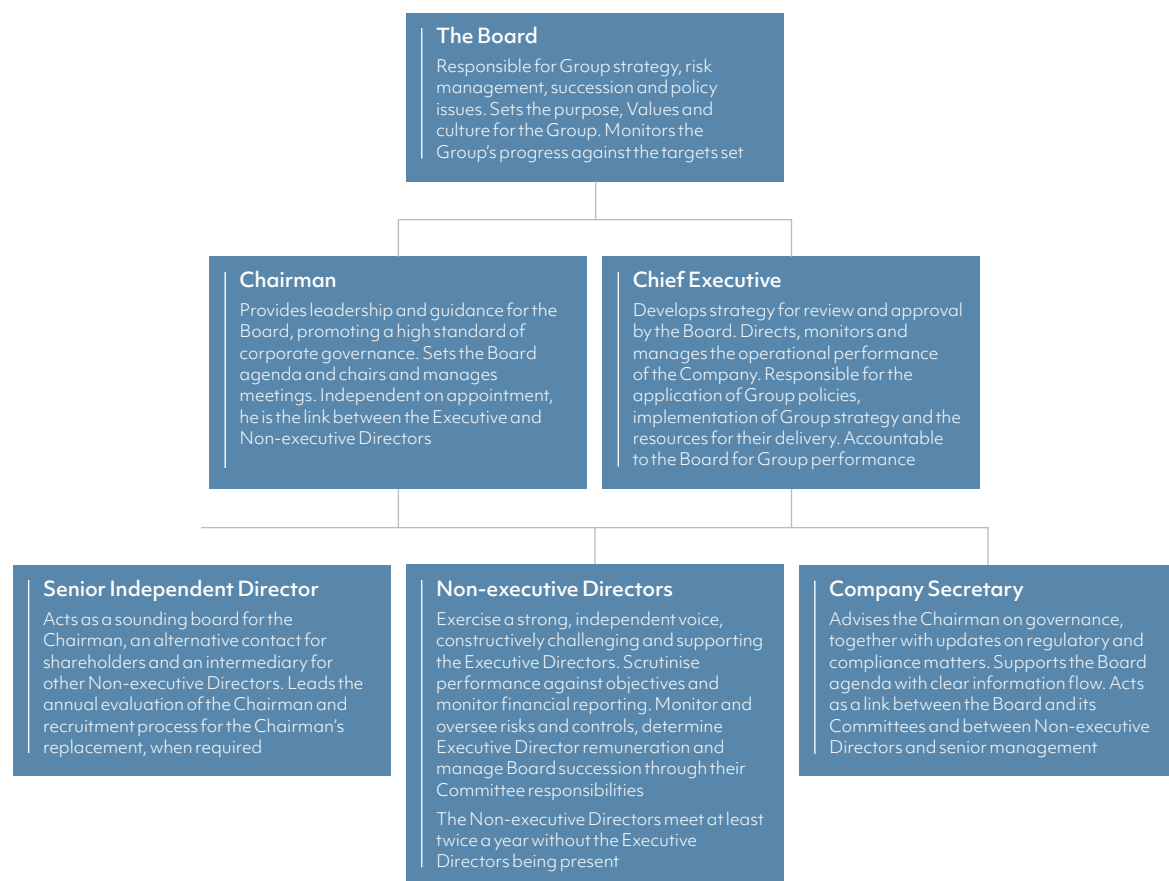
The Board considers that, for the purposes of the UK Corporate Governance Code, five Non-executive Directors (excluding the Non-executive Chairman), namely Kath Durrant, Hock Goh, Jane Hinkley, Douglas Hurt and Holly Koeppel, are independent of management and free from any business or other relationship which could affect the exercise of their independent judgement.

Friederike Helfer is a Partner of Cevian Capital, which continues to hold 21.11% of Vesuvius' issued ordinary share capital. As a result Friederike Helfer is not considered to be independent. The Chairman satisfied the independence criteria on his appointment to the Board. The Board and its Committees have a wide range of skills, experience and knowledge, and further details of each Director's individual contribution in this regard can be found in their biographical details on pages 92 and 93.

The Chairman and Chief Executive

The division of responsibilities between the Chairman and the Chief Executive is set out in writing. These were reviewed during the year as part of the Company's annual corporate governance review. They are available to view on the Company's website www.vesuvius.com.

Division of responsibilities



The Board

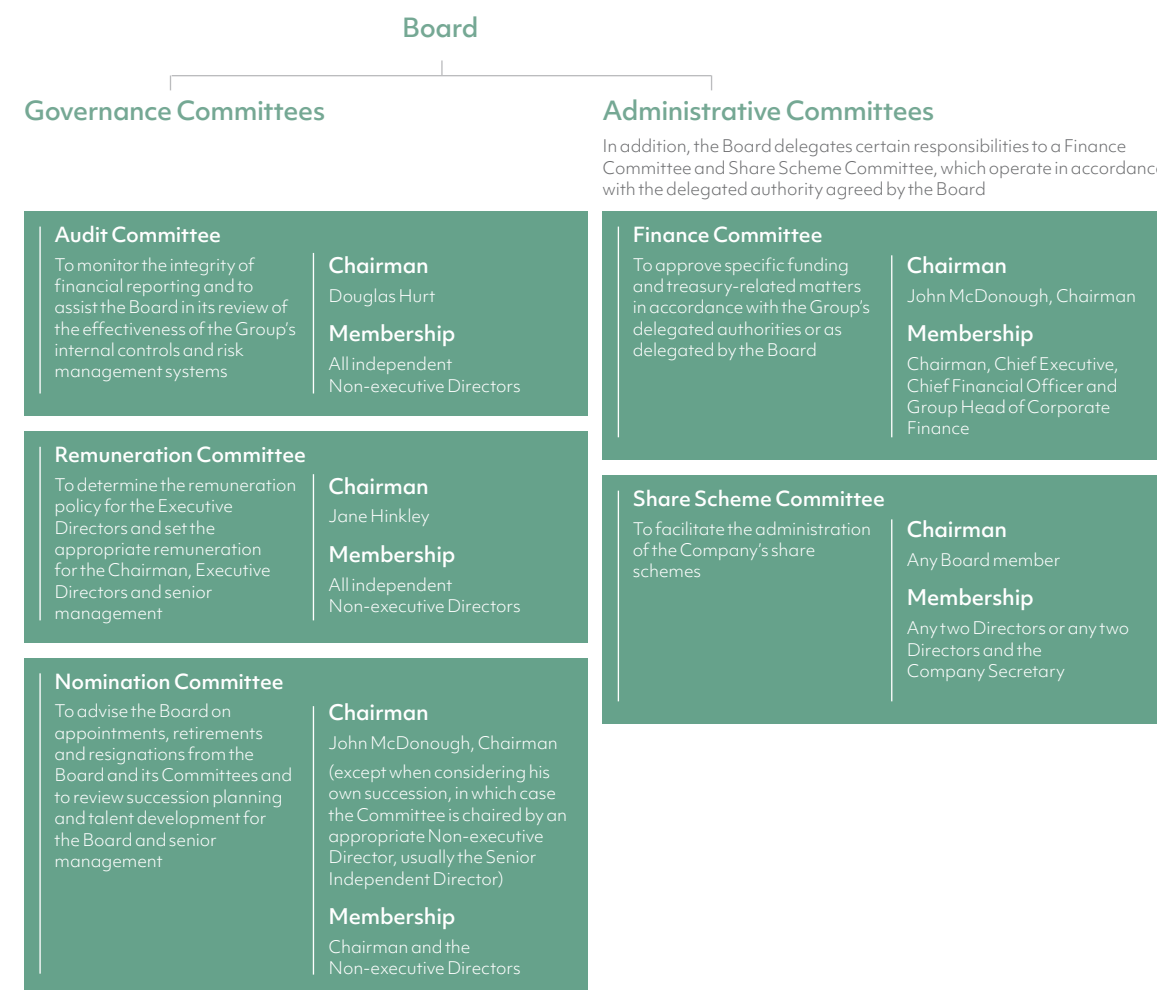
The Board has a formal schedule of matters reserved to it and delegates certain matters to its Committees. It is anticipated that the Board will convene on seven occasions during 2021, holding ad hoc meetings to consider non-scheduled business if required.

Board Committees

The principal governance Committees of the Board are the Audit, Nomination and Remuneration Committees. Each Committee has written terms of reference which were reviewed during the year. A number of minor amendments were made to update the terms of reference in accordance with recent governance updates and to enhance their clarity. These terms of reference are available to view on the Company's website www.vesuvius.com.

Committee composition is set out in the relevant Committee reports. No one, other than the Committee Chairman and members of the Committee, is entitled to participate in meetings of the Audit, Nomination and Remuneration Committees. However, as detailed in the Committee reports, where the agenda permits, other Directors and senior management regularly attend by invitation, supporting the operation of each of the Committees in an open and consensual manner.

The interactions in the governance process are shown in the schematic below.



Group Executive Committee

The Group also operates a Group Executive Committee (GEC), which is convened and chaired by the Chief Executive and assists him in discharging his responsibilities. The GEC comprises the Chief Executive, Chief Financial Officer, the business unit Presidents, the Chief HR Officer, the President Operations and Technology and the General Counsel/Company Secretary. The GEC continued its formal schedule of six meetings and two R&D reviews during 2020, and also, in response to the demands of the pandemic, held weekly virtual meetings to discuss the Group's business activities. These weekly meetings will continue in 2021, alongside the usual schedule of formal meetings.

Board Report continued

2020 Board programme

The Board discharges its responsibilities through an annual programme of meetings. When the impact of the COVID-19 pandemic became apparent during 2020 the Board began holding regular monthly meetings to ensure that the Directors were kept fully apprised of the impact of the pandemic on the Group and were able to take appropriate mitigating actions in a timely manner. Communication between the Board and the Executive Directors between meetings was frequent and covered operational matters in detail.

In 2020, the Board focused on key areas of strategy, performance and governance, including the matters outlined below:

Strategy	<div>> Receiving and reviewing reports on strategy from the Flow Control, Advanced Refractories, Sensors & Probes and Foundry business units</div> <div>> Receiving and reviewing regular reports from the Chief Executive on implementation of the Group's Strategic Objectives, including M&A opportunities</div> <div>> Receiving and considering reports on the Group's quality, health, safety and environmental strategy and objectives</div> <div>> Approving the Group's new Sustainability initiative</div> <div>> Participation in a two-day off-site review of strategy presented by the three main business unit Presidents and the Company's key financial advisers</div> <div>> Receiving and considering reports on the Group's HR, Purchasing, IT, tax and treasury strategies, legal and compliance activities and the management of the Group's key pension liabilities</div> <div>> Receiving and considering a report on the Group's R&D strategy and objectives</div> <div>> Regularly monitoring the Group's financing structure, including compliance with the debt covenants, the Group's going concern status and approving the withdrawal of the 2019 final dividend and the Group's participation in the UK Government's Covid Corporate Financing Facility</div> <div>> Approving the issue of a new US private placement (USPP) and the preparation of additional USPP 'shelf' documentation</div> <div>> Reviewing the Group's internal control and risk management practices</div>
Performance	<div>> Receiving regular reports from the Chief Executive on the impact of COVID-19 on the Group, including:<div><div>– the number of people infected and the actions being taken to protect employees,</div><div>– the impact on customers and the measures being taken to ensure continued delivery,</div><div>– the financial impact, with particular focus on the Group's cash flow and liquidity, the accessing of government support schemes and the measures being taken throughout the Group to mitigate costs, including tracking the number of employees on furlough or similar arrangements</div><div>– the operational status of our manufacturing sites and the number of people working remotely</div></div></div> <div>> Receiving regular reports on the Group's financial performance against key indicators, including each of the Group's KPIs</div> <div>> Receiving regular safety reports setting out performance against key indicators</div> <div>> Receiving regular reports on performance against manufacturing quality targets</div> <div>> Receiving regular monthly updates from the Chief Executive on the performance of the Group's businesses with a critical focus on safety and quality</div> <div>> Scrutinising the Group's financial performance and forecasts</div> <div>> Reviewing and agreeing the annual budget and financial planning</div> <div>> Approving trading updates, and preliminary and half-year results</div>

At each of the regularly scheduled meetings, the following standard items were considered:

- > Directors' duties and conflicts of interest
- > Minutes of the previous meeting and matters arising
- > Reports from the Chief Executive, the Chief Financial Officer and the Company Secretary on key aspects of the business
- > Key Performance Indicators

Governance

- > Receiving regular reports from the Board Committees
- > Approving the Annual Report and Notice of AGM, and approving the revised structure for the AGM in the light of COVID-19 lockdown issues
- > Approving the payment of the interim dividend
- > Approving the appointment of Kath Durrant as a new Director
- > Completing an evaluation of the Board and Committees' performance and regularly reviewing progress against the improvement actions identified in the 2019 evaluation
- > Reviewing the Group's internal controls and risk appetite, monitoring the Group's key risks and approving the Group's risk register
- > Reviewing and approving the Group's Modern Slavery Statement
- > Receiving regular updates on corporate governance and regulatory developments
- > Completing a formal annual review of the Group's governance arrangements
- > Reviewing information received through the Group's Speak Up reporting processes
- > Renewing the Group's delegated authorities
- > Receiving reports from the Company's brokers on market issues

Information and support

The Board ensures that it receives, in a timely manner, information of an appropriate quality to enable it adequately to discharge its responsibilities. Papers are provided to the Directors in advance of the relevant Board or Committee meeting to enable them to make further enquiries about any matters prior to the meeting should they so wish. This also allows Directors who are unable to attend to submit views in advance of the meeting.

In addition to the formal Board processes, the Chief Executive provides written updates on important Company business issues between meetings, and the Board is provided with a regular report of key financial and management information, including information on safety and quality performance. Regular updates on shareholder matters are provided to the Directors, who also receive copies of analysts' notes issued on the Company. For the distribution of all information, Directors have access to a secure online portal, which contains a reference section containing relevant background information.

All Directors have access to the advice and services of the Company Secretary. There is also an agreed procedure in place for Non-executive Directors, in the furtherance of their duties, to take independent legal advice at the Company's expense. The procedure was not utilised during the year under review.

Directors' conflicts of interest

The Board has established a formal system to authorise situations where a Director has an interest that conflicts, or may possibly conflict, with the interests of the Company (situational conflicts). Directors declare situational conflicts so that they can be considered for authorisation by the non-conflicted Directors.

In considering a situational conflict, these Directors act in the way they consider would be most likely to promote the success of the Company and may impose limits or conditions when giving authorisation or subsequently if they think this is appropriate.

The Company Secretary records the consideration of any conflict and any authorisations granted. The Board believes that the approach it has in place for reporting situational conflicts continues to operate effectively. No situational conflicts were presented to the Board for authorisation during the year under review.

Board Report continued

Board and Committee attendance

The attendance of Directors at the Board meetings and at meetings of the principal Committees of which they are members held during 2020 is shown in the table below. The maximum number of meetings in the period during which the individual was a Board or Committee member is shown in brackets.

	Board	Audit Committee	Remuneration Committee	Nomination Committee
Chairman				
John McDonough CBE	11 (11)	—	—	6 (6)
Executive Directors				
Patrick André	11 (11)	—	—	—
Guy Young	11 (11)	—	—	—
Non-executive Directors				
Kath Durrant ¹	1 (1)	1 (1)	1 (1)	1 (1)
Hock Goh	10 (11)	5 (5)	3 (4)	6 (6)
Friederike Helfer	11 (11)	—	—	5 (6)
Jane Hinkley	11 (11)	5 (5)	4 (4)	6 (6)
Douglas Hurt	11 (11)	5 (5)	4 (4)	6 (6)
Holly Koeppel	11 (11)	4 (5)	3 (4)	5 (6)

1. Kath Durrant was appointed to the Board on 1 December 2020 and the table reflects the number of Board and Committee meetings that she could attend following her appointment.

Hock Goh was unable to attend one set of Board and Committee meetings, and Holly Koeppel one set of Committee meetings during the year due to clashes with other professional responsibilities that had been previously notified to the Chairman. Hock Goh, Holly Koeppel and Friederike Helfer consistently attended online meetings, and also attended online at physical meetings where they were precluded from participating in person due to travel restrictions, in the case of Mr Goh and Ms Koeppel, this was despite the challenges posed by time differences to their countries of residence, being Australia and the US, respectively.

To the extent that Directors were unable to attend scheduled meetings, they received the papers in advance and relayed their comments to the Chairman for communication at the meeting. The Chairman followed up after the meeting in relation to the decisions taken.

The Chairman and Non-executive Directors each have a letter of appointment which sets out the terms and conditions of their directorship. An indication of the anticipated time commitment is provided in recruitment role specifications, and each Non-executive Director's letter of appointment provides details of the meetings that they are expected to attend, along with the need to accommodate travelling time. Non-executive Directors are required to set aside sufficient time to prepare for meetings, and regularly to refresh and update their skills and knowledge. Copies of all contracts of service or, where applicable, letters of appointment of the Directors are available for inspection during business hours at the registered office of the Company and are available for inspection at the location of the Annual General Meeting (AGM) for 15 minutes prior to and during each AGM.

All Non-executive Directors have agreed to commit sufficient time for the proper performance of their responsibilities, acknowledging that this will vary from year to year depending on the Group's activities, and will involve visiting operational and customer sites around the Group. The Chairman in particular dedicates a significant amount of time to Vesuvius in discharging his duties.

Directors are expected to attend all scheduled Board and Committee meetings and any additional meetings as required. Each Director's other significant commitments are disclosed to the Board during the process of their appointment and they are required to notify the Board of any subsequent changes.

The Company has reviewed the availability of the Chairman and the Non-executive Directors to perform their duties and considers that each of them can, and in practice does, devote the necessary amount of time to the Company's business.

Composition, evaluation and succession

Appointment and replacement of Directors

The Company's Articles of Association specify that Board membership should not be fewer than five nor more than 15 Directors, save that the Company may, by ordinary resolution, from time to time, vary this minimum and/or maximum number of Directors. Directors may be appointed by ordinary resolution or by the Board. The Board may appoint one or more Directors to any executive office, on such terms and for such period as it thinks fit, and it can also terminate or vary such an appointment at any time. The Articles specify that, at every AGM, any Director who has been appointed by the Vesuvius Board since the last AGM and any Director who held office at the time of the two preceding AGMs, and who did not retire at either of them, shall retire from office. However, in accordance with the requirements of the Code, all the Directors who wish to continue to serve on the Board, will offer themselves for election or re-election at the 2021 AGM. The Board believes that each of the current Directors is effective and demonstrates commitment to his or her respective role. Accordingly, the Board recommends that shareholders approve the resolutions to be proposed at the 2021 AGM relating to the election and re-election of the Directors. The biographical details of the Directors offering themselves for election and re-election, including details of their other directorships and relevant skills and experience, will be set out in the 2021 Notice of AGM. The biographical details of the Directors are also set out on pages 92 and 93.

Recommendations for appointments to the Board and rotation of the Board are made by the Nomination Committee in accordance with a rigorous procedure. The Nomination Committee is also responsible for overseeing the maintenance of an effective succession plan for the Board and senior management. Further information on the activities of the Nomination Committee is set out in the Nomination Committee report on pages 115-119.

A comprehensive induction programme is available to new Directors. The induction programme is tailored to meet the requirements of the individual appointee and explains the dynamics and operations of the Group, and its markets and technology. In normal times, the induction includes as a minimum a series of face to face meetings with key Group executives and advisers, along with site visits to the Group's key strategic sites. During the current COVID-19 travel restrictions, Kath Durrant's induction has been limited to virtual meetings with the Group's executives and senior management. A comprehensive plan of site visits is planned when circumstances allow.

The Chairman, through the Company Secretary, continues to ensure that there is an ongoing process to review training and development needs. Directors are provided with details of seminars and training courses relevant to their role and are encouraged and supported by the Company in attending them. In 2020, regulatory updates were provided as a standing item at each Board meeting in a Secretary's Report. External input on legal and regulatory developments impacting the business was also given, with specialist advisers invited to the Committees' meetings to provide briefings on topics such as the changing landscape of Corporate Governance, particularly the latest pronouncements from the FRC and material developments in the legal environment.

Performance evaluation

The Board carries out an evaluation of its performance and that of its Committees and individual Directors, including the Chairman, every year. Details of the evaluation conducted in 2020 can be found in the Nomination Committee report.

Audit, risk and internal control

The Board is responsible for ensuring that policies and procedures are in place to ensure the independence and effectiveness of the Internal and External Audit functions. The Audit Committee assists the Board in reviewing the effectiveness of the Group's Internal and External Audit functions, in addition to monitoring the integrity of the Group's financial and narrative statements. Further information about the work of the Audit Committee can be found in the Audit Committee report on pages 106-114.

The Board is also responsible for setting the Group's risk appetite and ensuring that appropriate risk management systems are in place. The Audit Committee assists the Board in reviewing the effectiveness of the system of internal control, including financial, operational and compliance controls, and risk management systems. The Group's approach to risk management and internal control is discussed in greater detail on pages 30-34 and the Group's principal risks and how they are being managed or mitigated are detailed on pages 36 and 37. The Viability Statement which considers the Group's future prospects is included on page 34. Risk management and internal control are also discussed in greater detail in the Audit Committee report.

All of the independent Non-executive Directors serve on both the Audit and Remuneration Committees. They therefore bring their experience and knowledge of the activities of each Committee to bear when considering critical areas of judgement. This means that, for example, the Directors are able to consider carefully the impact of incentive arrangements on the Group's risk profile and to ensure that the Group's Remuneration Policy and programme are structured to align with the long-term objectives and risk appetite of the Company.

Remuneration

The Directors' Remuneration Report on pages 120-143 describes the work of the Remuneration Committee in developing the Group's policy on executive remuneration, determining Director and senior management remuneration, reviewing workforce remuneration and related policies – including ensuring that these align with the Group's Strategic Objectives and culture, and overseeing the operation of the executive share incentive plans.

Audit Committee

Dear Shareholder,

On behalf of the Audit Committee, I am pleased to present the Audit Committee Report for 2020. The foundation of the Committee’s work each year is a recurring and structured programme of activities which are defined in an annual rolling Audit Committee timetable. The Audit Committee then considers additional items as matters arise and priorities change. During 2020, the Committee closely monitored the impact of the COVID-19 pandemic on the Group’s activities, undertaking particularly detailed analysis of the Group’s impairment assessments and the Going concern and Viability statements. In addition, the Committee again spent some time focusing on the Group’s cyber security measures, as well as receiving updates throughout the year on the implementation of changes to the Group’s Finance Operating Model.

As set out in detail in the Audit Committee Report in the 2019 Annual Report, at the start of 2020, the Committee spent a considerable amount of time reviewing management’s response to a letter from the Financial Reporting Council (FRC) as part of the usual cycle of the FRC’s reviews of listed companies accounts. The Committee approved management’s response after review, discussion and input from the Group’s External Auditor. The Group adopted several recommendations in preparing the 2019 Annual Report and Financial Statements and the FRC subsequently closed their enquiries. There were no further changes. The FRC’s recommendations have been carried through to the 2020 Annual Report.

The Audit Committee Report describes the work of the Committee during the year, including its role in monitoring the integrity of the Company’s financial statements and the effectiveness of the internal and external audit processes. It provides an overview of the significant issues the Committee has considered during the year and its material judgements. It also describes how the Committee fulfilled its responsibilities to assist the Board in reviewing the effectiveness of the Group’s system of internal financial controls and its internal control and risk management systems.

Yours sincerely

Douglas Hurt
Chairman, Audit Committee

3 March 2021

Committee members

Douglas Hurt (Committee Chairman)
Hock Goh
Jane Hinkley
Holly Koeppel
Kath Durrant – joined the Committee on her appointment to the Board on 1 December 2020

The Company Secretary is Secretary to the Committee.

The Audit Committee

The Audit Committee comprises all the independent Non-executive Directors of the Company, who bring a wide range of financial and commercial expertise to the Committee’s decision-making processes. Douglas Hurt is the Senior Independent Director and Chairman of the Audit Committee. He was the Finance Director of IMI plc for nine years prior to his appointment and has worked in various financial roles throughout his career. Douglas currently serves as the Chairman of the Audit Committees of Countryside Properties PLC, Hikma Pharmaceuticals PLC and the British Standards Institution. He is a Chartered Accountant. This background provides him with the ‘recent and relevant financial experience’ required under the Code.

The Code and Financial Conduct Authority Disclosure Guidance and Transparency Rules also contain requirements for the Audit Committee as a whole to have competence relevant to the sector in which the Company operates. Vesuvius’ Non-executive Directors have significant breadth of experience and depth of knowledge on matters related to Vesuvius’ operations, both from their previous roles and from their induction and other activities since joining the Vesuvius Board. The Directors’ biographies on pages 92 and 93 outline their range of multinational business-to-business experience and expertise in fields such as engineering, manufacturing, services, logistics and human resources, as well as financial and commercial acumen. The Board therefore considers that the Audit Committee as a whole has competence relevant to Vesuvius’ business sector.

Meetings

The Committee met five times during 2020. The Committee has also met twice since the end of the financial year and prior to the signing of this Annual Report. The Board Chairman, the non-independent Non-executive Director, the Chief Executive, the Chief Financial Officer, the Head of Finance, the Group Head of Internal Audit and the External Auditors were all invited to each meeting. Other management staff were also invited to attend as appropriate.

Audit Committee meetings are conducted to promote an open debate, a constructive challenge of significant accounting judgements, to provide guidance and oversight to management to ensure that the business maintains an appropriately robust control environment and to provide informed advice to the Board on financial matters. Between Audit Committee meetings, the Chairman of the Audit Committee encourages open dialogue between the External Auditors, the management team and the Group Head of Internal Audit to ensure that emerging issues are addressed in a timely manner.

During the year, as is the Audit Committee’s established practice, the Committee members met and discussed business and control matters with senior management during Board presentations. The Committee also met privately with the Group Head of Internal Audit and the External Auditors without any executives present.

The outcomes of Audit Committee meetings were reported to the Board, and all members of the Board received the agenda, papers and minutes of the Committee.

Role and responsibilities

During 2020, the main role and responsibilities of the Committee continued to be to:

- > Monitor the integrity of the Financial Statements of the Company and the Group, and any formal announcements relating to the Group’s financial performance, reviewing significant financial reporting judgements contained in them
- > Provide advice, as requested by the Board, on whether the Annual Report and Financial Statements, taken as a whole, are fair, balanced and understandable and provide the information necessary for the shareholders to assess the Group’s position and performance, business model and strategy
- > Review and monitor the effectiveness of the Company’s internal financial controls and internal control and risk management systems
- > Review procedures for detecting fraud, and systems and controls for the prevention of bribery and ensure that a thorough review is carried out of all alleged instances of fraud notified to the Committee
- > Monitor and review the role and effectiveness of the Company’s Internal Audit function and audit programme, ensuring that the function is adequately resourced and operates free from management or other restrictions
- > Make recommendations to the Board on the appointment, reappointment and removal of the External Auditors and negotiate and agree the fees and terms of engagement of the External Auditors
- > Monitor and review with the External Auditors the findings of their work, including key accounting and audit judgements, how any risks to audit quality were addressed and the External Auditors’ view of its interactions with senior management
- > Review and monitor the External Auditors’ independence, objectivity and effectiveness, taking into consideration relevant law, regulation, the Ethical Standard, other professional requirements and any FRC audit inspection findings
- > Oversee the operation of the policy on the engagement of the External Auditors to supply non-audit services
- > Report to the Board on how the Committee has discharged its responsibilities

The Committee operates under formal terms of reference approved by the Board. These were reviewed during the year and minor amendments made to enhance their clarity and alignment with best practice. They are available in the Investors/ Corporate Governance section of the Company’s website, www.vesuvius.com.

Within these terms, the Committee and its individual members are empowered to obtain outside legal or other independent professional advice at the cost of the Company. These powers were not utilised during the year. The Committee may also secure the attendance at its meetings of any employee or other parties with relevant experience and expertise should it be considered necessary.

Audit Committee continued

Activities in 2020

1. Much of the Committee's activities throughout the year were focused on the potential impact of COVID-19 on the Group:

– the work of Internal Audit was adjusted to recognise the travel restrictions and reduced availability of operational staff, as furlough schemes and home-working were implemented around the world. The focus of their work was discussed, ensuring that as homeworking was implemented, the critical controls of the Group were adjusted or strengthened accordingly

– the Group's risk profile and appetite was reviewed, noting the impact of changing customer demand, government responses to the pandemic and internal working patterns

– the Group's liquidity and cash generation was placed under particular scrutiny, with additional treasury matters reported to the Committee

– the Committee acted to ensure that despite the changes in working patterns, critical resources in internal control and compliance functions continued to work effectively

– The work of the External Auditors was carefully considered given the widespread need for the use of virtual tools, both at the half year review and in the planning for the year-end audit. As such, where appropriate and possible, audit work was accelerated to reflect the potentially longer time frames for completion

– The half year results review was carried out with due consideration of the impact of COVID-19 on the Group's finances and a particularly rigorous analysis of the Group's going concern status was undertaken, covering a range of worst-case scenarios.
2. Against this background, the Committee's agenda covered the usual standing items – the review of financial results, the effectiveness of the Group's internal financial controls, and the review of the internal control and risk management systems – as well as additional topics, including updates on cyber security and in-depth reviews of the Group's foreign exchange exposures.

3. The Committee received feedback throughout the year on the progress of plans to change the Finance Operating Model. This continued the transition of the business unit finance function from purely accounting to forward-looking business support, with clearer accountabilities for controlling functions and a focus on further standardising core processes. Changes were noted to the structure of finance roles and the planned roll-out of the new Model was reviewed and approved.

4. As set out overleaf, the FRC wrote to the Company at the end of 2019 as part of its review of the Group's 2018 Annual Report and Financial Statements. The Committee supervised the Company's response to the matters raised in their review letter and enhanced certain disclosures in the 2019 Annual Report and Financial Statements, revisiting the Company's approach to impairments. The FRC have closed their enquiries.
5. The Audit Committee continued to devote time to ensure that initiatives to mitigate potential risks and financial exposure remained robust and appropriate.

6. The Committee challenged the assumed growth rates and discount rates used for asset impairment assessments.

7. The Committee considered the Company's going concern statement and challenged the nature, quantum and assessment of the significant risks to the business model, future performance, solvency and liquidity of the Group that were modelled as part of the scenarios and stress testing undertaken to support the Viability Statement made by the Company in the 2019 Annual Report and Financial Statements. In particular the Committee examined the potential effect of a combination of risk factors occurring at the same time. At the half year the Committee undertook another detailed look at the Company's going concern statement. The 2020 going concern and Viability Statements, which were also critically reviewed, are contained within the Strategic Report on pages 34 and 35.

8. The Committee monitored the resourcing and delivery of the 2020 Internal Audit plan, in light the of the changes necessitated to accommodate COVID-19 travel restrictions and approved the 2021 Internal Audit plan. The Committee monitored both the responses from and follow-up by management to Internal Audit recommendations arising during the year. The Committee discussed at length the significant issues raised, the root causes for those issues and the actions being taken to resolve the issues.

9. The Committee conducted regular, detailed reviews of provisions, challenging the reasonableness of underlying assumptions and estimates of costs and the quantum of any related insurance assets.

10. The Committee reviewed and updated its terms of reference and approved a revised Non-Audit Services Policy.

11. The Committee reviewed the effectiveness of the External Auditors.

12. The Committee met with Internal and External Audit without management and received valuable feedback on a range of topics including culture, the impact on morale of COVID-19 and the strength of the finance function.

13. The Committee conducted an evaluation of its performance and effectiveness, concluding that the level of information provided to the Committee and the quality of debate had been maintained despite the challenges of COVID-19. As in previous evaluations the cycle of the Committee's work and the outcome of its deliberations were highly regarded.
- The Committee members believe that they received sufficient, relevant and reliable information throughout the year from management and the Internal and External Auditors to enable the Committee to fully discharge its responsibilities. The work of the Audit Committee is further elaborated in the paragraphs below.

Statement of compliance with the Competition and Markets Authority (CMA) Order

The Committee considers that the Company has complied with The Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Processes and Audit Committee Responsibilities) Order 2014 (Article 7.1), published by the CMA on 26 September 2014, including with respect to the Audit Committee's responsibilities for agreeing the audit scope and fees and authorising non-audit services.

Financial reporting

The Committee fulfilled its primary responsibility to review the integrity of the half year and annual Financial Statements and recommended their approval to the Board.

In forming its views, the Committee assessed:

- > The quality, acceptability and consistency of the accounting policies and practices

> The clarity and consistency of the disclosures, including compliance with relevant financial reporting standards and other reporting requirements

> Significant issues where management judgements and/or estimates had been made that were material to the reporting or where discussions had taken place with the External Auditors in arriving at the judgement or estimate

> In relation to the overall Annual Report, whether the Annual Report and Financial Statements taken as a whole were fair, balanced and understandable, taking into consideration all the information available to the Committee

> The application of the FRC's guidance on clear and concise reporting and the FRC guidance notes issued throughout the year on matters that companies should emphasise in their financial statements such as the impact of COVID-19 and enhancements to going concern reporting

> The disclosure and presentation of alternative performance measures, in view of the guidelines issued by the European Securities and Markets Association

The Committee actively deliberated and challenged reports from the Chief Financial Officer and the Head of Finance. These were well prepared and, for areas of judgement and/or estimation, set out the rationale for the accounting treatment and disclosures, and the pertinent assumptions and the sensitivities of the estimates to changes in the assumptions. The External Auditors also delivered memoranda for the half-year and year-end, stating its views on the treatment of significant issues. The External Auditors provided a summary for each issue, including its assessment of the appropriateness of management's judgements or estimates.

Significant issues and material judgements

The Committee considered the following significant issues in the context of the 2020 Financial Statements. It identified these areas to be significant, taking into account the level of materiality and the degree of judgement exercised by management.

The Committee resolved that the judgements and estimates made on each of the significant issues detailed below were appropriate and acceptable.

Impairment of intangible assets

The 2020 year-end carrying value of goodwill of £617.6m was tested against the current and planned performance of the Steel Flow Control, Steel Advanced Refractories, Steel Sensors & Probes and Foundry CGUs. The Committee considered the Board-approved medium-term business plans, medium term and terminal growth assumptions, as well as the discount rates used in the assessments. Relevant sensitivities using reasonably possible changes to key assumptions were evaluated. The detailed assumptions are provided in Note 17 to the Group Financial Statements.

Given that the models indicated, even with the application of reasonable sensitivities to the assumptions, that there remains significant headroom between the value in use and the carrying value, the Committee concurred that no goodwill impairment charges were required.

Other provisions

The Committee continues to monitor the implications of a number of potential exposures and claims arising from ongoing litigation, product quality issues, employee disputes, restructuring, vacant sites, environmental matters, onerous leases, legacy matter lawsuits, indirect tax disputes and indemnities or warranties outstanding for disposed businesses. Due to the long gestation period before settlement for a number of these issues can be reached, provisioning for these items requires careful judgement in order to establish a reasonable estimate of future liabilities. The Committee also assessed the strength of any insurance coverage for certain of these liabilities and challenged the accounting treatment for any amounts deemed to be recoverable from insurers. After due consideration and challenge, and having considered legal advice obtained by the Company, the Committee is satisfied that there are appropriate levels of provisions set aside to settle third-party claims and disputes (Note 30 to the Group Financial Statements) and that adequate disclosure has been made. The Committee also agreed with management's assessment of the estimated costs to manage and remediate the waste water at a disused US property and its disclosure as a separately reported item. Where no reliable estimate of the potential liability can be made for the outcome of an existing issue, no provision has been made and appropriate disclosure is included under contingent liabilities (Note 32 to the Group Financial Statements).

Audit Committee continued

Restructuring charges

The Group's restructuring costs in 2020 principally related to restructuring programmes which had commenced in prior years. The Committee critically reviewed the treatment of the restructuring costs disclosed as separately reported items in 2020 and concluded that these have been treated consistently with the accounting policy. This ensures that only significant restructuring programmes that have a defined scope and are material in nature are reported separately, which enables a clearer understanding of the underlying results of the Group.

Impairment of investment in subsidiaries

The Committee has also reviewed management's impairment analysis of the parent company's investment in subsidiaries. Following this review it concurred that no impairment was required.

Fair, balanced and understandable reporting

The Committee considered all the information available to it in reviewing the overall content of the Annual Report and Financial Statements and the process by which it was compiled and reviewed, to enable it to provide advice to the Board that the Annual Report and Financial Statements are fair, balanced and understandable. In doing so, the Committee ensured that time was again dedicated to the drafting and review process so that internal linkages were identified and consistency was tested. Drafts of the Annual Report and Financial Statements were also reviewed by a senior executive not directly involved in the year-end process who reported to the Committee on his impressions of their clarity, comprehensiveness, and the balance of disclosure in the document. On completion of the process, the Committee was satisfied that it could recommend to the Board that the Annual Report and Financial Statements are fair, balanced and understandable.

Risk management and internal controls

As highlighted in the reviews of strategy and principal risks in the Strategic Report, risk management is inherent in management's thinking and is embedded in the business planning processes of the Group. The Board has overall responsibility for establishing and maintaining a system of risk management and internal control, and for reviewing its effectiveness. The Audit Committee assists the Board in reviewing the effectiveness of the Group's system of internal control, including financial, operational and compliance controls, and risk management systems. This framework is consistent with the Code.

In 2020, Committee members fully participated in the Board review of existing risks and ongoing mitigating actions, further details of which are given on pages 36 and 37. The Committee believes that the Group's process for identifying and understanding its principal risks and uncertainties remains robust and appropriate.

The Committee considered the Company's going concern statement and challenged the nature, quantum and effects of the combination of the unlikely but significant risks to the business model, future performance, solvency and liquidity of the Group. These were all modelled as part of the scenarios and stress testing undertaken to support the Viability Statement. As part of this review, the Committee considered the Group's forecast funding requirements over the next three years and analysed the impact of key risks faced by the Group with reference to the Group's debt covenants, these included stress testing for raw material cost inflation, customer failure, business interruption and a fall in sales. The scenarios considered the impact of multiple risks occurring simultaneously and the additional mitigating actions that the Group could take. The Committee noted that the Group's debt headroom was sufficient to accommodate the modelled stress scenarios. As a result of its review, the Committee was satisfied that the going concern statement and Viability Statement had been prepared on an appropriate basis. The 2020 Going Concern statement and the 2020 Viability Statement are contained within the Risk, viability and going concern section on pages 34 and 35.

The key features of the Group's internal control system, which provides assurance on the accuracy and reliability of the Group's financial reporting, are detailed in the Risk, viability and going concern section on pages 30-37. During 2020, the Committee considered the process by which management evaluates internal controls across the Group. The Group Head of Internal Audit provided the Committee with a summary overview of the assurance provided by the Group's control framework and the testing of these controls. PwC also reviewed controls in the businesses within the scope of its audit.

The Group is made up of several large operating units, but also many small units in geographically diverse locations. Consequently, segregation of duties, overlapping access controls on systems and remote management oversight can give rise to control vulnerabilities and fraud opportunities. The Group has not adopted a common Enterprise Resource Planning system as a Group-wide standard. Over time, the Group is moving towards a shared services model, enabled by control, process and systems standardisation between businesses. This is expected to enhance the overall internal control environment in the smaller operating units.

The Group undertakes a range of activities to mitigate the risk of fraud. This framework is regularly reviewed to determine areas for improvement. Eliminating the risk of fraud remains one of the key areas of focus for Internal Audit, forming a fundamental part of 'full scope' and financial audits. These assess the quality of the balance sheet reconciliations, review key judgement matters, consider ERP access rights, review tenders and quotations, review the entity's controls over master data changes, and review controls over payments, journals and associated applications, along with travel and expense reimbursements.

Any control issues identified by management locally or as a result of the work performed by Internal Audit are escalated as appropriate. Internal Audit rate all control issues they identify in terms of their significance and agree remediation plans with the Auditee and an Action Owner, establishing a target date for remediation. For significant issues, management at all levels within the business are engaged to agree the actions and remediation dates. The status of the remediation is monitored and overdue issues are escalated appropriately with management, and reported at Audit Committee meetings. The Audit Committee continues to challenge management on the root cause where issues arise on the progress of remediation activities.

Cyber risks continue to be a significant area of focus for the Group. Like most other companies, Vesuvius receives a large number of 'phishing' emails presenting fake credentials. It is similarly subject to repeated attempts at social engineering fraud. In 2020, a loss of euro 31k was suffered due to a breach in protocol stemming from the receipt of an email from an account that had been hacked. The issue was addressed immediately, and further enhancements were made to the Group's control processes.

The Group's Cyber Security Committee meets on a regular basis to review and progress the Group's plans for tackling cyber issues, and the Audit Committee receives regular updates on the Group's activities in this area. During 2020 the Group conducted further work to strengthen its IT security and focused on mitigating risks in operations technology in response to the changing dynamics of external cyber threats. A holistic approach is taken to addressing cyber challenges, focusing on the improvement of the Group's overall IT procedures and framework. The Group continues to run regular training programmes on cyber/IT security.

During 2020, the Group continued its review of third-party representatives and intermediaries. This included detailed due diligence for distributors and ongoing monitoring of our sales agents. The Committee also continued its assessment of the Group's potential exposure to bribery and corruption risks, noting the ongoing work conducted by the Group in this context. The face-to-face visits to operations usually conducted to assist with the work were curtailed by the COVID-19 pandemic. However, in line with our continued improvement approach, a detailed review of the existing compliance programme and resources was undertaken in 2020. The output of this review, combined with previous risk assessments, continues to be used to develop the Group's framework, policies and procedures for the management of anti-bribery and corruption risk, reflecting an appropriate level of control for the business.

In line with the requirements of the new Code, responsibility for the oversight and monitoring of the Group's Speak Up helpline, which collates allegations of improper behaviour and employee concerns, has passed from the Audit Committee to the full Board. Procedures remain in place for any complaints received by the Company regarding fraud, accounting, internal accounting controls and auditing matters, to be passed to the Audit Committee for review and appropriate follow-up action. Further details of the operation of the Group's Speak Up policy and helpline can be found in the Sustainability section of the Annual Report on page 86.

Each year, the senior financial, operational and functional management of the businesses self-certify compliance with Group policies and procedures for the areas of the business under their responsibility and confirm the existence of adequate internal control systems throughout the year. The Committee reviews any exceptions noted in this bottom-up exercise.

The work undertaken during the year indicated the existence of an appropriate control environment, albeit with some areas for improvement, for which clearly defined improvement actions have been identified, particularly in respect of the Group's cyber risks. No significant control issues were raised by our External Auditors, PwC and Mazars, and no material issues were identified in 2020. After considering these various inputs, the Committee was able to provide assurance to the Board on the effectiveness of internal financial control within the Group, and on the adequacy of the Group's broader internal control systems.

Internal Audit

The Group's Internal Audit function operates on a global basis through professionally qualified and experienced individual members located around the world. They report to the Group Head of Internal Audit, based in London, who in turn reports directly to the Chairman of the Audit Committee.

Throughout 2020 Internal Audit continued to perform a programme of Compliance & Control ('C&C') audits which focus on internal financial controls and key Board compliance issues. Effectiveness & Efficiency ('E&E') audits which focus on a broader range of business performance issues, were only performed in response to a direct request from Management. This approach allows the Audit Committee to concentrate on key control issues for resolution.

The Committee received, considered and approved the 2020 Internal Audit plan which was constructed using a risk-based approach to cover the Group's control environment. The plan was based on the premise that all operating units are audited at least once every three years, including the smaller operating units. Internal Audit annually audits each of the large operating entities located in Germany, the US, China, Mexico and Brazil. Due to the travel restrictions arising from the COVID-19 pandemic, a modified plan was subsequently presented to the Committee for approval. Whilst the scope of the audit work was modified to facilitate remote testing, the entities tested remained aligned with the original risk-based plan.

Audit Committee continued

On site controls-based testing was replaced with remote Financial Controls Health Check audits supplemented by the continued use of Trial Balance deep dive testing which involved a detailed review of the Trial Balance and its underlying transactions. The Health Check audits required entities to submit evidence of the operation of key Balance Sheet reconciliations and key financial controls which were then reviewed remotely. This approach continued to allow the identification of areas for control improvement. The actions being taken to address these issues have been discussed at length at the Audit Committee with regular updates on the progress made. Internal Audit reported significant progress made against issues reported in previous years.

In 2020, a total of 28 audit assignments were undertaken (29 in 2019). The Committee received a report from the Group Head of Internal Audit at each of its meetings detailing progress against the agreed plan. Key trends and findings and an update on the progress made towards resolving open issues was also given. Common themes emerging from Internal Audit reports coupled with Internal Audit and Management’s assessment of risk have informed the development of the 2021 Internal Audit plan.

When necessary Internal Audit uses external auditors to supplement internal resources on an ad hoc basis. This process provides valuable learning opportunities and we expect to continue to use external resources in specialist areas and geographies in the future.

Control issues continue to be recorded in a live web-based database into which management is required to report progress towards addressing any open issues. Internal Audit monitors the progress made and frequent meetings continue to be held with each business unit President to ensure that engagement on the resolution of issues is clearly understood at all levels of the business and responsibility for remediation has been appropriately assigned. The results are communicated to the Audit Committee which also involves senior management as necessary to provide an update against any high-priority actions and Internal Audit undertakes follow-up reviews as required. In situations where audit findings required longer-term solutions, the Committee oversaw the process for ensuring that adequate mitigating controls were in place.

During the year, an internal review was undertaken of the effectiveness of the Internal Audit function, canvassing the views of the divisional finance Vice Presidents, business unit Presidents and other key stakeholders. This highlighted continued satisfaction with the relevance and value of issues raised, and the quality of reporting. It did however highlight the need to continue to upgrade the skills and capabilities of the Internal Audit team. Over the course of the second half of 2020, increased focus was placed on recruitment and a substantially new team of Internal Auditors based in Krakow, Poland has been recruited to deliver the 2021 plan. This includes an IT Audit specialist, recruited in November 2020.

Having considered the work of the Internal Audit function during 2020, including progress against the 2020 Internal Audit plan, the quality of reports provided to the Committee, and the results of the review of the function’s effectiveness, the Committee concluded that the Internal Audit function operated effectively during 2020.

External audit

Auditors’ appointment

In 2017, the Company appointed PricewaterhouseCoopers LLP (PwC) as External Auditors to the Company and the Group, and Mazars LLP to audit the non-material entities within the Group. PwC nominated Julian Jenkins as the audit partner responsible for the Group audit. After the completion of the 2020 half year audit, Julian Jenkins retired from PwC and was therefore replaced as Vesuvius’ engagement partner by Darryl Phillips. In line with the regulations on auditor rotation, the external audit contract will be put out to tender at least every ten years and the audit partner will be rotated at least every five years.

2020 Audit plan

PwC’s 2020 year-end audit plan was based on agreed objectives. The audit focused on areas identified as representing significant risk and requiring significant judgement. PwC maintained an ongoing dialogue with the Audit Committee throughout the year providing regular updates, including commentaries on significant issues and its assessment of consistency and appropriateness in the judgements and estimates made by management. Private sessions were held with PwC without management being present. PwC confirmed that its work had not been constrained in any way and that it was able to exercise appropriate professional scepticism and challenge throughout the audit process. The Chairman of the Audit Committee met on a number of occasions with PwC to monitor the progress of the audit and discuss questions as they arose.

The Independent Auditors’ Report provided by PwC on pages 150-157 includes PwC’s assessment of the key audit matters. These key audit matters are discussed in the significant issues and material judgements comments above. The report also summarises the scope, coverage and materiality levels applied by PwC in its audit. As part of the audit planning process and based on a detailed risk assessment, the Committee agreed a materiality figure of £7.0m for Group financial reporting purposes which is 19% lower than last year (£8.6m). This was set at 4.6% of the average of headline profit before tax in the three years to 31 December 2020, so as not to give undue weight to the 47% reduction to headline profit before tax from the impact of COVID-19 on the Group’s results. It represents 7.6% of the Group’s 2020 headline profit before tax. Importantly, much lower levels of materiality are used in the audit fieldwork on the individual businesses across the Group and these lower figures drive the scope and depth of audit work. Any misstatement at or above £0.35m was reported to the Committee.

There were no significant changes this year to the coverage of the audit which stood at 68% of the Group’s revenue, 74% of profit before tax and 79% of headline profit before tax. This coverage was considered to be sufficient by the Committee. The audit coverage is reflective of the long tail of smaller businesses within the Group that individually are not ‘material’ to the Group result.

The Committee also received a report from Mazars during the year summarising the findings and recommendations from its statutory audits for the year ended 31 December 2019 of the non-material Group subsidiaries and management agreed to implement certain of these recommendations.

The PwC audit fee approved by the Audit Committee was £1.8m. This was constructed bottom up on a local currency basis and was assessed in light of the audit work required by the agreed materiality level and scope. The fee agreed with Mazars for the audit of the non-material entities was £0.6m, resulting in a combined audit fee with PwC of £2.4m, compared with £2.3m in 2019.

Independence and objectivity

The Committee is responsible for safeguarding the independence and objectivity of the External Auditors in order to ensure the integrity of the external audit process. In discharging this responsibility during 2020, the Committee:

- > Sought regular confirmation from the incumbent External Auditors that they considered themselves to be independent of the Company in their own professional judgement, and within the context of applicable professional standards
- > Assessed the External Auditors’ work and considered whether they were exercising an appropriate level of professional scepticism
- > Evaluated all the relationships between the External Auditors and the Group, including compliance with the Group’s policy on the employment of former employees of the External Auditors, to determine whether these impaired, or appeared to impair, the Auditors’ independence
- > Reviewed compliance against the policy on the provision of non-audit services by the External Auditors
- > Reviewed details of the non-audit services provided by the External Auditors and associated fees

As a result of its review, the Committee concluded that PwC remained appropriately independent.

Non-audit services

Vesuvius operates a policy for the approval of non-audit services. A copy of the current policy is available to view on the ‘Investors/ Corporate Governance’ section of the Company’s website, www.vesuvius.com. The Committee approved a revised Non-audit Services Policy to comply with the FRC’s revised 2019 Ethical Standard in 2020.

The use of the External Auditors for the provision of non-audit services is strictly prohibited except for specific permitted audit related services. These comprise: Category 1 services which the External Auditors are obliged to perform due to law or regulation, such as regulatory and solvency reports; and Category 2 services which could be provided by others (albeit there are typically significant efficiencies to be had when done in combination with the audit such as interim reporting). An annual budget for the additional Category 2 service fees proposed to be paid to the External Auditors in the following year is presented for pre-approval to the Audit Committee each year. Audit Committee approval is required for expenditure in excess of this approved budget.

All audit-related and permissible non-audit services proposed to be carried out for any Group company worldwide by the External Auditors must be pre-approved before an engagement is agreed. Pre-approval must be obtained from the Head of Finance or the Chief Financial Officer, who will confirm that the Audit Committee has approved the engagement. Any assignment proposed to be carried out by the External Auditors must also have been cleared

by the External Auditors’ own internal pre-approval process, to assess the firm’s ethical ability to do the work.

In 2020, the fees for non-audit services payable to PwC amounted to £0.1m (2019: £0.1m). The 2020 fees represent payment for assurance services related to the review of the Group’s half-year financial statements, quarterly reviews and tax form audits in India (as required by regulation), Indian certification in respect of deposits along with the auditing of an R&D claim in Italy.

Effectiveness of the External audit process

The Committee and the Board are committed to maintaining the high quality of the external audit process. Each year the Committee carries out a formal assessment of the performance of the External Auditors in carrying out their work and of the audit process in general. Input into the evaluation in 2020 was obtained from management and other key Company personnel, members of the Audit Committee and the External Audit team. The review focused on the External Auditors’ mindset and culture, skills, character and knowledge, and the quality of its controls, as set out in the guidance for audit committees prepared by the FRC.

The evaluation of the External Auditors included the following steps:

- > a survey of key finance and non-finance stakeholders in Head Office and in-scope countries
- > a commentary-based survey of Audit Committee members focused on their experience of working with PwC
- > consideration of PwC’s approach to assessing the risks to its audit quality and an evaluation of the actions it had taken to mitigate these
- > a review of other external evidence on PwC audit quality (e.g. report on PwC by the FRC)
- > an assessment against the objectives outlined in PwC’s Audit Objectives report
- > discussions with PwC and key finance and non-finance personnel

The evaluation concluded that the audit process had been suitably rigorous, with PwC providing an effective, objective and challenging audit process for the 2019 financial year. The learnings from previous audits and the resultant actions taken had had a positive impact on the overall efficiency and effectiveness of the audit. PwC had further improved their audit approach and communications, challenging the team in the right areas and providing strong technical expertise. The PwC team was also seen as independent by the Audit Committee and management. To further improve the process it was proposed that more regular update meetings be held in 2020 and that the focus on earlier communication of audit approach and level of interim testing in advance of year-end, be maintained. Debrief meetings were held at a local level to discuss the 2019 audit and to constructively share feedback that would facilitate further improvements to the audit planning for the 2020 audit and an improved understanding of the audit approach and requirements.

Audit Committee continued

Reappointment of PwC for 2021

The Committee is responsible for making recommendations to the Board in relation to the appointment, reappointment and removal of the External Auditors. In undertaking this duty, the Committee takes into consideration a number of factors concerning the External Auditors and the Group's current activity, including:

- > the results of its most recent review of the effectiveness of the Auditors
- > the results of its review of the independence and objectivity of the Auditors, particularly in light of the provision of non-audit services
- > its ability to coordinate a global audit, working to tight deadlines
- > the cost-competitiveness of the Auditors in relation to the audit costs of comparable UK companies
- > the tenure of the incumbent Auditors
- > the periodic rotation of the senior audit management assigned to the audit of the Company
- > external reviews of the performance and quality of the Auditors, including:
 - the annual report issued by the Audit Inspection Unit of the Financial Reporting Council on the work of the Auditors
 - the Auditors' own annual Transparency Report

Having considered the aforementioned factors, the Committee decided to recommend to the Board that PwC be reappointed for 2021. It confirms that its recommendation is free from the influence of any third party and that there are no contractual restrictions on the choice of auditor. A resolution proposing the reappointment of PwC will be included in the notice of AGM for 2021.

The Committee has noted the ruling by the Securities Exchange Board of India (SEBI) regarding the prohibition placed on PwC network companies performing audits of listed entities in India for two years from 1 January 2018. PwC subsequently won the appeal at the Securities Appellate Tribunal (SAT) allowing PwC to continue with existing audits of listed companies. SEBI appealed against the SAT order in November 2019 and this was stayed by the Supreme Court pending final disposal of the appeal. For the rest of the order, dealing with the ban, there has not been any hearing and no date has been fixed. The Committee continues to monitor developments on this matter in the context of the Group's two listed Indian subsidiaries, Foseco India Limited and Vesuvius India Limited. The Group has contingency plans in place should PwC not be able to continue to audit the Group's entities in India.

Audit Committee evaluation

The Audit Committee's performance was evaluated as part of the overall externally facilitated Board and Committee performance evaluation, which is described in depth on pages 118-119. The management of Audit Committee meetings was rated highly in terms of the annual cycle of work, the level of input in meetings and the wide variety of issues covered in a good level of detail. The quality of the information provided to the Audit Committee was also rated highly and there was noted to be high-quality, open and candid engagement, between the Audit Committee and the Chief Financial Officer and his team, the Head of Internal Audit and the External Audit Partner, with a good rapport with the internal team and Audit partners.

The Committee was judged to monitor the work of the Internal and External Auditors effectively and to provide appropriate challenge to management's assessment of significant audit issues and material accounting judgements. The Committee noted that there was scope to further improve the Group's internal control systems and that action was being taken to strengthen these through further standardisation of processes.

A number of priorities were identified for the Audit Committee over the coming year, including review of the implementation of the new Finance organisation, ensuring there is appropriate and effective implementation of IT systems and solutions, along with continued oversight of the Internal Audit function and its findings, and support for the timely completion of recommendations by both the Internal and External Auditors.

On behalf of the Audit Committee

Douglas Hurt
Chairman, Audit Committee

3 March 2021

Nomination Committee

Dear Shareholder,

On behalf of the Nomination Committee, I am pleased to present the Nomination Committee Report for 2020. The primary responsibility of the Nomination Committee is to focus on Board composition and succession planning, to ensure that the Board is made up of individuals with the appropriate drive, abilities, diversity and experience to lead the Company in the delivery of its strategy.

As part of this work, the Committee is also responsible for overseeing the succession plans that are in place for senior management to ensure that there is a consistent pool of diverse talent as a pipeline for future progression to the Board.

2020 has been a year of significant activity for the Committee as it focused on its succession planning obligations. In December 2021, the Group reaches its ninth anniversary of operation as a stand-alone company. At this point, Jane Hinkley and I, the two remaining Directors who were appointed when the Company initially listed as a separate entity, reach our nine-year tenure thresholds for the purposes of the Code. With this in mind, the Committee has plans in place to add extra non-executive expertise to the Board. The first of these new Non-executive Directors, Kath Durrant, joined the Board on 1 December 2020. Kath has more than 30 years' experience in HR Management and will take over as Chair of the Remuneration Committee from Jane Hinkley at the close of the 2021 AGM. At the end of 2020 Hock Goh and Holly Koepfel, also signalled their desire to step down from the Board at the close of the 2021 AGM, following 6 years and 4 years of service, respectively. Consequently, the Nomination Committee will continue its focus on succession, with a further new Non-executive Director being actively sought. In addition, noting that Jane Hinkley and I reach our ninth anniversaries of appointment in 2021, the Committee will be undertaking further succession activity later in the year, including the Senior Independent Director commencing a process for the appointment of a new Chairman.

Alongside this focus on Board recruitment, the Committee also spent a considerable amount of time during the year reviewing senior management succession, including the pipeline for succession to roles in the divisional executive committees and the potential for progress to the Group's Executive Director positions.

Yours sincerely

John McDonough CBE
Chairman, Nomination Committee

3 March 2021

Committee members

John McDonough CBE (Committee Chairman)
Hock Goh
Friederike Helfer
Jane Hinkley
Douglas Hurt
Holly Koepfel
Kath Durrant – joined the Committee on her appointment to the Board on 1 December 2020

Meetings

The Committee met six times during the year.

Key activities during the year

- > **Board composition:** The Committee reviewed the structure, size and composition of the Board, including the skills, knowledge and experience required for the Board to continue to function effectively, taking into consideration the need to ensure an appropriate balance of independence and diversity amongst Board members. The Committee then evaluated the current Board composition against an assessment of these future business needs.
- > **Board succession:** The Committee considered the anticipated rotation of Directors from the Board and future requirements for Board composition, with a focus on ensuring that the Board continues to be resourced by a group of Directors with the skills and experience necessary to support the future accomplishment of the Group's Strategic Objectives. The Committee engaged recruitment consultants to assist in the search for new recruits and oversaw the successful recruitment process to appoint Kath Durrant, as a Non-executive Director and the next Chairman of the Remuneration Committee.
- > **Senior management development and succession:** The Committee reviewed the Group's succession processes for the Group Executive Committee and the management cadre below this level, taking a particular interest in the progress of plans to recruit a new business unit President for Flow Control. It also examined how the Group's talent management processes were developing, how the Senior management cadre were performing and how the development of individuals flagged as 'high potential' was proceeding – all aimed at providing a pipeline of experienced and talented managers to succeed to roles at the highest level of the business.
- > **Diversity:** The Committee reviewed the Group's progress in recruiting more women and supported the adoption by the Group of a new target focused on ensuring that 30% of the top management are female by 2025.
- > **Directors' elections:** The Committee considered the Directors' annual elections and re-elections at the AGM.
- > **Committee evaluation:** The Committee reviewed its performance and effectiveness during 2020, including evaluating whether each Non-executive Director was spending sufficient time fulfilling their duties.
- > **Committee terms of reference:** The Committee reviewed its terms of reference and recommended some minor updates to the Board.

Nomination Committee continued

The Nomination Committee

The Nomination Committee is made up of me, as Chairman of the Company, and the Non-executive Directors. During the year, I continued as Chairman of the Committee, though I did not act as Chairman when the Committee was discussing issues surrounding my succession, when Douglas Hurt our Senior Independent Director served as Chairman in my place. The Company Secretary is Secretary to the Committee. Members’ biographies are set out on pages 92 and 93.

Role and responsibilities

The Nomination Committee’s foremost priorities are to ensure that the Company has the best possible leadership, to oversee the process for Board appointments, ensure plans are in place for orderly succession to both the Board and Senior Management (being the Group Executive Committee) positions, and oversee the development of a diverse pipeline for succession. The Committee ensures that the procedure for the selection of potential candidates for Board appointments – either as an Executive Director or independent Non-executive Director – is formal, rigorous and transparent and undertaken in a manner consistent with best practice. It also ensures that appointments to the Board are made on merit, against objective criteria and with due regard for the benefits of diversity of gender, social and ethnic backgrounds, and cognitive and personal strengths on the Board. The Nomination Committee advises the Board on appointments, retirements and resignations from the Board and its Committees.

The Committee operates under formal terms of reference. A copy of these terms of reference, which were updated during the year, is available on the Group’s website www.vesuvius.com.

The Committee and its members are empowered to obtain outside legal or other independent professional advice at the cost of the Company in relation to its deliberations. These rights were not exercised during the year. The Committee may also secure the attendance at its meetings of any employee or other parties it considers necessary.

Process for Board appointments

The Committee follows formal, rigorous and transparent procedures for the appointment of new Directors. When considering a Board appointment, the Nomination Committee draws up a specification for the role, taking into consideration the balance of skills, knowledge and experience of its existing members, the diversity of the Board, the independence of continuing Board members, and the ongoing requirements and anticipated strategic developments of the Group. The search process is then able to focus on appointing a candidate with the necessary attributes to enhance the Board’s performance.

During 2020, the Committee oversaw the selection process to identify a new Non-executive Director, who would take over the Chair of the Remuneration Committee. The Committee reviewed the skills and attributes required for the role and agreed an

individual job specification. The Committee utilised the services of the specialist recruitment agency, Spencer Stuart, in this search. Spencer Stuart has adopted the Voluntary Code of Conduct addressing gender diversity and best practice in search assignments. It does not have any other connection with the Group, other than in respect of management recruitment work undertaken during normal trading activities. It was selected for this assignment following a review of potential agencies based on its skills and expertise.

The search for a new Non-executive Director was conducted globally and a long-list of potential appointees was produced by Spencer Stuart. The Committee reviewed the long-list and a short-list of candidates for interview was drawn up, based upon the objective criteria identified at inception. The Chairman, the Chief Executive, the Senior Independent Director and the Remuneration Committee Chair interviewed the short-listed candidates, and the preferred candidate then met with all other Board members, either in person or where travel restrictions prohibited this, virtually by videoconference. Detailed external references were taken up and, following this, the Committee made a formal recommendation to the Board for the appointment of Kath Durrant as a new Non-executive Director. Kath was required to demonstrate that she had sufficient time available to devote to the role and to identify any potential conflicts of interest. No conflicts were identified. Following her appointment, the Committee asked the Company Secretary to put in place a comprehensive induction programme for her.

Board composition

On an ongoing basis, the Committee reviews the current and future needs of the Board and its Committees – reflecting on the balance of skills, knowledge and experience of the current Directors and comparing this against the Board’s list of key skills. The independence and diversity of the Board and the balance of skills, experience and development needs of Board members are examined as part of the annual corporate governance review. The Committee also takes into consideration the results of the Board evaluation process each year. In 2020, the evaluation rated highly the skills and experience represented on the Board, along with the diversity amongst Directors noting particularly the excellent regional spread of expertise and culture with Directors from the US, UK, France, Austria, South Africa and Asia. The importance of the Board possessing knowledge of the Company’s growth markets was re-emphasised. The Committee’s key skills matrix was reviewed in light of the outcome of these deliberations. On an ongoing basis, the Committee considers existing lengths of tenure and the prospective rotation and retirement of Board members, so that it can plan succession accordingly. The Committee has commenced a search for a further new Non-executive Director and begun preparations for finding a successor to the Chairman, in line with anticipated requirements.

Diversity

The Group Diversity and Equality Policy outlines Vesuvius’ commitment to encouraging a supportive and inclusive culture amongst its global workforce, promoting diversity and eliminating any potential discrimination in our work environment. Vesuvius’ Board Diversity Policy explains how this commitment manifests in relation to the Board. Vesuvius recognises the value of a diverse and skilled workforce and is committed to creating and maintaining an inclusive and collaborative workplace culture that will provide sustainability for the organisation into the future. We believe that the dedication and professionalism of our people is the most significant contributor to our success. Having a balance of cultures, ethnicities and genders helps to promote innovation and creativity. The diversity of our employees is one of the core strengths of the Group. Copies of the Group’s Diversity policies can be found on the Group’s website: www.vesuvius.com.

As an organisation, Vesuvius has a global, multicultural operational and customer base, and we wish to reflect that inside our organisation with a multiculturally diverse community of excellent professionals of all backgrounds at Vesuvius. This starts by focusing on broad diversity of gender and nationality, with an aim to ensure that all employees and job applicants are given equal opportunity and that our organisation is representative of all sections of society where we operate. Each employee is respected and valued and able to give their best as a result. All employees are given help and encouragement to develop their full potential and utilise their unique talents.

In turn, a more diverse leadership group will result. We expect that Vesuvius’ leadership population should increase in diversity significantly over the next two to five years, in terms of age, gender, ethnicity, length of service and educational background.

In line with the Group’s global commitment to diversity, the Nomination Committee focuses on ensuring that the Board and

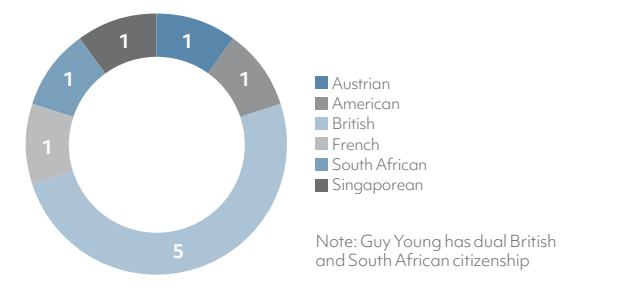
its Committees also have the appropriate range of diversity, skills, experience, independence and knowledge of the Company and the markets in which it operates, to discharge their duties and responsibilities effectively. We continue to look at diversity in its broadest sense – reflected in the range of backgrounds and experience of Board members who are drawn from different nationalities and have managed a variety of complex global businesses. The Nomination Committee recognises that diversity is a key ingredient in creating a balanced culture for open discussions at Board level and in minimising ‘groupthink’.

The Board’s overall skills and experience, as well as Non-executive Director independence, were reviewed during the year. The Board’s composition also formed part of the Board evaluation process. The Board considers its diversity, size and composition to be appropriate for the requirements of the business. In 2019 it achieved its target of achieving at least 33% female membership, and at the end of 2020, 44% of the Directors were women. Four Directors are non-UK citizens and two of the Directors (22%) identify as having BAME heritage.

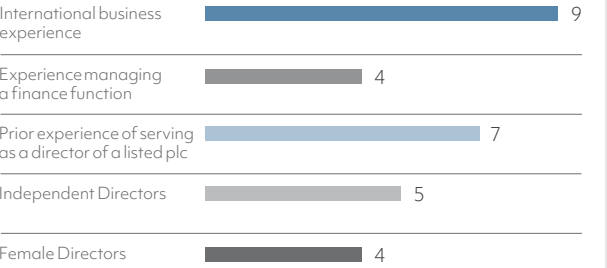
The Board Diversity Policy confirms the Group’s commitment to maintaining a Board comprising at least 33% female membership, while continuing to appoint candidates based on merit and recognising that over time the proportion of female Directors will fluctuate naturally as Board members retire and new Directors are appointed.

In 2020, 14% of our workforce were women, which was stable versus 2019. The number of women in the Group Executive Committee and Top Management team (members of the Group Executive Committee plus their key direct reports) increased by 7.5 percentage points in 2020 to 20%. The Group has adopted a new target focused on ensuring that 30% of the Group Executive Committee and Top Management are female by 2025. The Committee is committed to continuing to monitor the Group’s ongoing progress towards achieving this target.

Board nationalities



Board composition



Further information on the Group’s approach to promoting diversity can be found on page 82.

As at 31 December 2020, the gender balance of the Group’s employees was as follows:

	Female	Male	Total	Female	Male
Group Executive Committee member	2	5	7	29%	71%
Top management ¹	9	39	48	19%	81%
Middle management	65	401	466	14%	86%
All other employees	1,357	8,476	9,833	14%	86%
Grand total	1,433	8,921	10,354	14%	86%
Group Executive Committee members and Top Management	11	44	55	20%	80%
Directors of subsidiaries included in consolidation ²	40	394	434	9%	91%

Notes:

1. Top Management comprises key leadership roles reporting directly to members of the Group Executive Committee.
2. There are 434 directors of Group subsidiaries, 9% of whom are women. This disclosure is made to comply with regulatory requirements. It includes directors of dormant companies. Some individuals hold multiple directorships.

Nomination Committee continued

Board evaluation

The Board carries out an evaluation of its performance and that of its Committees every year. This year's evaluation was again externally facilitated by the corporate advisory firm, Lintstock. The Group uses Lintstock's Insider List database tool but has no other connection with the organisation and Lintstock does not have any connection with any of the Directors.

Each evaluation was conducted via a series of targeted questionnaires. As with previous years, the evaluation not only covered the performance of the Board but also that of its Committees, along with individual reviews of each Director and analysis of the performance of the Chairman. Narrative reports were then prepared for the Board, the Audit, Nomination and Remuneration Committees, and the Chairman.

The Board assessment focused on seven core areas: Board composition, oversight of stakeholders, Board dynamics, Board support and focus of meetings, Board oversight, risk management, and priorities for change. It also covered the Group's response to the COVID-19 crisis and the conduct of the Board's strategy meetings.

The outcome of the review was positive, with the Board perceived to have improved its performance despite the challenges of 2020 and the necessity to hold most of its meetings virtually. The Non-Executives' support and challenge of management was rated highly overall and the Directors were particularly supportive of the more frequent, shorter meetings that had been held to respond to the challenges of the COVID-19 pandemic. The Board's understanding of the views and requirements of investors and employees was rated highly, and the Board's understanding of customers was also rated positively overall, although it was noted that there continued to be further scope for improvement. The impact of travel restrictions limiting opportunities for face-to-face meetings was acknowledged and the benefit of re-establishing such interactions as soon as possible recognised.

With regard to the particular challenges of the COVID-19 pandemic, it was noted that the Board had been able swiftly

to adjust its focus and priorities, setting clear objectives for the executive team and monitoring their delivery. A programme of additional meetings had quickly been put in place to ensure decisions were taken on a timely basis. A clear imperative for safety, liquidity, rigorous financial management and customer supply was placed on the management team, which the business was able to address clearly and effectively.

In terms of longer-term strategy, Vesuvius' capacity to deliver on this was rated highly overall, though there was an emphasis on the ongoing need to ensure that the Group continued to recruit and retain sufficient and appropriately skilled people to support such delivery in the future. This would continue to be an area of focus in 2021, along with the roll-out of the Group's new sustainability agenda. In addition, the Board resolved to gain further understanding of competitor dynamics in 2021. With the forthcoming changes in Non-executive Directors, succession planning was once again highlighted as an area of focus.

In addition to the primary focus on safety, the top priorities for Vesuvius as a business over the coming year were identified by the Board as being capturing organic and, where possible inorganic growth; driving innovation and launching new products, to gain and maintain market share; operational and commercial performance and cost management.

The individual assessment of Directors concluded that all of the Directors continued to contribute effectively, providing expert and strategic advice as appropriate and holding management to account in an open and constructive manner. They were considered to devote adequate time to their duties and to be engaged and proactive in debate at all meetings. The Chairman was viewed to operate with objective judgement, and his approach to chairing meetings was deemed to be inclusive and to facilitate debate. Each of the Committees was also considered to have operated effectively during the year.

As in previous years, a set of action points was compiled from the output of the evaluation to ensure that its findings are included in the Board's activities. These will be implemented by the Board in 2021, with progress reviewed by the Board throughout the year.

The 2019 evaluation identified the following Board priorities for future Board attention; these were addressed during 2020 as follows:

Area	Issue	Action taken in 2020
Strategy	Review Board requirements for provision of strategic information	The Board held its annual strategy presentation and review, albeit delayed because of the COVID-19 pandemic. Non-executive Director input into the agenda for the day and the presentations was canvassed and reflected in the schedule to ensure that the meetings' aims were achieved.
	Enhance the Board's visibility of the Group's customers	Greater information on the Group's customer base, current requirements and untapped potential was included the Strategy Day presentations.
People and organisation	Senior management succession	The Nomination Committee received more detailed reporting on the enhancement of processes for talent management and succession in the Group, and the focus for further developing the talent pipeline for senior roles in the Group.
	Continued focus on enhancing the Board's understanding of senior management capabilities	The Chief Executive updated the Nomination Committee on senior management performance, recruitment and talent, giving them increased visibility on the strengths and weaknesses of the existing senior management cadre.
Board dynamics	Prioritise Board focus on key strategic and business issues rather than historical performance	Further priority was given to strategic reporting throughout the year, although the COVID-19 pandemic required key Board input on tactical issues to provide a response to the challenges it posed.
	Sharpen focus of Board Strategy Day presentations to clearly delineate immediate term delivery and long-term strategy	In appropriate areas, Board strategy presentations were conformed to give a broader understanding of overall themes.

Senior management succession

The Committee's succession planning activities do not exclusively relate to the Board but encompass the senior management levels immediately below the Board, aiming to support and encourage the growth of a pool of talent able to step up to the top roles in future years. The Committee considers succession plans for all the senior functional and business unit positions, assessing the availability of candidates who could cover the roles on a short term contingency basis should the need arise, along with the pool of medium-term and long-term talent available for future development into specific roles. The Committee continued to focus on the Group's talent development and succession planning processes in 2020, with a continuing emphasis on the development of this senior management cadre. Where gaps arose, the Committee was apprised of the work being undertaken to develop and recruit new executives for this talent pool.

Committee evaluation

The Committee's activities were part of the externally facilitated evaluation of Board effectiveness during the year, with Committee members completing individual questionnaires. The results of these written submissions were then collated and a written report tabled to the Committee. The management of Nomination Committee meetings was highly rated overall, with the quality of information provided also rated positively. The process for the recruitment of a new Non-executive Director was considered to have been conducted appropriately with all necessary rigour, despite the challenging circumstances. It was noted that the Committee needed to continue its focus on reviewing the development of the pipeline of internal successors for Senior Management, particularly the GEC roles. Going forward, it was noted that with the anticipated departures of Hock Goh and Holly Koeppel at the 2021 AGM, the Nomination Committee will continue its focus on recruitment, with further a new Non-executive Director being actively sought. In addition, noting that Jane Hinkley and I reach our ninth anniversaries of appointment in 2021, the Committee will be undertaking further succession activity later in the year, including the Senior Independent Director commencing a process for the appointment of a new Chairman.

On behalf of the Nomination Committee

John McDonough CBE
Chairman, Nomination Committee

3 March 2021

Directors’ Remuneration Report

Remuneration overview

Dear Shareholder,

On behalf of the Remuneration Committee, I am pleased to present the Directors’ Remuneration Report for the financial year ended 31 December 2020.

The Annual Report on Directors’ Remuneration sets out details of the pay received by the Directors in 2020. The report will be subject to an advisory shareholder vote at the 2021 AGM.

COVID-19

As with many organisations around the world, and for the people that work in them, 2020 has been an extraordinarily challenging year with the COVID-19 pandemic impacting our business, employees and communities. The Committee, together with the Board, would like to thank our people for their hard work and dedication during this difficult period, particularly those working tirelessly to maintain the supply of products and services to our customers.

Regardless of the challenges faced during the year, the Group’s priority remained the health and safety of all its employees. We are proud of the far-reaching efforts of all our employees around the world to maintain a safe working environment and for their contributions to local communities during this time of heightened need, be it donating PPE to local medical facilities and elderly care homes, donations of essential food and hygiene products to less fortunate families, or sanitising and reconfiguring workplaces to ensure the ongoing functioning of the business while ensuring the well-being of employees.

To protect the Group, management, with the support of the Board, enacted a series of measures to preserve cash, reduce costs and protect the business and jobs. Despite the impact of COVID-19 we have been able to maintain the size of our workforce at around 10,500.

In recognition of the prevailing challenges and to acknowledge the impact of the pandemic on all our stakeholders, including our shareholders, our people, customers and the communities in which we operate, the Group’s Executive Committee voluntarily waived 20% of their contractual base salaries, and where legally permissible, a corresponding reduction of their contractual employer pension contributions, for six months of the year. The Chairman and Non-executive Directors also volunteered a 20% reduction in their fees over the same period. The total savings generated by the members of the Group Executive Committee and the Board of Directors amounts to £406,000 inclusive of £56,000 contributed by the Non-executive Directors in sacrificed fees.

The voluntary waiver extended further into the senior management team with the direct reports to the Group Executive Committee electing to reduce their contractual salary (and where permissible, also their corresponding employer pension contributions) by 5-10% over the same period of time. In addition to the savings contributed by the Group Executive Committee and the Board of Directors, a further £1.15m was contributed by approximately 170 managers.

Internal measures adopted very early in the economic downturn included a restriction on discretionary spending, a hiring freeze on non-essential roles, a drive to reduce working capital, a significant reduction in planned capital expenditure, the use of furlough and other temporary absence programmes, utilising tax deferral arrangements where available, and encouraging employees to use up accrued vacation days.

Once the initial impact of the economic downturn on the business started to turn and signs of a slowly improving business became evident, several decisions were made to address the assistance accessed by the organisation.

- > While earlier in the year it was deemed appropriate to withdraw the 2019 final dividend payment, the Board determined in October that the improved level of business activity later in the year made the reinstatement of a dividend an affordable action recognising the importance of these payments to shareholders.
- > In the UK, given the uncertainty at the time, it was deemed appropriate to use the Government’s furlough programme to assist those whose employment may otherwise have been adversely affected by the COVID-19 pandemic. As the Group’s financial position became more stable, all furlough amounts received from the UK Government were repaid.
- > To reinforce our liquidity position, in April 2020, the Group secured access to the Covid Corporate Financing Facility (CCFF) being offered by the Bank of England. By September 2020, as a result of our positive free cash flow generation and early signs of marginally improving levels of business activity, the Company repaid the debt earlier than its March 2021 maturity.

These actions have formed the backdrop for the discussions and decisions of the Committee during 2020 and early 2021.

Performance in 2020

2020 was a challenging year for the Group, during which we were inevitably affected by the global outbreak of COVID-19, which materially disrupted our key end markets for both the Steel and Foundry Divisions. Despite these challenges, the Group focused swift action on cost control and cash preservation. Our reported results declined compared with 2019, registering £1,458.3m of revenue and £101.4m of trading profit on a reported basis. Cash flow has remained strong (£113.5m v £121.5m) despite the reduced profit, demonstrating the underlying strength and cash-generative nature of our business.

In considering the impact of this difficult year on all our stakeholders, the Committee also noted that, despite the reduced profits, the Company’s share price increased from £5.00 as of 31 December 2019 to £5.365 on 31 December 2020, representing an increase of 7.3% on an absolute basis, and 14.6% relative to the FTSE 250.

2020 Directors’ Remuneration

As was disclosed in last year’s Directors’ Remuneration Report, in December 2019, the Committee reviewed Patrick André’s and Guy Young’s salaries and increased them by 3% and 10% respectively. During 2020, these were voluntarily reduced by 20% for six months of the year in response to the impact of the COVID-19 pandemic.

In 2020, Patrick André and Guy Young received allocations of Performance Shares under the Vesuvius Share Plan (VSP) worth 200% and 150% of their base salaries, respectively. As outlined in last year’s Remuneration Report, in response to lower share prices driven by the growing economic uncertainty, the share price used to determine the number of shares allocated was £4.371 (the average in the five dealing days prior to the February 2020 Remuneration Committee meeting) rather than £3.9248 (the average in the five dealing days prior to grant). Accordingly, the effective value of these awards at the date of grant was 180% and 135% of base salaries for Patrick André and Guy Young, respectively.

Other than as outlined above, the Remuneration Committee did not exercise any further discretion in respect of the Executive Directors’ remuneration in 2020.

Remuneration outcomes for 2020

In 2020, the Annual Incentive awards were based 60% on Group headline earnings per share (EPS), 20% on the Group’s working capital to sales ratio (based on the 12-month moving average) and 20% on specified personal objectives; 33% of any Annual Incentive earned will be deferred into awards over shares for three years.

In 2020, our adjusted headline EPS of 27.6 pence was below the threshold Annual Incentive target of 39.0 pence and the Group’s working capital to sales ratio of 23.2% was better than the threshold target of 23.5%. As a result, partial payments of 34.0% of their maximum entitlement of 25% of contractual base salary (being 20% of their overall Annual Incentive) are due to the Executive Directors in respect of this financial performance metric of the 2020 Annual Incentive. Pay-outs are also due in respect of the personal objectives element of the Annual Incentive, with the Committee awarding Patrick André and Guy Young 65.3% and 69.0% respectively of their maximum entitlements of 25% of contractual base salary (being 20% of their overall Annual Incentive), in respect of the personal objectives they were set for 2020.

The Committee considered the appropriateness of paying Directors’ incentives when the EPS target had not been met and in light of other stakeholders’ experience. In addition to the factors listed previously, it should be noted that the financial targets were set in a pre-COVID-19 world and that the personal objectives are linked to key strategic, organisational and operational projects designed to strengthen the Company for the long term, and have measurable targets. One of the key financial objectives once the pandemic took hold was the preservation of cash and management of working capital. With the reduced level of business, we would normally expect an impact on the working capital to sales ratio, so it is gratifying to see that management not only reduced this to below last year’s figure of 24%, but achieved an outcome within the target set prior to COVID-19. In light of the achievements against targets set pre-COVID-19, the Committee concluded that such pay-outs were in order.

The performance period for the awards made under the VSP in 2018 matured at the end of December 2020 and potentially vest in March 2021. Performance was measured equally by reference to total shareholder return (TSR) relative to the FTSE 250 (excluding investment trusts) and headline EPS growth over the three-year period (adjusted as above). Relative TSR performance was below median; as a result no Performance Share awards will vest under the TSR element (out of a maximum 50%). The annual compound headline EPS growth for the period was -16%, which is below the minimum EPS target. As a result no Performance Share awards will vest under the EPS performance element (out of a maximum of 50%).

The Committee considered whether to exercise its discretion when reviewing the nil vesting of the Performance Shares and considered the underlying financial performance of the Company to satisfy itself that the outcome was appropriate.

The Committee took into account all factors when considering the remuneration outcomes for 2020, including the actions and measures deployed by the management team in response to the COVID-19 pandemic, and the Committee resolved that the Group’s Executive Remuneration Policy had operated appropriately in respect of 2020.

Workforce remuneration

The Remuneration Committee has always had clear oversight of the level and structure of remuneration for members of the Group Executive Committee, along with approving the structure and payment of awards to all executives under the Group’s share plans. In addition, it has been provided with broad remuneration information on the top cadre of management.

Following the recent revisions to the Code, the remit of the Remuneration Committee has been broadened to include the review of workforce remuneration and related policies and the more general alignment of incentives and rewards with culture.


Given the diverse nature of the Group’s operations both geographically and functionally, the Group has a wide variety of different remuneration and incentive arrangements in operation. The Committee has continued a programme to review workforce remuneration, which included the pension arrangements in the Group’s largest territories and bonus arrangements across the global workforce. Insights gained from these exercises enabled the Committee to assess the alignment of these arrangements within the Group and amongst employees of different seniority including the Executive Directors, and were taken into account when considering remuneration for the Executive Directors and Senior Management.

Environmental, social and governance issues


The Committee recognises the importance of environmental, social and governance matters in relation to Executive Directors’ remuneration. The Executive Directors’ personal objectives for the 2021 Annual Incentive contain specific targets in relation to such matters to ensure an increased focus.

In addition, the malus and clawback provisions applicable to the VSP specifically contemplate the reduction of awards should an individual’s conduct, a material failure of risk management or a serious breach of health and safety, result in serious reputational damage.


Strategic alignment




Deliver growth




Generate sustainable profitability and create shareholder value




Maintain strong cash generation and an efficient capital structure




Provide a safe working environment for our people



Be at the forefront of innovation



Run top-quality, cost-efficient and sustainable operations



Foster talent, skill and motivation in our people

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Governance

Remuneration overview continued

Implementation of the new Remuneration Policy in 2020

Our new Remuneration Policy came into effect on its approval at last year’s AGM, resulting in the following changes:

Enhancement of shareholding guidelines

- > The shareholding guideline that applies whilst in employment was increased to 200% of salary for all Executive Directors from 2020.
- > A post-employment shareholding guideline was introduced under which Executive Directors remain subject to their shareholding requirement in the first year after their cessation as an Executive Director and to 50% of the shares retained in the first year during the second year after such cessation, recognising that there is no requirement to purchase additional shares if the shares held when they cease to be an Executive Director are less than the applicable shareholding guideline.

Aligning pension provisions

- > As required by the new UK Corporate Governance Code, the level of pension allowance for Executive Directors appointed following the adoption of the 2020 Remuneration Policy will be aligned with the post-retirement benefits applicable to the majority of the workforce or, where appropriate, to the majority of the workforce of the relevant geography.
- > Our incumbent Executive Directors currently receive a 25% pension contribution. This was frozen at the 1 January 2020 amount and we committed to reduce it to that of the majority of the workforce in line with the Code. The review of workforce pensions referred to above covered pension plans in ten of the major countries in which we operate and where approximately half of our workforce is located. The review highlighted the wide variation in state, mandatory and customary corporate pension arrangements around the globe. On the basis of this review the Committee concluded, and the Executive Directors have agreed, that the contributions they receive in respect of pensions will be reduced to 17%, the average of the workforce as shown by our review, with effect from 1 January 2023.

2021 Remuneration review

Under the terms of the new Directors’ Remuneration Policy, and in line with the practice for the wider workforce, Patrick André and Guy Young are entitled to an annual review of their salary. The approach adopted across the Group for 2021 in response to the ongoing pandemic was that salary increases should be the exception other than where required by law. The Committee applied the same approach for the Executive Directors and their salaries for 2021 remain unchanged.

The Committee also reviewed the annual bonus opportunity for the Executive Directors. The year 2020, with all of its inherent challenges, has demonstrated the impact of the focus that annually set targets brings, and the Committee concluded that it was appropriate to increase their maximum bonus opportunity to 150%. In coming to this conclusion, the Committee also took into account its long track record of setting challenging bonus targets and is confident that corporate strategic objectives are aligned and that the performance metrics are incentivising the right behaviours to achieve the strategy.

Finally, in light of the 2020 EPS outcome, when considering targets for the 2021 LTIP awards, the Committee resolved that a range expressed as pence targets rather than a growth target was more appropriate for the EPS element of the award, whilst maintaining the split of 50% between relative TSR and EPS. The Committee retains the discretion to amend the vesting outcome where it considers that it is not a fair and accurate reflection of overall

business performance, including consideration of any potential “windfall gains” at the point of vesting.

2021 Chairman and Non-executive Directors’ fees

The Board has resolved to not increase the fees of Non-executive Directors for 2021 as the Committee did with respect to the Chairman’s fees.

Employee and shareholder engagement

The Group’s operations are geographically diverse in nature. The Group does not operate a central workforce engagement mechanism, and as such the Committee has not engaged systematically with the workforce during the year to explain how executive remuneration aligns with wider Company pay policy, although outside of travel restrictions brought about by COVID-19, visits to operations by the Non-executive Directors are designed to provide opportunities for an open forum for discussion with employees. Copies of the Company’s Annual Report detailing the Executive Directors’ remuneration are, however, widely disseminated throughout the Group and available for employees to view on the Company’s website at: www.vesuvius.com.

I would like to draw attention to the results of the recent all-employee engagement survey which delivers a very positive message with its reassuringly high, and increased, participation rate of 92% and with the overall engagement score, which measures the way employees think, feel and act towards Vesuvius, also increased. Whilst the work to respond to employee concerns continues, this reflects the positive impact of the efforts to date.

I am always keen to hear shareholders’ views on our remuneration policy and implementation, inviting those shareholders who wish to, to meet with me. During the year I met with a number of shareholders to discuss topics such as the Chief Financial Officer’s pay increase, executive pensions, Annual Incentive targets and Long-Term Incentive Plan measures. The comments made are shared with the Committee and taken into account during our deliberations.

At the 2020 AGM, the Remuneration Policy and the Directors’ Remuneration Report were passed with votes in favour of 97.18% and 96.94% respectively, showing broad-based support for the developments in the 2020 Remuneration Policy and to the changes proposed to Executive Directors’ remuneration.

As ever, I remain keen to hear shareholders’ views on remuneration matters.

Change of Remuneration Committee Chairman

After many years serving as the Chairman to the Remuneration Committee, I am very pleased to be succeeded by Kath Durrant who will take over at the close of the 2021 AGM. Kath brings extensive prior experience to this role. She served as a Non-executive Director and Chair of the Remuneration Committee of Renishaw plc from 2015 to 2018 and currently serves as a Non-executive Director and Chair of the Remuneration Committees of SIG plc and Calisen plc. I will remain in the service of Vesuvius as an Independent Non-executive Director.

I would like to express my appreciation to the shareholders, the Board and the management team for the support and constructive engagement afforded me during my time as Remuneration Committee Chairman.

Yours sincerely

Jane Hinkley
Chairman, Remuneration Committee

3 March 2021

Directors’ Remuneration Report
2020 Remuneration Policy

At the 2020 AGM, held on 13 May 2020, the Company obtained shareholder support for a new Remuneration Policy which took effect from the close of that meeting. The previous policy applied in its entirety up until this date. The elements of the previous policy that relate to remuneration that remained extant on this date (such as outstanding share awards) continue to apply until these commitments cease. The policy is contained within the 2019 Annual Report and can be viewed in the Investors section (Results, Reports and Presentations) of the Vesuvius website: www.vesuvius.com. The version of the policy set out below contains minor textual amendments to reflect 2021 policy implementation.

The Remuneration Committee reserves the right to make any remuneration payments and payments for loss of office (including exercising any discretions available to it in connection with such payments), notwithstanding that they are not in line with the Policy set out here, where the terms of the payment were agreed: (i) before the date the Company’s first Remuneration Policy approved by shareholders in accordance with Section 439A of the Companies Act came into effect; (ii) before the Policy set out here came into effect, provided that the terms of the payment were consistent with the shareholder-approved Remuneration Policy in force at the time they were agreed; or (iii) at a time when the relevant individual was not a Director of the Company and, in the opinion of the Remuneration Committee, the payment was not in consideration for the individual becoming a Director of the Company. For these purposes, ‘payments’ include the Remuneration Committee satisfying awards of variable remuneration and, in relation to an award over shares, the terms of the payment are ‘agreed’ at the time the award is granted.

Remuneration Policy Table for Executive Directors

Alignment/purpose	Operation	Opportunity	Performance
Base salary			
Helps to recruit and retain key employees. Reflects the individual's experience, role and contribution within the Company.	Base salary is normally reviewed annually, with changes effective from 1 January.	Salary increases will normally be in line with the average increase awarded to other employees in the Group, although increases may be made above this level at the Committee's discretion in appropriate circumstances. In considering any increase in base salary, the Committee will also take into account:	Any increase will take into account the individual's performance, contribution and increasing experience.
	Base salary is positioned to be market competitive when considered against other global industrial companies, and relevant international and FTSE 250 companies (excluding Investment Trusts).		
	Paid in cash, subject to local tax and social security regulations.	(i) the role and value of the individual (ii) changes in job scope or responsibility (iii) progression in the role (e.g. for a new appointee) (iv) a significant increase in the scale of role and/or size, value or complexity of the Group (v) the need to maintain market competitiveness. No absolute maximum has been set for Executive Director base salaries. Current Executive Directors' salaries are set out in the Annual Report on Directors' Remuneration section of this Remuneration Report.	
Other benefits			
Provides normal market practice benefits.	A range of benefits including, but not limited to: car allowance, private medical care (including spouse and dependent children), life insurance, disability and health insurance, expense reimbursement (including costs if a spouse accompanies an Executive Director on Vesuvius business), together with relocation allowances and expatriate benefits, in some instances grossed up for tax, in accordance with the Group's policies, and participation in any employee share scheme operated by the Group.	There is no formal maximum as benefit costs can fluctuate depending on changes in provider, cost and individual circumstances.	None.

2020 Remuneration Policy continued

Alignment/purpose	Operation	Opportunity	Performance
Pension			
Helps to recruit and retain key employees. Ensures income in retirement.	An allowance is given as a percentage of base salary. This may be used to participate in Vesuvius' pension arrangements, invested in own pension arrangements or taken as a cash supplement (or any combination of the above options).	Maximum of 25% of base salary for incumbent Executive Directors at the date that this policy is adopted. This was frozen at the 1 January 2020 amount and will be reduced to 17% from the end of 2022 in line with the average of that received by the majority of the workforce. The level of allowance for Executive Directors appointed following the adoption of this policy will be aligned with the post-retirement benefits applicable to the majority of the workforce or, where appropriate, to the majority of the workforce of the relevant geography.	None.
Annual Incentive			
Incentivises Executive Directors to achieve key short-term financial and strategic targets of the Group. Additional alignment with shareholders' interests through the operation of bonus deferral.	Normally 33% of any Annual Incentive earned by Executive Directors will be deferred into awards over shares under the Vesuvius Deferred Share Bonus Plan which normally vest after at least three years, other than in specified circumstances outlined elsewhere in this Policy. These may be cash or share settled. The Committee has the discretion to determine that actual incentive payments should be lower than levels calculated by reference to achievement against targets if it considers this to be appropriate. The Committee has the discretion to award participants the equivalent value of dividends accrued during the vesting period on any shares that vest. Subject to malus and clawback.	Below threshold: 0%. On-target: 50% of the applicable maximum opportunity in any year. Maximum: Up to 150% of base salary. The Remuneration Committee will set the level of maximum bonus opportunity for each Executive Director at the start of each year, with 50% of the applicable maximum payable for on-target performance. Payments start to accrue on meeting the threshold level of performance, with payments between threshold and on-target and between on-target and maximum made on a pro rata basis.	The Annual Incentive is measured on targets set at the beginning of each year. The Committee establishes threshold and maximum performance targets for each financial year. The majority of the Annual Incentive will be determined by measure(s) of Group financial performance. The remainder of the Annual Incentive will be based on financial, strategic or operational measures appropriate to the individual Director. Performance is measured over a one-year period. Actual performance targets will be disclosed after the performance period has ended. They are not disclosed in advance due to their commercial sensitivity.
Vesuvius Share Plan (VSP)			
Aligns Executive Directors' interests with those of shareholders through the delivery of shares. Rewards Executive Directors for achieving the strategic objectives of growth in shareholder value and earnings. Assists retention of Executive Directors over a three-year performance period.	VSP awards to Executive Directors are granted as Performance Share awards. These may be cash or share settled. Awards vest three years after their award date, other than in specified circumstances outlined elsewhere in this Policy, subject to the achievement of specified conditions. All vested shares, net of any tax liabilities, are then subject to a further two-year holding period after the vesting date, which will continue to apply notwithstanding the termination of employment of the participants during this holding period, except at the Committee's discretion in exceptional circumstances, including a change of control or where the participant dies or has left employment due to ill health, injury or disability. The Committee has the discretion to award participants the equivalent value of dividends accrued during the vesting period and further two-year holding period on any shares that vest. Subject to malus and clawback.	Executive Directors are eligible to receive an annual award with a face value of up to 200% of base salary in Performance Share awards. Vesting at threshold performance is at 25% of the award, rising to vesting of the full award at maximum. At its discretion, the Committee may elect to add additional underpinning performance conditions. The Company reserves the right only to disclose certain of the performance targets after the performance period has ended, due to their commercial sensitivity. Prior to any vesting, the Remuneration Committee reviews the underlying financial performance of the Group over the performance period, and the non-financial performance of the Group and participants, to ensure that the vesting is justified. Following this review, the Committee has the discretion to amend the final vesting level if it does not consider that it is justified.	Vesting will be subject to performance conditions as determined by the Remuneration Committee ahead of each award. Those conditions will be disclosed in the Annual Report on Directors' Remuneration section of the Remuneration Report. The performance conditions will initially be Group EPS and relative TSR, although the Remuneration Committee will retain discretion for future awards to include additional or alternative performance conditions which are aligned with the corporate strategy.

Malus/clawback arrangements

The Executive Directors' variable remuneration is subject to malus and clawback provisions. These provide the Committee with the flexibility, if required, to withhold or recover payments made to Executive Directors under the Annual Incentive Plan (including deferred awards) and/or to withhold or recover share awards granted to Executive Directors under the Vesuvius Share Plan, including any dividends granted on such awards. The circumstances in which the Committee could potentially elect to apply malus and clawback provisions include: a material misstatement in the Group's financial results; an error in the calculation of the extent of payment or vesting of an incentive; gross misconduct by an individual; or significant financial loss or serious reputational damage to Vesuvius plc resulting from an individual's conduct, a material failure of risk management or a serious breach of health and safety. These malus and clawback provisions apply for a period of up to three years after the end of a performance period (or end of the deferral period in respect of awards made under the Vesuvius Deferred Share Bonus Plan).

Performance measures

In selecting performance measures for the Annual Incentive, the Committee seeks to reflect key strategic aims and the need for a rigorous focus on financial performance. Each year, the Committee agrees challenging targets to ensure that underperformance is not rewarded. The Company will not be disclosing the specific financial or personal objectives set until after the relevant performance period has ended because of commercial sensitivities. The personal objectives are all job-specific in nature and track performance against key strategic, organisational and operational goals.

In selecting performance measures for the Vesuvius Share Plan, the Committee seeks to focus Executive Directors on the execution of long-term strategy and also align their rewards with value created for shareholders. On this basis, the performance conditions for the Vesuvius Performance Share awards will initially include measures based on TSR and EPS performance.

Within the Policy period, the Committee will continually review the performance measures used to ensure that awards are made on the basis of challenging targets that clearly support the achievement of the Group's strategic aims.

The Committee may vary or waive any performance condition(s) if circumstances occur which cause it to determine that the original condition(s) have ceased to be appropriate, provided that any such variation or waiver is fair, reasonable and not materially less difficult to satisfy than the original condition (in its opinion). In the event that the Committee were to make an adjustment of this sort, a full explanation would be provided in the next Remuneration Report.

The Committee may: (a) in the event of a variation of the Company's share capital, demerger, special dividend or any other corporate event which it reasonably determines justifies such an adjustment, adjust; and (b) amend the terms of awards granted under the share schemes referred to above in accordance with the rules of the relevant plans.

Share awards may be settled by the issue of new shares or by the transfer of existing shares. In line with prevailing best practice at the time this Policy was approved, any issuance of new shares is limited to 5% of share capital over a rolling ten-year period in relation to discretionary employee share schemes and 10% of share capital over a rolling ten-year period in relation to all employee share schemes.

Remuneration Policy Design

The Committee is satisfied that the Remuneration Policy is designed to promote the long-term success of the Company in accordance with the requirements of the Code with regard to:

Clarity:	Simplicity:	Risk:
There is complete transparency on the executive remuneration arrangements with full disclosure in the Annual Report. The Annual Incentive bonus structure for the Executive Directors is based on the same structure utilised for annual bonus arrangements for senior executives throughout the Group. The focus of incentive arrangements on long-term sustainable growth clearly aligns the interests of executives with those of the Group's shareholders. The Vesuvius Share Plan, with its emphasis on the retention of shares for a period of at least five years, clearly aligns the long-term objectives of the Directors with that of its investors.	The new Policy with its focus on three core elements: fixed pay, Annual Incentive and Long-Term Incentive is clear, simple and easy to understand.	The Committee has carefully analysed the range of possible outcomes of awards and believes the Policy to be fair and proportionate, with the clear linkage to Group profitability mitigating the potential for excessive rewards and the reliance on audited profit numbers and externally verified TSR targets serving to mitigate behavioural risk. The Committee has discretion under the Vesuvius Share Plan to determine the vesting of awards in accordance with the Code requirement and malus and clawback provisions also apply.
Predictability:	Proportionality:	Alignment to culture:
The charts on page 126 provide estimates of the total remuneration for the Executive Directors for 2021 for minimum, on-target and maximum performance, showing the split between fixed and variable remuneration. The charts also indicate the maximum potential remuneration assuming 50% share price appreciation. Prior to any vesting under the Vesuvius Share Plan the Committee reviews the underlying financial performance of the Company over the performance period, and the non-financial performance of the Group and participants, to ensure that the vesting is justified. Following this review, the Committee has the discretion to amend the final vesting level if it does not consider that it is justified.	The Committee believes that the performance-related elements of remuneration have financial targets which are transparent, stretching and clearly align the Executive Directors' remuneration with the delivery of the Group's strategy. The Vesuvius Share Plan rewards long-term performance directly linked with the Group's strategy and results, ensuring that only strong performance is rewarded.	The Executive Directors' incentive arrangements are consistent with the Group's core strategic objective of delivering long-term sustainable and profitable growth and support our performance-orientated culture. The inclusion of personal objectives in the Annual Incentive Plan affords the opportunity for attention to be focused on key non-financial strategic objectives each year.

2020 Remuneration Policy continued

Illustration of the application of the Remuneration Policy for 2021

The charts below show the total remuneration for Executive Directors for 2021 for minimum, on-target and maximum performance. The fixed elements of remuneration comprise base salary, pension and other benefits, using 2021 salary data. The assumptions on which they are calculated are as follows:

Minimum: Fixed remuneration only.

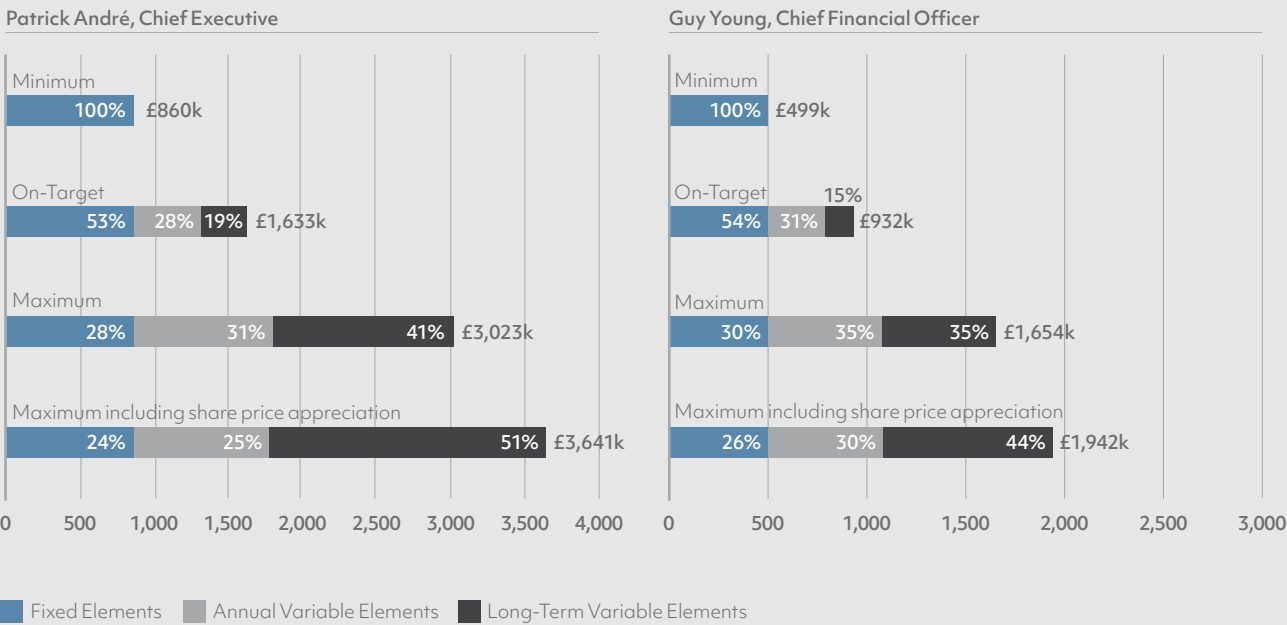
On-target: Fixed remuneration plus on-target Annual Incentive (made at 75% of base salary for Patrick André and Guy Young) and threshold vesting (i.e. median performance for TSR and threshold for EPS) for Performance Share awards (made at 200% of base salary for Patrick André and 150% of base salary for Guy Young) under the Vesuvius Share Plan. No share price appreciation is assumed.

Maximum: Fixed remuneration plus maximum Annual Incentive (being full achievement of financial and personal targets, made at 150% of base salary for Patrick André and Guy Young) and 100% vesting for Performance Share awards (made at 200% of base salary for Patrick André and 150% of base salary for Guy Young) under the Vesuvius Share Plan. No share price appreciation is assumed.

Maximum including assumed 50% share price appreciation: This shows the value of the maximum scenario if 50% share price appreciation is assumed over the three-year performance period of the Performance Share awards.

Note: In addition, the Committee retains the discretion to award dividends (either shares or their cash equivalent) on any shares that vest.

Remuneration Illustrations £000



Service contracts of Executive Directors

The Committee will periodically review the contractual terms for new Executive Directors to ensure that these reflect best practice. Service contracts currently operate on a rolling basis and are limited to a 12-month notice period.

Patrick André is employed as Chief Executive of Vesuvius plc pursuant to the terms of a service agreement made with the Company dated 17 July 2017. Guy Young is employed as Chief Financial Officer pursuant to the terms of a service agreement with Vesuvius plc dated 16 September 2015. Each Executive Director's appointment is terminable by Vesuvius on not less than 12 months' written notice, and by each Executive Director on not less than six months' written notice.

External appointments of Executive Directors

The Executive Directors do not currently serve as Non-executive Directors of any other quoted company. Subject always to consent being granted by the Company for them to take up such an appointment were they to so serve, the Company would allow them to retain any fees they received for the performance of their duties.

Remuneration Policy for Non-executive Directors

The Company seeks to appoint Non-executive Directors who have relevant professional knowledge and have gained experience in a relevant industry and geographical sector, to support diversity of expertise at the Board and match the wide geographical spread of the Company's activities.

Non-executive Directors attend Board, Committee and other meetings, held mainly in the UK, together with an annual strategy review to debate the Company's strategic direction. All Non-executive Directors are expected to familiarise themselves with the scale and scope of the Company's business and to maintain their specific technical skills and knowledge.

The Board sets the level of fees paid to the Non-executive Directors after considering the role and responsibilities of each Director and the practice of other companies of a similar size and international complexity. The Non-executive Directors do not participate in Board discussions on their own remuneration.

Alignment/purpose	Operation	Opportunity	Performance
Fees			
To attract and retain Non-executive Directors of the necessary skill and experience by offering market-competitive fees.	Fees are usually reviewed every year by the Board.	Non-executive Directors and the Chairman will be paid market-appropriate fees, with any increase reflecting changes in the market or adjustments to a specific Non-executive Director's role.	None.
	Non-executive Directors are paid a base fee for the performance of their role plus additional fees for roles that involve significant additional time commitment and/or responsibility. Such roles could include, but are not limited to, Committee chairmanship (and, where appropriate, membership) or acting as the Senior Independent Director. Fees are paid in cash.	No eligibility for bonuses, retirement benefits or to participate in the Group's employee share plans.	
	The Chairman is paid a single cash fee and receives administrative support from the Company.	Base fees paid to Non-executive Directors will in aggregate remain within the aggregate limit stated in our Articles, currently being £500,000.	
Benefits and expenses			
To facilitate execution of responsibilities and duties required by the role.	All Non-executive Directors are reimbursed for reasonable expenses incurred in carrying out their duties (including any personal tax owing on such expenses).	Non-executive Directors' expenses are paid in accordance with Vesuvius' expense procedures.	None.

Terms of service of the Chairman and other Non-executive Directors

The terms of service of the Chairman and the Non-executive Directors are contained in letters of appointment. Each Non-executive Director is appointed subject to their election at the Company's first Annual General Meeting following their appointment and re-election at subsequent Annual General Meetings. During the first year of his/her appointment, the Chairman is entitled to 12 months' notice from the Company; thereafter, he/she is entitled to six months' notice from the Company. None of the other Non-executive Directors is entitled to receive compensation for loss of office at any time. All Non-executive Directors are subject to retirement, and election or re-election, in accordance with the Company's Articles of Association. The current policy is for Non-executive Directors to serve on the Board for a maximum of nine years, with review at the end of three and six years, subject always to mutual agreement and annual performance evaluation. The Board retains discretion to extend the tenure of Non-executive Directors beyond this time, subject to the requirements of Board balance and independence being satisfied.

The table below shows the date of appointment for each of the Non-executive Directors:

Non-executive Director	Date of appointment
John McDonough CBE	31 October 2012
Kath Durrant	1 December 2020
Hock Goh	2 April 2015
Friederike Helfer	4 December 2019
Jane Hinkley	3 December 2012
Douglas Hurt	2 April 2015
Holly Koepfel	3 April 2017

2020 Remuneration Policy continued

Recruitment policy

On appointment or promotion of a new Executive Director, the Committee will typically use the Remuneration Policy in force at the time of the Committee’s decision to determine ongoing remuneration.

Base salary levels will generally be set in accordance with the Remuneration Policy current at the time of the Committee’s decision, taking into account the experience and calibre of the appointee. If it is appropriate to appoint an individual on a base salary initially below what is adjudged to be market positioning, contingent on individual performance, the Committee retains the discretion to realign base salary over the one to three years following appointment, which may result in a higher rate of annualised increase than might otherwise be awarded under the Policy. If the Committee intends to rely on this discretion, it will be noted in the first Remuneration Report following an individual’s appointment. Other than in exceptional circumstances, other elements of annual remuneration will, typically, be set in line with the Remuneration Policy, including a limit on awards under the Annual Incentive and Vesuvius Share Plan of 350% of salary in aggregate. The Committee retains the discretion to make the following further exceptions:

- > In the event that an internal appointment is made, or where a Director is appointed as a result of transfer into the Group on an acquisition of another Company, the Committee may continue with existing remuneration provisions for this individual, where appropriate
- > If necessary and appropriate to secure the appointment of a candidate who has to move locations as a result of the appointment, whether internal or external, the Committee may make additional payments linked to relocation, above those outlined in the policy table, and would authorise the payment of a relocation allowance and repatriation, as well as other associated international mobility terms. Such benefits would be set at a level which the Committee considers appropriate for the role and the individual’s circumstances
- > If appropriate the Committee may apply different performance measures and/or targets to a Director’s first incentive awards in his/her year of appointment

Service contracts will be entered into on terms similar to those for the existing Executive Directors, summarised in the service contracts of Executive Directors section above.

In addition to the annual remuneration elements noted above, the Committee may consider buying out terms, incentives and any other compensation arrangements forfeited on leaving a previous employer that an individual forfeits in accepting an appointment with Vesuvius. The Committee will have the authority to rely on Listing Rule 9.4.2R(2) or to apply the existing limits within the Vesuvius Share Plan to make Restricted Share awards on recruitment. In making any such awards, the Committee will review the terms of any forfeited awards, including, but not limited to, vesting periods, the expected value of such awards on vesting and the likelihood of the performance targets applicable to such awards being met, while retaining the discretion to make any buy-out award the Committee determines is necessary and appropriate. The Committee may also require the appointee to purchase shares in Vesuvius to a pre-agreed level prior to vesting of any such awards. The value of any buy-out award will be capped, to ensure its maximum value is no higher than the value of the awards that the individual forfeited on joining Vesuvius. Any such awards will be subject to malus and clawback.

With respect to the appointment of a new Chairman or Non-executive Director, appointment terms will be consistent with those applicable at the time the appointment is agreed. Variable pay will not be considered. With respect to Non-executive Directors, fees will be consistent with the Policy at the time the appointment is agreed. If, in exceptional circumstances, a Non-executive Director was asked to assume an interim executive role, the Company retains the discretion to pay them appropriate executive compensation, in line with the Policy.

Exit payment policy

Vesuvius has the option to make a payment in lieu of part or all of the required notice period for Executive Directors. Any such payment in lieu will consist of the base salary, pension contributions and value of benefits to which the Director would have been entitled for the duration of the remaining notice period, net of statutory deductions in each case. Half of any payments in lieu of notice would be made in a lump sum, the remainder in equal monthly instalments commencing in the month in which the midpoint of their foregone notice period falls (and are reduced or extinguished by salary from any role undertaken by the departing Executive in this time). Executive Directors are subject to certain non-compete covenants for a period of nine months, and non-solicitation covenants for a period of 12 months, following the termination of their employment. Their service agreements are governed by English law.

Executive Directors’ contracts do not contain any change of control provisions; they do contain a duty to mitigate should the Director find an alternative paid occupation in any period during which the Company must otherwise pay compensation on early termination.

The table below summarises how the awards under the annual bonus and Vesuvius Share Plan are typically treated in different leaver scenarios and on a change of control.

Event	Timing	Calculation of vesting/payment
Annual Incentive Plan – during period prior to payment		
Good leaver	Paid at the same time as to continuing employees.	Annual bonus is paid only to the extent that any performance conditions have been satisfied and is prorated for the proportion of the financial year worked before cessation of employment. In determining the level of bonus to be paid, the Committee may, at its discretion, take into account performance up to the date of cessation or over the financial year as a whole based on appropriate performance measures as determined by the Committee. The bonus may, at the Committee’s discretion, be paid entirely in cash.
Bad leaver	Not applicable.	Individuals lose the right to their annual bonus.
Change of control	Paid on the effective date of change of control.	Annual bonus is paid only to the extent that any performance conditions have been satisfied and is prorated for the proportion of the financial year worked.
Annual Incentive Plan – in respect of any amount deferred into awards over shares under the Vesuvius Deferred Share Bonus Plan		
Good leaver	On the date of the event.	Deferred awards vest in full.
Bad leaver	On the date of the event.	Other than dismissal for cause, deferred awards will vest in full.
Change of control²	Within seven days of the event.	Deferred awards vest in full.
Vesuvius Share Plan		
Good leaver¹	On normal release date (or earlier at the Committee’s discretion).	Unvested awards vest to the extent that any performance conditions have been satisfied and a pro rata reduction applies to the value of the awards to take into account the proportion of vesting period not served, unless the Committee decides that the reduction in the number of vested shares is inappropriate.
Bad leaver	Unvested awards lapse.	Unvested awards lapse on cessation of employment.
Change of control²	On the date of the event.	Unvested awards vest to the extent that any performance conditions have been satisfied and a pro rata reduction applies for the proportion of the vesting period not served, unless the Committee decides that the reduction in the number of vested shares is inappropriate.

- Notes:**
1. Under the rules of the Vesuvius Share Plan, any vested shares, net of any tax liabilities, are subject to a further two-year holding period after the vesting date. The holding period may be terminated early at the Committee’s discretion in exceptional circumstances, including a change of control or where the award holder dies or leaves employment due to ill health, injury or disability.
 2. In certain circumstances, the Committee may determine that unvested awards under the Vesuvius Deferred Bonus Plan and Vesuvius Share Plan will not vest on a change of control but will instead be replaced by an equivalent grant of a new award, as determined by the Committee, in the new company.

Benefits normally cease to be provided on the date employment ends. However, the Committee has the discretion to allow some minor benefits (such as health insurance, tax advice and repatriation expenses) to continue to be provided for a period following cessation where this is considered fair and reasonable, or appropriate on the basis of local market practice. In addition, the Committee retains discretion to fund other expenses for the Executive Director; for example, payments to meet legal fees incurred in connection with termination of employment, or to meet the costs of providing outplacement support, and de minimis termination costs up to £5,000 to cover transfer of mobile phone or other administrative expenses.

Whilst the Committee retains overall discretion on determining ‘good leaver’ status, it typically defines a ‘good leaver’ in circumstances such as retirement with agreement of the Company, ill health, disability, death, redundancy, or part of the business in which the individual is employed or engaged ceasing to be part of the Group. Final treatment is subject to the Committee’s discretion.

The Committee reserves the right to make any other payments in connection with a Director’s cessation of office or employment where the payments are made in good faith in discharge of an existing legal obligation (or by way of damages for breach of such an obligation) or by way of a compromise or settlement of any claim arising in connection with the cessation of a Director’s office or employment.

In certain circumstances, the Committee may approve new contractual arrangements with departing Executive Directors, including (but not limited to) settlement, confidentiality, restrictive covenants and/or consultancy arrangements. These would be used only where the Committee believed it was in the best interests of the Company to do so.

2020 Remuneration Policy continued

Comparison of Remuneration Policy for Executive Directors with that for other employees

The Remuneration Policy for Executive Directors is designed in line with the remuneration philosophy set out in this report – which also underpins remuneration for the wider Group. Remuneration arrangements for Executive Directors draw on the same elements as those for other employees – base salary, fixed benefits and retirement benefits – with performance-related pay extending to the management cadres and beyond. However, given that remuneration structures for other employees need to reflect both seniority and local market practice, they differ from the policy for Executive Directors. In particular, Executive Directors receive a higher proportion of their remuneration in performance-related pay and share-based payments. Individual percentages of variable versus fixed remuneration and participation in share-based structures increase as seniority increases.

As for Executive Directors, all employees receive an annual performance appraisal, and receive salary reviews on an annual basis. Middle and senior managers participate in the Annual Incentive Plan. For functional members of the Group Executive Committee, the award is predominantly based on Group performance, with the remainder focused upon the achievement of personal objectives. For business unit Presidents and other operational business unit employees, any potential award is based upon four separate measures relating to Group performance, business unit performance, regional performance, where relevant, and achievement of personal objectives.

All members of the Group Executive Committee participate in the Vesuvius Share Plan and receive awards of Performance Shares, which vest on the basis of the same performance targets set for the Executive Directors. The level of awards granted to members of the Group Executive Committee who don't serve on the Board are lower than those payable to the Executive Directors.

For certain senior and middle managers, awards are made under the Vesuvius Medium Term Plan (MTP). These managers participate in the MTP at varying percentage levels, and awards are based on the same measures and targets as the Annual Incentive Plan. The senior management cadre receives MTP awards made over Vesuvius shares, whilst other managers who participate in the MTP receive their awards in cash. In each case, awards are granted following the end of the relevant financial year. The MTP share awards vest on the second anniversary of the date of grant, subject to continuing employment.

Consideration of conditions elsewhere in the Group in developing policy

The Company does not consult directly with employees on Executive Directors' remuneration arrangements. However, the Remuneration Committee will take into account the pay and employment conditions of other Group employees when determining Executive Directors' remuneration, particularly when determining base salary increases, when the Committee will consider the salary increases for other Group employees in the same jurisdiction.

Consideration of shareholder views

Vesuvius is committed to open and transparent dialogue with its shareholders on remuneration as well as other governance matters. As Chair of the Committee, Jane Hinkley welcomes shareholder engagement and is available for any discussions investors wish to have on remuneration matters. In early 2020, the Committee wrote to its largest shareholders and key governance agencies outlining its proposals for the 2020 Remuneration Policy and inviting comments. Vesuvius received responses from each governance agency contacted and from 53% of the shareholders and entered into dialogue with a number of shareholders as a result. The overall shareholder response was supportive both of the developments in the 2020 Remuneration Policy and of the changes proposed to executive remuneration. Also, during 2020, as in previous years, Jane Hinkley directly contacted significant shareholders to offer discussions on remuneration matters and a number of meetings were conducted by her accordingly. The feedback from such meetings is always shared with the Committee and taken into consideration when decisions are made about future remuneration strategy and arrangements.

Shareholding guidelines

The Remuneration Committee encourages Executive Directors to build and hold a shareholding in the Company equivalent in value to at least 200% of base salary.

Compliance with the shareholding policy is tested at the end of each year for application in the following year, with the valuation of any holding being taken at the higher of: (1) the share price on the date of vesting of any shares derived from a share award, in respect of those shares only; and (2) the average of the closing prices of a Vesuvius ordinary share for the trading days in that December.

Unless exceptionally the Committee determines otherwise, under the post-employment shareholding guideline the Executive Directors will remain subject to their shareholding requirement in the first year after their cessation as an Executive Director and to 50% of the shares retained in the first year during the second year after such cessation, recognising that there is no requirement to purchase additional shares if the shares held when they cease to be an Executive Director are less than the applicable shareholding guideline.

General

The Committee may make minor amendments to the policy set out in this Policy Report (for regulatory, exchange control, tax or administrative purposes or to take account of a change in legislation) without obtaining shareholder approval for that amendment.

Directors' Remuneration Report
Annual Report on Directors' Remuneration

Directors' Remuneration at a glance

Our remuneration for Executive Directors

The table below sets out the phasing of receipt of the various elements of Executive Director remuneration for 2021.

	2021	2022	2023	2024	2025	2026	Description and link to strategy
Base salary							Salaries are set at an appropriate level to enable the Company to recruit and retain key employees, and reflect the individual's experience, role and contribution within the Company.
Benefits							Provides normal market practice benefits.
Pension							The pension benefit helps to recruit and retain key employees and ensures income in retirement.
Annual Incentive							The Annual Incentive incentivises the Executive Directors to achieve key short-term financial and strategic targets of the Group.
Deferred Annual Incentive							The deferral of a portion of the Annual Incentive increases alignment with shareholders.
Vesuvius Share Plan (VSP)							Awards under the VSP align Executive Directors' interests with those of shareholders through the delivery of shares and assist in the retention of the Executive Directors. The VSP rewards the Executive Directors for achieving the strategic objectives of growth in shareholder value and earnings.

2021 Directors' Remuneration

The table below sets out how the Remuneration Policy will be applied to the Executive Directors' remuneration for 2021. Further details about each of the elements of remuneration are set out in the Remuneration Policy and the Annual Report on Directors' Remuneration.

Remuneration element	Remuneration structure
Base salary	Current salaries as follows: > Patrick André – £618,000 (2020: £618,000) > Guy Young – £ 385,000 (2020: £385,000) Values reflect the full year equivalent without the voluntary reduction. There has been no increase in salaries for 2021.
Benefits	Benefits for Executive Directors include car allowance, private medical care, relocation expenses, tax advice and tax reimbursement, commuting costs, school fees, Directors' spouse's travel and administrative expenses.
Pension	Pension allowance of 25% of base salary. This allowance can be used to participate in Vesuvius' pension arrangements, be invested in their own pension arrangements or be taken as a cash supplement (or any combination of these alternatives). The pension allowance is frozen at the 1 January 2020 amount and will be reduced to 17% from the end of 2022 in line with the average of that received by the majority of the workforce.
Annual Incentive	For 2021 the maximum Annual Incentive potential for the Executive Directors will be 150% of base salary with target Annual Incentive potential being 75% of base salary. Their incentives are based 60% on Group headline earnings per share, 20% on the Group's working capital to sales ratio (based on the 12-month moving average) and 20% on specified personal objectives. 33% of any Annual Incentive earned will be deferred into awards over shares, to be held for a period of three years.
Vesuvius Share Plan (VSP)	Performance Share awards with a maximum value of 200% of salary will be awarded to Patrick André and 150% for Guy Young. Vesting of 50% of shares awarded will be based upon the Company's TSR performance relative to that of the constituent companies of the FTSE 250 (excluding investment trusts), and 50% on headline EPS performance. Performance will be measured over three years with awards vesting after three years. There will then be a further two-year holding period applicable to the awards.

Annual Report on Directors’ Remuneration continued

Remuneration Committee structure

The current members of the Remuneration Committee are all the independent Non-executive Directors of the Company.

The Committee Chairman is Jane Hinkley. Jane Hinkley, Hock Goh, Douglas Hurt and Holly Koepfel have all served on the Committee throughout 2020 and Kath Durrant joined the Committee in December. All continue in office as at the date of this report. Jane Hinkley will retire from the role as Committee Chair at the end of the upcoming AGM, and Kath Durrant will take over the role of Committee Chair at that date. Kath Durrant meets the requirements of having previously served on a Remuneration Committee. The Committee complies with the requirements of the UK Corporate Governance Code for the composition of remuneration committees. Each of the members brings a broad experience of international businesses and an understanding of their challenges to the work of the Committee. The Company Secretary is Secretary to the Committee. Members’ biographies are on pages 92 and 93.

Meetings

The Committee met four times during the year. The Group’s Chairman, Chief Executive and Chief HR Officer were invited to each meeting, together with Friederike Helfer, Vesuvius’ non-independent Non-executive Director, though none of them participated in discussions regarding their own remuneration. In addition, a representative from Deloitte, the Remuneration Committee adviser, attended the meetings. The attendees supported the work of the Committee, giving critical insight into the operational demands of the business and their application to the overall remuneration strategy within the Group. In receiving views on remuneration matters from the Executive Directors and senior management, the Committee recognised the potential for conflicts of interest to arise and considered the advice accordingly. The Chairman of the Committee reported the outcomes of all meetings to the Board.

The Committee operates under formal terms of reference which were reviewed during the year. The terms of reference are available on the Group website www.vesuvius.com. The Committee members are permitted to obtain outside legal advice at the Company’s expense in relation to their deliberations. These powers were not exercised during the year. The Committee may also secure the attendance at its meetings of any employee or other parties it considers necessary.

Role and responsibilities

The Committee is responsible for:

- > Determining the overall remuneration policy for the Executive Directors, including the terms of their service agreements, pension rights and compensation payments
- > Setting the appropriate remuneration for the Chairman, the Executive Directors and Senior Management (being the Group Executive Committee)
- > Reviewing workforce remuneration and related policies, and the alignment of incentives and rewards with culture, taking these into account when setting the policy for Executive Director remuneration
- > Overseeing the operation of the executive share incentive plans

Advice provided to the Remuneration Committee

Deloitte is appointed directly by the Remuneration Committee to provide advice on executive remuneration matters, including remuneration structure and policy, updates on market practice and trends, and guidance on the implementation and operation of share incentive plans. The Committee appointed Deloitte, a signatory to the Remuneration Consultants Group Code of Conduct in relation to Executive Remuneration Consulting in the UK, following a formal tender process in 2014. Deloitte also provides the Remuneration Committee with ongoing calculations of total shareholder return (TSR) to enable the Committee to monitor the performance of long-term share incentive plans.

Deloitte does not have any other connection with any individual Director.

In addition, in 2020, Deloitte provided the Group with IFRS 2 calculations for the purposes of valuing the share plan grants and, within the wider Group, was engaged in various jurisdictions to provide tax and treasury advisory work, and some consultancy services. During 2020, Deloitte’s fees for advice to the Remuneration Committee, charged on a time spent basis, amounted to £50,325. The Committee conducted a review of the performance of Deloitte as remuneration adviser during the year and concluded that Deloitte continued to provide effective, objective and independent advice to the Committee. No conflict of interest arises as a result of other services provided by Deloitte to the Group.

Activities of the Remuneration Committee

The key matters the Remuneration Committee considered during its four meetings in 2020 included:

- > Considering and approving the 2021 salaries for the Chairman, Chief Executive, Chief Financial Officer and senior management
- > Reviewing and approving achievement against performance targets for the 2019 Annual Incentive arrangements
- > Setting performance targets and approving the structure of the 2020 Annual Incentive arrangements
- > Reviewing and assessing the Company’s attainment of performance conditions applicable to the Vesuvius Performance Share awards made in 2017
- > Setting the performance measures and targets, and authorising the grant of new awards in 2020 under the VSP, the Deferred Share Bonus Plan and Medium-Term Incentive Plan
- > Considering the Company’s ongoing share sourcing requirements to meet obligations under the Company’s share plans, and funding of the employee share ownership plan (ESOP)
- > Obtaining shareholder approval for the 2020 Directors’ Remuneration Policy
- > Reviewing the Annual Incentive Plan structure applicable to the Group and approving changes to this structure for executives below the Board to incorporate a regional trading performance at business unit level into the bonus plan structure
- > Approving the 2019 Directors’ Remuneration Report and reviewing the 2020 Directors’ Remuneration Report
- > Reviewing the Committee’s Terms of Reference
- > Reviewing Group pension arrangements

As in previous years, the Committee was the subject of an externally moderated performance evaluation in 2020. The management of Remuneration Committee meetings was highly rated, with the meetings being seen to be well run, and the work being well prepared and organised. The quality of information provided to the Remuneration Committee from management and internal sources was positively rated, as was the quality of information and advice provided to the Remuneration Committee by the external remuneration adviser, Deloitte. The Committee noted that it had a good understanding of senior executive remuneration, but that there was more work to do for it to gain a deeper understanding of the remuneration of the workforce in general, a complex task given the number of countries and variables involved. The Committee also reflected on the process that had been undertaken for the revision of the Group’s Remuneration Policy and concluded that this had worked effectively.

Regulatory compliance

The Remuneration Policy, which is set out on pages 123-130, was prepared in accordance with the Companies Act 2006 and the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 (as amended). It also meets the requirements of the Financial Conduct Authority’s Listing Rules and the Disclosure Guidance and Transparency Rules.

This Remuneration Report sets out how the principles of the Code are applied by the Company in relation to matters of remuneration. Save as set out below, the Company was compliant with the provisions of the Code for the year under review.

Provision 38: The Company is progressing with its plans to align the level of pension allowance for Executive Directors with that applicable to the majority of the workforce. Our incumbent Directors’ pension contributions were frozen at the 1 January 2020 amount and will be reduced to 17% at the end of 2022, being the level of the majority of the workforce.

Provision 41: During the year, the Remuneration Committee did not engage systematically with the workforce to explain how executive remuneration aligns with wider company pay policies.

Share usage

Under the rules of the VSP, the Company has the discretion to satisfy awards either by the transfer of Treasury shares or other existing shares, or by the allotment of newly issued shares. Awards made under the Deferred Share Bonus Plan to satisfy shares awarded to Directors in respect of their Annual Incentive, and awards made to management of the Company over shares pursuant to the Medium-Term Incentive Plan, must be satisfied out of Vesuvius shares held for this purpose by the Company’s ESOP trust.

The decision on how to satisfy awards is taken by the Remuneration Committee, which considers the most prudent and appropriate sourcing arrangement for the Company.

At 31 December 2020, the Company held 7,271,174 ordinary shares in Treasury and the ESOP held 1,093,098 ordinary shares. The ESOP can be gifted Treasury shares by the Company, can purchase shares in the open market or can subscribe for newly issued shares, as required, to meet obligations to satisfy options and awards that vest.

The VSP complies with the current Investment Association guidelines on headroom which provide that overall dilution under all plans over a rolling ten-year period should not exceed 10% of the Company’s issued share capital, with a further limitation over a rolling ten-year period of 5% for discretionary share schemes. More than 9.9% of the 10% limit and more than 4.9% of the 5% limit remains available as headroom for the issue of new shares or the transfer of Treasury shares for the Company. No Treasury shares were transferred, or newly issued shares allotted under the VSP during the year under review.

Policy implementation

The following section provides details of how the Company’s current Remuneration Policy was implemented during the financial year 2020 and how it will be implemented in the financial year 2021.

Annual Report on Directors’ Remuneration continued

Directors’ Remuneration – audited

The table below sets out the total remuneration received by Executive Directors in the financial year under review:

	Patrick André		Guy Young	
	2020 (£000)	2019 (£000)	2020 (£000)	2019 (£000)
Total salary ¹	556	600	347	350
Taxable benefits ²	88	118	17	20
Pension ³	139	150	87	88
Total fixed pay⁴	783	868	451	458
Annual Incentive ⁵	153	84	99	64
Long-Term Incentives ^{6,7}	0	268	0	237
Total variable pay ⁸	153	352	99	301
Total⁹	936	1,220	550	759

The table below sets out the fees and taxable benefits received by Non-executive Directors in the financial year under review and the total remuneration received by both Executive and Non-executive Directors during the year under review:

	2020			2019		
	Total fees ¹ (£000)	Taxable benefits ² (£000)	Total (£000)	Total fees ¹ (£000)	Taxable benefits ² (£000)	Total (£000)
John McDonough CBE	185	6	191	205	11	216
Kath Durrant ¹⁰	4	—	4	—	—	—
Christer Gardell ¹¹	—	—	0	47	5	52
Hock Goh	45	2	47	50	5	55
Friederike Helfer ¹²	45	0	45	4	—	4
Jane Hinkley	59	1	60	65	3	68
Douglas Hurt	63	1	64	70	1	71
Holly Koeppl	45	0	45	50	8	58
Total 2020 Non-executive Director remuneration			456			
Total 2020 Executive Director remuneration			1,486			
Total 2020 Director remuneration			1,942			

Notes:

1. Base salary (or Non-executive Director fees, as appropriate), including 20% voluntarily waived salaries and fees for 6 months, earned in relation to services as a Director or Non-executive Director during the financial year. The voluntary waiver did not apply to Christer Gardell who did not receive fees in 2020 or Kath Durrant who joined on 1 December 2020.
2. The UK regulations require the inclusion of benefits for Directors where these would be taxable in the UK on the assumption that the Director is tax resident in the UK. The figures in the table therefore include expense reimbursement and associated tax relating to travel, accommodation and subsistence for the Director (and, where appropriate, their spouse) in connection with attendance at Board meetings and other corporate business during the year, which are considered by HMRC to be taxable in the UK. Standard benefits for the Executive Directors include car allowance and private medical care. As an expatriate, Patrick André also receives relocation benefits under Vesuvius’ applicable expatriate localisation policy, as detailed in the 18 July 2017 RNS announcement of Mr André’s appointment. Those relocation benefits (totalling£56,325 in 2020) comprise housing costs, tax advice and school fees.
3. Patrick André and Guy Young currently receive a pension allowance of 25% of base salary capped at the January 2020 level. The figures in the table represent the value of all cash allowances and contributions received in respect of pension benefits, at voluntarily reduced rates.
4. The sum of total salary, taxable benefits and pension.
5. This figure includes the Annual Incentive payments to be made to the Executive Directors in relation to the year under review. 33% of these Annual Incentive payments will be deferred into awards over shares, to be held for a period of three years. See pages 135, 136 and 137 for more details.
6. The 2019 figures represent the vested value of the Performance Share awards granted to Patrick André and Guy Young in 2017 under the VSP. The figures are inclusive of the vested value of the additional shares equivalent in value to the dividends that would have been paid on the vested shares (as detailed in Note 2 of the Vesuvius Performance Share award allocations table on page 139). Market prices on the dates of vesting were £3.5059 (16 March 2020) and £3.953 (1 September 2020), which were both lower than the equivalent grant date share prices, so none of the vested value is attributable to share price growth. These values have been restated from those shown in the 2019 Remuneration Report to reflect the value on the vested shares on the date of vesting.
7. The 2020 figures represent the Performance Share awards granted to Patrick André and Guy Young in 2018 under the VSP that will lapse in 2021.
8. The sum of the value of the Annual Incentive and the Long-Term Incentives where the performance period ended during the financial year.
9. The sum of base salary, benefits, pension, Annual Incentive and Long-Term Incentives where the performance period ended during the financial year.

Additional notes:

10. Kath Durrant joined the Board on 1 December 2020.
11. Christer Gardell retired from the Board on 4 December 2019; amounts have been restated from 2019 report for expenses reimbursed in 2020 related to 2019.
12. Total 2019 Director remuneration for the Directors who served during 2019 was £2.503m.

Base salary and fees

As outlined in last year’s Remuneration Report, the Chief Executive’s salary was increased to £618,000 p.a. with effect from 1 January 2020. The Chief Financial Officer’s base salary was increased on the same date to £385,000. In line with the Group’s remuneration policy, the base salaries for each of the Executive Directors was reviewed in 2020. It was resolved that no salary change would be made for 1 January 2021, thus aligning the approach for the Executive Directors with that taken for the majority of the Group’s workforce.

As outlined in last year’s Remuneration Report, the Chairman’s fee was increased to £205,000 p.a. with effect from 1 January 2020. The Non-executive Directors’ fees were increased on the same date to £50,000 p.a. No further changes have been made to the Chairman or Non-executive Directors’ fees for 2021, or to the supplementary fees, which remain at £15,000 p.a. for the Chairmen of the Audit and Remuneration Committees, and £5,000 for the Senior Independent Director.

Pension arrangements – audited

In accordance with their service agreements, Patrick André and Guy Young are entitled to pension allowances of 25% of base salary. This allowance can be used to participate in Vesuvius’ pension arrangements, be invested in their own pension arrangements or be taken as a cash supplement (or any combination of these alternatives). The Remuneration Committee has determined that this level of pension allowance be frozen at the 1 January 2020 amount and will be reduced to 17% from the end of 2022 in line with the average of that received by the majority of the workforce. In 2020 the level of pension allowances for each of the Executive Directors was 25% including for the period of their voluntarily reduced salary.

Annual Incentive – audited

The Executive Directors are eligible to receive an Annual Incentive calculated as a percentage of base salary, based on achievement against specified financial targets and personal objectives. Each year, the Remuneration Committee establishes the performance criteria for the forthcoming year. The financial targets are set by reference to the Company’s financial budget. The target range is set to ensure that Annual Incentives are only paid out at maximum for significantly exceeding performance expectations. The Remuneration Committee considers that the setting and attainment of these targets is important in the context of achievement of the Company’s longer-term strategic goals.

The Annual Incentive has a threshold level of performance below which no award is paid, a target level at which 50% of the maximum opportunity is payable, and a maximum performance level at which 100% of the maximum opportunity is earned, on a pro rata basis.

2020 Annual Incentive – audited

For 2020, the maximum Annual Incentive potential for the Executive Directors was 125% of base salary and their target Annual Incentive potential was 62.5% of base salary.

For the financial year 2020, the Executive Directors’ Annual Incentives were based 60% on Group headline EPS, 20% on the Group’s working capital to sales ratio (based on the 12-month moving average) and 20% on specified personal objectives.

Financial targets

The 2020 Vesuvius Group headline EPS performance targets set out below were set at the December 2019 full-year average foreign exchange rates, being the rates used for the 2020 budget process:

Threshold: 39.0p	On-target: 41.4p	Maximum: 46.1p
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The 2020 Group’s working capital to sales ratio targets were set as follows:

Threshold: 23.5%	On-target: 23.0%	Maximum: 22.5%
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In assessing the Group’s performance against these targets, the Committee uses a constant currency approach. Thus, the 2020 full-year EPS performance was retranslated at December 2019 full-year average foreign exchange rates to establish performance. This is consistent with practice in previous years.

In 2020, Vesuvius’ retranslated EPS performance at the December 2019 full-year average foreign exchange rates was 27.6 pence and working capital to sales ratio was 23.2%. Consequently, EPS performance was below the required threshold target, and the Group working capital to sales ratio was between threshold and target with an outcome of 34% of the maximum achievable for this target.

As a result, in respect of the financial performance metrics of the 2020 Annual Incentive, no payment is due on the EPS target (related to a maximum bonus opportunity of 75% of contractual salary), and a partial pay-out of 8.5% of contractual salary (of the maximum potential bonus of 25% of contractual salary) is due on the Working Capital to Sales ratio target.

Personal objectives

In 2020, a proportion (20%) of the Annual Incentive for Executive Directors (representing 25% of base salary out of the maximum 125% bonus entitlement) was based on the achievement of personal objectives. The Committee considered the appropriateness of paying Directors’ incentives under the personal objectives element of the Annual Incentive for 2020 with partial achievement of the financial targets. Given that the personal objectives are linked to key strategic, organisational and operational projects with measurable targets, the Committee concluded that such pay-outs are in order. A summary of the objectives set and performance achieved is set out on the next page.

Annual Report on Directors’ Remuneration continued

Patrick André	
Summary of objective	Summary outcome
Drive Group performance	> Delivered the best safety results since Vesuvius became an independent company in 2012
	> Very strong cash generation and cash conversion (173%) despite the COVID-19 crisis
	> Strong temporary cash savings of £39m to mitigate the crisis
	> Strong restructuring recurring cash savings of £20.6m
	> Market share gains in the Company's main markets
Reinforce talent management	> Increase in employee engagement as measured by external survey despite the crisis
	> Strengthening of the management team with a new experienced Flow Control business unit President
Review and Implementation of Group Strategy	> Elaborate action plan for improved long-term return on sales
	> On-target delivery of strategic capex to improve manufacturing efficiency, increase capacity and accelerate automation
Improve Group ESG performance	> Decreased CO ₂ emissions per tonne of product manufactured
	> Increased female representation in top management
	> Launched new Group Sustainability Initiative with net zero carbon footprint objective

In summary, after considering performance as outlined above, the Committee approved an Annual Incentive pay-out of 16.3% of contractual base salary, out of the maximum potential 25%, in respect of the personal objectives of Patrick André.

Guy Young	
Summary of objective	Summary outcome
Improve Group financial control and metrics	> Improved financial controls environment with satisfactory audit outcomes
	> Reduced working capital and increased trade creditor days
	> Delivered improved cash management and significant savings
Performance of IT function	> Achieved zero major cyber security incidents
	> Significant progress of major technology project for launch in 2021
Improve Group ESG performance	> Decreased CO ₂ emissions per tonne of product manufactured
	> Increased female representation in top management

In summary, after considering performance as outlined above, the Committee approved an Annual Incentive pay-out of 17.3% of contractual base salary, out of the maximum potential 25%, in respect of the personal objectives of Guy Young.

The total Annual Incentive awards payable to Patrick André and Guy Young in respect of their services as a Director during 2020 are therefore 24.8% and 25.8% of salary respectively. Of these Annual Incentive payments, 33% will be deferred into awards over shares, to be held for a period of three years.

The Committee considered the appropriateness of paying Directors’ incentives when the EPS target had not been met with respect to other stakeholders’ experience. As has been detailed, the financial targets were set in a pre-COVID-19 world and the personal objectives are linked to key strategic, organisational and operational projects designed to strengthen the Company for the long term and have measurable targets. One of the key financial objectives during the pandemic was cash preservation and strong working capital management. The reduced level of business would normally result in an increased working capital to sales ratio, whereas management succeeded in reducing this to below last year’s 24% and achieved this within the pre-COVID-19 targets. As a result, the Committee concluded that such pay-outs were in order.

On balance, the Committee feels that the formulaic outcome against the financial performance targets set is a fair reflection of performance and is satisfied that the resulting compensation for the Group's leadership team is an appropriate reflection of the performance delivered.

2021 Annual Incentive

The Annual Incentive opportunity for the Executive Directors in 2021 will be changed to 150 % of salary, with potential pay-outs of 75.0% of base salary for the achievement of target performance in all three elements. Pay-outs will commence and increase incrementally from 0% once the threshold performance for any of the three elements has been met. The structure of the Annual Incentive will also remain the same as for 2020: 60% of the Executive Directors’ Annual Incentives will therefore be based on Group headline EPS, 20% on the Group's working capital to sales ratio (based on the 12-month moving average) and 20% on the achievement of personal objectives. The Company will not be disclosing the targets set until after the relevant performance period has ended because of commercial sensitivities. The personal objectives for 2021 are focused on long-term strategic objectives, or are job-specific in nature and track performance against the Group's key strategic, organisational and operational goals with a specific focus on ESG outcomes. 33% of any Annual Incentive earned will be deferred into awards over shares, to be held for a period of three years.

Deferred Share Bonus Plan allocations – audited

33% of the Annual Incentives earned by Patrick André and Guy Young in respect of their periods of service as Directors of Vesuvius plc during 2017, 2018 and 2019 were deferred into shares under the Company's Deferred Share Bonus Plan. The following table sets out details of these awards:

Grant and type of award	Total share allocations as at 1 Jan 2020	Additional shares allocated during the year	Allocations lapsed during the year	Shares vested during the year	Total share allocations as at 31 Dec 2020	Market price of the shares on the day before award (p)	Earliest vesting date
Patrick André							
15 March 2018 ¹							
Deferred Bonus Shares	10,128	—	—	—	10,128	605.5	15 Mar 2021
14 March 2019 ²							
Deferred Bonus Shares	29,646	—	—	—	29,646	608	14 Mar 2022
12 March 2020 ³							
Deferred Bonus Shares	—	7,044	—	—	7,044	391.8	12 Mar 2023
Total	39,774	7,044	—	—	46,818		

Guy Young							
15 March 2018 ¹	18,118	—	—	—	18,118	605.5	15 Mar 2021
Deferred Bonus Shares							
14 March 2019 ²	19,028	—	—	—	19,028	608	14 Mar 2022
Deferred Bonus Shares							
12 March 2020 ³	—	5,345	—	—	5,345	391.8	12 Mar 2023
Deferred Bonus Shares							
Total	37,146	5,345	—	—	42,491		

- Notes:
1. In 2018, Patrick André and Guy Young received Annual Incentive bonuses in respect of their service as Directors of Vesuvius plc in 2017 of £185,544 and £331,906 respectively. 33% of each bonus was awarded in deferred shares (conditional awards) under the Vesuvius Deferred Share Bonus Plan. These shares will vest on the third anniversary of their award date.
 2. In 2019, Patrick André and Guy Young received Annual Incentive bonuses in respect of their service as Directors of Vesuvius plc in 2018 of £546,131 and £350,525 respectively. 33% of each bonus was awarded in deferred shares (conditional awards) under the Vesuvius Deferred Share Bonus Plan. The allocations of shares were made on 14 March 2019 and were calculated based upon the average closing mid-market price of Vesuvius' shares on the five dealing days before the award was made, being £6.079. The total value of these awards based on this share price was £180,218 and £115,671 respectively. There are no additional performance conditions applicable to these awards, therefore these shares will vest in full on the third anniversary of their award date.
 3. In 2020, Patrick André and Guy Young were awarded Annual Incentive bonuses in respect of their service as Directors of Vesuvius plc in 2019 of £83,775 and £63,569 respectively. 33% of each bonus was awarded in deferred shares (conditional awards). The allocations of shares were made on 12 March 2020 and were calculated based upon the average closing mid-market price of Vesuvius' shares on the five dealing days before the award was made, being £3.9248. The total value of these awards based on this share price was £27,646 and £20,978 respectively. There are no additional performance conditions applicable to these awards, therefore these shares will vest in full on the third anniversary of their award date.

- Additional note:
4. The mid-market closing price of Vesuvius' shares during 2020 ranged between 302.2 pence and 541 pence per share, and on 31 December 2020, the last dealing day of the year, was 536.5 pence per share.

Annual Report on Directors’ Remuneration continued

Longer-term Pay (LTIPs) – audited

Performance Share awards are allocated to the Executive Directors under the Vesuvius Share Plan (VSP). In accordance with the Remuneration Policy and the rules of the VSP, they are eligible to receive, on an annual basis, a Performance Share award with a face value of up to 200% of salary. Vesting of 50% of shares awarded is based upon the Company’s three-year TSR performance relative to that of the constituent companies of the FTSE 250 (excluding investment trusts), and 50% on headline EPS performance. The level of EPS growth specified in the targets is set by the Remuneration Committee each year, taking into account the Group’s prospects and the broader global economic environment. Considering the 2020 EPS outturn, the Committee have expressed the target range for this award as pence targets (to be assessed in Financial Year 2023) rather than growth targets. The target range is deliberately wider than usual in recognition of the current high level of economic uncertainty. The schedule of EPS targets is designed at the maximum level to be highly challenging, whilst remaining an effective incentive for the management team. The EPS and TSR measures operate independently. The use of these performance measures is intended to align executive remuneration with shareholders’ interests. Prior to the vesting of Performance Shares, the Remuneration Committee reviews the underlying financial performance of the Company and non- financial performance of the Company and individuals over the performance period to ensure that the vesting is justified, and to consider whether to exercise its discretion including consideration of any potential windfall gains. UK executives receive awards in the form of nil-cost options with a flexible exercise date and non-UK executives receive conditional awards which are exercised on the date of vesting. Performance Share awards vest after three years and, commencing with awards made in 2019, are then subject to a further two-year holding period.

Targets for the Performance Share awards for the years 2018, 2019 and 2020 – audited

TSR ranking relative to FTSE 250 excluding investment trusts	Vesting percentage	Annual compound headline EPS growth	Vesting percentage
Below median	0%	Less than 3%	0%
Median	12.50%	3%	12.50%
Between median and upper quintile	Pro rata between 12.50% and 50%	Between 3% and 6%	Pro rata between 12.50% and 25%
Upper quintile and above	50%	6%	25%
		Between 6% and 15%	Pro rata between 25% and 50%
		15% or more	50%

Targets for the Performance Share awards for the year 2021 – unaudited

TSR ranking relative to FTSE 250 excluding investment trusts	Vesting percentage	Headline EPS as at FY2023	Vesting percentage
Below median	0%	Less than 35p	0%
Median	12.50%	35p	12.50%
Between median and upper quintile	Pro rata between 12.50% and 50%	Between 35p and 47.5p	Pro rata between 12.50% and 25%
Upper quintile and above	50%	47.5p	25%
		Between 47.5p and 60p	Pro rata between 25% and 50%
		60p or more	50%

2020 Entitlement

In 2020, Patrick André and Guy Young were entitled to receive allocations of Performance Shares worth 200% and 150% of their base salaries, respectively. As outlined in last year’s Remuneration Report, because of share price volatility as a result of the growing COVID-19 pandemic, the share price used to determine the number of allocated shares was capped at £4.371 (the average in the five dealing days prior to the February Remuneration Committee meeting) rather than £3.9248 (the average in the five dealing days prior to grant). Accordingly, the actual value of these awards at the date of grant was reduced to 180% and 135% of base salary for Patrick André and Guy Young respectively.

2021 Entitlement

The Remuneration Committee has determined that Patrick André will again receive a Performance Share award in 2021 equivalent in value to 200% of his base salary and Guy Young an award equivalent in value to 150% of his base salary. The Committee considered the risk of windfall gains in making the award for 2021 but concluded, due to the stability of the share price, this was not a risk at this time.

2018 Performance Share Award (vesting in 2021)

The performance period applicable to the awards made in 2018 ended on 31 December 2020. These awards lapsed as the threshold performance level was not met for either the TSR or EPS performance conditions. (TSR:below median at -14.5%/ EPS:below threshold at-16%)

Vesuvius Performance Share award allocations – audited

The following table sets out the Performance Share awards that were allocated in 2017, 2018, 2019 and 2020 under the VSP:

Grant and type of award	Total share allocations as at 1 Jan 2020	Additional shares allocated during the year	Allocations lapsed during the year	Shares vested during the year	Total share allocations as at 31 Dec 2020	Market price of the shares on the day before award (p)	Performance period	Earliest vesting date	End of holding period ¹
Patrick André									
16 March 2017²							1 Jan 17 – 31 Dec 19		
Performance Shares	60,413	—	(22,570)	(37,843)	—	524.5		16 Mar 2020	n/a
1 September 2017²							1 Jan 17 – 31 Dec 19		
Performance Shares	42,257	—	(15,787)	(26,470)	—	578		1 Sep 2020	n/a
15 March 2018³							1 Jan 18 – 31 Dec 20		
Performance Shares	173,697	—	—	—	173,697	605.5		15 Mar 2021	n/a
14 March 2019⁴							1 Jan 19 – 31 Dec 21		
Performance Shares	197,400	—	—	—	197,400	608		14 Mar 2022	14 Mar 2024
12 March 2020⁵							1 Jan 20 – 31 Dec 22		
Performance Shares	—	282,772	—	—	282,772	391.8		12 Mar 2023	12 Mar 2025
Total	473,767	282,772	(38,357)	(64,313)	653,869				
Guy Young									
16 March 2017²							1 Jan 17 – 31 Dec 19		
Performance Shares	93,355	—	(34,877)	(58,478)	—	524.5		16 Mar 2020	n/a
15 March 2018³							1 Jan 18 – 31 Dec 20		
Performance Shares	86,848	—	—	—	86,848	605.5		15 Mar 2021	n/a
14 March 2019⁴							1 Jan 19 – 31 Dec 21		
Performance Shares	86,362	—	—	—	86,362	608		14 Mar 2022	14 Mar 2024
12 March 2020⁵							1 Jan 20 – 31 Dec 22		
Performance Shares	—	132,120	—	—	132,120	391.8		12 Mar 2023	12 Mar 2025
Total	266,565	132,120	(34,877)	(58,478)	305,330				

Notes:

1. Performance shares granted from 2019 onwards are subject to a further two-year holding period.
2. In 2017, Patrick André and Guy Young received an allocation of Performance Shares worth 200% of base salary (prorated) and 150% of base salary respectively. As outlined in last year’s Remuneration Report, 62.64% of the shares vested during 2020. In addition, the Remuneration Committee determined that Messrs André and Young were entitled to receive 8,558 and 9,241 additional shares respectively, equivalent in value to the dividends that would have been paid on the number of vested shares in respect of dividend record dates occurring during the period between the award date and the date of vesting.
3. In 2018, Patrick André and Guy Young received allocations of Performance Shares worth 200% and 150% of their base salaries. These allocations were calculated based upon the average closing mid-market price of Vesuvius’ shares on the five dealing days before the award was made, being £6.045. The total value of these awards based on this share price on the date of grant was £1,049,998 and £524,996 respectively. Following an assessment of the performance conditions, these awards will lapse in full during 2021.
4. In 2019, Patrick André and Guy Young received allocations of Performance Shares worth 200% and 150% of their base salaries. These allocations were calculated based upon the average closing mid-market price of Vesuvius’ shares on the five dealing days before the award was made, being £6.079. The total value of these awards based on this share price was £1,199,994 and £524,994 respectively.
5. In 2020, Patrick André and Guy Young were entitled to receive allocations of Performance Shares worth 200% and 150% of their base salaries respectively. In light of the volatile share price, the Committee applied its discretion so that the number of shares in these allocations were capped at a level based upon the average closing mid-market price of Vesuvius’ shares on the five dealing days before the February 2020 Remuneration Committee meeting of £4.371. As a result, Patrick André received an award of 282,772 shares which, at grant, was equivalent in value to 180% of his base salary (£1,109,823*) and Guy Young received an award of 132,120 shares which, at grant, was equivalent in value to 135% of his base salary (£518,544*).

* Grant values are based on the average closing mid-market price of Vesuvius’ shares on the five dealing days prior to grant (£3.9248).

Additional notes:

6. If the respective performance conditions for Patrick André’s and Guy Young’s awards are not met, then the awards will lapse. If the threshold level of either of the two performance conditions applicable to the awards is met, then 12.50% of the awards will vest.
7. The Remuneration Committee also has the discretion to award cash or shares equivalent in value to the dividend that would have been paid during the vesting period on the number of shares that vest.
8. The mid-market closing prices of Vesuvius’ shares during 2020 ranged between 302.2 pence and 541 pence per share, and on 31 December 2020, the last dealing day of the year, was 536.5 pence per share.

Annual Report on Directors’ Remuneration continued

Malus/clawback arrangements in 2021

Vesuvius has malus and clawback arrangements in respect of Executive Directors’ variable remuneration. The structure of those arrangements is outlined in our Remuneration Policy.

Statement of Directors’ shareholding – audited

The interests of Directors and their closely associated persons in ordinary shares as at 31 December 2020, including any interests in share options and shares provisionally awarded under the VSP, are set out below:

	Beneficial holding in shares	Outstanding share incentive awards	
		With performance conditions ¹	Without performance conditions ²
Executive Directors			
Patrick André	101,032	653,869	46,818
Guy Young	120,658	305,330	42,491
Non-executive Directors			
John McDonough CBE (Chairman)	120,000	—	—
Kath Durrant	—	—	—
Friederike Helfer ³	—	—	—
Hock Goh	5,000	—	—
Jane Hinkley	12,000	—	—
Douglas Hurt	18,000	—	—
Holly Koepfel	27,500	—	—

- Notes:**
- 1. These are Performance Shares granted under the VSP. The awards were all granted subject to performance conditions.
 - 2. These are awards granted under the Deferred Share Bonus Plan. These awards are not subject to any additional performance conditions.
 - 3. Friederike Helfer is a Partner of, and has a financial interest in, Cevian Capital which held 21.11% of Vesuvius’ issued share capital as at 31 December 2020 and at the date of this report.
- Additional notes:**
- 4. None of the other Directors, nor their spouses, nor their minor children, held non-beneficial interests in the ordinary shares of the Company during the year.
 - 5. There were no changes in the interests of the Directors in the ordinary shares of the Company in the period from 1 January 2021 to the date of this Report.
 - 6. All awards under the VSP are subject to performance conditions and continued employment until the relevant vesting date as set out on page 138.
 - 7. Full details of Directors’ shareholdings and incentive awards are given in the Company’s Register of Directors’ Interests, which is open to inspection at the Company’s registered office during normal business hours.

Payments to past Directors and loss of office payments – audited

There were no payments made to any Director for loss of office during the year ended 31 December 2020, and no payments were made to any other past Directors of the Company during the year ended 31 December 2020.

Shareholding guidelines

The Remuneration Committee encourages Executive Directors to build and hold a shareholding in the Company. Under the 2020 Remuneration Policy, the required holding is 200% of salary for all Executive Directors. Executive Directors are required to retain at least 50% (measured as the value after tax) of any shares received through the operation of share schemes; in addition, permission to sell shares held – whether acquired through the operation of share schemes or otherwise – will not be given, other than in exceptional circumstances, if, following the disposal, the shareholding requirement is not achieved or is not maintained.

Compliance with the shareholding policy is tested at the end of each year for application in the following year. Under the 2020 Remuneration Policy, the valuation of any holding is taken at the higher of: (1) the share price on the date of vesting of any shares derived from a share award, in respect of those shares only; and (2) the average of the closing prices of a Vesuvius ordinary share for the trading days in that December.

Executive Directors’ shareholdings – audited

As at 31 December 2020, the Executive Directors’ shareholdings against the shareholding guidelines contained in the Directors’ Remuneration Policy in force on that date (using the Company’s share price averaged over the trading days of the period 1 December to 31 December 2020, of 512.6 pence per share) were as follows:

Director	Actual share ownership as a percentage of salary at 31 Dec 2020	Policy share ownership as a percentage of salary	Policy met?
Patrick André	84%	200%	In the build-up period
Guy Young	161%	200%	In the build-up period

Annual changes in Executive Directors pay versus employee pay

Executive Directors pay comparison

The London headquartered salaried employee workforce are presented as a voluntary disclosure of the representative comparator group for the Vesuvius Group parent company as there are only two non-director employees in the parent company.

	Average employee¹	Executive Directors²		Non-Executive Directors³						
		Patrick André	Guy Young	John McDonough CBE	Kath Durrant⁴	Friederike Helfer⁵	Hock Goh	Jane Hinkley	Douglas Hurt	Holly Koepfel
2020										
Salary	(0%)	(7%)	(1%)	(10%)	n/a	(10%)	(10%)	(10%)	(10%)	(10%)
Bonus	165%	183%	155%	—	—	—	—	—	—	—
Benefits	18%	(25%)	(14%)	(46%)	n/a	(60%)	(60%)	(60%)	(63%)	(100%)

- Notes:**
- 1. This is the average change calculated by dividing the staff cost related to salaries, median bonus and benefits by the average number of full-time equivalent employees in the Vesuvius headquarters in London, excluding the Executive Directors. Salaries, bonus and benefits relate to the relevant financial reporting year. The financial performance in 2019 resulted in a pay-out on only the personal performance element of Executive Directors and the workforce bonus plans, whereas the financial performance in 2020 resulted in a partial pay-out on financial performance alongside the personal performance for Executive Directors and the workforce.
 - 2. Calculated using data from the single figure table in the annual report.
 - 3. Calculated using data from the audited Directors Emoluments.
 - 4. Kath Durrant joined on 1 December 2020.
 - 5. Friederike Helfer’s comparison shown against a notional 2019 full year equivalent.
- Additional notes:**
- 6. No taxable benefits in 2019.
 - 7. The Non-executive Directors’ fees were reviewed and increased in 2015 and 2019.

CEO pay ratio

The UK salaried employee workforce are the representative comparator group to the Chief Executive, Patrick André, who is based in the UK (albeit with a global role and responsibilities) and levels of pay vary widely across the Group depending on geography and local market conditions.

	Year	Method	25th percentile pay ratio	50th percentile (median) pay ratio	75th percentile pay ratio
Total remuneration (£)	2019	Option A	35:1 (37,119)	28:1 (45,000)	17:1 (75,293)
Salary (£)	2019	Option A	22:1 (27,338)	15:1 (39,890)	9:1 (66,784)
Total remuneration (£)	2020	Option A	32:1 (34,661)	24:1 (45,574)	13:1 (85,888)
Salary (£)	2020	Option A	19:1 (29,609)	13:1 (43,715)	8:1 (73,939)

The table above shows the Chief Executive pay ratios versus our UK employees for 2020. The pay ratios compare amounts disclosed in the single total figure table for the Group Chief Executive to the annual full-time equivalent remuneration of our UK employees for 2020. The data has been calculated in accordance with ‘Option’ A in The Companies (Miscellaneous Reporting) Regulations 2018, because it allows the Company to show the total annualised full-time equivalent remuneration (salary, incentives, allowances, fees, taxable benefits) and percentiles across the financial year as at 31 December 2020.

Amounts have been annualised for those who joined part way through the year or who are on part-time arrangements and exclude those who left the organisation during the reporting period.

The approach to calculating the pay ratios is consistent with the prior year and there have not been any changes to the compensation models in the reporting period.

Annual Report on Directors’ Remuneration continued

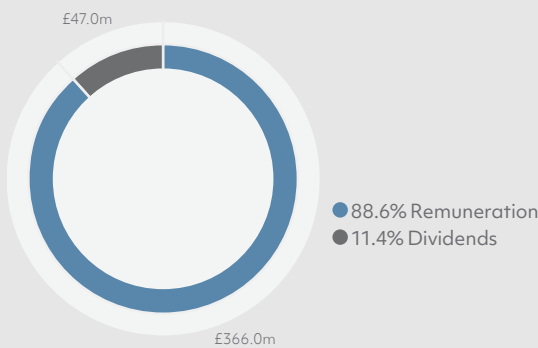
The reduction in pay ratios compared with last year can be attributed to a number of factors, including the CEO’s voluntary waiver of salary and employer pension contributions and the lapsing of the CEO’s long term incentive payable in the reporting period.

The Committee is comfortable that the principles applied and the quantum of compensation are appropriate across the Group’s employee base. These are regularly benchmarked to ensure market competitiveness. There is a consistent approach of measuring against both business and personal performance for all those who participate in incentive programmes. The Group continues to monitor the effectiveness of all compensation practices to identify future opportunities to ensure they remain fair, consistent and in line with best practice.

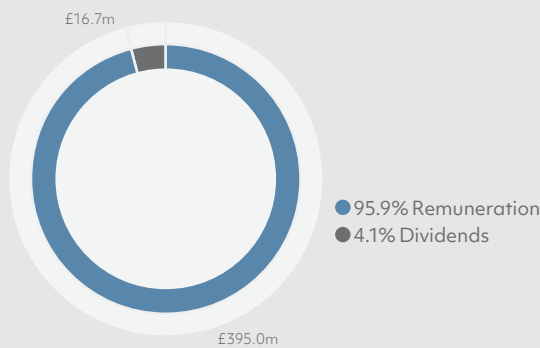
Annual spend on employee pay¹ versus shareholders’ distributions²

The charts below show the annual spend on all employees (including Executive Directors) compared with distributions made and proposed to be made to shareholders for 2019 and 2020:

Relative importance of spend on pay (2020) £m



Relative importance of spend on pay (2019) £m



	2020 (£m)	2019 (£m)	Change
Employee pay ¹	366.0	395.0	(7.3)%
Dividends ² (based on final proposed dividend)	47.0	16.7	281.4%

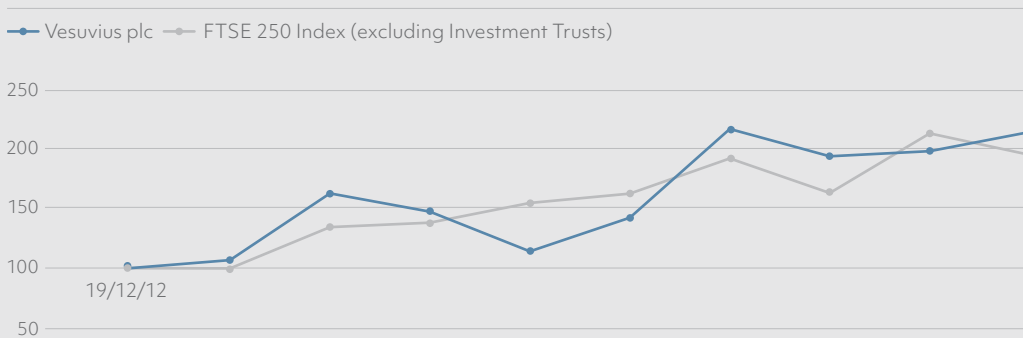
Notes:

1. Employee pay includes wages and salaries, social security, share-based payments and pension costs, and other post-retirement benefits. See Note 8 to the Group Financial Statements.
2. Shareholder distributions/dividends includes interim and final dividends paid in respect of each financial year. See Note 24 of the Group Financial Statements.

TSR performance and Chief Executive pay

The TSR performance graph compares Vesuvius TSR performance with that of the same investment in the FTSE 250 Index (excluding investment trusts). This index has been chosen as the comparator index to reflect the size, international scope and diversity of the Company. TSR is the measure of the returns that a company has provided for its shareholders, reflecting share price movements and assuming reinvestment of dividends. The demerger of Vesuvius plc was effective on 19 December 2012 and therefore the graph shows the period from 19 December 2012 to 31 December 2020.

Vesuvius’ total shareholder return compared against total shareholder return of the FTSE 250 index (excluding investment trusts) since demerger



Chief Executive pay – financial year ended

	François Wanecq ¹					Patrick André ²			
	31/12/12	31/12/13	31/12/14	31/12/15	31/12/16	31/12/17	31/12/18	31/12/19	31/12/20
Total remuneration (single figure (£000))	£1,227	£2,447	£1,519	£752	£1,173	£1,675 ¹	£2,022	£1,220	£936
Annual variable pay (% of maximum)	0%	100%	64%	0%	50%	81% ¹	83%	11%	20%
Long-term variable pay (% of maximum)	67%	28%	27%	0%	0%	43.7% ¹	100%	62.6%	0%

Notes:

1. Amounts shown in respect of François for 2017 reflect payments in respect of his service as Chief Executive from 1 January 2017 to 31 August 2017 and the full value of his VSP award in relation to the performance period 2015–2017.
2. Amounts shown in respect of Patrick André for 2017 reflect payments in respect of his service as Chief Executive from 1 September 2017 to 31 December 2017.

Shareholder voting on remuneration resolutions

	Votes for	Votes against	Votes withheld
Approval of the Directors’ Remuneration Policy 2020 AGM	244,618,671 (97.2%)	7,105,663 (2.8%)	3,640
Approval of the Annual Report on Remuneration 2020 AGM	244,015,719 (96.9%)	7,708,484 (3.1%)	3,771

The Directors’ Remuneration Report has been approved by the Board and is signed on its behalf by

Jane Hinkley
Chairman, Remuneration Committee

3 March 2021

Directors’ Report

Directors’ Report

The Directors submit their Annual Report together with the audited financial statements of the Group and of the Company, Vesuvius plc, registered in England and Wales No. 8217766, for the year ended 31 December 2020.

The Companies Act 2006 requires the Company to provide a Directors’ Report for Vesuvius plc for the year ended 31 December 2020.

Information incorporated by reference

The information that fulfils this requirement and which is incorporated by reference into, and forms part of, this report is included in the following sections of the Annual Report:

- > The Section 172(1) statement
- > The Non-financial information statement
- > The Governance section, including the Corporate Governance Statement
- > Financial instruments: the information on financial risk management objectives and policies contained in Note 25 to the Group Financial Statements

This Directors’ Report and the Strategic Report contained on pages 1 to 88 together represent the management report for the purpose of compliance with DTR 4.1.8R of the Financial Conduct Authority’s Disclosure and Transparency Rules.

Going concern	Information on the business environment in which the Group operates, including the factors that are likely to impact the future prospects of the Group, is included in the Strategic Report. The principal risks and uncertainties that the Group faces throughout its global operations are shown on pages 36 and 37. The financial position of the Group, its cash flows, liquidity position and debt facilities are also described in the Strategic Report. In addition, the Group’s Viability Statement is set out within the Strategic Report on page 34. Note 25 to the Group Financial Statements sets out the Group’s objectives, policies and processes for managing its capital; financial risks; financial instruments and hedging activities; and its exposures to credit, market (both currency and interest rate related) and liquidity risk. Further details of the Group’s cash balances and borrowings are included in Notes 13, 14 and 25 to the Group Financial Statements. The Directors have prepared profit and loss, balance sheet and cash flow forecasts for the Group for a period in excess of 12 months from the date of approval of the 2020 financial statements. On the basis of the exercise described above, the Directors have prepared a Going Concern Statement which can be found on pages 34 and 35.
Events since the balance sheet	Since 31 December 2020, there have been no material items to report.
Future developments	A full description of the activities of the Group, including performance, significant events affecting the Group in the year and indicative information in respect of the likely future developments in the Group’s business, can be found in the Strategic Report.
Financial instruments	Information on Vesuvius’ financial risk management objectives and policies can be found in Note 25 to the Group Financial Statements.
Research and development	The Group’s investment in research and development (R&D) during the year under review amounted to £27.9m (representing approximately 1.9% (2019: 1.7%) of Group revenue). Further details of the Group’s R&D activities can be found in the Operating Reviews and Sustainability section of the Strategic Report.
Political and charitable donations	In accordance with Vesuvius policy, the Group did not make any political donations or incur any political expenditure in the UK or the EU during 2020 (2019: nil). The Company made no charitable donations of more than £2,000 in the UK in 2020.
Energy consumption and efficiency/greenhouse gas emissions	Information on our reporting of greenhouse gas emissions, and the methodology used to record these, is set out on page 69 of the Strategic Report. Details of the Group’s energy usage for 2020, and the efficiency initiatives currently being undertaken, can be found in the Sustainability section on pages 68-73.
Branches	A number of the Group’s subsidiary undertakings maintain branches; further details of these can be found in Note 33.1 to the Group Financial Statements.
Dividends	In light of the rapidly deteriorating business environment, in April 2020 the Board withdrew its recommendation to pay the final dividend of 14.30 pence per share announced with the publication of the full year 2019 results. An interim dividend of 3.10 pence (2019: 6.20 pence) per Vesuvius ordinary share was paid on 4 December 2020 to Vesuvius shareholders. The Board is recommending a final dividend in respect of 2020 of 14.30 pence (2019: no dividend paid) per ordinary share which, if approved, will be paid on 21 May 2021 to shareholders on the register at 16 April 2021.

Accountability and audit	A responsibility statement of the Directors and a statement by the auditor about its reporting responsibilities can be found on pages 149, and 150-157, respectively. The Directors fulfil the responsibilities set out in their statement within the context of an overall control environment of central strategic direction and delegated operating responsibility. As at the date of this report, so far as each Director of the Company is aware, there is no relevant audit information of which the Company’s auditor is unaware and each Director hereby confirms that they have 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.
Auditors’ reappointment	PricewaterhouseCoopers LLP (PwC) was reappointed as External Auditor for Vesuvius plc for the year ended 31 December 2020, at the 2020 AGM. PwC has been Vesuvius’ external Auditor since 2017 and has expressed its willingness to continue in office as Auditor of the Company for the year ending 31 December 2021. Consequently, resolutions for the reappointment of PwC as auditor of the Company and to authorise the Directors to determine their remuneration are to be proposed at the 2021 AGM.
Directors	The current Directors of the Company are Patrick André, Kath Durrant, Hock Goh, Friederike Helfer, Jane Hinkley, Douglas Hurt, Holly Koeppel, John McDonough CBE and Guy Young. Kath Durrant was appointed to the Board on 1 December 2020. All the Directors will retire at the 2021 AGM and offer themselves for election or re-election at the AGM, other than Hock Goh and Holly Koeppel who intend to retire from the Board at the close of the 2021 AGM. Biographical information for the Directors is given on pages 92 and 93. Further information on the remuneration of, and contractual arrangements for, the Executive and Non-executive Directors is given on pages 131-143 in the Directors’ Remuneration Report. The Non-executive Directors do not have service agreements.
Directors’ indemnities	The Directors have been granted qualifying third-party indemnity provisions by the Company and the Directors of the Group’s UK Pension Plans Trustee Board (none of whom is a Director of Vesuvius plc) have been granted qualifying pension scheme indemnity provisions by Vesuvius Pension Plans Trustees Ltd. The indemnities for Directors of Vesuvius plc have been in force since the date of their appointment. The Pension Trustee indemnities were in force throughout the last financial year and remain in force.
Annual General Meeting	The Annual General Meeting of the Company will be held at the Company’s head office, 165 Fleet Street, London EC4A 2AE on Wednesday 12 May 2021 at 11.00 am. The meeting will be conducted in line with the UK Government guidelines in force at that time with respect to travel and gatherings. The Company will announce any changes to arrangements for the AGM as required.
Amendments of Articles of Association	The Company may make amendments to the Articles by way of special resolution in accordance with the Companies Act. It is proposed to adopt amended Articles at the 2021 AGM, primarily to update the current Articles to reflect changes in the law and developments in market practice and technology since the current Articles were adopted in November 2012.
Share capital	As at the date of this report, the Company had an issued share capital of 278,485,071 ordinary shares of 10 pence each; 7,271,174 of these ordinary shares are held in Treasury. Therefore, the total number of Vesuvius plc shares with voting rights is 271,213,897. Further information relating to the Company’s issued share capital can be found in Note 9 to the Company Financial Statements. The Company’s Articles specify that, subject to the authorisation of an appropriate resolution passed at a General Meeting of the Company, Directors can allot relevant securities under Section 551 of the Companies Act up to the aggregate nominal amount specified by the relevant resolution. In addition, the Articles state that the Directors can seek the authority of shareholders in a General Meeting to allot equity securities for cash, without first being required to offer such shares to existing ordinary shareholders in proportion to their existing holdings under Section 561 of the Companies Act, in connection with a rights issue and in other circumstances up to the aggregate nominal amount specified by the relevant resolution. At the AGM on 13 May 2020, the Directors were authorised to issue relevant securities up to an aggregate nominal amount of £9,040,463, and, in connection with a rights issue, to issue relevant securities up to a further nominal value of £9,040,463. In addition, the Directors were empowered to allot equity securities, or sell Treasury Shares, for cash on a non pre-emptive basis up to an aggregate nominal amount of £1,356,069, and for the purposes of financing (or refinancing, if the authority is to be used within six months after the original transaction) a transaction which the Board of the Company determines to be an acquisition or other capital investment, to allot equity securities, or sell Treasury Shares, for cash on a non pre-emptive basis up to an additional nominal amount of £1,356,069. Each of the authorities given in these resolutions expires on 30 June 2021 or the date of the AGM to be held in 2021, whichever is the earlier. The resolutions were all tabled in accordance with the terms of the Pre-Emption Group’s Statement of Principles. The Directors propose to renew these authorities at the 2021 AGM for a further year. In the year ahead, other than potentially in respect of Vesuvius’ ability to satisfy rights granted to employees under its various share-based incentive arrangements, the Directors have no present intention of issuing any share capital of Vesuvius plc.

Directors’ Report continued

Authority for purchase of own shares	<p>Subject to the provisions of company law and any other applicable regulations, the Company may purchase its own shares. At the AGM on 13 May 2020, Vesuvius shareholders gave authority to the Company to make market purchases of up to 27,121,389 Vesuvius ordinary shares, representing 10% of the Company's issued ordinary share capital as at the latest practicable day prior to the publication of the Notice of AGM. This authority expires on 30 June 2021 or the date of the AGM to be held in 2021, whichever is the earlier. The Directors will seek renewal of this authority at the 2021 AGM.</p> <p>In 2013, the Company acquired 7,271,174 ordinary shares, representing a nominal value of £727,117 and 2.6% of the entire called-up share capital of the Company prior to the purchase. These shares were purchased pursuant to the Board's commitment to return the majority of the net proceeds of the disposal of the Precious Metals Processing division to shareholders. These shares are currently held as Treasury shares. The Company has not subsequently disposed of any of the repurchased shares. During the year, the Company did not make any further acquisitions of shares nor did it dispose of any shares previously acquired. The Company does not have a lien over any of its shares.</p>															
Share plans	<p>Vesuvius operates a number of share-based incentive plans. Under these plans, the Group can satisfy entitlements by the acquisition of existing shares, the transfer of Treasury shares or by the issue of new shares. Existing shares are held in an employee share ownership plan trust (ESOP). The Trustee of the ESOP purchases shares in the open market as required to enable the Group to meet liabilities for the issue of shares to satisfy awards that vest. The Trustee does not register votes in respect of these shares at the Company's Annual General Meetings and has waived the right to receive any dividends.</p> <p>At 31 December 2019, the ESOP held 1,718,615 ordinary shares in the Company. During the year, the ESOP sold/transferred 625,517 shares to satisfy the vesting of awards under the Company's share-based incentive plans. As at 31 December 2020, the ESOP held 1,093,098 ordinary shares. The trustee of the ESOP did not purchase any additional shares during the year.</p>															
Restrictions on transfer of shares and voting	<p>The Company's Articles do not contain any specific restrictions on the size of a holding or on the transfer of shares. The Directors are not aware of any agreements between holders of the Company's shares that may result in restrictions on the transfer of securities or voting rights.</p> <p>No person has any special rights with regard to the control of the Company's share capital and all issued shares are fully paid. This is a summary only and the relevant provisions of the Articles should be consulted if further information is required.</p>															
Change of control provisions	<p>The terms of the Group's committed bank facility and US Private Placement Loan Notes contain provisions entitling the counterparties to exercise termination or other rights in the event of a change of control on takeover of the Company. A number of the arrangements to which the Company and its subsidiaries are party, such as other debt arrangements and share incentive plans, may also alter or terminate on a change of control in the event of a takeover. In the context of the Group as a whole, these other arrangements are not considered to be significant.</p>															
Interests in the Company's shares	<p>The Company has been notified in accordance with DTR 5 of the Disclosure and Transparency Rules of the following interests of 3%, or more, of its issued ordinary shares:</p> <table><tr><th></th><th>As at 31 Dec 2020</th><th>As at 3 Mar 2021</th></tr><tr><td>Cevian Capital</td><td>21.11%</td><td>21.11%</td></tr><tr><td>Standard Life Aberdeen</td><td>10.96%</td><td>10.96%</td></tr><tr><td>Aberforth Partners</td><td>4.93%</td><td>4.93%</td></tr><tr><td>Phoenix Asset Management</td><td>4.05%</td><td>4.00%</td></tr></table> <p>The interests of Directors and their connected persons in the ordinary shares of the Company as disclosed in accordance with the Listing Rules of the Financial Conduct Authority are as set out on page 140 of the Directors' Remuneration Report and details of the Directors' Deferred Share Bonus Plan and Long-Term Incentive awards are set out on pages 137 and 139.</p>		As at 31 Dec 2020	As at 3 Mar 2021	Cevian Capital	21.11%	21.11%	Standard Life Aberdeen	10.96%	10.96%	Aberforth Partners	4.93%	4.93%	Phoenix Asset Management	4.05%	4.00%
	As at 31 Dec 2020	As at 3 Mar 2021														
Cevian Capital	21.11%	21.11%														
Standard Life Aberdeen	10.96%	10.96%														
Aberforth Partners	4.93%	4.93%														
Phoenix Asset Management	4.05%	4.00%														

Suppliers, customers and others	<p>Information summarising how the Directors have regard to the need to foster the Company’s business relationships with suppliers, customers and others is included in the Group’s Section 172(1) Statement on pages 22-27. This also details how that regard impacted the principal decisions taken by the Directors during the year.</p> <p>Our approach to business places a significant number of Vesuvius Steel employees at customer sites on a permanent basis. In the Foundry Division, our success is built on our deep understanding of customer processes and technical requirements, and our ability to assist them in delivering the greatest efficiency from their operations.</p> <p>During the year, our supplier audit programme covered the operations of 95 suppliers. This approach allows Vesuvius to gain a deep understanding of our suppliers’ operations to ensure sustainability and quality of supply.</p> <p>Vesuvius agrees payment terms with its suppliers and seeks to pay in accordance with those terms.</p>
Equal opportunities employment	<p>Vesuvius is an equal opportunities employer, and decisions on recruitment, development, training and promotion, and other employment-related issues are made solely on the grounds of individual ability, achievement, expertise and conduct. These principles are operated on a non-discriminatory basis, without regard to race, colour, nationality, culture, ethnic origin, religion, belief, gender, sexual orientation, age, disability or any other reason not related to job performance or prohibited by applicable law. In cases where employees are injured or disabled during employment with the Group, support, including appropriate training, is provided to those employees and workplace adjustments are made as appropriate in respect of their duties and working environment, supporting recovery and continued employment.</p>
Employee engagement	<p>Information on the mechanisms through which Vesuvius engages with its workforce is included in the Section 172(1) Statement on pages 22-29.</p>
Pensions	<p>In each country in which the Group operates, the pension arrangements in place are considered to be consistent with good employment practice in that particular area. Independent advisers are used to ensure that the plans are operated in accordance with local legislation and the rules of each plan. Group policy prohibits direct investment of pension fund assets in the shares of Vesuvius plc. Outside the UK, the US, Germany and Belgium, the majority of pension plans in the Group are of a defined contribution nature.</p> <p>In 2016, the main German defined benefit plan was closed for new entrants and existing members were offered a buy-out of their benefits under this plan. Those who accepted this buy-out then joined the new defined contribution plan. The Group’s UK defined benefits plan (the ‘UK Plan’) and the main US defined benefits plans are closed to new entrants and have ceased providing future benefits accrual, with all eligible employees instead being provided with benefits through defined contribution arrangements.</p> <p>For the Group’s closed UK Plan, a Trustee Board exists comprising employees, former employees and an independent trustee. The Board currently comprises six trustee Directors, of whom two are member-nominated. The administration of the UK Plan is outsourced. The Company is mindful of its obligations under the Pensions Act 2004 and of the need to comply with the guidance issued by the Pensions Regulator. Regular dialogue is maintained between the Company and the Trustee Board of the UK Plan to ensure that both the Company and Trustee Board are apprised of the same financial and other information about the Group and the UK Plan. This is pertinent to each being able to contribute to the effective functioning of the UK Plan.</p> <p>Vesuvius continues to seek ways to de-risk its existing pension plans through a combination of asset matching, buy-in opportunities and, where prudent, voluntary cash contributions.</p> <p>The total gross defined benefit obligations at 31 December 2020 were £610.0m funded (2019: £590.5m funded) and £88.3m unfunded (2019: £79.3m unfunded). After asset funding there was a net deficit of £2.1m (2019: £8.5m) representing an improvement of £6.4m. The improvement is driven by £9.0m from cash contributions and payments of unfunded benefits and £7.7m from changes to actuarial assumptions (attributable to lower discount rates; updated mortality assumptions and pension membership data). These were offset by additional accrual and administrative expenditure paid for the year of £7.4m and £2.9m from foreign exchange movements.</p> <p>The majority of the ongoing pension plans are defined contribution plans, where our only obligation is to make contributions, with no further commitments on the level of post-retirement benefits. During 2020, cash contributions of £9.7m (2019: £11.3m) were made into the defined contribution plans and charged to trading profit.</p>

Directors’ Report continued

Listing Rule 9.8.4C R Disclosures	The following disclosures are made in compliance with the Financial Conduct Authority’s Listing Rule 9.8.4C R:	
	Disclosure requirements under LR 9.8.4R	Reference/Location
	(1) Interest capitalised by the Group during the year	None
	(2) Publication of unaudited financial information	Not applicable
	(3) Details of any Long-Term Incentive schemes	Pages 124 and 125
	(4) Director waiver of emoluments	The Directors responded to the COVID-19 crisis by sacrificing 20% of their salary and fees for six months during 2020. For further details please see page 120
	(5) Director waiver of future emoluments	Not applicable
	(6) Allotment for cash of equity securities made during the year	Not applicable
	(7) Allotment for cash of equity securities made by a major unlisted subsidiary during the year	Not applicable
	(8) Details of participation of parent undertaking in any placing made during the year	Not applicable
	(9) Details of relevant material contracts in which a Director or controlling shareholder was interested during the year	Not applicable
	(10) Contracts for the provision of services by a controlling shareholder during the year	Not applicable
	(11) Details of any arrangement under which a shareholder has waived or agreed to waive any dividends	Vesuvius plc holds 7,271,174 of its 10 pence ordinary shares as Treasury shares. No dividends are payable on these shares. The Trustee of the Company’s ESOP, has agreed to waive, on an ongoing basis, any dividends payable on shares it holds in trust for use under the Company’s Employee Share Plans, details of which can be found on pages 133, 137, 138, 139 and 146
	(12) Details of where a shareholder has agreed to waive future dividends	See above
	(13) Statements relating to controlling shareholders and ensuring company independence	Not applicable

The Directors’ Report has been approved by the Board and is signed, by order of the Board, by the Secretary of the Company.

Henry Knowles
Company Secretary

3 March 2021

Statement of Directors’ Responsibilities in respect of the Annual Report and Financial Statements

The Directors are responsible for preparing the Annual Report and Financial Statements in accordance with applicable law and regulation.

Company law requires the Directors to prepare financial statements for each financial year. Under that law the Directors have prepared the Group financial statements in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006. Additionally, the Financial Conduct Authority’s Disclosure Guidance and Transparency Rules require the Directors to prepare the group financial statements in accordance with international financial reporting standards adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union. The company financial statements have been prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 “Reduced Disclosure Framework”, and applicable law).

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 Company and of the profit or loss of the Group and Company for that period. In preparing the financial statements, the Directors are required to:

- > Select suitable accounting policies and then apply them consistently
- > State whether for the Group, international accounting standards in conformity with the requirements of the Companies Act 2006 and international financial reporting standards adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union have been followed for the Group financial statements and for the Company, United Kingdom Accounting Standards, comprising FRS 101 have been followed for the company financial statements, subject to any material departures disclosed and explained in the financial statements
- > Make judgements and accounting estimates that are reasonable and prudent
- > Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group and Company will continue in business

The Directors are also responsible for safeguarding the assets of the Group and Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group’s and Company’s transactions and disclose with reasonable accuracy at any time the financial position of the Group and Company and enable them to ensure that the financial statements and the Directors’ Remuneration Report comply with the Companies Act 2006 and, as regards the Group Financial Statements, Article 4 of the IAS Regulation.

The Directors are responsible for the maintenance and integrity of the Company’s website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Directors’ confirmations

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

Each of the Directors, whose names and functions are listed below, confirm that, to the best of their knowledge:

- > The Company Financial Statements, which have been prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 Reduced Disclosure Framework, and applicable law), give a true and fair view of the assets, liabilities, financial position and loss of the Company
- > The Group Financial Statements, which have been prepared in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006 and international financial reporting standards adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union, give a true and fair view of the assets, liabilities, financial position and profit of the Group
- > The Strategic Report includes a fair review of the development and performance of the business and the position of the Group and Company, together with a description of the principal risks and uncertainties that the Group faces

The names and functions of the Directors of Vesuvius plc are as follows:

John McDonough CBE	Chairman
Patrick André	Chief Executive
Guy Young	Chief Financial Officer
Kath Durrant	Non-executive Director
Hock Goh	Non-executive Director
Friederike Helfer	Non-executive Director
Jane Hinkley	Non-executive Director and Chairman of the Remuneration Committee
Douglas Hurt	Non-executive Director, Senior Independent Director and Chairman of the Audit Committee
Holly Koeppel	Non-executive Director

On behalf of the Board

Guy Young
Chief Financial Officer

3 March 2021

Independent auditors’ report to the members of Vesuvius plc

Report on the audit of the financial statements

Opinion

In our opinion:

- > Vesuvius plc’s Group financial statements and Company financial statements (the “financial statements”) give a true and fair view of the state of the Group’s and of the Company’s affairs as at 31 December 2020 and of the Group’s profit and the Group’s cash flows for the year then ended;
- > the Group financial statements have been properly prepared in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006;
- > the Company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 “Reduced Disclosure Framework”, and applicable law); and
- > the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements, included within the Annual Report and Financial Statements (the “Annual Report”), which comprise: the Group and Company Balance Sheets as at 31 December 2020; the Group Income Statement and Group Statement of Comprehensive Income, the Group Statement of Cash Flows and the Group and Company Statements of Changes in Equity for the year then ended; and the Group and Company notes to the financial statements, which include a description of the significant accounting policies.

Our opinion is consistent with our reporting to the Audit Committee.

Separate opinion in relation to international financial reporting standards adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union

As explained in note 2 to the Group financial statements, the Group, in addition to applying international accounting standards in conformity with the requirements of the Companies Act 2006, has also applied international financial reporting standards adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union.

In our opinion, the Group financial statements have been properly prepared in accordance with international financial reporting standards adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (“ISAs (UK)”) and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors’ 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 remained independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC’s Ethical Standard, as applicable to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

To the best of our knowledge and belief, we declare that non-audit services prohibited by the FRC’s Ethical Standard were not provided to the Group.

Other than those disclosed in note 6 to the financial statements, we have provided no non-audit services to the Group in the period under audit.

The scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements.

Capability of the audit in 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 in the Auditors’ responsibilities for the audit of the financial statements section, 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.

Based on our understanding of the Group and industry, we identified that the principal risks of non-compliance with laws and regulations related to tax, international trade restrictions, health and safety and anti-bribery, and we considered the extent to which non-compliance might have a material effect on the financial statements. We also considered those laws and regulations that have a direct impact on the preparation of the financial statements such as the Companies Act 2006 and Listing Rules of the Financial Conduct Authority (FCA). We evaluated management’s incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls) and determined that the principal risks were related to posting inappropriate journal entries and management bias in accounting estimates. The Group engagement team shared this risk assessment with the component auditors so that they could include appropriate audit procedures in response to such risks in their work. Audit procedures performed by the Group engagement team and/or component auditors included:

- > Enquiries of Group and local management, those charged with governance, internal audit and the Group’s legal counsel (internal and, where relevant, external), including consideration of known or suspected instances of non-compliance with laws and regulations and fraud.
- > Understanding and evaluation of the design and implementation of management’s controls designed to prevent and detect irregularities, including compliance, whistleblowing arrangements and the results of management’s investigation of such matters.
- > Inspecting management reports and Board minutes in relation to health and safety and other compliance matters.
- > Reading key correspondence with regulatory authorities, including in respect of provisions for uncertainty over income tax treatments.

- > Challenging assumptions and judgements made by management in their critical accounting estimates, in particular relating to impairment of goodwill and non-financial assets, impairment of investment in subsidiaries and provisions for exposures (see related key audit matters below).
- > Identifying and testing journal entries, in particular any journal entries posted with unusual account combinations including in respect of journals posted to revenue, cash and other credits to non- revenue accounts in the Group Income Statement.
- > Obtained an understanding of the nature of any trade restrictions and our component auditors tested relevant supporting evidence that exists locally.

There are inherent limitations in the audit procedures described above. We are less likely to become aware of instances of non-compliance with laws and regulations that are not closely related to events and transactions reflected in the financial statements. Also, 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 or intentional misrepresentations, or through collusion.

Key audit matters

Key audit matters are those matters that, in the auditors’ professional judgement, were of most significance in the 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) identified by the auditors, 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, and any comments we make on the results of our procedures thereon, 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.

This is not a complete list of all risks identified by our audit.

The impact of COVID-19 is a new key audit matter this year. Provisions for uncertainty over income tax treatments, which was a key audit matter last year, is no longer included because of the assessed decrease in the estimation uncertainty associated with this and therefore reduced relative significance in the audit of the financial statements compared to last year. Otherwise, the key audit matters below are consistent with last year.

Our audit approach

Overview

Audit scope

- > Our audit included full scope audits of 17 components and specific audit procedures on certain balances and transactions for 9 additional components.
- > Taken together, the components at which either full scope audit work or specified audit procedures were performed enabled us to get coverage on 68% of revenue, 74% of profit before tax and 79% of profit before tax and separately reported items (Headline profit before tax).

Key audit matters

- > Impairment of goodwill and other non-financial assets (Group)
- > Impairment of investment in subsidiaries (Company)
- > Provisions for exposures (Group)
- > Impact of COVID-19 (Group and Company)

Materiality

- > Overall Group materiality: £7,000,000 (2019: £8,600,000) based on approximately 4.6% of a 3 year average profit before tax and separately reported items (‘Headline profit before tax’).
- > Overall Company materiality: £7,000,000 (2019: £8,600,000) based on 1% of total assets, capped at the level of overall Group materiality.
- > Performance materiality: £5,250,000 (Group) and £5,250,000 (Company).

Independent auditors’ report to the members of Vesuvius plc
continued

Key audit matter	How our audit addressed the key audit matter
<p>Impairment of goodwill and other non-financial assets (Group)</p> <p>At 31 December 2020, the carrying value of goodwill is £617.6 million (2019: £620.2 million). Goodwill arising from acquisitions has an indefinite expected useful life and so is not amortised but rather is tested for impairment at least annually at the cash-generating unit (“CGU”) level. Management has determined its CGUs to align with the operating segments, which are Steel Advanced Refractories, Steel Flow Control and Foundry. Steel Sensors and Probes has no goodwill.</p> <p>The Group also carries Property, Plant and Equipment assets of £337.5 million (2019: £337.7 million) and other intangible assets of £78.5 million (2019: £88.3 million). The carrying value of these assets was assessed for impairment as a part of the impairment test performed in respect of the CGUs.</p> <p>Management prepares a Value in Use (VIU) model (discounted cash flow) to test for impairment of the above CGUs. This is based on a Board approved 3 year forecast, of which a terminal value is calculated based on long term growth rates. The VIU model requires estimation of projected future cash flows and involves making key assumptions of revenue growth rates, an appropriate discount rate and long term growth rates for each of the CGUs. In making such future assumptions there is an inherent level of estimation uncertainty to consider. This has become increasingly challenging in 2020 due to the COVID-19 pandemic where further consideration needs to be given to assumptions of recovery and timeframes to achieve this.</p> <p>We focused on valuation due to material carrying value of goodwill and other non-financial assets, and with regard to the increased uncertainties arising from the factors set out above. Refer to Impairment of Tangible and Intangible Assets (Note 17), Critical Accounting Judgements and Estimates (Note 3) and Significant issues and material judgements in the Audit Committee report.</p>	<p>Our audit procedures included:</p> <ul style="list-style-type: none">> For each CGU we obtained management’s Value in Use model. We ensured the calculations were mathematically accurate and that the valuation methodology conformed with the requirements of IAS 36 ‘Impairment of Assets’.> For key assumptions made by management in respect of forecast revenue and cash flow growth:<ul style="list-style-type: none">– We obtained management’s supporting evidence such as the Board approved budget and 3 year strategy plan and agreed the forecast cash flows and underlying assumptions to these.– We also obtained evidence through our own independent research. This included evidence supporting expected periods of recovery to ‘pre-COVID’ production levels for the CGUs end markets, historical evidence of Vesuvius growth rates and recoveries in cyclical end markets.– We further considered market valuation evidence such as current and target share price and understood any differences.– Our audit evidence supported the cash flows modelled, although in year 3 and into perpetuity it is challenging to obtain definitive evidence, particularly given current uncertainties (see our sensitivities below).> We utilised internal valuations experts to support our audit procedures over the discount rate and long term growth rate assumptions used in the impairment model and sensitised the impacts of changes in the discount rate within our view of a reasonable range.> We remained professionally sceptical of the impacts of forecasting uncertainty, particularly where evidence in later years is more judgemental as set out above. We determined alternative sensitivity scenarios to ascertain the extent of changes in projections that would be required for the goodwill and other non-financial assets to be impaired. These included scaling back year 3 forecasts and factoring in historical levels of forecasting inaccuracy. We did not identify reasonable sensitivities that would result in impairment of any of the CGUs being tested. <p>In addition to the above procedures (which comprised our area of focus), we instructed our component audit teams to evaluate the appropriateness of management impairment indicator assessments performed within territory components. These assessments focused on individual or groups of assets below the levels of the CGUs. Our component teams, under our supervision, did not identify any additional impairments required. From our procedures we concluded that estimates and key assumptions made by management in performing impairment testing, including reasonably possible downside sensitivities which showed no scenarios of impairment, were supported. Appropriate sensitivity disclosures have been included within the Annual Report. Critical Accounting Judgements and Estimates (Note 3) accordingly highlights this area as a critical accounting estimate although it is not expected to materially impact the financial statements in the next 12 months. Our findings were discussed with the Audit Committee.</p>

Key audit matter	How our audit addressed the key audit matter
<p>Impairment of investment in subsidiaries (Company)</p> <p>The Company holds investments in subsidiaries with a total carrying amount of £1,778.0m at 31 December 2020 (2019: £1,778.0 million). IAS 36 ‘Impairment of assets’ requires management to consider whether there are any indicators of impairment in respect of non-financial assets. Due to the quantum of the carrying amount and levels of estimation uncertainty that exist similar to assumptions used in testing for impairment of goodwill and other non-financial assets (Group) this was an area of focus for the audit of the Company. Consistent with the prior year management performed an impairment test at 31 October 2020. This utilises cash flow forecasts used for testing for impairment of the Group’s goodwill together with additional considerations of cash flows relevant to the subsidiaries that the Company owns.</p> <p>The judgements and estimates required to determine the cash flow forecasts are aligned with those set out in ‘Impairment of goodwill and other non-financial assets (Group)’ above.</p> <p>Refer to Investment (Note 7), Critical Accounting Judgements and Estimates (Note 3) in the Company financial statements and Significant issues and material judgements in the Audit Committee report.</p>	<p>Our audit procedures included:</p> <ul style="list-style-type: none">> We assessed the results of the Value in Use model used for the impairment test for goodwill and other non-financial assets, together with adjustments made to reflect cash inflows to subsidiaries due from the Company.> Our testing of the Group Value in Use model, including procedures performed over management’s model and evidence obtained in respect of key assumptions made is set out in Key audit matter ‘Impairment of goodwill and other non-financial assets’. We also compared the carrying value of the investment in subsidiaries and the Group Value in Use to the market capitalisation and market valuation expectations.> We performed sensitivity analyses including consideration of historical forecasting inaccuracies which showed there was no reasonably possible scenarios of impairment when taking account of estimation uncertainty in key assumptions.> This indicated significant headroom in the determined Value in Use and that the investment in subsidiaries balance was not impaired. <p>We reviewed financial statement disclosures and these are consistent with the results of management’s testing and our audit evidence. Critical Accounting Judgements and Estimates (Note 3) in the Company financial statements highlights this area as a critical accounting estimate although it is not expected to materially impact the financial statements in the next 12 months. Our findings were discussed with the Audit Committee.</p>
<p>Provisions for exposures (Group)</p> <p>The Group holds a provision for ‘Disposal, closure and environmental costs’ (which includes provisions relating to legacy legal matters for closed businesses) amounting to £42.2 million (2019: £34.8 million).</p> <p>Determining the quantum of this provision involves modelling and estimation of expected future legal claim volumes and amounts, with the support of an external expert. It also requires the directors to use judgement to determine whether associated insurance recoverable amounts should be recognised within assets.</p> <p>We focused on this area due to the material quantum of the provision and associated insurance asset, and the judgement and estimates involved in determining its valuation. Refer to Critical Accounting Judgements and Estimates (Note 3), Trade and Other Receivables (Note 18), Provisions (Note 30), Contingent Liabilities (Note 32) and Significant issues and material judgements in the Audit Committee report.</p>	<p>Our audit procedures included:</p> <ul style="list-style-type: none">> Obtaining management’s model of the estimated legal costs, associated insurance recoverable and testing the mathematical accuracy and integrity of this model.> We discussed claims arising, settlements made and expected trends with the Group’s in-house and external experts.> We tested the accuracy of historical source data which is used to determine estimates of future trends of volumes and amounts of claims, to supporting claim documentation.> We utilised our own internal expert to support our audit of the key assumptions and to provide a view of a range of potential outcomes due to the estimation uncertainty involved. We independently sensitised the model for changes in the average cost of claims, increase in the level of larger value claims and duration over which claims are expected to be received.> We inspected evidence of available insurance cover, the routine and consistent collection of this and considered the financial condition of insurance providers to gain comfort over the recognition and recoverability of the insurance asset. We also verified that this was appropriately presented as gross of the associated provisions (within ‘Other receivables’). <p>From our procedures, we concluded the amount of the provision held was within our acceptable range, albeit towards the optimistic end of the range. We challenged management in respect of the level of disclosure and that these adequately explain estimation uncertainty of key assumptions including over the long term. Additional disclosure of the indicative sensitivities of the provision amount, for changes in key assumptions has been included. Critical Accounting Judgements and Estimates (Note 3) highlights this area as a critical accounting estimate although it is not expected to materially impact the financial statements in the next 12 months. Our findings were discussed with the Audit Committee.</p>

Independent auditors’ report to the members of Vesuvius plc
continued

Key audit matter	How our audit addressed the key audit matter
Impact of COVID-19 (Group and Company) COVID-19 has had a significant impact on the Group and Company during 2020 and this continues into 2021.The directors and management have assessed the impact of the COVID-19 pandemic on the Company and the Group financial statements. (Refer to Going concern (Note 2.3) in the Group financial statements and Going concern (Note 2.2) in the Company financial statements). The main impacts considered: > Potential impairment (see ‘Impairment of goodwill and other non-financial assets’ above but also consideration of the recognition of deferred tax assets, expected credit losses on financial assets and inventory obsolescence). > Going concern and viability statement as a result of reduced profitability and cash flows and the need to maintain covenants related to debt instruments held. > Determining the appropriate accounting for any government assistance received during the year to support the business during the course of the pandemic. This includes accounting for ‘furlough’ type assistance of £3.0 million (Note 8) and also the COVID Corporate Financing Facility (‘CCFF’) of £200 million obtained and later repaid during the year (Note 25). > Ensuring Annual Report and financial statements disclosures explain the impacts of the pandemic, actions taken and ongoing risks arising (including within the going concern and viability statement disclosures).	 Our procedures in respect of the ‘Impairment of goodwill and other non-financial assets’ and ‘Impairment of investment in subsidiaries (Company)’ are set out in separate key audit matters above. Other procedures we performed included: > Understanding any changes to management assumptions used in making estimates as a result of COVID-19, including those in respect of level of recognition of deferred tax assets, expected credit losses on financial assets and provisions for inventory obsolescence, and that these are supported by audit evidence obtained from either management or externally. From our procedures we concluded that the carrying value of these assets was supportable and management’s estimates appropriately reflected the uncertainties arising from COVID-19. > We instructed our component audit teams to ensure this was specifically addressed in testing accounting estimates and we reviewed the results of their testing and findings. > Assessing that disclosures made in the financial statements provide clear explanation of impacts experienced and mitigating actions taken by the Group. > Evaluating management’s accounting for the CCFF and furlough type assistance, and that the assistance received was disclosed within the financial statements. > With respect to management’s going concern assessment, we evaluated management’s base case and downside case focussing on key assumptions together with assessing the Group’s available facilities. Further details of our audit procedures and conclusion in respect of going concern are set out separately in this report.

How we tailored the audit scope

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the structure of the Group and the Company, the accounting processes and controls, and the industry in which they operate.

The Vesuvius Group (Vesuvius plc together with its subsidiaries) has operations in 41 countries and has 53 production sites. The Group consolidates financial information through reporting from its components which include divisions and functions at these sites.

Our audit scope was determined by considering the significance of the component’s contribution to profit before tax and separately reported items (Headline profit before tax), revenue and contribution to individual financial statement line items, with specific consideration to obtaining sufficient coverage over areas of heightened risk and locations and entities where we identified other areas of higher risk.

We identified two financially significant components. These are located in China and Germany. These comprise 11% of Headline profit before tax and 18% of the Group’s revenue. The audit scope, including the financially significant components, comprised 17 components for which we determined that full scope audits would need to be performed and 9 components for which specific audit procedures on certain balances and

transactions were performed. This collectively provided audit coverage of 68% of the Group’s revenue, 74% of the Group’s profit before tax and 79% of the Group’s Headline profit before tax. This, together with the additional procedures performed at the Group level, including testing the consolidation process, gave us the evidence we needed for our opinion on the financial statements as a whole.

In establishing the overall approach to the Group audit, we determined the type of work that needed to be performed at the components by us, as the Group engagement team, or by component auditors of other PwC network firms. Where the work was performed by component auditors, we determined the level of involvement and oversight we needed to have in the audit work at those reporting units to be able to conclude whether sufficient appropriate audit evidence had been obtained as a basis for our opinion on the financial statements as a whole. This was achieved through regular communications with the component auditors, attendance at audit clearance meetings by senior team members, meetings with local management, discussion of their audit approach and audit findings with the component teams via video conference, including for certain components with the quality review partner and review of selected component auditors’ workpapers. The Group audit team also performed the audit of the Company.

Materiality

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial

statement line items and disclosures and in evaluating the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

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

	Financial statements – Group	Financial statements – Company
Overall materiality	£7,000,000 (2019: £8,600,000).	£7,000,000 (2019: £8,600,000).
How we determined it	Approximately 4.6% of 3 year average profit before tax and separately reported items (‘Headline profit before tax’)	1% of total assets, capped at the level of overall Group materiality
Rationale for benchmark applied	We believe that profit before tax and separately reported items (‘Headline profit before tax’) provides us with an appropriate basis for determining our overall Group materiality given it is a key measure used by users of the financial statements both internally and externally. Headline profit before tax is an Alternative Performance Measure presented and defined in the Annual Report and Financial Statements. In the current year, due to the volatility caused in the results by COVID-19, a 3 year average of the Headline profit before tax has been used as a benchmark as this provides a more normalised threshold for determining materiality. (2019: Based on 5% of 2019 profit before tax and separately reported items)	We believe that total assets is an appropriate basis for determining materiality for the Company, given this entity is an investment holding company and this is an accepted auditing benchmark. The materiality was capped to the level of Group overall materiality. The Company is not an in-scope component for our Group audit. (2019: 1% of total assets, capped at the level of overall Group materiality)

For each component in the scope of our Group audit, we allocated a materiality that is less than our overall Group materiality. The range of materiality allocated across components was between £600,000 and £5,500,000.

We use performance materiality to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds overall materiality. Specifically, we use performance materiality in determining the scope of our audit and the nature and extent of our testing of account balances, classes of transactions and disclosures, for example in determining sample sizes. Our performance materiality was 75% of overall materiality, amounting to £5,250,000 for the Group financial statements and £5,250,000 for the Company financial statements.

In determining the performance materiality, we considered a number of factors – the history of misstatements, risk assessment and aggregation risk and the effectiveness of controls – and concluded that an amount at the upper end of our normal range was appropriate.

We agreed with the Audit Committee that we would report to them misstatements identified during our audit above £350,000 (Group audit) (2019: £430,000) and £350,000 (Company audit) (2019: £430,000) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

Conclusions relating to going concern

Our evaluation of the directors’ assessment of the Group’s and the Company’s ability to continue to adopt the going concern basis of accounting included:

- > Evaluating management’s base case and downside case for liquidity and available financial resources and obtaining supporting evidence for key assumptions. This included agreeing the underlying cash flow projections to a Board approved forecast, assessing how these forecasts are compiled and assessing the historical accuracy of the forecasts. We also take account of performance and actions able to be taken during the pandemic to date (e.g. cost savings) and assessing available financing facilities and related liquidity headroom.
- > Testing the accuracy of cash flow models used to assess available liquidity during the going concern periods disclosed.
- > Inspected facility agreements to ensure key terms were considered including covenants.
- > Determining alternative sensitivity scenarios to ascertain the impact of changes in assumptions. These included scaling back forecasts and increasing working capital as a percentage of forecast revenue.
- > Reading management’s disclosures in the financial statements and relevant ‘other information’ and assessing consistency with the financial statements and our knowledge based on our audit.

Independent auditors’ report to the members of Vesuvius plc
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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’s and the 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.

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.

However, because not all future events or conditions can be predicted, this conclusion is not a guarantee as to the Group’s and the Company’s ability to continue as a going concern.

In relation to the Company’s reporting on how they have applied the UK Corporate Governance Code, we have nothing material to add or draw attention to in relation to the directors’ statement in the financial statements about whether the directors considered it appropriate to adopt the going concern basis of accounting.

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

Reporting on other information

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors’ report thereon. The directors are responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

In connection with our audit of the financial statements, 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 audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. 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 based on these responsibilities.

With respect to the Strategic report and Directors’ Report, we also considered whether the disclosures required by the UK Companies Act 2006 have been included.

Based on our work undertaken in the course of the audit, the Companies Act 2006 requires us also to report 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 Directors’ Report for the year ended 31 December 2020 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements.

In light of the knowledge and understanding of the Group and Company and their environment obtained in the course of the audit, we did not identify any material misstatements in the Strategic report and Directors’ Report.

Directors’ Remuneration

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

Corporate governance statement

The Listing Rules require us to review the directors’ statements in relation to going concern, longer-term viability and that part of the corporate governance statement relating to the Company’s compliance with the provisions of the UK Corporate Governance Code specified for our review. Our additional responsibilities with respect to the corporate governance statement as other information are described in the Reporting on other information section of this report.

Based on the work undertaken as part of our audit, we have concluded that each of the following elements of the corporate governance statement, included within the ‘Risk, viability and going concern’ section is materially consistent with the financial statements and our knowledge obtained during the audit, and we have nothing material to add or draw attention to in relation to:

- > The directors’ confirmation that they have carried out a robust assessment of the emerging and principal risks;
- > The disclosures in the Annual Report and Financial Statements that describe those principal risks, what procedures are in place to identify emerging risks and an explanation of how these are being managed or mitigated;
- > The directors’ statement in the financial statements about whether they considered it appropriate to adopt the going concern basis of accounting in preparing them, and their identification of any material uncertainties to the Group’s and Company’s ability to continue to do so over a period of at least twelve months from the date of approval of the financial statements;
- > The directors’ explanation as to their assessment of the Group’s and Company’s prospects, the period this assessment covers and why the period is appropriate; and
- > The directors’ statement as to whether they have a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due over the period of its assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

Our review of the directors’ statement regarding the longer-term viability of the Group was substantially less in scope than an audit and only consisted of making inquiries and considering the directors’ process supporting their statement; checking that the statement is in alignment with the relevant provisions of the UK Corporate Governance Code; and considering whether the statement is consistent with the financial statements and our knowledge and understanding of the Group and Company and their environment obtained in the course of the audit.

In addition, based on the work undertaken as part of our audit, we have concluded that each of the following elements of the corporate governance statement is materially consistent with the financial statements and our knowledge obtained during the audit:

- > The directors’ statement that they consider the Annual Report, taken as a whole, is fair, balanced and understandable, and provides the information necessary for the members to assess the Group’s and Company’s position, performance, business model and strategy;

- > The section of the Annual Report that describes the review of effectiveness of risk management and internal control systems; and
- > The section of the Annual Report describing the work of the Audit Committee.

We have nothing to report in respect of our responsibility to report when the directors’ statement relating to the Company’s compliance with the Code does not properly disclose a departure from a relevant provision of the Code specified under the Listing Rules for review by the auditors.

Responsibilities for the financial statements and the audit

Responsibilities of the directors for the financial statements

As explained more fully in the Statement of Directors’ Responsibilities in respect of the Annual Report and Financial Statements, the directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The directors are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group’s and the 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 Company or to cease operations, or have no realistic alternative but to do so.

Auditors’ 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 auditors’ 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.

Our audit testing might include testing complete populations of certain transactions and balances, possibly using data auditing techniques. However, it typically involves selecting a limited number of items for testing, rather than testing complete populations. We will often seek to target particular items for testing based on their size or risk characteristics. In other cases, we will use audit sampling to enable us to draw a conclusion about the population from which the sample is selected.

A further description of our responsibilities for the audit of the financial statements is located on the FRC’s website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditors’ report.

Use of this report

This report, including the opinions, has been prepared for and only for the Company’s members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

Other required reporting

Companies Act 2006 exception reporting

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

- > we have not obtained all the information and explanations we require for our audit; or
- > adequate accounting records have not been kept by the Company, or returns adequate for our audit have not been received from branches not visited by us; or
- > certain disclosures of directors’ remuneration specified by law are not made; or
- > the Company financial statements and the part of the Directors’ Remuneration Report to be audited are not in agreement with the accounting records and returns; or
- > a corporate governance statement has not been prepared by the Company.

We have no exceptions to report arising from this responsibility.

Appointment

Following the recommendation of the Audit Committee, we were appointed by the members on 10 May 2017 to audit the financial statements for the year ended 31 December 2017 and subsequent financial periods. The period of total uninterrupted engagement is 4 years, covering the years ended 31 December 2017 to 31 December 2020.

Darryl Phillips (Senior Statutory Auditor)
for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
London

3 March 2021