Modern Water plc
Annual Report and Accounts 2019

Company number 05963927

Business at a Glance

Modern Water owns a portfolio of water technologies that address the limited availability of fresh water and that treat wastewater worldwide. By 2025, it is forecast that two-thirds of the world's population will live in countries classified as water-stressed. Climate change is likely to further exacerbate this situation.

Modern Water is a pioneering and innovative technology company, specialising in membrane water treatment solutions and advanced monitoring products. The Company works for customers in a range of industries across the globe and owns proprietary technologies for use in a diverse range of applications.

Modern Water's Monitoring Division has a portfolio of world-leading toxicity and trace metal monitoring products, some of which constitute the regulatory standard.

The headline technology of the Company's Membrane Division, called "AMBC", can be used to tackle complex wastewater treatment problems at a reduced cost compared to standard processes, while being simple to operate.

Membrane Division
All-Membrane Brine Concentration (Industrial)
Thermal Desalination (Industrial)
Evaporative Cooling Systems (Industrial)
Packaged SWRO Desalination Systems (Industrial & Municipal)
Forward Osmosis Desalination (Industrial & Municipal)

Monitoring Division
Trace Metal Products
Toxicity Products
Environmental Products

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Chairman's Statement

Dear Fellow Shareholder,

I was appointed as Chairman on the 4th of March 2020 and have pleasure presenting the Company's report and results for the year ended 31 December 2019.

Our Business

Modern Water plc ("Modern Water", "Group" or "the Company") was established in 2006 to develop and commercialise water recovery technologies to counter water crisis problems arising from climate change and a growing global population. Having invested £20m over the last 14 years, the results comprise of a robust patent portfolio in cutting-edge technology, focused on monitoring of contaminated water and decontamination of wastewater, making recycling of water more efficient. Six countries across the world have legislated that Modern Water monitoring test systems are written into their environmental protection legislation.

After a fundamental review of the Company by the new Board, a collaboration development approach for new products and data support services, a revenue sharing commercial strategy and out-sourced equipment and reagent production was a necessity to reduce administration costs, increase revenue and build on the 30 year reputation of Modern Water's Microtox® water monitoring brand.

Results

2019 has been another transformational year for Modern Water attributable to liquidating two UK subsidiaries, Modern Water Services Limited and Modern Water Monitoring Limited. The liquidation resulted from the decision to withdraw from the Gibraltar Wastewater Project due to the lack of progress and to refocus on membrane projects outside the UK. This has resulted in lower overhead from disposal of non-performing assets and reduced employees as we move to a more online equipment and consumables support service Company.

Highlights:

- Total 2019 revenue from continuing operations of £2.9m from (2018: £3.6m);
- EBITDA losses before exceptional items of £0.9m (2018: £0.5m);
- Administration costs reduced to £2.4m (2018: £2.5m);
- Operating loss of £1.6m (2018: £1m) after providing for Depreciation & Amortisation of £687k (2018: £483k);
- Sale of brine concentration plant to leading global producer of industrial chemicals;
- Largest-ever AMBC for Korea Salt Production Facility;
- Liquidation of Modern Water Services Limited;
- Liquidation of Modern Water Monitoring Limited;
- Sale of its largest single order for its Microtox® CTM to a customer in China.

Post Year-End Events:

- February: Oversubscribed £1.85 million Conditional Placing;
- February: Appointment of Dr Nigel Burton to Board of Directors;
- February: Agreement to join ecowaterOS consortium for real-time water monitoring, recovery, treatment and recycling;
- March: Orders of water contamination detection consumables up 46% in Q1 2020 compared to Q1 2019;
- May: First Modern Water patented AMBC wastewater plant order from Ion Exchange (India);
- May: Modern Water Microtox® LX declared winner in China laboratory instrument award;
- May: Sichuan Province China orders Modern Water equipment.

Further information on our products and technologies can be found in the Chief Executive's Report.

Corporate governance

I believe that good corporate governance is important to support our future growth and the Board, which has extensive experience in publicly listed companies and running companies in the healthcare and environmental sectors, is committed to the highest standards.

Chairman’s Statement

Outlook

While 2019 was a tough year financially for the Company, the structural changes were necessary to expose the opportunity to move from high-ticket sales, which had a high employee support cost, in desalinisation and the membrane divisions. The Company business model in 2020 has moved to a high volume, high margin recurring revenue strategy that has been in existence within the Water Monitoring division that was acquired in 2011.

Modern Water continues to retain a leadership position within the water contamination monitoring sector and is adding the latest technologies in ecommerce, logistics, comms, networking and data encryption which extends the global reach of the Company beyond the US, EU and Far East offices. With thousands of sites and hundreds of water systems installed over the last 30 years, the Company retains a Gold Standard lead in water monitoring. The strategic challenge through this COVID-19 pandemic is being met with the move to provide support services online, making it easier and safer to interact with customers while at the same time to increase the capacity of our equipment to provide surveillance against all sorts of contaminants and threats including viruses and pathogens.

The new platform gives us the ability to fully exploit the data the Company generates from different water systems across the world. Data analytics with the latest AI systems in collaboration with Company partners set Modern Water up for multiple revenue streams from equipment, consumables and predictive services for our existing and new clients coming online to manage their COVID-19 risk.

Gerard Brandon
Chairman
21 August 2020

Strategic Report

The Directors of Modern Water plc (Modern Water or the Company) and its subsidiary undertakings (which together comprise the Group) present their Strategic Report for the year ended 31 December 2019.

The Group comprises of two technology divisions focused on Membrane technology and Monitoring technology

Monitoring Technology

Modern Water is expert in technology to monitor toxicity, metals and environmental contaminants in water, soil, food and industrial process streams.

Toxicity

Modern Water is expert in the design, development and provision of analytical instruments and technologies for monitoring toxicity in water, soil, food and industry. Our systems use bioluminescent bacteria to perform biosensor testing that detects the presence of toxic substances.

Microtox® LX

The Microtox® LX analyser is an award-winning laboratory based, temperature-controlled, self-calibrating photometer that measures acute toxicity. With over 2,900 instruments sold worldwide, the Microtox® toxicity test system is the industry standard for rapid toxicity screening and analysis.

Microtox® CTM

The Microtox® CTM makes fully automatic, continuous, on-line testing a reality. It has broad range detection capabilities that provide rapid early warning of contamination by several thousand known chemicals. This enables containment measures to be actioned in time to protect against serious contamination events.

Microtox® FX

The Microtox® FX instrument has a combined detection capability that provides a very sensitive and rapid test to detect two of the most probable classes of agents, pathogens and toxic chemicals that may accidently or intentionally contaminate drinking water or wastewater. Microtox® FX's acute toxicity and ATP detection capabilities make it the ideal instrument for rapidly and accurately assessing if the quality of drinking water, from the source to the tap, has been affected by an incident.

Trace Metals

Modern Water is expert in the design, development and provision of analytical instruments for monitoring trace metals in water, soil, food and industrial process streams. Our systems use solid state electrodes to perform voltammetry for the analysis of metals in solution.

Our trace metal product range includes the portable PDV6000plus and an on-line, continuous system the OVA7000. Our technology is robust and reliable, can be operated by technicians anywhere in the world and is low maintenance. The portable, laboratory and online systems have a worldwide reputation for quality, reliability and ease of use, enabling customers to monitor pollutant levels, optimise their processes, minimise damage to the environment and protect the health of employees and communities at large.

Environmental Tests

Modern Water is expert in the design, development and provision of analytical instruments and technologies for monitoring specific environmental contaminants in water, soil and industry samples. Our systems selectively identify contaminants such as PCB, pesticides, hydrocarbons, toxins, metals and explosives.

The Group's Environmental Monitoring products include a range of portable fluorometers, strip tests, test kits.

The fluorometer range allows rapid field deployment as well as in-situ, real-time monitoring and products include the AlgaeChek, AlgaeChek Ultra, BODChek, PetroChek, PAH and BTEX.

The Group has a wide variety of test kits which include the following product ranges: Ensys; EnviroGard®, RaPID Assay® and QuickChek. The Group also developed the QuickChek brand to include a variety of strip tests which are used with a reader to give instant results.

The Group has launched a fully integrated eCommerce solution with back-office and logistics platform, allowing clients and partners access to pricing, quotes, and equipment specifications. It has a built-in knowledge centre where 30 years of water contamination monitoring domain expertise is available to all users. Dedicated account areas for clients and partners also provide dashboards showing the live and near-time state of water monitoring sites including up to date information on consumables.

Membrane Technology

The principal technology currently being commercialised by the Group is the AMBC ('All Membrane Brine Concentrator'). The AMBC is Modern Water's cost-effective and proven technology for brine concentration. The AMBC is an innovative solution which significantly reduces wastewater treatment requirements and maximises clean water reuse, by concentrating brine streams up to, and beyond, 160,000 mg/l.

During the year the Company was awarded its largest-ever order AMBC for a Korea Salt Production Facility working with our Chinese partner Sunup.

Group

The year in review was a difficult year for the Group. Despite making progress across a number of projects in the membrane division, progress was not quick enough to provide the liquidity required to continue with the existing business model. In particular despite the successful conclusion of the planning application for the Gibraltar Wastewater Project the continuing delays by the Government of Gibraltar in awarding the full contract had a material adverse impact on the Group's resources.

As a result in August 2019 two subsidiaries Modern Water Services Limited and Modern Water Monitoring Limited were placed in liquidation.

Despite the liquidity issues the Group made progress in China and a successful end to the year with the award of its largest order for Microtox CTM units in December and the award of its largest-ever AMBC order for a Korean Salt Production Facility working with our Chinese partner Sunup in November.

Strategy

Following the changes to the Board in February and March the Group undertook a strategic review of the Group and its business model.

The outcome of the review was to move to a revenue-sharing collaborative and partnership strategy to accelerate growth. The new business model adopted in 2020 is to continue the move to a high volume, high margin, recurring revenue model that has been in existence within the Water Monitoring division that was acquired in 2011. Examples of the new business model were Modern Water joining the EcowaterOs consortium in February 2020 and in March the signing of a contract with Integumen for the manufacture of reagents using a revenue sharing model.

In June 2020 the Group launched its new website. The updated website includes a fully integrated eCommerce solution with back-office and logistics platform, allowing clients and partners access to pricing, quotes, and equipment specifications. It has a built-in knowledge centre where 30 years of water contamination monitoring domain expertise is available to all users. Dedicated account areas for clients and partners also provide dashboards showing the live and near-time state of water monitoring sites including up to date information on consumables.

This new platform gives us the ability to fully exploit the data the Group generates from different water systems across the world. Data analytics with the latest AI systems in collaboration with partners set Modern Water up for multiple revenue streams from equipment, consumables and predictive services for our existing and new clients coming online to manage their COVID-19 risk.

Outlook

Following the liquidity issues in 2019 the Company concluded an over-subscribed placing in February 2020 raising a net £1.7m and in June 2020 the Company received £110,000 following the exercise of warrants granted as part of the February placing.

Together with the significant reduction in overheads the Group is now well placed with the resources required to execute its new strategy and business model.

Strategic Report

Group Key Performance Indicators (KPIs)
The key performance indicators currently used by the Group are revenue, EBITDA and cash resources. The Group intends to establish other key performance indicators in due course once the Group's new strategy has matured sufficiently. The Group does not use and does not at present intend to use non-financial key performance indicators.

The Board reviews strategic, operational and financial information on a monthly basis to measure progress. The key financial performance indicators for 2019 excluding the discontinued operations, covered in more detail in the Financial Review and the financial statements, were:

- Revenue lower by 19% at £2.9m (2018: £3.6m);
- Gross profit reduced 28% to £1.5m (2018: £2.0m);
- Operating loss before tax, interest, depreciation, amortisation increased by 86% to £0.9m (2018: £0.5m)
- Cash outflow before financing and investing in 2019 was £0.5m (2018: £1.4m); and
- Cash as at 31 December 2019 was £0.2m (2018: £0.2m).

As detailed on page 31 the comparatives have not been restated for the impact of IFRS 16.

Group Research & Development (R&D)
The Group continues to invest in R&D across membrane, wastewater and monitoring technologies to support the development and delivery of commercial products for customers and to maximise the value of the patent portfolio of the Group.

Group Patent Portfolio & Intellectual Property
The Group has continued to file new patents to strengthen our portfolio in important markets whilst, as part of it's active patent management, and has decided to abandon patent coverage in some strategically unimportant jurisdictions, thereby achieving cost savings.

Group Resources
Modern Water continues to view its employees as a community, not just a workforce, and collaboration and networking across the Group is encouraged and welcomed. We also believe in developing and nurturing all our staff. Making Modern Water a great place to work is a key element in our successful attraction and retention of the most talented people to help us reach our goals.

As at 31 December 2019 the Group employed 23 permanent staff (2018: 37), supplemented by contract staff as required.

Group Financial Review
Summary
The Group had £0.2m cash in the bank and a bank loan of £0.4m at 31 December 2019 (2018: £0.2m cash and a bank loan of £0.5m). The overall loss before interest, tax, depreciation and amortisation was £0.9m (2018: £0.5m).

The Group generated revenues of £2.9m in 2019 (2018: £3.6m). Total comprehensive loss was £2.1m (2018: £2.8m).

Cash Flows
The Group cash outflow from operating activities for the year was £0.5m (2018: £1.4m) and during the year a net £0.6m was raised through the issue of new equity.

Cash inflow from R&D tax credits was £nil (2018: £0.2m). Cash outflows comprised £0.03m on property, plant and equipment (2018: £0.1m), £0.1m on patents and product development (2018: £0.3m) and £0.4m on operating activities (2018: £1.4m).

Capital Raise
The Company undertook two capital raises in the year. In January the Company's brokers placed 9,038,000 shares to raise £589,470 before costs and in September they placed a further 11,335,746 shares raising £141,696 before costs.

Accounting Policies
The Group financial statements have been prepared in accordance with EU Endorsed IFRS, IFRS Interpretations Committee (IFRIC) interpretations and the Companies Act 2006 applicable to companies reporting under IFRS. The key accounting policies to note are those concerned with intangible assets and share-based payments.

Capital Structure
The Group is primarily equity funded which is appropriate during the current stage of development. As the Group develops, the capital structure will be reassessed on a project by project basis.

Treasury Management
The Group has adopted a low risk approach to treasury management. Cash balances are invested in instant access current and deposit accounts. Credit risk is addressed by the Group's treasury policy. Deposits are selected based on achieving the optimum balance of yield, security and liquidity. Foreign exchange risk is primarily mitigated through natural hedging of receipts and payments. See note 3 to the Accounts for further detail of financial risk management.

Going Concern
The Directors are required by company law to be satisfied that the Group has adequate resources to continue in business for the foreseeable future. The Group has recorded a loss for the year of £1.5m and has net cash out flows from operating activities of £0.3m**.** The Directors have performed a detailed analysis of the cash flow projections for the Group as a whole covering the period through to the financial year ended 31 December 2020 and beyond.

Post year end the Group received two significant cash injections. In February 2020 the Company raised a net £1.7m from a placing of shares and in June 2020 the Company received £110k from the exercise of warrants.

The forecasts support that the Group will remain a going concern for at least twelve months from the date on which these financial statements have been approved and signed. The cash flow forecasts are based on the key assumptions set out below.

- Group overheads estimated to be reduced further from £2.4 m in 2019 to £1.8m 2020
- Small increase in revenue in Monitoring Division
- Increase in revenue from the Chinese market
- Increase in value and number of AMBC licences in 2020
- Barclays Bank plc loan repayments rescheduled from June 2020

As disclosed in Note 21 a covenant on the bank loan was breached as at 31 December 2019, but the bank has waived this breach, agreed to reset the covenant and agreed a revised repayment schedule.

Following the review, the Directors have concluded that adequate resources are available and therefore that they are justified in using the going concern basis for the preparation of the financial statements.

Principal Risks and Uncertainties
The principal risks inherent in the operation of the Group are well understood by the Board of Directors and the Management Team. Control measures have been established to ensure that these, and other, risks are adequately controlled both in terms of frequency and consequence. The internal control environment is described in the Corporate Governance Statement. The principal risks and uncertainties affecting the Group and the steps taken to manage these are:

Customer acceptance of the Group's technologies and emergence of competing technologies
The Group's success depends on potential customer acceptance of its products and processes. There are significant risks in predicting the size and timing of material revenue. The target customers of the Group's products and processes are often in developing countries which carry additional potential risks. The Group seeks to address these risks by building a track record and proving technology capabilities to future customers and industry players. The Group has increased investment in business development as product development progresses. Modern Water has formed a number of strategic partnerships to create local presence in target countries, overcome pre-qualification criteria on contract tendering and establish new routes to market. The range of applications for the Group's products provides mitigation against the risk of failure in a specific country or application. The Group continues to invest in research and development (R&D) to mitigate the risk of the emergence of competitor technologies.

Socio-political risks
Modern Water operates, and is looking to secure further contracts and sales, in a number of countries around the world. This exposes the Group to a range of social and political developments and consequentially to potential changes in the operating, regulatory and legal environment. The Group operates and generates revenue in

countries where political, economic and social transition is taking place. Some countries have experienced, or may experience in the future, political instability, changes to the regulatory environment, changes in taxation, expropriation or nationalisation of property, civil strife, strikes, acts of war and insurrections. Any of these conditions occurring could disrupt our operations and revenue. The Group seeks to manage these risks through diversifying the regions in which it operates.

'Brexit' risk

Approximately one-third of the Monitoring division's sales are to EU Countries, but these sales are invoiced and predominantly supplied from Modern Water Inc in the USA. The Membrane division does not currently have any projects in any EU Countries.

Possible risks for Monitoring Division sales:

- Delays of shipments are possible due to taxes and tariffs collections.
- Licences, registrations or certificates may be required to provide services in EU.
- Additional documentation to ship product from the UK to EU.
- Import/export documentation (commercial invoice) may be required for every shipment from the UK to EU.
- Possibly, customers may require import permits to receive goods from the UK.
- GBP value can further decline therefore margins may suffer.

However, all the above are at best speculation at the time of writing and the exact outcome is yet to be confirmed.

Scaling up the technology

The Group's Membrane Division and certain monitoring products are not yet well established commercially. They have been developed over recent years and whilst the proving of the technology is largely complete there remain significant risks associated with commercialising technology and a portfolio of new products. There are technology and procurement risks in scaling up the products through to large scale commercial deployment. The Group seeks to mitigate these risks through the use of partners with proven manufacturing and fabrication capabilities, rather than developing in-house capabilities, and through the development and operation of pilot plants prior to full commercial deployment.

Additionally, there are risks related to developing the optimum contract, royalty and licensing models to derive value from the products. The Group manages these risks through employment of executives and senior management with significant experience both in the water industry and in the development and growth of early stage companies.

COVID-19 risk

Management is constantly reviewing the impact of COVID-19 with clients and partners to assess manufacturing and supply of services stress. These include, but are not limited to, restrictions on the supply of materials that enable the Group to supply goods and services to clients. This review process is designed to provide advance warning to be able to manage impacts on the business and to assist clients meet their needs where reliance on the delivery of our goods and services from the Group is critical.

Intellectual Property (IP) protection

The Group's ability to generate value from its products depends in part on the development and protection of its IP. The Group assigns significant resources, both internally through our technical staff, and externally through patent attorneys, to enhance and protect its patented and non-patented IP.

Recruitment and retention of key personnel

The Group's Directors and employees are highly qualified and experienced. Recruiting and retaining key staff is critical to the Group's overall success. Knowledge and experience of the Group's products and customer base is retained by a relatively small number of individuals. The risk of staff loss is mitigated through its HR policies, competitive remuneration (including the Modern Water plc Incentive Plan), performance appraisals and training.

Health and safety

There are inherent health and safety risks with the deployment of the core membrane and monitoring products. The mitigation of any health and safety events involving the Group's products is key to the strategy for growth. The Group mitigates its health and safety risks through its Group Health and Safety Policy, which includes regular reporting to the Board.

Capital risks

It may be desirable for the Company to raise additional capital by way of the further issue of Ordinary Shares to enable the Company to progress through further stages of development. Any additional equity financing may be dilutive to shareholders. There can be no assurance that such funding, if required, will be available to the Company.

Strategic Report

Financial risks
These risks and mitigating controls are described in note 3 to the Accounts.

The Strategic Report was approved by the Board of Directors on 21 August 2020 and signed on its behalf by:

Simon Humphrey
Chief Executive Officer
21 August 2020

Corporate Governance Statement

Corporate Governance

The Board of Modern Water plc is committed to integrity, business ethics and achieving good standards of corporate governance. As permitted under AIM rules, Modern Water plc has not adopted the UK Corporate Governance Code (the "Code"). However, this Corporate Governance Statement, together with the information contained in the Directors' Remuneration Report on page 12, explains how the Directors seek to apply the requirements of the Code to the Group, where practical, given its size, resources and stage of development. Furthermore, the Directors of Modern Water plc acknowledge the importance of high standards of corporate governance and confirm that the Company applies the QCA Code, published by the Quoted Companies Alliance, which sets out a minimum best practice standard for small and mid-size quoted companies, particularly AIM companies.

Board of Directors

Directors

The Directors who held office during the year and as at the date of signing the financial statements were as follows:

Simon Humphrey	
Gerard Brandon	(Appointed on 4 March 2020)
Nigel Burton	(Appointed on 20 February 2020)
Piers Clark	(Resigned on 20 February 2020)
Mike Townend	(Resigned on 20 February 2020)
Alan Wilson	(Resigned on 23 August 2019)

The business and management of the Group and its subsidiaries are the collective responsibility of the Board. At each meeting the Board considers and reviews the performance of each of the major projects. The Board has a formal written schedule of matters reserved for its review and approval. These include the approval of the annual budget, major capital expenditure, investment proposals, the interim and annual results, and a review of the overall system of internal control and risk management.

Authority for the execution of the approved policies, business plan and daily running of the business is delegated to the Chief Executive Officer. In addition, there is a management team whose purpose is to assist the Chief Executive Officer in the performance of his duties.

Modern Water plc's Articles of Association require one-third of the Directors to stand for re-election each year at the Annual General Meeting. Accordingly, Nigel Burton will retire and offer himself for re-election at the forthcoming Annual General Meeting.

All Directors have access to the advice and services of the Company Secretary who is responsible for ensuring that board procedures and applicable rules and regulations are observed. The Board has a procedure whereby any director may seek independent professional advice, at the Group's expense, in furtherance of their duties.

Formal agendas and reports are provided to the Board on a timely basis for board and committee meetings and the Chairman ensures that all Directors are properly briefed on issues to be discussed at board meetings. Directors are able to obtain further advice or seek clarity on issues raised at the meetings from within the Group or from external sources.

Business Ethics

We are committed to acting fairly and ethically in all countries in which we operate. We expect the same standards from all third parties who provide services for Modern Water plc and its subsidiary companies. We maintain anti-bribery, gifts and entertainment policies, and procedures for contractual commitments to better manage risk with third parties.

Committees

The Board has a Remuneration Committee and an Audit Committee. The executive director is not a member of the committees, but attends the meetings by invitation to facilitate business, if appropriate. The Board does not have a Nomination Committee and Board appointments are consequently a matter for the Board as a whole. The Board is satisfied that the committees discharged their responsibilities appropriately.

Remuneration Committee

The Remuneration Committee consisted of Nigel Burton (Chairman) and Gerard Brandon. Further details of the committee and its policies are set out in the Directors' Remuneration Report on page 12.

Audit Committee

The Audit Committee consists of Nigel Burton (Chairman) and Gerard Brandon.

The committee reviews and makes recommendations on the appointment, reappointment and removal of the external auditor, the review of the scope and results of the external annual audit by the auditor, the auditor's cost effectiveness, independence and objectivity. The committee also reviews the nature and extent of any non-audit services provided by the external auditor. No independence issues were noted during the year. The Group's Group Financial Controller monitors the level and nature of non-audit services and specific assignments are identified for approval by the Audit Committee as appropriate. In addition, the Audit Committee reviews the effectiveness of internal controls, considers the need for an internal audit function and considers any major accounting issues, and reports on such matters to the Board. The Audit Committee reviews the integrity of the financial statements and formal announcements.

A whistle-blowing arrangement exists whereby matters can be confidentially reported to the committee.

Attendance

The following table shows attendance of the Directors at meetings of the Board, Remuneration and Audit Committees during the year:

	Board		Remuneration		Audit	
	Attended	Eligible to attend	Attended	Eligible to attend	Attended	Eligible to attend
Alan Wilson resigned 23/08/19	4	4	1	1	1	1
Simon Humphrey	5	5	-	-	-	-
Mike Townend	5	5	1	1	2	2
Piers Clark	5	5	1	1	2	2

Internal Control

The Board has overall responsibility for the Group's system of internal control and for reviewing its effectiveness. The implementation and maintenance of the risk management and internal control systems are the responsibility of the executive director and senior management. The internal control system is designed to mitigate the principal risks, amongst others, detailed in the Directors' Report, but it does not provide absolute assurance that these risks are eliminated or against material misstatement or loss. The Board is satisfied with the controls in place for identification and management of risk and that the reporting lines have been in place throughout the year under review. The key internal controls in place during the year and up to the date of approval of the report included:

- reporting to the Board, including key financial information and commentary (Group Statement of Comprehensive Income, Group Statement of Financial Position, Group Statement of Cash Flows) and the Chief Executive Officer's report on the business, significant changes and the external marketplace, including the extent to which they represent significant risk;
- detailed corporate policies and procedures document to address key operating and compliance risk areas, including procurement, treasury, human resources, health and safety;
- clear organisational structure with defined reporting lines and delegated authorities;
- the Audit Committee;
- centralised accounts team providing financial control and support to all Group companies; and
- an annual strategy review and an annual budget approved by the Board.

The Board has considered the need for an internal audit function, but because of the size and nature of its operations does not consider it necessary at the current time.

Relations with Shareholders and Investors

The Board is regularly updated regarding meetings and communications with shareholders. An analysis of the shareholder base is presented to the Board on a quarterly basis. Research notes and broker analysis are circulated to and discussed with the Board. During the year, various meetings with institutional investors were arranged by the Group's broker.

Corporate Governance Statement

Copies of the Annual Report and Accounts are issued to all shareholders and together with the Interim Statement are available on the Group's website: www.modernwater.com. The Group makes full use of its website to provide information to shareholders and other interested parties. The website provides a facility to receive email alert notifications of Group news and regulatory announcements to the London Stock Exchange. Shareholders are given the opportunity to raise questions at the Annual General Meeting and the Directors are available both prior to and after the meeting for further discussion with shareholders. Gerard Brandon, as Chairman, is available to shareholders where contact through the normal channels of Chief Executive Officer is inappropriate or has failed to resolve concerns.

Directors' Remuneration Report

Introduction

This report has been approved by the Board and the Remuneration Committee (the 'Committee'). It has been prepared to comply with the disclosure requirements of Schedule 5 to the Large and Medium Sized Companies and Groups (Accounts and Reports) (Amendment) Regulations 2013. The report also provides the information required to be reported on Directors' remuneration under AIM Rule 19. The Committee is committed to maintaining high standards of corporate governance and has taken steps to comply with the principles of best practice, including the ABI Principles of Remuneration and The UK Corporate Governance Code in so far as they can be applied practically given the size of the Group.

Role of the Remuneration Committee

The Committee determines, in accordance with its terms of reference, the remuneration and other benefits, including bonuses and share-based payments, of the executive director.

The Committee consulted with the executive director about its remuneration proposals for the year.

Remuneration Policy

The Committee is aware that the remuneration package should be sufficiently competitive to attract, retain and motivate individuals capable of achieving the Group's objectives and thereby enhancing shareholder value. Performance-based remuneration should be clearly aligned with business strategy and objectives and be regularly reviewed. Overall arrangements should be prudent, well communicated, incentivise effectively and recognise shareholders' expectations.

Service Contracts

The Group's policy is for executive Directors to have service contracts with provision for termination of no more than 12 months' notice.

Alan Wilson and Dr Piers Clark had letters of appointment. Appointments can be terminated by the Group or the individual giving one month's notice. The services of Mike Townend were covered in a services agreement with IP Group plc, a significant shareholder in the Company.

The appointment of Gerard James Brandon as Non-Executive Director of the Company is for an initial period of 12 months, and thereafter is terminable by either party on not less than 3 months' written notice. The Director's fee is £50,000 per annum but will not be settled in cash. Instead, the Director will have his accrued fee settled by the allotment to him of New Ordinary Shares, which will be issued at the Placing Price of 0.5p per New Ordinary Share for the first two years of his appointment.

The appointment of Dr Nigel Burton as Non-Executive Director of the Company is for an initial period of 12 months, and thereafter is terminable by either party on not less than 3 months' written notice. The Director's fee is £30,000 per annum but will not be settled in cash. Instead, Dr Burton will have his accrued fee settled by the allotment to him of New Ordinary Shares, which will be issued at the Placing Price of 0.5p per New Ordinary Share for the first two years of his appointment.

As a condition of engagement of Gerard Brandon and Nigel Burton, no cash was to be paid in settlement of their respective director's fees. Instead, each of the director's accrued fees were to be settled by the allotment of New Ordinary Shares at the Placing Price of 0.5p per New Ordinary Share for the first two years of their respective appointments ("the period"). In addition, in the event of a change of control of the Company occurring during the period, the balance of the Ordinary Shares which would otherwise have accrued and been due to Gerard Brandon and Nigel Burton, in settlement of their respective director's fees for the period, will immediately become payable in full, subject to such deduction of income tax and national insurance contributions, with all such shares being allotted automatically to each director, prior to completion of the change of control.

Directors' Remuneration Report

The details of the executive and non-executive Directors' service contracts during the year are summarised below:

	Director	Date of contract	Notice period (months)
Directors during the year and up to the date of approval of the financial statements			
Simon Humphrey	Chief Executive Officer	18 May 2007	12
Alan Wilson	Independent Non-executive Chairman	26 March 2015	1
Mike Townend (resigned 20/02/2020)	Non-executive	18 May 2007	1
Piers Clark (resigned 20/02/2020)	Non-executive	2 January 2018	1
Gerard Brandon (appointed 4/03/2020)	Independent Non-executive Chairman	4 March 2020	3
Nigel Burton (appointed 20/02/2020)	Non-executive	21 January 2020	3

Directors' Remuneration

Remuneration for the executive director comprises basic salary, pension and insurance cover for medical, life and income protection.

The Board, within the limits stipulated by the Articles of Association and with recommendation from the executive director, determines non-executive directors' fees. The remuneration of the non-executive directors is not pensionable and the non-executive directors do not participate in any of the Group's other remuneration schemes.

Remuneration for the directors during the year was as follows:

	Basic salary, allowances and fees	* Bonus	Benefits	**Year ended 31 December 2019 Total (ex pension)**	Pension	**Year ended 31 December 2019 Total (inc pension)**	Year ended 31 December 2018 Total (ex pension)	Pension	Year ended 31 December 2018 Total (inc pension)
	£000	£000	£000	**£000**	£000	**£000**	£000	£000	£000
Executive directors									
Simon Humphrey	138	—	6	**144**	14	**158**	**144**	14	**158**
Non-executive directors									
Alan Wilson	39	—	—	39	—	39	**60**	—	**60**
Mike Townend**	—	—	—	**—**	—	—	**—**	—	**—**
Piers Clark	30	—	—	**30**	—	**30**	**30**	—	**30**
	207	—	6	**213**	14	**227**	**234**	14	**248**

* Bonuses are disclosed in the year for which the performance relates. There were no bonuses in relation to 2019 annual performance.

** The services of Mike Townend are covered through an agreement with IP Group plc, see note 26 to the Accounts.

Modern Water plc Incentive Plan ('MWIP')

The MWIP contains provisions relating to the making of awards in the form of options and conditional awards of ordinary shares.

a) Options & EMI Options

	Grant date	**Vesting date**	**Outstanding at 1 January 2019 number**	**Outstanding at 31 December 2019 number**	**Vested and exercisable at 31 December 2019 number**	**Option price**	**Charge to Statement of Comprehensive Income in 2019**	**Charge to Statement of Comprehensive Income in 2018**
Simon Humphrey	28.4.17	28.4.20	400,000	400,000	-	£0.00	-	£16,000
Simon Humphrey	26.4.19	26.4.22	-	400,000	-	£0.00	£4,500	-

Directors’ Remuneration Report

Directors’ Interests
Directors’ interests are detailed in the Directors’ Report.

Share Price
The Modern Water plc closing share price was 1.275p on 31 December 2019. The share price high for 2019 was 8.25p and the low was 1.1p.

On behalf of the Board

Nigel Burton
Chairman, Remuneration Committee
21 August 2020

Directors' Report

The Directors present their Annual Report together with the audited consolidated financial statements for the year ended 31 December 2019.

Corporate Structure

The Company is incorporated in England and Wales and has subsidiaries principally incorporated in England and Wales, as well as in China, Oman and the USA.

Review of the Business and Results

A detailed review of the business is set out in the Strategic Report on page 3. This includes comments on the financial performance and position of the Group. Information on the Group's internal control environment, including the content of reporting to the Board, is included in the Corporate Governance Statement on page 9.

Research and Development and Future Developments

Research and Development and future developments and prospects are set out in the Strategic Report.

Dividends

The Directors do not recommend the payment of a dividend (2018: £nil). At this point in the Company's development, the Directors look to invest capital in areas designed to achieve the Group's plan for growth, although clearly this matter is kept under constant review.

Directors' Interests

The Directors in office during the year and up to the date of signing the financial statements are listed below together with their beneficial interests in the share capital of the Company.

	% of issued share capital	**Number of ordinary shares of 0.25p**	% of issued share capital	Number of ordinary shares of 0.25p
	31 December 2019	**31 December 2019**	31 December 2018	31 December 2018
Simon Humphrey	**1.51**	**1,882,000**	1.81	1,882,000
Mike Townend	**0.52**	**648,296**	0.62	648,296
Piers Clark	**0.18**	**227,272**	0	0
Gerard Brandon	**0**	**0**	0	0
Nigel Burton	**0.24**	**300,000**	0	0

Substantial shareholdings

As at 4th August 2020, the following interests in 3% or more of the issued Ordinary Share capital had been notified to the Company:

	Number of Shares	% of Issued Share Capital
Helium Rising Stars Fund	**71,100,000**	**13.55%**

Statement of Directors' Responsibilities

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

Company law requires the Directors to prepare financial statements for each financial year. Under that law the Directors have prepared the financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union. 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 and profit or loss of the Company and Group for that period. In preparing these financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether applicable IFRSs have been followed, subject to any material departures disclosed and explained in the financial statements;

- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

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

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

Companies Act S.172 Statement

The Directors set out their statement of compliance with S172 (1) of the Compliance Act 2006 which should be read in conjunction with the rest of the annual report and with the Corporate Governance section of the Modern Water website.

The Directors preside over the Group for the benefit of all stakeholders. In making decisions, the Directors take account of their potential short- and long-term implications. The basic goal is the long-term sustainable growth of the business which will see returns to shareholders increasing, enable employees to realise their ambitions and help customers of Modern Water Group achieve their goals.

Modern Water strives to maintain a reputation for the highest standards of business conduct. The Directors always endeavour to operate to the highest ethical standards in order to maintain and promote the reputation of the Company, this being its greatest asset.

Directors' and Officers' Liability Insurance

The Group maintains liability insurance for its directors and officers. The Group has also provided an indemnity for its directors and the secretary, which is a qualifying third party indemnity provision for the purposes of the Companies Act 2006. This provision was in place during the year and up to the date of the Annual Report and Accounts.

Corporate Governance

The Annual Report includes a separate section that describes the Group's approach to applying the principles of best practice associated with corporate governance. See page 9.

Financial Instruments

The Group's financial instruments primarily comprise cash and cash equivalents. In addition, various other financial instruments such as trade receivables and trade payables arise directly from its operations. Please refer to note 3 to the Accounts for greater details of the Group's risks and policies regarding financial instruments.

Independent Auditor

Jeffreys Henry LLP were appointed post year end and have expressed their willingness to continue in office as auditors and a resolution to reappoint them will be proposed at the forthcoming Annual General Meeting.

Directors' Statement as to Disclosure of Information to Auditor

The directors who were members of the Board at the time of approving the Directors' Report are listed on page 9. Having made enquiries of fellow directors, each of these directors confirms that:

- so far as each director is aware, there is no relevant audit information of which the Company's auditor is unaware; and
- the Directors have taken all the steps that they ought to have taken as directors in order to make themselves aware of any relevant audit information and to establish that the Company's auditor is aware of that information

Simon Humphrey
Chief Executive
21 August 2020

OPINION

We have audited the financial statements of Modern Water plc (the 'Parent Company') and its subsidiaries (the 'Group') for the year ended 31 December 2019 which comprise the Group Statement of Comprehensive Income, the Group and Company Statements of Financial Position, the Group and Company Statements of Changes in Equity, the Group and Company Statements of Cash Flows and the related notes to the financial statements, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union and as regards the Parent Company Financial Statements, as applied in accordance with the provisions of the Companies Act 2006.

In our opinion:

- the Group and Parent Company financial statements give a true and fair view of the state of the Group's and of the Parent Company's affairs as at 31 December 2019 and of the Group's loss for the year then ended;
- the Group financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union;
- the Parent Company financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union and as applied in accordance with the provisions of the Companies Act 2006; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

BASIS FOR OPINION

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the Group and Parent Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

MATERIAL UNCERTAINTY RELATING TO GOING CONCERN

We draw your attention to the primary statements within these financial statements, which indicates that the Group incurred a loss of £2.1m and had net cash outflows from operating activities of £0.6m for the year ended 31 December 2019.

We further draw your attention to note 2.1.1 in the financial statements, which highlights that management have made significant assumptions in preparing the financial statements on a going concern basis.

COVID-19 outbreak could impact on the Group's ability to win contracts or could also delay the start of assignments already won, which could have an impact on future cashflows. It remains difficult to assess reliably whether there will be any material disruption in the future which could adversely impact the Group's forecast.

See the going concern assumption key matter on pages 19 to 20 where we describe how we have evaluated management's assessment and the key observations arising with respect to that evaluation.

Our opinion is not modified in respect of this matter.

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the Financial Statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) we identified, including those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. This is not a complete list of all risks identified by our audit.

- Revenue may be improperly recognised
- Carrying value of intangible assets
- The use of the going concern assumption
- Carrying value of investment in subsidiaries and inter-company receivable (parent company only)

These are explained in more detail below.

Key Audit Matter	How the scope of our audit responded to the key audit matter
Revenue may be improperly recognised **The Group recognises revenue in accordance with the Group's accounting policy and International Financial Reporting Standard (IFRS) 15 'Revenue from Contracts with Customers'.** **The revenue recorded by the Group is one of the key determinants of the Group's underlying performance and results and is one of the Group's Key Performance Indicators.** **The application of IFRS 15 is an area requiring significant judgement by management. In particular, where a contract with a customer involves delivery of a service over a period of time. As a result, there is an element of judgement in determining the amount of revenue to be recognized in each reporting period.** **We therefore determined this to be a key audit matter.**	We have performed the following audit procedures: • assessed the appropriateness of the Group's revenue recognition accounting policies; • reviewed a sample of contracts with customers and tested that the Group has correctly accounted for the revenue arising from these contracts in accordance with the accounting policies; • performed detailed testing on individually significant contracts, including substantiating a sample of transactions with underlying documents such as contracts and understanding the key obligations relevant to the recognition of revenue. • Identified contracts that spanned the year end and re-calculated the expected deferred and accrued income and compared this to management's calculation. • performed a walk-through of the process followed and related controls with regard to the recognition of revenue; • evaluated whether revenue has been appropriately presented and disclosed in the financial statements. Based on the audit work performed, we are satisfied that management have appropriately accounted for revenue in line with their accounting policy and in accordance with the requirements of IFRS 15. We are also satisfied that all necessary disclosure have been made in the consolidated financial statements.

Carrying value of intangibles

The Group holds material intangible assets. These intangibles comprise patents and trademarks, development costs and research and development.

The Directors have a duty to confirm that all intangibles, are correctly recognized and appropriately considered for any impairment at the year end.

Furthermore, should impairment indicators be identified, there is a level of judgement exercised by management in estimating fair value of intangibles, which may result in inaccurate valuation of balances.

We have performed the following audit procedures:

- obtained and reviewed management's assessment of impairment of the intangibles held;
- ensured key judgements are robust by review of events surrounding the judgement and validating the judgements by agreeing to supporting evidence;
- where indicators of impairment were identified, we challenged management's assessment of any future income from the intangibles;
- where no indicators of impairment were highlighted by management, we challenged the judgements made in management's assessment by identifying contradictory signs of any potential indicators of impairment; and
- considered the appropriateness of the Group's disclosures in relation to any impairment in the financial statements.

Based on the audit work performed, we are satisfied that management have appropriately valued intangibles in line with their accounting policy and in accordance with the requirements of IFRS. We are also satisfied that all necessary disclosure have been made in the consolidated financial statements.

Going concern

Management judgement is required in assessing whether the Company is a going concern as it has historically incurred losses and is in the process of refocusing its business activities.

The key assumptions that impact the conclusions are the levels of future revenue, and the ability to control the operating costs.

There are therefore inherent risks that the forecasts may overstate future revenue due to the timing of closure of future contracts, or understate future costs, and that the Company will not be able to operate within its cash resources and continue to operate as a going concern.

We have performed the following audit procedures:

- obtained management's forecasts and cash flow analysis, and their going concern assessment;
- assessed the reliability of forecasts to date by agreeing historical actuals to budgets, and challenging the current forecasts;
- tested the clerical accuracy of management's forecast;
- challenged management's forecast assumptions, and inputs including reviewing the forecast revenue and corroborated the assumptions over the conversion of new

The COVID-19 pandemic has created a great deal of uncertainty regarding the future outlook of the business, as well as a number of opportunities for the Group.	contracts and the levels of costs that are forecast. • We reviewed the latest management accounts to gauge the financial position; • We performed sensitivity analysis on the cash flow forecasts prepared by the Directors; • Considered bank position at date of sign-off; • Considered the Group's historic ability to raise funds; and • considered the appropriateness of the Company's disclosures in relation to going concern in the financial statements. As detailed above, we note that there are inherent risks over the Group's forecasts. We note that the Group has historically been loss making given the level of research and development activity. We have enquired with management as to the impact of COVID-19 and the steps being taken to limit the impact of the pandemic on the business. We have reviewed forecasts and latest bank balances. The forecasts have been stress tested by management and the assumptions have been challenged. Due to the risks outlined above, a material uncertainty relating to going concern is highlighted in the auditor's report.
Impairment of parent company investment in subsidiaries and carrying value of inter-company receivables – parent company financial statements only	
We identified a risk that the investments and inter-company receivables of the parent company (Modern Water Plc) in its subsidiaries (subsidiaries are listed within note 16) may be impaired. **Management's assessment of the recoverable amount of investments/inter-company receivables in/with subsidiaries requires estimation and judgement around assumptions used, including the cash flows to be generated from continuing operations. Changes to assumptions could lead to material changes in the estimated recoverable amount, impacting the value of investment in the subsidiaries/amounts receivable from subsidiaries and impairment charges.**	We have performed the following audit procedures: • reviewed management's assessment of future operating cashflows and indicators of impairment; • compared the carrying value of the investment at the year end to the net assets and expected future profits of each subsidiary; • assessed the methodology used by management to estimate the future profitability of it's subsidiaries and recoverable value of the investment, in conjunction with any intra-group balances, to ensure that the method used is appropriate; • assessed the reasonableness of the key assumptions used in management's estimates of

recoverable value, in line with the economic and industry statistics relevant to the business;

- challenged cash inflows from revenue generating activities and the key assumptions applied in arriving at these;
- assessed the reasonability of cash outflows, including contracted delivery costs, and research and capital spend;
- considered the appropriateness of the Parent Company’s disclosures in relation to any impairment in the Company only financial statements; and
- ensured that disclosures of the key judgements and assumptions, and sensitivity of the impairment loss recognised was appropriately disclosed.

Based on the audit work performed we are satisfied that the management have accounted for the impairment loss appropriately and in accordance with accounting standards, and the impairment loss is appropriately disclosed in the Parent Company financial statements.

OUR APPLICATION OF 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 judgment, we determined materiality for the Group financial statements as follows:

	Financial statements
Overall materiality	£62,000 (2018: £100,000).
How we determined it	Based on an average of 2% of revenue
Rationale for benchmark applied	We believe that revenue is the primary measure used by the shareholders in assessing the performance of the Group. Revenue is one of the main performance indicators.

We agreed with the Directors that we would report to them misstatements identified during our audit above £3,100 (2018: £5,000) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

Based on our professional judgment, we determined materiality for the Company financial statements as follows:

	Financial statements
Overall materiality	£50,000 (2018: £46,000).

How we determined it	Based on of 1% of gross assets, restricted by Group materiality
Rationale for benchmark applied	We believe that gross assets are the primary measure used by the shareholders in assessing the performance of the Company. This benchmark is considered the most appropriate because the parent company is not a trading entity and is a holding company.

We agreed with the Directors that we would report to them misstatements identified during our audit above £2,500 (2018: £2,000) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

AN OVERVIEW OF THE SCOPE OF OUR AUDIT

As part of designing our audit we determined materiality, as above, and assessed the risk of material misstatement in the financial statements. In particular, we looked at areas requiring the Directors to make significant judgements and estimates, for example in respect of the valuation of investment in subsidiaries, intangibles and inventory and considered future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including evaluating whether there was evidence of bias by the Directors that represented a risk of material misstatement due to fraud.

How we tailored the audit scope
The UK operations and consolidation are accounted for from the UK. We conducted a full scope audit of the Group and key components whilst carrying out targeted audit procedures on non-significant components.

Our audit was conducted from our London office where the audit team was based, with regular interaction with key Group personnel responsible for the management of the Group and the accounting function. Additionally, discussions were held with those responsible for the functioning of the entity in USA and China. Virtual communications were used to verify certain aspects of our audit as the work was carried out during the Covid-19 pandemic.

We have audited all components within the Group, and no unaudited components remain.

Involvement with component teams
All audit work performed for the purposes of the audit was undertaken by the Group audit team. There were no component audit teams.

OTHER INFORMATION

The other information comprises the information included in the Annual Report, other than the financial statements and our auditor's report thereon. The Directors are responsible for the other information. Our opinion on the Group and Parent Company financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

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 such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in 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 in this regard.

OPINIONS ON OTHER MATTERS PRESCRIBED BY THE COMPANIES ACT 2006

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the Strategic report and the Directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the Strategic report and the Directors' report have been prepared in accordance with applicable legal requirements.

MATTERS ON WHICH WE ARE REQUIRED TO REPORT BY EXCEPTION

In the light of the knowledge and understanding of the Group and the Parent Company and their environment obtained in the course of the audit, we have not identified material misstatements in the Strategic report or the Directors' report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

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

RESPONSIBILITIES OF DIRECTORS

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

In preparing the Group and Parent Company financial statements, the Directors are responsible for assessing the Group's and the Parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or the Parent Company or to cease operations, or have no realistic alternative but to do so.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

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

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: *http://www.frc.org.uk/auditorsresponsibilities*. This description forms part of our auditor's report.

USE OF THIS REPORT

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

Sanjay Parmar (Senior Statutory Auditor)
For and on behalf of
Jeffreys Henry LLP, Statutory Auditor
Finsgate
5-7 Cranwood Street
London EC1V 9EE
21 August 2020

Group Statement of Comprehensive Income

For the year ended 31 December 2019

		2019	2018 Restated*
		Total	Total
Continuing Operations	Note	**£000**	£000
Revenue	5	**2,941**	3,646
Cost of sales	5	**(1,475)**	(1,607)
Gross profit	5	**1,466**	2,039
Administrative expenses	6	**(2,393)**	(2,538)
Operating loss before depreciation and amortisation		**(927)**	(499)
Depreciation and amortisation	14,15,23.1	**(687)**	(483)
Operating loss		**(1,614)**	(982)
Finance income	10	**65**	204
Finance costs	10	**(97)**	(79)
Loss on ordinary activities before taxation		**(1,646)**	(857)
Taxation	11.1	**(27)**	7
Loss for the year		**(1,673)**	(850)
Other comprehensive income			
Foreign currency translation differences on foreign operations		**181**	(504)
Total comprehensive loss for the year for Continuing Operations		**(1,492)**	(1,354)
Loss attributable to:			
Owners of the parent		**(1,488)**	(1,218)
Non-controlling interest		**(4)**	(136)
Total Loss for the Year		**(1,492)**	(1,354)
Discontinued operations			
Modern Water Services Limited	12	**(546)**	(1,226)
Modern Water Monitoring Limited	12	**(37)**	(230)
		(2,075)	(2,810)
Total comprehensive loss attributable to :			
Owners of the parent		**(2,071)**	(2,674)
Non-controlling Interest		**(4)**	(136)
Total comprehensive loss for the year including discontinued operations		**(2,075)**	(2,810)
(Loss) per share for the year (attributable to owners of the parent):			
Basic (loss) per share continuing operations	13	**(1.28p)**	(1.24p)
Diluted (loss) per share continuing operations	13	**(1.28p)**	(1.24p)
Basic (loss) per share discontinued operations	13	**(0.50p)**	(1.49p)
Diluted (loss) per share discontinued operations	13	**(0.50p)**	(1.49p)

Modern Water plc has taken advantage of the exemption provided under Section 408 of the Companies Act 2006 not to disclose the parent company statement of comprehensive income.

*The restated comparative for 2018 is to reflect the discontinued operations. Details are disclosed in note 12.

The notes from page 30 onwards are an integral part of these consolidated financial statements.

Group and Company Statements of Financial Position

as at 31 December 2019

		Group		Company	
		2019	2018	**2019**	2018
	Note	**£000**	£000	**£000**	£000
Assets					
Non-current assets					
Intangible assets	15	**1,190**	1,563	**-**	-
Property, plant and equipment	14	**111**	199	**-**	-
Right of Use Assets	23	**252**	-	**-**	-
Investments	16	**-**	-	**-**	2,023
		1,553	1,762	**-**	2,023
Current assets					
Inventories	17	**706**	935	**-**	-
Trade and other receivables	18	**268**	1,014	**2,051**	6,479
Cash and cash equivalents	19	**176**	228	**24**	-
		1,150	2,177	**2,075**	6,479
Total assets		**2,703**	3,939	**2,075**	8,502
Equity and liabilities					
Equity					
Ordinary shares	24	**311**	261	**311**	261
Share premium account	24	**43,140**	42,613	**43,140**	42,613
Warrant reserve	24.3	**105**	100	**105**	100
Merger reserve	24.1	**398**	398	**398**	398
Foreign exchange reserve	24.2	**(488)**	(669)	**-**	-
Accumulated losses		**(42,823)**	(40,642)	**(43,270)**	(35,590)
		643	2,061	**684**	7,782
Non-controlling interests		**5**	9	-	-
Total equity		**648**	2,070	**684**	7,782
Liabilities					
Non-current liabilities					
Lease Liability	23	**156**	-	**-**	-
Deferred tax liabilities	11.3	**-**	-	**-**	-
		156	-	**-**	-
Current liabilities					
Trade and other payables	20	**1,325**	1,337	**951**	188
Lease Liability	23	**134**	-	**-**	-
Bank loan	21	**440**	532	**440**	532
		1,899	1,869	**1,391**	720
Total liabilities		**2,055**	1,869	**1,391**	720
Total equity and liabilities		**2,703**	3,939	**2,075**	8,502

The loss attributed to the parent company in the year was £7,785,000 (2018 loss of: £1,390,000).

The notes on page 30 onwards are an integral part of these consolidated financial statements. The financial statements on pages 25 to 60 were approved by the Board of Directors on 21 August 2020 and signed on its behalf by:

Simon Humphrey
Chief Executive Officer
21 August 2020
Modern Water plc

Registered number: 05963927

Group and Company Statements of Changes in Equity

for the year ended 31 December 2019

Group	Note	Ordinary shares £000	Share premium Account £000	Warrant reserve £000	Merger reserve £000	Foreign exchange Reserve £000	(Accumulated losses)/ Retained Earnings £000	Total £000	Non-controlling interest £000	Total Equity £000
Balance as at 1 January 2018		**239**	**41,604**	**-**	**398**	**(165)**	**(38,540)**	**3,536**	**145**	**3,681**
Comprehensive loss										
Loss for the year		-	-	-	-	-	(2,170)	(2,170)	(136)	(2,306)
Foreign currency translation differences		-	-	-	-	(504)	-	(504)	-	(504)
Total comprehensive loss		-	-	-	-	(504)	(2,170)	(2,674)	(136)	(2,810)
Transactions with owners										
Share issue (net of transaction fees)		22	1,009	100	-	-	(100)	1,031	-	1,031
Share-based payments	8	-	-	-	-	-	168	168	-	168
Total transactions with owners		22	1,009	100	-	-	68	1,199	-	1,199
Balance as at 31 December 2018		**261**	**42,613**	**100**	**398**	**(669)**	**(40,642)**	**2,061**	**9**	**2,070**
Change in accounting policy (IFRS 16)	2.1.2	-	-	-	-	-	(34)	(34)	-	(34)
Restated total equity as at 1 January 2019		**261**	**42,613**	**100**	**398**	**(669)**	**(40,676)**	**2,027**	**9**	**2,036**
Comprehensive loss										
Loss for the year		-	-	-	-	-	(1,669)	(1,669)	(4)	(1,673)
Expired warrants		-	-	(100)	-	-	100	-	-	-
Loss on discontinued operations		-	-	-	-	-	(583)	(583)	-	(583)
Foreign currency translation differences		-	-	-	-	181	-	181	-	181
Total comprehensive loss		-	-	(100)	-	181	(2,152)	(2,071)	(4)	(2,075)
Transactions with owners										
Share issue (net of transaction fees)		50	527	105	-		-	682	-	682
Share-based payments	8	-	-	-	-	-	5	5	-	5
Total transactions with owners		50	527	105	-	-	5	687	-	687
Balance as at 31 December 2019		**311**	**43,140**	**105**	**398**	**(488)**	**(42,823)**	**643**	**5**	**648**

Group and Company Statements of Changes in Equity

for the year ended 31 December 2019

	Note	Ordinary shares	Share premium Account	Warrant reserve	Merger reserve	Foreign exchange Reserve	(Accumulated losses)/ Retained Earnings	Total	Non-controlling interest	Total Equity
		£000	£000	£000	£000	£000	£000	£000	£000	£000
Company										
Balance as at 1 January 2018		**239**	**41,604**	**-**	**398**	**-**	**(34,268)**	**7,973**	-	**7,973**
Comprehensive loss										
Loss and total comprehensive loss for year		-	-	-	-	-	(1,390)	(1,390)	-	(1,390)
Total comprehensive loss		-	-	-	-	-	**(1,390)**	**(1,390)**	**-**	**(1,390)**
Transactions with owners										
Share Issue (net of transaction fees)		22	1,009	100	-	-	(100)	1,031	-	1,031
Share-based payments	8	-	-	-	-	-	168	168	-	168
Total transactions with owners		22	1,009	100	-	-	68	1,199	-	1,199
Balance as at 1 January 2019		**261**	**42,613**	**100**	**398**	**-**	**(35,590)**	**7,782**	**-**	**7,782**
Comprehensive loss										
Loss and total comprehensive loss for year		-	-	-	-	-	(7,785)	(7,785)	-	(7,785)
Expired warrants		-	-	(100)	-	-	100	-	-	-
Total comprehensive loss		**-**	**-**	**(100)**	**-**	**-**	**(7,685)**	**(7,785)**	**-**	**(7,785)**
Transactions with owners										
Share issue (net of transaction fees)		50	527	105	-	-	-	682		682
Share-based payments	8	-	-	-	-	-	5	5	-	5
Total transactions with owners		50	527	105	-	-	5	687	-	687
Balance as at 31 December 2019		**311**	**43,140**	**105**	**398**	**-**	**(43,270)**	**684**	**-**	**684**

The notes on pages 30 to 60 are an integral part of these consolidated financial statements. The Merger reserve balance as at 31 December 2019 relates solely to the 2011 acquisition of Cogent Environmental Limited.

Group and Company Statements of Cash Flows

for the year ended 31 December 2019

		Group		Company	
		2019	2018	**2019**	2018
	Note	**£000**	£000	**£000**	£000
Net cash flows from operating activities					
Loss on ordinary activities before taxation		**(1,646)**	(857)	**(7,785)**	(1,390)
Adjustments for:					
Inventory Valuation adjustment		**7**	3	**—**	—
Depreciation of property, plant and equipment	14,23.1	**210**	109	**—**	—
Amortisation of intangible assets	15	**477**	414	**—**	—
Inter Company Bad Debt Write off		**—**	—	**6,959**	—
Impairment of investments		**—**	—	**—**	—
Discontinued operations	12	**(573)**	(1,612)	**—**	—
Net finance income	10	**32**	(112)	**(45)**	32
Share-based payments	8	**5**	168	**5**	21
R&D Tax credit receipts		**—**	155	**—**	—
Movements in working capital:					
(Increase) / decrease in inventories		**229**	109	**—**	—
Decrease / (increase) in trade and other receivables		**746**	29	**(314)**	(508)
Increase / (decrease) in trade and other payables		**(13)**	242	**764**	80
Net cash flows from operating activities		**(526)**	(1,352)	**(416)**	(1,765)
Cash flows from investing activities					
Purchase of property, plant and equipment	14	**(93)**	(60)	**—**	—
Purchase of patents and development costs	15	**(108)**	(319)	**—**	—
Interest Received/(Paid)		**(45)**	—	**(45)**	—
Net cash flows (used in)/generated from investing activities		**(246)**	(379)	**(45)**	—
Cash flows from financing activities					
Discontinued operations	12	**533**	—	**—**	—
(Repayments)/Proceeds from borrowings		**(92)**	500	**(92)**	500
IFRS 16 – finance lease interest		**(27)**	—	**—**	—
IFRS 16 – repayment and capital on liability		**(290)**	—	**—**	—
Proceeds from issuance of ordinary shares		**577**	1,031	**577**	1,031
Net cash flows generated from financing activities		**701**	1,531	**485**	1,531
Net increase in cash and cash equivalents		**(71)**	(200)	**24**	(234)
Cash and cash equivalents at the beginning of the year	19	**228**	466	**—**	234
Exchange losses on bank balances		**19**	(38)	**—**	—
Cash and cash equivalents at the end of the year	19	**176**	228	**24**	—

The notes on pages 30 to 60 are an integral part of these consolidated financial statements.

Notes to the Consolidated Financial Statements

1. General information

Modern Water plc is a public limited company incorporated and domiciled in England and Wales, whose shares are publicly traded on the Alternative Investment Market (AIM), a market operated by the London Stock Exchange. The registered office is 12th Floor, 6 New Street Square, London, EC4A 3BF.

The consolidated and Company financial statements of Modern Water plc (the 'Company') and its subsidiaries (together the 'Group') for the year ended 31 December 2019 were authorised for issue by the Board of Directors on 21 August 2020 and the statement of financial position was signed by the Chief Executive Officer (Simon Humphrey).

The principal accounting policies adopted by the Group and Company are set out below.

2. Summary of significant accounting policies

The principal accounting policies have been applied consistently throughout the current and prior year, unless otherwise stated, in the preparation of these financial statements.

2.1 Basis of preparation and changes in accounting policy and disclosures

The financial statements of Modern Water plc have been prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the EU, IFRS Interpretations Committee (IFRIC) interpretations and the Companies Act 2006 applicable to companies reporting under IFRS. The financial statements have been prepared under the historical cost convention.

The preparation of financial statements in conformity with IFRSs requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in note 4.

Under Section 479A of the Companies Act 2006, exemptions from an audit of the accounts for the financial year ended 31 December 2019 have been taken by Aguacure Ltd (05893786), Cymtox Limited (05025552), MW Monitoring IP Limited (07810737), Modern Water Holdings Limited (07588452), Modern Water (Nominees) Limited (6013174), MW Monitoring Limited (7495046), Poseidon Water Limited (04598478) and Surrey Aquatechnology Limited (05698169). As required, the Company guarantees all outstanding liabilities to which the subsidiary companies listed above are subject at the end of the financial year, until they are satisfied in full and the guarantee is enforceable against the parent undertaking by any person to whom the subsidiary companies listed above is liable in respect of those liabilities.

2.1.1 Going concern

The Directors are required by company law to be satisfied that the Group has adequate resources to continue in business for the foreseeable future. The Group has recorded a loss for the year of £1.5m and has net cash out flows from operating activities of £0.5m. The Directors have performed a detailed analysis of the cash flow projections for the Group as a whole covering the period through to the financial year ended 31 December 2020 and beyond.

Post year end the Group received two significant cash injections. In February 2020 the Company raised a net £1.7m from a placing of shares and in June 2020 the Company received £110k from the exercise of warrants.

The forecasts support that the Company will remain a going concern for at least twelve months from the date on which these financial statements have been approved and signed. The cash flow forecasts are based on the key assumptions set out below.

- Group overheads estimated to be reduced further from £2.4m in 2019 to £1.8m 2020
- Small increase in revenue in Monitoring Division
- Increase in revenue from the Chinese market
- Increase in value and number of AMBC licences in 2020
- Barclays Bank Plc loan repayments rescheduled from June 2020

As disclosed in Note 21 a covenant on the bank loan was breached as at 31 December 2019, but the bank has waived this breach, reset the covenant and agreed a revised repayment schedule.

The Directors have considered the impact of Covid-19 and are closely monitoring the situation.

Following the review, the Directors have concluded that adequate resources are available and therefore that they are justified in using the going concern basis for the preparation of the financial statements.

2.1.2 Changes in accounting policy and disclosures

Changes in accounting policy

For the purpose of the preparation of these consolidated financial statements, the Group has applied all standards and interpretations that are effective for accounting periods beginning on or after 1 January 2019.

Other than IFRS 16, no new standards, amendments and interpretations have had a material impact on the Group.

Initial application of IFRS 16 'Leases'

As of 1 January 2019, the Group adopted IFRS 16 Leases which replaced IAS 17. IFRS 16 introduced a single, on-balance sheet accounting model for leases. As a result, the Group, as a lessee, is required to recognise right-of-use assets representing its right to use the underlying assets and lease liabilities representing its obligation to make lease payments.

The Group has applied IFRS 16 using the modified retrospective approach, under which the cumulative effect of initial application is recognised in retained earnings at 1 January 2019. Accordingly, the comparative information presented for 2018 has not been restated. The details of the changes in accounting policies are disclosed below.

The Group recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, being the present value of minimum lease payments, and subsequently at cost less any accumulated depreciation and impairment losses. The value of the lease will be remeasured when and if terms of the lease change. The Group shall apply judgement to determine the lease term for some lease contracts where it is a lease that includes renewal options.

The Group has applied the exemption not to recognise right-of-use assets and liabilities for leases with less than 12 months of lease term when applying IFRS 16 to leases previously classified as operating leases under IAS 17.

Transition to IFRS 16

The Group adopted IFRS 16 using the simplified retrospective method of adoption with the date of initial application of 1 January 2019. The Group elected to use the transition practical expedient allowing the standard to be applied only to contracts that were previously identified as leases applying IAS 17 and IFRIC 4 at the date of initial application. The Group also elected to use the recognition exemptions for lease contracts that, at the commencement date, have a lease term of 12 months or less and do not contain a purchase option ('short-term leases'), and lease contracts for which the underlying asset is of low value ('low-value assets').

Notes to the Consolidated Financial Statements

The effect of adoption of IFRS 16 is as follows:

Impact on the statement of financial position as at 31 December 2018:

	31 Dec 2018 £'000
Assets	
Right of Use Assets	359
Liabilities	
Lease Liabilities	**(393)**
Net impact on equity at 31 December 2018	**(34)**

Impact on Consolidated Statement of Comprehensive Income (increase/(decrease)) for the year ended 31 December 2018:

	Year ended 31 December 2018 £'000
Depreciation expense	108
Rent expense (included in Administration costs)	**(127)**
Loss from operations	(19)
Finance costs	36
Loss for the year ending 31 December 2018	17

Impact on the statement of cash flows (increase/(decrease)) for the year ended 31 December 2018:

	Year ended 31 December 2018 £'000
Net cash flows from operating activities	108
Net cash flows from financing activities	(36)

New standards, interpretations and amendments not yet effective

Standards, amendments and interpretations that are not yet effective and have not been early adopted are as follows:

Standard	Impact on initial application	Effective date
IFRS 3 (Amendments)	Definition of a Business	1 January 2020
IAS 1 (Amendments)	Definition of material	1 January 2020
IAS 8 (Amendments)	Definition of material	1 January 2020
IFRS 17	Insurance contracts	1 January 2021
IAS 1	Classification of Liabilities as Current or Non-Current.	1 January 2022

The Group is evaluating the impact of the new and amended standards above which are not expected to have a material impact on the Group's results or shareholders' funds.

2.1.3 Parent company financial statements

Modern Water plc has taken advantage of the exemption provided under section 408 of the Companies Act 2006 not to disclose the parent company statement of comprehensive income. The loss attributed to the parent company in the year was £7,785,000 (2018 loss of: £1,390,000).

2.2 Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company (its subsidiaries).

(a) Subsidiaries

Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if, and only if, the Group has:

- Power over the investee (i.e., existing rights that give it the current ability to direct the relevant activities of the investee)
- Exposure, or rights, to variable returns from its involvement with the investee
- The ability to use its power over the investee to affect its returns

Generally, there is a presumption that a majority of voting rights results in control. To support this presumption and when the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- The contractual arrangement(s) with the other vote holders of the investee
- Rights arising from other contractual arrangements
- The Group's voting rights and potential voting rights

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated financial statements from the date the Group gains control until the date the Group ceases to control the subsidiary.

Acquisition costs are expensed as incurred.

If the business combination is achieved in stages, the acquisition date fair value of the acquirer's previously held equity interest in the acquire is re-measured to fair value at the acquisition date through profit or loss.

Any contingent consideration to be transferred by the Group is recognised at fair value at the acquisition date.
Subsequent changes to the fair value of the contingent consideration that is deemed to be an asset or liability is recognised in accordance with IAS 39 either in the profit and loss or as a charge to other comprehensive income.

Contingent consideration that is classified as equity is not re-measured, and its subsequent settlement is accounted for within equity.

Goodwill is initially measured as the excess of the aggregate of the consideration transferred in relation to the fair value of the net identifiable assets acquired and liabilities assumed. If this consideration is lower than the fair value of the net assets of the subsidiary acquired, the difference is recognised in the statement of comprehensive income.

Inter-company transactions, balances, income and expenses on transactions between group companies are
eliminated. Profits and losses resulting from inter-company transactions that are recognised in assets are also eliminated. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

(b) Transactions with non-controlling interests

The Group treats transactions with non-controlling interests as transactions with the equity owners of the Group. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of the net assets of the subsidiary is recorded in equity.

Comprehensive losses are attributable to non-controlling interests only to the extent the Group expects to recover them.

When the Group ceases to have control or significant influence, any retained interest in the entity is re-measured to fair value with the change in carrying amount recognised in the statement of comprehensive income. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. Any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognised in other comprehensive income are reclassified to the profit or loss.

2.3 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Board that makes strategic decisions.

2.4 Foreign currency translation

(a) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The consolidated financial statements are presented in sterling (£), which is the Group's presentation currency and the Company's functional currency.

(b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are re-measured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of comprehensive income. Foreign exchange gains and losses that relate to borrowings and cash and cash equivalents are presented in the statement of comprehensive income within 'finance income or cost'.

(c) Group companies

The results and financial position of all the Group entities (none of which has the currency of a hyper-inflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities for each statement of financial position presented are translated at the closing rate at the date of that statement of financial position;
- income and expenses are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the rate on the dates of the transactions); and
- all resulting exchange differences are recognised in other comprehensive income.

2.5 Property, plant and equipment

All property, plant and equipment is shown at cost less accumulated depreciation and impairment. Cost includes expenditure that is attributable to the acquisition of the items. Depreciation on assets is calculated using the straight-line method to allocate the cost of each asset to its residual value over its estimated useful economic life, as follows:

Leasehold improvements	–	remaining term of the lease
Plant and machinery	–	three to five years
Motor vehicles	–	three to five years
Office equipment	–	three to five years
Furniture, fixtures and fittings	–	three to five years

The assets' residual values and useful economic lives are reviewed, and adjusted if appropriate, at each balance sheet date.

Subsequent costs are capitalised only when it is probable that they will result in future economic benefits flowing to the Group and when they can be measured reliably. All other repairs and maintenance expenditure is charged to the statement of comprehensive income in the period in which it is incurred.

2.6 Intangible assets

(a) Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the Group's share of the net identifiable assets of the acquired subsidiary/joint venture/associate at the date of acquisition:

- goodwill on acquisitions of subsidiaries is included in 'intangible assets'; and
- goodwill on acquisitions of joint ventures is included in 'investments in joint ventures' and is tested for impairment as part of the overall balance

Separately recognised goodwill is tested annually for impairment and carried at cost less accumulated impairment losses. Impairment losses on goodwill are not reversed. Gains and losses on the disposal of an entity include the carrying amount of goodwill related to the entity sold.

Goodwill is not subject to amortisation, but is tested for impairment annually to identify whether there have been events or a change in circumstances to indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the carrying amount exceeds its recoverable amount. The recoverable amount is the higher of the asset's fair value less costs to sell and the value in use. For the purposes of assessing impairments, assets are grouped at the lowest levels for which there are identifiable cash flows in Cash Generating Units (CGUs). The allocation is made to those CGUs or groups of CGUs that are expected to benefit from the business combination in which the goodwill arose. Due to the pre-revenue stage of most of the Group's technologies, value in use has been assessed based on the present value of applying the Group's technologies to potential contracts in the future and an assessment of the expected number of such contracts.

(b) Patents and trademarks

Separately acquired patents are recognised at cost. They have a finite useful economic life and are subsequently carried at cost less accumulated amortisation. Amortisation is calculated using the straight-line method to allocate the cost of patents over their estimated useful economic lives of 20 years from patent filing.

Trademarks are initially recorded at historical cost. They have a finite useful life and are subsequently carried at cost less accumulated amortisation. Amortisation is calculated using the straight-line method to allocate the cost of trademarks over their useful economic life of five years from filing.

(c) Development costs

Development costs identified as a result of a business combination are accounted for in accordance with IAS 38, brought on to the consolidated statement of financial position at the date of acquisition and amortised on a straight-line basis between 10 and 20 years.

(d) Research and development

Expenditure on research activities is recognised as an expense in the period in which it is incurred.

Any internally-generated development costs are recognised as an asset only if all of the following are met:

1) The technical feasibility of completing the intangible asset so that it will be available for use or sale
2) The intention to compete the intangible asset and use or sell it
3) The ability to use or sell the intangible asset
4) The ability of the intangible asset to generate probable future economic benefits
5) The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset
6) The ability to measure reliably the expenditure attributable to the intangible asset during its development

Where no internally generated intangible asset can be recognised, development expenditure is recognised as an expense in the period in which it is incurred. Internally generated intangible assets are amortised on a straight-line basis over three years.

Patented technology acquired as part of a business combination is recorded at the fair value on acquisition and amortised on a straight-line basis over the useful economic life of the asset.

R&D tax credits received are recorded as income in the corporation tax charge/benefit in the year the cash is received.

2.7 Impairment of intangible assets, investments, property, plant and equipment

Assets that are subject to amortisation or depreciation are tested for impairment when events or a change in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the carrying amount exceeds its recoverable amount. The recoverable amount is the higher of the asset's fair value less costs to sell and the value in use. For the purposes of assessing impairments, assets are grouped at the lowest levels for which there are identifiable cash flows. Due to the pre-revenue stage of most of the Group's technologies, value in use has been assessed based on the present value of applying the Group's technologies to potential contracts in the future and an assessment of the expected number of such contracts.

2.8 Investments

Investments are stated at cost less any provision for impairment. Investment assets are tested annually for impairment, see note 16.

2.9 Leases

Prior to 1 January 2019: Leases in which a significant portion of the risks and rewards are retained by the lessor are classified as operating leases. Payments made under operating leases are charged to the Statement of Comprehensive Income on a straight-line basis over the period of the lease.

Assets held under finance leases are recognised as assets of the Group at the fair value at the inception of the lease or if lower, at the present value of the minimum lease payments. The related liability to the lessor is included in the Statement of Financial Position as a finance lease obligation. Lease payments are apportioned between interest expenses and capital redemption of the liability. Interest is recognised immediately in the Statement of Comprehensive Income, unless attributable to qualifying assets, in which case they are capitalised to the cost of those assets.

Post 1 January 2019: Assets held under leases are recognised as assets of the Group at the fair value at the inception of the lease or if lower, at the present value of the minimum lease payments. The related liability to the lessor is included in the Statement of Financial Position as a finance lease obligation. Lease payments are apportioned between interest expenses and capital redemption of the liability. Interest is recognised immediately in the Statement of Comprehensive Income, unless attributable to qualifying assets, in which case they are capitalised to the cost of those assets.

Exemptions are applied for short life leases and low value assets, with payments made under operating leases charged to the Statement of Comprehensive Income on a straight line basis over the period of the lease.

2.10 Cash and cash equivalents

In the Cash Flow Statements, cash and cash equivalents comprise cash in hand and deposits held at call with banks.

2.11 Financial instruments

Recognition and derecognition

Financial assets and financial liabilities are recognised when the Group becomes a party to the contractual provisions of the financial instrument.

Financial assets are derecognised when the contractual rights to the cash flows from the financial asset expire, or when the financial asset and substantially all the risks and rewards are transferred. A financial liability is derecognised when it is extinguished, discharged, cancelled or expires.

Classification and initial measurement of financial assets

Except for those trade receivables that do not contain a significant financing component and are measured at the transaction price in accordance with IFRS 15, all financial assets are initially measured at fair value adjusted for transaction costs (where applicable).

Financial assets, other than those designated and effective as hedging instruments, are classified into the following categories:

- amortised cost
- fair value through profit or loss (FVTPL)
- fair value through other comprehensive income (FVOCI).

In the periods presented the Group does not have any financial assets categorised as FVTPPL or FVOCI.

The classification is determined by both:

- the entity's business model for managing the financial asset
- the contractual cash flow characteristics of the financial asset.

All income and expenses relating to financial assets that are recognised in profit or loss are presented within finance costs, finance income or other financial items, except for impairment of trade receivables which is presented within other expenses.

Subsequent measurement of financial assets

Financial assets at amortised cost

Financial assets are measured at amortised cost if the assets meet the following conditions (and are not designated as FVTPL):

- they are held within a business model whose objective is to hold the financial assets and collect its contractual cash flows
- the contractual terms of the financial assets give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding

After initial recognition, these are measured at amortised cost using the effective interest method. Discounting is omitted where the effect of discounting is immaterial. The Group's cash and cash equivalents, trade and most other receivables fall into this category of financial instruments.

Impairment of financial assets

IFRS 9's impairment requirements use more forward-looking information to recognise expected credit losses – the 'expected credit loss (ECL) model'. This replaces IAS 39's 'incurred loss model'. Instruments within the scope of the new requirements included loans and other debt-type financial assets measured at amortised cost, trade receivables and contract assets recognised and measured under IFRS 15.

Recognition of credit losses is no longer dependent on the Group first identifying a credit loss event. Instead the Group considers a broader range of information when assessing credit risk and measuring expected credit losses, including past events, current conditions, reasonable and supportable forecasts that affect the expected collectability of the future cash flows of the instrument.

In applying this forward-looking approach, a distinction is made between:

- financial instruments that have not deteriorated significantly in credit quality since initial recognition or that have low credit risk ('Stage 1') and
- financial instruments that have deteriorated significantly in credit quality since initial recognition and whose credit risk is not low ('Stage 2').

'Stage 3' would cover financial assets that have objective evidence of impairment at the reporting date.

'12-month expected credit losses' are recognised for the first category while 'lifetime expected credit losses' are recognised for the second category.

Measurement of the expected credit losses is determined by a probability-weighted estimate of credit losses over the expected life of the financial instrument.

Trade and other receivables and contract assets

The Group makes use of a simplified approach in accounting for trade and other receivables as well as contract assets and records the loss allowance as lifetime expected credit losses. These are the expected shortfalls in contractual cash flows, considering the potential for default at any point during the life of the financial instrument. In calculating, the Group uses its historical experience, external indicators and forward-looking information to calculate the expected credit losses using a provision matrix.

The Group assess impairment of trade receivables on a collective basis as they possess shared credit risk characteristics they have been grouped based on the days past due. Refer to Note 19 for a detailed analysis of how the impairment requirements of IFRS 9 are applied.

Classification and measurement of financial liabilities

The Group's financial liabilities include borrowings, trade and other payables and derivative financial instruments.

Financial liabilities are initially measured at fair value, and, where applicable, adjusted for transaction costs unless the Group designated a financial liability at fair value through profit or loss.

Subsequently, financial liabilities are measured at amortised cost using the effective interest method except for derivatives and financial liabilities designated at FVTPL, which are carried subsequently at fair value with gains or losses recognised in profit or loss (other than derivative financial instruments that are designated and effective as hedging instruments).

All interest-related charges and, if applicable, changes in an instrument's fair value that are reported in profit or loss are included within finance costs or finance income.

2.12 Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the first-in, first-out (FIFO) method. The cost of finished goods and work in progress comprises raw materials, direct labour and other direct costs but excludes borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business, less applicable variable selling expenses. Provisions, if necessary, are made for slow-moving, obsolete and defective inventories.

2.13 Share Capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new ordinary shares or options are shown in equity as a deduction, net of tax, from the proceeds.

2.14 Employee benefits

(a) Pension obligations

The Group has a defined contribution pension plan for directors and staff. The scheme is administered by an insurance company to which the Group pays fixed contributions and the Group has no further payment obligations once the contributions have been paid. The contributions are recognised as an employee benefit expense when they are due. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

(b) Share-based payments

Share-based incentive arrangements are provided to directors and employees. The Group operates a number of share-based payment schemes under the Modern Water plc Incentive Plan (MWIP) which is described in note 8.

The fair value of the services received in exchange for the share-based payment is recognised as an expense with a corresponding credit to equity, where the payment is equity–settled, if cash settled then the cost is accrued in the statement of financial position. Where equity-settled the total amount to be expensed over the vesting period is determined by reference to the fair value of the options and bonus shares granted at the date of grant using either a Black-Scholes or Monte Carlo pricing model. Where cash-settled the total amount to be expensed over the vesting period is determined by reference to the fair value of the options granted at the date of grant and then reassessed at each subsequent reporting date using the Black-Scholes model. The annual charge is modified to take account of awards granted to employees who leave the Group during the performance or vesting period and forfeit their rights to the share options and in the case of non-market related performance conditions, where it becomes unlikely they will vest.

The grant by the Company of share-based payments to the employees of subsidiary undertakings in the Group is treated as a capital contribution. The fair value of employee services received, measured by reference to the grant date fair value, is recognised over the vesting period as an increase to investment in subsidiary undertakings, with a corresponding credit to equity.

(c) Warrant Liability

In January 2019 we issued to Turner Pope Broker warrants to purchase an aggregate of 9,578,000 shares of our common stock at a price of 6.50 and 9.75 pence. We accounted for the Turner Pope warrants as non-cash liabilities and estimated their fair value using Black Scholes model. The key component in determining the fair value of the Turner Pope Warrants and the related liability was the market price of our common stock, which is subject to significant fluctuation and is not under our control.

2.15 Taxation

The current income tax charge is calculated on the basis of the tax laws applicable to the current year and enacted or substantively enacted at the statement of financial position date in the countries where the Company's subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation, and establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination, which at the time of the transaction affects neither the accounting nor the taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the balance sheet date and are expected to apply when the related deferred income tax is realised or the deferred income tax liability is settled.

Deferred income tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Deferred income tax is provided on temporary differences arising on investments in subsidiaries, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

2.16 Revenue

Revenue arises mainly from the sale of goods and services, licence and maintenance fees, engineering contracts and royalties.

To determine whether to recognise revenue, the Group follows a 5-step process:

1 Identifying the contract with a customer
2 Identifying the performance obligations
3 Determining the transaction price
4 Allocating the transaction price to the performance obligations
5 Recognising revenue when/as performance obligation(s) are satisfied.

The Group often enters into transactions involving a range of the Group's products and services, for example for the delivery of goods, licences and maintenance fees. In all cases, the total transaction price for a contract is allocated amongst the various performance obligations based on their relative stand-alone selling prices. The transaction price for a contract excludes any amounts collected on behalf of third parties.

Revenue is recognised either at a point in time or over time, when (or as) the Group satisfies performance obligations by transferring the promised goods or services to its customers.

The Group recognises contract liabilities for consideration received in respect of unsatisfied performance obligations and reports these amounts as other liabilities in the statement of financial position. Similarly, if the Group satisfies a performance obligation before it receives the consideration, the Group recognises either a contract asset or a receivable in its statement of financial position, depending on whether something other than the passage of time is required before the consideration is due.

(a) Sale of goods

Revenue from the sale goods for a fixed fee is recognised when or as the Group transfers control of the assets to the customer. Invoices for goods or services transferred are due upon receipt by the customer.

For stand-alone sales of goods that are neither customised by the Group nor subject to significant integration services, control transfers at the point in time the customer takes undisputed delivery of the goods. When such items are either customised or sold together with significant integration services, the goods and services represent a single combined performance obligation over which control is considered to transfer over time. This is because the combined product is unique to each customer (has no alternative use) and the Group has an enforceable right to payment for the work completed to date. Revenue for these performance obligations is recognised over time as the customisation or integration work is performed, using the cost-to-cost method to estimate progress towards completion. As costs are generally incurred uniformly as the work progresses and are considered to be proportionate to the entity's performance, the cost-to-cost method provides a faithful depiction of the transfer of goods and services to the customer.

(b) Licence fees

For sales of licences that are neither customised by the Group nor subject to significant integration services, the licence period commences upon delivery. For sales of licences subject to significant customisation or integration services, the licence period begins upon commencement of the related services.

(c) Maintenance contracts

The Group enters into agreements with its customers to perform regularly scheduled maintenance services on goods and licences purchased from the Group. Revenue is recognised over time based on the ratio between the number of hours of maintenance services provided in the current period and the total number of such hours expected to be provided under each contract. This method best depicts the transfer of services to the customer because: (a) details of the services to be provided are specified by management in advance as part of its published maintenance program, and (b) the Group has a long history of providing these services to its customers, allowing it to make reliable estimates of the total number of hours involved in providing the service.

(d) Engineering contracts

The Group enters into contracts for the design, development and installation of its technology in exchange for a fixed fee and recognises the related revenue over time. Due to the high degree of interdependence between the various elements of these projects, they are accounted for as a single performance obligation. When a contract also includes promises to perform after-sales services, the total transaction price is allocated to each of the distinct performance obligations identifiable under the contract on the basis of its relative stand-alone selling price.

To depict the progress by which the Group transfers control of the systems to the customer, and to establish when and to what extent revenue can be recognised, the Group measures its progress towards complete satisfaction of the performance obligation by comparing actual hours spent to date with the total estimated hours required to design, develop, and install each system. The hours-to-hours basis provides the most faithful depiction of the transfer of goods and services to each customer due to the Group's ability to make reliable estimates of the total number of hours required to perform, arising from its significant historical experience constructing similar projects.

(e) Royalties

Royalty income is recognised as revenue on an accruals basis in accordance with the substance of the relevant agreements as agreed targets are met/sales are made. Royalty revenue is recognised on the basis of royalty statements provided by distributors.

2.17 Exceptional items

Exceptional items are disclosed separately in the financial statements where it is necessary to do so to provide further understanding of the financial performance of the Group. They are material items of income or expense that have been shown separately due to the significance of their nature or amount.

3. Financial risk management

The Group is subject to a number of financial risks, principally market risk (interest rate risk and foreign exchange risk); credit risk; liquidity risk; and capital risk. The Group's policy aims to mitigate these risks though a conservative approach to treasury management:

(a) Market risk

(i) Interest risk

The Group's interest rate risk arises from variable interest rates on finance income and investing cash flows from the cash deposits. The Group's policy is to invest in fixed interest term deposits, thereby mitigating uncertainty over the future interest receipts. As the Group has no borrowings it only has limited interest rate risk.

(ii) Foreign exchange risk

During 2019 the majority of the Group's costs were in pounds sterling and US dollars therefore it was appropriate to hold funds in pounds sterling and US dollars. The Group does also have a major supplier who invoices in Australian dollars, but the FX conversion is executed at the time of any transaction. In addition to sterling and US dollar accounts, the Group maintains Euro, RMB and OMR accounts for customer receipts and to hold currency to hedge against future commitments in those currencies. The principal exchange rates used by the Group in translating overseas profits and net assets are set out in the table below.

	2019	**2019**	2018	2018
	Average Rate	**Year End Date**	Average Rate	Year End Date
Oman - OMR	**0.492**	**0.504**	0.512	0.491
USA – US$	**1.283**	**1.326**	1.276	1.332
China - RMB	**9.188**	**8.848**	8.812	8.777

(b) Credit risk

The Group is exposed to credit risk from placing significant deposits with counterparties. The Group's policy is to restrict counterparties to institutions that are Moody's A rated when the deposit is placed; ratings can change during the term of the deposit. Cash balances by counterparty credit rating are listed in note 19. Additionally the Group is exposed to credit risk from customers. This risk is mitigated in the Monitoring Division through new customers being required to pay in advance for their first purchase. Customer's seeking credit undergo a credit application process and are subject to credit limits. Accounts receivable balances are monitored and actively managed on a regular basis.

(c) Liquidity risk

The Group's liquidity risk arises from cash being on deposit with counterparties and therefore not available at short notice to meet requirements. The Group's policy is to maintain rolling cash flow forecasts and place cash on deposit with a range of maturity dates to meet forecast liquidity requirements. The maximum duration for a term deposit is 12 months from the date of deposit.

(d) Capital risk

Capital risk relates to the long term funding requirements for the Group. The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. At the Group's current stage of development it is appropriate for it to be wholly funded by equity. As the Group develops, this capital structure will be reviewed.

4. Critical accounting estimates and judgements

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results.

Significant management judgements

The following are the judgements made by management in applying the accounting policies of the Group that have the most significant effect on the financial statements.

(a) Recognition of maintenance and engineering contract revenues

As revenue from maintenance agreements and engineering contracts is recognised over time, the amount of revenue recognised in a reporting period depends on the extent to which the performance obligation has been satisfied. Recognising revenue for engineering contracts requires significant judgment in determining the estimated number of hours required to complete the promised work when applying the hours-to-hours method described in Note 2.16(d).

(b) Capitalisation of internally developed intangibles

Distinguishing the research and development phases of a new customised software project and determining whether the recognition requirements for the capitalisation of development costs are met requires judgement. After capitalisation, management monitors whether the recognition requirements continue to be met and whether there are any indicators that capitalised costs may be impaired (see Note 2.7(d)).

(c) Deferred tax recognition

The extent to which deferred tax assets can be recognised is based on an assessment of the probability that future taxable income will be available against which the deductible temporary differences and tax loss carry-forwards can be utilised. In addition, significant judgement is required in assessing the impact of any legal or economic limits or uncertainties in various tax jurisdictions. For further details please see note 11.3 of the Notes to the Financial Statements.

(d) Going Concern

The Directors have carried out a review of forecast cash flows and have concluded that the going concern basis is justified in preparation of the financial statements. Judgement has been made in assessing the appropriate assumptions to be used in carrying out this review. For further details please see note 2.1.1 of the Notes to the Financial Statements.

(e) Classification of warrants

The classification of warrants issued requires judgement as to whether they should be recognised as debt or equity. In making this assessment the Directors consider the terms of the warrants in accordance with the requirements of IAS 32, in particular applying judgement as to whether or not the "fixed for fixed" test in the Standard is satisfied. See Note 24.3 for further details.

Estimation uncertainty

Information about estimates and assumptions that may have the most significant effect on recognition and measurement of assets, liabilities, income and expenses is provided below. Actual results may be substantially different.

(a) Estimated impairment of non-financial assets and goodwill

In assessing impairment, management estimates the recoverable amount of each asset or cash generating unit based on expected future cash flows and uses an interest rate to discount them. Estimation uncertainty relates to assumptions about future operating results and the determination of a suitable discount rate (see Note 2.7). Also see Note 16 for details in relation to investments.

(b) Acquired intangible assets

The Group is carrying significant intangible assets (patented technology and research and development) arising from business combinations in prior years, in accordance with the accounting policy stated in note 2.6. Estimation of the fair values of intangible assets acquired through business combinations requires assumptions as to replacement cost, value, future useful economic life and future cash flows for impairment tests. There is a high degree of judgement required in making these assumptions which impact both the initial fair value acquired and the carrying value as at the balance sheet date.

(c) Share-based payments

The fair value calculation of share-based payments requires several assumptions and estimates. Their details are included in note 8. Such assumptions and estimates could change and could affect the amount recorded.

Estimating fair value for share-based payment transactions requires determination of the most appropriate valuation model, which depends on the terms and conditions of the grant. This estimate also requires determination of the most appropriate inputs to the valuation model including the expected life of the share option or appreciation right, volatility and dividend yield and making assumptions about them. The Group initially measures the cost of cash-settled transactions with employees using a Black-Scholes model to determine the fair value of the liability incurred. The assumptions and models used for estimating fair value for share-based payment transactions are disclosed in Note 8.

(d) Inventory provisions

Management estimates the net realisable values of inventories, taking into account the most reliable evidence available at each reporting date. The future realisation of these inventories may be affected by future technology or other market-driven changes that may reduce future selling prices.

5. Segmental analysis

5.1 Reportable segments

The chief operating decision-maker is deemed to be the Board, for whom monthly financial information is provided by Division to gross profit and direct overheads; below this financial information is reported in a consolidated Group format. For management reporting purposes the Group is organised into two operating segments (i) Membranes; and (ii) Monitoring, which matches this Divisional split.

Administrative expenses which are directly attributable to the two main operating Divisions (comprised of business development, sales, operations and technical expenditure) are reported as expenditure in the respective Division. However, a significant proportion of the Group's expenditure (legal, marketing, finance, facilities and directors' expenditure) is managed and reported centrally. As the commercial activities of the Group develop, this financial information is expected to evolve.

Notes to the Consolidated Financial Statements

	2019				2018 Restated			
	Membrane £000	Monitoring £000	Central £000	Total £000	Membrane £000	Monitoring £000	Central £000	Total £000
Revenue	**119**	**2,822**	**—**	**2,941**	—	3,646	—	3,646
Cost of sales	**(106)**	**(1,369)**	**—**	**(1,475)**	—	(1,607)	—	(1,607)
Gross profit	**13**	**1,453**	**—**	**1,466**	—	2,039	—	2,039
Administrative expenses	**(495)**	**(1,388)**	**(505)**	**(2,388)**	—	(1,261)	(1,109)	(2,370)
Share based payments	**—**	**—**	**(5)**	**(5)**	—	—	(168)	(168)
Operating profit / (loss) before depreciation and amortisation	**(482)**	**65**	**(510)**	**(927)**	—	778	(1,277)	(499)
Depreciation and amortisation	**(324)**	**(363)**	**—**	**(687)**	(156)	(327)	—	(483)
Operating (loss)	**(806)**	**(298)**	**(510)**	**(1,614)**	(156)	451	(1,277)	(982)
Finance income	**—**	**—**	**65**	**65**	—	—	204	204
Finance costs	**—**	**—**	**(97)**	**(97)**	—	—	(79)	(79)
(Loss) before taxation	**(806)**	**(298)**	**(542)**	**(1,646)**	(156)	451	(1,152)	(857)
Taxation	**—**	**—**	**(27)**	**(27)**	—	—	7	7
(Loss) for the year	**(806)**	**(298)**	**(569)**	**(1,673)**	(156)	451	(1,145)	(850)

Revenue is recognised either at a point in time or over time when (or as) the Group satisfies performance obligations by transferring the promised goods or services to its customers.

The Monitoring Division recognised £2,822,000 (2018: £3,646,000) from sale of goods and services and £nil (2018: £nil) revenue from royalties on a point in time basis.

The Membrane Division recognised £119,000 (2018: £nil) from the sale of technology licences, engineering services and operating contracts on a services transferred over time basis.

5.2 Geographical information

The Group operates in four main geographical regions, based on customer location.

Revenue	2019 **Membranes** £000	**Monitoring** £000	**Total** £000	2018 Restated Membranes £000	Monitoring £000	Total £000
Americas	**-**	**1,143**	**1,143**	-	1,463	1,463
Europe	**-**	**650**	**650**	-	697	697
Middle East and Africa	**-**	**231**	**231**	-	150	150
Asia Pacific	**119**	**798**	**917**	-	1,336	1,336
Total	**119**	**2,822**	**2,941**	-	3,646	3,646

The Group has non-current assets in two countries (2018: two), based on location of the assets.

	2019 **Property, plant and equipment** £000	**Intangible assets including goodwill** £000	**Total** £000	2018 Property, plant and equipment £000	Intangible assets including goodwill £000	Total £000
UK	**-**	**849**	**849**	4	1,271	1,275
US	**363**	**341**	**704**	195	292	487
Total	**363**	**1,190**	**1,553**	199	1,563	1,762

Assets and liabilities are presented to the chief operating decision maker in a consolidated Group format. Assets and liabilities are not currently presented by segment, because they are managed centrally. As the commercial activities of the Group develop, this financial information is expected to evolve.

5.3 Major customers

Within the Monitoring Division no one customer represented more than 10% of revenue (2018: None greater than 10%). In the Membrane Division, revenue was earned from one customer in 2019 (2018: Revenue from four customers).

6. Administrative expenses by nature

	Note	**2019** £000	2018 Restated £000
Employee benefits expense		**1,621**	1,673
Share-based payments	8	**5**	168
Operating lease payments		**22**	240
Research and development		**20**	72
Auditor's remuneration	9	**60**	82
Other administrative expenses		**665**	303
Total administrative expenses before depreciation, amortisation and exceptional charges		**2,393**	2,538
Depreciation and amortisation charges	14,15 ,23.1	**687**	483
Total administrative expenses including depreciation, amortisation and exceptional charges		**3,080**	3,021

7. Employee benefits expense

	Note	**2019** **Group** **£000**	**2019** **Company** **£000**	2018 **Restated** Group £000	2018 **Restated** Company £000
Staff costs for the year, including the executive director, amounted to:					
Wages and salaries		**1,266**	**330**	1,365	227
Social security costs		**138**	**42**	116	18
Other pension costs		**58**	**30**	41	14
Other benefits and staff costs		**159**	**4**	152	10
Total employee benefits expense		**1,621**	**406**	1,673	269
Equity-settled share-based payments	8	**5**	**5**	168	21
		1,626	**411**	1,841	290

Other benefits include recruitment fees, private health insurance, life insurance and income protection and redundancy costs.

	2019 **Group** **Number**	**2019** **Company** **Number**	2018 Group Number	2018 Company Number
Monthly average number of employees by activity:				
Executive director	**1**	**1**	1	1
Technical	**16**	**—**	17	—
Business development	**11**	**—**	15	—
Finance, legal and administration	**4**	**—**	6	—
Total	**32**	**1**	39	1

Key management personnel is considered to be the executive director.

The aggregate amount of emoluments, excluding employers pension contributions, paid to the executive director in respect of qualifying services was £143,931 (2018: £143,931). The highest paid director received £143,931 (2018: £143,931), excluding pension contributions. There were no gains made by directors on the exercise of share options (2018: £nil). No money was received by directors under long term incentive schemes (2018: £nil). The executive director, who was also the highest paid director, in total received £nil in cash bonuses relating to 2019 performance (2018: £nil). The Group paid £13,749 (2018: £13,749) to the executive director in respect of money purchase pension schemes. Total remuneration for non-executive directors was £69,000 (2018: £90,000). See the remuneration table in the Directors' Remuneration Report on page 12 for further details.

In addition to the above costs for permanent staff, the Group utilises the services of contract and agency staff as circumstances require.

8. Share-based payment plans

	2019		2018	
	Group £000	**Company £000**	Group £000	Company £000
Options (including EMI)	**5**	**5**	168	21
Equity-settled share-based payments	**5**	**5**	168	21
Total share-based payments charged to the Statement of Comprehensive Income	**5**	**5**	168	21
Equity-settled share-based payments	**5**	**5**	168	21
Capital contribution relating to share-based payments	**-**	**-**	-	147
Total share-based payments changes in equity	**5**	**5**	168	168

The share-based payment plans are described below. The number of shares issued under these plans is limited to 10% of the issued ordinary share capital of the Company.

The Group incurred a £5,000 (2018: £168,000) share-based payment charge of which a charge of £5,000 (2018: £21,000) was recognised in the Company's Statement of Comprehensive Income for its employees and £nil (2018: £147,000) to the employees of subsidiary undertakings. The charge for equity-settled share-based payments to the employees of the Company's subsidiaries of £nil (2018: £147,000) is recognised as a capital contribution in the Company's statement of financial position (note 16).

Modern Water plc Incentive Plan (MWIP)

The original MWIP was adopted on 1 June 2007 and contained provisions relating to the making of awards in the form of options and conditional awards of ordinary shares (to be received once performance conditions are satisfied). It had a 10 year life, so a new MWIP was adopted in September 2017 containing the same provisions.

(a) Options (Excluding EMI options)

Under this scheme share options are granted to management. Certain awards are granted with an exercise price equal to the market price on the date of the grant, others at nil exercise price. The options may be exercised after three years from date of grant. Options expire after 10 years and, in certain circumstances, are forfeited if the option holder leaves the Group before the options vest. The movement in the number of share options is below:

	2019	2018
At 1 January	**2,660,000**	2,060,000
Granted during year	**-**	600,000
Forfeited	**(1,620,000)**	-
At 31 December	**1,040,000**	2,660,000

The fair value of the equity-settled share options granted is estimated as at the date of grant using a Black-Scholes model, taking into account the terms and conditions upon which the options were granted. No options were granted in the year.

Grant date	3 May 2018
Share price at date of award	**10.75p**
Number of shares options granted	**600,000**
Exercise price	**£nil**
Assumed volatility at date of award (median of historical 50 day average)	**101%**
Vesting period (years)	**3.0**
Expected dividend yield	**0%**
Risk-free discount rate	**1.0%**
Fair value per share awarded	**10.75p**

The weighted average remaining contractual life for the share options outstanding at 31 December 2019 is five years and six months (2018: seven years and three months). The weighted average exercise price for options outstanding at the end of the year was 20.96p (2018: 8.20p).

(b) Conditional share awards

There were no Conditional share awards outstanding as of 31 December 2019 (2018: Nil).

(c) Enterprise Management Incentives (EMI) options

Under this scheme share options are granted at nil exercise price to senior management. The options may be exercised after three years to the extent that certain market and non-market performance criteria are met. The extent to which the award will vest depends on performance against these performance criteria, if these are not met the options lapse. Options expire after 10 years and, in certain circumstances, are forfeited if the option holder leaves the Group before the options vest. The movement in the number of EMI options is set out below:

	2019	2018
At 1 January	**4,262,500**	3,642,500
Granted	**700,000**	1,350,000
Forfeited	**(2,092,500)**	(730,000)
Lapsed	**—**	—
Exercised	**(100,000)**	—
At 31 December	**2,770,000**	4,262,500

The fair value of the award is estimated as at the date of award using Monte Carlo (where there are market conditions) and Black-Scholes models (where there are no market conditions), taking into account the terms and conditions upon which the shares were awarded. The weighted average fair value of EMI options granted during the year was 6.77p (2018: 9.5p). Inputs into the model used for the options granted in 2019 and prior year are below:

Grant Date	31-Dec 2019	22-Nov 2018	3-May 2018	25-Apr 2018
Share price at date of award	**6.75p**	**9.10p**	**10.75p**	**8.50p**
Number of share options granted	**700,000**	**-**	**600,000**	**750,000**
Exercise Price	**£nil**	**£nil**	**£nil**	**£nil**
Assumed volatility at date of award (median of historical 50 day average)	**48%**	**43%**	**101%**	**94%**
Vesting period (years)	**3.0**	**3.0**	**3.0**	**3.0**
Expected dividend yield	**0%**	**0%**	**0%**	**0%**
Risk-free discount rate	**1.00%**	**1.25%**	**1.00%**	**1.00%**
Fair value per share awarded	**1.95p**	**9.10p**	**10.75p**	**8.50p**

Notes to the Consolidated Financial Statements

9. Auditor's remuneration

	2019 £000	2018 £000
Audit of Company and consolidated financial statements	**40**	49
Audit of subsidiaries in Oman and China not by Group auditor	**5**	10
Total audit	**45**	59
Tax compliance services	**10**	18
Tax compliance services in Oman not by Group auditor	**5**	5
Total non-audit services	**15**	23
Total fees to Group auditor	**50**	67
Total fees not to Group auditor	**10**	15
Total fees	**60**	82

10. Finance income and costs

	2019 £000	2018 Restated £000
Finance income:		
Foreign exchange gains	**65**	204
Total finance income	**65**	204
Finance costs:		
Bank and currency charges	**(52)**	(54)
Interest on bank loan	**(45)**	(25)
Total finance costs	**(97)**	(79)
Net finance (expense)/income	**(32)**	125

11. Taxation

11.1 Tax on loss on ordinary activities

	2019 £000	2018 Restated £000
Current tax:		
Foreign Tax Withheld	**23**	17
Tax in respect of R&D activities	**-**	-
Total current tax	**23**	17
Deferred tax		
Origination and reversal of temporary differences	**4**	(24)
Total deferred tax	**4**	(24)
Total tax payable/(benefit)	**27**	(7)

11.2 Reconciliation of the total tax charge

The tax on the Group's loss before tax differs from the theoretical amount that would arise using the weighted average tax rate applicable to losses of the consolidated entities as follows:

	2019	2018 Restated
	£000	£000
Loss on ordinary activities before taxation	**1,646**	857
Loss multiplied by the weighted average tax rate of 19% (2018: 19%)	**313**	163
Expenses not deductible for tax purposes	**(1)**	(35)
Capital allowances and other timing differences not recognised	**(42)**	(22)
Adjustments in respect of prior years	**(4)**	24
Re-measurement of deferred tax – changes in UK tax rate	**-**	-
Foreign Tax Withheld	**(23)**	(17)
Tax in respect of R&D activities	**-**	-
Losses not recognised	**(270)**	(106)
Tax (charge)/credit	**(27)**	7

11.3 Deferred tax liabilities

	2019	2018
Intangible assets in business combinations	**£000**	£000
At 1 January	**-**	27
Adjustments in respect of prior years	**-**	-
Credited to the statement of comprehensive income	**-**	(27)
At 31 December	**-**	-

12. Discontinued operations

On 28 August 2019 Modern Water Services Limited and Modern Water Monitoring Limited 100% owned subsidiaries of the Group were liquidated, The liquidation resulted from the decision to withdraw from the Gibraltar Wastewater Project due to the lack of progress and to refocus on membrane projects outside the UK.

Total Loss for the discontinued operations was 2019 (£583k); 2018 (£1,456k).

Net cash used in operating activities for the discontinued operations were 2019 £573k; 2018 £1,224k.

Results of discontinued operations were as follows:

	2019	2018
Modern Water Services Limited	**£000**	£000
Revenue	**171**	481
Cost of Sales	**(65)**	(236)
Administration expenses	**(661)**	(1,571)
Depreciation & amortisation	**(2)**	(6)
Finance Costs	**-**	(10)
Taxation	**-**	116
Write -off	**11**	-
Profit/(Loss)	**(546)**	(1,226)

Notes to the Consolidated Financial Statements

Modern Water Monitoring Limited	**2019 £000**	2018 £000
Revenue	**-**	32
Cost of Sales	**-**	(1)
Administration expenses	**(57)**	(264)
Depreciation & amortisation	**-**	(34)
Finance Costs	**-**	(3)
Taxation	**-**	40
Write-back	**20**	-
Profit/(Loss)	**(37)**	(230)

Modern Water Services Limited	**2019 £000**	2018 £000
Loss for year from discontinued operations	**(546)**	(1,227)
Adjustments for:		
Depreciation & amortisation	**2**	6
Net finance costs	**-**	10
Movement in working capital:		
Trade and other receivables	**(65)**	129
Trade and other payables	**70**	30
Interest	**-**	2
Net cash used in operating activities	**(539)**	(1,050)
Cash flow from financing activities:		
Loan from parent company	**500**	960
Net cash generated from financing activities	**500**	960
Net decrease in cash and cash equivalents	**(39)**	(90)
Cash and cash equivalents at beginning of period	**39**	129
Cash and cash equivalents at end of period	**-**	39

Modern Water Monitoring Limited	**2019 £000**	2018 £000
Loss for year from discontinued operations	**(37)**	(230)
Adjustments for:		
Depreciation & amortisation	**-**	35
Net finance costs	**-**	3
Movement in working capital:		
Trade and other receivables	**(5)**	10
Trade and other payables	**8**	7
Interest	**-**	1
Net cash used in operating activities	**(34)**	(174)
Cash flow from financing activities:		
Loan from parent company	**33**	174
Net cash generated from financing activities	**33**	174
Net increase in cash and cash equivalents	**(1)**	-
Cash and cash equivalents at beginning of period	**1**	1
Cash and cash equivalents at end of period	**-**	1

Notes to the Consolidated Financial Statements

13. Earnings per share

Basic

Basic (loss) per share is calculated by dividing the income / (loss) attributable to equity holders of the Company by the weighted average number of ordinary shares in issue during the year.

	2019	2018
(Loss) attributable to owners of the parent (£'000) – Continuing Operations	**(1,488)**	(1,218)
(Loss) attributable to owners of the parent (£'000) – Discontinued Operations	**(583)**	(1,456)
(Loss) attributable to owners of the parent (£'000) – Total	**(2,071)**	(2,674)
Weighted average number of ordinary shares in issue (thousands)	**116,098**	97,792
Basic Loss per share – Continuing Operations	**(1.28)**	(1.24)
Basic Loss per share – Discontinued Operations	**(0.50)**	(1.49)
Basic Loss per share - Total	**(1.78p)**	(2.73p)

14. Property, plant and equipment

Group	Leasehold improvements £000	Plant and machinery £000	Motor vehicles £000	Office equipment £000	Furniture, Fixtures and fittings £000	Total £000
At 1 January 2018						
Cost	446	1,685	38	419	208	2,796
Accumulated depreciation	(446)	(1,460)	(38)	(414)	(208)	(2,566)
Net book amount	**-**	**225**	**-**	**5**	**-**	**230**
Year ended 31 December 2018						
Opening net book amount	-	225	-	5	-	230
Exchange differences	-	18	-	-	-	18
Additions	16	72	-	9	2	99
Depreciation charge	(16)	(122)	-	(9)	(1)	(148)
Closing net book amount	-	**193**	**-**	**5**	**1**	**199**
At 31 December 2018						
Cost	462	1,775	38	428	210	2,913
Accumulated depreciation	(462)	(1,582)	(38)	(423)	(209)	(2,714)
Net book amount	-	**193**	-	**5**	**1**	**199**
Year ended 31 December 2019						
Opening net book amount	-	193	-	5	1	199
Exchange differences	-	17	-	-	-	17
Additions	-	-	-	-	93	93
Depreciation charge	-	(9)	-	-	(93)	(102)
Disposals (Cost)	(177)	(718)	-	(311)	(279)	(1,485)
Disposals (Depreciation)	177	627	-	306	279	1,389
Closing net book amount	-	**110**	**-**	**-**	**1**	**111**
At 31 December 2019						
Cost	285	1,074	38	117	24	1,538
Accumulated depreciation	(285)	(964)	(38)	(117)	(23)	(1,427)
Net book amount	-	**110**	-	**-**	**1**	**111**

There were no properties, plant and equipment assets recognised in the Company's Statement of Financial Position as at 31 December 2019 (2018: none).

15. Intangible assets

Group	Goodwill £000	Patent and trademark costs £000	Development costs £000	Research and development, and patented technology acquired as part of a business combination £000	Customer contracts acquired as part of a business combination £000	**Total £000**
At 1 January 2018						
Cost	13,434	1,033	175	4,008	180	18,830
Accumulated amortisation and impairment charge	(13,434)	(475)	(131)	(2,952)	(180)	(17,172)
Net book amount	**-**	**558**	**44**	**1,056**	**-**	**1,658**
Year ended 31 December 2018						
Opening net book amount	-	558	44	1,056	-	1,658
Additions	-	71	248	-	-	319
Amortisation charge	-	(162)	-	(252)	-	(414)
Closing net book amount	**-**	**467**	**292**	**804**	-	**1,563**
At 31 December 2018						
Cost	13,434	1,104	423	4,008	180	19,149
Accumulated amortisation and impairment charge	(13,434)	(637)	(131)	(3,204)	(180)	(17,586)
Net book amount	**-**	**467**	**292**	**804**	**-**	**1,563**
Year ended 31 December 2019						
Opening net book amount	-	467	292	804	-	1,563
Additions	-	15	93	-	-	108
Amortisation/Impairment charge	-	(63)	(43)	(371)	-	(477)
Disposals (cost)	-	(30)	-	-	-	(30)
Disposals (amortisation)	-	26	-	-	-	26
Closing net book amount	**-**	**415**	**342**	**433**	-	**1,190**
At 31 December 2019						
Cost	13,434	1,089	516	4,008	180	19,227
Accumulated amortisation and impairment charge	(13,434)	(674)	(174)	(3,575)	(180)	(18,037)
Net book amount	**-**	**415**	**342**	**433**	**-**	**1,190**

Additions to patent costs arise from legal and other fees incurred in securing patents. These are valued at the actual costs related to prosecuting the patents.

Impairment of other intangible assets

For the purpose of impairment testing, other intangible assets are allocated to the operating segments to which they relate as set out below and is compared to their recoverable value.

The recoverable amounts were determined using the higher of the CGU fair value less costs of disposal (FV) and value in use (VIU) calculations. The fair value less costs of disposal method calculates the fair value of each CGU based on the Company's share price and the selling prices of comparable businesses. The VIU method requires the estimation of future cash flows before tax and the selection of a suitable discount rate in order to calculate the net present value (NPV) of these cash flows. The discount rates applied to each CGU for the value in use projections were between 15% and 20% as outlined below (2018: 15% and 20%) and all assumptions were reviewed at the end of the year and revised where necessary.

The key assumptions for the Monitoring Division value in use calculations are sales volume and gross margin. Management's forecasts are based on the current five-year business plan and assume the Division delivers, on average, double digit revenue growth and maintains stable profit margins, based on past experience in this market. A discount rate of 15% and a terminal growth rate of 2% were used to calculate the NPV.

The estimate of recoverable amount is particularly sensitive to the revenue growth rate and the assumption of a terminal value. This was stress tested by reducing revenue growth by 10% and removing the terminal value entirely which show that no impairment would be recognised.

Management is not currently aware of any other reasonably possible changes to key assumptions that would cause a unit's carrying amount to exceed its recoverable amount.

The remaining intangible asset value is predominantly our actively managed patent portfolio, which is continually reviewed for impairment in the normal course of business and the individual patents are also amortised on an annual basis over their lives. No impairment of these assets was deemed necessary at year end.

There were no intangible assets recognised in the Company's Statement of Financial Position as at 31 December 2019 (2018: none).

16. Investments

Company	Investment in subsidiary £000
Year ended 31 December 2018	
Opening book amount	**1,877**
Capital contribution relating to share-based payments	**146**
Closing book amount	**2,023**
Year ended 31 December 2019	
Opening book amount	**2,023**
Capital contribution relating to share-based payments	**-**
Impairment Charge	**(2,023)**
Closing book amount	**-**

Subsidiary undertakings, which contribute to the group result	Principal activities	Shareholding%	Status
Surrey Aquatechnology Limited	Desalination technology	100	Subsidiary
Modern Water Holdings Limited	Holding company for water treatment operating companies	100	Subsidiary
Modern Water Technology (Shanghai) Co., Ltd	Project and operating company in China	100	Subsidiary
Encyclo Water Technology (Zhejiang) Co. Ltd	Business development relating to AMBC	49	JV
Modern Water Technologies LLC	Project and operating company in Oman	70	Subsidiary
MW Monitoring Limited	Holding company for monitoring instrumentation business	100	Subsidiary
Modern Water Inc	Toxicity and environmental monitoring products	100	Subsidiary
MW Monitoring IP Limited	Owner of IP for toxicity and environmental monitoring products	100	Subsidiary
Cymtox Limited	Toxicity monitoring applications	100	Subsidiary
Aguacure Ltd	Electro-coagulation wastewater treatment systems	100	Subsidiary
Poseidon Water Limited	Saline wastewater treatment systems	51	Subsidiary
Modern Water (Nominees) Ltd	Acquisition and allocation of shares for the Group	100	Subsidiary

Notes to the Consolidated Financial Statements

Modern Water Inc is a Delaware corporation. Modern Water Technologies LLC is a company registered in Oman. Modern Water Technology (Shanghai) Co., Ltd and Encyclo Water Technology (Zhejiang) Co. Ltd are companies registered in China. All other subsidiaries are incorporated in England and Wales. Shares held are all ordinary share capital. The Group had no investments in the current or prior year. Encyclo did not trade during the year.

On 28 August 2019 the Modern Water Services Limited and Modern Water Monitoring Limited both 100% owned subsidiaries of the Group were placed into liquidation.

Impairment of investments

An impairment charge of £2,023,000 has been recognised for the year ended 31 December 2019 (2018: Nil).

The recoverable amounts were determined using the higher of the CGU fair value less costs of disposal (FV) and value in use (VIU) calculations and the forecasts used in the assessment along with the key assumptions used are the same as for the other intangible assets impairment assessment as disclosed in Note 15.

The estimate of recoverable amount is particularly sensitive to the same assumptions as disclosed in Note 15 and under the same stress tests conducted by management no impairment would be noted.

17. Inventories

	Group		Company	
	2019	2018	**2019**	2018
	£000	£000	**£000**	£000
Raw materials	**256**	347	—	—
Work in progress	**11**	47	—	—
Finished goods	**439**	541	—	—
Total inventories	**706**	935	—	—

The cost of inventories recognised as expense and included in 'cost of sales' amounted to £1,023,661 (2018: £1,727,177). The carrying value of inventories is net of a £6,787 provision for slow moving and obsolete inventories (2018: £23,000).

18. Trade and other receivables

	Group		Company	
	2019	2018	**2019**	**2018**
	£000	£000	**£000**	**£000**
Trade receivables	**223**	596	**—**	—
Allowance for credit losses	**(46)**	(5)	**—**	—
Trade receivables – net	**177**	591	**—**	—
Value added tax	**13**	44	**22**	20
Other receivables	**24**	261	**—**	—
Amounts due from subsidiary undertakings	**—**	—	**1,988**	6,451
Prepayments	**54**	118	**41**	8
Total trade and other receivables	**268**	1,014	**2,051**	6,479

The amounts due from subsidiary undertakings are unsecured, bear no interest and are repayable on demand. As at 31 December Group trade receivables of £176k (2018: £224k) were past due, of which £46,000 was provided against (2018: £5,000). The ageing of these receivables is as follows:

	Group	
	2019	2018
	£000	£000
Up to 3 months past due date	**29**	103
3 to 6 months past due date	**24**	41
More than 6 months past due date	**123**	80
Trade receivables past due date	**176**	224
Trade receivables not yet due and not considered impaired	**47**	372
Total trade receivables	**223**	596

The carrying amounts of the Group's trade receivables are denominated in the following currencies:

	Group	
	2019	2018
	£000	£000
UK pound sterling	**1**	243
US dollar	**222**	196
Euro	**-**	157
	223	596

The Company has no trade receivables.

Movements on the Group's allowance for credit losses of trade receivables are as follows:

	Group	
	2019	2018
	£000	£000
At 1 January	**5**	7
Allowance for credit losses	**41**	(2)
	46	5

The Company had no trade and other receivables past due but not impaired (2018: £nil). The Directors believe that the carrying value of the Company's receivables from subsidiary undertakings is supported by their expected future cash flows.

19. Cash

19.1 Cash and cash equivalents

	Group		Company	
	2019	2018	**2019**	2018
Cash and cash equivalents	**£000**	£000	**£000**	£000
Cash at bank	**176**	228	**24**	—
Cash at bank and in hand	**176**	228	**24**	—

19.2 Credit quality of cash and cash equivalents

		Group		**Company**	
		2019	**2018**	**2019**	**2018**
Short term	Long term	**£000**	£000	**£000**	£000
P-1	AA	**3**	47	**—**	—
P-1	A	**173**	181	**24**	—
Cash at bank and in hand		**176**	**228**	**24**	**—**

The credit quality of the cash and cash equivalents is assessed using Moody's short and long term ratings.

20. Trade and other payables

	Group		Company	
	2019	2018	**2019**	2018
Current	**£000**	£000	**£000**	£000
Trade payables	**637**	629	**485**	163
Social security	**30**	117	**18**	19
Accruals and contract liabilities	**658**	591	**448**	6
Total trade and other payables	**1,325**	1,337	**951**	188

21. Borrowings

	Group		Company	
	2019	2018	**2019**	2018
Current	**£000**	£000	**£000**	£000
Bank loan	**440**	532	**440**	532
Total borrowings	**440**	532	**440**	532

Bank borrowings are secured by way of a fixed and floating charge over the Group assets. The bank loan is a Floating Rate Basis Term Loan with an interest rate of bank base rate plus 8%. The carrying amount of the bank loan is considered to be a reasonable approximation of the fair value.

The bank loan has a financial covenant that EBITDA is at least 80.00% of the EBITDA for the corresponding Relevant Period as set out in the Group Budget. A covenant on the bank loan was breached as at 31 December 2019, but the bank has waived this breach post year-end and reset the covenant.

22. Financial instruments by category

The accounting policies for financial instruments have been applied to the line items below. The fair value of the assets and liabilities is equal to their carrying value.

	2019	2018
Group	**Loans and receivables amortised at cost**	Loans and receivables amortised at cost
	£000	£000
Assets as per statement of financial position		
Trade and other receivables*	**201**	852
Cash and cash equivalents	**176**	228
Total	**377**	1,080
	Financial liabilities at amortised cost	Financial liabilities at amortised cost
	£000	£000
Liabilities as per statement of financial position		
Trade and other payables**	**1,295**	688
Barclays loan	**440**	532
Total	**1,735**	1,220

Company	2019 Loans and receivables at amortised cost £000	2018 Loans and receivables at amortised cost £000
Assets as per statement of financial position		
Trade and other receivables*	**1,988**	6,451
Cash and cash equivalents	**24**	-
Total	**2,012**	6,451
	Financial liabilities at amortised cost **£000**	Financial liabilities at amortised cost £000
Liabilities as per statement of financial position		
Trade and other payables**	**933**	169
Total	**933**	169

* excludes prepayments and VAT

** includes accruals, but excludes social security

Included in the cash and cash equivalents of the Group and Company at 31 December 2019 was the equivalent of £84,543 (2018: £158,000) denominated in US dollars, £84 (2018: £8,572) denominated in Euros, £nil in Omani Rials (2018: £2) and £69,473 in Chinese Yuan (2018: £nil). The balance was denominated in pounds sterling (£). See note 18 for denomination of trade receivables by currency.

23. Commitments and contingencies

23.1 Leases

IFRS 16 was effective for annual reporting periods on or after 1 January 2019 and removes the distinction between finance and operating leases for lessees. For lessees, all leases are recorded on the balance sheet as liabilities, at the present value of the future lease payments, along with an asset reflecting the right of use of the asset over the lease term. This information aims to provide users of financial statements with the basis to assess the effect leases have on the financial position, financial performance and cash flows of an entity.

The Company has adopted the modified retrospective approach, recognising on 1 January 2019 assets and liabilities which were historically accounted for as operating leases. As the Company had no leases greater than 12 months at this date there has been no adjustment to retained earnings as a result of this transition. Cash flows are not impacted by the adoption of this accounting policy, but the Income Statement now reflects a depreciation charge on the right of use asset and interest expense on the lease liability rather than a single operating lease charge.

Right of use assets
For leases entered into during 2019 the Company recognises right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Unless the Company is reasonably certain to obtain ownership of the leased asset at the end of the lease term, the recognised right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term. Right-of-use assets are subject to impairment.

Lease liabilities
At the commencement date of the lease, the Company recognises lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The variable lease payments that do not depend on an index or a rate are recognised as expense in the period on which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Company uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the in-substance fixed lease payments or a change in the assessment to purchase the underlying asset.

Short-term leases and leases of low-value assets
The Company applies the short-term lease recognition exemption to its short-term leases of machinery and equipment (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered of low value (i.e., below US$5,000). Lease payments on short-term leases and leases of low-value assets are recognised as expense on a straight-line basis over the lease term.

Amounts recognised in statement of financial position (Group)

	£000	£000
	Right of Use Assets	**Lease Liabilities**
As at 1 January 2019		
Additions	**360**	**393**
Depreciation	**(108)**	**-**
Interest expense	**-**	**27**
Payments	**-**	**(130)**
As at 31 December 2019	**252**	**290**
Current	**-**	**134**
Non-Current	**-**	**156**

23.2 Contingent liabilities

Neither the Group nor the Company had any contingent liabilities at the balance sheet date (2018: £nil).

24. Share capital and share premium reserve

	2019	2018
	£000	£000
Ordinary shares issued and fully paid		
- Beginning of the year	**104,219,468**	95,405,705
- Share issue, private placement	**20,473,746**	8,813,763
Shares issued and fully paid	**124,693,214**	104,219,468

The Company has no shares in Treasury; therefore, the total number of voting rights in Modern Water following the above transactions is 124,693,214.

Proceeds received in addition to the nominal value of the shares issued during the year have been included in the share premium reserve, less registration and other regulatory fees and net of related tax benefits. Costs of new shares charged to the equity amounted to £46,584 (2018: £40,922).

	Allotted and fully paid ordinary shares	Allotted and fully paid ordinary shares	Share premium	Total
Group and Company	Number	£000	£000	£000
At 1 January 2018	95,405,705	239	41,604	41,843
At 31 December 2018	104,219,468	261	42,613	42,680
At 31 December 2019	**124,693,214**	**311**	**43,140**	**43,451**

24.1 Merger reserve

The merger reserve balance of £398,000 (2018: £398,000) relates solely to the 2011 acquisition of Cogent Environmental Limited.

24.2 Foreign exchange reserve

The foreign exchange reserve balance of negative £488,000 (2018: negative £669,000) is the cumulative annual revaluation of our international subsidiaries in Oman, China and the USA.

24.3 Warrant Reserve

The Warrant Reserve balance relates to the placing of 9,038,000 ordinary shares on 21 January 2019. Upon completion warrants were granted over 9,038,0000 ordinary shares at an exercise price of 9.75p and 540,000 ordinary shares at an exercise price of 6.5p a total of 9,578,000 new Ordinary Shares. The warrants will expire on the 22 January 2021.

The fair value of the warrants granted is estimated as at the date of grant using a Black-Scholes model, taking into account the terms and conditions upon which the options were granted.

Grant date	**21 January 2019**
Share price at date of award	**6.75p**
Number of warrants granted	**9,038,000**
Exercise price	**9.75p**
Number of warrants granted	**540,000**
Exercise price	**6.5p**
Assumed volatility at date of award (median of historical 50 day average)	**48.3%**
Expected life of option (years)	**2**
Expected dividend yield	**0%**
Risk-free discount rate	**1%**
Fair value per share awarded	**1.95p**

25. Capital management policies and procedures

The Group's capital management objectives are:
- to ensure the Group's ability to continue as a going concern
- to provide an adequate return to shareholders by pricing products and services in a way that reflects the level of risk involved in providing those goods and services.

As at 31 December 2019 the Group will seek to manage its capital in accordance with covenants in the terms of any loan agreement.

The amounts managed by the Group for the reporting periods under review are summarised as follows:

	2019 **£000**	2018 £000
Total equity	**648**	2,070
Cash and cash equivalents	**(176)**	(228)
Capital	**472**	1,842
Total equity	**648**	2,070
Borrowings	**(440)**	(532)
Overall financing	**208**	1,538
Capital to overall financing ratio	**2.27**	1.20

Notes to the Consolidated Financial Statements

26. Related party transactions

IP Group plc held 12.76% of the ordinary share capital of the Company as at 31 December 2019 and appoints a non-executive director, and it is therefore deemed a related party. A service agreement dated 1 December 2006 was made between the Company and IP Group plc, whereby IP Group plc provides strategic, business development and administrative services to the Company. Fees for the year were £30,000; (2018: £45,139) and as at 31 December 2019 £73,796 (2018: £45,139) was outstanding under this agreement.

Alan Wilson was a director of the Company and therefore a related party. Alan Wilson had a service contract with the Company dated 26 March 2015. Fees for the year were £39,158.77(2018: £60,000). As at 31 December 2019, £39,158.77 (2018: £nil) was outstanding.

Piers Clark was a director of the Company and therefore a related party. Piers Clark signed a services agreement with the Company, dated 2 January 2018, relating to his services as a non-executive director. Fees for the year were £30,000 (2018: £30,000). As at 31 December 2019, £42,500 (2018: £15,000) was outstanding under this agreement.

Transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation in the Group accounts, but require disclosure in the Company accounts.

The Company had receivable balances at 31 December 2019 with its subsidiary companies to fund working capital and acquisition of investments. No interest is charged on these balances, which are as follows:

	2019		2018	
	Balance	Provision	Balance	Provision
	£000s	£000s	£000s	£000s
Modern Water Services Limited	-	-	25,720	22,000
Surrey Aquatechnology Limited	-	-	1,535	1,530
Poseidon Limited	-	-	197	196
AguaCure Limited	-	-	218	218
Total Membrane Division	-	-	**27,670**	**23,944**
MW Monitoring Limited	3,883	2,500	4,638	2,500
Modern Water Monitoring Limited	-	-	3,137	3,115
Modern Water Holdings Limited	349	-	553	-
MW Monitoring IP Limited	41	-	-	-
Modern Water Inc	(11)	-	-	-
Cymtox Limited	711	699	711	699
Total Monitoring Division	**4,973**	**3,199**	**9,039**	**6,314**
Group Total	**4,973**	**3,199**	**36,709**	**30,258**

27. Ultimate controlling party

There is not considered to be a controlling party**.**

28. Events after the reporting year

On 14 February 2020 the Company issued 370,000,000 new ordinary shares of 0.25p each at a price of 0.5p per share raising a net £1.68m.

On 2 June 2020 the Company received £110k from the exercise of 22,000,000 warrants at a price of 0.5p per warrant.

On 18 March the Company announced it had signed a three-year revenue sharing manufacturing agency agreement ("Agreement") with Integumen plc ("Integumen") to manufacture, and provide logistic support for, the supply of the Company's water monitoring reagent consumables to Monitoring Division clients on behalf of the Company.

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Company number
Registered in England and Wales, number 05963927

Further details can be found on the Modern Water website: **www.modernwater.com**

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