






Modern Water plc

Annual Report and Accounts 2018

MODERNWATER

www.modernwater.com

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.

Managed by an executive team with extensive experience in the water industry, Modern Water is at the leading edge of new and developing technologies, products and services, which are vital to the future sustainability of the world's most precious commodity.

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)
Wastewater Treatment (Municipal)
Forward Osmosis desalination (Industrial & Municipal)

Monitoring Division
Trace Metal Products
Toxicity Products
Environmental Products

Contents

Chairman's Statement

Modern Water's financial performance in 2018 marks another year of steady improvement in the turnaround, which started towards the end of 2014. Revenues and Gross Profits in 2018 reached record highs of £4.2m (2017: £3.52m) and £2.3m (2017: £1.8m) respectively. These results generated a loss before tax, interest, depreciation and amortisation of £2.1m (2017: £2.8m), the lowest on record.

When reflecting upon the company's financial performance since 2014, I am satisfied that substantial progress continues to be made: revenues are up by some 50%, administration costs have been slashed by 31%, whilst average annual operating losses since 2015 have been around 50% lower than those seen previously.

A significant milestone was achieved in the year, when the Membrane Division commissioned its first full-scale AMBC plant in India, serving a large textiles customer. Wider recognition and interest in our membrane technology was highlighted by signing two new AMBC partnerships in China and South Africa. Our Chinese partner, Sunup, took a 5% stake in Modern Water because they see significant potential for our AMBC and also our membrane technology when applied to treating leachate from landfill sites – a potentially huge market given there are approx.10,000 landfill sites in China.

The advance works contract for a waste-water treatment plant, located in Gibraltar, was executed during the year. This work resulted in a successful planning application, which passed a public planning meeting on 26 March 2019. Detailed design and construction of the new plant will be conducted by Modern Water, as part of a joint venture with Northumbrian Water Group, who will operate the completed facility.

The Monitoring Division has gone from strength-to-strength, by upgrading its best-selling product, the Microtox LX, which has received a strong level of interest from users of its predecessor, the Microtox M500 and also from Modern Water's international distribution network. In addition, the Monitoring Division has successfully commissioned a monitoring station for a major power generation company in the Middle East, including two OVAs. Modern Water's reputation for technical excellence was rewarded by the Frost & Sullivan Water Quality Innovation award for the Monitoring Division's CTM toxicity monitor, a highly prestigious award.

In October, the company issued 3,792,410 new ordinary shares, which successfully raised ca. £340,000 in an open offer. This followed the investment from China in July, which saw our partner, Sunup, subscribe for 5,021,353 new shares, investing ca. £550,000 in Modern Water.

Outlook

I believe the Monitoring Division's foundations are now well set: gross profit is continually increasing as time passes, market focus has markedly improved and the successful launch of a new product sets the tone for continued increases in sales and profits in the coming period.

Over the years, the Membrane Division has struggled to find proper market traction for its impressive technology and deep knowledge of membrane systems design. Recent interest and sales of our AMBC technology from India and China highlight a turning point for the Division, which I believe is now showing that there is substantial market potential that will build sales and profits as we move forward.

HM Government of Gibraltar has given planning go-ahead for the design and construction of a new waste-water treatment plant and Modern Water's portion of this contract is valued at around £25m.

Based upon the foregoing, I believe that Modern Water is now in an excellent position to start profiting from the excellent efforts of our talented employees and I sincerely hope that we can start returning value to our loyal shareholders.

Alan Wilson
Chairman
18 April 2019

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 2018.

Membrane Division

Strategy
The Company has continued to pursue its key strategic goals and has made clear progress in the commercialisation of its technologies.

We have continued to follow our preferred business model of licensing our technologies to key partners. Under these arrangements Modern Water receives a licence fee for our technology, a design fee for high-level process design and a fee for supervising process commissioning. In addition we supply key items of process plant for each project. Our licensing business model significantly reduces the commercial and financial risk of each project.

Commercial Progress
During the year the Membrane Division achieved a number of key commercial milestones;

Bodal Plant Commissioned and Opening Ceremony
On 4th of July following a successful commissioning period the British Deputy High Commissioner of Gujarat, Geoff Wain, opened the world's first brine treatment plant based on Modern Water's all membrane brine concentration process ("**AMBC**"). The plant treats technically challenging waste water for Indian chemicals giant Bodal Chemicals, a major international chemicals company and one of the world's leading manufacturers of dyes and dye intermediates. This is a crucial part of an energy-efficient treatment process for a highly saline organic-laden effluent stream from dyes manufacturing operations that achieves zero liquid discharge ("**ZLD**"), meaning that all waste water is purified and recycled at the end of the treatment cycle.

Joint Venture Established in China for AMBC Technology
Also on 4th of July, Modern Water and Sunup announced the formation of a Joint Venture Company, Encyclo, in China to promote Modern Water's innovative and proprietary brine concentration technology, the AMBC. 49% of Encyclo's shares are owned by Modern Water and 51% by Sunup. The parties are both represented on the board and are signatories to a joint venture agreement relating to Encyclo.

On completion of the JV formalities an opening ceremony for Encyclo was held in Changxing in December. The ceremony was attended by senior representatives of Modern Water and Sunup, together with senior representatives of the Chinese Government.

Forward Osmosis for Landfill Leachate Treatment
In September the Company licensed its proprietary forward osmosis technology for use in a demonstration plant to treat leachate from a landfill site in China. Modern Water's customer, Sunup, will use the demonstration plant to enhance its existing technological offering for the treatment of leachate from landfill sites.

AMBC Partner for Africa
In October, Modern Water entered into a collaboration agreement with WEC Projects (Pty) Ltd, a leading South-African EPC contractor which specialises in the provision of engineered solutions in the water and wastewater treatment sector. Based in Johannesburg, South Africa, WEC Projects will promote Modern Water's AMBC technology throughout the African continent.

AquaPak for Omani Safari Park
In December Modern Water was awarded a contract to provide a desalination plant for an exciting new safari theme park in Oman in the illustrious Adam location of the Sultanate.

Further AMBC Order in India
Post year-end, in March 2019, Modern Water received an order from one of the world's leading chemicals producers for an AMBC plant. The plant, which will be delivered with Modern Water's Indian partner Advent Envirocare Technology Pvt. Ltd., will treat technically challenging waste water. It is a crucial part of an energy-efficient treatment process for a highly saline organic-laden effluent stream, achieving ZLD, meaning that all waste water is purified and recycled at the end of the treatment cycle, leaving only a small amount of concentrated dry solids. Modern Water's AMBC will significantly reduce the cost of achieving ZLD for our client.

Gibraltar Wastewater Treatment Project

In January 2018, H.M. Government of Gibraltar awarded an Advance Works Contract to the Joint Venture between Modern Water Services Ltd and NWG Commercial Solutions Limited (“**Northumbrian Water**”), covering the design and survey work required for final planning and environmental approvals, as well as preliminary site works. This contract was successfully completed in March 2019 following the presentation of the project to Gibraltar’s Development and Planning Commission. Work continues on closing the main contract for a wastewater treatment plant to treat all the wastewater from Gibraltar.

Modern Water is responsible for the design and build portion of the contract. Northumbrian Water will be responsible for the operation and maintenance of the plant for 20 years following its completion.

Monitoring Division

Strategy

The Monitoring Division is focused on three core product segments: Toxicity, Trace/Heavy Metals and Environmental Contaminants, with a geographic focus on North America, China and Europe.

2018 was a significant year for the Monitoring Division. The year-on-year increase in revenue was 19%, resulting in an increase in gross margin of 25% over 2017. In addition to the significant improvement in revenue and gross profit the Division also undertook a significant product development programme.

In April 2018, the Division completed the commissioning of a Monitoring Station for a major power generation company in the Middle East to help ensure environmental compliance. The Monitoring Station monitors critical parameters such as Chlorine, PH, Aluminum and 12 critical trace metals.

The development programme for the new Microtox LX, the Division’s laboratory-based toxicity monitoring product, was completed at the end of 2018 and the new product was launched in January 2019. Initial feedback from customers on the new product has been very favourable.

Another achievement in 2018 (announced post year-end in January) was that Modern Water’s SRB Test Kits meet the proposed new ASTM standards, which aim to address corrosion in petrochemical pipelines by helping to detect quantities of corrosion-inducing bacteria in water. The test method produces real benefits to customers: the real-time detection of corrosion inducing bacteria allows faster and more accurate remediation, which in turn reduces corrosion costs in pipelines and equipment.

Recurring revenue from service contracts and reagent sales was £1.4m in 2018 (2017 £1.0m).

Capital Raise

In October, the company issued 3,792,410 new ordinary shares**,** which successfully raised £310,864 (after costs) in an open offer supported by management and existing shareholders. This followed the investment from China in July, which saw Modern Water’s partner Sunup subscribe for 5,021,353 new shares, investing £552,348.83 (before costs) in Modern Water.

Outlook

Modern Water continues to make steady progress in commercialising its core membrane technologies and in the last year has signed up partners in two new key markets, China and Africa. Alongside the new projects, a number of pilot trials have been successfully concluded and we expect to see new orders resulting from this work.

We expect the Monitoring Division to continue to build on the record sales achieved in 2018 with the launch of the new Microtox LX product at the end of 2018.

Modern Water has developed an attractive range of technologies which offer demonstrable benefits to our target markets. This range of capabilities, developed over many years, now offers the Company an exciting series of opportunities, as we continue to commercialise our technology. In addition, increasingly efficient operational practices, close control of costs and the careful use of capital allow us to maintain this commercial traction and continue to develop new products and techniques in parallel.

Group Key Performance Indicators (KPIs)
As previously stated, at the Company's current stage of development the Directors consider that strategic and operational progress is best measured by achievement in terms of technical and business development milestones and at this stage does not monitor non-financial KPIs. In 2018 we achieved progress against our goals and will continue to focus on these elements to drive future growth. In 2018 the key milestones reached were:

- The first commercial AMBC plant commissioned in India
- Chinese joint venture company established for AMBC technology in the Chinese market
- New partnership established for the African market with WEC Projects (Pty) Ltd
- Development of upgraded Microtox® LX laboratory-based toxicity testing technology
- ASTM approved method for SRB testing achieved

Further details of strategic and operational progress for the two main operating Divisions are outlined above in the Membrane and Monitoring sections of this Strategic Report.

The Board reviews strategic, operational and financial information on a monthly basis to measure progress. The key financial performance indicators for 2018, covered in more detail in the Financial Review and the financial statements, were:

- Revenue increased 18% to £4.2m (2017: £3.5m);
- Gross profit increased 31% to £2.3m (2017:£1.8m);
- Operating loss before tax, interest, depreciation, amortisation was £2.1m (2017: £2.8m)
- Total comprehensive loss for the year was £2.8m (2017: £5.0m)
- Cash outflow before financing in 2018 was £1.7m (2017: £2.2m); and
- Cash as at 31 December 2018 was £0.2m (2017: £0.5m).

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 expand the patent portfolio of the Group. Expenditure recorded in the Statement of Comprehensive Income for R&D during the year was £72,000 (2017: £165,000). The Group has benefited from the HMRC R&D tax credits scheme with the receipt of £155,386 in cash from claims made in 2018, related to R&D expenditure in 2017. The Group will submit claims for the recovery of 2018 R&D expenditure to HMRC in 2019.

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

As a result our patent portfolio in the Membrane Division now consists of 114 (2017: 86) granted patents across eight main patent families comprising solvent removal, improved solvent removal, secondary oil recovery, osmotic energy, separation process, evaporative cooling, cooling tower improvements and thermal desalination. The Monitoring Division currently holds 11 granted patents (2017: 13) and Modern Water has 2 (2017: 6) innovative wastewater treatment patents. Altogether the Group holds 127 granted patents (2017: 105) with a further 27 pending applications (2017: 42).

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 2018 the Group employed 37 permanent staff (2017: 41), supplemented by contract staff as required.

Group Financial Review
Summary
The Group had £0.2m cash in the bank and a bank loan of £0.5m at 31 December 2018 (2017: £0.5m cash). The Monitoring Division ended the year with an order book of £368,000. The overall loss before interest, tax, depreciation and amortisation decreased to £2.1m (2017: £2.8m).

The Group generated revenues of £4.2m in 2018 (2017: £3.5m). Total comprehensive loss was £2.8m (2017: £5.0m, £3.5m before goodwill impairment).

Cash Flows
The Group cash outflow for the year was £1.4m (2017: £2.2m) and during the year a net £0.9m was raised through the issue of new equity.

Cash inflow from R&D tax credits was £0.2m (2017: £0.2m). Cash outflows comprised £0.1m on property, plant and equipment (2017: £0.2m), £0.3m on patents (2017: £0.1m) and £1.4m on operating activities (2017: £1.9m).

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 £2.3m and has net cash out flows from operating activities of £1.4m**.** 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 2018 and beyond.

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, some of which are subject to material uncertainty that may cast significant doubt on the group and the company's ability to continue as a going concern:

- Monitoring Division: Continuing revenue growth over 2018.
- Membrane Division: Significant increase in number of technology licences sold vs 2018.
- Gibraltar Waste Water Treatment Plant: full contract commences during 2019.
- R&D tax credit receipts from HMRC of a broadly similar amount to 2018.
- Continued availability of a £0.5m bank loan from Barclays Bank Plc.

As disclosed in Note 21 a covenant on the bank loan was breached as at 31 December 2018, but the bank has waived this breach and reset the covenant.

Post year-end, the $0.5m credit facility that was available to the Group was terminated and is to be replaced with a new $0.75m facility to be finalised, providing additional available resources to the Group.

Modern Water is also pursuing a number of new commercial opportunities across its divisions and also believes it has a variety of external financing options available should they become necessary.

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. During 2019, Modern Water did undertake work in Gibraltar- however although Gibraltar is not part of the UK, but as a British Overseas Territory it will, by default, cease to be part of the EU upon UK's withdrawal.
Possible outcomes for Monitoring Division sales:

- Taxes/tariffs on any product shipped from the US to Cambridge (UK) plus additional taxes/tariffs on shipments from Cambridge to EU countries.
- Delays of shipments are possible due to taxes and tariffs collections.
- Licenses, registrations or certificates may be required to provide services in EU.
- Additional documentation to ship product from the UK to EU.
- Currently, bulk inventory is transferred from the US to UK and import/export documentation is provided at that time. No additional documentation is required when shipping from the UK to other EU countries.
- Import/export documentation (commercial invoice) may be required for every shipment from the UK to EU.
- Possibly, customers will 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.

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 the Company's General Counsel and 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 and to the Management Team.

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.

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 18 April 2019 and signed on its behalf by:

Simon Humphrey
Chief Executive Officer
18 April 2019

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 10, 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

The Board comprises one executive director, the Chief Executive Officer (Simon Humphrey), and three non-executive directors (Alan Wilson, Mike Townend and Piers Clark). Alan Wilson was appointed on 1 May 2015 as independent non-executive Chairman. Mike Townend is a representative of IP Group plc. Alan Wilson is the Interim Chairman of the Audit Committee and Piers Clark was appointed Chairman of the Remuneration Committee on 21 November 2018.

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, Simon Humphrey 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, through the office of the Company Secretary, independent professional advice, at the Group's expense, in furtherance of his 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 Company Secretary acts as secretary to the committees. 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 Dr Piers Clark (Chairman), Alan Wilson and Mike Townend. Further details of the committee and its policies are set out in the Directors' Remuneration Report on page 10.

Audit Committee

The Audit Committee consisted of Alan Wilson (Interim Chairman), Mike Townend and Dr Piers Clark.

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	8	8	3	3	2	2
Simon Humphrey	8	8	-	-	-	-
Mike Townend	8	8	3	3	2	2
Piers Clark	8	8	3	3	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 brokers and financial PR advisers.

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. Alan Wilson, as Chairman, is available to shareholders where contact through the normal channels of Chief Executive Officer or Company Secretary 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 have letters of appointment. Appointments can be terminated by the Group or the individual giving one month's notice. The services of Mike Townend are covered in a services agreement with IP Group plc, a significant shareholder in the Company.

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	Non-executive	18 May 2007	1
Piers Clark	Non-executive	2 January 2018	1

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.

Directors' Remuneration Report

Remuneration for the directors during the year was as follows:

	Basic salary, allowances and fees	* Bonus	Benefits	**Year ended 31 December 2018 Total (ex pension)**	Pension	**Year ended 31 December 2018 Total (inc pension)**	Year ended 31 December 2017 Total (ex pension)	Pension	Year ended 31 December 2017 Total (inc pension)
	£000	£000	£000	**£000**	£000	**£000**	£000	£000	£000
Executive directors									
Simon Humphrey	138	—	6	**144**	14	**158**	**155**	14	**169**
Non-executive directors									
Alan Wilson	60	—	—	**60**	—	**60**	**60**	—	**60**
Mike Townend**	—	—	—	**—**	—	—	**—**	—	**—**
Piers Clark	30	—	—	**30**	—	**30**	**—**	—	**—**
	228	—	6	**234**	14	**248**	**215**	14	**229**

* Bonuses are disclosed in the year for which the performance relates. There were no bonuses in relation to 2018 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 2018 number	Outstanding at 31 December 2018 number	Vested and exercisable at 31 December 2018 number	Option price	Charge to Statement of Comprehensive Income in 2018	Charge to Statement of Comprehensive Income in 2017
Simon Humphrey	28.4.17	28.4.20	400,000	400,000	-	£0.00	£16,000	£16,000

Directors' Interests

Directors' interests are detailed in the Directors' Report.

Share Price

The Modern Water plc closing share price was 7.95p on 31 December 2018. The share price high for 2018 was 14.4p and the low was 6.2p.

On behalf of the Board

Dr Piers Clark
Chairman, Remuneration Committee
18 April 2019

Directors' Report

The directors present their Annual Report together with the audited consolidated financial statements for the year ended 31 December 2018.

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 2. 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 8.

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 (2017: £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 2018	**31 December 2018**	31 December 2017	31 December 2017
Simon Humphrey	**1.81**	**1,882,000**	1.92	1,832,000
Mike Townend	**0.62**	**648,296**	0.63	605,000

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 8.

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

Grant Thornton UK LLP was appointed as independent auditor following a tender process in 2016. Grant Thornton UK LLP has indicated their willingness to continue in office and a resolution concerning their reappointment will be proposed at the 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 12. 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

By order of the Board

Toby Schumacher
Company Secretary
18 April 2019

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.

By order of the board

Toby Schumacher
Company Secretary
18 April 2019

Independent Auditor's Report
to the members of Modern Water plc

Opinion

Our opinion on the financial statements is unmodified

We have audited the financial statements of Modern Water Plc (the 'parent company') and its subsidiaries (the 'group') for the year ended 31 December 2018, 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 notes to the financial statements, including a summary of significant accounting policies. The financial reporting framework that has been applied in the preparation of the group financial statements is applicable law and 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 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 2018 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 the parent company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Material uncertainty related to going concern

We draw attention to note 2.1.1 in the financial statements, which indicates that management have made significant assumptions in preparing the financial statements on a going concern basis. As stated in note 2.1.1, the group has recorded a loss for the year of £2.3m and has net cash out flows from operating activities of £1,352k. The most significant assumptions made in the cash flow forecast prepared by the directors include a significant increase in the number of technology licenses sold and full commencement of the Gibraltar Waste Water Treatment Plant contract. These events or conditions, along with the other matters as set forth in note 2.1.1, indicate that a material uncertainty exists that may cast significant doubt on the group and parent company's ability to continue as a going concern. Our opinion is not modified in respect of this matter.

Grant Thornton

Overview of our audit approach

- Overall group materiality: £100,000, which represents approximately 3.8% of the group's loss on ordinary activities before taxation
- Key audit matters were for the group were identified as revenue recognition, and for the parent company were carrying value of investment in subsidiaries and carrying value of intercompany receivable.
- We performed a full scope audit of the financial statements of Modern Water Plc and Modern Water Inc. We performed targeted audit procedures on the financial statements of Modern Water Technology (Shanghai) Co., Ltd, Modern Water Services Limited, Surrey Aquatechnology Limited, MW Monitoring Limited, Modern Water Monitoring Limited and MW Monitoring IP Limited.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those that 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.

In addition to the matter described in the material uncertainty related to going concern section, we have determined the matters described below to be the key audit matters to be communicated in our report.

Key Audit Matter - Group	How the matter was addressed in the audit
Revenue may be improperly recognised Revenue is recognised 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, the nature of the contracts with customers involve 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 recognised in each reporting period. We identified revenue recognition as a significant risk which was one of the most significant assessed risks of material misstatement.	Our audit work included, but was not restricted to: • Understanding the Group's revenue recognition policy and confirming that revenue has been recognised in accordance with this policy; • Evaluating management's assessment for the transition from International Accounting Standard (IAS) 18 'Revenue' to IFRS 15 'Revenue from Contracts with Customers' and determining whether revenue was recognised appropriately; • For a sample of transactions, developing an understanding of the key performance obligations relevant to recognition of revenue. This included testing a sample of sales invoices raised during the year to supporting documentation, such as signed contracts; and • Identifying contracts that spanned the year end and re-calculated the expected deferred and accrued income and compared this to management's calculation. The group's accounting policy on revenue recognition is shown in note 2.15 to the financial statements and related disclosures are included in note 5. Key observations Overall, based on our audit work, we found that the judgments made by management were consistently applied and that revenue was recognised in accordance with the policies adopted by the Group.

Key Audit Matters – Parent	How the matter was addressed in the audit – Parent
Carrying value of investment in subsidiaries The assessment of impairment of fixed asset investments is carried out when there is an indication that the assets may be impaired. It was considered by management that there were indicators of impairment given the losses incurred by the subsidiaries in the current year. The calculation of the impairment requires management to make significant assumptions and judgements about the recoverability of the investment value, including expected future cash flows associated with the subsidiaries. We therefore identified carrying value of investment in subsidiaries as a significant risk, which was one of the most significant assessed risks of material misstatement.	Our audit work included, but was not restricted to: • Obtaining management's impairment review and comparing the recoverable amounts to the carrying values of the investments; • Comparing the carrying value of the investment at the year end to the net assets and expected future profits of each subsidiary; • Inspecting in detail the key underlying assumptions within management's discounted cash flow models, assessing each of the key assumptions against market data, where relevant and available, and performing a sensitivity analysis of each of these assumptions; • Corroborating the key inputs used in support of the key underlying assumptions to relevant supporting documentation; • Evaluating the sensitivity of the cash flow models to a change in the discount rate, the growth rate and the identified headroom; and • Assessing the disclosures of estimates and judgements made in the financial statements for compliance with the requirements of International Accounting Standard (IAS) 1 'Presentation of Financial Statements'. The company's accounting policy relating to carrying value of investment in subsidiaries is shown in note 2.8 to the financial statements and related disclosures are included in note 16. Key observations Based on our audit work, we found that the current level of net assets and expected future profits of the subsidiaries provide sufficient support for the carrying value of the investments as at the year end. We found no errors in the underlying calculations.
Carrying value of intercompany receivables Management determined that there were indicators that the intercompany receivable may not be recoverable given the losses incurred by the subsidiaries in the current year and their net liabilities position at the year end. The calculation of the recoverable amounts of receivables requires management to make significant assumptions and judgements. We therefore identified carrying value of	Our audit work included, but was not restricted to: • Understanding the impairment provision policy relating to receivables; • Obtaining management's impairment review and comparing the recoverable amounts to the carrying values of the intercompany receivables; • Evaluating the application of the impairment provision policy in accordance with the financial reporting framework and the policy as described

Key Audit Matters – Parent	How the matter was addressed in the audit – Parent
intercompany receivables as a significant risk, which was one of the most significant assessed risks of material misstatement.	in the group's accounting policies; • Comparing the available assets of the subsidiary to the amounts payable to the parent; • Obtaining management's discounted cash flow forecast for each group component and comparing the available assets plus expected cash flows of each company to the carrying amount of the intercompany receivable as at the yearend; • Inspecting in detail the key underlying assumptions within management's discounted cash flow models, assessing each of the key assumptions in turn against market data, where relevant and available, and performing sensitivity analysis on management's model; • Corroborating the key inputs used in support of each of the underlying assumptions to supporting documentation; and • Assessing the disclosures of estimates and judgements made in the financial statements for compliance with the requirements of IAS 1. The company's accounting policy on impairment of receivables is shown in note 2.10 to the financial statements and related disclosures are included in note 18. Key observations Based on our audit work, we found that the current level of assets available and expected future cash flows of the subsidiaries support the carrying value of the intercompany receivable as at the year end. We found no errors in the underlying calculations.

Our application of materiality

We define materiality as the magnitude of misstatement in the financial statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality in determining the nature, timing and extent of our audit work and in evaluating the results of that work.

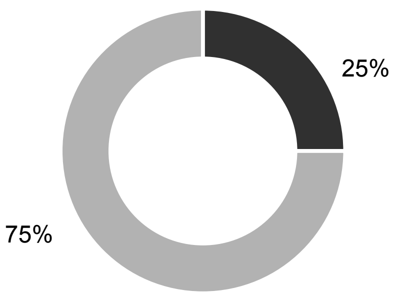
Materiality was determined as follows:

Materiality measure	Group	Parent
Financial statements as a whole	£100,000, which is approximately 3.8% of the group's loss on ordinary activities before taxation. This benchmark is considered the most appropriate because it is a prominent key performance indicator to the users of the financial statements. Materiality for the current year is higher than the level that we determined for the year ended 31 December 2017 to reflect a change in the benchmark that was used in the prior year. Due to the continued	£46,000, which is approximately 0.5% of the parent company's gross assets. This benchmark is considered the most appropriate because the parent company is not a trading entity and is a holding company. Management considers net assets to be a key performance measure of the long-term sustainability of the company. Materiality for the current year is higher than the level that we

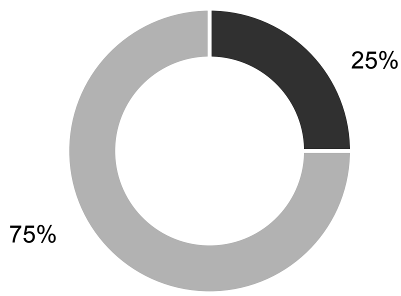
Materiality measure	Group	Parent
	losses of the group it was deemed appropriate to change the benchmark in the current year.	determined for the year ended 31 December 2017 due to gross assets being higher than the previous year.
Performance materiality used to drive the extent of our testing	75% of financial statement materiality, being £75,000.	75% of financial statement materiality, being £35,000.
Specific materiality	We determined a lower level of specific materiality for certain areas such as Directors’ remuneration and related party transactions.	We determined a lower level of specific materiality for certain areas such as Directors’ remuneration and related party transactions.
Communication of misstatements to the audit committee	£5,000 and misstatements below that threshold that, in our view, warrant reporting on qualitative grounds.	£2,000 and misstatements below that threshold that, in our view, warrant reporting on qualitative grounds.

The graph below illustrates how performance materiality interacts with our overall materiality and the tolerance for potential uncorrected misstatements.

Overall materiality – Group



Overall materiality – Parent



I

■ Tolerance for potential uncorrected mis-statements ■ Performance materiality

An overview of the scope of our audit

Our audit approach was a risk-based approach founded on a thorough understanding of the group's business, its environment and risk profile and in particular included:

- The group audit team conducted a full scope audit of the financial statements of Modern Water Plc and Modern Water Inc. including a site visit of the USA location;
- We performed targeted audit procedures of the financial statements of Modern Water Technology (Shanghai) Co., Ltd, Modern Water Services Limited, Surrey Aquatechnology Limited, MW Monitoring Limited, Modern Water Monitoring Limited and MW Monitoring IP Limited. Analytical procedures were performed on the financial statements of the remaining group components in the UK and Oman;
- In identifying the scope of work performed for each component noted above based on our risk assessment, we have ensured that we have obtained sufficient appropriate audit evidence on which to base our opinion on the group financial statements. In making this determination we took into account the following factors: the geographic structure of the group, the accounting processes and controls, and the industry in which the group operates, and tailored the scope of our audit accordingly; and
- The group sells products and services worldwide predominantly through a UK Company and the US trading subsidiary, which have different characteristics. Specific audit procedures were designed to cover the significant risks and other matters such as taxation.

Other information

The directors are responsible for the other information. The other information comprises the information included in the annual report and accounts 2018, other than the financial statements and our auditor’s report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

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 of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Our opinion on other matters prescribed by the Companies Act 2006 is unmodified

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.

Matter on which we are required to report under the Companies Act 2006

In the light of the knowledge and understanding of the group and the parent company and its environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the directors’ report.

Matters on which we are required to report by exception

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

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

Responsibilities of directors for the financial statements

As explained more fully in the statement of directors’ responsibilities set out on page 14, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

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

Auditor’s responsibilities for the audit of the financial statements

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

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

Use of our report

This report is made solely to the 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.

Norman Armstrong BSc FCA
Senior Statutory Auditor
for and on behalf of Grant Thornton UK LLP
Statutory Auditor, Chartered Accountants
Southampton
18 April 2019

Group Statement of Comprehensive Income

for the year ended 31 December 2018

	Note	2018 Total £000	2017 Total £000
Revenue	5	**4,159**	3,518
Cost of sales	5	**(1,843)**	(1,744)
Gross profit	5	**2,316**	1,774
Administrative expenses	7	**(4,371)**	(4,410)
Exceptional Item: Inventory valuation adjustment	6	**(3)**	(173)
Operating loss before depreciation and amortisation		**(2,058)**	(2,809)
Depreciation and amortisation	14,15	**(523)**	(508)
Exceptional Item: Goodwill Impairment	15	**—**	(1,532)
Operating loss		**(2,581)**	(4,849)
Finance income	11	**204**	—
Finance costs	11	**(92)**	(381)
Loss on ordinary activities before taxation		**(2,469)**	(5,230)
Taxation	12.1	**163**	157
Loss for the year		**(2,306)**	(5,073)
Other comprehensive income			
Foreign currency translation differences on foreign operations		**(504)**	69
Total comprehensive loss for the year		**(2,810)**	(5,004)
Loss attributable to:			
Owners of the parent		**(2,170)**	(5,073)
Non-controlling Interest		**(136)**	-
		(2,306)	(5,073)
Total comprehensive loss attributable to:			
Owners of the parent		**(2,674)**	(4,990)
Non-controlling Interest		**(136)**	(14)
		(2,810)	(5,004)
(Loss) per share for the year (attributable to owners of the parent):			
Basic (loss) per share	13.1	**(2.22p)**	(5.71p)
Diluted (loss) per share	13.2	**(2.22p)**	(5.71p)

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 notes from page 27 onwards are an integral part of these consolidated financial statements.

Group and Company Statements of Financial Position

as at 31 December 2018

	Note	Group 2018 £000	Group 2017 £000	Company 2018 £000	Company 2017 £000
Assets					
Non-current assets					
Property, plant and equipment	14	**199**	230	**-**	-
Intangible assets	15	**1,563**	1,658	**-**	-
Investments	16	**-**	-	**2,023**	1,877
		1,762	1,888	**2,023**	1,877
Current assets					
Inventories	17	**935**	1,047	**-**	-
Trade and other receivables	18	**1,014**	1,043	**6,479**	5,971
Cash and cash equivalents	19	**228**	466	**-**	234
		2,177	2,556	**6,479**	6,205
Total assets		**3,939**	4,444	**8,502**	8,082
Equity and liabilities					
Equity					
Ordinary shares		**261**	239	**261**	239
Share premium account		**42,613**	41,604	**42,613**	41,604
Warrant reserve		**100**	-	**100**	-
Merger reserve		**398**	398	**398**	398
Foreign exchange reserve		**(669)**	**(165)**	**-**	**-**
Accumulated losses		**(40,642)**	(38,540)	**(35,590)**	(34,268)
		2,061	3,536	**7,782**	7,973
Non-controlling interests		**9**	145	-	-
Total equity		**2,070**	3,681	**7,782**	7,973
Liabilities					
Non-current liabilities					
Deferred tax liabilities	12.3	**-**	27	**-**	-
Current liabilities					
Trade and other payables	20	**1,337**	736	**188**	109
Bank loan	21	**532**	-	**532**	-
		1,869	736	**721**	109
Total liabilities		**1,869**	763	**721**	109
Total equity and liabilities		**3,939**	4,444	**8,502**	8,082

The loss attributed to the parent company in the year was £1,390,000 (2017 loss of: £1,421,000).

The notes on page 27 onwards are an integral part of these consolidated financial statements.

The financial statements on pages 22 to 55 were approved by the Board of Directors on 18 April 2019 and signed on its behalf by:

Simon Humphrey
Chief Executive Officer
18 April 2019
Modern Water plc

Registered number: 05963927

Group and Company Statements of Changes in Equity

for the year ended 31 December 2018

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 2017		**199**	**40,032**	**-**	**398**	**(248)**	**(33,629)**	**6,752**	**159**	**6,911**
Comprehensive loss										
Loss for the year		-	-	-	-	-	(5,073)	(5,073)	(136)	(5,073)
Foreign currency translation differences		-	-	-		83	-	83		69
Total comprehensive loss		-	-	-	-	83	(5,073)	(4,990)	(14)	(5,004)
Transactions with owners										
Share issue (net of transaction fees)		40	1,572	-	-	-	-	1,612	-	1,612
Share-based payments	9	-	-	-	-	-	162	162	-	162
Total transactions with owners		40	1,572	-	-	-	162	1,774	-	1,774
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)	(2,306)	(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	9	-	-	-	-	-	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**

Group and Company Statements of Changes in Equity

for the year ended 31 December 2018

	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 2017		**199**	**40,032**	**-**	**398**	**-**	**(33,009)**	**7,620**	**-**	**7,620**
Comprehensive loss										
Loss and total comprehensive loss for year		-	-	-	-	-	(1,421)	(1,421)	-	(1,421)
Total comprehensive loss		-	-	-	-	-	(1,421)	(1,421)	-	(1,421)
Transactions with owners										
		40	1,572	-	-	-		1,612		1,612
Share-based payments	9	-	-	-	-	-	162	162	-	162
Total transactions with owners		40	1,572	-	-	-	162	1,774	-	1,774
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	9	-	-	-	-	-	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**	**-**	**(35,590)**	**7,782**	**-**	**7,782**

The notes on pages 27 to 55 are an integral part of these consolidated financial statements. The Merger reserve balance as at 31 December 2018 relates solely to the 2011 acquisition of Cogent Environmental Limited.

Group and Company Statements of Cash Flows

for the year ended 31 December 2018

		Group		Company	
		2018	2017	**2018**	2017
	Note	**£000**	£000	**£000**	£000
Net cash flows from operating activities					
Loss on ordinary activities before taxation		**(2,469)**	(5,230)	**(1,390)**	(1,421)
Adjustments for:					
Inventory Valuation adjustment		**3**	173	**—**	—
Depreciation of property, plant and equipment	14	**109**	153	**—**	—
Amortisation of intangible assets	15	**414**	355	**—**	—
Impairment of Goodwill		**—**	1,532	**—**	—
Net finance income	11	**(112)**	381	**32**	—
Share-based payments	9	**168**	162	**21**	16
R&D Tax credit receipts		**155**	184	**—**	—
Movements in working capital:					
(Increase) / decrease in inventories		**109**	239	**—**	—
Decrease / (increase) in trade and other receivables		**29**	3	**(508)**	(404)
Increase / (decrease) in trade and other payables		**242**	108	**80**	13
Net cash flows from operating activities		**(1,352)**	**(1,940)**	**(1,765)**	**(1,796)**
Cash flows from investing activities					
Purchase of property, plant and equipment	14	**(60)**	(162)	—	—
Purchase of patents and development costs	15	**(319)**	(113)	—	—
Net cash flows (used in)/generated from investing activities		**(379)**	(275)	—	—
Cash flows from financing activities					
Proceeds from borrowings		**500**		**500**	
Proceeds from issuance of ordinary shares		**1,031**	1,612	**1,031**	1,612
Net cash flows generated from financing activities		**1,531**	1,612	**1,531**	1,612
Net increase in cash and cash equivalents		**(200)**	(603)	**(234)**	(184)
Cash and cash equivalents at the beginning of the year	19	**466**	1,072	**234**	419
Exchange losses on bank balances		**(38)**	(3)	—	(1)
Cash and cash equivalents at the end of the year	19	**228**	466	**-**	234

The notes on pages 27 to 55 are an integral part of these consolidated financial statements.

Notes to the Financial Statements (continued)

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 and principal place of business is Bramley House, The Guildway, Old Portsmouth Road, Guildford, Surrey GU3 1LR.

The consolidated and Company financial statements of Modern Water plc (the 'Company') and its subsidiaries (together the 'Group') for the year ended 31 December 2018 were authorised for issue by the Board of directors on 18 April 2019 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 2018 have been taken by Aguacure Ltd (05893786), Cymtox Limited (05025552), Modern Water Monitoring Limited (06701882), Modern Water Services Limited (06316697), MW Monitoring Limited (07495046), MW Monitoring IP Limited (07810737), Modern Water Holdings Limited (07588452), 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 £2.3m and has net cash out flows from operating activities of £1.4m**.** 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 2018 and beyond.

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, some of which are subject to material uncertainty that may cast significant doubt on the group and the company's ability to continue as a going concern:

- Monitoring Division: Continuing revenue growth over 2018.
- Membrane Division: Significant increase in number of technology licences sold vs 2018.
- Gibraltar Waste Water Treatment Plant: full contract commences during 2019.
- R&D tax credit receipts from HMRC of a broadly similar amount to 2018.
- Continued availability of a £0.5m bank loan from Barclays Bank Plc.

As disclosed in Note 21 a covenant on the bank loan was breached as at 31 December 2018, but the bank has waived this breach and reset the covenant.

Post year-end, the $0.5m credit facility that was available to the Group was terminated and will be replaced with a new $0.75m facility agreed in April 2019, providing additional available resources to the Group.

Modern Water is also pursuing a number of new commercial opportunities across its divisions and also believes it has a variety of external financing options available should they become necessary.

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
(a) New and amended standards adopted by the group
New Standards adopted as at 1 January 2018

IFRS 9 'Financial Instruments'

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.

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)

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.
IFRS 9's impairment requirements use more forward-looking information to recognise expected credit losses – the 'expected credit loss (ECL) model'. 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. The Group has not recognised any additional expected losses at the year-end as a result of the implementation of IFRS 9.

IFRS 15 'Revenue from Contracts with Customers'

With effect from 1 January 2018 Modern Water Group adopted IFRS 15 Revenue from Contracts with Customers which presents new requirements for the recognition of revenue. The new standard establishes a control-based revenue recognition model and provides additional guidance in many areas not covered in detail under existing IFRSs.
To determine whether to recognise the revenue the Group follows a 5 step process:

- Identify the contract with a customer
- Identify the performance obligations
- Determine the performance price
- Allocating the transaction price to the performance obligations
- Recognising revenue when performance obligations are satisfied

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 deferred revenue 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.
Management feels the new standard if anything could align revenue recognition with the commercial substance of the contracts. The application of IFRS 15 has no impact on the lifetime profitability or cash flow of our contracts, or the majority of our transactional businesses. Instead, the resulting changes in the timing of revenue and cost recognition more closely aligns our financial results with the timing of the delivery of our outcomes to clients.
The Group transitioned applying the modified retrospective approach, however, no adjustments were required to prior years as all contracts were completed before the year-end previously.

(b) New standards, amendments and interpretations issued but not effective for the financial year beginning 1 January 2019 and not adopted early
New standards and amendments to standards and interpretations effective for annual periods beginning after 1 January 2019 have not been applied in preparing these consolidated financial statements. None of these is expected to have a significant effect on the consolidated financial statements of the Group.

(b) Standards, amendments and Interpretations to existing Standards that are not yet effective and have not been adopted early by the group

At the date of authorisation of these financial statements, several new, but not yet effective, Standards, amendments to existing Standards, and Interpretations have been published by the IASB. None of these Standards, amendments or Interpretations have been adopted early by the Group.

Management anticipates that all relevant pronouncements will be adopted for the first period beginning on or after the effective date of the pronouncement. New Standards, amendments and Interpretations neither adopted nor listed below have not been disclosed as they are not expected to have a material impact on the Group's financial statements

IFRS 16 'Leases'

Adoption of IFRS 16 Leases
IFRS 16 is effective from 1 January 2019 and replaces IAS 17 Leases and related interpretations. It will result in almost all leases being recognised on the balance sheet by lessees, as the distinction between operating and finance leases is removed. Under the new standard, a right-of-use asset and a financial liability for future lease payments are recognised. The only exceptions are short-term leases, low-value leases, and leases of intangible assets.
The Group will apply the Standard from 1 January 2019. The Group will apply the modified retrospective transition approach and will not restate comparative amounts for the year ended 31 December 2018. The Group's main assets including IT equipment are owned outright so we will only be looking at rent leases.

Impact of adoption of IFRS 16 Leases

Balance sheet
There may be a transition adjustment recognised as a debit to retained earnings. The Group will not capitalise low-value leases on transition, or those which expire before 31 December 2019, and has opted not to apply IFRS 16 to leases relating to intangible assets. The right-of-use asset principally consists of property (rent leases).
Statement of Comprehensive Income
Under IFRS 16 the Group will see a different pattern of expense within the income statement, as the IAS 17 operating lease expense is replaced by depreciation and interest charges.
Cash flow statement
The change in presentation as a result of the adoption of IFRS 16 will see an improvement in 2019 in cash flow generated from operating activities, offset by a corresponding decline in cash flow from financing activities. There is no overall cash flow impact from the adoption of the new Standard. Lessor accounting under IFRS 16 is largely unchanged from IAS 17.
Management have not yet completed a full impact assessment of adopting the new standard.

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 £1,390,000 (2017 loss of: £1,421,000).

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

Leases in which a significant portion of the risks and rewards of ownership 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.

Notes to the Financial Statements (continued)

2.10 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.

Previous financial asset impairment under IAS 39

In the prior year, the impairment of trade receivables was based on the incurred loss model. Individually significant receivables were considered for impairment when they were past due or when other objective evidence was received that a specific counterparty will default. Receivables that were not considered to be individually impaired were reviewed for impairment in groups, which are determined by reference to the industry and region of the counterparty and other shared credit risk characteristics. The impairment loss estimate was then based on recent historical counterparty default rates for each identified group.

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 18 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.

2.11 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.

2.12 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.

2.13 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 9.

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.

2.14 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.

2.15 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.

2.16 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 2018 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.

(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 2.15(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 2.6(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 12.3 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). In 2017, the Group recognised an impairment loss on goodwill (see Note 15). 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 9. 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 9.

(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.

	2018				2017			
	Membrane £000	Monitoring £000	Central £000	Total £000	Membrane £000	Monitoring £000	Central £000	Total £000
Revenue	**481**	**3,678**	**—**	**4,159**	369	3,149	—	3,518
Cost of sales	**(55)**	**(1,788)**	**—**	**(1,843)**	(161)	(1,583)	—	(1,744)
Gross profit	**426**	**1,890**	**—**	**2,316**	208	1,566	—	1,774
Administrative expenses	**(1,216)**	**(1,878)**	**(1,109)**	**(4,203)**	(1,054)	(2,094)	(1,100)	(4,248)
Share based payments	**—**	**—**	**(168)**	**(168)**	—	—	(162)	(162)
Exceptional Item: Inventory Adj.	**—**	**(3)**	**—**	**(3)**	—	(173)	—	(173)
Operating profit / (loss) before depreciation and amortisation	**(790)**	**9**	**(1,277)**	**(2,058)**	(846)	(701)	(1,262)	(2,809)
Depreciation and amortisation	**(162)**	**(361)**	**—**	**(523)**	(117)	(391)	—	(508)
Exceptional Item: Goodwill Impairment	**—**	**—**	**—**	**—**	(240)	(1,292)	—	(1,532)
Operating (loss)	**(952)**	**(352)**	**(1,277)**	**(2,581)**	(1,203)	(2,384)	(1,262)	(4,849)
Finance income	**—**	**—**	**204**	**204**	—	—	—	—
Finance costs	**—**	**—**	**(92)**	**(92)**	—	—	(381)	(381)
(Loss) before taxation	**(952)**	**(352)**	**(1,165)**	**(2,469)**	(1,203)	(2,384)	(1,643)	(5,230)
Taxation	**115**	**40**	**8**	**163**	143	41	(27)	157
(Loss) for the year	**(837)**	**(312)**	**(1,157)**	**(2,306)**	(1,060)	(2,343)	(1,670)	(5,073)

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 £3,678,000 (2017: £3,149,000) from sale of goods and services and £nil (2017: £nil) revenue from royalties on a point in time basis.

The Membrane Division recognised £481,000 (2017: £369,000) 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.

	2018			2017		
Revenue	**Membranes £000**	**Monitoring £000**	**Total £000**	Membranes £000	Monitoring £000	Total £000
Americas	**—**	**1,463**	**1,463**	—	1,303	1,303
Europe	**378**	**729**	**1,107**	—	838	838
Middle East and Africa	**3**	**150**	**153**	80	173	253
Asia Pacific	**100**	**1,336**	**1,436**	289	835	1,124
Total	**481**	**3,678**	**4,159**	369	3,149	3,518

The Group has non-current assets in five countries (2017: five), based on location of the assets.

	2018			2017		
	Property, plant and equipment £000	**Intangible assets including goodwill £000**	**Total £000**	Property, plant and equipment £000	Intangible assets including goodwill £000	Total £000
UK	**4**	**1,271**	**1,275**	4	1,658	1,662
US	**194**	**292**	**486**	226	—	226
Oman	**—**	**—**	**—**	—	—	—
China	**—**	**—**	**—**	—	—	—
Gibraltar	**—**	**—**	**—**	—	—	—
Total	**198**	**1,563**	**1,761**	230	1,658	1,888

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 (2017: None greater than 10%). In the Membrane Division, revenue was earned from four customers in 2018 (2017: Revenue from five customers).

6. Exceptional Item: Inventory valuation adjustment

As part of managements' refocusing of the Monitoring Division, all of its global operations were moved onto one management information system in late 2016, which in turn allowed a thorough review of its inventory position during the course of 2017. As a result, management felt it was necessary to adjust the holding value of some inventory items. No further write down was made during 2018.

	2018	2017
	£000	£000
Write down of discontinued products	**-**	46
Write down of spares for obsolete/discontinued products	**-**	21
Write down of inventory dating from before 2016	**-**	24
Other write downs and corrections	**3**	82
Total	**3**	173

7. Administrative expenses by nature

	Note	**2018 £000**	2017 £000
Employee benefits expense		**2,647**	2,580
Share-based payments	9	**168**	162
Operating lease payments	23.1	**240**	290
Research and development		**72**	165
Auditor's remuneration	10	**82**	66
Exceptional Item: Inventory valuation adjustment	6	**-**	173
Other administrative expenses		**1,162**	1,147
Total administrative expenses before depreciation, amortisation and exceptional charges		**4,371**	4,583
Depreciation and amortisation charges	14,15	**523**	508
Exceptional Item: Goodwill Impairment		**-**	1,532
Total administrative expenses including depreciation, amortisation and exceptional charges		**4,894**	6,623

8. Employee benefits expense

		2018			2017
		Group	**Company**	Group	Company
	Note	**£000**	**£000**	£000	£000
Staff costs for the year, including the executive director, amounted to:					
Wages and salaries		**2,137**	**227**	2,217	216
Social security costs		**228**	**18**	216	20
Other pension costs		**103**	**14**	99	14
Other benefits and staff costs		**187**	**10**	230	20
Total employee benefits expense		**2,655**	**269**	2,762	270
Equity-settled share-based payments	9	**168**	**21**	162	16
		2,823	**290**	2,924	286

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

	2018			2017
	Group	**Company**	Group	Company
	Number	**Number**	Number	Number
Monthly average number of employees by activity:				
Executive director	**1**	**1**	1	1
Technical	**17**	**—**	22	—
Business development	**15**	**—**	13	—
Finance, legal and administration	**6**	**—**	6	—
Total	**39**	**1**	42	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 (2017: £142,597). The highest paid director received £143,931 (2017: £142,597), excluding pension contributions. There were no gains made by directors on the exercise of share options (2017: £nil). No money was received by directors under long term incentive schemes (2017: £nil). The executive director, who was also the highest paid director, in total received £nil in cash bonuses relating to 2018 performance (2017: £12,000). The Group paid £13,749 (2017: £14,000) to the executive director in respect of money purchase pension schemes. Total remuneration for non-executive directors was £90,000 (2017: £60,000). See the remuneration table in the Directors' Remuneration Report on page 10 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.

9. Share-based payment plans

	2018		2017	
	Group	**Company**	Group	Company
	£000	**£000**	£000	£000
Options (including EMI)	**168**	**21**	162	16
Equity-settled share-based payments	**168**	**21**	162	16
Total share-based payments charged to the Statement of Comprehensive Income	**168**	**21**	162	16
Equity-settled share-based payments	**168**	**21**	162	16
Capital contribution relating to share-based payments	—	**147**	—	146
Total share-based payments changes in equity	**168**	**168**	162	162

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 £168,000 (2017: £162,000) share-based payment charge of which a charge of £21,000 (2017: £16,000) was recognised in the Company's Statement of Comprehensive Income for its employees and a further £147,000 (2017: £146,000) to the employees of subsidiary undertakings. The charge for equity-settled share-based payments to the employees of the Company's subsidiaries of £147,000 (2017: £146,000) 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:

	2018	2017
At 1 January	**2,060,000**	2,110,877
Granted during year	**600,000**	670,000
Forfeited	**-**	(720,877)
At 31 December	**2,660,000**	2,060,000

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.

Grant date	**3 May 2018**	**28 April 2017**	**24 March 2017**
Share price at date of award	**10.75p**	**16.00p**	**6.50p**
Number of shares options granted	**600,000**	**200,000**	**470,000**
Exercise price	**£nil**	**£nil**	**£nil**
Assumed volatility at date of award (median of historical 50 day average)	**101%**	**135%**	**37%**
Vesting period (years)	**3.0**	**3.0**	**3.0**
Expected dividend yield	**0%**	**0%**	**0%**
Risk-free discount rate	**1.0%**	**1.0%**	**1.0%**
Fair value per share awarded	**10.75p**	**16.00p**	**6.50p**

The weighted average remaining contractual life for the share options outstanding at 31 December 2018 is seven years and three months (2017: seven years and nine months). The weighted average exercise price for options outstanding at the end of the year was 8.20p (2017: 10.6p). 600,000 options were exercisable as at 31 December 2018 (2017: 700,000).

(b) Conditional share awards

There were no Conditional share awards outstanding as of 31 December 2018 (2017: 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:

	2018	2017
At 1 January	**3,642,500**	2,322,500
Granted	**1,350,000**	1,770,000
Forfeited	**(730,000)**	(450,000)
Lapsed	**—**	—
At 31 December	**4,262,500**	3,642,500

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 9.50p (2017: 11.87p). Inputs into the model used for the options granted in the year are below:

Grant date	**28 April 2018**	28 April 2017	24 March 2017
Share price at date of award	**10.75p**	16.00p	6.50p
Number of options	**1,350,000**	1,000,000	770,000
Exercise price	**£nil**	£nil	£nil
Assumed volatility at date of award (median of historical 50 day average)	**101%**	135%	37%
Vesting period (years)	**3.0**	3.0	3.0
Expected dividend yield	**0%**	0%	0%
Risk-free discount rate	**1.0%**	1.0%	1.0%
Weighted average fair value per share awarded	**10.75p**	16.00p	6.50p

10. Auditor's remuneration

	2018 £000	2017 £000
Audit of Company and consolidated financial statements by Grant Thornton	**49**	41
Audit of subsidiaries in Oman and China not by Grant Thornton	**10**	4
Total audit	**59**	45
Tax compliance services by Grant Thornton	**18**	19
Tax compliance services in Oman and China not by Grant Thornton	**5**	2
Total non-audit services	**23**	21
Total fees to Grant Thornton	**67**	60
Total fees not to Grant Thornton	**15**	6
Total fees	**82**	66

11. Finance income and costs

	2018 £000	2017 £000
Finance income:		
Foreign exchange gains	**204**	-
Total finance income	**204**	-
Finance costs:		
Foreign exchange losses	**-**	(354)
Interest on bank loan	**(25)**	-
Bank and currency charges	**(67)**	(27)
Total finance costs	**(92)**	(382)
Net finance expense/(income)	**112**	(381)

12. Taxation

12.1 Tax on loss on ordinary activities

	2018 £000	2017 £000
Current tax:		
Foreign Tax Withheld	**19**	34
Tax in respect of R&D activities	**(155)**	(184)
Total current tax	**(136)**	(150)
Deferred tax		
Origination and reversal of temporary differences	**(27)**	(7)
Total deferred tax	**(27)**	(7)
Total tax benefit	**(163)**	(157)

12.2 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:

	2018 £000	2017 £000
Loss on ordinary activities before taxation	**2,663**	5,230
Loss multiplied by the weighted average tax rate of 19% (2017: 19.25%)	**506**	1,046
Expenses not deductible for tax purposes	**(35)**	(34)
Capital allowances and other timing differences not recognised	**(22)**	(31)
Adjustments in respect of prior years	**27**	7
Re-measurement of deferred tax – changes in UK tax rate	**0**	0
Foreign Tax Withheld	**(19)**	(34)
Tax in respect of R&D activities	**155**	184
Losses not recognised	**(449)**	(981)
Tax credit	**163**	157

12.3 Deferred tax liabilities

Intangible assets in business combinations	**2018 £000**	2017 £000
At 1 January	**27**	29
Adjustments in respect of prior years	**-**	5
Credited to the statement of comprehensive income	**(27)**	(7)
At 31 December	**-**	27

The deferred tax liability arises from taxable temporary differences on intangible assets recognised on business combinations and is expected to unwind over the useful economic life of these assets. The analysis of deferred tax liabilities is as follows:

	2018 £000	2017 £000
To be recovered after more than 12 months	**-**	25
To be recovered within 12 months	**-**	6
Deferred tax liabilities	**-**	31

Deferred tax assets of £5,705,000 at 31 December 2018 (31 December 2017: £5,414,000 all related to goodwill).

13. Earnings per share

13.1 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.

	2018	2017
(Loss) attributable to owners of the parent (£'000)	**(2,170)**	(5,073)
Weighted average number of ordinary shares in issue (thousands)	**97,792**	88,781
Basic loss per share	**(2.22p)**	(5.71p)

13.2 Diluted

As the Group is loss making, the diluted loss per share is equal to the basic loss per share.

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 2017						
Cost	473	1,712	38	429	210	2,862
Accumulated depreciation	(421)	(1,525)	(38)	(417)	(206)	(2,607)
Net book amount	**52**	**187**	**-**	**12**	**4**	**255**
Year ended 31 December 2017						
Opening net book amount	52	187	-	12	4	255
Exchange differences	(8)	(26)	-	-	-	(34)
Additions	-	159	-	3	-	162
Depreciation charge	(44)	(95)	-	(10)	(4)	(153)
Closing net book amount	**-**	**225**	**-**	**5**	**-**	**230**
At 31 December 2017						
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	-	55	-	3	2	60
Depreciation charge	-	(105)	-	(3)	(1)	(109)
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**

There were no properties, plant and equipment assets recognised in the Company's Statement of Financial Position as at 31 December 2018 (2017: 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 2017						
Cost	13,434	1,021	131	4,007	180	18,773
Accumulated amortisation and impairment charge	(11,902)	(472)	(131)	(2,700)	(180)	(15,385)
Net book amount	**1,532**	**549**	**-**	**1,307**	**-**	**3,388**
Year ended 31 December 2017						
Opening net book amount	1,532	549	-	1,307	-	3,388
Additions	-	113	44	-	-	157
Amortisation charge	(1,532)	(104)	-	(251)	-	(1,887)
Closing net book amount	**-**	**558**	**44**	**1,056**	**-**	**1,658**
At 31 December 2017						
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/Impairment 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**

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.

The goodwill impairment charge for 2018 was £nil (2017: £1,532,000) and there is no goodwill carrying value at 31 December 2018 (2017: £nil).

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 (2017: 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 (including Cymtox Ltd and Modern Water Monitoring Ltd) 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.

The key assumption for Membrane Division (including Poseidon Water Limited and Aguacure Ltd), value in use calculations is the securing of wastewater contracts over the next five years. Recent interest and sales of the Company's AMBC technology from India and China highlight a substantial market potential in the two largest markets for the Company's technologies.

Again, management's forecasts are based on the current five year business plan, which anticipates significant new contract wins for this Division. The early stage of adoption of some of Modern Water's technology means that there remains a significant level of judgement involved in making these sales assumptions. A discount rate of 20% and a terminal growth rate of 2% were used to calculate the NPV.

Poseidon Water technology was the basis for the Group's successful bid (in JV with Northumbrian Water) for the contract to build a Sewerage Treatment Plant for the Government of Gibraltar. Given the project is expected to commence this year with the Environmental Impact Assessment (EIA), the planning process and the Advance Works Contract have been completed management are confident that the full contract will go ahead and therefore remain confident the recoverable value far exceeds the carrying value of the loan balance.

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 halving the forecast revenue growth 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 2018 (2017: none).

16. Investments

Company	Investment in subsidiary £000
Year ended 31 December 2017	
Opening book amount	1,730
Capital contribution relating to share-based payments	147
Closing book amount	**1,877**
Year ended 31 December 2018	
Opening book amount	1,877
Capital contribution relating to share-based payments	146
Closing book amount	**2,023**

Subsidiary undertakings, which contribute to the group result	Principal activities	Shareholding%	Status
Modern Water Services Limited	Technical, business development, finance, legal and admin services to the Group companies	100	Subsidiary
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
Modern Water Monitoring Limited	Water and soil 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

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.

Impairment of investments

No impairment charge has been recognised for the year ended 31 December 2018 (2017: 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.

On the 4th of July 2018, Modern Water and Sunup announced the formation of a Joint Venture Company, Encyclo, in China to promote Modern Water's innovative and proprietary brine concentration technology, the AMBC. The company is yet to invest any capital and is committed to contributing $75,950 in respect of this. 49% of Encyclo's shares are owned by Modern Water and 51% by Sunup. This has been accounted for as a joint venture by virtue of the company having joint control as both parties are equally represented on the board of Encyclo. Encyclo has not traded between the acquisition date and the year end.

17. Inventories

	Group		Company	
	2018	**2017**	**2018**	2017
	£000	**£000**	**£000**	£000
Raw materials	**347**	307	—	—
Work in progress	**47**	21	—	—
Finished goods	**541**	719	—	—
Total inventories	**935**	1,047	—	—

The cost of inventories recognised as expense and included in 'cost of sales' amounted to £1,727,177 (2017: £1,367,000). The carrying value of inventories is net of a £23,000 provision for slow moving and obsolete inventories (2017: £23,000).

18. Trade and other receivables

	Group		Company	
	2018	2017	**2018**	2017
	£000	£000	**£000**	£000
Trade receivables	**596**	632	**—**	—
Allowance for credit losses	**(5)**	(7)	**—**	—
Trade receivables – net	**591**	625	**—**	—
Value added tax	**44**	47	**20**	15
Other receivables	**261**	96	**—**	—
Amounts due from subsidiary undertakings	**—**	—	**6,451**	5,948
Amounts due from non-controlling interests	**—**	145	**—**	—
Prepayments	**118**	130	**8**	8
Total trade and other receivables	**1,014**	1,043	**6,479**	5,971

The amounts due from subsidiary undertakings are unsecured, bear no interest and are repayable on demand. As at 31 December Group trade receivables of £224k (2017: £90k) were past due, of which £5,000 was provided against (2017: £7,000). The ageing of these receivables is as follows:

	Group	
	2018	2017
	£000	£000
Up to 3 months past due date	**103**	53
3 to 6 months past due date	**41**	29
More than 6 months past due date	**80**	7
Trade receivables past due date	**224**	89
Trade receivables not yet due and not considered impaired	**372**	543
Total trade receivables	**596**	632

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

	Group	
	2018	2017
	£000	£000
UK pound sterling	**243**	59
US dollar	**196**	534
Omani rial	**-**	31
Euro	**157**	8
	596	632

The Company has no trade receivables

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

	Group	
	2018	2017
	£000	£000
At 1 January	**7**	**12**
Allowance for credit losses	**(2)**	**(5)**
	5	**7**

The Company had no trade and other receivables past due but not impaired (2017: £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	
	2018	2017	**2018**	2017
Cash and cash equivalents	**£000**	£000	**£000**	£000
Cash at bank	**228**	466	**—**	234
Cash at bank and in hand	**228**	466	**—**	234

19.2 Credit quality of cash and cash equivalents

		Group		**Company**	
		2018	**2017**	**2018**	**2017**
Short term	Long term	**£000**	£000	**£000**	£000
P-1	AA	**47**	283	**—**	234
P-1	A	**181**	183	**—**	—
Cash at bank and in hand		**228**	466	**—**	234

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	
	2018	2017	**2018**	2017
Current	**£000**	£000	**£000**	£000
Trade payables	**629**	475	**163**	73
Social security	**117**	44	**19**	6
Accruals and contract liabilities	**591**	217	**6**	30
Total trade and other payables	**1,337**	736	**188**	109

21. Borrowings

	Group		Company	
	2018	2017	**2018**	2017
Current	**£000**	£000	**£000**	£000
Bank loan	**532**	-	**532**	-
Total borrowings	**532**	-	**532**	-

Bank borrowings are unsecured. 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 2018, 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.

Group	2018 Loans and receivables amortised at cost £000	2017 Loans and receivables amortised at cost £000
Assets as per statement of financial position		
Trade and other receivables*	**852**	866
Cash and cash equivalents	**228**	466
Total	**1,080**	1,332
	Financial liabilities at amortised cost £000	Financial liabilities at amortised cost £000
Liabilities as per statement of financial position		
Trade and other payables**	**688**	692
Barclays loan	**532**	-
Total	**1,220**	692

Company	2018 Loans and receivables at amortised cost £000	2017 Loans and receivables at amortised cost £000
Assets as per statement of financial position		
Trade and other receivables*	**6,451**	5,948
Cash and cash equivalents	**-**	234
Total	**6,451**	6,182
	Financial liabilities at amortised cost £000	Financial liabilities at amortised cost £000
Liabilities as per statement of financial position		
Trade and other payables**	**169**	103
Total	**169**	103

* 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 2018 was the equivalent of £158,000 (2017: £229,000) denominated in US dollars, £8,572 (2017: £10,000) denominated in Euros, £2 in Omani Rials (2017: £4,000) and £Nil in Chinese Yuan (2017: £14,000). The balance was denominated in pounds sterling (£). See note 18 for denomination of trade receivables by currency.

23. Commitments and contingencies

23.1 Group operating leases

Future aggregate minimum lease payments under non-cancellable operating leases as at 31 December are as follows:

	Group	
	2018	2017
	£000	£000
Not later than one year	**206**	214
After one year but not more than five years	**811**	495
More than 5 years	**-**	-
Group operating leases	**1,017**	708

The Group's operating leases relate to property and office equipment and have remaining terms up to five years. The amount recognised as an expense in the year is £240,000 (2017: £290,000). The Company does not have any operating lease commitments (2017: none).

23.2 Contingent liabilities

Neither the Group nor the Company had any contingent liabilities at the balance sheet date (2017: £nil).

24. Share capital and share premium reserve

	2018	2017
	£000	£000
Ordinary shares issued and fully paid		
- Beginning of the year	**95,405,705**	79,505,256
- Share issue, private placement	**8,813,763**	15,900,449
Shares issued and fully paid	**104,219,468**	95,405,705

On 5 July 2018, Modern Water announced that Hangzhou Shangtuo Environmental Technology Co. Ltd ("Sunup") had agreed to subscribe for 5,021,353 new ordinary shares which were admitted to trading on AIM on 24 August 2018. And on 29 October 2018, the Company announced that as a result of an Open Offer it would issue 3,792,410 new shares of 0.25p each. The shares were admitted to trading on AIM on 2 November 2018. Each share has the same right to receive dividends and the repayment of capital and represents one vote at the shareholders meetings of Modern Water Plc. The Company has no shares in Treasury; therefore the total number of voting rights in Modern Water following the above transactions is 104,219,468.

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 £40,922 (2017: £137,000). The difference between the below figure and balance sheet £42,613 is the cost of issued up to date of £177, 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 2017	79,505,256	199	40,032	40,231
At 31 December 2017	95,405,705	239	41,604	41,843
At 31 December 2018	**104,219,468**	**261**	**42,419**	**82,074**

24.1 Merger reserve

The merger reserve balance of £398,000 (2017: £398,000) relates solely to the 2011 acquisition of Cogent Environmental Limited.

24.2 Foreign exchange reserve

The foreign exchange reserve balance of negative £669,000 (2017: negative £165,000) 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 Subscription of ordinary share capital issued on 4 July 2018 of 5,021,353 to Hangzhou Shangtuo Environmental Science and Technology Co. Ltd (“Sunup”). Upon completion Sunup were granted warrants over an additional 5,021,353 new Ordinary Shares. The warrants will expire on the 20th of August 2019.

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 Aug 2018
Share price at date of award	**0.09**
Number of shares options granted	**5,021,353**
Exercise price	**£0.13**
Assumed volatility at date of award (median of historical 50 day average)	**101%**
Expected life of option	**1**
Expected dividend yield	**0**
Risk-free discount rate	**1%**
Fair value per share awarded	**9.10**

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 2018 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:

	2018 £000	2017 £000
Total equity	**2,070**	3,681
Cash and cash equivalents	**(228)**	(466)
Capital	**1,842**	3,215
Total equity	**2,070**	3,681
Borrowings	**(532)**	-
Overall financing	**1,538**	3,681
Capital to overall financing ratio	**1.20**	0.87

26. Related party transactions

IP Group plc held 15.35% of the ordinary share capital of the Company as at 31 December 2018 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 £45,139 (2017: £30,000) and as at 31 December 2018 £45,139 (2017: £7,500) was outstanding under this agreement.

Piers Clark is 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 (2017: £nil). As at 31 December 2018, £15,000 (2017: £nil) 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 2018 with its subsidiary companies to fund working capital and acquisition of investments. No interest is charged on these balances, which are as follows:

	2018		2017	
	Balance	Provision	Balance	Provision
	£000s	£000s	£000s	£000s
Modern Water Services Limited	25,720	22,000	24,426	22,000
Surrey Aquatechnology Limited	1,535	1,530	1,531	1,530
Poseidon Limited	197	196	196	196
AguaCure Limited	218	218	191	191
Total Membrane Division	**27,670**	**23,944**	**26,344**	**23,917**
MW Monitoring Limited	4,638	2,500	5,291	2,500
Modern Water Monitoring Limited	3,137	3,115	3,189	3,000
Modern Water Holdings Limited	553	-	541	-
Cymtox Limited	711	699	378	378
Total Monitoring Division	**9,039**	**6,314**	**9,399**	**5,878**
Group Total	**36,709**	**30,258**	**35,743**	**29,795**

ADVISERS

Registered office
Bramley House
The Guildway
Old Portsmouth Road
Guildford
Surrey
GU3 1LR

Company number
Registered in England and Wales, number 05963927

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

Directors & Company Secretary
Alan Wilson (Non-executive Chairman)
Simon Humphrey (Chief Executive Officer)
Mike Townend (Non-executive Director)
Piers Clark (Non-executive Director)
Toby Schumacher (General Counsel & Company Secretary)

Nominated adviser
Cairn Financial Advisers LLP
Cheyne House
Crown Court
62–63 Cheapside
London
EC2V 6AX

Broker
Turner Pope Investments (TPI) Ltd
6th Floor – Becket House
36 Old Jewry
London
EC2R 8DD

Independent auditor
Grant Thornton UK LLP
Benham 5
Southampton Science Park
Southampton
SO16 7QJ

Registrars
Neville Registrars Limited
Neville House
Steelpark Road
Halesowen
B62 8HD

Principal bankers
Barclays Bank plc
1 Churchill Place,
Canary Wharf,
London,
E14 5HP





MODERNWATER

www.modernwater.com

Modern Water plc
Bramley House
The Guildway, Old Portsmouth Road,
Guildford GU3 1LR
United Kingdom

T: +44 (0)1483 696 000
E: info@modernwater.co.uk
W: www.modernwater.com

Registered number: 05963927