Annual Report and Accounts

2022

FW Thorpe Plc

WELCOME

2022 Annual Report.

Who we are.

We specialise in designing and manufacturing professional lighting systems. We currently employ over 800 people and although each company works autonomously, our skills and markets are complementary.

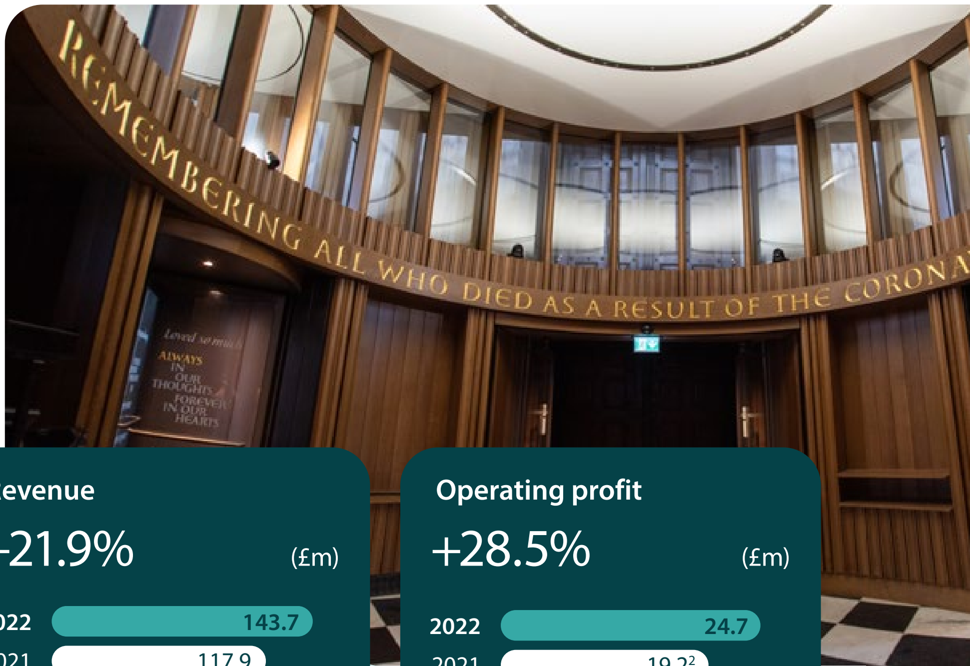
Our purpose.

Provide technically advanced lighting solutions that deliver long-term lowest cost of ownership.

Our vision.

Maintain a consistently respected and profitable organisation with an environmental conscience.

Image: St Paul's Cathedral, London



Cover image: Lotus Manufacturing Facility, Norfolk

Revenue
+21.9% (£m)

2022	**143.7**
2021	117.9
2020	113.3
2019	110.6
2018	109.6

Operating profit
+28.5% (£m)

2022	**24.7**
2021	19.2[2]
2020	16.3
2019	17.6[3]
2018	19.5

Dividend per share
+6.0% (pence)

2022	**6.15[1]**
2021	5.80[1]
2020	5.66
2019	5.53
2018	5.40

Basic earnings per share
+26.5% (pence)

2022	**17.16**
2021	13.57
2020	11.45
2019	13.91
2018	13.91

CO_2 emissions
+7.0% (tonnes)

2022	**2,325[4]**
2021	2,181
2020	2,810
2019	2,558
2018	2,687

Operational highlights.

- Strong revenue and orders growth across the majority of the Group
- Solid operating profit growth despite challenges with component supply and inflationary cost pressures
- Zemper, acquired in October 2021, has been successfully integrated
- Entered into a joint venture investment in Ratio Electric
- Net cash generated from operating activities, despite increasing stock levels, remained strong – £19.7m

1 2022, 2021 dividends exclude special dividends
2 2021 excludes the exceptional item in respect of Lightronics fire £1.6m
3 2019 excludes the profit on disposal of property of £1.9m
4 2022 includes 9 months of Zemper

Contents.

Visit us online at:
www.fwthorpe.co.uk

FW THORPE AT A GLANCE

Our investment case.

Product innovation...

Product design and development is fundamental to our operations.

- We maintain a competitive advantage with market-leading products, utilising technology to attract new customers and retain them.
- We engage in continuous product development – products, software/controls, and lighting design. We have also focused on the further development of our SmartScan wireless system.
- In addition, our diversified product portfolio gives us the ability to supply a complete project – from "boiler room to boardroom, and beyond".
- Our Group spend on capitalised R&D this year was £2.1m (£1.5m).

Read more about **Innovations from around the Group** on pages 50 to 51

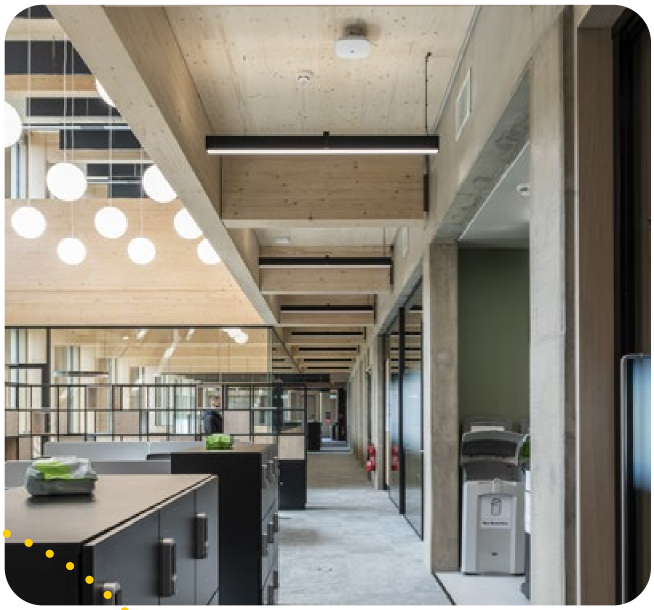
Our focus on sustainability...

Environmental issues are a significant focus for us:

- We carry the LSE Green Mark; we continue to plant trees (165,687 trees planted to date).
- We invest in installing solar panels in our UK, Spain and Netherlands manufacturing facilities; and we monitor CO_2 emissions.
- Energy saving products are a substantial part of the business, as well as our carbon offsetting programme, we continue to invest in solar to reduce our emissions.
- We have family principles and a supportive culture. Our employees are fundamental to our success.
- We support local communities by giving to charities – this year, we gave £23,153.

Read more about **Sustainability** on pages 58 to 68

165,687
Trees planted to date



Means we are positioned for sustainable, long-term growth.

Providing long-term value for us and for our stakeholders.

A well-positioned portfolio of companies across eight different countries, serving many market sectors, means that we have resilience in the current economic climate and a strong direction for the future.

Read more about **Operational performance** on pages 41 to 49

And financial performance...

We achieved an improved financial performance over this year despite challenging economic conditions, with revenue of £143.7m and operating profit of £24.7m. In addition, we had net cash generated from operating activities of £19.7m.

- Majority of Group companies managed to grow revenue and profitability this year.
- The Group has had a strong order performance, mainly attributed to our largest division, Thorlux Lighting but supported by all Group companies.
- Positive contribution from our new acquisition, Zemper.

Read more about **Financial performance** on pages 54 to 55

£2.1m
Group spend on R&D this year

FW THORPE AT A GLANCE

Our culture.

With our focus on excellence, we ensure our Group's culture is consistent with the aim of long-term growth and stability.

Our values . . .

Integrity
Striving to make the right decisions for all of our stakeholders and our planet.

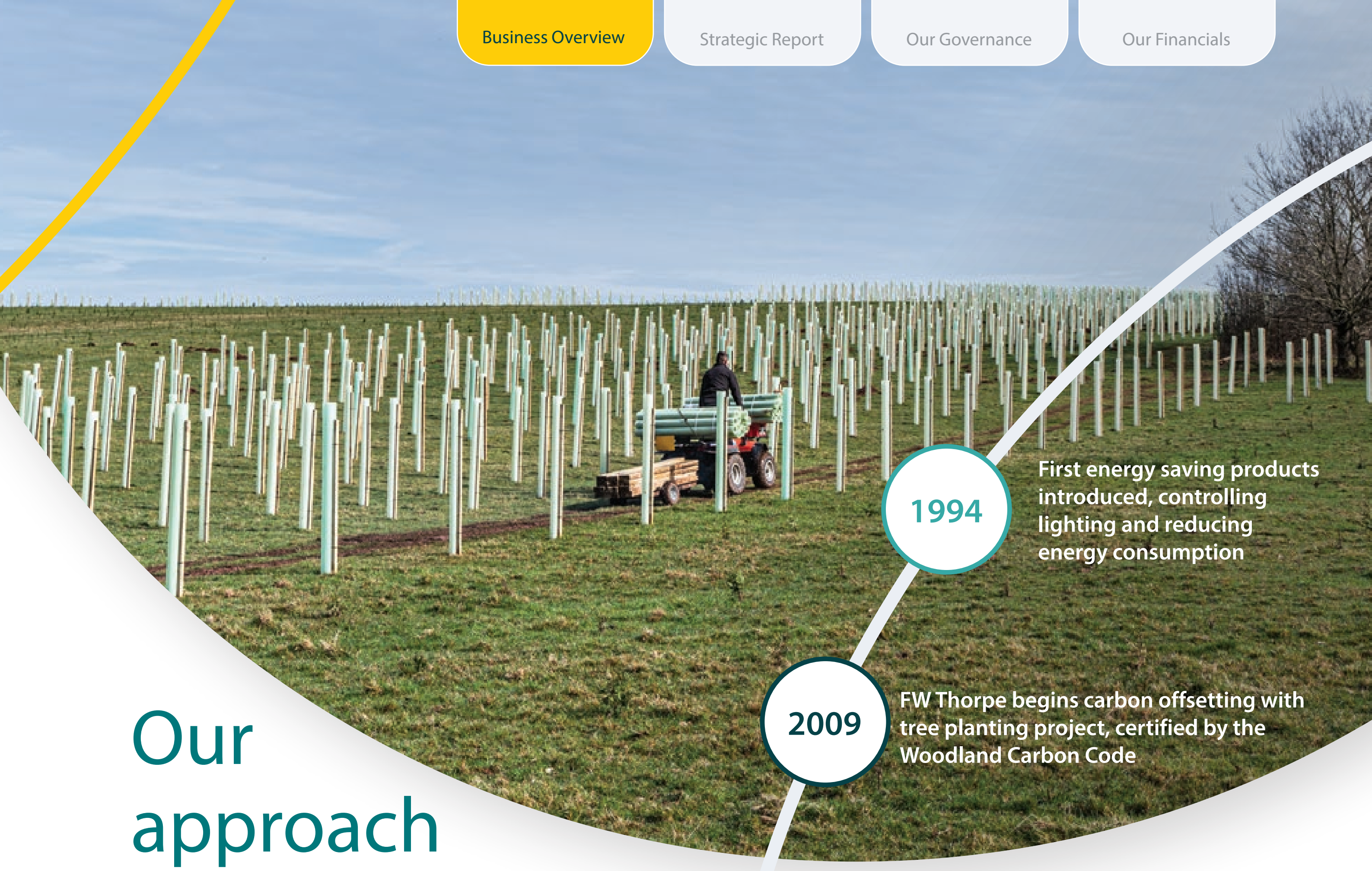
Honesty
We honour our commitments and aim to deliver them in a dedicated and respectful manner.

Longevity
We have a long history and we genuinely care about our people, their professional development and work-life balance. Our employees are our most important asset.

Our colleagues.

Our employees are fundamental to our success; they develop, manufacture and sell our products, and provide the excellent customer service we deliver.

In return, we invest in them with development and training, and we have a well-being policy. We also have an apprentice scheme, and we train and promote management from within the Group.



Our approach to sustainability.

FW Thorpe Plc has a long-standing commitment to tackling global environmental challenges, principally through its core business of manufacturing energy efficient lighting equipment.

Over the last two decades, at FW Thorpe we have sought to address our carbon impact by working towards carbon neutrality for our manufacturing, sales and distribution operations. We are now certified as carbon neutral, with the same methodology adopted since 2012.

Our goal is ultimately to reach net zero before the UK's target for achieving net zero carbon emissions by 2050. We have made initial assessments of our carbon impact right across our manufacturing and value chain, and this will enable us to set science-based targets in line with the Paris Agreement on climate change.

Read more about **Sustainability** on pages 58 to 68

2012 FW Thorpe becomes carbon neutral as a Group

2016 Thorlux, the main revenue driver for the Group, introduces wireless controls technology to monitor and save energy usage called SmartScan

2020 FW Thorpe receives the Green Economy mark from the London Stock Exchange

2022 FW Thorpe officially recognised as being carbon neutral since 2012 through independent verification

What we do.

The complete service offering we provide...

Our strategic pillars...

- Focus on high-quality products and good leadership in technology
- Focus on manufacturing excellence
- Continue to grow the customer base for Group companies
- Continue to develop high-quality people

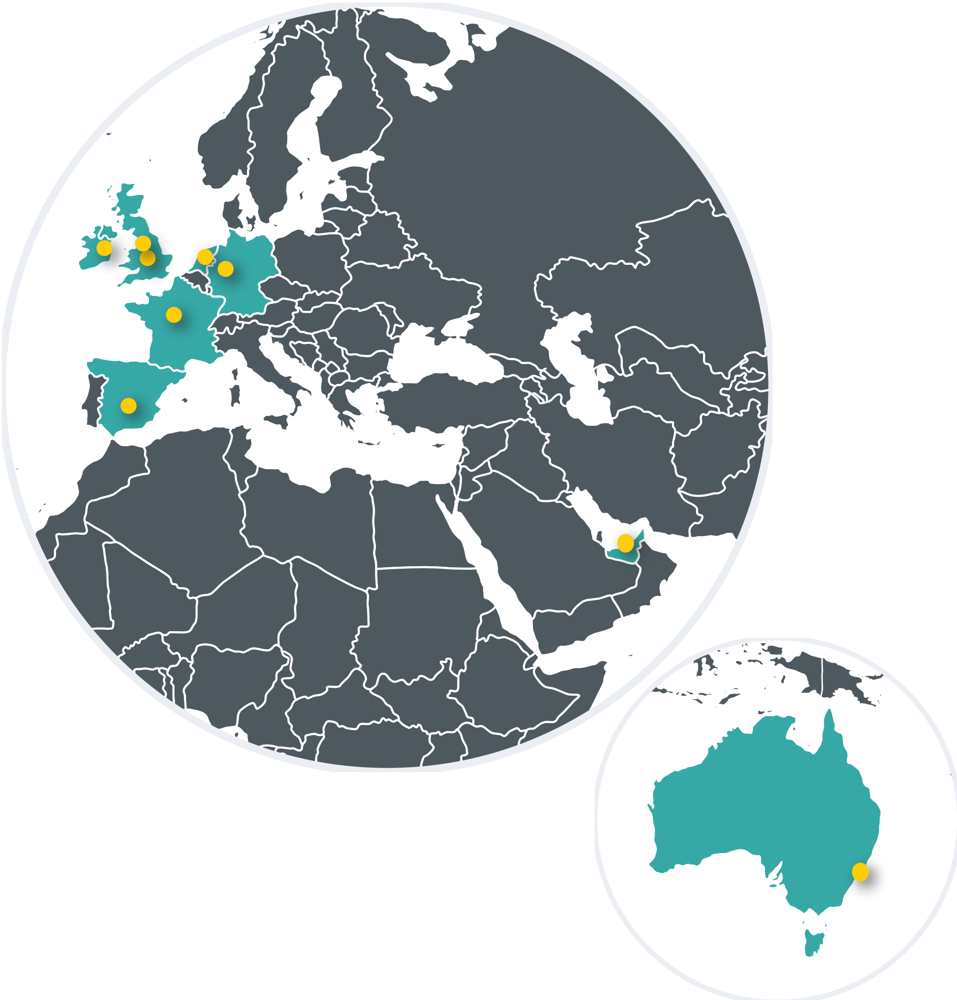
£2.1m
Group spend on capitalised R&D
(2021: £1.5m)

£0.4m
Investment in solar at Group facilities
(2021: £0.3m)

£4.5m
Revenue from Services
(2021: £4.4m)

Our global footprint.

We focus on long-term growth and stability, achieved by delivering market-leading products, backed by excellent customer service.



1. United Kingdom
Thorlux Lighting, Philip Payne, Solite Europe, Portland Lighting, TRT Lighting, Ratio EV Charging

2. Netherlands
Lightronics, Famostar, Ratio Electric

3. Ireland
Thorlux Lighting

4. Germany
Thorlux Lighting

5. United Arab Emirates
Thorlux Lighting

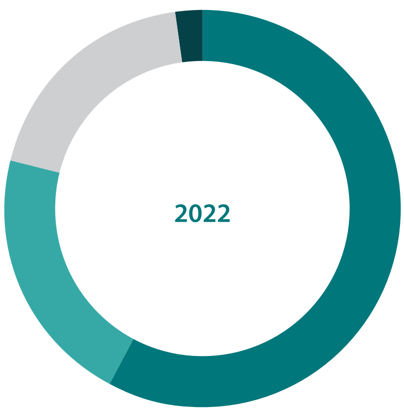
6. Australia
Thorlux Lighting Australasia

7. Spain
Zemper

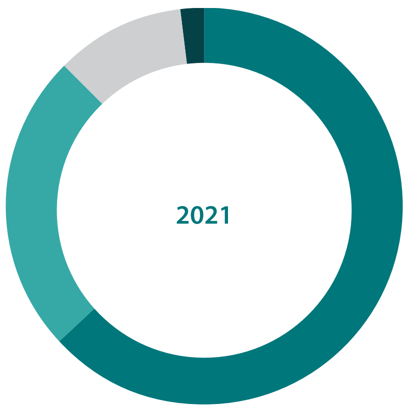
8. France
Zemper

Read more about **Our market** on pages 19 to 21

Revenue by region (£m)



UK	83.2	Rest of Europe	27.4
Netherlands	30.3	Rest of the World	2.8



UK	74.4	Rest of Europe	12.5
Netherlands	28.9	Rest of the World	2.1

Read more about **Our performance** on pages 41 to 49

Our timeline.

1936
Established by Frederick William Thorpe and his son Ernest Thorpe. Spinning circular reflectors

1940–1960
Moved to larger premises twice to cope with the expansion into linear fluorescent luminaires, and to enter the exterior and hazardous markets

1965
Floated on the London Stock Exchange

1989
Moved to our Redditch headquarters

1990–1996
First acquisition – Mackwell Electronics

Start-up in retail and display lighting

Acquired Philip Payne emergency exit signs

2005
Transferred to AIM

2009–2011
Acquired Solite Europe for clean rooms

Acquisition of Portland Lighting

Mackwell Electronics disposal

2013–2014
Start-up company TRT Lighting

Entered the street lighting market

Creation of an in-house LED printed circuit board production line

2016
Minority investment in Spain

Target Spanish market and acquire lens specialism

2018
Acquired Famostar – Netherlands

Improved emergency lighting product offering

2020
All operating businesses housed in Group-owned property

Maintained safe and secure operations during COVID-19 pandemic

2022
Acquired Electrozemper – Spain

Joint venture investment with Ratio Electric – electric vehicle charging products

2015
Acquisition of Lightronics – Netherlands

Develop European market

Sugg Lighting disposal

2017
Acquired remaining share capital in Thorlux Australasia

Target Australian market, improve performance

2019
Compact Lighting business successfully merged with Thorlux Lighting

Portsmouth facility sold

2021
Lightronics recovers from factory fire with improved results

Sustainability focus

Our businesses.

Thorlux Lighting

Description

Thorlux luminaires have been manufactured continuously since 1936, the year Frederick William Thorpe founded the company.

The company now operates from the Group's modern 16,882m^2 self-contained factory in Redditch, Worcestershire, central England.

Thorlux is well known throughout the world and provides a comprehensive range of professional lighting and control systems for a wide variety of applications.

Key products

- Recessed, surface and suspended luminaires
- Emergency lighting systems
- Hazardous area lighting
- High and low bay luminaires
- Lighting controls
- Exterior lighting

Market sectors

Commercial
Industrial
Education
Healthcare
Manufacturing
Retail, Display and Hospitality

LIGHTRONICS
MEMBER OF FW THORPE PLC.

Description

Based in Waalwijk, Netherlands, Lightronics specialises in the development, manufacture and supply of external and impact resistant lighting, which includes street lighting and outdoor wall and ceiling luminaires, as well as control systems. The majority of its revenue is derived from the Netherlands but there is also an export presence in other European locations.

Lightronics was established in 1946 and has a strong tradition of solid, reliable products as well as being known for its innovation. Products are environmentally friendly in terms of energy use as well as in the prevention of light pollution.

Key products

- Road lighting
- Amenity lighting
- Outdoor wall and ceiling luminaires
- Lighting controls

Market sectors

Infrastructure
Facilities – car parking
Housing

Famostar

Description

Based in Velp, Netherlands, Famostar specialises in the development, manufacture and supply of emergency lighting products. Revenue is derived from the Netherlands, where it is considered one of the foremost brands in the market.

Famostar was established in 1947, with each product being designed and manufactured at its own production facility.

Famostar has a reputation for designing and manufacturing reliable luminaires offering solutions for a range of sectors.

Emergency lighting knowledge and expertise is key to the success of the business. Famostar offers both the correct technical solution and unique proposals to meet the needs of the customer.

Key products

- Emergency exit signage
- Emergency lighting systems

Market sectors

Commercial

Industrial

Education

Retail, Display and Hospitality

ZEMPER

Description

Zemper was established in 1967 and is a leading independent producer of emergency lighting. It uses highly automated manufacturing processes and, through high levels of research and development and extensive in-house and third-party testing, supplies market-leading products, including wired and wireless self-testing systems.

Based in Ciudad Real, Spain, and with an additional sales and distribution facility in France, Zemper derives revenue from Spain, France and Belgium as well as other overseas territories.

Key products

- Emergency general illumination
- Emergency exit signage
- Emergency lighting systems

Market sectors

Commercial

Infrastructure

Industrial

Retail, Display and Hospitality

Healthcare

Education

Our businesses. continued

Description

TRT (Thorlux Road and Tunnel) Lighting is an independent specialist company which has evolved from Thorlux Lighting.

Building on years of lighting experience, TRT is dedicated to the design, manufacture and supply of LED road and tunnel luminaires. TRT produces high quality, efficient, stylish, high performance LED products, which are manufactured in the UK.

Key products

- Road and tunnel lighting
- Amenity lighting

Market sectors

Infrastructure

Facilities – car parking

Description

Solite Europe is a leading manufacturer and supplier of cleanroom lighting equipment and luminaires within the UK and Europe.

Solite provides luminaires for laboratories, pharmaceutical and semi-conductor manufacturing areas, hospitals, kitchens and food preparation applications.

Key products

- Cleanroom luminaires

Market sectors

Pharmaceutical

Healthcare

Education

Research & Development

Description

Philip Payne recognises that most trade emergency exit signage products are designed with the functional requirements in mind. Philip Payne offers a backbone range of quality standard products but, more importantly, encourages direct dialogue with architects and designers to ensure, via product variation or bespoke work, aesthetic aspirations and requirements are fully met.

Key products

- Emergency exit signage
- Emergency lighting systems

Market sectors

Commercial
Hospitality
Healthcare

Description

Portland Lighting designs, manufactures and supplies innovative lighting products to the advertising, brewery, retail, sign lighting and road traffic lighting industries.

The company operates from a modern 1394m^2 facility in Walsall, West Midlands, which was purposely designed to enable the fast turnaround of customer orders.

Established in 1994, the company has continually evolved its product range to ensure that Portland remains one of the leading companies in its sector.

Key products

- Lighting for signs
- Road safety lighting

Market sectors

Retail
Hospitality
Advertising
Infrastructure

Strategic Report.

Image: Ordnance Survey Head Office, Southampton

Chairman's statement.

"I am pleased to report that the Group has increased its revenue and profitability, which is especially admirable considering most companies in the Group suffered from severe component shortages throughout the year."

Mike Allcock
Chairman and Joint Chief Executive

Another year has passed without a return to a more stable business climate, and with one crisis being replaced by another. Nevertheless, I am again pleased to report that the Group has increased its revenue and profitability (before and after the effects of its acquisition of Zemper).

This positive performance is especially admirable considering most companies in the Group suffered severe component shortages throughout the financial year, hampering production output and efficiency, and softening year-end results. Most Group companies continue to face supply shortages, particularly for electronic components and microchips, whilst having substantial order books.

Component scarcities have inevitably affected the Group's enviably high levels of customer service, but I hope the situation is at last improving. In addition, of course, the Group is also contending with significant cost inflation of materials, wages and utilities.

The Annual Report and Accounts contains a more detailed appraisal of each company's individual achievements and challenges.

Group results

Revenue increased by 22% to £144m or by 10% excluding revenue associated with the acquisition of Zemper. Operating profit increased by 29% to £25m, or by 20% on a like-for-like basis excluding the addition from Zemper and last year's exceptional item. A 17% operating profit return on revenue is a good achievement, under the circumstances, but the Board thinks that improvements can be made, and all businesses are targeted to improve.

A high proportion of growth within the Group is again attributable to Thorlux Lighting in the UK and Famostar in the Netherlands.

There was a notable downturn at TRT Lighting due to the lack of a sizeable one-off project during the year and some factory efficiency issues. TRT's order book has now returned to a good level. A new operations director started at TRT in mid-August and is addressing manufacturing performance.

Zemper made a solid start within the Group despite facing similar issues to other companies as referred to throughout this report.

General overview

All companies in the Group have significantly increased their stock levels during the year - from a low point of £20m to £29m on a like-for-like basis - to support their large order books as well as to further mitigate the ongoing supply chain risk. It is important that this stock is carefully managed to avoid overshoot and obsolescence in coming months. Whilst stock has increased significantly overall, it is rare for a fully populated bill of materials to reach the assembly areas, causing the delays mentioned, and dampening Group performance as a whole.

Whilst order delivery lead times have increased dramatically, for example at Thorlux Lighting, within the Group we are striving to deliver on time where possible, notwithstanding the supplier issues mentioned.

All companies have been affected by significant cost increases. Whilst the intention has been to recover cost increases by making selling price increases in a fair manner, some Group companies were better than others in achieving this in a timely fashion. Within the Group we need to be agile and react to market conditions, being prepared to reverse price rises if the cost base changes again, as well as driving through efficiency savings where practical.

Electrozemper S.A. (trading as Zemper) has settled nicely into the Group. The timing of Zemper's financial reporting is now aligned with that of the Group; consequently only nine months of its figures are included in this year's final results. The results presented are dampened by the required acquisition accounting adjustments. Technical teams from around the Group have embarked on several synergy projects together and some common sustainability and circularity work. I hope this will improve productivity and enhance margins too.

As mentioned in my interim report, in December 2021 the Group purchased a 50% stake in Ratio BV from the Netherlands, a company that designs and manufactures electric vehicle chargers, connecting leads and electrical wiring accessories. Figures for Ratio are not included in the operating results of the Group, with our share of profits included within profit before tax. Revenue growth, as expected, has been significant , even though Ratio has experienced component shortages like other companies. Profitability has grown only slightly but is in line with expectations due to the investments required to develop the more high technology chargers, especially suited to the UK market and some of the Group's commercial customers. Ratio now has a developing UK operation, with five employees, distribution and manufacturing space, and new ranges of cloud-connected chargers which are targeted to be ready in late autumn this year. These are exciting times for all concerned.

FW Thorpe has successfully adapted to rapid changes in its market in recent years, including the wholesale change to LED technology, and now the change to wireless-enabled high technology solutions that provide not only energy savings but many other benefits such as energy and status reporting and data collection. The Thorlux SmartScan system, for example, continues to mature and, in my opinion, is the leading solution for the UK market, and beyond. The first-generation system was launched in 2016, and in 2019 won a Queen's Award for Enterprise in the Innovation category. Generation 2 is now available, following successful site trials over the last 12 months. The most recent system offers a raft of new features to keep it ahead of the competition, and provides customers with freedom to manage and communicate with their lights in a much faster, more complete and even more robust way. The new generation SmartScan system was developed in collaboration with Thorlux's biggest customer and resulted in Thorlux winning the lighting contract for one of the largest factories in Europe, in central Germany. The majority of the software is developed in house with Thorlux's own engineers and, as such, is now exclusively in use in most Group companies.

The next challenge for FW Thorpe, which is certainly topical in its industry, is the global one of sustainability. To that end, within the Group we have a good head start, having commenced our programme in 2010. In order to remain in a prime position, FW Thorpe needs to continue to invest in greener solutions for its factories, better sourcing and control of components, more circularity to designs, and more energy efficient product solutions. Apart from the well-publicised ongoing tree planting projects, FW Thorpe will continue to roll out solar solutions for its numerous factory roofs. Through good foresight and, probably, fortunate timing, last year, before the energy crisis and availability issues, FW Thorpe bought a further 3,000 large 2.094 by 1.038 metre PV panels at a cost of around £0.9m to cover the roof of the main Thorlux facility in Redditch. These are in a warehouse on standby for fitment. Prior to being able to mount them to the 30-year-old roof, significant enabling works are being completed – at a further cost of £0.7m. At the time of writing, with such enormous rising electrical costs, it is hoped that the panels will be commissioned soon – hopefully they will be online around the time of this year's AGM in November.

Efforts continue within the Group to improve companies' sustainability credentials and move sooner towards Net Zero – which, apart from being the right thing to do, will bring commercial advantages. Initial third-party support and assessment is now complete. I hope to be able to share the estimated CO_2e (total carbon footprint) number for the Group as a whole when the Group is more certain of its direction. It has taken months of work to collect and collate accounts for emissions from all Group activities in scope 1, 2 and 3; the estimated CO_2e number not only includes emissions due to the Group's sales, manufacturing and distribution activities, but also the emissions from the Group going about its normal business – for example, including emissions from the supply chain and from downstream use of products by customers and the electrical energy the luminaires consume. To be able to say the Group is Net Zero seems a distant dream, but every watt saved in Group factories and saved by making its lights more efficient is another watt that does not have to be reduced and offset.

Apart from electrical energy consumption, sustainability involves many other factors, such as material selection, reduction, re-use and recycling. Within the Group, all employees are involved: they are being trained and developed, and receive a frequent chairman's sustainability newsletter, with contributions from

Chairman's statement. continued

around the Group; some employees have even been awarded with a 'Net Zero Hero' tee shirt for special achievements. Many of the efficiency gains in Group factories and at product level reduce costs, make Group companies more successful at winning orders, and improve the Group's reputation. For example, Thorlux was awarded Manufacturer of the Year at the prestigious Lux Awards in 2020, with specific mention of its tree planting, and solar PV works in the judges' comments.

Acquisition

I mentioned above that, following significant design and engineering effort, the Group won a major German factory lighting project, involving around 10,000 luminaires on the Thorlux SmartScan generation 2 platform. The German customer for this project, SchahlLED Lighting GmbH, has rapidly become the Group's largest customer over the last 3 years or so. SchahlLED's independent majority shareholder approached FW Thorpe to discuss the sale of its shares; it was natural for FW Thorpe to have a keen interest, as well as for SchahlLED's management to want to continue to build on the trading relationship of the last few years. Although members of the Board of FW Thorpe had planned for a few years to be quieter on the acquisition front, we approached this situation in both a defensive capacity to protect existing work, but also in an opportunistic way, as we see good growth potential in SchahlLED's business model of focusing on energy saving payback projects, and think they could be adopted in some other territories. So, I am pleased to announce that on 26 September 2022, FW Thorpe acquired an 80% shareholding in SchahlLED GmbH, with the remaining shares to be acquired subject to performance conditions over the next 3 years. FW Thorpe paid an initial consideration from cash reserves, with the remaining shares available in due course with certain earn-out conditions.

Last year SchahlLED's revenue, which has grown rapidly in recent years, was €15.9m, with an EBITDA of €2.8m. The company has solid growth plans and will continue to focus on selling high technology wireless lighting systems, in future supplied almost exclusively by the Group.

Personnel

I would like to thank all Group employees for their dedication and commitment throughout the financial year. All areas of the business have been under significant pressure from dealing with the current economic climate, including issues related to sourcing difficulties and manufacturing capacity. Engineering teams have faced the constant pressure of re-designs to accommodate alternative components, and those facing customer service issues have had their patience stretched. The diligence of Group employees does not go unnoticed and is sincerely appreciated.

Dividend

Performance as a whole for the year to 30 June 2022 allows the Board to recommend an increased final dividend of 4.61p per share (2021: 4.31p) which gives a total for the year of 6.15p (2021: 5.80p excluding special dividend).

Outlook

The dramatic rising cost of energy is a catalyst for customers to study their lighting energy consumption and look for ways to reduce it. In the media there is often mention of turning lights off to reduce usage, but of course commercially, in most cases, doing so is simply not practical and may be dangerous. The whole Group, and especially Thorlux, is focused on designing energy saving products; therefore I anticipate that orders should be resilient if a recession becomes inevitable. Customers' energy costs have trebled in some instances, which means investment payback periods could be one third of those a year ago.

FW Thorpe has a broad portfolio of customers; those in government or blue-chip industries have usually found the capital to invest in their assets when times get more difficult.

Within the Group we have taken actions to cover rising costs: we continually strive to achieve better margins without unfairly penalising our customers, ensuring long term retention rates. We strive for further efficiency improvements and have the cash to invest in energy saving and sustainability projects.

The Group has started the financial year with a robust order book and some healthy projects on the horizon. The Group sees an improving supply and operations picture and, as such, the Board expects a good first half performance despite ongoing pressures on operating costs.

Michael Allcock

Mike Allcock
Chairman and Joint Chief Executive
11 October 2022

Marketplace.

What is the impact of inflationary cost pressures?

One of the key challenges for all of our businesses this year and into the next financial year, is managing supply chain pressures in terms of availability of supply and increased costs.

The Group has responded well to these challenges with our engineering teams redesigning products to accommodate alternative parts and our procurement teams around the Group working together to source materials. The Group has the ability to increase stock holding of strategic components when required, to mitigate both price and availability concerns.

The operating costs of the business have also increased, with employment, logistics and utility costs all driving higher during the year.

We have responded by increasing selling prices, however, these take time to materialise.

How has the market sector approach evolved in recent times?

There is growth in a number of areas that continues to justify our investment in business development.

Reduction in some sectors was offset by growth in certain target areas.

We will consider how we deploy our existing selling resources over the next few years in order to target specific sectors and territories.

Our product and solution portfolio continues to evolve and can cater for a variety of different sectors. We continue to focus on specific sectors that are investing but with some renewed endeavour on those that have reduced in previous years.

Do your competitors have an interest in each of these markets as well?

We have both domestic and international competition across all of these markets, from listed multinationals to solid private businesses. We continue to differentiate ourselves with product and systems innovation, combined with excellent customer service through the life cycle of a project.

Are you in each of these markets in all of the geographies you operate within?

We tend to focus on particular product ranges and technologies in new territories. We continue to work with existing partners and our Group presence in certain countries to drive export sales growth.

We continue to focus on building our reputation by targeting certain sectors in these territories.

Where is the focus for FW Thorpe for 2022/23?

Order books across the Group are at the highest levels and compounded with the material availability issues is causing extended lead times for our customers.

Returning to normal levels of service is paramount for our businesses this year but can only be achieved when supply is stabilised. We will need to be agile in the coming year if economic conditions become more challenging.

UK +12%

- Increased business from target sectors
- Services revenue with improved gross contribution
- Reduced revenue from street lighting sector but with improved orders in final quarter of 2021/22

Netherlands +5%

- Continued Famostar growth, Lightronics revenue at similar levels
- Margin pressure at Lightronics driven by material cost increases, increased operating profit at Famostar

Spain/France
(inc. in Rest of Europe)

- Revenue in line with expectations, improved levels in France with the addition of Zemper
- Margin pressure at Zemper driven by material and logistics cost increases

Rest of Europe +119%
(inc. Zemper acquisition)

- Continued growth in Germany driven by SmartScan
- Scandinavian market continued to be positive

Other countries +31%

- Improved demand in Australia, difficulty with logistics in current climate
- Dampened demand in UAE

Marketplace. continued

The Group services a diverse range of clients across a variety of different sectors. These sectors are targeted by our sales teams, sector specialists and product experts as well as dedicated company specialisms in areas such as emergency or outdoor lighting.

The product portfolio across the Group gives us the ability to deliver a complete project, from boiler room to board room and beyond.

1 Pharmaceutical
2 Hospitality
3 Display
4 Housing
5 Advertising
6 Research & Development

7 Commercial
8 Facilities
9 Retail
10 Education

11 Industrial
12 Infrastructure
13 Healthcare
14 Manufacturing

CASE STUDY

Ordnance Survey Head Offices, Southampton.

Client:

CBRE

End user:

Ordnance Survey

Location:

Ordnance Survey Head Offices, Southampton

Ordnance Survey's 16,000m^2 exemplar head office outside of Southampton is a purpose built, highly energy efficient office building. It has been designed with innovative features that give it a striking appearance, resulting in nominations for numerous architectural awards. The development was also designed to achieve a BREEAM Excellent rating; it makes maximum use of natural resources and minimises greenhouse gas emissions wherever possible.

The building comprises open plan occupied office space over four floors, a data centre, plant rooms, roof space and external walkways.

Challenge

Thorlux Lighting was asked to replace the existing luminaires with an installation that would both complement the architecture of the building while providing a low energy and minimal maintenance lighting solution.

Luminaires

High performance LED luminaires combined with the SmartScan wireless management system were selected. The luminaires have inbuilt energy usage monitoring, and users have instant access to energy performance data via the SmartScan website. The information displayed on the website can be accessed from anywhere using a computer, laptop, tablet or smart phone.

Commissioning

Thorlux provided a professional on-site commissioning service to ensure that the products were configured to provide the desired performance and return on investment. The end users' requirements and expectations were agreed prior to Thorlux's site visit.

Carbon offsetting

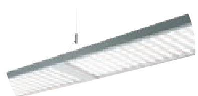
For CBRE, one of the main advantages of using Thorlux products was the ability to carbon offset the CO_2 produced during the manufacture and use of the luminaires. In 2009 Thorlux designed an ambitious carbon offsetting scheme to help compensate for the CO_2 released into the atmosphere as an indirect result of factory and selling activities and customers' use of luminaires. To date the total number of trees planted is 165,687; these trees will sequester over 41,000 tonnes of CO_2 over a period of 100 years.

Client testimonial

"From initial engagement to project completion Thorlux Lighting was brilliant. The installation was completed with more than 3000 fittings being replaced and the client can now use the SmartScan portal to track and highlight energy usage and lighting patterns throughout the site."

Matthew Balcombe
Project Manager
CBRE | FM-FMSO

Luminaires installed

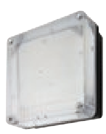


Light Line

G3

Hi-Style LED

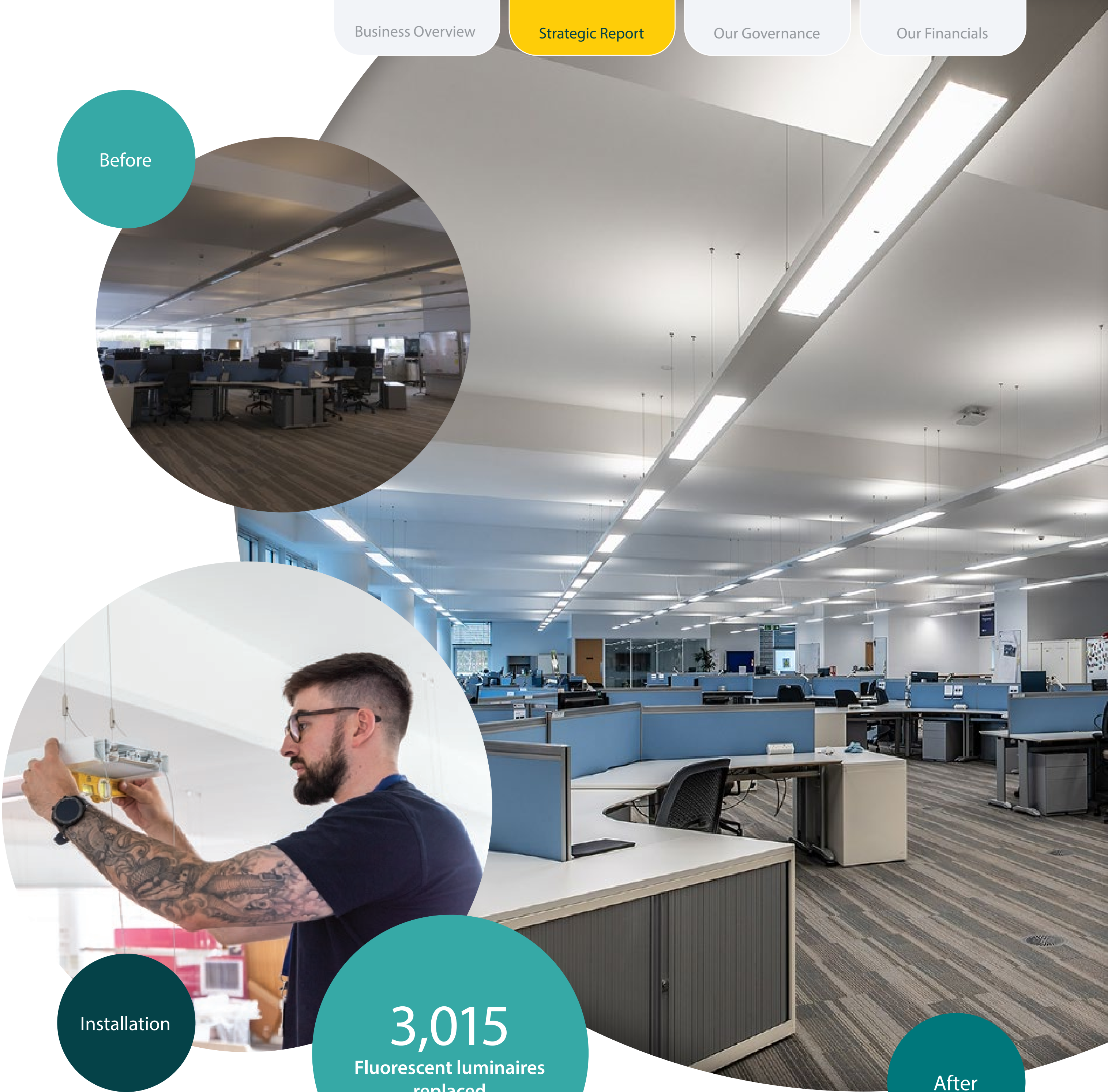
Thoroproof



Prismalette

Passway

Before



Installation

After

3,015

Fluorescent luminaires replaced

CBRE team visit to plant trees at the FW Thorpe carbon offsetting site in Wales.

Market drivers.

Market-specific drivers.

Increase in demand for technology

What this means

- Evolution of controls technology – wireless
- Connectivity with the internet and other devices – the Internet of Things
- Ability to offer customers additional functionality by adding different sensor technology and presenting data
- The Group's shift to LED sales now representing over 90% of total revenue

The opportunity

- Improves ability to hold specification business with our own controls offering
- Potential to supply retrofit projects with wireless controls where wired controls were cost prohibitive
- Offer solutions to provide additional data specific to the market sector

How we are responding

- SmartScan continues to evolve since launching in 2016, the latest generation has been launched successfully in the last year
- Further development of the SmartScan platform, bringing other non-lighting devices into the web portal
- Occupancy profiling, air quality sensing, and the ability to change colour temperature are all features
- All new product developments are LED based
- Continual review of LED technology offerings to take advantage of the latest advances and ensure we are offering the best solutions to our customers

Drive for energy efficiency and carbon reduction

What this means

- Global emissions targets
- Increasing energy costs in Europe

The opportunity

- Increased demand for sustainable, energy efficient lighting solutions
- Demand for retrofit lighting solutions driving energy savings using both LED and wireless controls technology

How we are responding

- We continue to offer energy saving technology with the SmartScan platform
- Financing options with partners to make solutions more affordable to customers to match the savings achieved
- Offering turnkey packages to customers to enable change
- Investment in electric vehicle charging products with Ratio

Image:
Morgan Motor Company, Malvern

Macroeconomic drivers.

International economic conditions

What this means

- Countries are now dealing with the impact of the conflict in Ukraine and the global energy crisis
- Pressure remains on global supply chains – raw material price pressure, component shortages
- Certain sectors could slow investment given recent interest rate raises and concerns over future economic growth

The opportunity

- Increased energy costs are resulting in shorter payback periods for energy saving lighting projects
- Renewed focus on carbon saving investments with support from Governments
- Potential to win market share or acquire competitors who struggle in these economic conditions

How we are responding

- Ensure our businesses are not reliant on any one sector in particular
- Continue to develop innovate product solutions in all our businesses
- Target sectors where demand is stable or increasing
- Redirect sales focus as appropriate

Globalisation

What this means

- Responding to the demands of our traditional customers who are developing a global footprint
- Harmonisation of technology from the adoption of LED brings the threat of increased competition from both Far Eastern and Western economies
- Resilience in the supply chain is being tested post-pandemic and with increased logistics costs

The opportunity

- Chance to establish ourselves in new territories with established customers in the countries we currently supply into
- Sourcing opportunities – chance to review what is sourced from where. Considering not only price, quality, carbon footprint but the security of supply
- Potential for customers to reconsider sourcing strategies and buy "local"

How we are responding

- Working with global customers
- Continual development of the supply chain
- Potential to establish new offices in chosen locations to support both customer and supply chain development in the future

Business model.

Customers come to us for peace of mind. They want the correct technical solution, professional service, sustainability of products/services and the ability to provide support during a product's warrantable life and beyond.

Our business model is focused on the needs of customers and the marketplace, with a robust capital structure that underpins our ability to deliver sustainable growth, innovative products and excellent customer service.

The key resources we utilise . . .

Design & Innovation

Continuous product development – products, software/controls, lighting design

Talented People

Continual development

Manufacturing Facilities

UK – multiple sites,
Europe – Netherlands, Spain
Continual investment

Financial & Environmental Sustainability

Financial stability,
Carbon Offset Scheme

The service offering we provide . . .

Design & development

Designing and developing products in line with customer specifications and sustainability requirements.

£2.1m (2021: £1.5m)

Manufacturing

Manufacturing bespoke lighting systems and components.

Investment in solar at Group facilities:

£0.4m (2021: £0.3m)

Services

Supporting customers throughout the products lifecycle.

£4.5m (2021: £4.4m)

Group operations . . .

Specification renovations, new build, energy saving, compliance, technology adoption.

Diversified product portfolio gives the ability to supply a complete project – "boiler room to board room, and beyond".

Cross-selling opportunities with other Group companies to offer a complete solution to a wide variety of sectors.

Sustainability leadership Group-wide initiatives and support in achieving sustainability targets.

Image:
Prime, Worcester

Solutions provided for our customers

Value generated

We supply lighting systems including the controls, and install them for our customers.

We then maintain the lighting system for it's lifecycle and provide support.

Solutions Provided

- Energy efficiency
- Low maintenance
- Rapid installation
- Longevity of product
- Low total cost of ownership

Read more about **Our customers** on pages 22 to 23

	Short term	Long term
Customers	Replacement of ageing technology with improved lighting systems	Innovative lighting that delivers cost savings and additional benefits, such as data capture and presentation
Shareholders	Opportunity to invest in a company that pays a progressive dividend and with a robust balance sheet	Sustainable profit growth drives future shareholder returns
Employees	Opportunity to work with an innovative market leading company within the lighting industry	Continual development with a variety of Group companies in a number of different territories
Environment	Build on the work of many years, delivering energy saving products and continuing our carbon offset programme	Develop and implement our sustainability strategy as we drive towards net zero
Communities	Employment opportunities and supporting local charities	Providing sustainable employment in the local areas where our businesses are located.

Strategy.

Our products are sold throughout the world. The Group management team is passionate about developing the business for the benefit of the shareholders, employees and customers. With the energy and ability of our staff we look forward to the future with enthusiasm. Our aim is to create shareholder value through market leadership in the design, manufacture and supply of professional lighting systems.

Our focus is for long-term growth and stability, achieved through the following priorities:

Risks key

- A Adverse economic conditions
- B Changes in government legislation or policy
- C Competitive environment
- D Price changes
- E Business continuity
- F Credit risk
- G Movements in currency exchange
- H Cyber security
- I Exit from the European Union
- J Impact of Ukraine conflict on domestic and global economies

Focus on high quality products and good leadership in technology

Customers continually require new and innovative ways in which to reduce the operating costs of their lighting installations. There is also the requirement to reduce their environmental impacts.

Progress to date

- Continued enhancement of features for the SmartScan wireless system
- Shared product development between certain companies within Group
- Acquired additional and new product portfolios with the addition of Zemper – emergency lighting and Ratio – Electric vehicle charging

Future opportunities

- Further development of SmartScan
- Continuous research and development
- Targeted acquisition

Associated risks C

- Product acceptance
- Initial product introduction

Strategy in action

- SmartScan
- Visio
- D-Sign

Read more on pages 36 to 37 and 50 to 53

Continue to grow the customer base for Group companies

With the continued investment in the product portfolio and the broad range of sectors we can service, the focus will be on expanding our customer base in new markets and territories.

Progress to date

- Targeted approach in the Netherlands with Thorlux industrial product portfolio
- Introduce Famostar product portfolio to territories where the Group has a presence
- Introduce Zemper product portfolio to territories where the Group has a presence

Future opportunities

- Consider further sales offices overseas
- Potential business development investment
- Investment in sales personnel in the UK and overseas
- Targeted acquisition

Associated risks A C D J

- Short-term cost increase without immediate return
- Prolonged time required to establish FW Thorpe brands in new territories"

Strategy in action

- Ordnance Survey head offices

Read more on page 22

Overview of strategy.

- Strategy was designed to build on the values that have been at the core of the company since its inception. FW Thorpe has been built on product innovation – design and product development is fundamental.
- The Group is product led. This enables us to maintain competitive advantage with marketing leading products, utilising technology to retain and attract new customers.
- Sustainable growth is key to our stakeholders – targeting new customers in existing or new territories, using our product portfolio to drive into new sectors.
- Control of the manufacturing processes is of utmost importance – key processes are kept in-house with targeted investment in new machinery as required.
- Family principles and how we treat our people is fundamental to our success. The Group prides itself on the development of people from within the organisation providing training and experience as well as maintaining our core values.

Focus on manufacturing excellence

Along with continued product development, the need to innovate the production process is essential.

Progress to date

- Rebuild completed of Lightronics factory following fire in 2020
- Famostar facility extension project commenced
- Complete solar investment at Thorlux

Future opportunities

- Develop manufacturing facilities for Ratio EV products in the UK at Target Park facility

Associated risks C E

- Reduced productivity while changes are implemented
- Learning curve on introduction of new products and processes

Read more about **Strategy in action: Building for the future** on page 38

Continue to develop high quality people

Talent is one of our main sources of competitive advantage and it is imperative we continually develop and retain it within the business.

Progress to date

- Training and development
- Apprentice scheme continues
- Investment in management training

Future opportunities

- Continued investment in training and personnel development

Associated risks C I

- Ability to retain staff in competitive local job markets
- Loss of UK personnel from the EU due to Brexit

STRATEGY IN ACTION

ZEMPER

Established in 1967 by Aurelio Espinosa, father of the current Managing Director Jesús María Espinosa, Zemper was initially involved in the manufacture of transformers and electrical voltage stabilisers. Subsequently, with the aim of increasing its turnover, it began the manufacture of emergency lighting and became Electrozemper S.A. (Zemper) on 25 March 1978.

The company operates from a modern 10,000m^2 self-contained factory in Ciudad Real manufacturing hundreds of thousands of luminaires per year.

For over 50 years the company has focused on manufacturing quality products, and this mentality has not been lost over time. Zemper has adapted to changes in the market and in the needs of its customers, who not only demand high quality products but also a greater commitment to environmental sustainability.

Market sectors

- Commercial
- Infrastructure
- Industrial
- Retail & hospitality
- Healthcare
- Education

43M Luminaires manufactured

9,000 Emergency lighting projects

30 Countries served

Project: BNP Paribas, Belgium

In 2018, Zemper made the commitment to add to its quality system, resulting in the creation of an integrated management system with certification to the following standards:

- ISO 9001:2015: Quality Management System.
- ISO 14001:2015: Environmental Management System.
- ISO 45001:2018: Health and Safety Management System.
- IQNet SR 10: Social Responsibility Management System.

This positions Zemper as the first company in its industry in Spain to be certified with these four management systems at the same time (source provided by AENOR).

SILVER 2022 ecovadis Sustainability Rating

1967 Founded by Aurelio Espinosa.

1982 Emergency lighting range introduced.

1992 Venus range launched. Accredited to ISO 9000.

1996 First centralised management system developed.

2001 Revolutionary Diana range launched.

2002 Entered ATEX market.

2004 New facility in Ciudad Real, Spain. Zemper France created.

2012 New French facility opened in Charnay-lès-Mâcon.

2015 Accredited to ISO 9001 and ISO 14001.

2018 Accredited to ISO 45001.

2021 Joined FW Thorpe Plc.

2022 Awarded EcoVadis silver sustainability rating.

ZEMPER continued

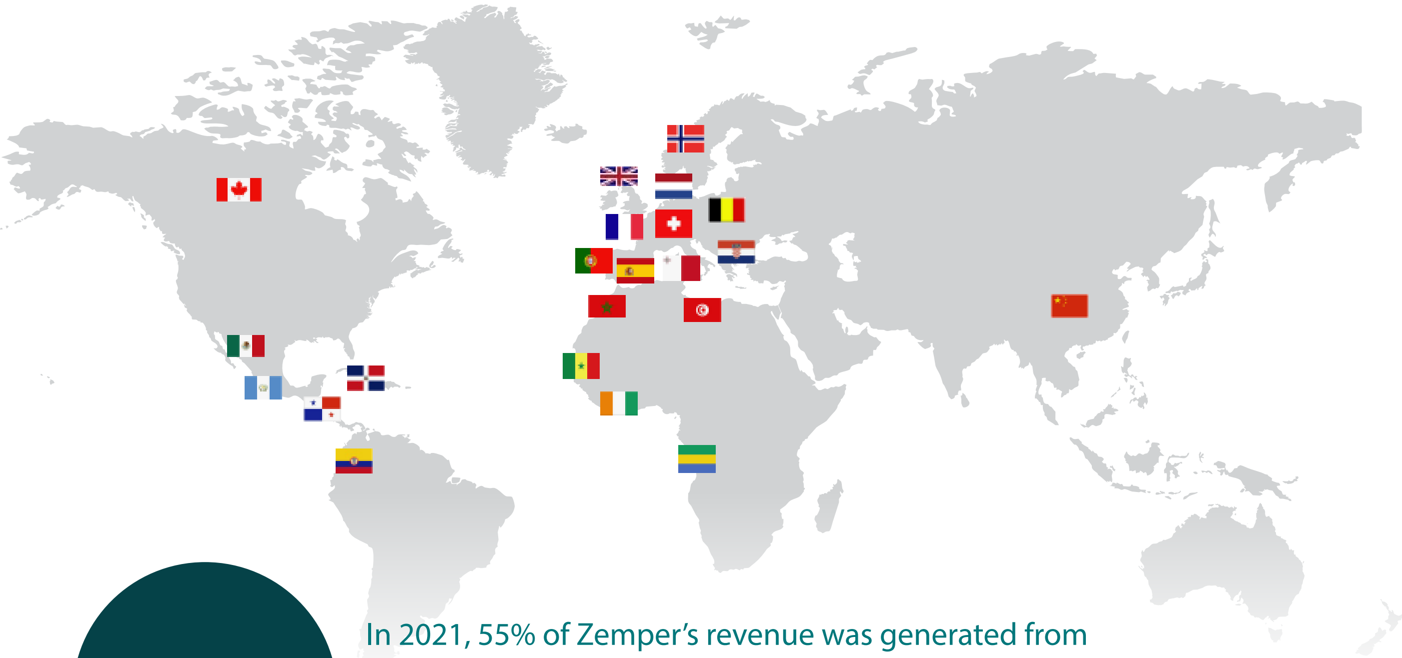
Zemper Facilities

Zemper – Head Office
Ciudad Real, Spain

Since: 1967
Staff: 120

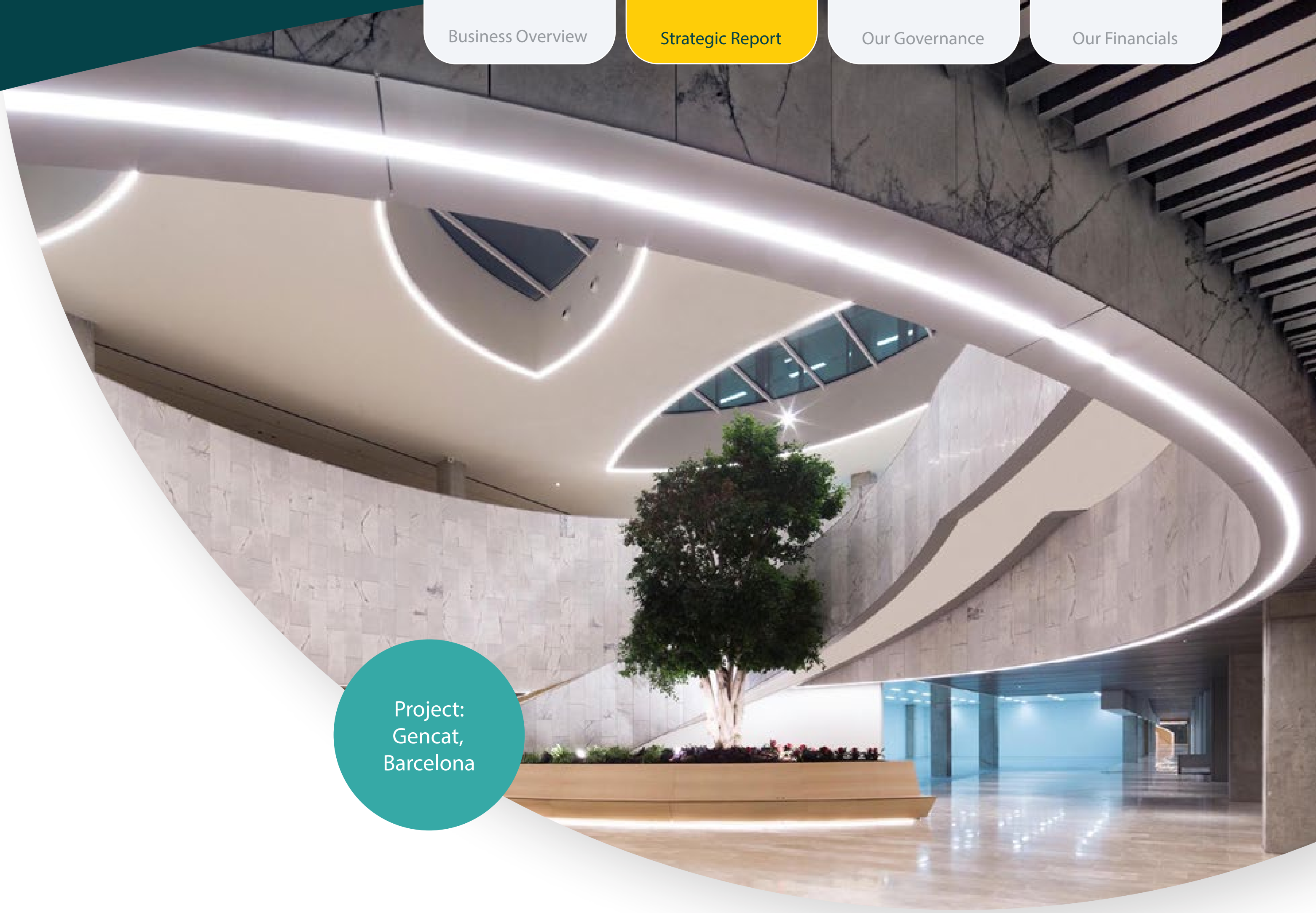
Zemper France
Charnay-lès-Mâcon, France

Since: 2000
Staff: 20



Markets served

In 2021, 55% of Zemper's revenue was generated from outside Spain, largely due to its direct presence in France and sales into Belgium, Columbia and Morocco.

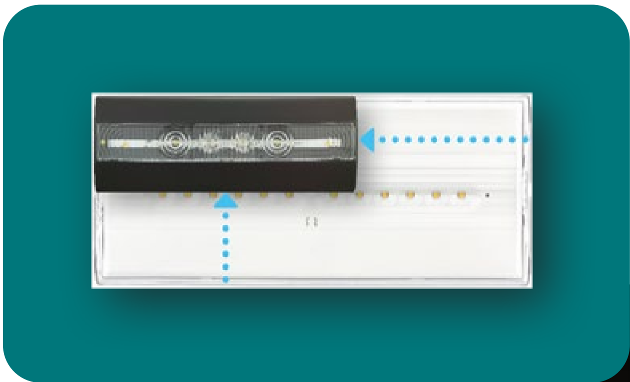


Product feature – Alya range

Launched in 2021, the Alya family of luminaires is a new concept within the emergency lighting sector.

Its size, up to 60% smaller than similar luminaires of its type, make it unique and one of the smallest emergency luminaires on the market. Sustainability is key to the design of the Alya range. Being compact, it uses fewer materials and also requires significantly less maintenance than its predecessors. Its high efficiency also greatly increases the durability of the battery.

The Alya family is designed for a wide range of applications and consists of three types: Alya, an emergency luminaire specifically designed for use in the ceiling; Walya, an emergency wall luminaire; and Exitalia, designed as an exit information sign that can be adapted to any position and surface, wall mounted or recessed.



STRATEGY IN ACTION

In December 2021, FW Thorpe Plc announced the acquisition of 50% of the share capital of Ratio Electric B.V. in the Netherlands. Ratio was established in 1960 by its pioneering founder Hans Snaak. The company developed products such as energy distribution systems for data centres and offices, a breakthrough plug and play shore power connection which set a new standard in the maritime world, and innovative charging solutions for electric cars.

Today Ratio Electric continues to supply high quality, functional and affordable products to OEMs, installers and specialised wholesalers, with e-mobility accounting for nearly 60% of the business.

Over 60 years of experience, combined with FW Thorpe skills and expertise, enable Ratio to develop smart solutions for current and upcoming customer needs, such as connected charging stations and market-leading charging pillars. Ratio EV Charging is a collaboration between FW Thorpe Plc and Ratio Electric. Ratio EV Charging designs, and will manufacture, EV charging products at its factory in Redditch, specifically to serve the UK market.

"This is an exciting opportunity for the Group. FW Thorpe's know-how in electrical engineering, manufacturing and lighting, combined with Ratio's experience in electrical vehicle charging, will allow the introduction of new products into the UK market as well as supporting growth in Ratio's existing markets.

We see similarities in technology and engineering skills, giving the Group the opportunity to diversify into new areas of engineering with high growth potential."

Mike Allcock
Chairman


E-Mobility
Data Centre
Office
Marine

STRATEGY IN ACTION

SmartScan development.

The next generation.

Launched in 2016, SmartScan has continued to evolve over the last 6 years. The latest generation offers an extensive range of new customer features that improve user interaction and simplify maintenance of the system.

An increase in wireless network speed enables faster access to information, providing a larger data set and improved analytics. In addition, this faster network allows for a live, secure, truly IOT (internet of things) system that is now online permanently. This allows users to interact with installations from anywhere in the world without any delay, a valuable feature for larger multi-site users.

User control has been improved with the addition of manual dimming and an increase in the number of available scenes on offer. A new selection of battery or mains powered switches complements the range and offers a simplified method for connection of smart phones for app control. The SmartScan website and method of communication with installations has evolved to meet the latest security standards, future proofing the system for years to come.

The first installation of this next generation of SmartScan commenced early 2022 at two manufacturing facilities in Europe, both owned by the same company. In total 4558 high bay industrial luminaires and 6650 office luminaires have been supplied.

The base requirements of the installation included automated lighting control (presence detection and daylight dimming) in the production halls and automated lighting with user control (scene setting) in the offices.

However, the customer also asked for features that were not previously available. Subsequently, the next generation of SmartScan was developed to secure the order. These additional features include:

- Web based commissioning of luminaires (reducing time and cost by 50%).
- The ability for the customer to re-zone or adjust lighting parameters via the SmartScan website.
- The ability to change luminaire parameters via the interactive site drawing.
- Manual dimming via a push switch.
- Additional scenes and fixed manual dim levels via the new scene plate.
- New battery powered options for the scene plate, to simplify installation.
- New smart phone connection and app.
- New global commands for system override for out of hours or for alarm signals.
- New calendar function that will change system parameters out of hours.
- Faster remote testing and diagnostics.

The first phases have been commissioned successfully.

Client testimonial

"As long-term users of the amazing Thorlux SmartScan system we are fully aware of its capabilities; however certain end users have asked for more. We approached Thorlux with our requests and they exceeded all of our expectations with the 'generation 2' update. This helped us secure our largest installation to date and the end user is delighted with the new features on offer."

-50%
Commissioning time

+49%
Revenue
2021/22

NEW LIGHTRONICS FACILITY

Building for the future.

Following the devastating fire in September 2020 that destroyed the assembly area and experience centre at Lightronics, work is now complete on the new structure at Waalwijk.

Both levels of the new building are being used as a production facility and warehouse. At 4200m^2, the floor space is almost double that of the old property, optimising production routing and improving the working climate for Lightronics employees. The high bay warehouse adjoins the manufacturing area, ensuring that components are always to hand for assembly, minimising internal logistics.

The new building is entirely gas-free, reducing the CO_2 footprint, and it will be equipped with solar panels for energy-neutral manufacturing. In addition to these measures, the Group carbon offsetting scheme compensates for emissions from manufacturing and logistics and the company is installing multiple charging points for visitor and employee electric vehicles. Behind the property, a waste recycling plant will be established to ensure the optimum sorting and disposal of various waste flows.

The new building has not only added space, but has also improved and streamlined the manufacturing facility, further strengthening Lightronics' position as a leading Dutch lighting manufacturer.

"With our new facility, we can continue to define our targets for the future of Lightronics. This property puts our employees even more centre stage. We were able to scrutinise the work climate and layout again. In addition, the new building has allowed us to further reduce our CO_2 footprint."

Jos Spapens
Lightronics Managing Director

+59%
Manufacturing space

0%
Reliance on gas

+146%
Solar capacity

Key performance indicators.

The following key performance indicators are considered to be the most appropriate for measuring how successful the Group has been in meeting its strategic objectives.

Revenue (£m)

+21.9%

2022	**143.7**
2021	117.9
2020	113.3
2019	110.6
2018	109.6

Performance in 2022

- Built on 2021 performance
- Revenue growth across the Group, driven by Thorlux and Famostar
- Addition of Zemper, nine months of results included

Operating profit (£m)

+28.5%

2022	**24.7**
2021	19.2[1]
2020	16.3
2019	17.6[2]
2018	19.5

Performance in 2022

- Solid improvement, positive addition of Zemper. Increase tempered by margin pressures from material costs and logistics
- Operating cost pressures from wage rate and utility cost inflation

Basic earnings per share (£m)

+26.5%

2022	**17.16**
2021	13.57
2020	11.45
2019	13.91
2018	13.91

Performance in 2022

- Driven by operating results
- Increased number of shares due to exercise of executive share options and employee SAYE scheme

Operating cash (£m)

-10.0%

2022	**19.7**
2021	21.9
2020	19.4
2019	21.6
2018	20.7

Performance in 2022

- Impacted by operating results
- Increased stock holding to protect against supply chain disruption

CO_2 emissions (tonnes)

+6.6%

2022	**2,325[3]**
2021	2,181
2020	2,810
2019	2,558
2018	2,687

Performance in 2022

- Investment in solar energy generating capacity at factories in the UK, Netherlands and Spain
- All remaining electricity consumed across the Group is from renewable sources

Renewable energy usage (kWh)

+247.2%

2022	**2,743,373**
2021	790,030
2020	321,236
2019	0
2018	0

Performance in 2022

- Solar generation, renewably sourced electricity
- Further solar investment at Thorlux, Lightronics and Famostar

1 2021 excludes the exceptional item in respect of Lightronics fire £1.6m
2 2019 excludes the profit on disposal of property of £1.9m
3 2022 includes 9 months of Zemper

Operational performance.

2022 Group Company Overview

FW Thorpe Plc encompasses individual companies that concentrate on particular market sectors and geographical locations. The companies provide the Group with diversity as well as risk mitigation, as they do not compete with one another and are complementary.

The companies within the Group can be affected differently by trends and economic impacts within their respective markets. The continuing development and market adoption of LED lighting and controls technology allows Group companies to share the benefits of their product and technical expertise, differentiating themselves from competitors.

Improved Group performance in 2021/22 was driven by increased revenues at Thorlux, a solid performance by the businesses in the Netherlands, and the addition of Zemper, for which nine months of trade were added to the results.

Within the other companies, TRT failed to build on the success of last year but has a solid order book to start the new financial year. Portland deserves a special mention, with its revenue and profit having recovered to almost pre-pandemic levels, as well as the company launching new products into two further market sectors during the year.

This year's growth has been hampered by supply chain challenges, both of price and availability. Traditional materials such as steel, plastics and cardboard saw significant price increases, and electronic components – especially microprocessors and modems, required for the more sophisticated systems – became scarce. The Group's engineering and procurement teams performed valiantly to meet customer demand.

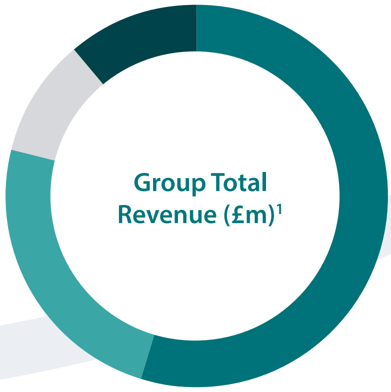
In addition, employee related costs increased in the latter part of the year due to statutory wage increases; this will be further compounded in the financial year to come with inflationary pressures. Utility cost increases have been well documented, although the Group's investments in solar panels in recent years have mitigated some of the increase in electricity costs. Gas price increases have yet to show an impact.

Sales prices have been increased across Group companies, some more effectively than others. These increases of course take time to filter through, but the Group started to see some positive effects in the final quarter of the year; however, Group companies were still supplying certain larger scale projects without the full impact of these increases.

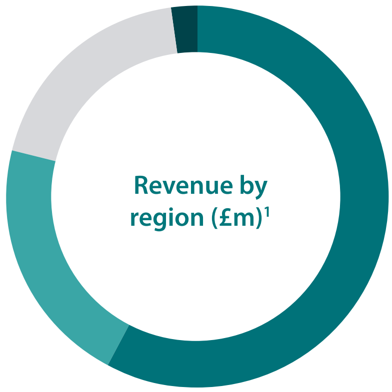
Whilst revenue increased, profitability growth was more challenging. The cost pressures mentioned and the operational inefficiencies caused by supply constraints dulled results. Despite this, continued new product introductions, investment in manufacturing facilities, and sales into new markets have helped the Group deliver decent results yet again, even against the backdrop of challenging economic conditions and uncertainty.

The Group continues to be underpinned by the development of market-leading lighting equipment, by investment in manufacturing and employee capabilities, as well as by aspiring to deliver excellent customer service in difficult circumstances.

The following is an overview of 2021/22 for each company.



Thorlux UK	78.9
Netherlands companies	34.7
Zemper	14.2
Other companies	15.9



UK	83.2
Netherlands	30.3
Rest of Europe	27.4
Rest of the World	2.8

1 Excluding Intercompany

Operational performance. continued

Thorlux Lighting

Record order and revenue performance from Thorlux surpassed last year's all-time high. A positive contribution was achieved from different sectors. The order book is currently at a high level, and includes a significant healthcare project to be delivered over the next two financial years.

The ability of Thorlux to deliver increased revenue has been hampered by the shortage of labour in the first half of the year, together with the ongoing challenge of sourcing components. The engineering and procurement teams have worked tirelessly to resolve these issues, and the company's ability to re-engineer and source alternatives has stood it in good stead. The customer facing teams also deserve credit for managing customer expectations in this tricky climate.

Investment in business development has again paid off this year; Thorlux's depth of product range and capability to service the broadest portfolio of customers has enabled it to continue to secure projects across a variety of sectors.

Overseas revenues have grown, driven by the Thorlux partnership in Germany. Revenue from Australia improved during the year, despite the logistical challenges of increased shipping times. UAE revenue has been disappointing. Results directly from the Republic of Ireland were slightly lower; however, the team has won projects for delivery into other territories again this year.

Services such as surveying and sub-contracted installation and project management works have a dilutive impact on results; however, an improved contribution from installations this year supported a growth in operating profit. Whilst margin is impacted by providing services, Thorlux's ability to offer a "one stop shop" helps it secure significant projects, contributing to the good order pipeline currently ahead.

Investment in product development continues with the successful launch of the next generation of SmartScan, which will give customers faster access to a larger data set and improved analytics, as well as web based commissioning functionality. See how the product continues to evolve on page 36. Thorlux has already completed the first deliveries on a significant project in Germany.

Teams have been distracted by re-engineering and sourcing challenges, hampering Thorlux's ability to bring new products to market, but so far teams continue to deliver in both regards.

Capital investment had a sustainability theme this year. Solar panels were acquired to complete the Thorlux rollout; enabling works are ongoing, with roof issues to be fixed shortly. A number of fleet vehicles were exchanged for either full electric or hybrid cars; this technology now makes up 47% of the Thorlux fleet.

A new SmartScan van has been added to the marketing effort with the ability to serve more customers during a visit, and a full event programme has been planned for the next 12 months. Further investment to improve the company's ability to deliver the current order book is expected during the next financial year.

Whilst Thorlux enters the new financial year with a significant order book, the supply chain challenges are not over. Also, economic storm clouds are gathering, it seems, with the threat of recession and higher interest rates. The targets within Thorlux will be to steady the supply flow and improve productivity to reduce the order backlog and improve the company's ability to service customers in a more timely manner.

Revenue (£m)

£84.1m

+15% (+7%)

A strong second half performance helped move the business towards pre-pandemic revenue levels. Major projects had been lacking in previous years, and the business has also been impacted by increased costs.

Philip Payne's ability to offer modifications of standard designs to accommodate architectural demands differentiates its range from those of competitors, which are generally produced in higher volumes. The discerning client expects more than the standard trade offering.

Notable projects supplied this year included the BSI's Kitemark House, the Old War Office and Sky Studios.

The Specto-XT wireless emergency lighting system continues to provide Philip Payne's sales team with the ability to supply the majority of a client's needs. Occupational safety standards can be met and regulatory compliance achieved with minimal disruption and installation costs.

Philip Payne's collaboration with Famostar continues, with some positive momentum during the year and sales revenue achieved for Famostar products from the UK. Export revenues are at a similar level to the previous year, with lower than historic levels of activity via the Group's selling operations in the UAE.

With the ability to visit customers severely restricted in the last few years, Philip Payne invested in a new demonstration vehicle, similar to that of Thorlux. The Mobile Training Unit, or MTU, offers continuing professional development (CPDs) around the country and demonstrates Philip Payne's product portfolio to clients; its initial outings have made a positive impact, with some promising enquiries so far.

Following the investment in selling resource and marketing activities, revenues have improved to marginally below the peaks of the past few years. The company has some work to do on improving operating profit levels – a clear target for the coming year.

Revenue (£m)

£3.2m

+16% (+3%)

Operational performance. continued

SOLITE

Another solid performance from Solite was driven both by demand for clean-room lighting and by bespoke projects for clients and the Group. This has brought revenues to pre-pandemic levels; however, operating results need to improve.

Profitability has been a challenge; higher costs and the ability to secure sales price increases have dampened performance this year. Whilst forward ordering mitigated some of the cost challenges, selling price increases only started to take effect in the latter part of the year due to the long term project nature of the business.

There has been a change in management following the retirement of Phil Myles, Managing Director since 2011. The Board would like to thank Phil for his contribution in transitioning Solite into the successful business it is today.

Investments were made in improving the efficiency of the manufacturing facility, with assembly space added through the introduction of a mezzanine structure in the building and the reorganisation of storage space. There is still work to do but, as supply constraints ease through the coming year, the investments put the business in a good place to improve productivity.

Continuous improvement of the product portfolio has been maintained despite pressures on the technical engineering to deliver alternative product options because of supply challenges.

Solite carries a strong order book into the new financial year, as well as the ability to engineer solutions for specific customer requirements. A renewed focus on operational matters should support the quest to grow the business, which is underpinned with potential opportunities.

Revenue (£m)

£3.9m

+21% (19%)

PORTLAND LIGHTING

The standout performance of the year was that of Portland. The growth this year is due to the return of business in Portland's traditional markets. Focused on the retail and hospitality sectors, Portland has continued to recover from the pandemic lows experienced in recent years, following its strong close to last year.

Results for the year were largely unaffected by the inflationary pressures felt by others in the Group, with the business managing to cover component requirements with increased stock levels. There will be some pressure on costs in the new financial year, with higher utility costs (to some degree offset by the Group's investment in its roof mounted solar array) and an increased wage bill due to the current inflationary environment.

With sustainability in focus, Portland has reduced plastics packaging by 90% this year by replacing plastic bubble wrap with a recycled paper version which is both recyclable and biodegradable.

The company continues to develop products to target new markets. For example, it had some initial success in the road safety signage market securing trial orders with local authorities, some of these in partnership with TRT. There has also been some traction with Portland's other new product portfolio targeting domestic customers. LeisureLUX has been launched both directly and via Amazon this year, as well as at tradeshows such as the Caravan, Camping and Motorhome Show.

There is a positive atmosphere around Portland this year, with recovery of its traditional market and some initial successes with new product portfolios. Moving into the new financial year, Portland expects to convert trial orders to rollouts and for there to be further stabilisation of the traditional business.

Revenue (£m)

£3.8m

+35% (+16%)

Operational performance. continued

TRT LIGHTING ROAD & TUNNEL SYSTEMS

TRT's performance was surprisingly disappointing following the highs of last year's record figures. Orders started very slowly during the year; combined with the inability to pass on price increases to customers, this led to a poor profit performance only marginally above break-even.

TRT continued to supply Thorlux with a significant rail project during the year, but long awaited tunnel projects have been delayed; however, two orders are expected to be delivered in the first half of 2022/23. TRT did not enjoy its usual intake of larger scale street lighting rollout projects; however, a large local project has been secured and is on track for delivery commencing early in the new financial year.

Having resized the operations to reflect lower demand midway through the year, the company continues to struggle with operational effectiveness. Some changes are underway in how the business is managed to improve productivity.

Product development, as in some other Group companies, has been hampered this year due to re-engineering to cope with supply shortages. Having said that, the new Nano street light is due for imminent launch and will improve TRT's chances of securing larger scale rollouts in the future and improve the margins on those that have been secured. On the road lighting side of the business, there is a collaboration with Portland to introduce road signage lighting such as Belisha beacons into the range.

TRT continues to develop its offering for amenity lighting projects, by introducing its own products and those of the Group. This year has also seen a partnership to supply handrail lighting, which is becoming an important part of amenity lighting designs; TRT now has the ability to offer this to customers as part of an overall solution.

Whilst last year was disappointing, this year starts with renewed optimism with a decent order book from a street lighting perspective as well as solid opportunities for tunnel lighting projects to boost results. Amenity projects will also be targeted this year, and the collaboration with Group companies should yield better results.

Revenue (£m)

£8.7m

-18% (+8%)

LIGHTRONICS
MEMBER OF FW THORPE PLC.

Results for the business might seem disappointing this year at first glance; however, revenue in euros is consistent with last year's and, despite margins being impacted by increased costs, Lightronics has delivered a creditable operating profit return in line with Group expectations.

Lightronics battled with rising costs and employee turnover, and following the fire had to continue to manage its operations across two manufacturing sites until the new building was completed in early June of this year. Logistics costs also increased dramatically, as seen elsewhere across the Group.

Completion of the new building was a significant milestone. The purpose built facility now offers a solid base from which to grow the company. The next steps are for further solar investment to feed a larger scale facility that has electric vehicle charging, and for the replacement application centre to demonstrate its capabilities to customers.

No major projects were secured this year, with business dominated by street lighting rather than the higher margin impact-proof segment. Sales into Germany and France were at similar levels to last year.

Product development remains key to the success of any FW Thorpe business. Lightronics continued to work with Thorlux and TRT in particular, sharing product developments and technologies. These businesses share similar product portfolios and customer types, therefore collaboration can reduce costs and improve success.

Lightronics welcomed a new Commercial Director to the team with a remit to drive the business forwards and utilise the investment made in new facilities.

Revenue (£m)

£22.0m

-2% (-2%)

(Constant currency +2% (2021: -3%))

(exc. Thorlux)

Operational performance. continued

Famostar

Famostar delivered yet another year of growth since joining the Group in 2017. Targeted customer activity, the continued success of SmartScan and the addition of Thorlux product sales have driven revenues to new heights this year.

The Netherlands continues to be the main market for Famostar; however, efforts continue to develop sales via the UK utilising the additional sales resource at Philip Payne as well as selling certain products through Thorlux. The business will also look to work with Zemper in new territories whenever appropriate.

Famostar now manages the distribution of Thorlux products into the Netherlands; there was some initial success this year, with a number of projects secured through an increased marketing effort. Further growth is targeted for 2022/23 following an investment in selling resource.

Famostar continues to drive sustainability efforts and is currently reviewing the use of alternative plastics and printed circuit board recycling. Cardboard packaging has been reduced by 20% during the year following a review as part of the Group's renewed focus on sustainability initiatives.

Given the continued profitable growth of the business, Famostar has commenced construction of a new warehouse and manufacturing facility. This will bring some operational efficiencies and savings from third party rental as well as the ability to support future growth. This investment should be completed during the new financial year.

Succession was an important topic during the year. We congratulate both Richard Stroo (Managing Director) and Frank Risseeuw (Technical Director and Group Head of Synergy) for their new roles and thank Frans Haafkens for his guiding hand over the last few years.

Famostar will look to consolidate the success of last few years and strive for growth domestically through existing channels, offering SmartScan and delivering projects with the Thorlux product portfolio. Export markets will continue to be explored in conjunction with other Group companies.

Revenue (£m)

£11.1m

+20% (+5%)

(Constant currency +25% (2021: +4%))

ZEMPER

In 2021 the Group welcomed the addition to the Group of Electrozemper S.A., trading as Zemper, the specialist emergency lighting provider. Zemper derived revenues from Spain, France and Belgium, as well as other export markets.

Zemper was a family business with over 50 years of history, with the ability to injection mould its own components and populate finished printed circuit boards as well as its own robotic final assembly and testing process. Read more about Zemper on pages 30 to 33.

Results were hampered by the similar types of cost increases to those experienced across the Group: materials, labour, logistics and utility costs. Revenues, however, were generally in line with expectations. Zemper expects sales price increases to take effect in the new financial year to help address this situation.

The addition of Zemper will further strengthen the Group's emergency lighting presence in Europe and provide opportunities for the Group to share components and technologies. The Zemper team has brought some manufacturing and engineering know-how to the Group and is actively taking part in sharing best practices and ideas. Work has started on a number of synergy projects, including to increase sales into regions where the Group already has a presence, and to investigate the potential for shared manufacturing capabilities and consider product development ideas.

In the next financial year Zemper will, of course, have the benefit of a full trading year, and the Group will start to see some of the benefits of Group collaboration.

Revenue (£m)

£14.2m

9mths included

PRODUCT SPOTLIGHT

Innovations from around the Group.

Portland – Bee Seen range.

A new division of Portland Lighting has been created to service the local authority market and its contractors. Utilising many years of site experience and customer feedback, the first range of Belisha beacons was launched in January 2022.

The modular Bee Seen range of beacon globes is cleverly designed to incorporate further high-vis additions to suit the safety requirements of individual sites. The family includes a flashing standard yellow beacon, a non-flashing white beacon used for marking centre island sites, and a high visibility beacon. The arrays dim at night to avoid dazzling drivers and have user settable brightness levels which can be adjusted during installation to suit particular site conditions.

The range comprises three options:

Standard Beacon

A high performance LED Belisha beacon featuring long life, low energy and low maintenance.

Centre Island Beacon

A high performance LED white centre island beacon.

Hi-Viz Beacon

An enhanced version of the Bee Seen beacon offers adjustable daytime enhancements, improving driver perception and pedestrian safety at zebra crossing points.

Standard Beacon

Centre Island Beacon

Hi-Viz Beacon

Famostar – D-Sign.

The new D-Sign emergency luminaire has been designed to be both aesthetically appealing and easy to install.

The slender design and continuous pictogram provide a modern twist without compromising functionality or reliability.

The D-Sign is available as surface mounted, recessed or suspended, in white, black and in a specially dimmed version (Cinema dim) for environments such as theatres and cinemas where the brightness of the legend might be disturbing. For ease of installation the surface mounted version can also be changed from ceiling to wall mounting simply and quickly, without any tools.

In 2021 the D-Sign won the prestigious Red Dot Design Award, an international award for product design.

TRT – Nano.

At TRT Lighting, the focus has been on developing a market leading residential streetlight.

The Nano has been designed to use as few components as possible to deliver the company's most energy efficient luminaire to date. With today's increased energy bills, Nano returns an efficacy result of 174lm/W, ensuring that the total cost of ownership and the luminaire's carbon footprint are significantly reduced over the life of the product.

Key features:

- Interchangeable and upgradable LED module and control gear enable reuse and repair.
- Utilisation of materials that can be easily recovered and recycled at end of life.
- Reduction in ancillary components.

PRODUCT SPOTLIGHT

The all-new Visio family.

In 2021, Thorlux launched the new Visio family of luminaires for high bay applications. By utilising over 85 years of experience in illuminating industrial environments and listening to our customers' needs, Thorlux has designed Visio, Visio Pro and Visio Sport to tackle the latest lighting challenges.

With environmental impact and material usage key considerations, the luminaires are as compact as possible whilst still delivering excellent photometric performance, very high light outputs, and a long reliable lifetime.

The three versions in the family have been tailored for specific applications.

Visio is designed for a wide range of applications, including warehouses and manufacturing spaces.

Visio Pro is designed for arduous environments. With a high ingress protection rating of IP66 protecting it from dust, dirt and water, Visio Pro is ideal for heavy industry, food manufacture or maintenance depots.

Visio Sport has been designed with sports halls in mind and, while it shares many common features with Visio Pro, it also includes specific features such as compliance with the demanding ball impact requirements from the German sports hall standard.

64%
Reduction in PCBs *

40%
Reduction in metalwork *

65%
Reduction in lenses *

Visio SPORT

Visio PRO

Visio

* Visio 1400mm vs Solow XLED Quadline. Figures are based on material weight

Sustainability.

A key ambition in the development of Visio was to minimise its environmental impact, considering the materials used and its manufacture and distribution, as well as its through life operation. The size of the luminaire and the choice of materials were therefore key aspects for the specification. When compared with the Solow XLED, the luminaire it replaces, the material usage of the Visio is greatly reduced using 40% less metalwork and over 60% less in LED PCBs and plastic lenses. This reduction in size also means that less cardboard packaging is required and less space is taken up, making distribution more efficient.

All Visio luminaires provide a very long and reliable lifetime, up to 100,000 hours of operation, and are fully serviceable. All the components can be replaced, extending the lifetime of the product as well as making upgrading to more efficient LEDs in the future possible, features that are now highly important when considering product circularity. The luminaires can also be fully disassembled once end of life is reached for recycling.

The Visio family is available with our award winning SmartScan lighting management system. Through the integral sensor which monitors presence and daylight, the luminaire will automatically control itself and only switch on when needed as well as dim in accordance with any daylight ingress, ensuring maximum energy savings, reducing through life costs, and reduced carbon emissions. SmartScan also allows users to monitor their energy performance data and complete operational status information for all SmartScan standard and emergency luminaires. This information is displayed on the SmartScan website, which can be accessed from anywhere using a computer, laptop, tablet or smart phone.

Supreme performance.

The Visio family is available in four different light distributions. Custom optics have been developed to a Thorlux specification, with each optic comprising an individual lens per LED to ensure maximum efficiency and light control.

Visio uses the very latest LED technology and, when combined with the highly efficient optics, produces a system efficacy of over 179 luminaire lumens per circuit watt, making it one of the most efficient luminaires in the Thorlux range.

By Visio providing a range of distributions for both open area and high rack warehouse applications, lighting designs can be optimised to use as few luminaires as possible whilst still illuminating the space to the required standard. This focus on light efficiency means light is placed where it is needed, optimising the lighting scheme and reducing capital expenditure, running costs and carbon emissions.

Financial performance.

"The Group profitability has been driven by another positive year from Thorlux. The Netherlands companies made a strong contribution . . . "

Craig Muncaster
Joint Chief Executive,
Group Financial Director and
Company Secretary

The directors have pleasure in submitting their annual report and the audited consolidated financial statements of the Group and the Company for the year ended 30 June 2022.

Results and dividends

Revenue increased by 21.9% to £143.7m with operating profit increasing by 28.5% to £24.7m, supplemented by the addition of Zemper acquired in October 2021. Excluding Zemper revenue increased 9.9%, with operating profit up 20.3%.

The increase in Group profitability has been driven by another positive year from Thorlux. The Netherlands companies made a strong contribution, unhampered by accounting adjustments for earn-out provisions which were settled back in September 2021.

Zemper made a positive contribution, before IFRS adjustments for the acquisition, of £1.6m. Given the Group has committed to acquiring the remaining shares over the next three years, we account for 100% of the profit derived by Zemper, but adjust the operating profit for the amortisation of intangibles valued at acquisition. Details of the consideration for this acquisition are provided in note 34.

The remaining UK companies all posted positive contributions with improvements in all except for TRT, however, the overall results for the other companies continue to be dampened by the results from our overseas sales offices in the UAE and Australia.

Net finance expense is impacted by the Zemper acquisition and continued low interest rates on our cash deposits.

The taxation charge represents an effective rate of 16.7% (2021: 21.5%). The rate is lower than the previous year resulting from a reduction in non-deductible expenses and reduced profits in the Netherlands where the headline rate is higher. The effective tax rate for UK companies is lower than the current corporation tax rate due to patent box relief driven by the Group's product innovations.

Cash balance remained strong following significant investments during the year.

In April 2022, the Company paid an interim dividend of 1.54p per share (2021: 1.49p) amounting to £1,803,000 (2021: £1,736,000) and a special dividend of 2.27p (2021: nil) amounting to £2,659,000 (2021: nil). A final dividend of 4.61p (2021: 4.31p) per ordinary share is proposed amounting to £5,403,000 (2021: £5,028,000). If approved the dividends will be paid on 25 November 2022. Total dividends paid during the year amounted to £12,079,000 in aggregate (2021: £6,631,000). The final dividend for 2021 was paid on 25 November 2021.

Cash and liquidity management

The Group's cash is managed in accordance with the treasury policy. Cash is managed centrally on a daily basis to ensure that the Group has sufficient funds available to meet its needs and invests the remainder. The majority of cash is placed with approved counterparties either on overnight deposit or time deposit. There are a series of time deposits that are maturing on a rolling cycle in order to meet regular business payments, with a margin for larger regular and one-off payments as well as seasonal variation in cash requirements.

The Group primarily trades in sterling. There is an exposure to foreign currency as the Group buys and sells in foreign currencies and maintains currency bank accounts in US dollars, Australian dollars, UAE dirhams and euros. The activities of buying and selling in foreign currency are broadly matched with currencies bought and sold as required in order to minimise currency exposures. Larger exposures would be hedged in order to reduce the risk of adverse exchange rate movement. There were no currency hedging derivatives in place at 30 June 2022 or 30 June 2021.

Pension scheme position and funding

The latest triennial actuarial valuation was completed as at 30 June 2021. This valuation showed that the pension scheme position remains in surplus and a funding level for the future has been agreed between the trustees of the scheme and the directors of the Company. The directors consider it unlikely that any changes to the present funding levels will have any significant effect on the strength of the Company's statement of financial position.

Group research and development activities

The Group is committed to research and development activities in order to maintain its market share in the sectors and territories we operate. These activities encompass constant development of both new and existing products to ensure that a leading position in the lighting market is maintained. During the year the Group spent £2,096,000 (2021: £1,516,000) on capitalised development costs, which includes internal labour.

Property, plant and equipment

The directors are of the opinion that the market value of the freehold land and buildings is in excess of their net book value. While it is considered that the market value is significantly greater than the net book value for many of the Group's properties as a result of being acquired between one and over 20 years ago, management considers that undertaking formal valuation exercises would be costly for limited value and consequently no formal exercise has been undertaken.

Investment this year increased from a significantly lower level last year. The main capital expenditure focused on the rebuilding of the Lightronics facility (covered by insurance proceeds), a further underpinning of our sustainability credentials with an increased investment in solar panels for the Thorlux factory and replacement vehicles, that were typically hybrid or electric.

Creditor payment policy

The Group's policy concerning the payment of its trade creditors is to accept and follow the normal terms of payment among suppliers to the lighting industry. Payments are made when they fall due, which is usually on the day after the end of the calendar month following the month in which delivery of goods or services is made. Where reasonable settlement discount terms are offered for early payment, these terms are usually taken up. The number of days represented by the Company's year end trade payables is 42 (2021: 43). The Group continues to report on payment practices and performance as per UK legislation.

Internal financial control

During the year, a member of the Group finance department has visited all operating sites to assess their compliance with a selection of key control procedures and any non-compliance reported to the Group Board. Any areas of non-compliance noted as part of this process have been addressed.

In addition, the executive directors regularly visit all operating sites and review with local management financial and commercial issues affecting the Group's operations. Regular financial reporting includes rolling forecasts and monthly financial reports comparing performance against plan as well as the previous year. These reports are reviewed locally with a Group representative and monitored by the Group Board. Accordingly, the directors do not consider that an internal audit department is required.

Craig Muncaster
Joint Chief Executive, Group Financial Director and Company Secretary
11 October 2022

Section 172.

Stakeholder engagement.

The Group has the responsibility for managing the challenges that affect the business on a daily basis; this also includes our impact on our key stakeholders. Our ability to engage and work constructively with these stakeholders underpins the long-term success and sustainability of the Group.

Key stakeholders and how we engage with them:

Employees

Why we engage

The right people, capabilities and engagement across the Group is the platform to drive our long-term success

How we engage

- Employee committees.
- Health & safety committees.
- Employee appraisals, training and development.
- Communication via web portal, notices and company newsletter.
- Group board meetings held periodically at different company sites.

Customers

Why we engage

Understanding the needs of our customer is fundamental. We aim to deliver the correct technical solution, professional service, sustainability of products/services and support the customer during a product's warrantable life and beyond

How we engage

- Meetings/maintaining close relationships via regional sales or business development teams.
- Providing Continuing Professional Development seminars and education opportunities.
- Company websites.
- Customer specific events, including trade shows.
- Order execution – from lighting design, through to delivery, installation and commissioning.

Shareholders

Why we engage

Trust from our shareholders is key to delivering our strategy and long-term success. We endeavour to provide fair, balanced and meaningful information to shareholders and potential investors to ensure they understand our performance and strategy

How we engage

- Trading updates at appropriate times.
- Regulatory News Service.
- Investor meetings and presentations, including company visits.
- Dedicated Group website.
- Annual and Interim reports.
- Annual General Meetings.

Image:
Met Office visit the FW Thorpe carbon offsetting project, Devauden

Suppliers

Why we engage

We need to maintain reliable relationships with suppliers for mutual benefit and ensure they are meeting our standards, from value for money, quality, through to business ethics

How we engage

- Meetings and negotiations with key suppliers.
- Site visits.
- Quality management reviews and audits.
- Attending supplier forums and trade shows.

Communities & environment

Why we engage

The Group is committed to be a responsible member of the community and considers the environmental impacts of the customer's use of our products as well as our own operations

How we engage

- Support local and national charities.
- Engagement with local MPs and Chambers of Commerce.
- Members of appropriate trade and industry bodies.
- Carbon offset scheme in place since 2009, accredited under the Woodland Carbon Code.
- Recent investment in solar panels in the UK and Netherlands facilities.
- Products and systems support energy saving and carbon reduction – London Stock Exchange Green Economy mark in 2020.

The directors are aware of their duty under Section 172(1) of the Companies Act 2006 to act in the way they consider, in good faith, would be most likely to promote the success of the Company for the benefit of its members as a whole, and in doing so have regard (amongst other matters) to:

- The likely consequence of any decision in the long term.
- The interest of the Company's employees.
- The need to foster the Company's business relationships with suppliers, customers and others.
- The impact of the Company's operations on the community and the environment.
- The desirability of the Company maintaining a reputation for high standards of business conduct.
- The need to act fairly between members of the Company.

The Board considers its key stakeholders to be its employees, customers, shareholders, suppliers and the communities and environment we operate within.

Sustainability.

The Group is committed to addressing today's sustainability challenges and opportunities, adjusting its business strategy accordingly.

Understanding the needs of customers, key stakeholders and the expectations they have is central to ensuring that the Group prioritises the most critical issues and operates a responsible and sustainable business.

Sustainability has been at the core of FW Thorpe for many years. Products are designed for longevity using recyclable materials, and the Group's direct carbon impact has been measured for over a decade, with emissions offset using its own independently certified tree planting scheme since 2009. Thorlux Smart technology has been saving energy for customers as well as reducing their carbon impact since 2003. FW Thorpe now holds the Green Economy Mark, which identifies companies and funds listed on the London Stock Exchange that generate between 50 and 100% of total annual revenues from products and services that contribute to the global green economy.

The journey so far: the Group's progress so far and plans for the future

Over the last two decades, FW Thorpe has sought to address its carbon impact, by working towards carbon neutrality for its manufacturing and distribution operations. This has led to a major employee engagement programme on energy efficiency of its operations, as well as significant recent investments in renewable energy generation with the addition of roof-top solar photovoltaic (PV) panels to the Group's manufacturing facilities. This investment in solar PV will enable the Group to generate 40–50% of its own electricity usage when the project is completed later this financial year.

Since 2009, FW Thorpe has been planting trees on its own land in Wales to offset Group emissions each year. To date 165,687 trees have been planted, offsetting 41,000 tonnes of CO_2. A further 15,000 trees will be planted by the end of 2023.

FW Thorpe has been officially recognised as being carbon neutral, with systems of reduction, measurement and certified offsetting in place, since 2012. This decade long status has been independently assessed by a third party in accordance with ISO 14064-1, an international standard for the quantification and reporting of greenhouse gas (GHG) emissions and removals. Meeting this standard provides independent assurance of the Group's long-standing commitment to sustainability across all of its operations worldwide.

What does "carbon neutral" mean?

Being carbon neutral means that FW Thorpe offsets the carbon dioxide emissions it generates (scopes 1 and 2 of the Greenhouse Gas Protocol) by its business activities.

Scope 1

All direct emissions from the activities of an organisation, including fuel combustion on site, such as in gas boilers and in its fleet of delivery and other company-owned vehicles.

Scope 2

Indirect emissions from electricity purchased and used by the organisation. These emissions are caused during the production of the electricity that is ultimately used by the organisation.

Alignment with the UN Sustainable Development Goals

The 17 Sustainable Development Goals (SDGs) were launched in 2015 by the UN, aiming to end poverty and create a life of dignity and opportunity for all, within the boundaries of the planet. The SDGs define global sustainable development priorities and aspirations for 2030 and seek to mobilise global efforts among governments, business and civil society around a common set of targets. FW Thorpe activities align most closely with six UN SDGs, covering the themes of good health and well-being, affordable clean energy, decent work and economic growth, responsible consumption and production, and climate action.

3 — Ensure healthy lives and promote well-being for all at all ages

7 — Ensure access to affordable, reliable, sustainable and modern energy for all

8 — Promote sustained, inclusive and sustainable economic growth

11 — Sustainable cities and communities

12 — Ensure sustainable consumption and production patterns

13 — Take urgent action to combat climate change and its impacts

Our sustainability focus areas.

The link between the Group's sustainability journey and its strategic priorities related to its products, operations, business model and people is vital to the long-term success of the business.

Products (Design and Innovation)

New Products:

- Design principles – circularity focus, recycled/ renewable content
- Product lifetimes – e.g. 100,000 hours operation
- Energy efficiency
- Smart technology
- Health & Well being – e.g. Flexview product
- Minimum certification against sustainability and circularity standards – e.g. EPDs

Sourcing:

- Electronic components
- Plastics
- Metals
- Wiring
- Packaging

Supply chain:

- Determine sourcing criteria with key suppliers

Operations (Manufacturing Excellence)

"Responsible production"

Energy usage:

- Own solar generation
- Source from renewables
- Continue carbon offset programme

Waste:

- Reduce waste to landfill

Distribution:

- Hybrids/EV, shipping routes
- Packaging – type, return/reuse
- Goods in – shipping routes, air freight, packaging

External activities:

- Sales & engineering fleet – Hybrids/EV/ hydrogen
- Consider travel policy – trains, air travel
- Ability for certain staff to work at home – reduced travel
- EV charging at work using solar energy suppliers

Business Model

- New products supporting green economy – e.g. electric vehicle charging
- Existing products that support the green economy – e.g. Smart, SmartScan
- Refurbishment/reuse business – replacement light engines, upgraded controls
- Alternative financing models for customer projects

People

- Health & safety measures – ISO 45001 across the Group
- Training and development
- Employment of young people – continued support of apprenticeship scheme
- Diversity, gender pay
- Responsible wage/salary rates
- Flexible working

Products.

From an environmental point of view, the greatest impact of a luminaire is during the operating phase and, more specifically, in the amount of energy it consumes.

The Group has continued to invest in the development of energy efficient luminaires and control systems, utilising LED technology, including circuit-board design, software development, thermal modelling and optical lens design, ensuring its luminaires provide the optimum lighting performance with the best use of energy and minimal stray emissions. Utilising the most up to date and high-quality LEDs, based on criteria such as colour rendering, luminous flux and thermal stability, guarantees that Group luminaires offer exceptional quality in terms of luminous efficacy and lifetime.

New products

The Group endeavours to limit the environmental impact of its products throughout their lifetime and new product design follows an FW Thorpe Plc agreed Circular Design Strategy.

Read more about **TRT case study** on page 61

Offering increasingly energy-efficient luminaires and lighting solutions reduces energy consumption and prolongs the lifetime of all products.

Read more about **Bee Seen case study** on page 61

The Group's products have always been engineered to last and extending the life of a product allows it to remain in use for as long as possible, this may be by designing products to be physically durable or allowing the product to adapt to a user's changing needs through easy upgrade.

Read more about **Solite case study** on page 61

The Group is actively promoting retrofit solutions for existing and new customers. Utilising the bodies of existing luminaires by designing custom made gear trays to replace traditional light sources with LED realises significant benefits in terms of energy efficiency, maintenance costs and luminaire lifetime.

Read more a **Thorlux case study** on page 61

Thorlux continues to collaborate with WMG Business through a Knowledge Transfer Partnership. The focus for the project has been to assess and improve new product development processes to ensure new products become more circular in their design. To facilitate this, Thorlux has reviewed the environmental impact of certain products in terms of the amount of embodied carbon that they contain. This provides an insight into which materials have the greatest environmental impact and therefore how this knowledge can be used to design more circular products in future. To complement this, a methodology has been developed to score and compare products based on a multitude of factors that cover design, production, product life cycle and end of life scenarios. The aim is to embed these circular principles and concepts into the NPD (new product development) team through workshops and design related activities with the aim of launching more circular products.

The aim is for certain newly developed luminaires to have an environmental product declaration (EPD); a material declaration that shows the types of materials included in the product.

Supply chain

The Group is committed to its Supplier Code of Conduct to ensure an ethical and sustainable supply chain and is working with suppliers to embed sustainable practices.

The FW Thorpe Plc supply chain comprises approximately one hundred mainline suppliers. These companies are based throughout the world and vary considerably, both in terms of size and amount spent with them. All the product suppliers are subject to an approvals process before they are permitted to supply products. Many hold international quality standards and accreditations and are regularly audited to ensure ongoing compliance with quality standards and other regulatory requirements. In addition, the Group has approximately five hundred non-product suppliers, who are predominantly based in Europe. These suppliers are subject to the same due diligence processes as the product suppliers.

Sourcing

Sustainable sourcing, including social, ethical and environmental performance factors, is integrated into the Group's practices and procurement decisions. All materials used in manufacture comply with the directive on Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS). The choice of material has a significant environmental impact throughout the luminaire's lifetime, so the Group is working to increase the use of sustainable materials to reduce this impact. As the Group begins to embed the principles of the Circular Economy into its business, one of the first initiatives is to reduce the amount of packaging waste generated by the business. Improved planning will allow Group companies to successfully manage inventory, reduce excess, consolidate deliveries and eliminate the purchase of unnecessary items, all of which will reduce the amount of supplier delivered waste. The recycled content of all raw materials is being established and increased wherever possible.

Sustainability in action:

The TRT Nano has been designed to use as few components as possible to deliver the company's most energy efficient luminaire to date. The interchangeable and upgradable LED module and control gear enable re-use and repair and materials have been used that are easily recovered and recycled at end of life.

Sustainability in action:

Portland Lighting - the aluminium post extrusion of the BEE SEEN zebra crossing lamppost is able to sleeve over older existing 76mm lamp post columns extending their sustainable lifetime use.

Sustainability in action:

Solite recently supplied 700 geartrays and 280 complete fittings to a project in Ireland under their "Relight" programme.

Sustainability in action:

Thorlux has designed and supplied LED gear trays for existing fluorescent luminaires at a local authority customer, eliminating the expense, inconvenience and waste of replacing the entire luminaire.

Sustainability in action:

At Famostar all plastics will be changing from virgin plastics to biobased plastics, this is a climate-neutral polycarbonate made from biomass feedstock. The material is ISCC+ certified and uses no fossil feedstock resulting in a significant CO_2 reduction.

Operations.

Energy Usage

The Group has been officially recognised as being carbon neutral, with systems of reduction, measurement and certified offsetting in place, since 2012. To date the Group has planted 165,687 trees on its own land in Wales offsetting over 41,000 tonnes of CO_2. A further 15,000 trees will be planted by the end of 2023.

The Group has installed solar PV units on the roofs of the majority of its UK manufacturing facilities, as well as at Lightronics in the Netherlands and Zemper in Spain. The scheme will be extended at Zemper and implemented at Famostar during 2022/23.

The majority of the Group's electricity usage is from renewable sources.

All Group companies are certified to the international standards ISO 14001 (Environmental Management Systems) and ISO 9001 (Quality Management Systems).

Waste

All Group companies are required to meet ambitious targets to reduce waste to landfill through the economical use of resources and recycling of materials.

Group companies will target zero plastic bag and zero bubble wrap usage.

Distribution

Systems are being successfully introduced which lend themselves to the implementation of returnable and reusable packaging, including a customer packaging recycling scheme. All finished goods packaging is to be supplied from Forest Stewardship Council (FSC) or equivalent sources. Group companies will offer a return or reuse service for product packaging.

External Activities

A proactive policy is in place to increase the use of either hybrid or full electric vehicles (EVs).

Sustainability in action:

Famostar is removing all waste bins at the workplaces and desks and installing waste collection points at central points around the business premises.

Sustainability in action:

47% of the Thorlux fleet are electric or hybrid. All new Famostar lease contracts are for fully electric vehicles.

Key figures (excluding Zemper):

756,733
kWh of electricity is produced per annum from solar panels

220.54
tonnes CO_2e avoided per annum by the use of solar panels

25
year projection of 18,918,313 kWh of electricity produced from solar panels

25
year projection of 5,513.49 tonnes CO_2e avoided by the use of solar panels

Environment

Greenhouse gas emissions

The table below shows the Group's greenhouse gas emissions for the year ended 30 June 2022.

	Tonnes of CO_2e equivalent	
	2022	**2021**
Scope 1: Direct emissions from own operations*	964	1,011
Scope 1: Transport*	936	617
Scope 1: Total	1,900	1,628
Scope 2: Indirect emissions from purchased energy (mainly electricity)	425	553
Total Scope 1 and Scope 2 emissions	2,325	2,181
Intensity metric: tonnes of CO_2 per £1m of revenue	16.18	18.50

* 2021 restated to separate out transport from own vehicles.

The methodology used to calculate our emissions is based on current government published conversion factors. In the UK these are 2021 factors for July to December emissions and 2022 factors for January to June emissions.

The Group is committed to minimising the environmental impact of both its manufacturing processes and its products. To achieve this aim, in 2009 an ambitious carbon-offsetting scheme was launched to help compensate for these emissions and since then 165,687 trees have been planted. Further information may be found on the corporate website www.fwthorpe.co.uk/carbon-offsetting.

Global Energy Use

The table below shows the Group's energy use for the year.

	UK kWh	Rest of world kWh	Total kWh
2022			
Electricity	2,687,096	1,254,682	3,941,778
Gas	4,549,437	424,942	4,974,379
Total	7,236,533	1,679,624	8,916,157
2021			
Electricity	2,449,670	385,496	2,835,166
Gas	4,557,575	37,508	4,595,083
Total	7,007,245	423,004	7,430,249

People.

Safety

All Group companies are certified to the international standard ISO 45001 (Occupational Health and Safety Management Systems) or equivalent.

The Group is committed to developing a safe and healthy working environment for all employees consistent with the requirements of the Health and Safety at Work Act. Within the constraints of health and safety, disabled people are given full and fair consideration for job vacancies. Depending on their skills and abilities, disabled people enjoy the same career prospects as other employees, and if employees become disabled every effort is made to ensure their continued employment, with appropriate training where necessary.

Training and Development

The Group offers skill and personal development to all employees and continues to support its apprenticeship scheme. A number of senior managers and Directors within the Group are former apprentices.

The Group continues to work with Warwick Business School to develop our leaders of the future.

Employee Engagement and Diversity

Employees are kept informed of matters of concern to them as employees by publication and distribution of a company newsletter and other notices, or by specially convened meetings. Committees representing the different groups of employees meet regularly to ensure the views of employees are considered in making decisions that are likely to affect their interests.

The Group aims to improve the work-life balance by continuing to offer flexible work time models.

The Group offers a fully funded Employee Assistance Programme (EAP) and 24/7 GP video helpline that make available the support and resources needed to address any personal challenges and/or concerns that may affect well-being and/or work performance. The EAP is confidential and free to all employees as well as their eligible family members.

The Group is committed to the highest standards of openness, probity and accountability. The Whistleblowing Policy is intended to assist individuals who believe they have discovered malpractice or impropriety and to offer protection to those employees of the Group who disclose such concerns.

Employees are encouraged to share ideas and solutions through Group suggestion schemes to encourage sustainable development. A bi-annual Group sustainability newsletter is distributed to all employees with updates of company environmental initiatives and the FW Thorpe Sustainability Working Group has been set up to share, discuss, learn and circulate ideas on sustainability topics.

The Group pays employees above minimum wage rates as well as an additional annual profit share bonus for all those who meet eligibility criteria as well as access to a pension scheme with a contribution from the respective Group company.

The Group supports equal opportunity regardless of gender, age, religion, ethnic origin or sexual orientation.

The Group's Modern Slavery Act disclosure is published on the corporate website (www.fwthorpe.co.uk) in the company documents section.

During the year the Group gave £23,153 (2021: £22,992) for charitable purposes. This is made up of donations to charities of £7,942, and local causes of £15,211.

Image:
'Supplier Day' event at Thorlux HQ, Redditch

Image:
Thorlux donates equipment to local community organisation, 'Keep Redditch Tidy'

Business model.

27
Number of charities supported
+17% (2021)

17
Number of apprentices
No % change (2021)

Governance

Sustainable management and social responsibility are at the core of Group Governance. The Board and Group management is responsible for determining the strategic direction of sustainability initiatives and the governance and monitoring of sustainable working methods.

The company's shares are traded on the Alternative Investment Market (AIM) of the London Stock Exchange Plc. Previously the company was not required to comply with the Principles of Good Governance and Code of Best Practice ("The UK Corporate Governance Code", or the "Code"). Following a change to the AIM rules in 2018, from 28 September 2018, the company adopted the Quoted Companies Alliance's "Corporate Governance Guidelines for Smaller Quoted Companies" (the QCA Code) which the Board believes appropriate due to the size and complexity of the company.

It is Group policy to conduct all its business in an honest and ethical manner. The Group takes a zero-tolerance approach to bribery and corruption and is committed to acting professionally, fairly and with integrity in all business dealings and relationships wherever it operates.

A number of small-scale projects have been funded directly or indirectly by FW Thorpe, enabling the customer to benefit from energy savings immediately as well as lowering their carbon emissions.

£23,153
Charitable donations
+1% (2021)

Sustainability in action:

Thorlux launched the next generation of the SmartScan wireless lighting management system in 2022. The system combines maintained illuminance, daylight dimming and presence detection which maximises energy savings, in some instances in excess of 70%. Even during the short winter days, there can be sufficient daylight for the luminaires to dim, providing energy savings throughout the year.

Sustainability in action:

FW Thorpe invested in Ratio Electric BV in December 2021, one of Ratio's core markets is electric vehicle charging products. We will introduce these products to the UK market as well as to develop products collaboratively for all markets.

Carbon neutral to net zero.

Having achieved carbon neutral status for our manufacturing and sales operations, via our offsetting project, we continue to expand measurement into others areas of our activities and target further carbon reductions as part of our overall journey to Net Zero.

Upstream activities

A

Emissions from purchased goods and services

Scope 3

- Purchased goods and services
- Capital goods
- Transportation & distribution
- Business travel
- Leased assets

Emissions from purchased energy

Scope 2

- Purchased electricity, steam, heating & cooling for own use

Reporting company

Emissions from FW Thorpe manufacturing & operations

Scope 1

- Company facilities
- Company Vehicles

Downstream activities

B

Emissions from our goods and services in use

Scope 3

- Transportation & distribution
- Processing of sold products
- Use of sold products
- End-of-life treatment of sold products
- Leased assets

The Greenhouse Gas Protocol Corporate Standard classifies a company's GHG (Greenhouse Gas) emissions into three 'scopes':

- Scope 1 emissions: direct emissions from owned or controlled sources.
- Scope 2 emissions: indirect emissions from the generation of purchased energy.
- Scope 3 emissions: all indirect emissions (not included in Scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.

Having achieved carbon neutral status by offsetting our Scope 1 and 2 emissions, the Group now strives to implement an ambitious Net Zero plan. Before we can do this, we need to measure where we are starting from. The Group has collated data on Scope 1 and 2 emissions for many years to support our tree planting carbon offset scheme.

As Scope 3 emissions typically account for a high percentage of a company's carbon footprint, it is crucial that the Group tackles Scope 3 emissions to meet the aims of the Paris Agreement and play our part in limiting global warming to 1.5°C.

FW Thorpe Plc has set out its ambition to be a net zero company as soon as possible. To this end the Group is currently measuring and evaluating its Scope 3 carbon emissions and will set science-based targets, aligned to the Paris Agreement, to further reduce its carbon footprint. There are 15 categories of scope 3 emissions, ranging from upstream categories such as purchased goods and employee commuting, to downstream categories such as outsourced transportation and distribution, and the use of sold products. The greatest contribution to decarbonise the Group's value chain is to reduce emissions in the use phase of all products and by engaging with the supply chain.

Measuring our Scope 3 emissions at use phase is challenging. We provide a variety of products that have different applications, for example we can provide high powered fittings to a 24-7 operation and lower powered fittings to a school that only operates 2,800 hours per annum. With our SmartScan system, the operating hours and power levels are dramatically reduced. We also have emergency lighting products that consume very little electricity but use battery technology which has its own footprint considerations. We are developing a forecasting tool for each business in the Group using certain assumptions and typical product lifetimes.

As our products consume electricity they have a significant impact on our Scope 3 emissions. The core focus areas will be increasing the energy efficiency of our products benefiting both our customers and reducing those emissions, continuing to promote SmartScan technology to reduce energy usage, as well as working with key suppliers to understand how we can reduce the carbon element of certain components. The Group is currently investigating carbon insetting projects, working with existing partners to help them lower their emissions by investing in carbon reduction projects. In contrast to a carbon offset project, emissions are avoided, reduced or sequestered upstream or downstream within the Group's own value chain. Part of our Net Zero plan will ultimately be determined by the governments in the respective territories that we sell into meeting their commitments in terms of clean energy provision, for the UK this is 2035.

The Group expects to publish Scope 3 data next year, once we have a clearer picture of its constituent parts and our ability to influence the reduction of these emissions.

Sustainability in action:

Visio uses the very latest LED technology and when combined with the highly efficient optics produces a system efficacy of over 179 luminaire lumens per circuit watt, making Visio one of the most efficient luminaires in the Thorlux range.

See page 52 for further details

TCFD.

Reporting for Task Force on Climate-Related Financial Disclosures

The FCA introduced requirements for premium-listed companies to report against the Task Force on Climate related Disclosures (TCFD) framework on a comply or explain basis for years starting on or after 1 January 2021. TCFD is a reporting framework that consists of a list of recommendations for companies to consider, with the aim to improve and increase the reporting of climate-related financial information.

This does not apply to FW Thorpe until 2023, however, in preparation for its introduction and as the Group transitions on its sustainability journey from carbon neutral to net zero, it is important to understand and assess the climate-related risk to our business. This year we report for the first time on the four thematic areas set out in the TCFD's recommendations: strategy, governance, risk management, metrics and targets.

Strategy

Summary of disclosure

Disclosure of the actual and potential impacts of climate-related risks and opportunities on the business where such information is material.

The Group will assess the materiality and prioritise climate related risks and opportunities in terms of the potential financial impact.

Climate scenarios will need to be selected to assess the potential future impact.

To assess the climate risks, climate projections will need to be utilised. These risks will need to be applied to our value chain including manufacturing operations and supply chains.

The financial impact will need to be quantified.

Governance

Summary of disclosure

Disclosure of the Group's governance around climate related risk and opportunities.

The Chairman and Joint Chief Executive has overall responsibility for the management of climate-related risks and opportunities.

The executive directors are accountable for the day to day management of climate change guided by the Board.

Sustainability targets are set each year for Group companies to achieve.

The Board will continue to be engaged on a range of sustainability topics to further develop their climate-related expertise.

Risk

Summary of disclosure

Disclosure of how FW Thorpe identifies, assesses, and manages climate-related risks .

The Board evaluates the risks within the business. The Group as a manufacturer of energy consuming products has an impact on the environment in terms of its operations and its products in use.

Climate and the sustainability has been added as a Principal Risk. Details of our principal risks are set out on pages 69 to 71.

Further development of the Group's approach to climate change risk management building on the Group's evolving understanding of materiality, time horizons and approach to risk.

Metrics and Targets

Summary of disclosure

Disclosure of the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

Our Scope 1 and 2 GHG emissions are disclosed on page 63, these have been offset since 2012 with the Group's tree planting initiative established in 2009.

Scope 3 GHG emissions will be disclosed in the future once the Group is clear on the impact on this number by the calculation of products in use.

The Group will continue to decrease its total GHG by reducing the impact of its operations and improving energy efficiency of its products as well as continuing to promote energy saving controls.

The Group aims to grow its revenues from climate-related product solutions through energy efficiency and products supported the use of electric vehicles, chargers and cables.

Principal risks and uncertainties.

Risk management process

The Board is responsible for the identification and effective management of risks posed to the Group. Due to the impact certain risks could pose, the Board regularly reviews the likelihood of risks occurring and the potential impact they could have on the business. Detailed below is a list of the principal risks facing the business, and the corresponding actions the Board is currently taking in order to manage them.

The Board
Strategic risk assessment at Executive level

▼

Principal Risks
Strategic | Operational | Financial

▲

Group Companies
Risk assessment at an individual company level

Area of risk	Type of risk	Description of risk	Mitigation of risk	Possible impact on performance	Strategic priorities impacted upon	Change in period
A **Adverse economic conditions**	Strategic Financial	Deferred or reduced capital investment plans in market sectors, which our products are supplied into and are key sources of revenue for the Group Impact of Ukraine conflict on domestic and global economies	• Broad range of customers in differing sectors • High quality, technically advanced products to differentiate the Group from competitors • Actively seek to identify new opportunities to ensure we maximise our potential of winning new business	High	1 2 4	▲

STRATEGIC PRIORITIES KEY

1. Focus on high quality products and good leadership in technology
2. Continue to grow the customer base for Group companies
3. Focus on manufacturing excellence
4. Continue to develop high-quality people

RISKS KEY

- ▲ Increase in risk
- ▶ No change in risk
- ▼ Decrease in risk

Principal risks and uncertainties. continued

Area of risk	Type of risk	Description of risk	Mitigation of risk	Possible impact on performance	Strategic priorities impacted upon	Change in period
B **Changes in government legislation or policy**	Strategic	Reduction in public sector expenditure and changing policy increases risk to our order book Increased complexity of access to EU markets	• Continue to seek to diversify our customer portfolio to ensure we have an appropriate spread, mitigating the risk of any industry or specific sector spending issues • Develop sales in new markets	Medium	2, 4	▶
C **Competitive environment**	Strategic Financial	Existing competitors, powerful new entrants and continued evolution of technologies in the lighting industry eroding our revenue and profitability	• Offering innovative products and service solutions that are technologically advanced products to enable us to differentiate ourselves from our competitors • Investing in research and development activities to produce new and evolving product ranges • Investing in new production equipment to ensure we can keep costs low and maintain barriers to new market entrants	Medium	1, 2, 3, 4	▶
D **Price changes**	Financial	Erosion of revenue and profitability	• Management reviews prices, at least annually, to take into account fluctuations in costs, in order to minimise the risk of reduction in gross margin, or the loss of market share from a lack of competitiveness	High	1, 2	▲
E **Business continuity**	Operational	The majority of the Group's revenues are from products manufactured in the Redditch facility	• High level of importance attached to environmental management systems, health and safety and preventative maintenance • Insurance cover is maintained to provide financial protection where appropriate • Increased production flexibility with the ability to build products in more than one manufacturing facility	High	2, 3	▶
F **Credit risk**	Financial	The Group offers credit terms which carry risk of slow payment and default	• Credit policy includes an assessment of the bad debt risk and management of higher risk customers • The Group maintains a credit insurance policy for a significant proportion of its debtors	Low	2	▶

Area of risk	Type of risk	Description of risk	Mitigation of risk	Possible impact on performance	Strategic priorities impacted upon	Change in period
G **Movements in currency exchange**	Financial	The Group is exposed to transaction and translation risks. With some natural hedging in EUR this risk is primarily with changes in the GBP:USD rates	• The Group has increased its sourcing of materials to maintain a natural hedge to offset its currency risk from EUR receivables, whilst at the same time buying EUR and USD when the exchange rate is favourable, compared to our operational rates, to minimise the risk	Low	2	No change in risk
H **Cyber security**	Operational	A breach of IT security could result in the inability to operate systems effectively and efficiently or the release of inappropriate information	• Continual review and monitoring of potential risks • Computers encrypted where necessary to protect data • Cyber security awareness training for employees ongoing	Medium	1, 3, 4	No change in risk
I **Exit from the European Union**	Strategic	Increased complexity of access to EU markets, customers in certain EU territories actively moving business from UK companies	• With the Group having a manufacturing presence in two EU countries, the Netherlands and Spain, this leaves us ideally placed to react to any negative trade barriers that may be imposed on the UK • Continue to develop closer working relationship with these entities, sharing product development, market knowledge and operational expertise to ensure we have the flexibility to adapt to any changes in the future • Creation of legal entity in Republic of Ireland to route all EU business in the future to ease the process of customers trading with us	Medium	2, 4	No change in risk
J **Impact of Ukraine conflict on domestic and global economies**	Operational	Potential impact on supply chains including increase in certain raw material prices and disruption to some shipping routes. Impact of energy supply price increases	• Alternative sources for certain materials and alternative shipping routes, albeit with higher costs in some circumstances • Electricity usage has been reduced with implementation of solar panels at the majority of manufacturing sites across the Group	Medium	2, 3	Increase in risk

STRATEGIC PRIORITIES KEY

1 Focus on high quality products and good leadership in technology

2 Continue to grow the customer base for Group companies

3 Focus on manufacturing excellence

4 Continue to develop high-quality people

RISKS KEY

▲ Increase in risk

▶ No change in risk

▼ Decrease in risk

Image: Ordnance Survey Head Office, Southampton

Governance Report.

Board of directors.

Mike Allcock

Chairman, Joint Group Chief Executive

Appointment/Background:

Mike joined FW Thorpe Plc in 1984 as an apprentice working his way to Technical Director for Thorlux Lighting in 1998, taking responsibility for the Company's design programme. He was appointed Group Technical Director in 2001 and became Managing Director of Thorlux Lighting in 2003. Mike is a Chartered Electrical Engineer and a Fellow of the Institution of Engineering and Technology. He is passionate about developing innovative, high technology, market leading products. He became Joint Group Chief Executive of FW Thorpe in 2010 and Chairman in July 2017.

Key Areas of Expertise/ Responsibility:

Lighting & Controls Technology, Product Design/Management, Industry Knowledge, Marketing, Strategy

Craig Muncaster

Joint Group Chief Executive, Group Financial Director and Company Secretary

Appointment/Background:

After graduating in Business Administration, Craig qualified as a Chartered Management Accountant in 2000. He has spent time in the manufacturing and engineering sectors, previously as UK Financial Director for Durr, which included a number of overseas ventures and projects for the wider Group. He joined FW Thorpe in 2010 and was appointed Joint Group Chief Executive in July 2017.

Key Areas of Expertise/ Responsibility:

Financial Management, Commercial/Legal Risk, Investor Relations, Mergers & Acquisitions, Company Secretarial

James Thorpe

Business Development Director, Thorlux Lighting

Appointment/Background:

James graduated from Swansea University with a BSc in 2000. He spent 13 years in the IT industry, involved in a variety of public and private sector contracts before joining FW Thorpe in 2013. During his time as Business Development Manager at Thorlux, he has been responsible for securing a number of high profile projects which have contributed to the growth of revenue derived from the healthcare sector. James is the great grandson of the Company founder and was appointed as a director in July 2017.

Key Areas of Expertise/ Responsibility:

Sales & Marketing, Business Development, Digital Marketing

David Taylor

Managing Director, Philip Payne

Appointment/Background:

David joined FW Thorpe in 1978 and on completion of a commercial apprenticeship leading to an HNC in Business Studies he worked in various roles at Thorlux Lighting and elsewhere within the Group. In 1996, he became Managing Director of Philip Payne Limited.

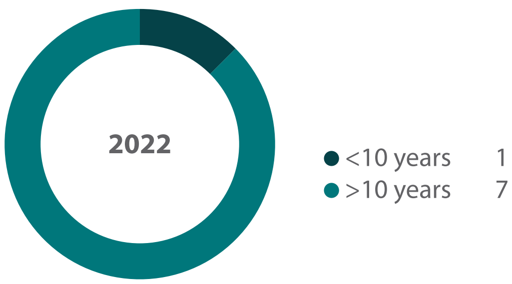
Key Areas of Expertise/ Responsibility:

Manufacturing, Business Management, Financial Management, Industry Knowledge

Committee key

(R) Remuneration Committee

Tenure



Andrew Thorpe

Non-Executive Director

Appointment/Background:

Andrew is the grandson of the Company founder, Frederick William Thorpe. After serving an apprenticeship with the Company, he has worked in various parts of the business, leading to the positions of Export Sales Director, Manufacturing Director and then Managing Director of Thorlux Lighting. In 2000, he became Joint Group Chief Executive and in 2003 Group Chairman, positions he held until July 2017. In July 2019 Andrew became a non-executive director and member of the remuneration committee.

Key Areas of Expertise/ Responsibility:

R

Manufacturing, Product Design/ Management, Sales & Marketing, Industry Knowledge, Strategy, Governance

Peter Mason

Non-Executive Director

Appointment/Background:

After studying Electrical Engineering at Aberdeen University, Peter qualified as a Chartered Accountant with Price Waterhouse in 1976. He spent time with Planet Group and TI Group before joining FW Thorpe in 1987 as Finance Director. He became Joint Chief Executive in July 2000. In June 2010 he became a non-executive director and Chairman of the remuneration committee following the appointment of his successor.

Key Areas of Expertise/ Responsibility:

R

Financial Management, Governance, Company Secretarial, Industry Knowledge

Ian Thorpe

Non-Executive Director

Appointment/Background:

Ian, grandson of the Company founder, was Manufacturing Director of Thorlux Lighting from 1978 until 1993 when he became Personnel Director. He became a non-executive director on 1 October 1997 and is a member of the remuneration committee.

Key Areas of Expertise/ Responsibility:

R

Manufacturing, Human Resources, Governance, Industry Knowledge

Tony Cooper

Non-Executive Director

Appointment/Background:

Tony graduated from Loughborough University with a B.Tech in Production Engineering and Management in 1984 and became a Chartered Engineer in 1988. He worked in various manufacturing industries, including Mars Electronics and Thomas & Betts, before joining Thorlux Lighting as Manufacturing Director in 1998. Tony became a non-executive director in April 2020.

Key Areas of Expertise/ Responsibility:

Manufacturing, Business Management, Industry Knowledge, Project Management

Independent Auditors

PricewaterhouseCoopers LLP
Central Business Exchange
Midsummer Boulevard
Central Milton Keynes
MK9 2DF

Bankers

Lloyds
Church Green East
Redditch
Worcestershire
B98 8BZ

Solicitors

Keystone Law
48 Chancery Lane
London
WC2A 1JF

Pinsent Masons LLP
19 Cornwall Street
Birmingham
B3 2FF

Nominated Adviser

N+1 Singer
12 Smithfield Street
London
EC1A 9BD

Registrars

Equiniti
Aspect House
Spencer Road
Lancing
BN99 6DA

Registered Office

Merse Road
North Moons Moat
Redditch
Worcestershire
B98 9HH

Registered No

FW Thorpe Plc is registered in England and Wales No. 317886

Directors' report.

The directors present their Directors' report with the audited consolidated financial statements of the Group and the Company for the financial year ended 30 June 2022.

Principal activity

The main activity of the Group continues to be the design, manufacture and supply of professional lighting equipment. Each company within the Group operates in a different market of the lighting sector.

Business review

The trading results for the year are set out in the Consolidated Income Statement on page 96 and the Group's financial position at the end of the year is set out in the Consolidated and Company Statements of Financial Position on page 98. A review of the performance of the business during the financial year and expected future developments are contained in the Chairman's Statement, the Operational Performance section and the Financial Performance section which form part of the Strategic Report.

Key performance indicators

The directors consider the main financial key performance indicators (KPIs) to be those disclosed on page 40 (financial highlights). The two most important KPIs to the business are revenue and operating profit.

The directors monitor non-financial areas of the business relating to energy saving and environmental responsibility, market and product development, customer service and product support on a regular basis.

Objectives are set for each company within the Group incorporating financial and non-financial targets which have appropriate measurements that reflect their nature. These are monitored regularly at local and Group Board level. During the year a number of objectives were achieved.

Principal risks and uncertainties

The table on pages 69 to 71 details what we consider to be the principal risks and uncertainties to the business, and how we seek to manage and mitigate these risks.

The Group has financial risks and seeks to minimise and manage these by incorporating controls into key functions as part of the normal business operation.

Details of other risk management procedures are included within the internal control section of this report and in the financial risk section within the accounting policies (note 1).

Internal control

The Board of directors has overall responsibility for the system of internal control and for reviewing its effectiveness throughout the Group. The internal control systems are designed to meet the Group's particular needs and the risks to which it is exposed, and by their nature can only provide reasonable but not absolute assurance against misstatement or loss.

The directors have responsibility for maintaining a system of internal control which provides reasonable assurance of the effective and efficient operations, internal financial control and compliance with laws and regulations.

Other areas of control

During the year and continuing after the year end, the Board has operated a formal risk identification and evaluation process as part of a continuous review of the Group's internal controls. This process considers financial, operational and compliance risks and includes participation from senior executives from all operating subsidiaries. The results of this process to date have been utilised by the Board to focus the ongoing process for identifying, evaluating and managing the Group's significant risks. The programme is utilised to monitor the potential impact of the risks identified and, where appropriate, actions are taken to ensure they are effectively controlled. This process is extended to include a detailed review of risk, as assessed by local senior executives, and procedures have been established to ensure that the Group Board is made aware of any additional significant risks identified and to consider appropriate action. This process culminated in the provision of a certificate, by senior executives at the operating sites, confirming that they have identified and addressed the risks arising in their business and reported them to the Group Board accordingly.

Proposed dividend

Details of the proposed dividend are disclosed in the Financial Performance section on page 54.

Directors

The directors of the Company during the year and at the date of this report are set out on pages 74 and 75.

The directors retiring by rotation are I A Thorpe, A B Thorpe and J E Thorpe, who, being eligible, offer themselves for re-election. J E Thorpe has service contract terminable on 12 months' notice.

Directors' share interests

The details of the directors' share interests are set out in the directors' remuneration report on page 85.

Directors' indemnities

As permitted by the Articles of Association, the directors have the benefit of an indemnity which is a qualifying third party indemnity provision as defined by section 234 of the Companies Act 2006. The indemnity was in force throughout the last financial year and is currently in force. The Company also purchased and maintained throughout the financial year directors' and officers' liability insurance in respect of itself and its directors.

Board constitution

The Company continues to be proprietorial in nature and the directors act as a unitary Board and as a consequence are unable to see the benefits of splitting the Board into sub-committees and in particular of constituting audit and nomination committees as matters that would normally be considered by an audit or nomination committee are addressed by the full Board with the non-executive directors present and the auditors attending as appropriate.

A remuneration committee has been established with the following people serving on it:

P D Mason
Non-executive director and Chairman of the committee.

A B Thorpe
Non-executive director.

I A Thorpe
Non-executive director.

Terms and conditions for the operation of this committee are in place and it meets as and when required. The committee's report is presented on pages 83 to 86.

Where there is a requirement for a senior personnel or subsidiary board appointment a sub-committee is formed. Any appointment to the Group Board would involve all Board members in the selection process.

The Board meets regularly during the year and has a schedule of matters reserved for its approval, which only the Board may change.

Substantial shareholdings

At 11 October 2022, the Company had received notification of the following interests in 3% or more of the issued share capital, excluding holdings of directors:

Liontrust Investment Partners LLP
7,113,454 (6.0%%)

Estate of C M Brangwin
7,271,550 (6.2%)

Relations with shareholders

Directors are kept informed of the views of shareholders by face-to-face contact at the Company's premises on the day of the Annual General Meeting where possible and, if appropriate, by meeting with major shareholders at other times during the year. See Notice of Meeting – AGM 2022.

Directors' authority to issue shares

In previous years, at the Annual General Meeting, shareholders have been asked to pass resolutions to authorise the directors to allot shares for cash or to grant rights to subscribe for, or to convert any security into, shares in the Company and to allow them to do so (and also to sell treasury shares) in certain circumstances without first offering the shares in question to existing shareholders.

As the directors have no intention of exercising these authorities, there will be no resolution to grant these powers at the forthcoming Annual General Meeting.

This will not, however, prevent shares from being allotted or treasury shares being sold to individuals who exercise options under any share option scheme of the Company.

Purchase of own shares

Resolution number 8 set out in the notice of the Annual General Meeting will, if it is approved, allow the Company to exercise the authority contained in the Articles of Association to purchase its own shares. The Board has no firm intention that the Company should make purchases of its own shares if the proposed authority becomes effective, but would like to be able to act quickly if circumstances arise in which such a purchase would be desirable.

Purchases will only be made on the Alternative Investment Market and only in circumstances where the directors believe that they are in the best interests of the shareholders generally. Furthermore, purchases will only be made if the directors believe that they would result in an increase in earnings per share.

The proposed authority will be limited by the terms of the special resolution to the purchase of 11,893,559 ordinary shares representing 10% of the Company's issued ordinary share capital at 11 October 2022 and a nominal value of £118,936.

The minimum price per ordinary share payable by the Company (exclusive of expenses) will be 1p. The maximum to be paid will be an amount not more than 5% above the average of the middle market quotations for ordinary shares of the Company as derived from the Alternative Investment Market on the five business days immediately preceding the date of each purchase. The Company may either cancel any shares which it purchases under this authority or transfer them into treasury, and subsequently sell or transfer them out of treasury or cancel them. The maximum number of shares and the permitted price range are stated in order to comply with statutory and Stock Exchange requirements and should not be taken as representative of the number of shares (if any) which may be purchased, or the terms of such a purchase.

The authority will lapse on the date of the Annual General Meeting of the Company in 2023. However, in order to maintain the Board's flexibility of action it is envisaged that it will be renewed at future Annual General Meetings.

Corporate governance

The Company's shares are traded on the Alternative Investment Market (AIM) of the London Stock Exchange Plc. Previously the Company was not required to comply with the Principles of Good Governance and Code of Best Practice ("The UK Corporate Governance Code", or the "Code").

Following a change to the AIM rules in 2018, from 28 September 2018, the Company has adopted the Quoted Companies Alliance's "Corporate Governance Guidelines for Smaller Quoted Companies" (the QCA Code) which the Board believes is appropriate due to the size and complexity of the Company.

There are ten principles of the QCA code and the following table sets out in broad terms how we comply at this point in time.

Principle	Extent of current compliance	Commentary	Further disclosure
1 Establish a strategy and business model which promote long-term value for shareholders	Compliant	The Group's business strategy is detailed in our Annual Report & Accounts and focuses on delivering long-term growth and stability, achieved through four key strategic priorities: • Focus on high quality products and good leadership in technology • Continue to grow the customer base for Group companies • Focus on manufacturing excellence • Continue to develop high quality people	Find out more in the **Strategic Report** on pages 16 to 72 Read about our **Strategy** on pages 28 and 29 Read about our **Business model** on pages 26 and 27
2 Seek to understand and meet shareholders' needs and expectations	Compliant	Meetings are held with shareholders as required; this includes visits to our various company locations being organised and encouraged where possible. In addition, all announcements include contact details for shareholders to contact the Company if they so choose. The AGM is another forum for dialogue with our shareholders. The Notice of Meeting is sent to shareholders at least 21 days before the meeting. Any feedback during these meetings is encouraged and acted upon where appropriate.	Find out more in the **Directors' report** on page 76
3 Take into account wider stakeholder and social responsibilities and their implications for long-term success	Compliant	Feedback from employees, customers, suppliers and other stakeholders is actively encouraged. Our employees are an important stakeholder group and we actively encourage dialogue with the Company via various employee committees within our companies. Reports from these meetings are distributed to the Board.	Find out more in the **Strategic Report** on pages 16 to 72 and in our **Sustainability section** on pages 58 to 68

Principle	Extent of current compliance	Commentary	Further disclosure
4 Embed effective risk management, considering both opportunities and threats, throughout the organisation	Compliant	The Board operates a continuous risk identification and evaluation process. The results are utilised by the Board to manage any significant risks. In addition, the executive directors regularly visit all operating sites and review financial and commercial issues with an executive director responsible for each individual company. The Board has overall responsibility for the system of internal control and for reviewing its effectiveness throughout the Group. Internal financial control is driven by Group finance who visit each company to assess compliance against key controls. This includes regular financial reporting that is compared against plan and previous year's performance.	Find out more about our **Principal risk and uncertainties** on pages 69 to 71 and in the **Directors' report** on page 76
5 Maintain the Board as a well-functioning, balanced team led by the Chair	Partially Compliant	Total of eight directors, four executive directors and four non-executive directors. The non-executives are not considered fully independent. The Board considers that the non-executive directors are appropriate as they bring significant experience and expertise in the sector. In addition, as the directors retire on a three-year rotation, shareholders have a regular opportunity to ensure that the composition of the Board is in line with their interests. There is a Remuneration Committee but no Audit Committee, with matters that would normally be tabled at an Audit Committee put to the full Board.	Find out more in **Our governance** on pages 74 to 93 Read about our **Board of directors** on pages 74 and 75 Read our **Directors' report** on pages 76 to 81
6 Ensure that between them the directors have the necessary up-to-date experience, skills and capabilities	Compliant	The current composition of the Board provides the necessary skills, experience and capabilities for the size and context of the Group. The composition and succession of the Board are subject to review, considering the future needs of the Group.	Find out more in **Our governance** on pages 74 to 93 Read about our **Board of directors** on pages 74 and 75 Read our **Directors' report** on pages 76 to 81

Principle	Extent of current compliance	Commentary	Further disclosure
7 Evaluate Board performance based on clear and relevant objectives, seeking continuous improvement	Partially Compliant	There is no formal evaluation process; however, the Chairman is responsible for Board performance and accordingly actively encourages feedback on the content and function of board meetings. The composition and succession of the Board are subject to constant review, considering the ever-changing needs of the Group. In addition, the directors retire by rotation every three years giving shareholders the opportunity to ensure that the Board is aligned with their interests.	
8 Promote a corporate culture that is based on ethical values and behaviours	Compliant	Our core aim is for long-term growth and stability. The Group management team is passionate about developing the business for the benefit of the shareholders, employees and customers. With our focus on excellence, we ensure our Group's culture is consistent with the aim of long term growth and stability. In order to achieve and maintain such a culture, we invest in training our employees, as mentioned in the Annual Report and Accounts.	Find out more in the **Strategic Report** on pages 16 to 72 Read about our **Strategy** on pages 28 and 29
9 Maintain governance structures and processes that are fit for purpose and support good decision making by the Board	Compliant	The Board as a whole is responsible for robust governance practices. The roles and responsibilities of each director are clear and responsibilities understood. The Board meets at least eight times each year, with additional meetings as required.	Find out more in the **Directors' report** on pages 76 to 81 Read about our **Board of directors** on pages 74 and 75
10 Communicate how the Company is governed and is performing by maintaining a dialogue with shareholders and other relevant stakeholders	Compliant	The Company communicates through the Annual Report and Accounts, full-year and interim announcements, the AGM and one-to-one meetings with existing or potential shareholders. A range of corporate information is also available on the Company's website. Meetings with shareholders, employee groups, management and other representative groups provide a platform for raising any concerns relating to corporate governance.	Find out more online at: www.fwthorpe.co.uk

The Board considers that the Company applies the principles of best practice with the exception of the matters listed below:

- There are no independent Board members.
- The Board does not have an independent audit committee.
- The Board does not have a nominations committee.
- There is no formal evaluation process of Board performance.

The Board believes that the exceptions, which are more fully explained in the sections relating to the Board constitution and the Directors' Remuneration Report, are appropriate for the size and context of the Group.

Statement on the provision of information to independent auditors

The auditors have direct access to all members of the Board and attend and present their reports at appropriate Board meetings. The Board considers, at least annually, the relationships and fees in place with the auditors to confirm their independence is maintained.

Independent auditors

The auditors, PricewaterhouseCoopers LLP, have expressed their willingness to continue in office and a resolution for their reappointment will be proposed at the next Annual General Meeting.

Going concern

The directors confirm they are satisfied that the Group and Company have adequate resources, with £35.5m cash and £5.1m short term deposits, to continue in business for the foreseeable future, including the affect of increased costs caused by the Ukraine and Russia conflict, where the Group has no sales, and other global events. They have also produced an analysis that demonstrates that the Group could cover its cash commitments even if there was a significant reduction in sales over the following year from approving these accounts. For this reason, they continue to adopt the going concern basis in preparing the accounts.

Approval of strategic and directors' reports

The directors confirm that the information contained within the Strategic Report on pages 16 to 72 and the Directors' Report on pages 76 to 81 is an accurate representation of the Group's strategy and performance.

By order of the Board

Craig Muncaster
Joint Chief Executive,
Group Financial Director and
Company Secretary

11 October 2022

Registered Office:
Merse Road
North Moons Moat
Redditch
Worcestershire
B98 9HH

Company Registration
Number: 317886

Statement of directors' responsibilities.

The directors are responsible for preparing the Annual Report and Accounts and the financial statements in accordance with applicable law and regulation.

Company law requires the directors to prepare financial statements for each financial year. Under that law the directors have prepared the group and the company financial statements in accordance with UK-adopted international accounting standards.

Under company law, directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the group and company and of the profit or loss of the group for that period. In preparing the financial statements, the directors are required to:

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

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

The directors are also responsible for keeping adequate accounting records that are sufficient to show and explain the Group's and Company's transactions and disclose with reasonable accuracy at any time the financial position of the group and company and enable them to ensure that the financial statements comply with the Companies Act 2006.

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

Directors' confirmations

In the case of each director in office at the date the Directors' Report is approved:

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

By order of the Board

Craig Muncaster
Joint Chief Executive, Group Financial Director and Company Secretary
11 October 2022

Directors' remuneration report.

The Board has prepared this report to the shareholders, taking into account sections 420 to 422 of the Companies Act 2006.

The Board has delegated the responsibility for the executive directors' remuneration to the Remuneration Committee. The scope of their responsibilities includes the executive directors' service contracts, salaries and other benefits, which comprise their terms and conditions of employment.

Remuneration Committee

The current members of the Remuneration Committee are the non-executive directors P D Mason (Chairman of the Committee), I A Thorpe, and A B Thorpe.

The Committee has met as and when required during the financial year. No member of the Committee has any personal financial interest in the matters to be decided other than as shareholders. There are no conflicts of interest arising from cross-directorships or day-to-day involvement in running the business. The Committee has access to market data when considering the remuneration of the executive directors.

Remuneration Policy

Executive directors

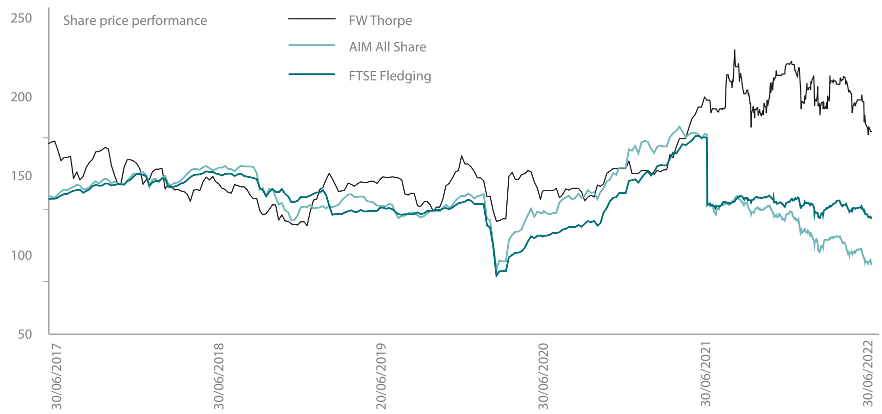
The aim of the Committee is to ensure that the executive directors are fairly rewarded for their responsibilities and contribution to the performance of the Group. The Committee seeks to achieve this with a combination of performance and non-performance related remuneration designed to attract, retain and motivate the directors.

In establishing the salaries of the directors, the Committee takes into account the responsibilities and performance of the individual together with data from comparable organisations and indicative trends for the business and its economic sector.

Performance graph

The graph below shows the comparative data for the FTSE AIM share index and the FTSE Fledgling share index, rebased to 100, as these are considered to be the most appropriate comparative indices for the Company's business.

Total shareholder return



The remuneration package consists of the following elements:

1. Basic salary, benefits in kind and other benefits. The salary is determined in July each year, unless there has been a change in responsibilities, where an adjustment will be made at the same time. The benefits in kind mainly consist of the provision of a car and health insurance. A director may choose to take a cash allowance instead of a car. Other benefits consist of pension arrangements and life assurance.
2. Annual bonus. The bonus is made up of two elements. The first element relates to the operating profit of the business unit for which the director has specific performance responsibilities. The second element relates to the operating profit of the Group as a whole. The bonuses are paid in September and relate to the period ending on 30 June in the same year.
3. Long term incentive scheme. This scheme consists of the "Executive Share Ownership Plan" (ESOP) details of which are shown on page 86.

Non-executive directors

The Board as a whole determines the remuneration of the non-executive directors. The Board takes into account the contribution made and the relative time spent on the Company's affairs. The non-executive directors do not receive bonuses. Their benefits in kind consist of the provision of health insurance.

Directors' service contracts

M Allcock has a service contract terminable on two years' notice. C Muncaster, D Taylor and J E Thorpe have service contracts terminable on one year's notice. A B Thorpe, P D Mason, I A Thorpe and A M Cooper do not have formal service contracts with the Company.

Directors' remuneration report. continued

Directors' emoluments (audited)

Executive directors	2022 Salary/ fees £'000	2022 Bonus £'000	2022 Benefits £'000	2022 Total £'000	2021 Total £'000	2022 Share options gains £'000	2021 Share options gains £'000	2022 Total £'000	2021 Total £'000
M Allcock	234	247	7	488	399	59	32	547	431
D Taylor	115	78	14	207	201	–	65	207	266
C Muncaster	261	274	7	542	437	44	24	586	461
J E Thorpe	160	241	2	403	273	–	–	403	273
Non-executive directors									
A B Thorpe	34	–	15	49	49	–	–	49	49
I A Thorpe	34	–	15	49	50	–	–	49	50
P D Mason	34	–	5	39	39	–	–	39	39
A M Cooper	38	–	2	40	36	–	231	40	267
	910	840	67	1,817	1,484	103	352	1,920	1,836

The directors' emoluments exclude contributions to the pension scheme.

Directors' pension arrangements (audited)

M Allcock is a deferred member and D Taylor a pensioner member of the defined contribution scheme of the FW Thorpe Retirement Benefits Scheme and they have a final salary guarantee as they were previously members of the defined benefit section. A M Cooper is a deferred member and J E Thorpe an active member of the defined contribution section of the FW Thorpe Retirement Benefits Scheme.

I A Thorpe, A B Thorpe and P D Mason are retired members of the defined benefit section.

The FW Thorpe Retirement Benefits Scheme is a funded, HMRC approved occupational pension scheme. The scheme is divided into two sections – a defined benefit scheme and a defined contribution scheme. The defined benefit section was closed to new members on 1 October 1995.

The defined benefit section aims to provide a maximum pension of two-thirds of pensionable salary at normal retirement date. M Allcock's and D Taylor's pensionable salary includes an average of the previous three years' profit bonus. Defined contribution members contribute up to 5% of basic salary and the Company contributes up to 17%.

M Allcock, D Taylor and A M Cooper have ceased being active members of the FW Thorpe Retirement Benefits Scheme and C Muncaster has ceased being an active member of his personal pension scheme due to HMRC limits on lifetime allowances and annual contributions. Subsequently the Company has entered into pension compensation arrangements with these four directors and J E Thorpe to compensate them for the loss of these employer pension contributions. During the financial year the Company paid pension compensation to M Allcock of £170,358 (2021: £169,410), C Muncaster £44,439 (2021: £40,790), D Taylor £19,546 (2021: £19,163) and to J E Thorpe £12,016 (2021: £10,500).

All the executive directors are covered by life assurance benefit of four times pensionable salary. In addition, the defined benefit scheme members are entitled to a spouse's pension on death.

There are no directors, excluding those classified as pensioners, having accrued entitlements under the defined benefit section of the pension scheme.

The following table shows the contributions paid by the Company in respect of those directors participating in the defined contribution section of the pension scheme.

	2022 £'000	2021 £'000
J E Thorpe	**15**	13

CEO pay ratio

FW Thorpe being a UK listed company with more than 250 employees is required to disclose annually the ratio of the CEO'S pay to the lower quartile, median and upper quartile pay of their UK employees. These details are shown in the table below.

Year	Method	25th percentile pay ratio	Median pay ratio	75th percentile pay ratio
2021–22	Option A	26:1	18:1	9:1
2020–21	Option A	23:1	14:1	8:1

Option A was chosen as it represents the most accurate means of identifying the percentiles. The comparison is based on data for the year ended 30 June 2022. The table below sets out the salary and total pay and benefits for the three quartiles.

	25th percentile pay	Median pay	75th percentile pay
Base salary	22,000	30,582	46,818
Total remuneration	28,246	42,075	84,396

Directors' shareholdings

The directors listed below were in office during the year. Directors' interests in the share capital of the Company at 30 June 2022 and 30 June 2021 were as follows:

	Ordinary shares of 1p Beneficial	
Executive directors	**2022**	2021
M Allcock	**207,500**	191,500
D Taylor	**146,896**	146,896
C Muncaster	**80,000**	65,000
J E Thorpe	**2,164,682**	2,164,682
Non-executive directors		
A B Thorpe	**25,812,700**	25,812,700
I A Thorpe	**25,047,120**	25,047,120
P D Mason	**626,370**	626,370
A M Cooper	**166,107**	178,707

The market price of the Company's shares at the beginning and end of the financial year was 440p and 380p respectively, and the range of market prices during the year was from 370p to 491p.

Directors’ remuneration report. continued

Executive share ownership plan (ESOP) (audited)

Share options were granted during 2014, under the Company’s ESOP, to the Company’s executive directors and certain directors of subsidiary companies. The plan allows the vesting of options subject to the achievement of performance targets, being annual growth of pre-tax Earnings Per Shares in excess of RPI plus 3% over a five-year period. The options that were granted to the executive directors are detailed in the table below:

	A B Thorpe	M Allcock	D Taylor	A M Cooper	C Muncaster
Date Granted	24 October 2014	24 October 2014	24 October 2014	24 October 2014	24 October 2014
Share Options	200,000	200,000	200,000	200,000	200,000
Exercise price (p)	124	124	124	124	124

	A B Thorpe	M Allcock	D Taylor	A M Cooper	C Muncaster
Number at 30 June 2021	80,000	60,000	–	–	95,000
Awarded	–	–	–	–	–
Vested	–	–	–	–	–
Exercised	–	(20,000)	–	–	(15,000)
Forfeit	–	–	–	–	–
Lapsed	–	–	–	–	–
Number at 30 June 2022	80,000	40,000	–	–	80,000

On 1 July 2022 A B Thorpe exercised his remaining 80,000 share options. Excluding this, there have been no other changes in the interests of the directors in the share capital of any Company in the Group during the period 1 July 2022 to 11 October 2022.

Approved by the Board and signed on its behalf by:

Craig Muncaster
Joint Chief Executive, Group Financial Director and Company Secretary
11 October 2022

Independent auditors' report

to the members of FW Thorpe Plc

Report on the audit of the financial statements

Opinion

In our opinion, FW Thorpe Plc's group financial statements and company financial statements (the "financial statements"):

- give a true and fair view of the state of the group's and of the company's affairs as at 30 June 2022 and of the group's profit and the group's and company's cash flows for the year then ended;
- have been properly prepared in accordance with UK-adopted international accounting standards; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements, included within the Annual Report and Accounts (the "Annual Report"), which comprise: the Consolidated and Company Statements of Financial Position as at 30 June 2022; the Consolidated Income Statement, the Consolidated Statement of Comprehensive Income, the Consolidated and Company Statements of Cash Flows, and the Consolidated and Company Statements of Changes in Equity for the year then ended; and the notes to the financial statements, which include a description of the significant accounting policies.

Basis for opinion

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

Independence

We remained independent of the group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, as applicable to other listed entities of public interest, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

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

We have provided no non-audit services to the company in the period under audit.

Our audit approach

Overview

Audit scope

- An audit was conducted of the complete financial information of the four reporting units: Thorlux Lighting (the Company, located in the UK), TRT Lighting Limited (located in the UK), Lightronics and Famostar (both located in the Netherlands).
- The audit work performed at these four reporting units (2021: three reporting units), together with specified procedures performed on Electozemper (located in Spain and France) and additional procedures performed on centralised functions at the Group level, including audit procedures over the consolidation, gave us the audit evidence we needed for our opinion on the Group financial statements as a whole.
- This provided coverage of 91% (2021: 89%) of profit before tax.

Key audit matters

- Valuation of warranty provisions (group and parent)
- Capitalisation of internal development costs (group and parent)
- Impairment considerations over intercompany receivables (parent)
- Accounting related to acquisitions of a subsidiary and a joint venture (group and parent)

Materiality

- Overall group materiality: £1,200,000 (2021: £929,000) based on 5% of profit before tax.
- Overall company materiality: £788,000 (2021: £760,000) based on 5% of profit before tax.
- Performance materiality: £900,000 (2021: £697,000) (group) and £591,000 (2021: £570,000) (company).

Independent auditors' report.

to the members of FW Thorpe Plc continued

The scope of our audit

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

Key audit matters

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

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

Accounting related to acquisitions of a subsidiary and a joint venture is a new key audit matter this year. Otherwise, the key audit matters below are consistent with last year.

Key audit matter	How our audit addressed the key audit matter
Valuation of warranty provisions (group and parent)	
Refer to critical accounting estimates and judgements in note 1 to the financial statements and note 23 Provisions for Liabilities and Charges. The Group and Company makes provisions for warranties where it is obliged to repair or replace faulty goods under the terms and conditions of sale. The typical warranty provision offered is for a period of five years, although longer periods are offered by Lightronics and Famostar on certain product lines. Amounts have been provided based on known faults at the year-end date where rectification will be due and also based on expected failure rates as applied to sales made which are within the warranty period. The valuation of the warranty provision involves judgement with respect to the expected failure rates especially when applied to new products at the start of their warranty period.	In undertaking our audit procedures: We have audited the specific provisions held at year-end by inspecting correspondence to confirm rectification is required and recalculating the provision amount based on material cost and estimated labour and installation expenditure; We have enquired with management and reviewed board minutes to ensure that no specific rectification issues have been identified which were not provided for at year-end; We have corroborated the actual failure rates against the expected failure rate used to calculate the provision, where no known rectification issues have been identified; We have reviewed and challenged the appropriateness of any other judgement used in the estimation of the provision; and We have audited the accuracy of disclosures in relation to the provision. We found the valuation of the warranty provision was consistent with the evidence obtained.
Capitalisation of internal development costs (group and parent)	
Refer to critical accounting estimates and judgements in note 1 to the financial statements and note 9 intangibles. The Group and Company undertakes development activities on new products and such internal development costs are capitalised where allowable under IAS 38 – "Intangible Assets". Judgement has been applied in considering whether the requirements for capitalising such internal development costs under IAS 38 have been met, the level and nature of costs which should be capitalised and the period over which the capitalised costs should be amortised.	In undertaking our audit procedures: We have assessed the development activities performed by the Group and Company against the criteria for capitalising internal development costs under IAS 38; We have performed testing over the amounts capitalised in the year by agreeing payroll amounts to payslips and assessing the percentage of payroll costs capitalised with respect to the employee and their role in the development of products; We have assessed the amortisation period across the Group with reference to the product launches and knowledge of the industry; and We have reviewed the accuracy of the disclosures in relation to capitalised development costs. We found that the accuracy of the capitalised development costs was consistent with the evidence obtained.

Key audit matter	How our audit addressed the key audit matter
Impairment considerations over intercompany receivables (parent)	
Refer to critical accounting estimates and judgements in note 1 to the financial statements, note 12 for Financial assets at amortised cost and note 16 for Trade and other receivables. The Company assesses the recoverability of the amounts owed from Group undertakings through assessment of each balance outstanding at the year end in line with the requirements of IFRS 9. Judgement has been applied in considering the likelihood of default and in calculating the expected settlement period for each balance. Following the impact of COVID-19 on the underlying trading in certain entities in the group in the previous two years and deteriorating performance after the return back to normal, the risk is considered to be specific to the recoverability of intercompany receivable balances within the Company.	In undertaking our audit procedures: We have audited the expected credit loss model prepared by management and ensured that it has considered a range of potential outcomes for each individual receivable balance and includes a probability weighting depending on the future underlying performance of the entities; When considering these models, we have applied sensitivity analysis to the key inputs, which include the probability of default; and We have also considered management's estimates through comparison to historical and future business performance in line with contractual terms and the financial position of each business at the year end. We found that the valuation of balances owed from Group undertakings after making impairment provisions were consistent with the evidence obtained and disclosed appropriately.
Accounting related to acquisitions of a subsidiary and a joint venture (group and parent)	
Refer to critical accounting estimates and judgements in note 1 to the financial statements, note 10 for Investments in subsidiaries, note 13 Equity accounted investments and joint arrangements and note 34 Business Combination. In October 2021, the Group acquired 63% of the share capital of Electrozemper S.A. (Zemper), an emergency lighting specialist in Spain with a commitment to purchase the remaining 37% of the share capital between the first and third year anniversaries of the acquisition, calculated by a pre-determined earnings multiple used to value the investment. Management engaged external valuers to value the assets and liabilities acquired in the acquisitions, including the identification and valuation of intangible assets. In December 2021, the Group acquired 50% in Ratio Electric B.V, a specialist in electrical power connection and distribution systems based in the Netherlands.Based on the significance of the acquisitions, critical accounting estimates and judgements involved in the identification of the consideration price, the valuation of related intangible assets acquired where relevant and valuation of the assets and liabilities that are recognised, the risk is considered to be specific to the accounting, subsequent measurement and disclosure of these acquisitions.	In undertaking our audit procedures: We have obtained and reviewed relevant contracts related to the acquisitions and evaluated management's process of identifying acquisition price and intangible assets; assessed the competence, capabilities and objectivity of management's external valuers; obtained the valuation reports and discussed with the external valuers on the methodologies and key assumptions used; involved our internal valuation experts to evaluate the methodologies used to determine the fair values of assets and liabilities recognised (including the valuation of intangible assets acquired), and benchmarked the discount rates applied to other comparable companies in the same industry; we assessed the reasonableness of key assumptions such as revenue growth rates and EBITDA applied by management by comparing them with economic and industry forecasts to assess the reasonableness of management forecasts and; we assessed the appropriateness of the related disclosures. We found that the accounting treatment in relation to the acquisitions to be appropriate.

Independent auditors' report.

to the members of FW Thorpe Plc continued

How we tailored the audit scope

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

The group financial statements are a consolidation of multiple reporting units across the UK, the Netherlands and Spain, comprising the group's operating businesses and centralised functions. These reporting units maintain their own accounting records and controls and report to the head office finance team for consolidation purposes.

In establishing the overall approach to the Group audit, we identified four reporting units, which, in our view, required an audit of their complete financial information both due to their size and risk characteristics; These are Thorlux Lighting (the Company, located in the UK), TRT Lighting Limited (located in the UK), Lightronics and Famostar (both located in the Netherlands). The Group engagement team audited Thorlux Lighting and TRT Lighting Limited whilst Lightronics and Famostar were audited by a non-PwC component audit team located in the Netherlands. Where balances in out of scope components are in excess of group performance materiality and contribute a notable proportion of a certain financial statement line item, these balances have been subject to audit procedures by the non-PwC component audit team. The audit work performed at these four reporting units (2021: three), together with specified procedures performed on Electrozemper and additional procedures performed on centralised functions at the Group level, including audit procedures over the consolidation, gave us the audit evidence we needed for our opinion on the Group financial statements as a whole. This provided coverage of 91% (2021: 89%) of profit before tax.

The work performed by the component auditors was subject to review by the Group engagement team and the work performed over areas considered to be of significant importance to the audit has fed into our key audit matters.

Materiality

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

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

	Financial statements - group	Financial statements - company
Overall materiality	£1,200,000 (2021: £929,000).	£788,000 (2021: £760,000).
How we determined it	5% of profit before tax	5% of profit before tax
Rationale for benchmark applied	Based on the benchmarks used in the annual report, profit before tax excluding the impact of exceptional items is the primary measure used by the shareholders in assessing the performance of the Group.	Based on the benchmarks used in the annual report, profit before tax excluding the impact of exceptional items is the primary measure used by the shareholders in assessing the performance of the Company.

For each component in the scope of our group audit, we allocated a materiality that is less than our overall group materiality. The range of materiality allocated across components was £260,000 to £920,000. Certain components were audited to a local statutory audit materiality that was also less than our overall group materiality.

We use performance materiality to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds overall materiality. Specifically, we use performance materiality in determining the scope of our audit and the nature and extent of our testing of account balances, classes of transactions and disclosures, for example in determining sample sizes. Our performance materiality was 75% (2021: 75%) of overall materiality, amounting to £900,000 (2021: £697,000) for the group financial statements and £591,000 (2021: £570,000) for the company financial statements.

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

We agreed with those charged with governance that we would report to them misstatements identified during our audit above £60,000 (group audit) (2021: £46,000) and £39,000 (company audit) (2021: £38,000) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

Conclusions relating to going concern

Our evaluation of the directors' assessment of the group's and the company's ability to continue to adopt the going concern basis of accounting included:

- Testing the reasonableness of the model and assessing the assumptions used in management's going concern assessment which covers the period to December 2023;
- Management's base case forecasts are based on its normal budget and forecasting process and have produced a downside model. We understood and assessed this process, including the assumptions used, for 2022 and 2023 and assessed whether there was adequate support for these assumptions; and
- We assessed the adequacy of disclosures in the Going Concern statement within the Directors' report and in note 1 of the Annual Report and found these appropriately reflect downside risks.

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

In auditing the financial statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

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

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

Reporting on other information

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

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

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

Independent auditors' report.

to the members of FW Thorpe Plc continued

Based on our work undertaken in the course of the audit, the Companies Act 2006 requires us also to report certain opinions and matters as described below.

Strategic report and Directors' report

In our opinion, based on the work undertaken in the course of the audit, the information given in the Strategic report and Directors' report for the year ended 30 June 2022 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements.

In light of the knowledge and understanding of the group and company and their environment obtained in the course of the audit, we did not identify any material misstatements in the Strategic report and Directors' report.

Responsibilities for the financial statements and the audit

Responsibilities of the directors for the financial statements

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

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

Auditors' responsibilities for the audit of the financial statements

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

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

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

- enquiry of management and those charged with governance around actual and potential litigation and claims;
- enquiry of entity staff in tax and compliance functions to identify any instances of non-compliance with laws and regulations;
- reviewing minutes of meetings of those charged with governance;
- reviewing financial statement disclosures and testing to supporting documentation to assess compliance with applicable laws and regulations;

- auditing the risk of management override of controls, including through testing journal entries and other adjustments for appropriateness, testing accounting estimates (because of the risk of management bias), and evaluating the business rationale of significant transactions outside the normal course of business;
- Reviewing component teams' key working papers for all in-scope components with a particular focus on the areas involving judgement and estimates; and
- Incorporating elements of unpredictability into our audit procedures.

There are inherent limitations in the audit procedures described above. We are less likely to become aware of instances of non-compliance with laws and regulations that are not closely related to events and transactions reflected in the financial statements. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

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

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

Use of this report

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

Other required reporting

Companies Act 2006 exception reporting

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

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

We have no exceptions to report arising from this responsibility.

Mark Foster (Senior Statutory Auditor)
for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
Milton Keynes

11 October 2022

Image: MG Showroom, Redditch

Financial Statements.

Consolidated income statement.
For the year ended 30 June 2022

	Notes	2022 £'000	2021 £'000
Continuing operations			
Revenue	2	**143,715**	117,875
Cost of sales		**(80,440)**	(62,484)
Gross profit		**63,275**	55,391
Distribution costs		**(15,501)**	(13,598)
Administrative expenses		**(23,482)**	(22,855)
Other operating income		**423**	289
Operating profit (before exceptional item)		**24,715**	19,227
Exceptional item in respect of Lightronics fire	3	**–**	1,566
Operating profit	3	**24,715**	20,793
Finance income	5	**527**	615
Finance expense	5	**(1,367)**	(1,267)
Share of profit of joint ventures	13	**228**	–
Profit before income tax		**24,103**	20,141
Income tax expense	6	**(4,030)**	(4,329)
Profit for the year		**20,073**	15,812

Earnings per share from continuing operations attributable to the equity holders of the Company during the year (expressed in pence per share)

Basic and diluted earnings per share	Notes	2022 pence	2021 pence
– Basic	7	**17.16**	13.57
– Diluted	7	**17.13**	13.52

The notes on pages 102 to 149 form part of these financial statements.

The Company has elected to take the exemption under section 408 of the Companies Act 2006 not to present the Company income statement.

Consolidated statement of comprehensive income.

For the year ended 30 June 2022

	Notes	2022 £'000	2021 £'000
Profit for the year:		**20,073**	15,812
Other comprehensive (expenses)/income			
Items that may be reclassified to profit or loss			
Exchange differences on translation of foreign operations		**(268)**	(688)
		(268)	(688)
Items that will not be reclassified to profit or loss			
Revaluation of financial assets at fair value through other comprehensive income	14	**(57)**	135
Actuarial gain on pension scheme	22	**953**	1,758
Movement on unrecognised pension scheme surplus	22	**(1,143)**	(1,940)
Taxation		**14**	(236)
		(233)	(283)
Other comprehensive expense for the year, net of tax		**(501)**	(971)
Total comprehensive income for the year		**19,572**	14,841

The notes on pages 102 to 149 form part of these financial statements.

Consolidated and company statements of financial position.

For the year ended 30 June 2022

	Notes	Group 2022 £'000	Group 2021 £'000	Company 2022 £'000	Company 2021 £'000
Assets					
Non-current assets					
Property, plant and equipment	8	**33,818**	28,251	**11,070**	11,018
Intangible assets	9	**51,865**	19,705	**3,531**	3,798
Investments in subsidiaries	10	**–**	–	**20,486**	14,581
Investment property	11	**1,984**	1,967	**9,967**	10,184
Financial assets at amortised cost	12	**1,124**	746	**31,882**	9,027
Equity accounted investments and joint arrangements	13	**6,112**	–	**–**	–
Financial assets at fair value through other comprehensive income	14	**3,470**	3,764	**3,439**	3,764
Deferred income tax assets	24	**120**	–	**–**	–
Total non-current assets		**98,493**	54,433	**80,375**	52,372
Current assets					
Inventories	15	**32,758**	20,389	**16,976**	11,528
Trade and other receivables	16	**33,018**	29,310	**24,480**	29,024
Financial assets at amortised cost	12	**1,800**	1,800	**1,800**	1,800
Short-term financial assets	17	**5,079**	23,603	**5,075**	23,603
Cash and cash equivalents	18	**35,505**	52,268	**28,221**	47,064
Total current assets		**108,160**	127,370	**76,552**	113,019
Total assets		**206,653**	181,803	**156,927**	165,391
Liabilities					
Current liabilities					
Trade and other payables	19	**(35,801)**	(39,198)	**(22,425)**	(33,142)
Financial liabilities	20	**(332)**	–	**–**	–
Lease liabilities	21	**(506)**	(226)	**–**	–
Current income tax liabilities		**(641)**	(1,040)	**–**	–
Total current liabilities		**(37,280)**	(40,464)	**(22,425)**	(33,142)
Net current assets		**70,880**	86,906	**54,127**	79,877
Non-current liabilities					
Other payables	19	**(12,880)**	(78)	**–**	–
Financial liabilities	20	**(1,830)**	–	**–**	–
Lease liabilities	21	**(2,510)**	(435)	**–**	–
Provisions for liabilities and charges	23	**(2,536)**	(2,242)	**(879)**	(706)
Deferred income tax liabilities	24	**(4,264)**	(1,591)	**(883)**	(956)
Total non-current liabilities		**(24,020)**	(4,346)	**(1,762)**	(1,662)
Total liabilities		**(61,300)**	(44,810)	**(24,187)**	(34,804)
Net assets		**145,353**	136,993	**132,740**	130,587
Equity					
Share capital	25	**1,189**	1,189	**1,189**	1,189
Share premium account	26	**2,827**	1,960	**2,827**	1,960
Capital redemption reserve	26	**137**	137	**137**	137
Foreign currency translation reserve	26	**1,808**	2,076	**–**	–
Retained earnings					
At 1 July		**131,631**	122,686	**127,301**	120,336
Profit for the year attributable to the owners		**20,073**	15,812	**13,598**	13,781
Other changes in retained earnings		**(12,312)**	(6,867)	**(12,312)**	(6,816)
		139,392	131,631	**128,587**	127,301
Total equity		**145,353**	136,993	**132,740**	130,587

The notes on pages 102 to 149 form part of these financial statements.

The financial statements on pages 96 to 101 were approved by the Board on 11 October 2022 and signed on its behalf by

Mike Allcock

Craig Muncaster

Company Registration Number: 317886

Consolidated statement of changes in equity.

For the year ended 30 June 2022

	Notes	Share capital £'000	Share premium account £'000	Capital redemption reserve £'000	Foreign currency translation reserve £'000	Retained earnings £'000	Total equity £'000
Balance at 1 July 2020		**1,189**	**1,526**	**137**	**2,764**	**122,686**	**128,302**
Comprehensive income							
Profit for the year to 30 June 2021		–	–	–	–	15,812	15,812
Actuarial gain on pension scheme	22	–	–	–	–	1,758	1,758
Movement on unrecognised pension scheme surplus	22	–	–	–	–	(1,940)	(1,940)
Revaluation of financial assets at fair value through other comprehensive income	14	–	–	–	–	135	135
Movement on associated deferred tax	24	–	–	–	–	(59)	(59)
Impact of deferred tax rate change	24	–	–	–	–	(177)	(177)
Exchange differences on translation of foreign operations		–	–	–	(688)	–	(688)
Total comprehensive income		–	–	–	(688)	15,529	14,841
Transactions with owners							
Shares issued from exercised options		–	434	–	–	–	434
Dividends paid to shareholders	27	–	–	–	–	(6,631)	(6,631)
Share-based payment charge	28	–	–	–	–	47	47
Total transactions with owners		–	434	–	–	(6,584)	(6,150)
Balance at 30 June 2021		**1,189**	**1,960**	**137**	**2,076**	**131,631**	**136,993**
Comprehensive income							
Profit for the year to 30 June 2022		–	–	–	–	20,073	20,073
Actuarial gain on pension scheme	22	–	–	–	–	953	953
Movement on unrecognised pension scheme surplus	22	–	–	–	–	(1,143)	(1,143)
Revaluation of financial assets at fair value through other comprehensive income	14	–	–	–	–	(57)	(57)
Movement on associated deferred tax	24	–	–	–	–	14	14
Exchange differences on translation of foreign operations		–	–	–	(268)	–	(268)
Total comprehensive income		–	–	–	(268)	19,840	19,572
Transactions with owners							
Shares issued from exercised options		–	867	–	–	–	867
Dividends paid to shareholders	27	–	–	–	–	(12,079)	(12,079)
Share-based payment charge	28	–	–	–	–	–	–
Total transactions with owners		–	867	–	–	(12,079)	(11,212)
Balance at 30 June 2022		**1,189**	**2,827**	**137**	**1,808**	**139,392**	**145,353**

The notes on pages 102 to 149 form part of these financial statements.

Company statement of changes in equity.

For the year ended 30 June 2022

	Notes	Share capital £'000	Share premium account £'000	Capital redemption reserve £'000	Retained earnings £'000	Total equity £'000
Balance at 1 July 2020		**1,189**	**1,526**	**137**	**120,336**	**123,188**
Comprehensive income						
Profit for the year to 30 June 2021		–	–	–	13,781	13,781
Actuarial gain on pension scheme	22	–	–	–	1,758	1,758
Movement on unrecognised pension scheme surplus	22	–	–	–	(1,940)	(1,940)
Revaluation of financial assets at fair value through other comprehensive income	14	–	–	–	135	135
Movement on associated deferred tax	24	–	–	–	(59)	(59)
Impact of deferred tax rate change	24	–	–	–	(126)	(126)
Total comprehensive income		–	–	–	13,549	13,549
Transactions with owners						
Shares issued from exercised options		–	434	–	–	434
Dividends paid to shareholders	27	–	–	–	(6,631)	(6,631)
Share-based payment charge	28	–	–	–	47	47
Total transactions with owners		–	434	–	(6,584)	(6,150)
Balance at 30 June 2021		**1,189**	**1,960**	**137**	**127,301**	**130,587**
Comprehensive income						
Profit for the year to 30 June 2022		–	–	–	13,598	13,598
Actuarial gain on pension scheme	22	–	–	–	953	953
Movement on unrecognised pension scheme surplus	22	–	–	–	(1,143)	(1,143)
Revaluation of financial assets at fair value through other comprehensive income	14	–	–	–	(57)	(57)
Movement on associated deferred tax	24	–	–	–	14	14
Impact of deferred tax rate change	24	–	–	–	–	–
Total comprehensive income		–	–	–	13,365	13,365
Transactions with owners						
Shares issued from exercised options		–	867	–	–	867
Dividends paid to shareholders	27	–	–	–	(12,079)	(12,079)
Share-based payment charge	28	–	–	–	–	–
Total transactions with owners		–	867	–	(12,079)	(11,212)
Balance at 30 June 2022		**1,189**	**2,827**	**137**	**128,587**	**132,740**

The notes on pages 102 to 149 form part of these financial statements.

Consolidated and company statements of cash flows.

For the year ended 30 June 2022

	Notes	Group 2022 £'000	Group 2021 £'000	Company 2022 £'000	Company 2021 £'000
Cash flows from operating activities					
Cash generated from operations	29	**24,789**	25,726	**14,982**	18,453
Tax paid		**(5,049)**	(3,853)	**(1,568)**	(1,789)
Net cash generated from operating activities		**19,740**	21,873	**13,414**	16,664
Cash flows from investing activities					
Purchases of property, plant and equipment		**(5,510)**	(2,932)	**(2,024)**	(1,045)
Proceeds from sale of property, plant and equipment		**423**	290	**301**	220
Purchase of intangibles		**(2,366)**	(1,756)	**(1,234)**	(1,323)
Purchase of subsidiaries (net of cash acquired)		**(14,625)**	–	**(3)**	–
Purchase of depositary receipts of shares in subsidiaries		**(15,219)**	–	**(15,219)**	–
Purchase of investment property		**(36)**	–	**(36)**	(305)
Net sale of financial assets at fair value through Other Comprehensive Income		**268**	205	**268**	205
Investment in joint venture		**(4,958)**	–	**–**	–
Insurance proceeds re: property, plant and equipment lost in fire		**–**	3,057	**–**	–
Property rental and similar income		**113**	41	**451**	367
Dividend income		**246**	186	**946**	5,223
Net withdrawal/(deposit) of short-term financial assets		**18,524**	(5,023)	**18,528**	(5,023)
Interest received		**218**	105	**277**	397
Net (issue)/receipt of loan notes		**(806)**	59	**(23,387)**	1,435
Net cash (used in)/received from investing activities		**(23,728)**	(5,768)	**(21,132)**	151
Cash flows from financing activities					
Net proceeds from the issuance of ordinary shares		**867**	434	**867**	434
Proceeds from loans		**236**	365	**–**	–
Repayment of borrowings		**(1,271)**	(958)	**–**	–
Payment of lease liabilities		**(535)**	(310)	**–**	–
Payment of lease interest		**(139)**	(39)	**–**	–
Dividends paid to Company's shareholders	27	**(12,079)**	(6,631)	**(12,079)**	(6,631)
Net cash used in financing activities		**(12,921)**	(7,139)	**(11,212)**	(6,197)
Effects of exchange rate changes on cash		**146**	(1,120)	**87**	(772)
Net increase in cash in the year		**(16,763)**	7,846	**(18,843)**	9,846
Cash and cash equivalents at beginning of year		**52,268**	44,422	**47,064**	37,218
Cash and cash equivalents at end of year		**35,505**	52,268	**28,221**	47,064

The notes on pages 102 to 149 form part of these financial statements.

Notes to the financial statements.

For the year ended 30 June 2022

1 Accounting Policies

The principal accounting policies applied in the preparation of these consolidated financial statements and company financial statements (the "financial statements") are set out below. These policies have been consistently applied to all years presented, unless otherwise stated.

FW Thorpe Plc is incorporated in England and Wales. The Company is domiciled in the UK. The Company is a public limited company, limited by shares, which is listed on the Alternative Investment Market (AIM) of the London Stock Exchange. The address of its registered office is Merse Road, North Moons Moat, Redditch, Worcestershire, B98 9HH, United Kingdom.

Basis of preparation

On 31 December 2020, IFRS as adopted by the European Union at that date was brought into UK law and became UK-adopted International Accounting Standards, with future changes being subject to endorsement by the UK Endorsement Board. FW Thorpe Plc transitioned to UK-adopted International Accounting Standards in its company financial statements on 1 July 2021. This change constitutes a change in accounting framework. However, there is no impact on recognition, measurement or disclosure in the period reported as a result of the change in framework.

The consolidated and company financial statements of FW Thorpe Plc have been prepared in accordance with UK adopted International Accounting Standards and with the requirements of the Companies Act 2006 as applicable to companies reporting under those standards, with future changes being subject to endorsement by the UK Endorsement Board.

The financial statements have been prepared on a going concern basis, under the historical cost convention except for the financial instruments measured at fair value either through other comprehensive income or profit and loss per the provisions of IFRS 9 and contingent consideration that is measured at fair value.

There are no other standards that are not yet effective that are expected to have a material impact on the Group in the current or future reporting periods and on foreseeable future transactions.

The consolidated financial statements are presented in Pounds Sterling, which is the Company's functional and presentation currency, rounded to the nearest thousand.

The preparation of financial information in conformity with the basis of preparation described above requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Company's and 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 information, are disclosed in the critical accounting estimates and judgements section.

The Company has elected to take the exemption under section 408 of the Companies Act 2006 from presenting the Company income statement.

Going concern

The directors confirm they are satisfied that the Group and Company have adequate resources, with £35.5m cash and £5.1m short-term deposits, to continue in business for the foreseeable future, including the affect of increased costs caused by the Ukraine and Russia conflict, where the Group has no sales, and other global events. They have also produced a severe, but plausible downside scenario that demonstrates that the Group could cover its cash commitments over the following year from approving these accounts. For this reason, they continue to adopt the going concern basis in preparing the accounts.

Basis of consolidation

The financial statements for FW Thorpe Plc incorporate the financial statements of the Company and its subsidiary undertakings.

A subsidiary is a company controlled directly by the Group and all the subsidiaries are wholly owned by the Group. The Group achieves control over the subsidiaries by being able to influence financial and operating policies so as to obtain benefits from their activities.

Intra-group transactions, balances, income and expenses are eliminated in preparing consolidated financial statements.

Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

1 Accounting Policies continued

The Group uses the acquisition method of accounting to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair value of the assets transferred, the liabilities incurred and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration agreement. Acquisition related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed on a business combination are measured initially at their fair values at the acquisition date. The Group recognises any non-controlling interest in the acquiree on an acquisition-by-acquisition basis either at fair value or at the non-controlling interest's proportionate share of the recognised amounts of the acquiree's identifiable net assets.

Equity accounted investments and joint arrangements

Under IFRS 11, 'Joint Arrangements', investments in joint arrangements are classified as either joint operations or joint ventures. The classification depends on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangement.

Joint operations

FW Thorpe Plc recognises its direct right to the assets, liabilities, revenues and expenses of joint operations and its share of any jointly held or incurred assets, liabilities, revenues and expenses.

Equity accounted investments

Under the equity method of accounting, the investments are initially recognised at cost and adjusted thereafter to recognise the Group's share of the post-acquisition profits or losses of the investee in profit or loss, and the Group's share of movements in other comprehensive income of the investee in other comprehensive income. Dividends received or receivable from associates and joint ventures are recognised as a reduction in the carrying amount of the investment.

Where the Group's share of losses in an equity-accounted investment equals or exceeds its interest in the entity, including any other unsecured long-term receivables, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the other entity.

Unrealised gains on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in these entities. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of equity-accounted investees have been changed where necessary to ensure consistency with the policies adopted by the Group.

Revenue recognition

The Group recognises revenue earned from contracts based on individual performance obligations using the five-step model. Revenue from contracts with customers is recognised when control of the goods or services are transferred to the customer at an amount that reflects the consideration the Group is entitled to in exchange for those goods or services, excluding VAT, trade discounts and rebates.

The Group has generally concluded that it is the principal in its revenue arrangements. The amount of revenue is not considered to be reliably measurable until all contingencies relating to the sale have been resolved. The Group bases its estimates on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement. The normal credit terms are 30 to 90 days from delivery, or completion of the service provided.

Revenue from external customers is derived from the supply of light fittings and services to support the sale of these light fittings. These services include surveying, project management, installation and commissioning. The transaction price for both the light fittings and the service agreements are at fair value as if each of those services are provided individually.

Revenue Stream	Revenue Recognition
Light fittings	Revenue is recognised at the point in time when control of the asset is transferred to the customer, generally on delivery of the goods
Services	Revenue is recognised over time when the service is performed

The Group considers whether there are other promises in the contract that are separate performance obligations to which a portion of the transaction price needs to be allocated (e.g. service agreements). In determining the transaction price for the sale of goods, the Group considers the effects of variable consideration, the existence of significant financing components, non-cash consideration, and consideration payable to the customer (if any).

1 Accounting Policies continued

Interest income

Interest income is recognised on a time proportion basis using the effective interest method. When a receivable is impaired the Group reduces the carrying amount to its recoverable amount, being the estimated cash flow discounted at the original effective interest rate of the instrument, and continues unwinding the discount as interest income.

Interest on impaired loans is recognised using the original effective interest rate.

Dividend income

Dividend income is recognised when the right to receive payment is established.

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, is identified as the Group Board.

The Group is organised into eleven operating segments based on the products and customer base in the lighting market. The largest businesses, on an ongoing basis, are Thorlux, Lightronics Participaties B.V. (which includes the business of Famostar Emergency Lighting B.V.) and Zemper Group. The seven remaining operating segments have been aggregated into the "other companies" reportable segment based upon their size, comprising the entities Philip Payne Limited, Solite Europe Limited, Portland Lighting Limited, TRT Lighting Limited, Thorlux Lighting L.L.C., Thorlux Australasia Pty Limited and Thorlux Lighting GmbH.

Pension costs

The Group operates a hybrid defined benefit and defined contribution pension scheme. The Group's hybrid pension scheme provides benefits to members based upon the following:

- Service before 1 October 1995, benefits provided are defined benefit in nature (the "pure" defined benefit element);
- Service after 1 October 1995, has two elements:
  - For members joining pre-1 October 1995, benefits provided are the maximum of their defined contribution pension and their defined benefit pension (the "defined benefit underpin" element);
  - For members joining post-1 October 1995, benefits provided are defined contribution in nature (the "pure defined contribution" element).

The contributions of all three elements are paid into one pension scheme, where the contributions and assets are segregated and ring-fenced from each other. The assets of the scheme are invested and managed independently of the finances of the Group. Pension costs are assessed in accordance with the advice of an independent qualified actuary. Costs include the regular cost of providing benefits, which it is intended should remain at a substantially level percentage of current and expected future earnings of the employees covered. Variations from the regular pensions cost are spread evenly through the income over the remaining service lives of current employees. Contributions made to the defined benefit scheme are charged to the income statement in the period in which they are made.

The liability or surplus recognised in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the statement of financial position date less the fair value of plan assets, together with adjustments for unrecognised past-service costs. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. In the defined benefit underpin element of the scheme, the liabilities reflect the greater of the defined contribution or defined benefit liabilities.

For the defined benefit underpin element of the scheme each member is tested to see whether the pension on a defined contribution or defined benefit basis is higher. The liabilities shown in the pensions note are based on the greater of the two liabilities for each member, which in almost all cases is the defined benefit liability. For the service cost, again tests are performed to see which is the higher for each member out of the Company's share of the defined contribution payments or the Company's share of accruing benefits on a defined benefit basis. The higher of these two figures for each member is then used to give the total service cost; again the defined benefit cost is the higher for the vast majority of members.

The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension liability.

1 Accounting Policies continued

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in the statement of comprehensive income in the period in which they arise.

Past-service costs are recognised immediately in income, unless the changes to the pension plan are conditional on the employees remaining in service for a specified period of time (the vesting period). In this case, the past-service costs are amortised on a straight-line basis over the vesting period.

For defined contribution plans and pure defined contribution elements, the Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis.

The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefit expense in the income statement as they fall due, or as an accrued or prepaid expense. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available. A defined benefit surplus is only recognised if it meets the following criteria: if the Group has an unconditional right to a refund; or if the Group can realise it at some point during the life of the plan or when the plan liabilities are settled. If the criteria are not met then a defined benefit surplus is not recognised.

Foreign currencies

Transactions in foreign currency are converted to sterling using the exchange rate applicable to the date of the transaction. Foreign currency gains and losses resulting from the settlement of foreign currency transactions at a different time are recognised in the income statement. Currency exchange differences arising from holding monetary assets or liabilities in a foreign currency are fair valued at the statement of financial position date in accordance with prevailing exchange rates and resulting gains or losses are recognised in the income statement.

Exceptional items

Exceptional items are separately presented from other items by virtue of their nature, size and/or incidence. They are identified separately in order for the reader to obtain a clearer understanding of the underlying results of the ongoing Group's operations, by excluding the impact of items which, in management's view, do not form part of the Group's underlying operating results.

Taxation

The current income tax charge is calculated on the basis of the tax laws 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 the 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 that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the statement of financial position date and are expected to apply when the related deferred income tax asset 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 and joint ventures, 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.

Dividend distribution

Final dividend distribution to the Company's shareholders is recognised as a liability in the Group's financial statements in the period in which the dividends are approved by the Company's shareholders.

Interim dividends are recognised as a liability in the Group's financial statements when approved by the directors.

Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and impairment losses where applicable. Cost includes the original purchase price together with the costs attributable to bringing the asset to its working condition for its intended use.

1 Accounting Policies continued

Depreciation is calculated on a straight-line basis to write down the cost less estimated residual value of all plant and equipment assets by equal instalments over their expected useful life. Right of use assets are depreciated at the rates below according to their asset classification. The rates generally applicable are:

Freehold land	Nil
Buildings	2%–10%
Plant and equipment	10%–50%

The assets' residual values and useful lives are reviewed and adjusted, if appropriate, at each statement of financial position date. Assets are reviewed for impairment where there is an indication that the carrying value may not be recoverable.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised within administrative expenses in the income statement.

Leases

The Group assesses whether a contract is or contains a lease, at inception of the contract. The Group recognises a right-of-use asset and a corresponding lease liability with respect to all lease arrangements in which it is the lessee, except for short-term leases (defined as leases with a lease term of 12 months or less) and leases of low value assets. For these leases, the Group recognises the lease payments as an operating expense on a straight-line basis over the term of the lease unless another systematic basis is more representative of the time pattern in which economic benefits from the leased assets are consumed.

Lease liability: The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by using the rate implicit in the lease. If this rate cannot be readily determined, the Group uses an incremental borrowing rate which is the rate of interest that the lessee would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment.

Right-of-use assets: The right-of-use assets comprise the initial measurement of the corresponding lease liability, lease payments made at or before the commencement day and any initial direct costs. They are subsequently measured at cost less accumulated depreciation and impairment losses. Right-of-use assets are depreciated over the shorter period of lease term and useful life of the underlying asset.

The Group applies IAS 36 to determine whether a right-of-use asset is impaired and accounts for any identified impairment loss in line with the Group's existing impairment accounting policy.

Short term leases and low value assets

For these leases, payments made under them, are charged to the income statement on a straight-line basis over the term of the lease.

Intangible assets

Development costs

The Group undertakes development activities on an ongoing basis. Part of these costs relate to projects where the benefit is received in the short term (less than one year) and part relates to longer term projects where the benefit is expected to be received for several years to come. Costs associated with the shorter term activities are expensed as and when they are incurred. Costs associated with the longer term projects are capitalised as an intangible asset and amortised over the expected life of the benefit at 33.33% per annum commencing when the asset is available for use within the business. Development costs are recognised as intangible assets when the following criteria are met:

- It is technically feasible to complete the intangible asset so that it will be available for use;
- Management intends to complete the intangible asset and use or sell it;
- There is an ability to use or sell the intangible asset;
- It can be demonstrated how the intangible asset will generate probable future economic benefits;
- Adequate technical, financial and other resources to complete the development and to use or sell the intangible asset are available; and
- The expenditure attributable to the intangible asset during its development can be reliably measured. Other development expenditures that do not meet these criteria are recognised as an expense as incurred.

1 Accounting Policies continued

Development costs previously recognised as an expense are not recognised as an asset in a subsequent period.

The economic success for development activities is uncertain and carrying amounts are reviewed at each statement of financial position date for impairment in accordance with IAS 36.

Development assets are valued at cost less accumulated amortisation and any impairment losses.

Fishing rights

Fishing rights are stated at cost less accumulated impairment where applicable. The rights are not amortised, but assessed annually for impairment.

Goodwill

Goodwill is stated at cost less accumulated impairment where applicable. Goodwill represents the excess of the cost of an acquisition over the fair value of the Group's share of the net assets of the acquired subsidiary undertaking at the date of acquisition. Goodwill is reviewed for impairment at least annually or more frequently if events or changes in circumstances indicate a potential impairment. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount.

Goodwill is allocated to cash-generating units for the purpose of impairment testing. The allocation is made to those cash-generating units or groups of cash-generating units that are expected to benefit from the business combination in which the goodwill arose.

Software costs

Software costs are stated at cost less accumulated amortisation and impairment where applicable. Amortisation is calculated on a straight-line basis to write down the cost less estimated residual value over its useful life. The amortisation rates are between 20% and 50% per annum.

Patent costs

Patents are stated at cost less accumulated amortisation. Amortisation is calculated on a straight-line basis to write down the cost less estimated residual value over its useful life. The amortisation rate is 20%.

Other intangible assets

An intangible asset acquired in a business combination is recognised at fair value to the extent it is probable that the expected future economic benefits attributable to the asset will flow to the Group and that its cost can be measured reliably. Intangible assets principally relate to brand names and technology that were valued discounting estimated future net cash flow from the asset. The cost of intangible assets is amortised through the income statement on a straight-line basis over their estimated economic life. The rates generally applicable are:

Technology	12%-14%
Brand name	10%–20%
Customer Relationships	7%

Investment properties

Investment properties are recognised at cost, and then subsequently cost less accumulated depreciation and (if applicable) any accumulated impairment losses. Assets are depreciated at the same rates as property, plant and equipment assets according to their assets class, freehold land is not depreciated.

In the Company accounts, land and buildings (and integral fixtures and fittings) not occupied by the Company are included within investment property.

Investments in subsidiaries

Investments in subsidiaries are held at cost less impairment. Cost includes directly attributable costs of investment.

1 Accounting Policies continued

Financial assets

(i) Classification

The Group classifies its financial assets in the following measurement categories:

- those to be measured subsequently at fair value (either through OCI or the income statement); and
- those to be measured at amortised cost.

The classification depends on the entity's business model for managing the financial assets and the contractual terms of the cash flows.

For assets measured at fair value, gains and losses will either be recorded in the income statement or OCI. For investments in equity instruments that are not held for trading, this will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income (FVOCI).

The Group reclassifies debt investments when, and only when, its business model for managing those assets changes.

(ii) Recognition and derecognition

Regular way purchases and sales of financial assets are recognised on trade-date, the date on which the Group commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership.

(iii) Measurement

At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss (FVPL), transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVPL are expensed in the income statement.

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

Debt instruments

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the asset. There are three measurement categories into which the Group classifies its debt instruments:

- Amortised cost: Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost. Interest income from these financial assets is included in finance income using the effective interest rate method. Any gain or loss arising on derecognition is recognised directly in the income statement together with foreign exchange gains and losses. Impairment losses are included in either administrative expenses, or finance costs in the income statement dependent on the type of asset impaired.
- FVOCI: Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through OCI, except for the recognition of impairment gains or losses, interest income and foreign exchange gains and losses which are recognised in the income statement. When the financial asset is derecognised, the cumulative gain or loss previously recognised in OCI is reclassified from equity to profit or loss and recognised in finance income or costs. Interest income from these financial assets is included in finance income using the effective interest rate method. Foreign exchange gains and losses are presented in administrative expenses and impairment expenses are included in either administrative expenses, or finance costs in the income statement.
- FVPL: Assets that do not meet the criteria for amortised cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognised in the income statement in the period in which it arises.

1 Accounting Policies continued

Equity instruments

The Group subsequently measures all equity investments at fair value. Where the Group's management has elected to present fair value gains and losses on equity investments in OCI, there is no subsequent reclassification of fair value gains and losses to the income statement following the derecognition of the investment. Dividends from such investments continue to be recognised in the income statement as finance income when the Group's right to receive payments is established.

Changes in the fair value of financial assets at FVPL are recognised in the income statement as applicable. Impairment losses (and reversal of impairment losses) on equity investments measured at FVOCI are not reported separately from other changes in fair value.

(iv) Impairment

The Group assesses, on a forward looking basis, the expected credit losses associated with its debt instruments carried at amortised cost and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For trade receivables, the Group applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables, see accounting policy for trade receivables for further details.

Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined by the first-in, first-out (FIFO) method.

The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs and related production overheads based on normal operating capacity. Net realisable value is the estimated selling price in the ordinary course of business, less the costs of completion and selling expenses. Provision is made against the cost of slow-moving, obsolete and other stock lines based on the net realisable value.

Trade receivables

Trade receivables are recognised initially at fair value and the Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables and contract assets.

To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due. The expected loss rates are based on the payment profiles of sales over a period 12 months up to the end of the relevant financial year, and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables, such as significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation, and default or delinquency in payments. The carrying amount of the asset is reduced through the use of an allowance account, and the amount of the loss is recognised in the income statement within "distribution costs". When a trade receivable is uncollectable, it is written off against the allowance account for trade receivables. Subsequent recoveries of amounts previously written off are credited against "distribution costs" in the income statement.

Non-current assets and disposal groups held for sale

Non-current assets and disposal groups are classified as assets held for sale when their carrying amount is to be recovered principally through a sale transaction and a sale is considered highly probable. They are stated at the lower of their carrying amount and fair value less costs to sell if their carrying amount is to be recovered principally through a sale transaction rather than through continuing use and a sale is considered highly probable.

Short-term financial assets

Short-term financial assets are defined as cash term deposits with banks with an original term of three months and over.

Cash and cash equivalents

Cash and cash equivalents are defined as cash in hand, on demand deposits and short-term deposits with banks with an original term less than three months.

Current asset investments

Current asset investments are valued at fair value. Changes in fair value are recognised in the income statement.

Trade payables

Trade payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

1 Accounting Policies continued

Government grants

Government grants relating to costs are deferred and recognised in profit or loss over the period necessary to match them with the costs that they are intended to compensate. Government grants relating to the purchase of property, plant and equipment are included in non-current liabilities as deferred income, and they are credited to profit or loss on a straight-line basis over the expected lives of the related assets.

Financial liabilities

Financial liabilities are initially recognised at fair value, net of transaction costs incurred and subsequently measured at amortised cost. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognised in profit or loss over the period of the financial liability using the effective interest rate method. Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw-down occurs. To the extent that there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a prepayment for liquidity services and amortised over the period of the facility to which it relates.

Financial liabilities are removed from the statement of financial position when the obligation specified in the contract is discharged, cancelled or expired. The difference between the carrying amount of the financial liability that has been extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss as other income or finance costs.

Financial liabilities are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting period.

Costs for financial liabilities are expensed in the period in which they occur.

Provisions

Provisions are recognised in the statement of financial position when a Group company has a present obligation (legal or constructive) as a result of a past event; it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. The amount recognised as a provision is the best estimate of the expenditure required to settle the present obligation at the statement of financial position date.

If the effect is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. A provision for restructuring is recognised when the Group has approved a detailed and formal restructuring plan, and the restructuring has either commenced or has been announced to those affected by it. In accordance with the Group's published environmental policy and applicable legal requirements, a provision for site restoration in respect of contaminated land is recognised when land is contaminated.

A provision for onerous contracts is recognised when the expected benefits to be derived by the Group from a contract are lower than the unavoidable cost of meeting its obligations under the contract.

Warranty

The Group provides for expected warranty costs covering both specific known warranty claims and calculating expected future warranty claims in order to estimate the expected costs that will arise in respect of products sold within the remaining warranty periods. The expected future warranty claims provision is calculated by assessing historical data, industry failure rates and the Group's knowledge of products to determine the percentage of sales that should be provided for to cover future associated warranty costs.

Critical accounting estimates and judgements

The presentation of the annual financial statements in accordance with UK adopted International Accounting Standards and the requirements of the Companies Act 2006 requires the Directors to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised and in any future periods affected. The key estimates and judgements used in the financial statements are as follows:

1 Accounting Policies continued

Estimates	**Goodwill/Investment in subsidiaries** The Group and the Company undertake impairment reviews for cash generating units (CGU) at least annually to assess the carrying value of goodwill/investment in subsidiaries and other intangible assets. These reviews apply either discounted cash flows forecast, including terminal values and growth factors if appropriate, or EBITDA multiples to the forecast financial performance of the CGU. Note 9 contains details of reviews that have been carried out. **Warranty** The Group provides for expected warranty costs covering both specific known warranty claims and calculating expected future warranty claims in order to estimate the expected costs that will arise in respect of products sold within the remaining warranty periods. The usual warranty period provided is between 5 and 10 years, dependent on market requirements. The expected future warranty claims provision is calculated by assessing historical data, industry failure rates and the Group's knowledge of products to determine the percentage of sales that should be provided for to cover future associated warranty costs. Note 23 contains details of the warranty provision. If the failure rate assumption used in the provision calculation were to increase by 5%, then the resulting provision would be higher by £96,000. **Zemper non-controlling interests** The Group has the obligation to purchase the remaining shares of the Zemper business in tranches over the next 3 years. To calculate the expected repurchase value the Group has considered the recent and budgeted future performance of the Zemper business analysing forecasted EBITDA, revenue and costs upon which the obligation is based. This analysis is reviewed and updated each year and, if necessary, adjustments are made to ensure that the provision value reflects the best current estimate of settlement with movements recognised as a share-based payment charge. If the forecast EBITDA assumption were to increase by 5%, the resulting deferred consideration would increase by £520,000. Notes 19, 31 and 34 contain details of the outstanding obligations. **Retirement benefit obligations** The Group recognises its obligations to employee retirement benefits. The quantification of these obligations is subject to significant estimates and assumptions regarding life expectancy, discount and inflation rates and the rate of increase in pension payments. In making these assumptions the Group takes advice from an independent qualified actuary about which assumptions best reflect the nature of the Group's obligations to employee retirement benefits. These assumptions are regularly reviewed by our actuaries Cartwright Benefit Consultants Limited to ensure their appropriateness. Note 22 contains details of the retirement benefit obligations. **Inter-company loan impairment** The Company provides for expected credit losses that may arise from under-performing loans to subsidiary companies. The expected credit loss is calculated by looking at historical performance and the Company's knowledge of how the subsidiary is likely to perform in the future. Note 12 contains details of inter-company loan impairments based on an expected credit loss assumption of 45%. If the expected credit loss assumption were to increase to 55% there would be an extra charge of £418,000 to the Company.
Judgements	**Development costs** The Group undertakes development activities and the commercial viability of these activities is assessed on a continual basis; as such the Group assesses each new project to determine whether development costs incurred should be capitalised within intangible assets or recognised as an expense within administrative expenses. The Group determines this classification based on the future value of the work based on past experience of similar development projects and the feedback from the marketplace about future expectations for technological development. **Zemper non-controlling interests** The Group has the obligation to purchase the remaining shares of the Zemper business in tranches over the next 3 years. In determining the expected purchase price the Group has assumed the repurchase will be made in the 3 tranches commencing in September 2022 and ending in September 2024 thereby assessing the expected purchase price at each of these dates. **Retirement benefit obligations** The Group recognises its obligations to employee retirement benefits. Where the fair value of the pension plan assets exceeds the present value of the defined benefit obligation the Group consider the amount that can be recognised as an asset within the statement of financial position in line with the requirements of IAS 19. A defined benefit surplus is only recognised if it meets the following criteria: if the Group has an unconditional right to a refund; or if the Group can realise it at some point during the life of the plan or when the plan liabilities are settled. As these criteria are not met the Group has decided not to recognise a net retirement benefit asset.

1 Accounting Policies continued

Financial risk factors

The Group's activities expose it to a variety of financial risks: market risk (including currency risk, commodity price risk and security price risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. The Group may use derivative financial instruments to hedge certain risk exposures.

(a) Market risk

(i) Foreign exchange risk

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the euro, US dollar, Australian dollar and Arab Emirate dirham. Foreign exchange risk arises from future commercial transactions denominated in a currency that is not the entity's functional currency as well as bank account balances, trade and other receivables as well as trade and other payables denominated in currencies other than sterling and net investments in foreign operations. The Group has carried out an exercise to evaluate the effect of a movement of 1% in each currency other than sterling, and the results are not significant. The risk is managed by maintaining relatively low currency balances and selling or buying currency when required.

(ii) Price risk

The Group is exposed to equity securities price risk because of investments held by the Group and classified on the consolidated statement of financial position either as financial assets at fair value through other comprehensive income or at fair value through profit or loss.

The Group has investments in UK listed securities of other entities and these are publicly traded on the London Stock Exchange. The nature of the list of investments held means the investments can go up and down in value.

The Group holds money market funds that are designated as short term investments and also a range of quoted securities that are designated as financial assets at fair value through other comprehensive income. Management has performed an analysis and do not believe there to be a material sensitivity to changes in underlying price indices arising from these holdings.

(iii) Commodity price risk

The Group has an exposure to the risk of commodity price changes, in particular, metals. The Group seeks to minimise the risk by agreeing prices with major suppliers in advance.

(iv) Interest rate risk

The Group is exposed to interest rate risk because it has cash investments and short-term financial assets which are mostly interest-bearing. The effect of a reduction in interest rates is to reduce financial income. The Group has no exposure to the risk of increased interest cost other than pension scheme interest cost.

(b) Credit risk

Credit risk is managed on a Group basis. Credit risk arises from cash and cash equivalents, derivative financial instruments and deposits with banks and financial institutions, as well as credit exposures to wholesale and retail customers, including outstanding receivables and committed transactions. For banks and financial institutions, only independently rated parties with a minimum Fitch rating of F1 are accepted. If wholesale customers are independently rated, these ratings are used. Otherwise, if there is no independent rating, risk control assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. Individual risk limits are set based on internal or external ratings in accordance with limits set by the Board. The utilisation of credit limits is regularly monitored.

(c) Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and marketable securities and the ability to close out market positions. Management monitors rolling forecasts of the Group's liquidity reserve, which comprises cash and cash equivalents together with short-term financial assets, see note 17, on the basis of expected cash flow. All external current liabilities are expected to mature within four months.

1 Accounting Policies continued

Capital risk management

The Group's policy has been to maintain a strong capital basis in order to maintain investor, customer, creditor and market confidence. This sustains future development of the business, safeguarding the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders or issue new shares. From time to time the Group purchases its own shares in the market; the timing of these purchases is dependent on market prices, to ensure such transactions are sufficiently beneficial for the Company, its earnings per share and returns to investors. The Group continues to seek to maintain the balance of these returns, while strengthening the reserves and equity position of the Company, via continued profitability and structured growth.

The Group has a long-standing policy not to utilise debt within the business, providing a robust capital structure even within the toughest economic conditions. The Group's significant cash resources allow such a position, but also require close management to ensure that sufficient returns are being generated from these resources. The Group's policy with regard to the cash resources is to ensure they generate sufficient returns, whether by investment in business activities, such as plant and equipment, or assessing suitable opportunities to grow the business, or the physical investment of these funds to ensure appropriate returns to investors.

The Group is able to maintain its current capital structure because there are no externally imposed capital requirements, and there were no changes in the Group's approach to capital management during the year.

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.

Fair value estimation

Financial instruments

Financial instruments that are measured at fair value are disclosed in the consolidated financial statements in accordance with the following fair value measurement hierarchy:

i) Quoted prices (unadjusted) in active markets for identical assets and liabilities (level 1)
ii) Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices), or indirectly (that is, derived from prices) (level 2)
iii) Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs) (level 3)

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques.

These valuation techniques maximise the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

Other assets and liabilities

The carrying value less impairment provision of trade receivables and payables are assumed to approximate their fair values. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Group for similar financial instruments.

Share capital

Ordinary shares are classified as equity.

Where any Group company purchases the Company's equity share capital (treasury shares), the consideration paid, including any directly attributable incremental costs (net of income taxes), is deducted from the equity attributable to the Company's equity holders until the shares are cancelled or reissued. Where such shares are subsequently reissued, any consideration received, net of any directly attributable incremental transaction costs and the related income tax effects, is included in equity attributable to the Company's equity holders.

1 Accounting Policies continued

Share-based payments

Senior executives of the Group receive remuneration in the form of share-based payments through the executive share ownership plan and other employees through a "SAYE" scheme. The fair value of the shares or share options granted is recognised over the vesting period to reflect the value of the employee services received. The charge relating to grants to employees of the Company is recognised as an expense in the profit and loss account.

The fair value of options granted, excluding the impact of any non-market vesting conditions, is calculated using established option pricing models. The probability of meeting non-market vesting conditions, which include profitability targets, is used to estimate the number of share options that are likely to vest.

Cash-settled share-based payments

Where the Group has cash-settled share-based payments for holders of share appreciation rights. A liability is recognised equal to the calculated future fair value as at the date of the statement of financial position.

Firm commitment

Where the Group has an obligation to pay outstanding consideration in a business combination, a liability is recognised equal to the calculated future fair value as at the date of the statement of financial position.

2 Segmental Analysis

(a) Business segments

The segmental analysis is presented on the same basis as that used for internal reporting purposes. For internal reporting FW Thorpe is organised into eleven operating segments based on the products and customer base in the lighting market – the largest business is Thorlux, which manufactures professional lighting systems for industrial, commercial and controls markets. The businesses in the Netherlands, Lightronics and Famostar, are material subsidiaries and disclosed separately as Netherlands companies. The businesses in the Zemper Group are also material and disclosed separately as the Zemper Group

The seven remaining operating segments have been aggregated into the "other companies" reportable segment based upon their size, comprising the entities Philip Payne Limited, Solite Europe Limited, Portland Lighting Limited, TRT Lighting Limited, Thorlux Lighting L.L.C., Thorlux Australasia Pty Limited and Thorlux Lighting GmbH.

FW Thorpe's chief operating decision-maker (CODM) is the Group Board. The Group Board reviews the Group's internal reporting in order to monitor and assess performance of the operating segments for the purpose of making decisions about resources to be allocated. Performance is evaluated based on a combination of revenue and operating profit. Assets and liabilities have not been segmented, which is consistent with the Group's internal reporting.

	Thorlux £'000	Netherlands companies £'000	Zemper Group £'000	Other companies £'000	Inter-segment adjustments £'000	Total continuing operations £'000
Year to 30 June 2022						
Revenue to external customers	**78,912**	**34,676**	**14,152**	**15,975**	**–**	**143,715**
Revenue to other group companies	**5,171**	**377**	**–**	**5,794**	**(11,342)**	**–**
Total revenue	**84,083**	**35,053**	**14,152**	**21,769**	**(11,342)**	**143,715**
Depreciation and amortisation	**3,378**	**1,043**	**1,525**	**1,045**	**–**	**6,991**
Operating profit	**13,509**	**7,471**	**1,582**	**1,647**	**506**	**24,715**
Net finance expense						**(840)**
Share of profit of joint ventures						**228**
Profit before income tax						**24,103**
Year to 30 June 2021						
Revenue to external customers	69,969	31,490	–	16,416	–	117,875
Revenue to other group companies	3,304	290	–	5,238	(8,832)	–
Total revenue	73,273	31,780	–	21,654	(8,832)	117,875
Depreciation and amortisation	3,509	1,182	–	973	–	5,664
Operating profit (before exceptional item)	11,694	5,402	–	1,722	409	19,227
Exceptional item in respect of Lightronics fire	–	1,566	–	–	–	1,566
Operating profit	11,694	6,968	–	1,722	409	20,793
Net finance expense						(652)
Profit before income tax						20,141

2 Segmental Analysis continued

Inter segment adjustments to operating profit consist of property rentals on premises owned by FW Thorpe Plc, adjustments to profit related to stocks held within the Group that were supplied by another segment and elimination of profit on transfer of assets between Group companies.

(b)i Geographical analysis

The Group's business segments operate in four main areas, the UK, the Netherlands, the rest of Europe and the rest of the World. The home country of the Company, which is also the main operating company, is the UK.

	2022 £'000	2021 £'000
UK	**83,242**	74,363
Netherlands	**30,323**	28,879
Rest of Europe	**27,344**	12,499
Rest of the World	**2,806**	2,134
	143,715	117,875

(b)ii Geographical analysis by product types

The Group's main business segments primary revenue stream is the sale of light fittings, with some ancillary services and commissioning supporting this revenue stream.

2022 (£'000)	**Light fittings**	**Services**	**Total**
UK	**78,713**	**4,529**	**83,242**
Netherlands	**30,323**	**–**	**30,323**
Rest of Europe	**27,344**	**–**	**27,344**
Rest of the World	**2,806**	**–**	**2,806**
	139,186	**4,529**	**143,715**

2021 (£'000)	Light Fittings	Services	Total
UK	69,992	4,371	74,363
Netherlands	28,879	–	28,879
Rest of Europe	12,499	–	12,499
Rest of the World	2,134	–	2,134
	113,504	4,371	117,875

3 Operating Profit

	2022 £'000	2021 £'000 (Restated)
Profit on sale of Property, Plant & Equipment	**(197)**	(115)
Depreciation of investment property	**19**	20
Depreciation of Property, Plant & Equipment		
– owned property	**3,303**	3,104
– right-of-use assets	**456**	212
Amortisation of intangible assets	**3,213**	2,328
Share appreciation rights (with associated share-based payment charges)	**(348)**	2,274
Cost of inventories recognised as an expense*	**55,608**	45,253
Research and development expenditure credit	**(306)**	(289)
Government grants	**(117)**	–
Currency (gains)/losses in income statement	**(479)**	821

* The restatement is reducing the cost of inventories recognised as an expense from £53,370,000 to £45,253,000 for cost of sales relating to inter-company sales. There is no other effect in the financial statements in respect of this restatement.

3 Operating Profit continued

Services provided by the Company's auditors	2022 £'000	2021 £'000
Fees payable to the Company's auditors for audit of financial statements	241	247
Fees payable to the Company's auditors and its associates for other services		
– Audit of Company's subsidiaries	48	20
	289	267

During the year they were no non-audit services provided by PricewaterhouseCoopers LLP.

In the prior year an exceptional item of £1,566,000 was recognised in the consolidated income statement as a result of a fire at Lightronics on 23 September 2020. The building has been rebuilt using proceeds from the insurance claim.

4 Employee Information

The average monthly number of employees employed by the Group (including executive directors) during the year is analysed below:

	Group		Company	
Average headcount	2022 Number	2021 Number	2022 Number	2021 Number
Production	408	292	227	182
Sales and distribution	229	189	111	103
Administration	232	215	130	142
Total average headcount	869	696	468	427

	Group		Company	
Employment costs of all employees (including executive directors)	2022 £'000	2021 £'000	2022 £'000	2021 £'000
Wages and salaries	34,968	28,779	20,869	17,644
Social security costs	4,497	3,423	2,349	2,005
Other pension costs	1,650	1,598	1,008	983
	41,115	33,800	24,226	20,632

Included in wages and salaries are £2,365,000 (2021: £1,463,000) of temporary employees costs.

Other pension costs include contributions to pension schemes and other employer's pension related charges comprising life assurance of £80,000 (2021: £93,000), pension administration and professional charges of £113,000 (2021: £111,000) and private pension schemes amounting to £5,000 (2021: £5,000).

4 Employee Information continued

Contributions to the defined contribution section amounted to £236,000 (2021: £243,000) and contributions to other schemes administered independently of the FW Thorpe pension schemes amounted to £1,067,000 (2021: £963,000).

	Group		Company	
Directors' emoluments	**2022 £'000**	2021 £'000	**2022 £'000**	2021 £'000
Aggregate emoluments	**1,920**	1,836	**1,713**	1,570
Contributions to money purchase schemes	**15**	13	**15**	13
	1,935	1,849	**1,728**	1,583

For the year ended 30 June 2022 no retirement benefits were accruing to any director (2021: nil) under the defined benefit scheme and to J E Thorpe (2021: J E Thorpe) under the defined contribution scheme. Additionally, compensation payments for the loss of pension contributions totalling £246,000 (2021: £240,000) were made to 4 (2021: 4) directors.

	Group		Company	
Highest paid director	**2022 £'000**	2021 £'000	**2022 £'000**	2021 £'000
Total of emoluments and amounts receivable	**586**	461	**586**	461

Compensation payments for the loss of pension contributions for the highest paid director were £44,000 (2021: £41,000).

The key management personnel are the Group Board directors.

Further details are provided in the directors' remuneration report on pages 83 to 86.

5 Net Finance Expense

	2022 £'000	2021 £'000
Finance income		
Current assets		
Interest receivable	**49**	46
Non-current assets		
Fair value adjustments on loans	**–**	177
Dividend income on financial assets at fair value through other comprehensive income	**247**	186
Net rental income	**113**	52
Loan interest	**114**	92
Gain on disposal of financial assets	**4**	62
	527	615
Finance expense		
Current liabilities		
Interest payable	**53**	7
Lease liability interest expense	**139**	39
Share appreciation rights distribution	**–**	1,155
Non-controlling interest	**613**	–
Non-current assets		
Loan interest	**55**	66
Fair value adjustment on loans	**507**	–
	1,367	1,267
Net finance expense	**(840)**	(652)

6 Income Tax Expense

Analysis of income tax expense in the year:

	2022 £'000	2021 £'000
Current tax		
Current tax on profits for the year	**4,717**	4,128
Adjustments in respect of prior years	**(279)**	(564)
Total current tax	**4,438**	3,564
Deferred tax		
Origination and reversal of temporary differences	**(408)**	765
Total deferred tax	**(408)**	765
Income tax expense	**4,030**	4,329

The tax assessed for the year is lower (2021: higher) than the standard rate of corporation tax in the UK of 19.00% (2021: 19.00%). The differences are explained below:

	2022 £'000	2021 £'000
Profit before income tax	**24,103**	20,141
Profit on ordinary activities multiplied by the standard rate in the UK of 19% (2021: 19%)	**4,580**	3,827
Effects of:		
Expenses not deductible for tax purposes	**329**	1,077
Accelerated tax allowances and other timing differences	**(348)**	238
Adjustments in respect of prior years	**(279)**	(564)
Patent box relief	**(812)**	(686)
Foreign profit taxed at higher rate	**560**	437
Tax charge	**4,030**	4,329

The effective tax rate was 16.72% (2021: 21.49%). Adjustments in respect of prior years relate to refunds received for prudent assumptions on additional investment allowances and patent box relief in the tax calculations.

The UK corporation tax rate of 19% (effective 1 April 2020) was substantively enacted on 17 March 2020. The UK corporation tax rate increase from 19% to 25% from 1 April 2023, was substantively enacted in May 2021. Deferred tax assets and liabilities have been calculated based on a rate at which they are expected to crystallise.

In the Netherlands the rate of corporate income tax was increased from 25% to 25.8%, this has resulted in an increase in tax costs of £31,000. The recently announced intention in the UK to reverse the decision to increase the corporation tax rate from 19% to 25% will reduce deferred tax liabilities by £303,000.

7 Earnings Per Share

Basic and diluted earnings per share for profit attributable to equity holders of the Company

Basic earnings per share is calculated by dividing the profit attributable to equity holders of the Company by the weighted average number of ordinary shares in issue during the year, excluding ordinary shares purchased by the Company and held as treasury shares.

Basic	2022	2021
Weighted average number of ordinary shares in issue	**116,953,866**	116,511,580
Profit attributable to equity holders of the Company (£'000)	**20,073**	15,812
Basic earnings per share (pence per share) total	**17.16**	13.57

Diluted earnings per share is calculated by dividing the profit attributable to equity holders of the Company by the weighted average number of ordinary shares in issue during the year, excluding ordinary shares purchased by the Company and held as treasury shares, plus the number of shares earnt for share options where performance conditions have been achieved.

Diluted	2022	2021
Weighted average number of ordinary shares in issue (diluted)	**117,209,308**	116,938,189
Profit attributable to equity holders of the Company (£'000)	**20,073**	15,812
Diluted earnings per share (pence per share) total	**17.13**	13.52

8 Property, Plant and Equipment

	Group				Company			
	Freehold land and buildings £'000	Plant and equipment £'000	Right-of-use assets £'000	Total £'000	Freehold land and buildings £'000	Plant and equipment £'000	Right-of-use assets £'000	Total £'000
Cost								
At 1 July 2021	22,094	27,662	895	50,651	6,529	20,661	–	27,190
Acquisition of subsidiary*	975	3,965	3,534	8,474	–	–	–	–
Additions	2,241	3,037	232	5,510	63	1,961	–	2,024
Disposals	(1)	(884)	(303)	(1,188)	–	(657)	–	(657)
Currency translation	45	15	(2)	58	–	–	–	–
At 30 June 2022	**25,354**	**33,795**	**4,356**	**63,505**	**6,592**	**21,965**	**–**	**28,557**
Accumulated depreciation								
At 1 July 2021	4,638	17,345	417	22,400	2,399	13,773	–	16,172
Acquisition of subsidiary*	234	3,175	1,062	4,471	–	–	–	–
Charge for the year	600	2,703	456	3,759	160	1,686	–	1,846
Disposals	–	(714)	(248)	(962)	–	(531)	–	(531)
Currency translation	5	9	5	19	–	–	–	–
At 30 June 2022	**5,477**	**22,518**	**1,692**	**29,687**	**2,559**	**14,928**	**–**	**17,487**
Net book amount								
At 30 June 2022	**19,877**	**11,277**	**2,664**	**33,818**	**4,033**	**7,037**	**–**	**11,070**

* Acquisition of subsidiary are the assets acquired from the purchase of the Zemper companies with a fair value of £4,003,000.

	Group				Company			
	Freehold land and buildings £'000	Plant and equipment £'000	Right-of-use assets £'000	Total £'000	Freehold land and buildings £'000	Plant and equipment £'000	Right-of-use assets £'000	Total £'000
Cost								
At 1 July 2020	23,552	26,933	856	51,341	6,484	20,356	–	26,840
Additions	133	2,435	364	2,932	45	1,000	–	1,045
Disposals	(1,181)	(1,548)	(276)	(3,005)	–	(695)	–	(695)
Transfers	–	–	–	–	–	–	–	–
Currency translation	(410)	(158)	(49)	(617)	–	–	–	–
At 30 June 2021	**22,094**	**27,662**	**895**	**50,651**	**6,529**	**20,661**	**–**	**27,190**
Accumulated depreciation								
At 1 July 2020	4,362	15,955	450	20,767	2,245	12,615	–	14,860
Charge for the year	617	2,487	212	3,316	154	1,731	–	1,885
Disposals	(283)	(1,013)	(221)	(1,517)	–	(573)	–	(573)
Transfers	–	–	–	–	–	–	–	–
Currency translation	(58)	(84)	(24)	(166)	–	–	–	–
At 30 June 2021	**4,638**	**17,345**	**417**	**22,400**	**2,399**	**13,773**	**–**	**16,172**
Net book amount								
At 30 June 2021	**17,456**	**10,317**	**478**	**28,251**	**4,130**	**6,888**	**–**	**11,018**

Freehold land which was not depreciated at 30 June 2022 amounted to £758,000 (2021: £758,000) (Group) and £500,000 (2021: £500,000) (Company).

9 Intangible Assets

Group 2022	Goodwill £'000	Development costs £'000	Technology £'000	Brand name £'000	Customer relationship £'000	Software £'000	Patents £'000	Fishing rights £'000	Total £'000
Cost									
At 1 July 2021	14,431	7,871	2,846	1,257	–	2,811	150	182	29,548
Acquisition of subsidiary*	18,320	6,346	45	2,588	9,468	266	6	–	37,039
Additions	–	2,096	–	–	–	267	3	–	2,366
Currency translation	27	7	4	–	(8)	–	–	–	30
At 30 June 2022	**32,778**	**16,320**	**2,895**	**3,845**	**9,460**	**3,344**	**159**	**182**	**68,983**
Accumulated amortisation									
At 1 July 2021	241	4,415	2,179	1,006	–	1,852	150	–	9,843
Acquisition of subsidiary*	–	3,770	–	–	–	250	6	–	4,026
Charge for the year	–	1,820	308	262	465	358	–	–	3,213
Currency translation	11	4	8	5	8	–	–	–	36
At 30 June 2022	**252**	**10,009**	**2,495**	**1,273**	**473**	**2,460**	**156**	**–**	**17,118**
Net book amount									
At 30 June 2022	**32,526**	**6,311**	**400**	**2,572**	**8,987**	**884**	**3**	**182**	**51,865**

* Acquisition of subsidiary are the assets acquired from the purchase of the Zemper companies with a fair value of £14,693,000, excluding goodwill.

Group 2021	Goodwill £'000	Development costs £'000	Technology £'000	Brand name £'000	Customer relationship £'000	Software £'000	Patents £'000	Fishing rights £'000	Total £'000
Cost									
At 1 July 2020	15,116	7,357	3,000	1,323	–	2,573	150	182	29,701
Additions	–	1,516	–	–	–	240	–	–	1,756
Write-offs and transfers	–	(964)	–	–	–	(5)	–	–	(969)
Currency translation	(685)	(38)	(154)	(66)	–	3	–	–	(940)
At 30 June 2021	14,431	7,871	2,846	1,257	–	2,811	150	182	29,548
Accumulated amortisation					–				
At 1 July 2020	248	3,902	1,908	980	–	1,481	150	–	8,669
Charge for the year	–	1,508	373	74	–	373	–	–	2,328
Write-offs and transfers	–	(964)	–	–	–	(5)	–	–	(969)
Currency translation	(7)	(31)	(102)	(48)	–	3	–	–	(185)
At 30 June 2021	241	4,415	2,179	1,006	–	1,852	150	–	9,843
Net book amount					–				
At 30 June 2021	14,190	3,456	667	251	–	959	–	182	19,705

Amortisation and impairment of £3,227,000 (2021: £2,328,000) is included in the administrative expenses. Included in goodwill are amounts of £2,618,000 (2021: £2,618,000) arising from the acquisition of Portland Lighting Limited in 2011, €7,784,000 (£6,698,000) (2021: €7,784,000 (£6,684,000)) arising from the acquisition of Lightronics Participaties B.V. in 2015, €5,057,000 (£4,351,000) (2021: €5,057,000 (£4,343,000)) arising from the acquisition of Famostar Emergency Lighting B.V. in December 2017 and €21,273,000 (£18,304,000) (2021: €nil (£nil)) arising from the acquisition of Electrozemper S.A. in October 2021. This goodwill is not amortised. The goodwill for Lightronics, Famostar, Electrozemper and Thorlux Australasia is revalued annually to the closing exchange rate, as it is denominated in euros and Australian dollars respectively, with the movement recorded in exchange differences on translation of foreign operations in the Statement of Changes in Equity.

9 Intangible Assets continued

The Group tests intangible assets annually for impairment, or more frequently if there are indications of impairment, for each relevant cash generating unit (CGU). CGUs in the Group comprise the entities FW Thorpe Plc, Lightronics Participaties B.V., Lightronics B.V., Philip Payne Limited, Solite Europe Limited, Portland Lighting Limited, TRT Lighting Limited, Thorlux Lighting L.L.C., Thorlux Australasia Pty Limited, Thorlux Lighting GmbH, Famostar Emergency Lighting B.V., Electrozemper S.L, Zemper France S.A.R.L. S.A, RGB S.L. and Thorlux Lighting Limited.

For Portland Lighting Limited the value in use has been determined using cash flow projections covering a five year period with a terminal value all discounted at a rate of 10.06%. For prudence, no growth has been assumed from 2022. For an impairment to be required, the discount rate would need to exceed 34.4% (Group) and 19.8% (Company: investments in subsidiaries).

For the other CGUs an EBITDA analysis is computed to compare against the net carrying value of the goodwill and other intangible assets for each CGU as appropriate. A multiple based on a six times EBITDA, that we consider a reasonable multiple for the sector, is used in these computations, except for Zemper where an EBITDA multiple of ten has been used in accordance with the agreement upon which the contingent consideration is based.

At expected levels of EBITDA we consider that our goodwill is fully recoverable with headroom on the Lightronics and Famostar CGUs of £33.1m in the Group and £18.4m in the Company (investments in subsidiaries, financial assets at amortised cost and amounts due from Group companies).

Due to the timing of the acquisitions that gave rise to the majority of our goodwill held, our assessment also considers business performance and likely net realisable value, which must be assessed as part of settlement of non-controlling interest rights. At expected levels of EBITDA we consider that our goodwill is fully recoverable with headroom on the Zemper CGUs of £21.9m in the Group and £14.4m in the Company (financial assets at amortised cost).

Company 2022	**Development costs £'000**	**Software £'000**	**Patents £'000**	**Fishing rights £'000**	**Total £'000**
Cost					
At 1 July 2021	6,182	2,796	150	182	9,310
Additions	1,016	218	–	–	1,234
Write-offs and transfers	–	–	–	–	–
At 30 June 2022	**7,198**	**3,014**	**150**	**182**	**10,544**
Accumulated amortisation					
At 1 July 2021	3,496	1,866	150	–	5,512
Charge for the year	1,160	341	–	–	1,501
Write-offs and transfers	–	–	–	–	–
At 30 June 2022	**4,656**	**2,207**	**150**	**–**	**7,013**
Net book amount					
At 30 June 2022	**2,542**	**807**	**–**	**182**	**3,531**

9 Intangible Assets continued

Write-offs relate to development assets where no further economic benefits will be obtained.

Company 2021	Development costs £'000	Software £'000	Patents £'000	Fishing rights £'000	Total £'000
Cost					
At 1 July 2020	5,081	2,574	150	182	7,987
Additions	1,101	222	–	–	1,323
Write-offs and transfers	–	–	–	–	–
At 30 June 2021	6,182	2,796	150	182	9,310
Accumulated amortisation					
At 1 July 2020	2,262	1,501	150	–	3,913
Charge for the year	1,234	365	–	–	1,599
Write-offs and transfers	–	–	–	–	–
At 30 June 2021	3,496	1,866	150	–	5,512
Net book amount					
At 30 June 2021	2,686	930	–	182	3,798

For development costs, the Group capitalises employee costs and directly attributable material costs necessary to design, construct and test new and improved product ranges and technology. These costs are only capitalised where they meet all the criteria set out in IAS 38.

Where development costs relate to products or technologies that are not expected to generate future economic benefits, do not meet the requirements of IAS 38 or relate to research, they are charged to the income statement.

10 Investments in Subsidiaries

The cost of investment in subsidiaries is as follows:

	Company 2022 £'000	Company 2021 £'000
Investment in subsidiaries – cost	**20,486**	14,581

The movement in the investment and provisions is as follows:

	Costs £'000	Provision £'000
At 1 July 2021	**14,581**	–
Addition in year	**5,905**	–
At 30 June 2022	**20,486**	–

Additions consist of €6,854,000 (£5,902,000) for the share appreciation rights in Lightronics Participaties B.V., and €3,000 (£3,000) for FW Thorpe Espana S.L.U. Impairment for investments in subsidiaries has been considered within the headroom shown in note 9.

11 Investment Property

	Group		Company	
	2022 £'000	2021 £'000	**2022 £'000**	2021 £'000
Cost				
At 1 July	**2,226**	2,259	**11,709**	11,448
Additions	**36**	–	**36**	305
Disposals	**–**	(33)	**–**	(44)
At 30 June	**2,262**	2,226	**11,745**	11,709
Accumulated depreciation				
At 1 July	**259**	272	**1,525**	1,318
Charge for the year	**19**	20	**253**	240
Disposals	**–**	(33)	**–**	(33)
At 30 June	**278**	259	**1,778**	1,525
Net book amount				
At 30 June	**1,984**	1,967	**9,967**	10,184

The following amounts have been recognised in the income statement:

	Group		Company	
	2022 £'000	2021 £'000	**2022 £'000**	2021 £'000
Rental income	**175**	137	**513**	463
Direct operating expenses arising from investment properties that generate rental income	**(81)**	(105)	**(314)**	(325)

The investment property and land owned by the Group consists of property held for investment purposes, a property with land and fishing rights by the River Wye, and land designated for woodland in Monmouthshire. The associated fishing rights for the property by the River Wye are included in intangible assets.

Investment property of £1,296,000 (2021: £1,296,000) is freehold land and therefore not depreciated; the property element includes accumulated depreciation of £278,000 (2021: £259,000) which relates to the property occupied by Mackwell Electronics Limited. This investment property has been independently valued and has a market value that is not materially higher than its cost.

An external fair value exercise of the land by the River Wye and the land in Monmouthshire was last undertaken in June 2022 resulting in a valuation of £1.97m, which is greater than the carrying value of those specific investment properties.

The Company's investment properties consist of land and buildings used by subsidiaries in their normal course of business. The Company receives rental income from the subsidiaries for the use of these premises and incurs amortisation costs.

Each investment property generates rental income.

12 Financial Assets at Amortised Cost

The Group classifies its financial assets at amortised cost only if both of the following criteria are met:

- the asset is held within a business model whose objective is to collect the contractual cash flows; and
- the contractual terms give rise to cash flows that are solely payments of principal and interest.

Financial assets at amortised cost include the following debt investments. The Group applied the expected credit risk model to calculate the impairment provision.

Mackwell Electronics Limited

Mr N Brangwin, a director and main shareholder in Mackwell Electronics Limited, has loans outstanding of £1,800,000 (2021: £1,800,000), with interest payable at 4% over the Bank of England base rate. This loan is secured against Mr Brangwin's shareholding in FW Thorpe Plc. No repayment was received during the year.

This debt investment is considered to have a minimal risk of default due to the collateral that is held as security, and therefore the impairment provision is determined as 12 months expected credit losses. As at the date of these financial statements, no provision was recorded.

Luxintec S.L.

In the year ended 30 June 2021 loan notes of €869,000 (£746,000) were provided to Luxintec S.L., an investment in the company is held under financial assets at fair value through other comprehensive income, with ordinary interest payable at 1.5% fixed rate payable quarterly. This loan is secured against the company assets.

This debt investment is considered to have a risk of default despite the collateral that is held as security, and therefore the impairment provision is determined as 12 months expected credit losses. As at the date of these financial statements, a provision of €589,000 (£507,000) (2021: €nil (£nil)) was recorded.

At the date of the financial statements, the loan notes balance was €281,000 (2021: €869,000) equating to £242,000 (2021: £746,000) at the end of year exchange rate.

Ratio Holding B.V.

Pursuant to the investment in Ratio Holding B.V. in December 2021, the Group has issued loan notes of €1,000,000 (£860,000) to help fund the development of this business. With accrued interest, the balance at 30 June 2022 is €1,012,000 (£872,000) (2021: nil (£nil)).

The debt investment has shown no significant increase in credit risk since the inception of the loan, and therefore the impairment provision is determined as 12 months expected credit losses. As at the date of these financial statements, no provision was recorded.

We assess the credit risk of our loan note receivables, based on the creditworthiness of the counterparty, history of repayment and security in place, and where required provisions are made.

12 Financial Assets at Amortised Cost continued

	Group		Company	
	2022	2021	**2022**	2021
	£'000	£'000	**£'000**	£'000
At 1 July	**2,546**	2,425	**10,827**	12,963
Acquisition of subsidiary	**77**	–	**–**	–
Issued	**872**	746	**23,467**	1,151
Repaid	**(66)**	(802)	**(80)**	(2,655)
Fair value adjustment	**(507)**	177	**(629)**	(143)
Exchange rate movement	**2**	–	**97**	(489)
At 30 June	**2,924**	2,546	**33,682**	10,827

	Group		Company	
	2022	2021	**2022**	2021
Analysis of total financial assets at amortised cost	**£'000**	£'000	**£'000**	£'000
Non-current	**1,124**	746	**31,882**	9,027
Current	**1,800**	1,800	**1,800**	1,800
	2,924	2,546	**33,682**	10,827

The £23,467,000 loans issued by the Company are £19,914,000 to FW Thorpe Espana S.L.U., £2,939,000 issued to Lightronics Participaties B.V., £354,000 to Thorlux Lighting L.L.C. and £260,000 issued to Thorlux Lighting Limited.

The debt investments to FW Thorpe Espana S.L.U. of €23,125,000 (£19,914,000), Lightronics Participaties B.V. of €12,049,000 (£10,367,000) and Thorlux Lighting Limited of €305,000 (£260,000) have shown no significant increase in credit risk since the inception of the loan, and therefore the impairment provision is determined as 12 months expected credit losses. As at the date of these financial statements, no provision was recorded.

The debt investment to Thorlux Lighting L.L.C. of £1,944,000 is considered to be underperforming and therefore the impairment provision is determined as lifetime expected credit losses. As at the date of these financial statements, the Company has made a provision of £771,000 (2021: £650,000) for these loan notes based on an expected credit loss of 45%.

13 Equity Accounted Investments and Joint Arrangements

The Group has a joint operation in the United Arab Emirates. Thorlux Lighting L.L.C. is registered in the United Arab Emirates and operates from a sales office in Abu Dhabi. The Group has applied the proportionate consolidation method of accounting to recognise this interest.

The Group invested £5,818,000 for 50% of the share capital of Ratio Holding B.V., a company based in the Netherlands in December 2021. This value consists of an initial investment of €5,750,000 (£4,948,000) and further €1,000,000 (£860,000) for payment in December 2023. In addition there were €12,000 (£10,000) of costs. The Group has applied the equity accounting method to recognise this interest.

The Group assesses on a forward looking basis the associated expected credit losses and the impairment methodology applied depends on whether there has been a significant increase in credit risk, as allowed under IFRS 9. As at the date of these financial statements, no provision was recorded for the Group.

	Group		Company	
	2022	2021	**2022**	2021
	£'000	£'000	**£'000**	£'000
At 1 July	**–**	–	**–**	–
Additions	**5,818**	–	**–**	–
Share of joint venture profit	**290**	–	**–**	–
Currency translation	**4**	–	**–**	–
At 30 June	**6,112**	–	**–**	–

In the period from investment to 30 June 2022, the joint venture, Ratio Holdings B.V. generated a profit after tax of €683,000 (£588,000).

13 Equity Accounted Investments and Joint Arrangements continued

The Group has recognised its 50% share of €342,000 (£290,000) in the Income Statement, less costs in the parent company of £62,000.

The tables below provide summarised financial information for those joint ventures and associates that are material to the group. The information disclosed reflects the amounts presented in the financial statements of the relevant associates and joint ventures and not FW Thorpe Plc's share of those amounts. They have been amended to reflect adjustments made by the entity when using the equity method, including fair value adjustments and modifications for differences in accounting policy.

Summarised statement of financial position (unaudited)	€'000	£'000
Non-current assets	720	619
Inventories	4,956	4,264
Trade & other receivables	1,842	1,585
Cash and cash equivalents	–	–
Total Assets	**7,518**	**6,468**
Trade & other payables	(1,564)	(1,346)
Current liabilities	(506)	(435)
Financial liabilities	(4,096)	(3,525)
Total Liabilities	**(6,166)**	**(5,306)**
Net Assets	**1,352**	**1,162**

Summarised statement of comprehensive income (unaudited)*

	€'000	£'000
Revenue	**5,864**	**5,046**
Profit for the year *	**683**	**588**

* The summarised statement of comprehensive income above is for the 6 months period to 30 June 2022.

14 Financial Assets at Fair Value through Other Comprehensive Income

	Group		Company	
	2022 £'000	2021 £'000	**2022 £'000**	2021 £'000
Beginning of year	**3,764**	3,772	**3,764**	3,772
Acquisition of subsidiary*	**31**	–	**–**	–
Net disposals	**(268)**	(143)	**(268)**	(143)
Revaluation	**(57)**	135	**(57)**	135
At 30 June	**3,470**	3,764	**3,439**	3,764

* Acquisition of subsidiary are the assets acquired from the purchase of the Zemper companies.

Regular purchases and sales of financial assets are recognised on the trade date – the date on which the Group commits to purchase or sell the asset. Investments are initially recognised at fair value plus transaction costs for all financial assets not carried at fair value through profit or loss. Financial assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred and the Group has transferred substantially all risks and rewards of ownership. Financial assets at fair value through other comprehensive income are subsequently carried at fair value.

Financial assets at fair value through other comprehensive income comprise:

i) Listed equity in the UK, and are denominated in UK pounds. None of these assets is either past due or impaired;
ii) Listed equity in Spain held by Electrozemper S.A., denominated in euros. None of these assets is either past due or impaired; and
iii) The Group invested €1,200,000 for 40% of the share capital of Luxintec S.L., a company based in Spain, in 2016. This is classified as financial assets at fair value through other comprehensive income as the Group is not able to assert influence over the management of this investment.

14 Financial Assets at Fair Value through Other Comprehensive Income continued

An impairment of £529,000 was included in the revaluation amount of £135,000 for the investment in Luxintec S.L. based on the fair value assessment of this investment.

The Group assesses at the end of each reporting year whether there is objective evidence that a financial asset or a group of financial assets is impaired. For equity investments classified as financial assets at fair value through other comprehensive income, a significant or prolonged decline in the fair value of the security below its cost is evidence that the assets are impaired. If any such evidence exists for financial assets at fair value through other comprehensive income, the cumulative loss – measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognised in profit or loss – is removed from equity and recognised in the Consolidated Income Statement. Impairment losses recognised in the Consolidated Income Statement on equity instruments are not reversed through the Consolidated Income Statement.

15 Inventories

	Group		Company	
	2022 £'000	2021 £'000	**2022 £'000**	2021 £'000
Raw materials	**23,555**	14,992	**10,343**	6,853
Work in progress	**3,735**	2,228	**2,742**	1,687
Finished goods	**5,468**	3,169	**3,891**	2,988
	32,758	20,389	**16,976**	11,528

The value of the inventory provision is £4,449,000 (2021: £2,928,000) for the Group and £2,477,000 (2021: £1,475,000) for the Company.

16 Trade and Other Receivables

	Group		Company	
Current	**2022 £'000**	2021 £'000	**2022 £'000**	2021 £'000
Trade receivables	**29,015**	25,599	**15,834**	17,103
Other receivables	**2,723**	1,982	**2,516**	1,837
Prepayments and accrued income	**1,280**	1,729	**623**	1,014
Amounts owed by subsidiaries	**–**	–	**5,507**	9,070
Total	**33,018**	29,310	**24,480**	29,024

Amounts owed by subsidiaries, except cash balances, are unsecured, interest free and have no fixed date for repayment.

	Group		Company	
	2022 £'000	2021 £'000	**2022 £'000**	2021 £'000
Trade receivables past due date not provided	**2,705**	3,339	**741**	2,476

A significant proportion of the amounts past due date were settled shortly after the end of the financial year, and taken together with the credit insurance policy and good credit history, the directors consider that there is no impairment and the trade receivables are therefore stated at their fair value, which equals their book value.

The carrying amounts of the trade receivables for the Group company Zemper France S.A.R.L. include receivables which are subject to a factoring arrangement. Under this arrangement, the company has transferred the relevant receivables to the factor in exchange for cash and is prevented from selling or pledging the receivables. However, Zemper France S.A.R.L. retains the late payment and credit risk. The Group therefore continues to recognise the transferred assets in their entirety in its balance sheet. Zemper France S.A.R.L. only receives money from the factor when needed and the amount repayable under the factoring agreement is presented as secured borrowing. The Group considers that the 'held to collect' business model remains appropriate for these receivables, and hence it continues measuring them at amortised cost. The relevant carrying amounts for transferred receivables are €1,161,000 (£999,000) and the amount received from the factor as secured borrowing is €nil (£nil).

16 Trade and Other Receivables continued

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables and contract assets. A significant proportion of the trade receivables are insured.

The policy covers 90% of the debt in the event of a claim for default, where the customer is in severe financial difficulty. No bad debt provision is made in respect of trade receivables from Government departments or agencies. At 30 June 2022 the bad debt provision for the Group amounted to £704,000 (2021: £180,000) and for the Company £503,000 (2021: £23,000).

No provision is held against trade receivables that are not yet due, due to the good credit history and expected financial performance of customers and the overall exposure is considered low due to levels of credit insurance in place. Credit limits are reviewed at least every 6 months to assess and amend, where appropriate, the credit limit offered to customers.

Included in amounts owed by subsidiaries are provisions for expected credit losses for Thorlux Lighting L.L.C. of £303,000 (2021: £264,000) and Thorlux Australasia PTY Limited of £806,000 (2021: £643,000), based on an expected credit loss of 45%.

During the year the following amounts were written off (excluding amounts owed by subsidiaries):

	Group		Company	
	2022 £'000	2021 £'000	**2022 £'000**	2021 £'000
Bad debts written off	**469**	26	**463**	–
Bad debts recovered	**(409)**	(5)	**(407)**	–
Net bad debt expense	**60**	21	**56**	–

At 30 June 2022, trade receivables were due to the Group and Company in the following currency denominations:

	Group		Company	
	2022 £'000	2021 £'000	**2022 £'000**	2021 £'000
Due in £ sterling	**16,965**	18,217	**13,875**	15,232
Due in € euro	**11,809**	7,166	**1,959**	1,871
Due in UAE dirham	**17**	82	**–**	–
Due in AUD Australian dollars	**224**	134	**–**	–
Due in $ United States dollars	**–**	–	**–**	–
	29,015	25,599	**15,834**	17,103

The other assets within trade and other receivables do not contain impaired assets.

The maximum exposure to credit risk at the reporting date is the carrying value of each class of receivable mentioned above. The Group does not hold any collateral as security.

17 Short-Term Financial Assets

	Group		Company	
	2022 £'000	2021 £'000	**2022 £'000**	2021 £'000
Beginning of year	**23,603**	18,580	**23,603**	18,580
Net (withdrawals)/deposits	**(18,524)**	5,023	**(18,528)**	5,023
	5,079	23,603	**5,075**	23,603

The short-term financial assets consist of term cash deposits in sterling with an original term in excess of three months.

The banks where the deposits are held have a minimum rating of "A" by Fitch, with a specific rating of "F1" for short-term funds.

18 Cash and Cash Equivalents

	Group		Company	
	2022 £'000	2021 £'000	**2022 £'000**	2021 £'000
Cash at bank and in hand	**35,505**	52,268	**28,221**	47,064

The banks where the funds are held have a minimum rating of "A" by Fitch, with a specific rating of "F1" for short-term funds.

19 Trade and Other Payables

	Group		Company	
Current liabilities	**2022 £'000**	2021 £'000	**2022 £'000**	2021 £'000
Trade payables	**15,772**	10,600	**9,216**	7,149
Contract liabilities	**1,375**	1,360	**1,375**	1,359
Other payables	**6,547**	17,048	**311**	16,060
Social security and other taxes	**2,935**	2,289	**1,353**	849
Accruals and deferred income	**9,172**	7,901	**6,479**	5,242
Amounts owed to subsidiaries	**–**	–	**3,691**	2,483
Total	**35,801**	39,198	**22,425**	33,142

	Group		Company	
Non-current liabilities	**2022 £'000**	2021 £'000	**2022 £'000**	2021 £'000
Other payables	**12,880**	78	**–**	–
Total	**12,880**	78	**–**	–

Amounts owed to subsidiaries, except cash balances, are unsecured, interest free and have no fixed date of repayment. Amounts owed in relation to cash balances generate interest in line with the Group's deposit facilities.

Included within other payables is a commitment to purchase the outstanding shares (redemption liability and contingent consideration) in Electrozemper S.A. of €20,046,000 (£17,248,000). Of this amount €6,123,000 (£5,268,000) is included in current liabilities and €13,923,000 (£11,980,000) in non-current liabilities.

Non-current liabilities also includes €1,000,000 (£860,000) deferred consideration for the investment in Ratio Holding B.V. and £40,000 (2021: £78,000) post employment benefits at Thorlux Australasia Pty Limited and Thorlux Lighting L.L.C.

20 Financial Liabilities

Financial liabilities	Group 2022 £'000	Group 2021 £'000	Company 2022 £'000	Company 2021 £'000
At 1 July 2021	–	–	–	–
Acquisition of subsidiary*	2,546	–	–	–
Additions in year	7	–	–	–
Repayment in year	(392)	–	–	–
Currency translation	1	–	–	–
At 30 Jun 2022	**2,162**	–	–	–

Analysis of financial liabilities	Group 2022 £'000	Group 2021 £'000	Company 2022 £'000	Company 2021 £'000
Current financial liabilities (values due < 12 months)	332	–	–	–
Non-current financial liabilities (values due > 12 months)	1,830	–	–	–
Total	**2,162**	–	–	–

Financial liabilities by category	Group 2022 £'000	Group 2021 £'000	Company 2022 £'000	Company 2021 £'000
Bank overdrafts	63	–	–	–
Bank loans	1,073	–	–	–
Government loans	1,026	–	–	–
Total	**2,162**	–	–	–

* Acquisition of subsidiary are the liabilities acquired with the purchase of the Zemper companies.

Pursuant to the acquisition of Electrozemper S.A., the Group acquired financial liabilities totalling €2,957,000 (£2,546,000). The bank loans include €783,000 (£674,000) issued to support Zemper France S.A.R.L. through the Covid pandemic, and are guaranteed by the Government in France. There is also a bank loan for the property occupied by Zemper France S.A.R.L., at the date of these Financial Statements the outstanding amount was €437,000 (£376,000). The Government loans were issued to facilitate investment, including research and development projects.

21 Lease Liabilities
Right-of-use assets

	Property £'000	Plant and equipment £'000	Motor vehicles £'000	Total £'000
At 1 July 2020	–	67	339	406
Additions	–	5	359	364
Depreciation charge for the year	–	(20)	(192)	(212)
Lease termination	–	(2)	(53)	(55)
Currency translation	–	(2)	(23)	(25)
At 30 June 2021	**–**	**48**	**430**	**478**
Acquisition of subsidiary*	2,286	–	186	2,472
Additions	–	5	227	232
Depreciation charge for the year	(208)	(20)	(228)	(456)
Lease termination	–	–	(57)	(57)
Currency translation	(5)	–	–	(5)
At 30 June 2022	**2,073**	**33**	**558**	**2,664**

* Acquisition of subsidiary are leases acquired with the investment in the Zemper group of companies.

Additions comprise increases to right-of-use assets as a result of entering into new leases.

21 Lease Liabilities continued

Lease liabilities

Lease liabilities recognised at 30 June 2022 total £3,016,000 (2021: £661,000) of which £506,000 (2021: £226,000) is due within one year and £2,510,000 (2021: £435,000) due after more than one year. There are no contractual options to either extend or terminate early lease agreements.

Maturity analysis

The timing of the payments due over the remaining lease term for these liabilities is as follows:

2022	Total £'000
Within one year	726
More than one but less than five years	2,355
More than five years	927
Total due including interest	**4,008**

The total cash paid on these leases during the year was £674,000.

2022	£'000
Expense relating to short-term leases	136
Expense relating to low-value leases	22

22 Pension Scheme

The Group operates a funded hybrid pension scheme for employees in the UK. The scheme is approved by H.M. Revenue and Customs under Chapter 1 Part XIV of the Income and Corporation Taxes Act 1988. Membership is contracted in to the second state pension. The basis of the Group's hybrid pension scheme is to provide benefits to members based on the following:

- For service prior to 1 October 1995, the benefits provided are defined benefit in nature.
- For service from 1 October 1995, the benefits provided have two elements depending on the date that the member joined the pension scheme.
- For members joining before 1 October 1995, benefits provided are the higher of their defined contribution pension and their defined benefit pension.
- For members joining on or after 1 October 1995, benefits provided are defined contribution in nature.

The contributions of the pure defined contribution, the defined benefit underpin and pure defined benefit elements are paid into one pension scheme, where the contributions and assets are segregated and ring-fenced from each other.

For the defined benefit underpin element of the scheme, each member is tested to see whether the pension on a defined contribution or defined benefit basis is higher. The liabilities shown in the pensions note are based on the greater of the two liabilities for each member, which in almost all cases is the defined benefit liability. For the service cost, again, tests are performed to see which is the higher for each member out of the Company's share of the defined contribution payments or the Company's share of accruing benefits on a defined benefit basis. The higher of these two figures for each member is then used to give the total service cost; again the defined benefit cost is the higher for the vast majority of members.

The assets of the scheme are held separately from the assets of the Group, being invested in Managed Funds. Contributions by the Group to the scheme during the year ended 30 June 2022 amounted to £580,000 (2021: £614,000). Contributions are determined by an independent qualified actuary on the basis of triennial valuations using the Project Unit Method.

The date of the most recent actuarial valuation was 30 June 2021, and at that date the value of the fund was £42,600,000. This was sufficient to cover 103% of the value of the benefits accrued to members after allowing for future increases in earnings. In arriving at the actuarial valuation, the following assumptions were adopted:

Price inflation	3.60%
Salary increases	5.25%
Discount rate	2.10%
Revaluation for deferred pensioners	2.10%

22 Pension Scheme continued

The figures at 30 June 2021 have been updated as at the Statement of Financial Position dates in order to assess the additional disclosures required under IAS 19 as at 30 June 2022 by an independent qualified actuary using the following major assumptions:

	2022	2021	2020	2019	2018
Price inflation	**3.50%**	3.50%	3.30%	3.50%	3.40%
Salary increases	**3.50%**	3.50%	3.30%	3.50%	3.40%
Discount rate	**3.80%**	1.80%	1.40%	2.10%	2.70%
Revaluation for deferred pensioners	**2.80%**	2.80%	2.30%	2.50%	2.40%
Pension increases in payment of 5% p.a. or RPI if less	**3.30%**	3.30%	3.10%	3.30%	3.20%
Pension increases in payment of 2.5% p.a. or RPI if less	**2.20%**	2.20%	2.10%	2.20%	2.10%
Life expectancy at age 65 – men	**23.4 years**	22.1 years	22.5 years	22.5 years	23.1 years
Life expectancy at age 65 in 20 years – men	**24.6 years**	23.4 years	23.6 years	23.5 years	24.8 years
Life expectancy at age 65 – women	**24.8 years**	24.3 years	24.7 years	24.7 years	25.4 years
Life expectancy at age 65 in 20 years – women	**25.9 years**	25.4 years	25.9 years	25.9 years	27.2 years

The Statement of Financial Position figures required under IAS 19 are as follows:

	30 June 2022		30 June 2021		30 June 2020		30 June 2019		30 June 2018	
	Expected long-term rate of return %	**Value £'000**	Expected long-term rate of return %	Value £'000	Expected long-term rate of return %	Value £'000	Expected long-term rate of return %	Value £'000	Expected long-term rate of return %	Value £'000
Equities	**3.80%**	**12,150**	1.8%	13,269	1.4%	11,003	2.70%	12,570	2.70%	13,154
Bonds	**3.80%**	**21,643**	1.8%	26,458	1.4%	29,549	2.70%	26,618	2.70%	24,769
Other	**3.80%**	**2,659**	1.8%	2,832	1.4%	2,300	2.70%	2,387	2.70%	1,665
Total market value of assets		**36,452**		42,559		42,852		41,575		39,588
Present value of scheme liabilities		**(33,100)**		(40,350)		(42,583)		(39,437)		(37,259)
Surplus in the scheme		**3,352**		2,209		269		2,138		2,329

All assets are held in quoted investments with the exception of the cash balance of £130,000 (2021: £153,000) in the trustees bank account.

Amounts recognised in the statement of financial position

The amounts recognised in the Statement of Financial Position are determined as follows:

	2022 £'000	2021 £'000
Present value of funded obligations	**(33,100)**	(40,350)
Fair value of plan assets	**36,452**	42,559
Surplus in the scheme	**3,352**	2,209
Less restriction of surplus recognised in the Statement of Financial Position	**(3,352)**	(2,209)
Asset recognised in the Statement of Financial Position	**–**	–

22 Pension Scheme continued

Movement in defined benefit obligation

The movement in the defined benefit obligation over the year is as follows:

	2022 £'000	2021 £'000
At 1 July	**(40,350)**	(42,583)
Current service cost	**(390)**	(432)
Interest cost	**(711)**	(583)
Contributions by plan participants	**(259)**	(272)
Actuarial loss	**6,303**	964
Benefits paid	**2,307**	2,556
At 30 June	**(33,100)**	(40,350)

Movement in the fair value of the plan assets

The movement in the fair value of the plan assets of the year is as follows:

	2022 £'000	2021 £'000
At 1 July	**42,559**	42,852
Expected return in plan assets	**753**	588
Actuarial (loss)/gains	**(5,392)**	789
Employer contributions	**580**	614
Employee contributions	**259**	272
Benefits paid	**(2,307)**	(2,556)
At 30 June	**36,452**	42,559

Amounts recognised in income statement

The amounts recognised in the Income Statement are as follows:

	2022 £'000	2021 £'000
Current service cost	**390**	432

Actuarial loss recognised in statement of comprehensive income for the year

	2022 £'000	2021 £'000
Actual return less expected return on pension scheme assets	**(5,392)**	789
Experience gains/(losses) arising on the scheme liabilities	**348**	(951)
Changes in assumptions underlying the present value of the scheme liabilities	**5,955**	1,915
Net interest income	**42**	5
Restriction of decrease in pension scheme surplus	**(1,143)**	(1,940)
Actuarial loss recognised in the Statement of Comprehensive Income	**(190)**	(182)

	2022 £'000	2021 £'000
Cumulative actuarial loss recognised in the Statement of Comprehensive Income at 1 July	**(4,728)**	(6,486)
Actuarial gain recognised in the Statement of Comprehensive Income for the year	**953**	1,758
Cumulative actuarial loss recognised in the Statement of Comprehensive Income at 30 June	**(3,775)**	(4,728)

22 Pension Scheme continued

The restriction in the scheme surplus is excluded from the cumulative actuarial gain recognised in the Statement of Comprehensive Income. As a result of the most recent valuation, and in light of the non-recognition of the pension scheme surplus, the recovery plan liability of £189,000 (2021: £189,000) is included in other payables.

The expected return on plan assets is determined by considering the expected returns available on the assets underlying the current investment policy. Expected yields on fixed interest investments are based on gross redemption yields as at the Statement of Financial Position date. Expected returns on equity and property investments reflect long-term real rates of return experienced in the respective markets.

The actual return on plan assets over the year ended 30 June 2022 was (£4,639,000) (2021: £1,377,000) or (10.9)% (2021: 3.2%). The Group expects to pay £361,000 contributions (2021: £602,000) into the pension scheme during the forthcoming year.

History of experience gains and losses recognised in the statement of comprehensive income

	2022		2021		2020		2019		2018	
	£'000	**%**	£'000	%	£'000	%	£'000	%	£'000	%
Difference between the expected and actual return on scheme assets	**(5,392)**		789		1,217		1,755		592	
Percentage of scheme assets		**(13%)**		2%		3%		4%		1.5%
Experience (loss)/gain on scheme liabilities	**348**		(951)		(171)		(294)		214	
Percentage of the present value of scheme liabilities		**0%**		2%		0%		1%		(0.6%)
Changes in assumptions underlying the present value of the scheme liabilities	**5,955**		1,915		(3,131)		(1,901)		632	
Percentage of the present value of scheme liabilities		**(15%)**		(5%)		7%		5%		(1.7%)
Movement in recovery plan liability	**–**		–		–		–		–	
Percentage of the present value of scheme liabilities		**0%**		0%		0%		0%		0%
Net interest income	**42**		5		46		66		21	
Percentage of the present value of scheme liabilities		**0%**		0%		0%		0%		0%
Amount which has been recognised in the SOCI	**953**		1,758		(2,039)		(374)		1,459	
Percentage of the present value of scheme liabilities		**2%**		4%		5%		1%		4%

Sensitivity analysis

The impact on the defined benefit obligation of changes in the significant assumptions is shown approximately below:

Assumption varied	Defined benefit obligation £m
As at 30 June 2022	33.1
Discount rate 0.5% p.a. higher	31.7
Increase in salaries 0.5% p.a. higher	33.2
Pension increase (in payment and in deferment) 0.5% p.a. higher	33.9
Life expectancy one year longer	34.0

The figures assume that each assumption is changed independently of the others. Therefore, the disclosures are only a guide because the effect of changing more than one assumption is not cumulative.

23 Provisions for Liabilities and Charges

	Group WEEE provision £'000	Group Warranty provision £'000	Group Total £'000	Company WEEE provision £'000	Company Warranty provision £'000	Company Total £'000
At 1 July 2020	102	2,619	2,721	102	693	795
Additions	–	611	611	–	432	432
Utilisation	–	(478)	(478)	–	(419)	(419)
Surplus	(102)	(428)	(530)	(102)	–	(102)
Currency translation	–	(82)	(82)	–	–	–
At 30 June 2021	–	2,242	2,242	–	706	706
Acquisition of subsidiary	–	136	136	–	–	–
Additions	–	496	496	–	289	289
Utilisation	–	(202)	(202)	–	(116)	(116)
Surplus	–	(136)	(136)	–	–	–
Currency translation	–	–	–	–	–	–
At 30 June 2022	**–**	**2,536**	**2,536**	**–**	**879**	**879**

Analysis of total provisions	Group **2022 £'000**	Group 2021 £'000	Company **2022 £'000**	Company 2021 £'000
Non-current	**2,536**	2,242	**879**	706
Total	**2,536**	2,242	**879**	706

WEEE provision

A potential liability was previously assessed for the future cost of disposal of products under the WEEE legislation for a transitional period between the adoption of the WEEE legislation in the European Union in August 2005 and the effective date in the UK of 1 July 2007.

From 1 July 2007 the Group has followed Regulation 9 of the legislation and amended the terms of sale to its customers so that the customer is responsible for the actual costs of WEEE at the time of disposal. The assessment was updated at the date of the financial statements where it was determined that no liability exists, consequently the provision was released.

Warranty provision

The usual warranty period provided by Group companies is between 5 and 10 years, dependent on market requirements, and the provision for warranty is based on expected claims over the remaining warranty period. This is calculated in accordance with the accounting policy estimates section included in note 1.

24 Deferred Income Tax

Deferred income tax assets and liabilities are offset where there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes relate to the same fiscal authority. The offset amounts are as follows:

	Group **2022 £'000**	Group 2021 £'000	Company **2022 £'000**	Company 2021 £'000
Deferred tax assets	**120**	–	**–**	–
Deferred tax liabilities	**(4,264)**	(1,591)	**(883)**	(956)
Net deferred tax liabilities	**(4,144)**	(1,591)	**(883)**	(956)

24 Deferred Income Tax continued

The net movement on the deferred income tax account is as follows:

	Group		Company	
	2022 £'000	2021 £'000	**2022 £'000**	2021 £'000
Beginning of year	**(1,591)**	(601)	**(956)**	(398)
Acquisition of subsidiary*	**(2,984)**	–	**–**	–
Income statement credited /(charged)	**408**	(765)	**59**	(373)
Tax credited/(charged) directly to equity	**14**	(236)	**14**	(185)
Currency translation	**9**	11	**–**	–
End of year	**(4,144)**	(1,591)	**(883)**	(956)
Of which:				
Deferred tax asset	**120**	–	**–**	–
Deferred tax liability	**(4,264)**	(1,591)	**(883)**	(956)

* Acquisition of subsidiary are the deferred assets and liabilities acquired with the investment in the Zemper group of companies.

The movement in Group deferred income tax assets and liabilities during the year, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

Deferred tax asset	**Fair value & other timing differences £'000**	**Total £'000**
At 1 July 2020	–	–
Charged to the income statement	–	–
At 1 July 2021	–	–
Acquisition of subsidiary	114	114
Credited to the income statement	6	6
At 30 June 2022	**120**	**120**

Deferred tax liabilities	**Accelerated tax depreciation £'000**	**Research & development £'000**	**Fair value & other timing differences £'000**	**Total £'000**
At 1 July 2020	270	638	(307)	601
Charged/(credited) to the income statement	253	(13)	525	765
(Charged)/credited directly to equity	80	193	(37)	236
Currency translation	(10)	(2)	1	(11)
At 1 July 2021	593	816	182	1,591
Acquisition of subsidiary	169	–	2,929	3,098
Charged/(credited) to the income statement	29	4	(435)	(402)
(Charged) directly to equity	–	–	(14)	(14)
Currency translation	–	2	(11)	(9)
At 30 June 2022	**791**	**822**	**2,651**	**4,264**

24 Deferred Income Tax continued

The movement in the Company deferred income tax liabilities during the year is as follows:

Deferred tax liabilities	Accelerated tax depreciation £'000	Research & development £'000	Fair value & other timing differences £'000	Total £'000
At 1 July 2020	183	515	(300)	398
Charged/(credited) to the income statement	204	(52)	221	373
Charged/(credited) directly to equity	57	163	(35)	185
At 30 June 2021	444	626	(114)	956
Charged/(credited) to the income statement	18	(34)	(43)	(59)
Charged/(credited) directly to equity	–	–	(14)	(14)
At 30 June 2022	**462**	**592**	**(171)**	**883**

The deferred income tax (charged)/credited to equity during the year is as follows:

	Group		Company	
Deferred tax credited/(charged)to equity	**2022 £'000**	2021 £'000	**2022 £'000**	2021 £'000
Tax on revaluation of financial assets at fair value through other comprehensive income	**14**	(236)	**14**	(185)
	14	(236)	**14**	(185)

25 Share Capital

	Group		Company	
	2022 £'000	2021 £'000	**2022 £'000**	2021 £'000
Authorised, allotted and fully paid				
118,935,590 ordinary shares of 1p each (2021: 118,935,590 ordinary shares of 1p each)	**1,189**	1,189	**1,189**	1,189

The ordinary shareholders each have one vote per share.

	Group and Company		Group and Company	
Movements in treasury shares included in share capital	**2022 £'000**	2021 £'000	**2022 No. of shares**	2021 No. of shares
At 1 July	**23**	26	**2,273,569**	2,605,093
Shares issued from treasury	**(5)**	(3)	**(449,565)**	(331,524)
At 30 June	**18**	23	**1,824,004**	2,273,569

There were no new shares issued during the year (2021: nil). 449,565 (2021: 331,524) shares were issued from treasury for the exercise of share options, of which the Company repurchased nil (2021: nil). There are 230,322 (2021: 683,423) share options outstanding at the year end.

26 Other Reserves

	Group		Company	
	2022 £'000	2021 £'000	**2022 £'000**	2021 £'000
Share premium account	**2,827**	1,960	**2,827**	1,960
Capital redemption reserves	**137**	137	**137**	137
Foreign currency translation reserve	**1,808**	2,076	**–**	–
	4,772	4,173	**2,964**	2,097

27 Dividends

Dividends paid during the year are outlined in the tables below:

Dividends paid (pence per share)	2022	2021
Final dividend	**4.31**	4.20
Special dividend (final)	**2.20**	–
Interim dividend	**1.54**	1.49
Special dividend (interim)	**2.27**	–
Total	**10.32**	5.69

A final dividend in respect of the year ended 30 June 2022 of 4.61p per share, amounting to £5,403,000 (2021: £5,028,000) is to be proposed at the Annual General Meeting on 17 November 2022 and, if approved, will be paid on 25 November 2022 to shareholders on the register on 28 October 2022. The ex-dividend date is 27 October 2022. These financial statements do not reflect this dividend payable.

Dividends proposed (pence per share)	2022	2021
Final dividend	**4.61**	4.31
Special dividend	**–**	2.20

Dividends paid	2022 £'000	2021 £'000
Final dividend	**5,043**	4,895
Special dividend (final)	**2,574**	–
Interim dividend	**1,803**	1,736
Special dividend (interim)	**2,659**	–
Total	**12,079**	6,631

Dividends proposed	2022 £'000	2021 £'000
Final dividend	**5,403**	5,028
Special dividend	**–**	2,567

28 Share-Based Payment Charge

Equity settled scheme

The Group operates a share-based remuneration scheme, created to motivate and retain those employees responsible for the continued success of the Group.

The Executive Share Ownership Plan (ESOP) allows for the vesting of options subject to the achievement of performance targets, being annual growth of pre-tax Earnings per Share in excess of RPI plus 3% over a five-year period. The Group also operated a Save As You Earn (SAYE) scheme for UK based employees that matured in October 2021. Rather than issue new shares, the Company has utilised shares that are already held in treasury to satisfy options.

Under IFRS 2, an expense is recognised in the income statement for share-based payments, calculated on the fair value at the grant date. The application of IFRS 2 gave rise to a charge of £nil (2021: £47,000) for the year.

At 30 June 2022, there were 230,322 options exercisable (2021: 683,423) under the ESOP or SAYE schemes.

28 Share-Based Payment Charge continued

a) Details of changes in the number of awards outstanding during the year are set out below:

	ESOP Scheme		SAYE Scheme		Total
	Options	Exercise price (p/s)	Options	Exercise price (p/s)	Options
Outstanding at 30 June 2021	315,000	124	368,423	209	683,423
Exercised during the year	(84,678)	124	(364,887)	209	(449,565)
Forfeited during the year	–	–	(666)	209	(666)
Lapsed during the year	–	–	(2,870)	209	(2,870)
Outstanding at 30 June 2022	**230,322**	**124**	**–**	**209**	**230,322**

The weighted average contractual life of the share-based payments outstanding at the end of the year is 2.3 years for the ESOP scheme and nil years for the SAYE scheme.

b) Fair value calculations

The fair value of the share options granted during the year were calculated using the methods, principal assumptions and data set out below:

	ESOP Scheme	SAYE Scheme
Method used	Black–Scholes	Black–Scholes
Date of grant	24 October 2014	15 July 2016
Share price at date of grant (p/s)	124	233
Exercise price (p/s)	124	209
Expected option life (years)	3 – 7	5
Vesting period (years)	3 – 7	5
Expected volatility	23% – 28%	27%
Expected dividend yield	3.02%	1.90%
Risk free rate	1.06% – 1.90%	0.91%
Fair value per share (p/s)	18.61 – 21.07	54.84

Expected volatility was determined by calculating the annualised standard deviation over the daily changes in the share price, and measured against historical share price movements over the number of years vesting period prior to the grant of the options.

Cash-settled share-based payment charge

Arising from the acquisition of Lightronics Participaties B.V. and Famostar Emergency Lighting B.V., the Group entered into a cash-settled share-based payment arrangement with certain employees of Lightronics Participaties B.V. Under this arrangement, the Group was committed to purchase the 43% of the share appreciation rights held by these employees, between the third and sixth anniversaries of the acquisition, calculated by a pre-determined earnings multiple used to value the initial investment.

Under IFRS 2, an expense is recognised in the income statement for share-based payments, calculated on the fair value at the settlement date. The application of IFRS 2 gave rise to a charge of £nil (2021: £1,384,000) for the year. The total liability at 30 June 2022 was £nil (2021: £4,135,000).

On 21 September 2021 the Group completed its commitment to purchase the outstanding share appreciation rights in the subsidiaries Lightronics Participaties B.V. and Famostar Emergency Lighting B.V. The settlement was executed by a cash payment of £15.2m (€17.9m) for the outstanding liability.

29 Cash Generated from Operations

Cash generated from continuing operations	Group 2022 £'000	Group 2021 £'000	Company 2022 £'000	Company 2021 £'000
Profit before income tax	**24,103**	20,141	**15,242**	15,298
Depreciation charge	**3,759**	3,316	**1,846**	1,885
Depreciation of investment property	**19**	20	**253**	240
Amortisation of intangibles	**3,213**	2,328	**1,501**	1,599
Profit on disposal of property, plant and equipment	**(197)**	(115)	**(175)**	(98)
Loss on disposal of investment property	**–**	–	**–**	11
Exceptional item in respect of Lightronics fire	**–**	(1,566)	**–**	–
Insurance proceeds re inventory lost in fire	**–**	5	**–**	–
Insurance proceeds re other costs	**–**	318	**–**	–
Net finance expense/(income)	**855**	652	**(1,480)**	(4,292)
Retirement benefit contributions in excess of current and past service charge	**(190)**	(182)	**(190)**	(182)
Share of joint venture (profit)/loss	**(228)**	–	**62**	–
Share-based payment charge	**–**	1,429	**–**	1,429
Research and development expenditure credit	**(306)**	(289)	**(193)**	(183)
Effects of exchange rate movements	**(520)**	1,114	**(154)**	1,245
Changes in working capital				
– Inventories	**(8,986)**	4,878	**(5,449)**	5,386
– Trade and other receivables	**(603)**	(7,287)	**5,041**	(7,612)
– Payables and provisions	**3,870**	964	**(1,322)**	3,727
Cash generated from operations	**24,789**	25,726	**14,982**	18,453

30 Capital Commitments

	Group 2022 £'000	Group 2021 £'000	Company 2022 £'000	Company 2021 £'000
Property, plant and equipment	**602**	2,303	**516**	169

31 Financial Instruments by Category

All financial instruments measured at fair value are categorised as level 2 in the fair value measurement hierarchy, whereby the fair value is determined by using valuation techniques, except for £3,470,000 (2021: £3,764,000) of fixed rate listed investments included in financial assets at fair value through other comprehensive income that are classified as level 1. The valuation techniques for level 2 instruments use observable market data where it is available, for example quoted market prices, and rely less on estimates. There have been no changes to valuation techniques or movements between levels of the hierarchy in the year.

31 Financial Instruments by Category continued

The accounting policies for financial instruments have been applied to the line items below:

Group	Financial assets at amortised cost £'000	Financial assets at fair value through other comprehensive income £'000	Total £'000
30 June 2022			
Financial assets at amortised cost	**2,924**	**–**	**2,924**
Financial assets at fair value through other comprehensive income	**–**	**3,470**	**3,470**
Trade and other receivables	**31,738**	**–**	**31,738**
Short-term financial assets	**5,079**	**–**	**5,079**
Cash and cash equivalents	**35,505**	**–**	**35,505**
Total	**75,246**	**3,470**	**78,716**

Group	Financial assets at amortised cost £'000	Financial assets at fair value through other comprehensive income £'000	Total £'000
30 June 2021			
Financial assets at amortised cost	2,546	–	2,546
Financial assets at fair value through other comprehensive income	–	3,764	3,764
Trade and other receivables	27,581	–	27,581
Short-term financial assets	23,603	–	23,603
Cash and cash equivalents	52,268	–	52,268
Total	105,998	3,764	109,762

Company	Financial assets at amortised cost £'000	Financial assets at fair value through other comprehensive income £'000	Total £'000
30 June 2022			
Financial assets at amortised cost	**33,682**	**–**	**33,682**
Financial assets at fair value through other comprehensive income	**–**	**3,439**	**3,439**
Trade and other receivables	**23,857**	**–**	**23,857**
Short-term financial assets	**5,075**	**–**	**5,075**
Cash and cash equivalents	**28,221**	**–**	**28,221**
Total	**90,835**	**3,439**	**94,274**

31 Financial Instruments by Category continued

Company	Financial assets at amortised cost £'000	Financial assets at fair value through other comprehensive income £'000	Total £'000
30 June 2021			
Financial assets at amortised cost	10,827	–	10,827
Financial assets at fair value through other comprehensive income	–	3,764	3,764
Trade and other receivables	28,010	–	28,010
Short-term financial assets	23,603	–	23,603
Cash and cash equivalents	47,064	–	47,064
Total	109,504	3,764	113,268

The above analysis excludes prepayments.

	Group		Company	
Liabilities as per statement of financial position	**2022 £'000**	2021 £'000	**2022 £'000**	2021 £'000
Trade and other payables (excluding statutory liabilities)	**18,426**	20,316	**14,593**	16,599
Redemption liability	**11,918**	–	**–**	–
Deferred and contingent consideration	**6,190**	16,593	**–**	15,694
Other payables	**40**	78	**–**	–
Financial liabilities	**2,162**	–	**–**	–
Lease liabilities	**3,016**	661	**–**	–

Financial liabilities are measured at amortised cost. The maturity analysis for lease liabilities is shown in note 21.

Contractual cash flows relating to current financial liabilities are all due within one year, and are equal to their carrying value.

The Group and Company did not have derivative financial instruments at 30 June 2022 or 30 June 2021. All assets and liabilities above are considered to be at fair value.

32 Related Party Transactions

The following amounts relate to transactions between the Company and its related undertakings:

2022	Purchases of goods £'000	Sales of goods £'000	Sales of services £'000	Purchase of services £'000	Dividends paid to Company £'000
Philip Payne Limited	**581**	**166**	**42**	**–**	**250**
Solite Europe Limited	**1,477**	**512**	**144**	**–**	**100**
Portland Lighting Limited	**19**	**5**	**75**	**–**	**350**
TRT Lighting Limited	**2,874**	**1090**	**–**	**–**	**–**
Thorlux Lighting L.L.C.	**–**	**176**	**19**	**–**	**–**
Lightronics Participaties B.V.	**–**	**–**	**–**	**–**	**–**
Lightronics B.V.	**229**	**2,269**	**–**	**–**	**–**
Thorlux Australasia PTY Limited	**–**	**558**	**–**	**–**	**–**
Thorlux Lighting GmbH	**–**	**–**	**–**	**539**	**–**
Famostar Emergency Lighting B.V.	**–**	**395**	**–**	**–**	**–**
Thorlux Lighting Limited	**–**	**295**	**–**	**–**	**–**
FW Thorpe Espana S.L.U.	**–**	**–**	**–**	**–**	**–**
Electrozemper S.A.	**–**	**–**	**–**	**–**	**–**
Zemper France S.A.R.L.	**–**	**–**	**–**	**–**	**–**
R.G.B. S.L.	**–**	**–**	**–**	**–**	**–**

2021	Purchases of goods £'000	Sales of goods £'000	Sales of services £'000	Purchase of services £'000	Dividends paid to Company £'000
Philip Payne Limited	509	82	42	–	300
Solite Europe Limited	1,314	386	202	–	250
Portland Lighting Limited	202	7	75	–	200
TRT Lighting Limited	2,477	1,246	20	–	–
Thorlux Lighting L.L.C.	–	312	11	–	–
Lightronics Participaties B.V.	140	652	–	–	2,512
Thorlux Australasia PTY Limited	–	614	–	–	–
Thorlux Lighting GmbH	–	–	–	506	–
Famostar Emergency Lighting B.V.	–	6	–	–	–

32 Related Party Transactions continued

Trading balances due to and from the Company by related entities were as follows:

	Amounts due to related party at 30 June		Amounts due from related party at 30 June	
	2022 £'000	2021 £'000	**2022 £'000**	2021 £'000
Philip Payne Limited	**(552)**	(628)	**57**	12
Solite Europe Limited	**(803)**	(793)	**262**	35
Portland Lighting Limited	**(677)**	(578)	**32**	9
TRT Lighting Limited	**(973)**	(310)	**978**	297
Thorlux Lighting L.L.C.	**–**	–	**300**	381
Lightronics Participaties B.V.	**–**	(31)	**1,276**	5,905
Lightronics B.V.	**(144)**	–	**551**	–
Thorlux Australasia PTY Limited	**–**	–	**1,736**	1,645
Thorlux Lighting GmbH	**(178)**	(143)	**–**	–
Famostar Emergency Lighting B.V.	**–**	–	**1**	786
Thorlux Lighting Limited	**(364)**	–	**314**	–
FW Thorpe Espana S.L.U.	**–**	–	**–**	–
Electrozemper S.A.	**–**	–	**–**	–
Zemper France S.A.R.L	**–**	–	**–**	–
R.G.B. S.L.	**–**	–	**–**	–
Total	**(3,691)**	(2,483)	**5,507**	9,070

Trading balances arise from transactions of goods and services carried out under normal commercial terms.

The Company has loan balances due from FW Thorpe Espana of €23,125,000 (£19,914,000), Lightronics Participaties B.V. of €12,049,000 (£10,367,000) (2021: €8,549,000 (£7,341,000)), Thorlux Lighting L.L.C. £1,864,000 (2021: £1,590,000) and Thorlux Lighting Limited €310,000 (£267,000) (2021: €nil (£nil)). The Company has made provisions for receivables due from Thorlux Australasia PTY Limited of £864,000 (2021: £643,000) and £1,074,000 (2021: £914,000) due from Thorlux Lighting L.L.C.

Cash resources are managed centrally by the Company and result in balances owed to and from the Company when cash is transferred.

The key management personnel are the Group Board directors; their interests are disclosed in the directors' remuneration report on pages 83 to 86. There are 2 employees who are related parties (2021: 2). Total remuneration for the year was £94,000 (2021: £94,000).

The Company owns 40% of the share capital of Luxintec S.L., a company registered in Spain. During the year the Company sold goods to Luxintec S.L. amounting to £328,000 (2021: £367,000) and purchased goods and services amounting to £47,000 (2021: £31,000). At the year end there were trade balances due to Luxintec S.L. of £31,000 (2021: £21,000) and £338,000 due from Luxintec S.L. (2021: £341,000). The Company has made a provision of £338,000 (2021: £nil) against the receivables due from Luxintec S.L.

In 2021 a loan of €869,000 was provided to Luxintec S.L. with interest payable at 1.5% secured against the company's assets. At the date of the financial statements, the loan notes balance including interest was €281,000 (2021: €869,000) equating to £242,000 (2021: £750,000) at the end of year exchange rate, including a provision of €589,000 (£507,000) (2021: €nil (£nil)) (see note 12).

33 Group Companies

The parent Company has the following investments as at 30 June 2022 and 30 June 2021:

Name of undertaking	Country of incorporation	Description of shares held	Proportion of nominal value of issued shares held by Group and Company 30 June 2022	30 June 2021
Compact Lighting Limited	England	Ordinary £1 shares	**100%**	100%
Philip Payne Limited	England	Ordinary £1 shares	**100%**	100%
Solite Europe Limited	England	Ordinary £1 shares	**100%**	100%
Portland Lighting Limited	England	Ordinary £1 shares	**100%**	100%
TRT Lighting Limited	England	Ordinary £1 shares	**100%**	100%
Lightronics Participaties B.V.	Netherlands	Ordinary €0.01 shares	**100%**	100%
Lightronics B.V. (investment held by Lightronics Participaties B.V.)	Netherlands	Ordinary €454 shares	**100%**	100%
Thorlux Lighting GmbH	Germany	Ordinary €1 shares	**100%**	100%
Thorlux Australasia PTY Limited	Australia	Ordinary $1 shares	**100%**	100%
Thorlux Lighting L.L.C.	United Arab Emirates	Ordinary AED 1,000 shares	**49%**	49%
Famostar Emergency Lighting B.V. (investment held by Lightronics Participaties B.V.)	Netherlands	Ordinary €100 shares	**100%**	100%
Luxintec S.L.	Spain	Ordinary €1 shares	**40%**	40%
Thorlux Lighting Limited	Ireland	Ordinary €1 shares	**100%**	100%
FW Thorpe Espana S.L.U.	Spain	Ordinary €1 shares	**100%**	–
Electrozemper S.A. (investment held by FW Thorpe Espana S.L.U.)	Spain	Ordinary €1,250 shares	**63%**	–
Zemper France S.A.R.L (investment held by Electrozemper S.A.)	France	Ordinary €1,000 shares	**63%**	–
R.G.B. S.L (investment held by Electrozemper S.A.)	Spain	Ordinary €60 shares	**63%**	–
Ratio Holding B.V.	Netherlands	Ordinary €1 shares	**50%**	–
Ratio Electric B.V. (investment held by Ratio Holding B.V.)	Netherlands	Ordinary €1 shares	**50%**	–
Ratio E.V. Limited (investment held by Ratio Holding B.V.)	England	Ordinary £1 shares	**50%**	–

33 Group Companies continued

The registered office addresses of these Group companies are:

Compact Lighting Limited	Merse Road, North Moons Moat, Redditch, Worcestershire, B98 9HH, England
Philip Payne Limited	Merse Road, North Moons Moat, Redditch, Worcestershire, B98 9HH, England
Solite Europe Limited	Merse Road, North Moons Moat, Redditch, Worcestershire, B98 9HH, England
Portland Lighting Limited	Merse Road, North Moons Moat, Redditch, Worcestershire, B98 9HH, England
TRT Lighting Limited	Merse Road, North Moons Moat, Redditch, Worcestershire, B98 9HH, England
Lightronics Participaties B.V.	Spuiweg 19, 5145 NE Waalwijk, Netherlands
Lightronics B.V.	Spuiweg 19, 5145 NE Waalwijk, Netherlands
Thorlux Lighting GmbH	Bahnhofstrasse 72, 27404 Zeven, Germany
Thorlux Australasia PTY Limited	31 Cross Street, Brookvale, NSW 2100, Australia
Thorlux Lighting L.L.C.	Office No. 2, Ghantoot International Building, Plot No: M.14-26, Musaffah Industrial Area, PO Box 108168, Abu Dhabi, United Arab Emirates
Famostar Emergency Lighting B.V.	Florijnweg 8 6883JP Velp, Netherlands
Luxintec S.L.	Polígono Industrial La Encomienda, C/ Atlas 12-14, 47195 Arroyo de la Encomienda, Valladolid, Spain
Thorlux Lighting Limited	Unit G6 Riverview Business Park, Nangor Road, Gallanstown, Dublin 12, Ireland
FW Thorpe Espana S.L.U.	Calle Conde de Aranda, 1, 2º izq., 28002 Madrid, Spain
Electrozemper S.A.	C/ Juan de Mariana, 16 Local 2 Drcha, 28045 Madrid, Spain
Zemper France S.A.R.L.	189 Chemin des Frozières ZA des Berthilliers, 71850 Charnay-Les-Macon, France
R.G.B S.L.	C/ Flauta Magica 19, 29006 Malaga, Spain
Ratio Holding B.V.	Ambachtsstraat 12, 3861 RH Nijkerk, Netherlands
Ratio Electric B.V.	Ambachtsstraat 12, 3861 RH Nijkerk, Netherlands
Ratio E.V. Limited	Merse Road, North Moons Moat, Redditch, Worcestershire, B98 9HH, England

33 Group Companies continued

The principal activities of these Group companies are:

Compact Lighting Limited	– non-trading entity
Philip Payne Limited	– design and manufacture of illuminated signs
Solite Europe Limited	– design and manufacture of clean room lighting equipment
Portland Lighting Limited	– design and manufacture of lighting for signs
TRT Lighting Limited	– design and manufacture of lighting for roads and tunnels
Lightronics Participaties B.V.	– holding company
Lightronics B.V.	– design and manufacture of external and impact resistant lighting
Thorlux Lighting GmbH	– sales support function
Thorlux Australasia PTY Limited	– sale of lighting equipment to industrial and commercial markets
Thorlux Lighting L.L.C.	– sale of lighting equipment to industrial and commercial markets
Famostar Emergency Lighting B.V.	– design and manufacture of illuminated signs
Luxintec S.L.	– design and manufacture of LED luminaires and lenses
Thorlux Lighting Limited	– sale of lighting equipment to industrial and commercial markets
FW Thorpe Espana S.L.U.	– holding company
Electrozemper S.A.	– design and manufacture of illuminated signs
Zemper France S.A.R.L.	– sale of lighting equipment to industrial and commercial markets
R.G.B S.L.	– sale of lighting equipment to industrial and commercial markets
Ratio Holding B.V.	– holding company
Ratio Electric B.V.	– sale of lighting equipment to industrial and commercial markets
Ratio E.V. Limited	– sale of lighting equipment to industrial and commercial markets

For the year ended 30 June 2022, Compact Lighting Limited, Philip Payne Limited, Solite Europe Limited and Portland Lighting Limited are exempt from the requirements of the Companies Act 2006 relating to the audit of individual financial statements by virtue of section 479A. As a result, the Group guarantees all outstanding liabilities to which the subsidiary company is subject. The Company registration number for Compact Lighting Limited is 02649528, for Philip Payne Limited it is 01361523, for Solite Europe Limited it is 02295852 and for Portland Lighting Limited it is 02826511.

34 Business Combination

In October 2021, the Group acquired 63% of the share capital of Electrozemper S.A., an emergency lighting specialist in Spain. The company was acquired for an initial consideration of £19.9m (€23.1m) with a deferred consideration of £1.0m (€1.1m) payable during 2022. There is a fixed commitment to acquire the remaining shares, based on current best estimates, a further £16.3m (€18.9m) could be payable which is subject to future performance conditions. Amounts recognised in respect of this acquisition are shown below.

	€'000	£'000
Intangible assets	17,062	14,693
Property, plant & equipment	1,783	1,531
Right of use assets	2,872	2,472
Financial assets at amortised cost	90	77
Financial assets at fair value through other comprehensive income	36	31
Inventories	3,879	3,341
Trade and other receivables	3,035	2,618
Cash	6,143	5,290
Trade and other payables	(3,339)	(2,873)
Financial liabilities	(2,957)	(2,546)
Lease liabilities	(3,084)	(2,656)
Provisions for liabilities and charges	(157)	(136)
Deferred tax	(3,465)	(2,984)
Total identifiable assets	21,898	18,858
Goodwill	21,273	18,320
Total purchase consideration	43,171	37,178
Total purchase consideration satisfied by:		
Cash	23,125	19,915
Redemption liability	13,851	11,928
Deferred consideration	1,123	967
Contingent consideration	5,072	4,368
Total consideration	43,171	37,178
Net cash flow arising acquisition of subsidiary		
Cash consideration	23,125	19,915
Less cash in subsidiary acquired	(6,143)	(5,290)
Cash outflow on acquisition of subsidiary	16,982	14,625

A fair value exercise has been performed; the book value of all assets and liabilities except for raw material inventories and warranties are considered to represent fair value. For raw material inventories and provisions for warranties, reductions of €0.4m (£0.3m) and €0.1m (£0.1m) were applied to reflect slow moving stock lines and potential customer claims, respectively.

Fair value of intangible assets was assessed and determined on the basis of the technology, brand name and customer relationships acquired. Technology was determined using an industry typical royalty rate over a eight years period; brand name elements was determined using an industry typical royalty rate over a ten years period and customer relationships was determined using an industry typical royalty rate over a fifteen years period, all discounted to the present day.

The goodwill relates to the on going level of profitability of the business model, opportunity to sell existing Group products into the Spanish and French markets, sale of Electrozemper products in other markets and potential sourcing benefits for Group companies.

For the nine months to 30 June 2022 the Electrozemper companies contributed €16.7m (£14.2m) to Group revenue and €0.8m (£0.8m) to Group profit before tax for the current financial year.

34 Business Combination continued

If the acquisition had occurred on 1 July 2021 the consolidated pro-forma revenue and profit before tax for the year ended 30 June 2022 would have been £148.0m and £24.6m respectively. These amounts have been calculated using the subsidiary's results and adjusting them for:

- differences in accounting policies between the Group and the subsidiary; and
- the additional depreciation and amortisation that would have been charged, assuming that the fair value adjustments to property, plant and equipment and intangible assets had applied from 1 July 2021, together with the consequential tax benefits.

35 Events after the Statement of Financial Position date

In September 2022, FW Thorpe acquired 80% of the share capital of SchahlLED Lighting in Germany, a turnkey provider of intelligent energy saving lighting products for the industrial and logistics sector. The acquisition is expected to enhance earnings per share in the financial year ending 30 June 2023, solidifying our business in Germany and providing further growth opportunities. FW Thorpe has paid an initial consideration of €14.6m (circa £12.8m) and could pay an additional amount to be determined by SchahlLED's EBITDA performance in the year ending 30 June 2023. The initial consideration has been funded from the Company's existing cash reserves, these reserves and the cash generated from SchahlLED over the next few years will fund the purchase of the remaining share capital in the future.

On 12 September 2022, the Group paid the second tranche of payments for the acquisition of Electrozemper S.A. totalling €6.1m (£5.3m).

Notice of meeting.

Notice is hereby given that the Annual General Meeting of FW Thorpe Plc will be held at Merse Road, North Moons Moat, Redditch, Worcestershire, B98 9HH on 17 November 2022 at 3.15 pm to transact the business set out below.

ORDINARY BUSINESS

1. To receive and adopt the Annual Report and Accounts for the year ended 30 June 2022.
2. To declare a final dividend.
3. To re-elect Mr A B Thorpe as a director.
4. To re-elect Mr I A Thorpe as a director.
5. To re-elect Mr J E Thorpe as a director.
6. To re-appoint PricewaterhouseCoopers LLP as auditors of the Company, to hold office until the conclusion of the next General Meeting at which accounts are laid before the Company and to authorise the directors to fix the auditors' remuneration.

Special business

To consider and, if thought fit, to pass the following resolutions which will be proposed in the case of 7 as an ordinary resolution and in the case of 8 as a special resolution.

7. That the directors' remuneration report (as set out on pages 83 to 86 of the Annual Report and Accounts) for the year ended 30 June 2022 be approved.
8. That the Company be generally and unconditionally authorised to make market purchases (within the meaning of section 693(4) of the Companies Act 2006) of ordinary shares of 1p each of the Company provided that:
   a. the maximum number of ordinary shares hereby authorised to be acquired is 11,893,559;
   b. the minimum price which may be paid for any such share is 1p;
   c. the maximum price which may be paid for any such share is an amount equal to 105% of the average of the middle market quotations for an ordinary share in the Company as derived from the Alternative Investment Market for the five business days immediately preceding the day on which such share is contracted to be purchased;
   d. the authority hereby conferred shall expire on the date of the Annual General Meeting of the Company in 2023; and
   e. the Company may make a contract to purchase its ordinary shares under the authority hereby conferred prior to the expiry of such authority, which contract will or may be executed wholly or partly after the expiry of such authority, and may purchase its ordinary shares in pursuance of any such contract.

Notes

1. Copies of the directors' service contracts will be available for inspection during usual business hours, at the registered office of the Company on any weekday (Saturdays and public holidays excepted) from the date of this notice until the date of the meeting and also at the meeting for at least 15 minutes prior to, and until the conclusion of, the meeting. If you wish to inspect these documents, please contact the Company at shareholders@fwthorpe.co.uk.
2. To be entitled to attend and vote at the meeting (and for the purposes of the determination by the Company of the votes they may cast), members must be registered in the Register of Members of the Company at 6.30 pm on 15 November 2022 (or, in the event of any adjournment, 6.30 pm on the date which is two days before the time of the adjourned meeting). Changes to the Register of Members of the Company after the relevant deadline shall be disregarded in determining the rights of any person to attend and vote at the meeting.
3. A member entitled to attend and vote at the meeting is entitled to appoint a proxy or proxies to attend, speak and vote on his or her behalf. A proxy need not also be a member but must attend the meeting to represent you. Details of how to appoint the Chairman of the meeting or another person as your proxy using the form of proxy are set out in the notes on the form of proxy. If you wish your proxy to speak on your behalf at the meeting you will need to appoint your own choice of proxy (not the Chairman) and give your instructions directly to them.
4. To appoint more than one proxy, an additional proxy form(s) may be obtained by contacting the Company's registrars, Equiniti, Aspect House, Spencer Road, Lancing, West Sussex, BN99 6DA, or you may photocopy the proxy form. Please indicate in the box next to the proxy holder's name the number of shares in relation to which they are authorised to act as your proxy. Please also indicate by ticking the box provided if the proxy instruction is one of multiple instructions being given.

5. A reply paid form of proxy is enclosed with shareholders' copies of this document. To be valid, it should be lodged with the Company's registrars, Equiniti, Aspect House, Spencer Road, Lancing, West Sussex, BN99 6DA, so as to be received not later than 3.15 pm on 15 November 2022 or 48 hours before the time appointed for any adjourned meeting or, in the case of a poll taken subsequent to the date of the meeting or adjourned meeting, so as to be received no later than 24 hours before the time appointed for taking the poll.
6. CREST members who wish to appoint a proxy or proxies by utilising the CREST electronic proxy appointment service may do so for the Annual General Meeting and any adjournment(s) thereof by utilising the procedures described in the CREST Manual. CREST personal members or other CREST sponsored members (www.euroclear.com), and those CREST members who have appointed (a) voting service provider(s), should refer to their CREST sponsor or voting service provider(s), who will be able to take the appropriate action on their behalf.
7. In order for a proxy appointment made by means of CREST to be valid, the appropriate CREST message (a "CREST Proxy Instruction") must be properly authenticated in accordance with Euroclear UK & Ireland's specifications and must contain the information required for such instructions, as described in the CREST Manual. The message must be transmitted so as to be received by the issuer's agent ID RA19, by 3.15 pm on 15 November 2022 (or, in the case of an adjournment of the Annual General Meeting, not later than 48 hours before the time fixed for the holding of the adjourned meeting). For this purpose, the time of receipt will be taken to be the time (as determined by the timestamp applied to the message by the CREST Applications Host) from which the issuer's agent is able to retrieve the message by enquiry to CREST in the manner prescribed by CREST.
8. CREST members and, where applicable, their CREST sponsors or voting service providers should note that Euroclear UK & Ireland does not make available special procedures in CREST for any particular messages. Normal system timings and limitations will therefore apply in relation to the input of CREST Proxy Instructions. It is the responsibility of the CREST member concerned to take (or, if the CREST member is a CREST personal member or sponsored member or has appointed (a) voting service provider(s), to procure that his CREST sponsor or voting service provider(s) take(s)) such action as shall be necessary to ensure that a message is transmitted by means of the CREST system by any particular time. In this connection, CREST members and, where applicable, their CREST sponsors or voting service providers are referred, in particular, to those sections of the CREST Manual concerning practical limitations of the CREST system and timings.
9. The Company may treat as invalid a CREST Proxy Instruction in the circumstances set out in Regulation 35(5)(a) of the Uncertificated Securities 2001 (as amended).
10. As at 11 October 2022 (being the last practicable day prior to the publication of this notice), the Company's issued share capital consists of ordinary shares of 1p each, carrying one vote each. Excluding 1,744,004 shares held in treasury, the total voting rights in the Company as at 11 October 2022 are 117,191,586.

Appointment of a proxy will not preclude a member from subsequently attending and voting at the meeting should he or she subsequently decide to do so. You can only appoint a proxy using the procedures set out in these notes and the notes to the form of proxy.

By order of the Board

Craig Muncaster
Joint Chief Executive, Group Financial Director and Company Secretary

Registered Office:
Merse Road
North Moons Moat
Redditch
Worcestershire
B98 9HH

11 October 2022

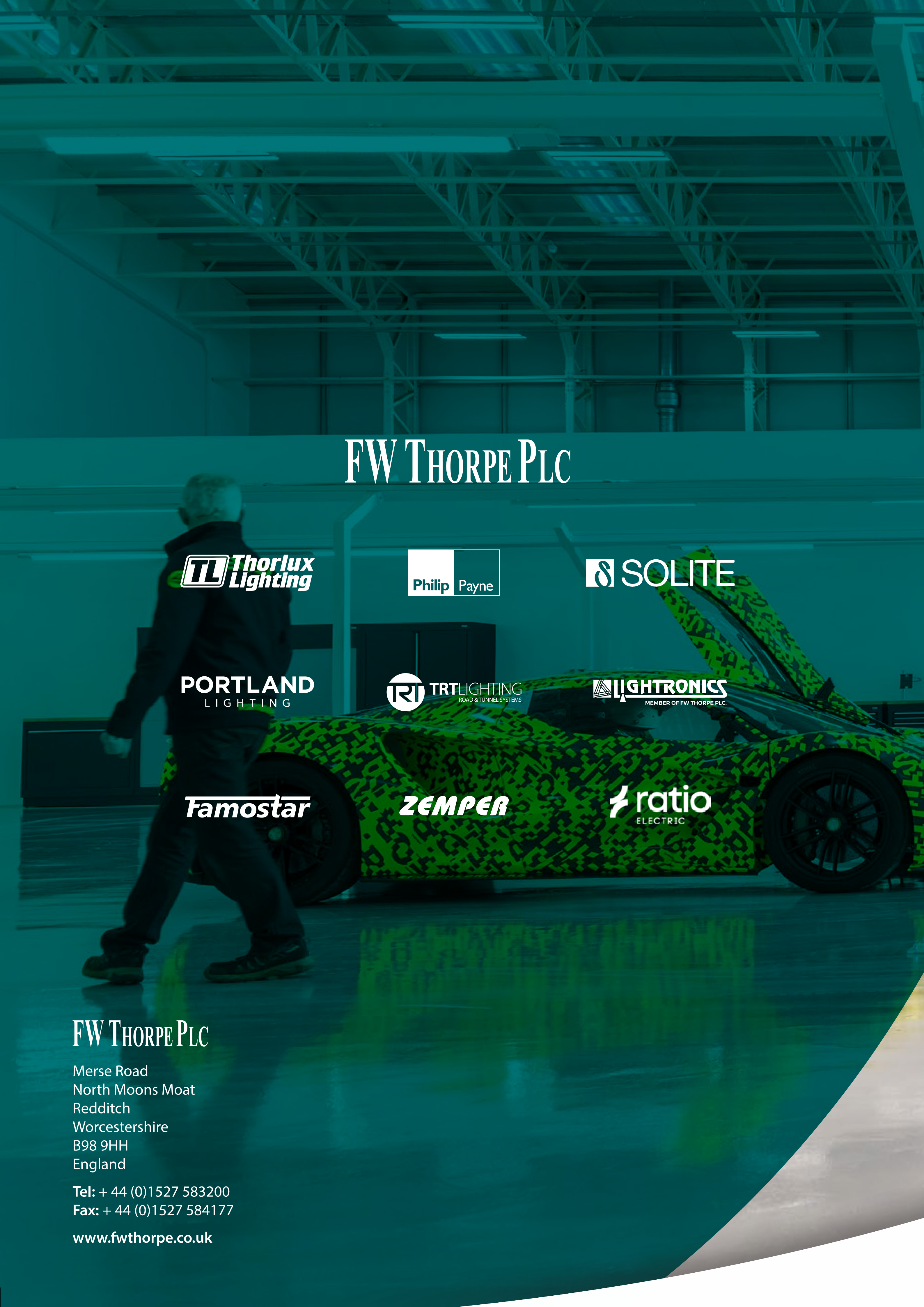
Financial calendar.

2022

14 October	Posting of the Annual Report and Accounts
17 November	Annual General Meeting
25 November	Payment of final dividend

2023

March	Announcement of interim results
April	Payment of interim dividend
September	Announcement of results for the year



FW THORPE PLC

Thorlux Lighting

Philip Payne

SOLITE

PORTLAND LIGHTING

TRT LIGHTING ROAD & TUNNEL SYSTEMS

LIGHTRONICS MEMBER OF FW THORPE PLC.

Famostar

ZEMPER

ratio ELECTRIC

FW THORPE PLC

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