Kingspan

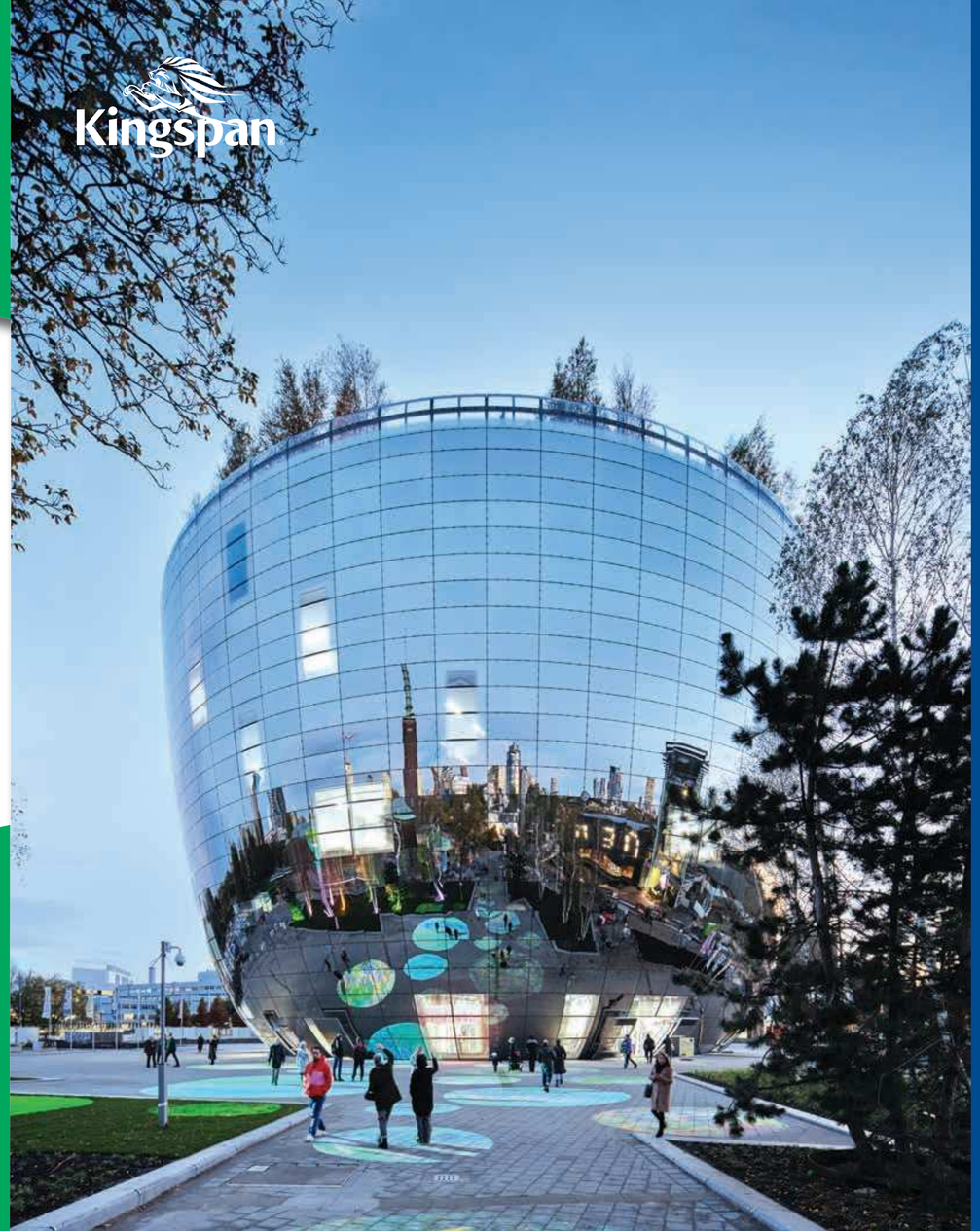
Annual Report & Financial Statements

2022

Pictured on the right is the **Depot Boijmans Van Beuningen** in Rotterdam in the Netherlands. The Depot stores the artwork for the adjacent museum of the same name. The museum's collection comprises more than 151,000 objects, only eight percent of which can be displayed in the museum. In Depot Boijmans Van Beuningen the public can enjoy the remainder of the collection.

With five different climate zones and the invaluable nature of the collection, thermal efficiency and security were key considerations in the choice of building envelope solutions. Kingspan worked with the architects, MVRDV, to customise the optimal solution.

Depot Boijmans Van Beuningen
Rotterdam, The Netherlands
Insulation
Kooltherm range
Light + Air
BA/RC Glazing System



Pathways to a Sustainable Energy Future

Understanding the **Opportunity**

There is public and political will to radically rethink global energy security.

Page 2

Energy **Conservation**

Saving energy is the cheapest, safest and cleanest way to reduce our reliance on fossil fuels.

Page 6

Energy **Transition**

Diversification of the energy network is key to our future energy security.

Page 10

Our reliance on fossil fuels has expanded from a climate crisis to an energy poverty crisis.

Scan here to watch our full interactive story online

Global consumption has increased 50% in the last 20 years.

2021 was an all-time high for global energy use. The world is facing a global climate crisis and we continue to add fuel to the fire. 82% of primary energy consumption continues to come from fossil fuels.

50% ↑

In Focus

Understanding the **Opportunity**

There is public and political will to radically rethink global energy security.

See page 2

In Focus

Energy **Conservation**

Saving energy is the cheapest, safest and cleanest way to reduce our reliance on fossil fuels. Kingspan is enabling conservation in the built environment with our full spectrum of insulation solutions.

See page 6

In Focus

Energy **Transition**

Diversification of the energy network is key to our future energy security.

See page 10

In focus

Understanding the **Opportunity**

The Dean Hotel
Cork, Ireland
Insulated Panels
K-Roc Karrier

> **In the midst of every crisis, lies great opportunity.**
> *- Albert Einstein*

Transition opportunity

Current public and political will presents global leaders with a unique opportunity to progress the energy transition agenda.

Even in advanced markets, such as the EU, energy transition is a big challenge.

The EU's renewable energy share grew from 11% in 2006 to 22% in 2021. The plan now is to double that by 2030.

ENERGY COST AND AVAILABILITY HAS A SIGNIFICANT IMPACT ON EU HOUSEHOLD BUDGETS.

22% → 45%

The EU's renewable energy share in 2021 was only 22.2%.

The EU hopes to increase their renewable energy share to 45% by 2030.

27%

of total EU energy consumption is by households.

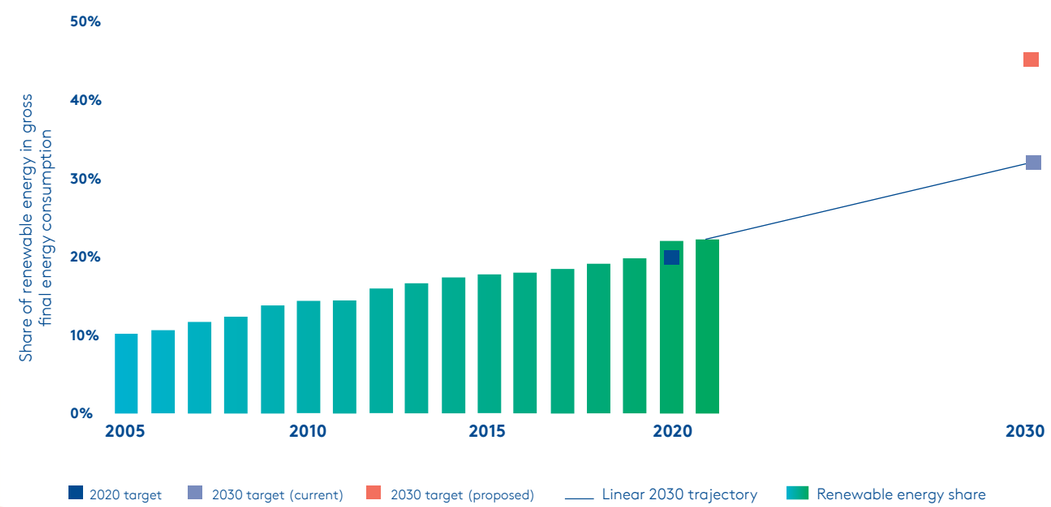
77%

of EU household energy is used for heating and cooling.

70%

almost 70% of EU energy still comes from fossil fuels.

Progress towards renewable energy source targets for EU 27



Faced with energy shortfalls and high prices, governments have so far committed well over $500billion to shield consumers from the immediate impacts.

New policies in major energy markets will help propel annual clean energy investment to more than $2trillion by 2030 in the STEPS (Stated Policies Scenario), a rise of more than 50% from today.

- IEA World Energy Outlook 2022

$2trillion

THIS CRISIS IS DIFFERENT, TODAY THERE ARE PATHWAYS TO A SUSTAINABLE ENERGY FUTURE.

Swansea Arena
Swansea, Wales
Insulated Panels
Eurobond Rainspan

Energy Conservation

It is estimated that over 75% of the EU's building stock is energy inefficient.

If we can make our buildings more efficient, we can save a considerable amount of energy annually, driving down the need for, and reliance upon, fossil fuel energy production.

Energy Transition

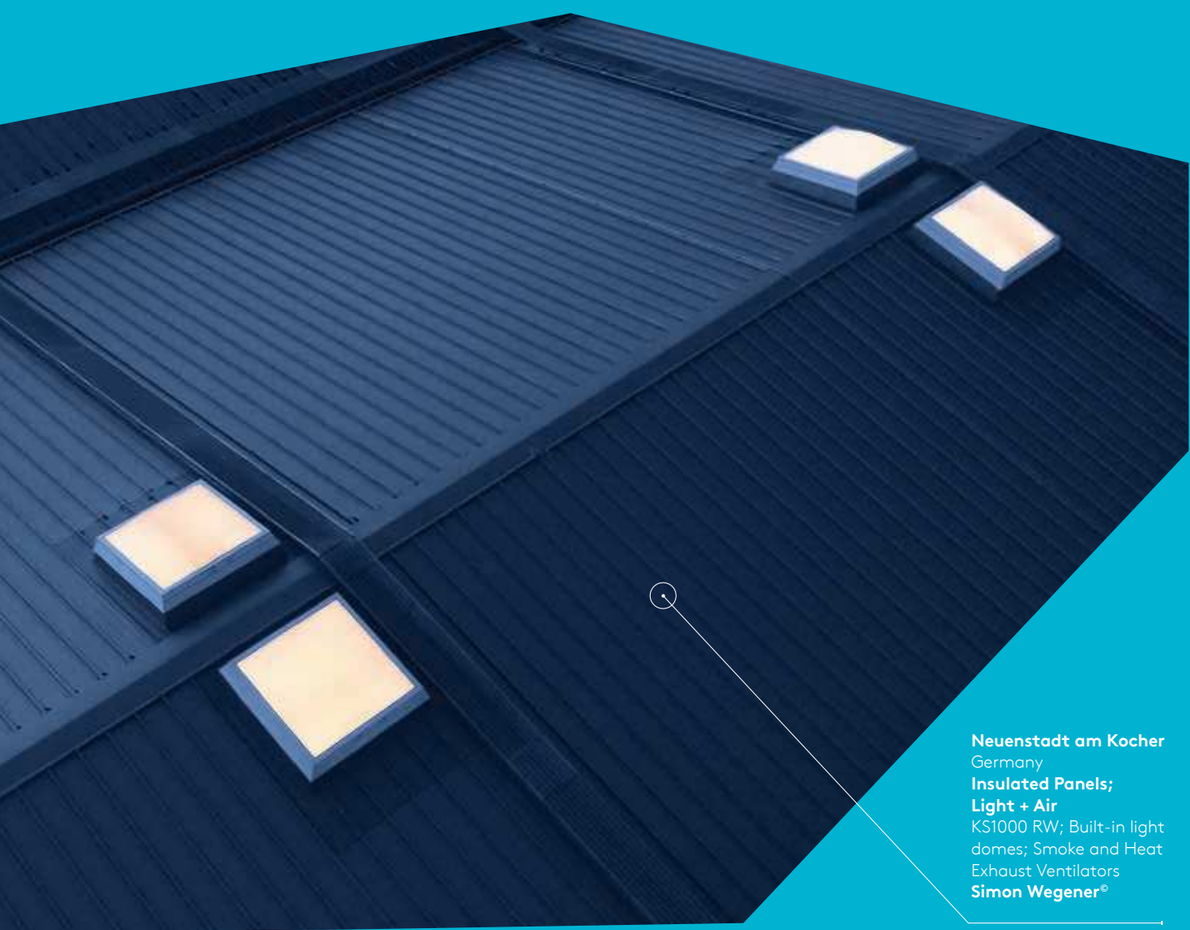
Solar energy is the most abundant, and one of the most renewable energy resources on earth. According to the National Oceanic and Atmospheric Administration (NOAA), 173,000 terawatts of solar energy strike the earth continuously which is more than 10,000 times the world's total energy use.

Every community, indeed every building, can play a part in transitioning to smarter, renewable energy sources.

AT KINGSPAN WE'RE WORKING TO INNOVATE AND DEPLOY NEW TECHNOLOGIES THAT ADDRESS THESE OPPORTUNITIES AT A GLOBAL SCALE.

Energy **Conservation**

SAVING ENERGY IS THE CHEAPEST, SAFEST AND CLEANEST WAY TO REDUCE OUR RELIANCE ON FOSSIL FUELS.



Neuenstadt am Kocher
Germany
Insulated Panels; Light + Air
KS1000 RW; Built-in light domes; Smoke and Heat Exhaust Ventilators
Simon Wegener©

45%

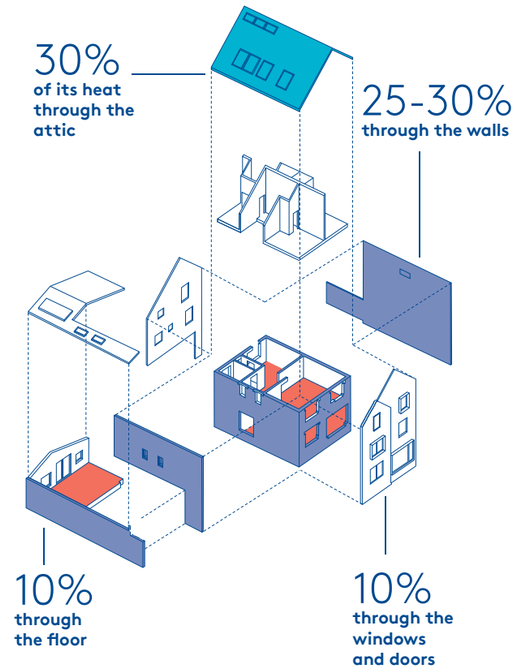
Insulation renovation alone could reduce EU households' home heating energy use by up to 45%.

Ref: BPIE - Putting a Stop to Energy Waste

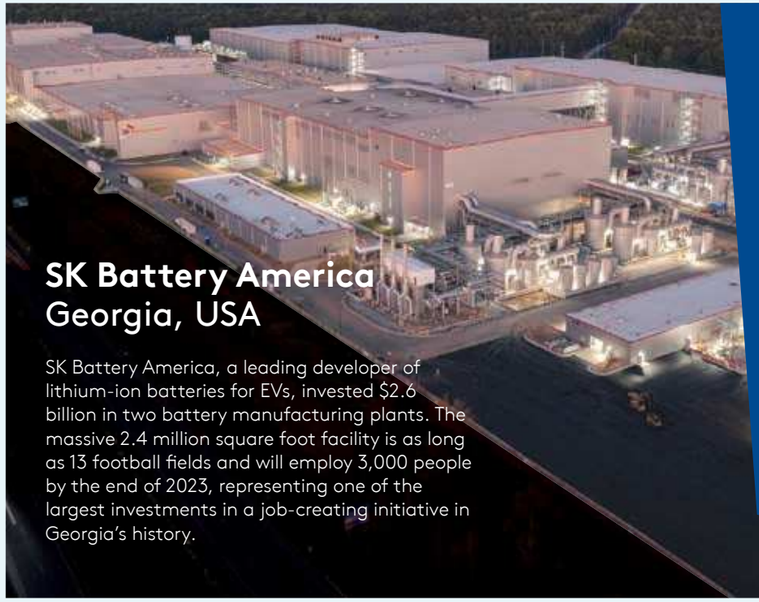
If we make our buildings more efficient we can save a considerable amount of energy annually, driving down the need for, and reliance upon, fossil fuel energy production.

Kingspan is enabling this transition through its full spectrum of building envelope solutions.

A poorly insulated home can lose:



Here are our products in action



SK Battery America
Georgia, USA

SK Battery America, a leading developer of lithium-ion batteries for EVs, invested $2.6 billion in two battery manufacturing plants. The massive 2.4 million square foot facility is as long as 13 football fields and will employ 3,000 people by the end of 2023, representing one of the largest investments in a job-creating initiative in Georgia's history.

"Just as the EV industry is about performance and efficiency, so too is Kingspan's QuadCore™ insulated panel, offering best-in-class thermal performance and faster build times versus traditional wall assemblies.

- Brent Trenga
Sustainability Director, Kingspan North America

40%

Designed to achieve a 40% carbon reduction over building regulations beyond the baseline of Part L of the 2010 Building Regulations.

Dixon Hotel
London, England
Insulation
Thermataper TT47;
Thermaroof TR27

Conservation in architecture and energy

The newest addition to Marriott's Autograph Collection blends the building's Edwardian past with more modern styling, including modern, advanced insulation.

The completed renovation achieved a 'Very Good' rating under BREEAM 2014.

Roof replacement without compromise - Neuenstadt am Kocher, Germany

The client's objective was to renovate the existing roof quickly, smoothly and cost effectively, while also creating better lighting and working conditions inside the building.

Kingspan Insulated Panels and Kingspan Light + Air worked together to provide planning and implementation services to the client.

Simon Wegener©

High-performing

KS1000 RW insulated panels were chosen for thermal performance and build-speed advantages.

Cost effective

Ease of installation reduced project labour costs while the improved thermal performance reduced the energy running costs of the building for the long-term.

Improved working conditions

The built-in light domes improved indoor working conditions and reduced energy consumption from artificial lighting.

CONSERVATION IS IMPORTANT BUT IT'S ONLY ONE LEG OF THE JOURNEY TO A BRIGHTER ENERGY FUTURE.

We also need to diversify away from fossil fuel generated energy and Kingspan is supporting this transition.

Energy **Transition**

THERE IS NO SINGLE PERFECT RENEWABLE ENERGY SOURCE TO TRANSITION TO.

Diversification of the energy network is key to our future energy security.

Communities and individual buildings need to be able to sustainably serve their needs in energy and heat. In some places, that future is already here, and so is Kingspan.

IKON, Global Innovation Centre
Kingscourt, Ireland

Here are some of the ways Kingspan is supporting that transition:

1

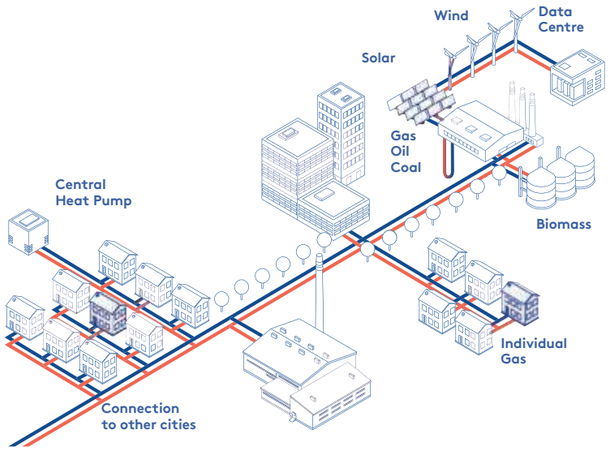
Kingspan | LOGSTOR

Thermal energy at a municipal level

In a district heating system, the heat in your building, your neighbours' buildings, and the nearby office, is all being piped from the same centralised source.

This centralisation is more efficient than heat being generated by each individual building.

The energy powering the heating system can come from renewable sources or waste heat from other industries such as data centres.



INVESTMENT IN RENEWABLE ENERGY

Germany alone will invest

€3bn

in District Heating by 2028, supported by the EU.

Targeting reductions of approximately

4m tonnes

of CO2e per year.

Kingspan LOGSTOR is supporting this transition by supplying pre-insulated pipes to district heating networks.

One such project is the FWS-West district heating project in Hamburg which aims to transport climate-friendly district heat from the planned CHP plant in Dradenau and industrial waste heat in south Hamburg.

Logstor
Pre-insulated pipe system

FWS-West Hamburg

Enabling the transition away from coal powered heating.

360k tonnes

estimated annual savings of CO2e.

20k households

converted from fossil fuel generated heating.

Hamburg, Germany

2

Solar energy built-in

Solar accounts for just 3.6% of global electricity generation today. That's going to change - fast.

REPowerEU propose to grow from c.200 GW installed capacity today, to 600 GW of newly installed solar power generation by 2030.

The EU is also considering phasing in requirements to install solar power on all new public and commercial buildings.

That's where Kingspan PowerPanel™ fits in. PowerPanel™ is Kingspan's first fully integrated insulated panel with solar generation.

It's already in action at our Kingscourt Insulated Panels Facility in Ireland

7,500 m²
of roof replaced in 10 days

380 MWh
solar generation annually

123 tonnes
CO2e saved annually

2x lux levels
from upgraded Kingspan Light + Air daylighting products

THE COMBINATION OF ENERGY CONSERVATION AND ENERGY TRANSITION ARE THE PATH FORWARD.

AT KINGSPAN, WE WILL CONTINUE TO INNOVATE TO SUPPORT THIS SHIFT.

See more about our strategic pillars on pages 26-27

Innovation | Planet Passionate | Completing the Envelope | Global

Legacy Magnet Academy
California, USA
Insulated Panels
Dri-Design

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This copy of the statutory annual report of Kingspan Group plc for the year ended 31 December 2022 is not presented in the ESEF-format as specified in the Regulatory Technical Standards on ESEF (Delegated Regulation (EU) 2019/815). The ESEF annual report is available at: https://www.kingspan.com/group/investors/reports-presentations.

Our Impact

Our products directly enable lower carbon and healthier buildings, now and into the future.

Kingspan's insulation systems, sold in 2022, will save an estimated 771 million MWh of energy or 173 million tonnes of CO2e over their lifetime.

Ultra Energy-Efficient

173m tonnes

173 million tonnes of CO2e will be saved over the life of our insulation systems sold in 2022

Enough to power a major airline for over 15 years[1]

Recycled Materials

803m

In 2022 alone we upcycled 803 million waste plastic bottles

Enough recycled bottles to fill over 1,000 football pitches

Conserved Water

48bn litres

Over 48 billion litres of rainwater will be harvested by our tanks produced in 2022

Enough water to fill over 600 million baths[2]

Natural Daylight

9bn lumens

The capacity to create 9 billion lumens of natural light annually through our daylighting systems

Enough to light up 1 million homes[3]

1 Assumes 60 year product life; based on an EU airline disclosure of over 9.2m tonnes of CO2e emissions for 12 months to March 2022
2 Assumes a 20 year product life
3 Assumes 10 x 60W bulbs per home

We Are Planet Passionate

Through Planet Passionate we will reduce carbon and energy intensity in both our manufacturing processes and products, and continue our relentless pursuit to help enable lower carbon buildings that deliver more performance and value, with clear targets to strive for by 2030.

Gene M. Murtagh

PLANET PASSIONATE

Read more about Planet Passionate on page 64

Our Commitments

Carbon

- Net Zero Carbon Manufacturing by 2030
- 50% reduction in product CO2e intensity from primary suppliers by 2030
- Zero emission company funded cars by 2025

Energy

- 60% direct renewable energy use by 2030
- 20% on-site renewable energy generation by 2030
- Solar PV systems on all wholly owned sites by 2030

Circularity

- Zero company waste to landfill by 2030
- Recycle 1 billion PET bottles into our manufacturing process annually by 2025
- QuadCore™ products utilising recycled PET by 2025

Water

- Harvest 100 million litres of rainwater annually by 2030
- Support 5 ocean clean-up projects by 2025

Our Global Reach

2022 was another year of global expansion with our manufacturing footprint growing from 198 sites to 212.

Our Locations

Americas
Brazil
Canada
Chile
Colombia
Mexico
Panama
Peru
Uruguay
USA

Europe
Austria
Azerbaijan
Belgium
Bosnia
Bulgaria
Croatia
Czech Republic
Denmark
Estonia
Finland
France
Germany
Hungary
Ireland
Italy
Kazakhstan
Latvia
Lithuania
Netherlands
N. Ireland
Norway
Poland
Portugal
Romania
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
UK
Ukraine

Middle East
Qatar
Turkey
UAE

Africa
Egypt
Morocco

Asia
China
India
Indonesia
Kyrgyzstan
Malaysia
Philippines
Singapore
Vietnam

Australasia
Australia
New Zealand

Read more about our global strategic pillars on page 26-27

Summary Financials

Revenue

€8.3bn
+28%
2021: €6.5bn

EBITDA[1]

€998.3m
+12%
2021: €893.2m

Trading Profit[2]

€833.2m
+10%
2021: €754.8m

Trading Margin[3]

10.0%
-160bps
2021: 11.6%

Profit After Tax

€616.0m
+8%
2021: €570.6m

EPS

329.5c
+8%
2021: 305.6c

Driving Sustainability, Innovation and Performance

1 Earnings before finance costs, income taxes, depreciation, amortisation and non trading item
2 Operating profit before amortisation of intangibles and non trading item
3 Trading profit divided by total revenue

Cincinnati Children's Hospital Utility Plant
Ohio, USA
Insulated Panels
Morin Matrix Series

Chairman's Statement

Jost Massenberg

Łódź Zoo
Łódź, Poland
Insulated Panels
K-Roc Karrier Panel

I am pleased to report on another year of record performance by Kingspan, in what turned out to be a year of two halves. Solid momentum in the early part of 2022 gave way to more challenging conditions in the second half, delivering total revenue for the year of €8.3bn (2021: €6.5bn) and record trading profits of €833m (2021: €755m).

↑

Revenue

€8.3bn
+28%

2021: €6.5bn

Delivering on strategy
This excellent result, against a backdrop of global uncertainty in many of our markets, demonstrates the success of our core strategy centred around the four key pillars of Innovation, Planet Passionate, Global, and Completing the Envelope.

Our strong balance sheet enabled us to pursue investment opportunities that bolster this strategy. During the year, we achieved a new milestone in 'Completing the Envelope' by establishing a new global Roofing + Waterproofing division through the acquisition of Ondura Group, a global provider of roofing solutions, and Derbigum, a leading Belgian based provider of waterproofing membranes. In parallel, we have continued our organic global growth, with several new facilities either commissioned or in progress during the year including in Vietnam, Australia, Brazil and the US.

We also continued to invest in new high performance technologies with the development of the A-rated AlphaCore® insulation board, and the new QuadCore™ LEC (lower embodied carbon) insulated panel, both of which will be launched to market in early 2023, and will help our end users to reduce the carbon footprint of the built environment. Throughout the year we continued to make meaningful progress in our Planet Passionate programme, including further advances in absolute carbon emission reduction across our global operations, full details of which will be published shortly in our 2022 Planet Passionate Sustainability Report.

Dividend
Thanks to these positive results, the Board is pleased to recommend a final dividend of 23.8 cent per share, which if approved at the Annual General Meeting, will give a total dividend for the year of 49.4 cent (compared to 45.9 cent in the prior year). This is in line with the Company's previously announced shareholder returns policy. If approved, the final dividend will be paid (subject to Irish withholding tax rules) on 9 May 2023 to shareholders on the register at close of business on 14 April 2023.

I extend my sincere thanks to management and all our colleagues across the business for your hard work and contribution to Kingspan's success in 2022.

Management and employees

Kingspan is a team of over 22,000 talented and dedicated people. On behalf of the Board, I particularly want to welcome those who joined the business during this past year. They joined a pioneering team of colleagues and innovators who make a difference to our planet and the climate challenge every day. During 2022, the Board and I were delighted to meet and hear from many of you on our trips to LATAM and the Nordics, amongst others.

I extend my sincere thanks to management and all our colleagues across the business for your hard work and contribution to Kingspan's success in 2022. I look forward to meeting many more of you from the Kingspan team on our site visits later this year.

Ukraine and Turkey

Like so many others, we were shocked as events unfolded in Ukraine last year. I particularly want to send my good wishes to our Ukrainian colleagues, their families and their loved ones. In response, Kingspan supported the establishment of five UNICEF Blue Dot Hubs, to provide support and protection to those fleeing the war. We also announced our proposed €200m investment in a new Building Technology Campus in Ukraine where we will manufacture a range of products to help meet Ukraine's vision of rebuilding a low carbon built environment to the highest levels of energy-efficiency. We intend to establish this campus as soon as conditions permit, and indeed significant preparatory work is already under way.

We were also deeply distressed by the recent earthquake in Turkey and Syria which has had a devastating impact on many of our colleagues in our Turkish facilities. Kingspan is already providing practical support to those on the ground, and on behalf of the Board, I extend our sincerest sympathies and support to all those affected.

Board governance

In last year's Annual Report, I highlighted the Board's key areas of focus around governance. Following on from that, the Board appointed *Better Boards* to carry out an independent review of the Board, into its effectiveness, culture, committees, and composition. The review found that the Board and its committees were working effectively, whilst also highlighting the need to further build diversity and international experience at Board level. The Board has adopted all the recommendations of the *Better Boards* report, including formally underpinning its commitment to improving diversity through the adoption of Kingspan's Board Diversity Policy. Further details of *Better Boards* report and recommendations are set out in the Report of the Nominations & Governance Committee.

Board changes

During the year, we were delighted to welcome Senan Murphy to the Board as an independent non-executive director. Senan brings a wealth of industry and financial experience across multiple sectors including banking, building materials and renewable energy. We are also very pleased to announce the appointment of Louise Phelan, who will join the Board in April this year as an independent non-executive director. Louise is a highly respected business leader and adviser, with experience leading global organisations in both the renewable energy and finance sectors. We look forward to benefitting from their experience in the years ahead.

Following the conclusion of this year's Annual General Meeting in April, both Michael Cawley and John Cronin will be retiring from the Board on the expiration of their terms of office. Both Michael and John have been valued Board and committee members over the past nine years. On behalf of the Board, I would like to thank them both for their significant contributions to Kingspan during those years.

Looking ahead

No doubt 2023 will bring fresh challenges to Kingspan and the wider global community. However, I remain confident that Kingspan's strong balance sheet and management's relentless focus on delivering on its strategy, will continue to build on the success of prior years in bringing sustainable long-term value to our stakeholders whilst supporting the climate change goals of our end users across the globe.

Jost Massenberg
Chairman

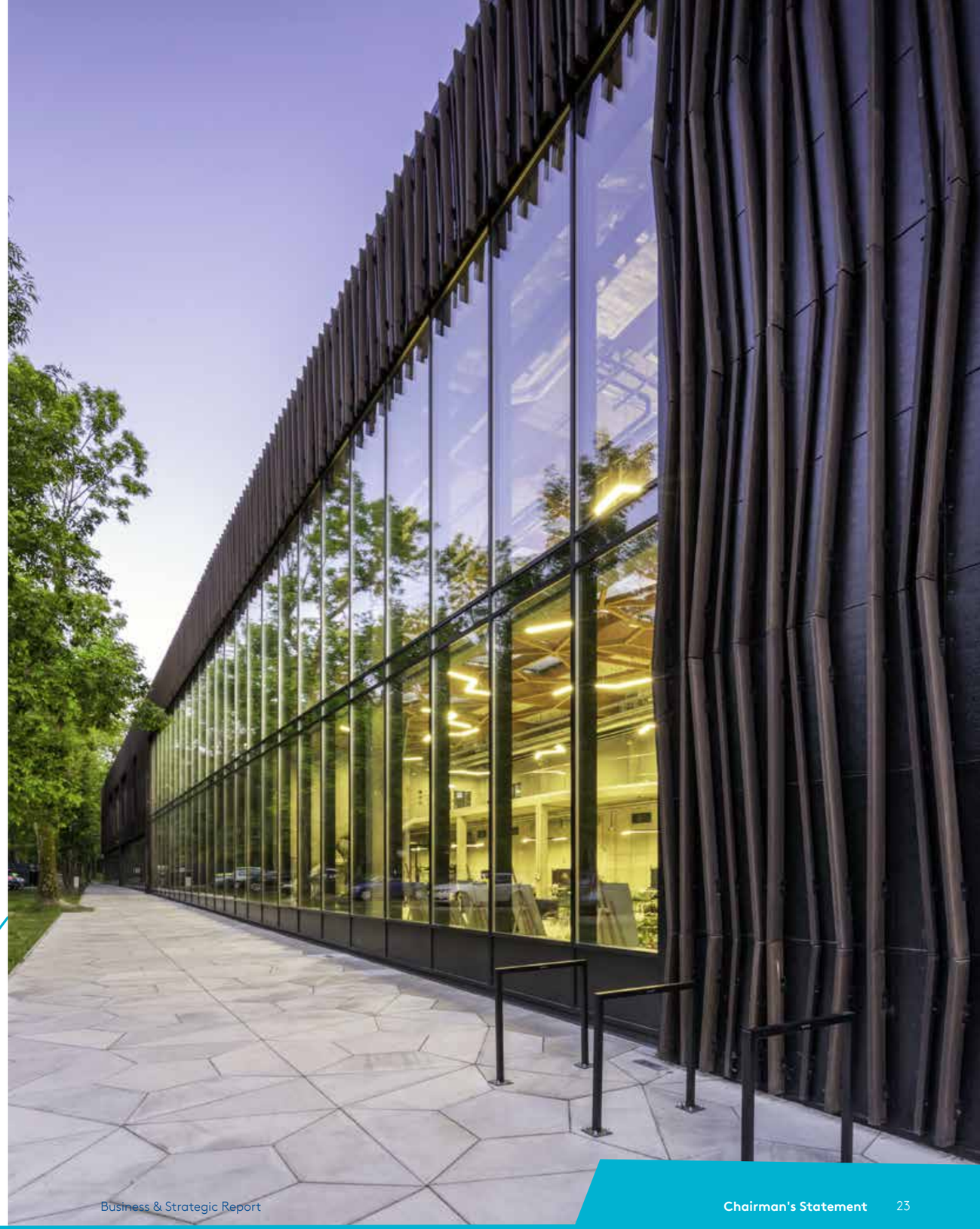
21 February 2023

↑

Trading Profit

€833m
+10%

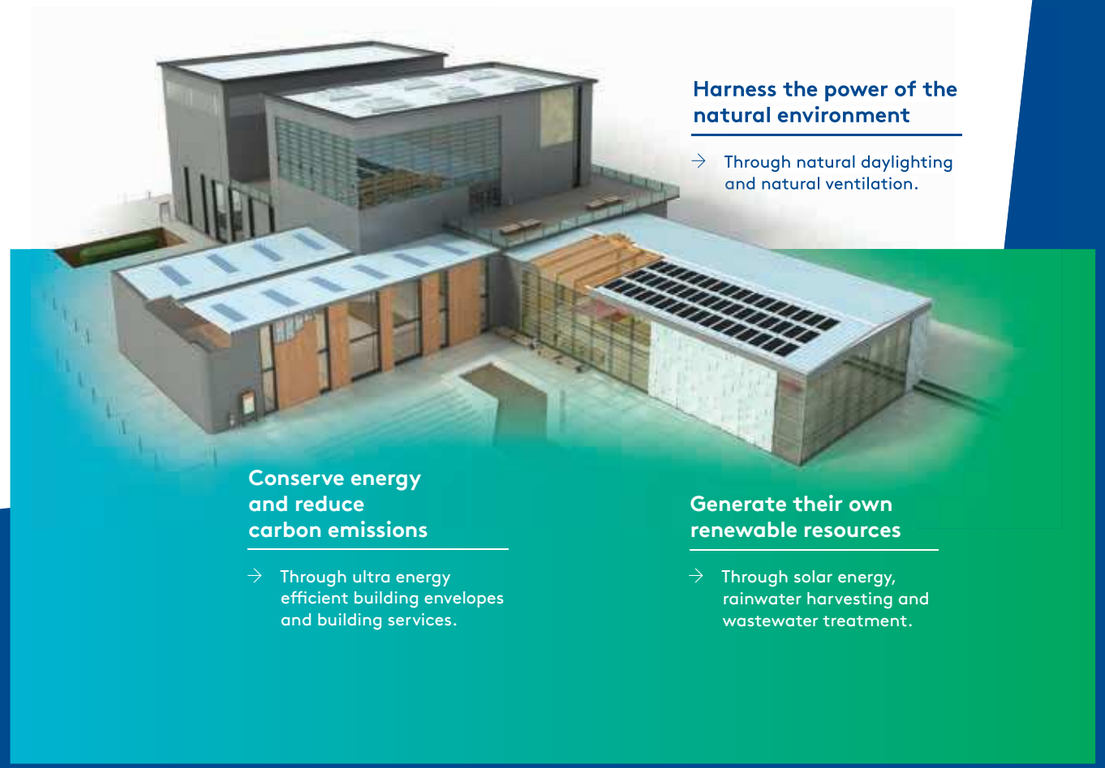
2021: €755m



Our Business Model and Strategy

Our mission is to accelerate a zero emissions future built environment with people and planet at its heart.

We believe buildings of the future should:



Harness the power of the natural environment

→ Through natural daylighting and natural ventilation.

Conserve energy and reduce carbon emissions

→ Through ultra energy efficient building envelopes and building services.

Generate their own renewable resources

→ Through solar energy, rainwater harvesting and wastewater treatment.

Our Solutions

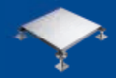
Conserve energy and reduce carbon emissions

Insulated Panels

Kingspan Insulated Panels is the world's largest and leading manufacturer of high-performance insulated panel building envelopes. Powered by Kingspan's proprietary and differentiated insulation core technologies, a Kingspan panelised envelope provides building owners with consistently superior build quality and lifetime thermal performance compared with built-up constructions using traditional insulation.

Insulation

Kingspan is a world leader in rigid insulation board. Our advanced insulation technologies deliver superior thermal performance and air-tightness when compared with traditional insulation, resulting in thinner solutions that offer multiple advantages including more internal floorspace and daylight. In 2021 we extended our exposure in insulation to pre-insulated pipe systems which service the district heating segment. Industrial insulation is a segment which contains significant opportunity for Kingspan to expand in the future. The operation of buildings accounts for 28% of carbon emissions globally. While space heating is the largest consumer of energy in buildings, heating water and space cooling are also key energy consumers. Kingspan has innovative and ultra-performance products in both piping and ducting insulation.



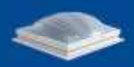
Data + Flooring

Kingspan is the world's largest supplier of raised access flooring and data centre airflow management systems. Raised access flooring is the most cost effective way of creating a flexible working environment by utilising the floor void to manage the distribution of M&E services and HVAC systems. Our systems have many benefits including optimising overall building height, achieving faster construction with greater design flexibility, enabling easier reconfiguration of a workspace, and improving indoor air quality.

Roofing + Waterproofing

Kingspan has a long established interest in developing a roofing and waterproofing segment to complement our insulation board offering. Roofing membrane and roofing components are essential elements for the energy efficiency and water protection of a building envelope. Through the acquisitions of Ondura Group and Derbigum in 2022, Kingspan will have an annual run rate in this segment of c. €500m. Going forward we expect to offer single component membrane solutions and to also supply roof systems incorporating membrane and insulation, giving our customers increased warranty protection from a single trusted supplier.

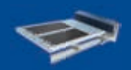
Harness the power of the natural environment



Light + Air

Kingspan Light + Air is established as a global leader providing a full suite of daylighting solutions, as well as natural ventilation and smoke management solutions, which complement our existing building envelope technologies. Thermal comfort, indoor air quality and natural daylighting are widely recognised as the most important factors affecting occupant wellbeing in buildings.

Generate their own renewable resources



PowerPanel™

PowerPanel™ is part of our Insulated Panels division. It is an engineering innovation from Kingspan which has integrated our QuadCore™ insulated panel with solar technology, enabling a single fix installation of high-performance insulated panel with solar power generation.

Water + Energy

Sustainable water management is rapidly becoming one of the greatest challenges of our time. We manufacture and support pioneering new technologies to preserve and protect water. Kingspan is also a market leading manufacturer of innovative energy management solutions.

Our Strategic Pillars

Our business model and our strategic pillars enable the ongoing conversion to ultra-performance building envelopes from outdated, inefficient, methods of construction.

Innovation

Kingspan's innovation agenda is driven across four key themes - performance, solutions, sustainability, and digitalisation.
We have a persistent focus on iterative performance improvements in our current portfolio including characteristics relating to thermal, structural, sustainability, fire and smoke. We innovate solutions to enable architects and building designers to create sustainable buildings, such as our integrated insulated panel with solar-PV, PowerPanel™. And by progressively surfacing our products digitally, we are making it easier to find them, specify them, buy them and track them.

Planet Passionate

Our Planet Passionate agenda is inextricably linked with innovation. Planet Passionate is Kingspan's 10-year sustainability programme which aims to impact three big global issues – climate change, circularity and protection of our natural world.
By setting ourselves challenging targets in the areas of carbon, energy, circularity and water, we aim to make significant advances in both our business operations and our products.

Completing the Envelope

Our strategy of 'Completing the Envelope' aims to take our innovation and sustainability DNA and apply them to a wider portfolio of products which are complementary to our current offering.
Our solutions driven approach deepens our relationships with our customers and extends the opportunities to make buildings better for the future.

Global

Kingspan is a truly global business, trading in over 80 countries with 212 manufacturing sites across the globe.
We aim to continue expanding globally to bring ultra-performance building envelope solutions to markets which are at an earlier stage in their evolution to sustainable and efficient methods of construction.

Santa Monica High School Discovery Building
California, USA
Data + Flooring
ConCore®

Strategic Highlights 2022

Innovation

PowerPanel™
PowerPanel™ is a fully integrated, factory manufactured, insulated panel with solar PV. The initial launch in the UK and Ireland shows encouraging early signs and preparation is now underway for production in additional regions.

QuadCore™ (LEC)
Our Innovation and Planet Passionate teams worked in partnership to take significant steps forward in the development of lower embodied carbon alternatives for our QuadCore™ insulated panel products produced in the UK and Ireland. QuadCore™ LEC will have c.17% lower embodied carbon (based on LCA modules A - C) when compared to the existing Quadcore™ insulated panel product.

AlphaCore®
Part of our R&D agenda is working and engaging with innovators and small-scale manufacturers of pioneering materials. In 2022 this led to a breakthrough in the development of AlphaCore® which is currently building a specification bank and is likely to advance further in the years ahead.

Planet Passionate

Internal carbon charge
From the 1st of January 2023 each business unit will have an internal charge of €70 per tonne for all energy related carbon emissions (excluding process and biogenic emissions). This will help to further incentivise the rapid deployment of decarbonisation projects to support the achievement of our net zero carbon manufacturing target.

Energy and Carbon
2022 saw a reduction of 26% in Scope 1 & 2 carbon emissions from a 2020 baseline. This reduction was achieved through reduction in use of high GWP blowing agents in North America, the implementation of new renewable energy contracts and the deployment of 18 new rooftop solar-PV projects across our business which have the capacity to generate 6.4 GWh of energy annually.

Expansion

Roofing + Waterproofing
In 2022 Kingspan established its Roofing + Waterproofing division through the acquisition of Ondura Group and Derbigum. Roofing has been a targeted area of expansion as a complementary category to our energy efficient building envelope solutions. The 12-month revenue run rate for this newly established division should reach c. €500m.

Bio-based Insulation
In March 2022, Kingspan completed the acquisition of Troldtekt, a wood fibre acoustic insulation producer in Denmark, marking our first significant step into the 'bio-based insulation' category. This is an area in which we expect to make further advances in the foreseeable future.

Global
We continued to expand organically in 2022, including breaking ground on our first facility in South East Asia, Vietnam, late in the year. We have a significant amount of planned new lines and facilities, which will add over 10% to our current global footprint over the next three years. Within those plans is our ambition to invest over €200m in a Building Technology Campus in Ukraine.

Our Strategic Goals

Our strategic goals are aligned with our mission to accelerate a zero emissions future built environment with people and planet at its heart.

To advance materials, building systems and digital technologies to address issues such as climate change, circularity and the protection of our natural world.

To be the world's leading provider of low energy building envelopes – Insulate and Generate.

To expand globally, bringing high-performance building envelope solutions to markets which are at an earlier stage in the evolution of sustainable and efficient building methods.

Innovation Global Planet Passionate Completing the Envelope

Hartman Marine Group
Urk, The Netherlands
Insulated Panels
QuadCore™;
Dri-Design; Multideck

Read more about our strategic pillars on page 26

Our Values

Our values have always been the foundation of our strategy and are fundamental to how we do business and interact with each other.

Our Belief

Historically, construction has taken from nature with little consideration given to the finite resources available. Buildings were constructed without contemplating how they might impact future generations. We believe that buildings now and into the future need to deliver more than ever before. They must combat climate change by maximising energy efficiency through superior thermal performance while incorporating products that are lower in embodied carbon across their entire lifecycle. Using less energy is not enough; buildings should generate their own energy too. Buildings should be healthy and inspirational, optimising the benefits of daylight and clean air. They should be designed, constructed and operated to protect natural resources and conserve water as much as possible. Above all they must be safe, protecting people and property from fire and other natural hazards.

Our Culture and Values

Kingspan has grown from a family business and many of the values associated with family businesses form the backbone of our culture today. The business has been built on trust in the integrity of our people and of our offering. We value this trust and recognise it as being fundamental to our ongoing success. We are entrepreneurial, collaborative, honest, and we stand behind a common cause – better buildings for a better world.

We are innovative. We are the market leader in the field of high-performance building envelope solutions, which ensure lifetime carbon and resource savings. We have gained this position through a creative and solutions driven mindset, which continues to inform our innovation agenda today.

We think long-term. The strategy of the business is driven by long-term ambitions and not by quarterly performance. The success of this strategy can be seen in our long-term growth. This ethos is apparent in our multi-year commitments such as our 10-year Planet Passionate programme which will drive real, positive, impact for the environment and forms a common global goal across the business.

Code Of Conduct

Kingspan expects the highest standards of integrity, honesty and compliance with the law from our employees, our directors and our partners, globally. We actively encourage our employees to speak out if they experience instances that are not in keeping with the principles outlined in our Code of Conduct.

Over 95% of Kingspan employees have completed online training on our updated Code of Conduct since its launch in 2021. Our business success is inextricably linked to our behaviours, and our aspiration is to maintain a culture where our everyday actions are built on five core principles:

- Clear, ethical and honest behaviours and communications;
- Compliance with the law;
- Respect for the safety and wellbeing of colleagues;
- Protection of our Group assets; and
- Upholding our commitment to a more sustainable future.

Please see further detail at:

2022 In a Nutshell

Revenue

€8.3bn

+28%

2021: €6.5bn

Trading Profit[1]

€833.2m

+10%

2021: €754.8m

Applications

- Retail
- Distribution
- Leisure
- Accommodation
- Food
- Manufacturing
- Data Management
- Infrastructure

How we create value

- Product innovation and differentiation
- Excellent customer service
- Energy efficient sustainable building envelope solutions
- We operate our businesses to the highest standards
- We acquire excellent businesses
- We recycle capital to optimise returns
- We maintain financial discipline
- We balance our portfolio of businesses across product and geography
- We are reducing our environmental impacts throughout our Planet Passionate initiatives

How we operate

212

Global manufacturing facilities

22,000+

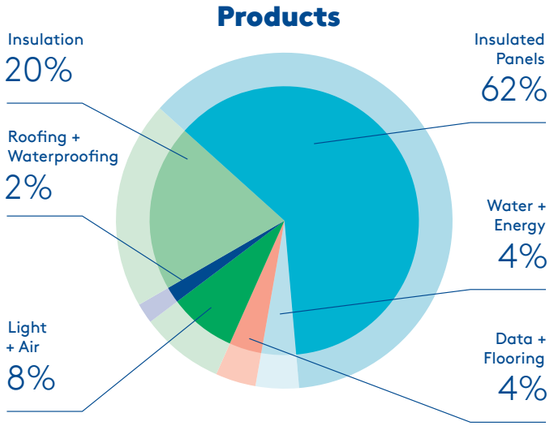
Employees

- Management controls
- Quality systems
- Responsible supply chain partnerships

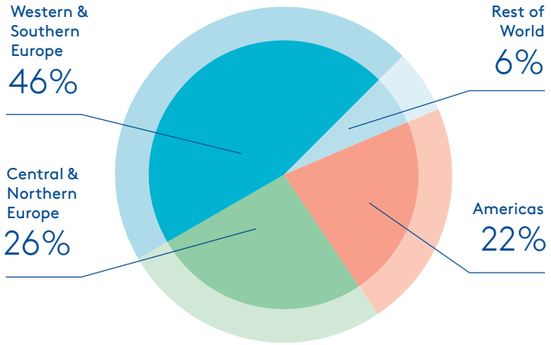
The Dean Hotel
Cork, Ireland
Insulated Panels
K-Roc Karrier

15% Other	85% Energy Efficiency & Conversion		**Drivers**
34% Via Distribution	66% Direct		**Channel**
24% Residential	9% Office & Data	67% Commercial & Industrial	**Sector**
23% Refurbishment	77% New Build		**End-Market**

Products



Geography



Value created

EBITDA[2]

€998.3m

+12%

2021: €893.2m

EPS

329.5c

+8%

2021: 305.6c

ROCE

15.9%

2021: 19.5%

Dividend

49.4c

+8%

2021: 45.9c

1 Operating profit before amortisation of intangibles and non trading item.
2 Earnings before finance costs, income taxes, depreciation, amortisation and non trading item.

Chief Executive's Review

Gene M. Murtagh

Business Review

The 2022 outcome for the Group as a whole was relatively pleasing given the accumulating uncertainty as the year progressed. Over-life carbon saved in buildings using insulation systems we manufactured in 2022 is an estimated 173 million tonnes of CO2e, driving record revenue of €8.3bn and record trading profit of €833m. This was achieved at a time of exceptional inflation and unprecedented disruption in supply chains globally, which was less a feature in the latter part of the year.

The performance of individual markets and economies varied significantly with the Americas, Germany and Australasia the most stable for Kingspan, with much of Europe weaker. The pattern of trade was also at odds with prior periods where many of our routes to market built inventory in the earlier part of the year, largely out of caution, followed by industry-wide efforts to lower stock levels in the second half.

Virtually all walks of life have been and will be further impacted by the prevailing energy cost and availability dynamics. This has understandably led to broader and growing concerns which may weigh on demand in the year or so ahead. Conversely, it has also generated an unprecedented impetus amongst governments and society in general to ensure measures are taken to curtail reliance on fossil fuel. Conservation in buildings is a key component of this given almost 40% of all global energy related carbon emissions emanate from buildings and construction. Our solutions can, and are, playing a meaningful long-term role in this process.

Santa Monica High School Discovery Building
California, USA
Data + Flooring
ConCore®

Operational Summary

- Record year overall in a testing environment and a tougher second half.
- Insulated Panels sales increase of 23% driven by raw material price growth and a 46% increase in global sales volume of QuadCore™. Ground-breaking Lower Embodied Carbon (LEC) insulated panel launched recently.
- Insulation sales strongly ahead by 40% driven by inflation and acquisitions. District heating applications a standout performer. Significant progress on entry into the bio-based insulation category. AlphaCore® launching shortly. Technical insulation now comprising 35% of divisional revenue.
- Roofing + Waterproofing platform embedded. Annualised revenue run rate in excess of €500m. Ondura Group acquisition completed in September 2022 following Derbigum acquisition and strategic minority investment of 24% in Nordic Waterproofing.
- Technical insulation and roofing significantly increase the Group's exposure to RMI.
- Significant progress at Light + Air, with a sales increase of 27% and margins progressing year on year.
- Strong performance in Data + Flooring with sales up 33% and a strong data centre solutions pipeline into 2023.
- Invested a total of €1.3bn in acquisitions, purchase of minority interest and capex during the year.

Read more about our strategic pillars on page 26-27

Financial Highlights

28% ↑
Revenue up 28% to €8.3bn, (pre-currency, up 25%)

10% ↑
Trading profit[1] up 10% to €833m, (pre-currency, up 7%)

9%
Acquisitions contributed 9% to sales growth and 8% to trading profit growth in the year

8% ↑
Profit after tax of €616.0m (2021: €570.6m). Effective tax rate of 17.5% (2021: 17.2%)

160bps ↓
Group trading margin[2] of 10.0% (2021: 11.6%), a decrease of 160bps

8% ↑
Basic EPS up 8% to 329.5 cent (2021: 305.6 cent). Diluted EPS also up 8% to 326.9 cent (2021: 303.0 cent)

23.8c
Final dividend per share of 23.8 cent (2021: 26.0 cent) giving a total dividend for the year of 49.4 cent (2021: 45.9 cent)

1.62x
Year end net debt[3] of €1,539.6m (2021: €756.1m). Net debt to EBITDA[4] of 1.62x (2021: 0.88x)

15.9%
ROCE of 15.9% (2021: 19.5%), or 16.5% after annualised impact of acquisitions

1 Operating profit before amortisation of intangibles and non trading item
2 Trading profit divided by total revenue
3 Net debt pre-IFRS 16 per banking covenants
4 Net debt to EBITDA is pre-IFRS 16 per banking covenants

Planet Passionate Targets (Progress from base year)	Target Year	Underlying Business 2020	Underlying Business 2022	Whole Business 2020	Whole Business 2022
Carbon					
→ Net Zero Carbon Manufacturing - scope 1 & 2 GHG emissions[1] (t/CO2e)	2030	410,224[2]	**242,734**	517,972[2,3]	**385,157[3]**
→ 50% reduction in product CO2e intensity from primary supply partners (%)	2030	-	**0.04**	-	**0.04**
→ Zero emission company funded cars (annual replacement %)	2025	11	**60**	11	**58[4]**
Energy					
→ 60% Direct renewable energy (%)	2030	19.5	**34.3**	19.5	**33.4**
→ 20% On-site renewable energy generation (%)	2030	4.9	**7.2**	4.9	**7.1**
→ Solar PV systems on all wholly owned facilities (%)	2030	21.7	**41.5**	21.7	**35.2**
→ Net Zero Energy (%)	2020	100	**100**	100	**n/a[5]**
Circularity					
→ Zero company waste to landfill (tonnes)	2030	18,642	**9,081**	18,642	**10,828**
→ Recycle 1 billion PET bottles into our manufacturing processes annually (million bottles)	2025	573	**803**	573	**803**
→ QuadCore™ products utilising recycled PET (no. of sites)	2025	1	**3**	1	**3**
Water					
→ Harvest 100 million litres of rainwater annually (million litres)	2030	20.1	**26.3**	20.1	**26.4**
→ Support 5 ocean clean-up projects (no. of projects)	2025	1	**3**	1	**3**

Whole Business includes all manufacturing, assembly and R&D sites within the Kingspan Group, including acquisitions since 2020.

1: Excluding biogenic emissions. Scope 2 GHG emissions calculated using market-based methodology.
2: Restated figures due to improved data collection & change in calculation methodologies.
3: GHG emissions were recalculated due to acquisitions that occurred in 2021 & 2022.
4: Excluding recent acquisitions due to unavailability of data at this time.
5: As we retire our Net Zero Energy target in favour of a carbon charge, newly acquired businesses are not included for this target.

The table below provides further detail on the progress within Kingspan by category:

Intensity Indicators	Change over 2020 base year
Carbon Intensity (tCO2e/€m)	54% reduction
Energy Intensity (MWh/€m)	28% reduction
Landfill Waste Intensity (t/€m)	68% reduction
Water Intensity (million lt/€m)	16% reduction

Planet Passionate and our impact

The vast majority of what we provide to the market enables others to dramatically reduce energy consumption and its related GHG emissions. That estimated impact during 2022 was 173 million tonnes of CO2e saved from insulation systems we sold during the year, taking into account their contributions over the life of the building infrastructure that they serve.

Internally, our Planet Passionate initiative once again made tremendous progress, despite being hampered by supply issues, largely related to the procurement of solar panels from Asia.

In summary, 18 solar PV projects were completed across our facilities during the year which will generate 6.4 GWh of renewable electricity annually. 803 million PET bottle equivalent of recycled material was processed across the Group, and 14 rainwater harvesting systems were installed. In addition, 58% of all new company funded cars in the year were replaced with zero emission vehicles, and our waste to landfill for the whole business reduced by 42% since 2020.

Investing in our future

Between organic and inorganic initiatives, we invested a total of €1.3bn during the year. Capital projects, mainly focused on capacity expansion, amounted to €276m and included significant projects either completed or commenced in the US, Brazil, France, Germany, Vietnam and Australia. Preparatory work is also underway for the Ukraine Technology Campus that we announced last year. Understandably progress has been slow to date although we anticipate investing over €200m in the project over the next four years.

Acquisitions have long been a prominent feature of our strategy and in 2022 we invested a total of €1,054m, a record, in adding geographic footprint and new business lines to our portfolio including deferred consideration and a strategic minority investment. In total six transactions were completed, the largest of which was Ondura, a French headquartered global provider of roofing solutions. Together with Derbigum, this now forms the platform for expansion deeper into the Roofing + Waterproofing arena with combined annual run-rate revenues of approximately €500m entering the current year. In addition, we also acquired a 24% strategic holding in Nordic Waterproofing.

Innovation at work

The nucleus of our innovation agenda is focused on driving product improvement across thermal, renewable content, embodied carbon and fire performance, while also incorporating more bio-based solutions across our portfolio.

PowerPanel™ and Rooftricity™ made it to market during 2022 with very encouraging early signs. We have limited the launch to Ireland and the UK for the time being due to component supply constraints. Initial preparations are now underway for PowerPanel™ production enablement in the US, France and the Czech Republic, likely entering production sometime in 2024.

Our QuadCore™ LEC (Lowered Embodied Carbon) insulated panel launched recently, giving rise to an estimated 17% reduction in embodied carbon (in life cycle modules A - C) relative to existing product. We aim to achieve further reductions in embodied carbon as we progress towards our 2030 supply chain targets. This is an exciting new departure which we are confident will resonate strongly with our global blue chip client base and beyond.

QuadCore™ 2.0 development is significantly advanced, and AlphaCore® is launching imminently following the acquisition of Calostat® technology in late 2022. Progress is also being made on the bio-based insulation front, albeit at a somewhat slower pace than we would like.

Product and system integrity

By the end of 2022, 26 of our sites were certified to ISO 37301, with a plan to have 58 sites certified to the standard by the end of 2023. ISO 37301 is the leading global standard for establishing, developing and monitoring compliance systems. Our enhanced product integrity programme is now deeply embedded across the Group. To date, 133 of our sites have been audited by the Group Compliance and Certification Team. In addition, 651 third party external products and system audits took place throughout 2022.

Plastchem
Hardenberg, The Netherlands
Insulated Panels
QuadCore™

Insulated Panels

↑

Turnover

€5,181.5m

+23%[1]

2021: €4,229.2m

↑

Trading Profit

€548.7m

+6%

2021: €519.8m

↓

Trading Margin

10.6%

-170bps

2021: 12.3%

1 Comprising underlying +17%, currency +4% and acquisitions +2%. Like-for-like volume -7%.

The global and diverse nature of this business was reflected in the broad and varying performances of the different regional businesses and trends. Overall, the trading result has demonstrated growth, albeit that volumes became more challenged during the second half.

Advanced insulation cored products represented 85% of insulated panels sales volumes, whilst mineral fibre cored was 11% with older generation materials comprising the balance. QuadCore TM, our highly differentiated and unique core material, represented 17% of insulated panels volume, having grown by 46% over prior year. Further progress is anticipated during 2023.

PowerPanel™ made its market entry, and we anticipate this family of ground-breaking solutions to feature prominently over the longer term. Supply chain consistency and reliability has been a challenge and we continue to explore ways of ensuring this is addressed.

NAU High-Performance Athletic Centre
Arizona, USA
Insulated Panels
KS Series Mini Micro-Rib

GRID
Dundee, UK
Insulation
Kooltherm K103 Floorboard; GreenGuard GG300

Insulation

↑

Turnover

€1,658.3m

+40%[1]

2021: €1,182.9m

↑

Trading Profit

€165.2m

+13%

2021: €146.7m

↓

Trading Margin

10.0%

-240bps

2021: 12.4%

1 Comprising underlying +12%, currency +2% and acquisitions +26%.

Worldwide sales grew encouragingly by 40% over prior year. Much of the growth was delivered through pricing, and indeed the acquisitions added during 2022. Sales volumes in Logstor®, Kingspan's main technical insulation platform and now 25% of the division, grew by 18% in the second half of the year which was the first like-for-like period under Kingspan ownership. Insulation board activity represents approximately 60% of the division with like-for-like volume decreasing by 10% in the year.

The two larger businesses acquired were Logstor (June 2021) and Troldtekt (April 2022), both Danish headquartered, but in entirely different markets with significant growth potential. Logstor, the larger of the two, focuses primarily on pre-insulated pipes for district heating (and cooling) infrastructure, an area of ever-growing opportunity as the world accelerates towards clean power generation and distribution. Our capacity will be increased by 30% during the current year, and by a further 50% over the following three years. Troldtekt addresses both the acoustic and bio-based insulation segments. Again, we expect to grow capacity by 60% over the next two years or so reflecting the opportunity afforded by the extension of applications and geography.

On the innovation and new product agenda, AlphaCore® launches imminently following the acquisition of Calostat® technology. An A-Class Optim-R® should reach market in early 2024. We are in the process of assembling the leadership and skills required to enter the stone wool segment which is part of our long-established ambition to be the sole global provider of the 'full spectrum' of thermal solutions.

Light + Air

In 2022 this business delivered strong progress with revenue and trading profit both ahead, by 27% and 45% respectively. Notable growth was achieved in the Central European and Southern European businesses. North America also improved its performance, enhanced by the addition of the Solatube® product set and business model, which we anticipate rolling out more regionally across the US over the coming years.

As the Group grows, so too will the divisional structure that supports it. To that end, going forward the Light, Air and Water businesses will be reported as one enlarged division. Combining the service businesses of both, leveraging the online success at Water + Energy, and having a wider global route to market and channel synergy will make this combination compelling over the longer term. The enlarged division will have real global scale and scope, with revenue run-rate expected to be approximately €1bn in 2023.

San Diego Symphony
California, USA
Light + Air
UniQuad®
Cladding + Wall System

↑
Turnover
€700.7m
+27% (1)
2021: €552.2m

↑
Trading Profit
€52.3m
+45%
2021: €36.0m

↑
Trading Margin
7.5%
+100bps
2021: 6.5%

1 Comprising underlying +15%, currency + 2% and acquisitions +10%

Roofing + Waterproofing

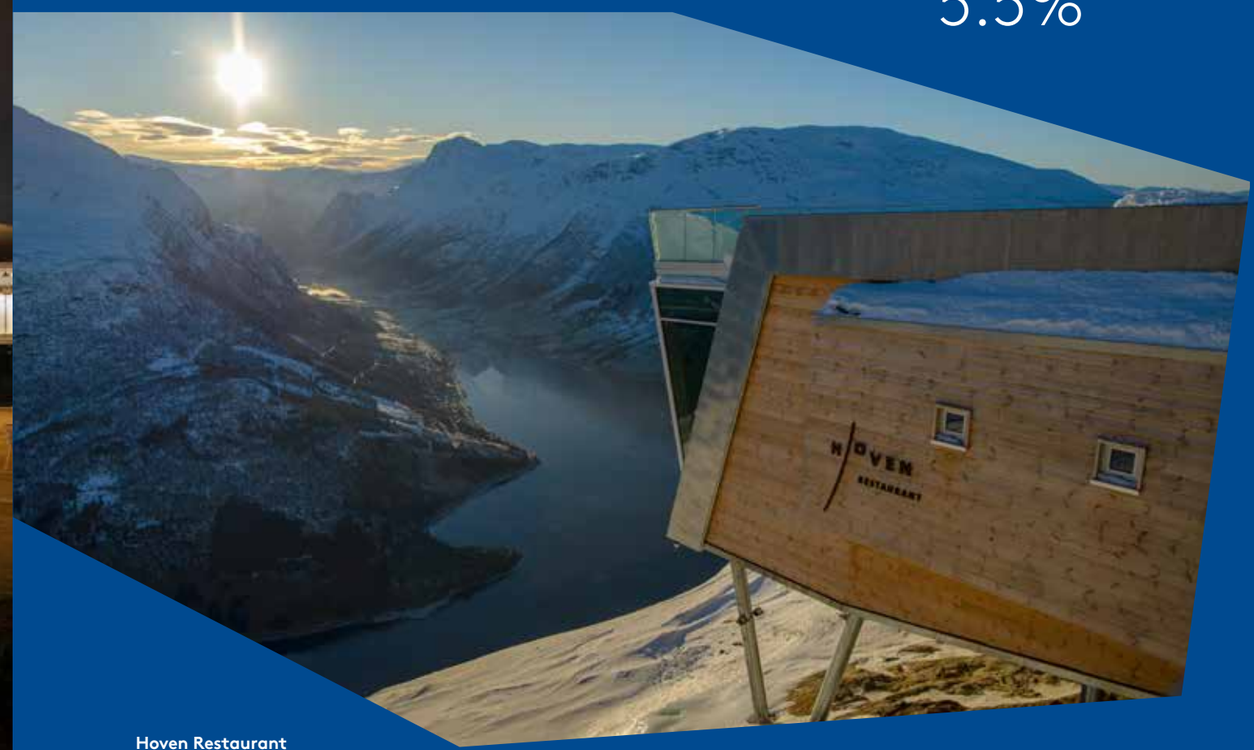
The maiden year for this new business was marked by two meaningful acquisitions, Ondura and Derbigum, acquired in September 2022 and June 2022 respectively.

The annualised revenue run rate is approximately €500m. This combination brings Kingspan into both flat and pitched roof membrane solutions, from the primary outer layer of the roof to the secondary underlay. In both applications, the core basis of our strategy is to create pull-through for Insulation products through a warranted system-sell. Early progress has been encouraging. From a roofing technology perspective, we intend to broaden our portfolio of waterproofing, and our geographic presence, through both organic and inorganic routes. The trading margin reported reflects acquisition and other related costs during 2022.

Turnover
€153.2m

Trading Profit
€8.5m

Trading Margin
5.5%



Hoven Restaurant
Loen, Norway
Roofing + Waterproofing
Derbigum® SP4 FR;
Derbigum® GC

Data + Flooring

Strong progress was again achieved in the data solutions activity in this business as large scale cloud services infrastructure continued to expand globally, and as our share of those internal solutions grew.

This trajectory and the active pipeline of live projects give us confidence that further growth ought to be delivered during the current year.

↑

Turnover

€360.1m

+33%[1]

2021: €271.4m

↑

Trading Profit

€43.1m

+33%

2021: €32.3m

↑

Trading Margin

12.0%

+10bps

2021: 11.9%

1 Comprising underlying +26% and currency +7%

Water + Energy

This business delivered a reasonably solid outcome for the year owing to some recovery of position in the Australian market, albeit with margin pressures elsewhere reflecting a lag in the recovery of raw material inflation.

↓

Turnover

€287.1m

+10%[1]

2021: €261.3m

↓

Trading Profit

€15.4m

-23%

2021: €20.0m

↓

Trading Margin

5.4%

-220bps

2021: 7.6%

1 Comprising underlying +6%, currency +1% and acquisitions +3%

Looking ahead

2022 was a bumpy year with the strong performance in the first half giving way to a more subdued environment in the second half of the year. The combination of war in Ukraine, the consequential steep energy and consumer inflation, and an industry overstocked due to supply chain concerns were all factors that weighed on second half demand and performance.

The more recent performance of our business has differed significantly by sector, end-market and geography. Within the mix of business there are strong sectors of out-performance led by a need for ultra-energy efficiency and lower carbon. This is a theme which is likely to play out more fully in the medium term as society grapples with the need for a step change in energy efficiency and de-carbonisation.

It is difficult to look too far ahead in this environment. We anticipate delivering a broadly similar trading profit in the first quarter of 2023 to that of 2022, aided in part by the contribution from acquisitions. We are mindful of a more demanding comparative to come in the second quarter. Longer term, Kingspan is very well placed given the powerful combination of our global scale, diversity of our end-markets, strong innovation agenda and an ongoing societal drive for energy efficiency.

Gene M. Murtagh
Chief Executive Officer
21 February 2023

Read more in our Business & Strategic Report on page 24

Depot Boijmans van Beuningen
Rotterdam, The Netherlands
Insulation
Kooltherm range
Light + Air
BA/RC Glazing System

Financial Review

Geoff Doherty

The Financial Review provides an overview of the Group's financial performance for the year ended 31 December 2022 and of the Group's financial position at that date.

Overview of results

Group revenue increased by 28% to €8.3bn (2021: €6.5bn) and trading profit increased by 10% to €833.2m (2021: €754.8m) with a decrease of 160 basis points in the Group's trading profit margin to 10.0% (2021: 11.6%). Basic EPS for the year was 329.5 cent (2021: 305.6 cent), representing an increase of 8%.

The Group's underlying sales and trading profit growth by division are set out below:

Sales	Underlying	Currency	Acquisition	Total
Insulated Panels	+17%	+4%	+2%	+23%
Insulation	+12%	+2%	+26%	+40%
Light + Air	+15%	+2%	+10%	+27%
Roofing + Waterproofing	-	-	+100%	+100%
Water + Energy	+6%	+1%	+3%	+10%
Data + Flooring	+26%	+7%	-	+33%
Group	**+16%**	**+3%**	**+9%**	**+28%**

The Group's trading profit measure is earnings before interest, tax, amortisation of intangibles and non trading item:

Trading Profit	Underlying	Currency	Acquisition	Total
Insulated Panels	+1%	+4%	+1%	+6%
Insulation	-16%	+2%	+27%	+13%
Light + Air	+29%	+2%	+14%	+45%
Roofing + Waterproofing	-	-	+100%	+100%
Water + Energy	-26%	-	+3%	-23%
Data + Flooring	+24%	+9%	-	+33%
Group	**-1%**	**+3%**	**+8%**	**+10%**

The key drivers of sales and trading profit performance in each division are set out in the Business Review.

Finance costs (net)

Finance costs for the year increased by €1.4m to €37.7m (2021: €36.3m). The Group's net interest expense on borrowings (bank and loan notes net of interest receivable) was €34.6m (2021: €32.2m). This increase reflects higher average gross debt levels in 2022. In particular, this includes the interest expense relating to the two new acquisition related financing facilities with an aggregated value of €800m which were arranged and fully drawn in 2022. Lease interest of €4.7m (2021: €3.7m) was recorded for the year. €0.1m (2021: €0.2m) was recorded in respect of a non-cash finance charge on the Group's defined benefit pension schemes.

Taxation

The tax charge for the year was €130.6m (2021: €118.4m) which represents an effective tax rate of 17.5% (2021: 17.2%). The increase in the effective rate reflects, primarily, the change in the geographical mix of earnings year on year.

Dividends

The Board has proposed a final dividend of 23.8 cent (2021: 26.0 cent) per ordinary share payable on 9 May 2023 to shareholders registered on the record date of 14 April 2023. An interim dividend of 25.6 cent per ordinary share was declared during the year (2021: 19.9 cent). In summary, therefore, the total dividend for 2022 is 49.4 cent compared to 45.9 cent for 2021. This payout is in line with our shareholder returns policy.

Retirement benefits

The primary method of pension provision for current employees is by way of defined contribution arrangements. The Group has three legacy defined benefit schemes in the UK which are closed to new members and to future accrual. The total pension contributions to these schemes for the year amounted to €1.8m (2021: €nil) and the expected contributions for 2023 are €nil (2021: €nil). On 6 December 2022, the Group completed a bulk insurance annuity insurance policy 'buy in' for the Colt Life Assurance and Retirement Scheme ('CLARS'). This buy-in ensures an insurance asset that fully matches the remaining pension liability and was net settled in cash for an amount of €15.9m in January 2023. There was no impact on profit before tax from this transaction. In addition, the Group has a number of smaller defined benefit pension liabilities in Mainland Europe. The net pension liability in respect of all defined benefit schemes was €49.5m as at 31 December 2022 (2021: €28.0m) with the increase reflecting, primarily, a decrease in the value of scheme assets during the year partially offset by actuarial gains on scheme liabilities.

Intangible assets and goodwill

Intangible assets and goodwill increased during the year by €685.5m to €2,687.3m (2021: €2,001.8m). Intangible assets and goodwill of €708.9m (2021: €418.9m) were recorded in the year relating to acquisitions completed by the Group. An increase of €9.0m (2021: increase of €50.9m) arose due to year end exchange rates used to translate intangible assets and goodwill other than those denominated in euro. There was an annual amortisation charge of €32.4m (2021: €29.5m).

Financial key performance indicators

The Group has a set of financial key performance indicators (KPIs) which are presented in the table below. These KPIs are used to measure the financial and operational performance of the Group and to track ongoing progress in achieving medium and long term targets to maximise shareholder return.

Key Performance Indicators	2022	2021
Basic EPS growth	**+8%**	+48%
Sales performance	**+28%**	+42%
Trading margin	**10.0%**	11.6%
Free cashflow (€m)	**392.5**	127.1
Return on capital employed	**15.9%**	19.5%
Net debt/ EBITDA	**1.62x**	0.88x

(a) Basic EPS growth. The growth in EPS is accounted for primarily by a 10% increase in trading profit partially offset by an increase in the Group's effective tax rate by 30 basis points to 17.5% and an increase in minority interest. The effective tax rate increased due to the geographical mix of earnings year on year. The minority interest amount increased reflecting the performance at the Group's operations which have minority stakeholders.

(b) Sales performance of +28% (2021: +42%) was driven by a 16% increase in underlying sales, a 9% contribution from acquisitions and positive currency translation of 3%. The increase in underlying sales reflected a combination of strong year on year price growth due to raw material inflation offset by an overall reduction in volume particularly in the second half of the year as global construction markets eased.

(c) Trading margin by division is set out below:

	2022	2021
Insulated Panels	**10.6%**	12.3%
Insulation	**10.0%**	12.4%
Roofing + Waterproofing	**5.5%**	-
Light + Air	**7.5%**	6.5%
Water + Energy	**5.4%**	7.6%
Data + Flooring	**12.0%**	11.9%

The Insulated Panels division trading margin decreased year on year reflecting the market mix of sales, inventory cost dynamics as well as negative operating leverage driven by year on year volume declines. The trading margin decrease in the Insulation division reflects, in the main, negative operating leverage associated with year on year volume declines and the category mix of sales. The increased trading margin in Light + Air reflects activity growth, investment in specification and other processes as the division continues to scale up.

The Water + Energy trading margin decrease reflects lag in the recovery of inflation in the first half of the year. The trading margin in Data + Flooring is consistent year on year.

(d) Free cashflow is an important indicator and reflects the amount of internally generated capital available for re-investment in the business or for distribution to shareholders.

Free cashflow	2022	2021
	€m	€m
EBITDA*	**998.3**	893.2
Lease payments	**(50.6)**	(38.6)
Movement in working capital**	**(136.2)**	(429.3)
Movement in provisions	**7.7**	6.9
Net capital expenditure	**(250.6)**	(163.6)
Net interest paid	**(31.9)**	(34.5)
Income taxes paid	**(158.4)**	(126.8)
Other including non-cash items	**14.2**	19.8
Free cashflow	**392.5**	127.1

* Earnings before finance costs, income taxes, depreciation, amortisation and non trading item

** Excludes working capital on acquisition but includes working capital movements since that point

Working capital at year end was €1,195.9m (2021: €977.8m) and represents 14.5% (2021: 13.8%) of annualised sales based on fourth quarter sales. This metric is closely managed and monitored throughout the year and is subject to a certain amount of seasonal variability associated with trading patterns and the timing of significant purchases of steel and chemicals. The 16% growth in underlying sales in 2022 required a consequential investment in working capital to support the sales growth. The December 2022 working capital position is untypically high reflecting higher than normal inventory levels although these have been reducing through the second half. The business took the opportunity to build an element of buffer stocks earlier in the year due to availability constraints and has been steadily working through this in the second half as supply chain bottlenecks and pricing eased. We expect working capital levels to normalise further during 2023.

(e) Return on capital employed, calculated as operating profit divided by total equity plus net debt, was 15.9% in 2022 (2021: 19.5%)and was 16.5% with annualised impact of acquisitions. The decrease year on year reflects the 160bps reduction in trading margin and elevated levels of working capital. The creation of shareholder value through the delivery of long term returns well in excess of the Group's cost of capital is a core principle of Kingspan's financial strategy.

(f) Net debt to EBITDA measures the ratio of net debt to earnings and at 1.62x (2021: 0.88x) is comfortably less than the Group's banking covenant of 3.5x in both 2022 and 2021. The calculation is pre-IFRS 16 in accordance with the Group's banking covenants.

Acquisitions and capital expenditure

During the year the Group made a number of acquisitions for a total upfront consideration of €887.0m.

In April 2022, the Group acquired 100% of the share capital of Troldtekt, a Danish natural acoustic insulation producer. The total consideration, including net debt acquired amounted to €220.4m.

In September 2022, the Group acquired 100% of the share capital of Ondura Group, a French headquartered global provider of roofing membranes and associated roofing solutions, for a total consideration, including net debt acquired of €515.6m.

The Group also made a number of smaller acquisitions during the year for a combined cash consideration of €151.0m:

- The Roofing + Waterproofing division acquired 100% of the share capital of Derbigum, a Belgian producer of waterproofing membranes for a total consideration, including net debt acquired of €95.0m in June 2022;
- The Insulated Panels division acquired 100% of the share capital of THU Perfil in February 2022 and 100% of the share capital of Invespanel in Spain in September 2022;

- The Insulation division acquired the assets of Calostat in the UK in September 2022.

The Group's organic net capital expenditure during the year was €250.6m encompassing a number of strategic capacity enhancements and ongoing maintenance.

EU Taxonomy and TCFD

Climate related disclosures are required under the EU Taxonomy Regulation (Sustainable finance taxonomy - Regulation (EU) 2020/852) and by the Task Force on Climate-related Financial Disclosures (TCFD). The disclosures will be included in our 2022 Planet Passionate Sustainability Report that will be published at a later date within the required timeframe.

Non trading item

The Group recorded a non trading charge of €16.5m (2021: €nil) in the year in respect of the Group's net loss on the complete divestment of its Russian operations.

Capital structure and Group financing

The Group funds itself through a combination of equity and debt. Debt is funded through syndicated bank facilities and private placement loan notes. The primary bank debt facility is a €800m sustainability linked Revolving Credit Facility arranged in May 2021, maturing in May 2026, and which was undrawn at year end. The Revolving Credit Facility was increased by €100m in December 2022 under the facility's accordion clause.

In April 2022, the Group arranged two additional banking finance facilities with an aggregate value of €800m (€500m maturing in April 2024, €300m in April 2025). The facilities were fully drawn at year end.

In addition, as part of the Group's debt funding structure, the Group has total private placement loan notes of €1,322.0m (2021: €1,377.1m) which have a weighted average maturity of 5.7 years (31 December 2021: 6.4 years).

The weighted average term, as at 31 December 2022, of all drawn debt was 4.1 years (31 December 2021: 6.3 years).

The Group has significant available committed undrawn facilities and cash balances which, in aggregate, were €1.45bn at 31 December 2022 (31 December 2021: €1.3bn).

Net debt

Net debt increased by €783.5m during 2022 to €1,539.6m (2021: €756.1m). This is analysed in the table below:

Movement in net debt	2022	2021
	€m	€m
Free cashflow	**392.5**	127.1
Acquisitions and divestments	**(893.4)**	(540.2)
Purchase of financial asset	**(113.3)**	(5.0)
Deferred consideration paid	**(45.4)**	-
Purchase of non-controlling interests	**(2.0)**	-
Share issues	**-**	0.1
Repurchase of treasury shares	**(1.4)**	(46.9)
Dividends paid	**(93.7)**	(73.5)
Dividends paid to non-controlling interests	**(3.5)**	(3.2)
Cashflow movement	**(760.2)**	(541.6)
Exchange movements on translation	**(23.3)**	21.7
Movement in net debt	**(783.5)**	(519.9)
Net debt at start of year	**(756.1)**	(236.2)
Net debt at end of year	**(1,539.6)**	(756.1)

		2022	2021
	Covenant	Times	Times
Net debt/EBITDA	Maximum 3.5	**1.62**	0.88
EBITDA/Net interest	Minimum 4.0	**28.7**	26.2

Key financial covenants

The majority of Group borrowings are subject to primary financial covenants calculated in accordance with lenders' facility agreements which exclude the impact of IFRS 16:

- A maximum net debt to EBITDA ratio of 3.5 times; and
- A minimum EBITDA to net interest coverage of 4 times.

The performance against these covenants in the current and comparative year is set out above.

Investor relations

Kingspan is committed to interacting with the international financial community to ensure a full understanding of the Group's strategic plans and its performance against these plans. During the year, the executive management and investor team presented at 11 capital market conferences and conducted 624 institutional one-on-one and group meetings.

Share price and market capitalisation

The Company's shares traded in the range of €43.60 to €106.65 during the year. The share price at 30 December 2022 was €50.58 (31 December 2021: €105.00) giving a market capitalisation at that date of €9.2bn (2021: €19.0bn). Total shareholder return for 2022 was -51.5% (2021: +84%).

Financial risk management

The Group operates a centralised treasury function governed by a treasury policy approved by the Group Board. This policy primarily covers foreign exchange risk, credit risk, liquidity risk and interest rate risk. The principal objective of the policy is to minimise financial risk at reasonable cost. Adherence to the policy is monitored by the CFO and the Internal Audit function. The Group does not engage in speculative trading of derivatives or related financial instruments.

On behalf of the Board

Geoff Doherty
Chief Financial Officer

21 February 2023

Risk & Risk Management

CEBRA Architecture Offices
Aarhus, Denmark
Insulation
Troldtekt V-Line

As a leading building supplies manufacturer in a highly competitive international environment, Kingspan is exposed to a variety of risks and uncertainties which are monitored and controlled by the Group's internal risk management framework.

Overall responsibility for risk management lies with the Board who ensure that risk awareness is set at an appropriate level. To ensure that risk awareness is set at an appropriate level, the Audit & Compliance Committee assist the Board by taking delegated responsibility for risk identification and assessment, in addition to reviewing the Group's risk management and internal control systems and making recommendations to the Board thereon.

The chairman of the Audit & Compliance Committee reports to the Board at each board meeting on its activities, both for audit matters and risk management. The activities of the Audit & Compliance Committee are set out in detail in the Report of the Audit & Compliance Committee on page 110.

The Board monitors the Group's risk management systems through its consultation with the Audit & Compliance Committee but also through the Group's divisional monthly management meetings, where at least two executive directors are present. Business risks and trends are the focus of each division's monthly management meeting, where divisional business performance is also assessed against budget, forecast and prior year. Key performance indicators are also used to benchmark operational performance for all manufacturing sites.

In addition to this ongoing assessment of risk within the divisions, the Audit & Compliance Committee oversees an annual risk assessment for the Group whereby each divisional management team is formally asked to prepare a detailed risk assessment for their business. This assessment involves evaluating group-wide risks, as put forward by the Board, and presenting additional risks that are specific to their business.

While it is acknowledged that the Group faces a variety of risks, the Board, through the processes set out above, has identified the following principal risks and uncertainties that could potentially impact upon the Group's short to medium term strategic goals:

Read more about our strategic pillars on page 26

Innovation | Global | Planet Passionate | Completing the Envelope

Volatility in the macro environment

Risk and impact

Kingspan products are targeted at both the residential and non-residential (including industrial, retail, commercial, public sector and high rise offices) construction sectors. As a result, demand is dependent on activity levels which may vary by geographic market and is subject to the usual drivers of construction activity (i.e. general economic conditions and volatility, Brexit, pandemics, political uncertainty and wars in some regions, interest rates, business/consumer confidence levels, supply chain disruption, unemployment, and population growth).

While construction markets are inherently cyclical, changing building and environmental regulations continue to act as an underlying positive structural trend in demand for many of the Group's products.

Actions to mitigate

The exposure to cyclicality or downturn of any one construction market is partially mitigated by the Group's geographic diversification, by end application and by product.

As set out in the Business Model & Strategy, the Group has mitigated this risk through diversification as follows:

- an established globalisation strategy resulting in 212 global manufacturing sites and a commercial presence in more than 80 countries;
- the launch of new innovative products and an approach of continual improvements to existing product lines; and
- acquisitions made during the year enhance the geographic and product diversification of the Group.

The full details of these diversifications are set out in the Business Model & Strategy section of this Annual Report.

Product failure

Risk and impact

A key risk to the Kingspan business is the potential for functional failure of our product which could lead to health, safety and security issues for both our people and our customers.

The Kingspan brand is well established and is a key element of the Group's overall marketing and positioning strategy. In the event of a product failure, the Kingspan brand and/or reputation could be damaged and if so, this could lead to a loss of market share.

Actions to mitigate

Dedicated structures and processes are in place to manage and monitor product quality controls throughout the business:

- New products go through rigorous internal testing at the Group's Global Innovation Centre, IKON, and the industry leading Kingspan Fire Engineering Research Centre prior to proceeding to a certification process which is undertaken by internationally recognised and independent authorities, before being brought to market.
- The Group appointed a Head of Compliance & Certification, reporting to the Group CEO, to ensure a rigorous approach to certification, testing and product compliance across the Group and to ensure consistent and robust application of processes centred around our core commitment to product safety. The Group Product Compliance team completed the audit of 98 manufacturing sites in 2022.
- A Group Marketing Integrity Manual (MIM) has been designed to incorporate the Group Code of Conduct as well as the incoming UK Code for Construction Product Information. The MIM establishes a compliance framework for product marketing materials and websites. Compliance with the MIM is subject to audit by the Group Internal Audit function under a dedicated audit programme.
- The Group's Product Compliance function has been accredited to the leading independent standard in compliance, ISO 37301. 26 manufacturing sites are already certified to ISO 37301 with a further 32 sites to be certified in 2023.
- The terms of reference for the Audit & Compliance Committee include oversight of the product compliance agenda.
- Our businesses employ quality control specialists and operate strict policies to ensure consistently high standards are maintained in addition to the sourcing and handling of raw materials.
- The construction of a dedicated Kingspan Fire Engineering Research Centre using Kingspan products allows for more expedient and significant testing to take place.
- Effective training is delivered to our employees.
- Proactively monitor the public policy, regulatory and legislative environment.

Failure to innovate

Risk and impact	Actions to mitigate
Failing to successfully manage and compete with new product innovations, changing market trends and consumer tastes could have an adverse effect on Kingspan's market share, the future growth of the business and the margins achieved on the existing product line.	→ Innovation is one of Kingspan's four strategic pillars to increasing shareholder value and therefore plays a critical role within the Group. → There is a continual review of each division's product portfolios at both the executive and local management level to ensure that they target current and future opportunities for profitable growth. → The Group's innovation strategy is intertwined with its Planet Passionate sustainability strategy. Ambitious Planet Passionate goals require the Group to invest in expanding its existing range of highly sustainable building products and establish market leading supply chains for sustainable raw materials. → This risk is further mitigated by continuing innovation and compelling marketing programmes. The launch of the IKON Global Innovation Centre in 2019 has served to enhance the capabilities of the Group to innovate. → The Kingspan Fire Engineering Research Centre enables large scale fire testing to industry regulation standards thereby accelerating the pace of innovation and certification on the path to commercialisation. → Kingspan also has a deep understanding of changing consumer and industry dynamics in its key markets and continues to refine its omnichannel customer centric approach, enabling management to respond appropriately to issues which may impact business performance.

Laws and regulations

Risk and impact	Actions to mitigate
Kingspan is subject to a broad range of existing and evolving governance requirements, environmental, health and safety and other laws, regulations and standards which affect the way the Group operates. Non-compliance can lead to potential legal liabilities and curtail the development of the Group.	→ Kingspan's in-house legal team is responsible for monitoring changes to laws and regulations that affect the business and is supported by external advisors. Issued policies include, but are not limited to, the following: - Sanctions Compliance Policy - Anti-Fraud, Bribery and Corruption Policy - Competition Law Compliance - Directors' Guidance Policy → A comprehensive framework of policies is in place that set out the ways employees and suppliers are expected to conduct themselves. → The Group's publicly available Code of Conduct sets out the fundamental principles which it requires all its directors, officers, and employees to adhere to in order to meet those standards. → Training is provided through a variety of mediums in key areas of legal and regulatory compliance, including a suite of mandatory training for those that join Kingspan. → A robust whistleblowing process is in place that allows the anonymous reporting through an independent hotline of any suspected wrongdoing or unethical behaviour, including reporting instances of non-compliance with laws and regulations. All reported cases are investigated, and findings reported to the Audit & Compliance Committee.

Climate change

Risk and impact	Actions to mitigate
Kingspan's products provide a solution to help mitigate climate change, particularly with respect to reducing carbon emissions in the built environment. Climate change is therefore both an opportunity and a risk for Kingspan. Climate risks within our business include regulatory changes, substitution risk should we fail to maintain our market leading offering, rising energy or carbon prices within our own operations or in our supply chain, and physical risk to our operations or those of our suppliers.	Transforming building and construction is an important element of addressing the climate crisis as they represent approximately 39% of global greenhouse gas emissions. Kingspan is uniquely placed to help support the decarbonisation of the building sector via our extensive offering of high-performance, energy saving systems and solutions. Risks relating to climate change are managed through a multi-disciplinary, and company wide, risk management process. Examples of how climate change risks are mitigated include: **Planet Passionate** → Following the successful completion of our Net Zero Energy programme (our programme that focused on reducing energy consumption and increasing renewable energy use where possible), Kingspan launched the next stage of our sustainability journey in 2020, our 10-year Planet Passionate programme, which includes 12 ambitious targets in the areas of Carbon, Energy, Circularity and Water. This strategic agenda will enable significant advances in the sustainability of both our business operations and our products. **Innovation** → Our innovation agenda is inextricably linked with our Planet Passionate programme, helping us to drive market leading products in the areas of carbon savings and sustainability. Innovation is supported through ongoing investments such as the opening of the IKON Global Innovation Centre in 2019. → In 2022, our insulation products sold globally are estimated to save 173 million tonnes of CO_2e over their lifetime. In addition, we estimate 48 billion litres of rainwater will be harvested over the lifetime of the tanks we produced and we recycled 803 million waste plastic bottles in to our manufacturing processes. **Digitalisation** → Digital adoption is a key factor to enabling more efficiency and sustainability in manufacture, delivery, construction and operations of our built environment. → Enhanced digitalised processes for customer engagement provide faster and deeper insight into the sustainability demands of our customers. → Under the leadership of the Group Director of Digital, our 2022 Building Information Modelling (BIM) & Digital Innovation Programme drove the enhancement and introduction of several tools to improve the workflows of our customers. Utilising the latest digital technologies, Kingspan aims to empower its customers and partners with tailored digital solutions. **Global Presence** → Kingspan operates out of 212 manufacturing sites across the globe, diversifying our physical risk from climate change. We have also built relationships with a wide range of global supply partners to limit the reliance on any one supplier or even a small number of suppliers.

Business interruption (including IT continuity)

Risk and impact	Actions to mitigate
Kingspan's performance is dependent on the availability and quality of its physical infrastructure, its proprietary technology, its raw material supply chain, and its information technology. The safe and continued operation of such systems and assets are threatened by natural and man-made perils and are affected by the level of investment available to improve them. The building industry is going through some significant change with respect to building regulations and codes. The risks associated with misunderstanding some of the potential changes and the nature of our product set are more prevalent today. Any significant or prolonged restriction to its physical infrastructure, the necessary raw materials or its IT systems and infrastructure could have an adverse effect on Kingspan's business performance.	→ Kingspan insists on industry leading operational processes and procedures to ensure effective management of each facility. The Group invests significantly in a rigorous programme of preventative maintenance on all key manufacturing lines to mitigate the risk of production line stoppages. → The impact of production line stoppages is also mitigated by having business continuity plans in place to allow for the transfer of significant volume from any one of our 106 plants in the Insulated Panels division or 43 plants in the Insulation division to another in the event of a shutdown. → In addition, and as part of our consequential loss insurance, Kingspan is subject to regular reviews of all manufacturing sites by external risk management experts, with these reviews being aimed at optimising Kingspan's risk profile. → Kingspan continues to focus on developing, enhancing, and protecting its IP portfolio. As a global leader in building envelope solutions, Kingspan considers its IP security to be paramount. → In addition to trade secret policies and procedures, Kingspan has developed appropriate IP strategies to protect and defend against infringements. → To reduce Kingspan's exposure to raw material supply chain issues, Kingspan retains strong relationships with a wide range of raw material suppliers to limit the reliance on any one supplier or even a small number of suppliers. → Kingspan continues to inform all stakeholders of the characteristics of our product offerings, their appropriate application and benefits, to limit the risk of misunderstanding within the building industry. → Kingspan's IT infrastructure is constantly reviewed and updated to meet the needs of the Group. Procedures have been established for the protection of this infrastructure and all other IT related assets. These include the development of IT specific business continuity plans, IT disaster recovery plans and back-up delivery systems, to reduce business disruption in the event of a major technology failure.

Credit risks and credit control

Risk and impact	Actions to mitigate
As part of the overall service package, Kingspan provides credit to customers and as a result there is an associated risk that the customer may not be able to pay outstanding balances. At the year end, the Group was carrying a receivables book of €1,136.8m (2021: €1,022.9m) expressed net of provision for default in payment. This represents a net risk of 14% (2021: 16%) of sales. Of these net receivables, approximately 60% (2021: 61%) were covered by credit insurance or other forms of collateral such as letter of credit and bank guarantees.	→ Each business unit has rigorous procedures and credit control functions for managing its receivables and takes appropriate action when necessary. → Trade receivables are primarily managed through strong credit control functions supplemented by credit insurance to the extent that it is available. All major outstanding and overdue balances together with significant potential exposures are reviewed regularly and concerns are discussed at monthly meetings at which the Group's executive directors are present. → Control systems are in place to ensure that credit authorisation requests are supported with appropriate and sufficient documentation and are approved at appropriate levels in the organisation.

Employment development and retention

Risk and impact	Actions to mitigate
The success of Kingspan is built upon effective management teams committed to achieving a superior performance in each division. Failure to attract, retain or develop these teams could have an impact on business performance.	→ Kingspan is committed to ensuring that the necessary procedures are in place to attract, develop and retain the skill levels needed to achieve the Group's strategic goals. These procedures include strong recruitment processes, succession planning, remuneration reviews, including both long and short term incentive plans, and targeted career development programmes. → Kingspan's leadership team holds an annual Talent Forum each year to review succession plans, metrics on key positions hired throughout the year and to forecast future talent gaps as part of our human capital risk assessment. → In 2021 we redesigned and relaunched Kingspan's Internal Career Portal which provides an open and transparent forum for Kingspan employees to learn about and apply for career opportunities across all our businesses worldwide. It has a wealth of information about the types of roles and skills that are in demand to deliver on our strategic objectives. → Graduates participated in our Yours to Shape development programme which was in its sixth consecutive year in 2022. The objective of the programme is to provide new graduates with a network to collaborate across the Group and develop the capabilities to drive their career in Kingspan. It spans 12-months of interactive workshops, peer coaching, masterclasses with senior executives and assignments on the Promote e-learning platform. → PEAK (Programme for Executive Acceleration in Kingspan) was launched in 2018 and is targeted at middle to senior managers who are currently, or will soon commence, managing a team. It aims to increase leadership diversity by deepening and widening the pool of potential senior leaders to match the increasing scale and global nature of the business. → An Advanced Management Programme was launched in 2021 in partnership with INSEAD's executive business school in France. This new programme supports Kingspan's senior leaders on engaging with enterprise level goals in a more collaborative way while transforming their leadership capabilities to drive significant long term growth.

Health and safety

Risk and impact	Actions to mitigate
The nature of Kingspan's operations can expose its contractors, customers, suppliers and other individuals to potential health and safety risks. Health and safety incidents can lead to loss of life or severe injuries.	A robust health and safety framework is in place throughout the Group's operations requiring all employees to complete formal health and safety training on a regular basis. → The Group monitors the performance of its health and safety framework and takes immediate and decisive action where non-adherence is identified. → The development of a strong safety culture is driven by management and employees at every level and is a core part of doing business with integrity.

Innovation Global Planet Passionate Completing the Envelope

Fraud and cybercrime

Risk and impact	Actions to mitigate
Kingspan is potentially exposed to fraudulent activity, with particular focus on the Group's online banking systems, online payment procedures and unauthorised access to internal systems.	→ The Group issues extensive guidance and policies, which include critical process and control policies for the mitigation of fraud risk, and they must be effectively adopted by all Group businesses. → The Group internal audit programme includes rigorous tests of financial controls and general IT controls to ensure they align with Group policies that mitigate fraud risk. → All fraud and cybercrime attempts, successful and unsuccessful, are reported to the Group Audit & Compliance Committee. → The Group's cyber strategy is designed by a multi-discipline Group IT function with input from external expertise and our Group Head of Cyber Security. The Group Head of Cyber Security is responsible for owning and executing the Group's cyber security strategy to ensure critical assets and technologies are protected against cyber risk. → Our Cyber Security Roadmap, published internally in 2022, sets out the phased milestones for the implementation of improved cyber risk policies and projects over a period of 30 months to enhance the Group's security posture. → Pro-active cyber security services are in place which provide global 24/7 critical security services that include managed threat protection (Security Information and Event Management - SIEM), managed detection and incident response services, including access to trusted and experienced cyber security advisors. → Group Internal Audit & Compliance function perform cyber audits with dedicated audit programmes in addition to separate audits of IT general controls. Findings of cyber audits are reported to the Audit & Compliance Committee and outputs form part of enhanced IT policies. → Mandatory implementation of multi-factor authentication (MFA) on all internet facing and business critical services group-wide. → High frequency phish testing performed globally. → Kingspan corporate assets can be swiftly 'auto-contained' in the event of a significant cyber security incident to limit the business impact.

Acquisition and integration of new businesses

Risk and impact	Actions to mitigate
Acquisitive growth is an important element of Kingspan's development strategy. A failure to execute and properly integrate significant acquisitions and capitalise on the potential synergies they bring may adversely affect the Group.	→ All potential acquisitions are rigorously assessed and evaluated, both internally and by external advisors, to ensure any potential acquisition meets Kingspan's strategic and financial criteria. → This process is underpinned by extensive integration procedures and the close monitoring of performance post acquisition by both divisional and Group management. → New acquisitions are categorised as higher risk from a financial controls, IT general controls, and product compliance perspective and are therefore subject to greater internal audit focus in the initial 12 month period post-acquisition. → Kingspan also has a strong track record of successfully integrating acquisitions and therefore management has extensive knowledge in this area which it utilises for each acquisition.

Tide Academy
California, USA
Insulated Panels
Dri-Design

Sustainability Report

Kingspan's mission

To accelerate a net zero emissions future built environment with the wellbeing of people and planet at its heart. We do this through enabling high-performance buildings via our systems and solutions that help to save more energy, carbon and water.

We recognise the vital importance of achieving this while:

- enhancing the safety and wellbeing of people in buildings;
- supporting the transition to a circular economy; and
- always delivering more performance and value.

We believe the answers lie in challenging building industry traditions with innovation in advanced materials and digital technologies. What defines us is our relentless pursuit for better building performance whilst incorporating our Planet Passionate programme into everything we do. Our commitment to sustainability is instilled throughout our business.

In developing our approach to sustainability, we incorporate guidelines from recognised associations such as the Sustainable Accounting Standards Board (SASB) and the Task Force on Climate-related Financial Disclosures (TCFD). We are also currently undergoing a double materiality assessment, which we will report on in more detail next year.

Kingspan recognises that it has a responsibility as a business leader to contribute towards the achievement of the United Nation's Sustainable Development Goals (SDGs). We will be publishing our Kingspan Planet Passionate Sustainability Report in March 2023 with more detail on how we contribute to the SDGs.

173m tonnes

173 million tonnes of CO_2e will be saved over the life of our insulation systems sold in 2022

Enough to power a major airline for over 15 years[1]

1 Assumes 60 year product life; based on an EU airline disclosure of over 9.2m tonnes of CO_2e emissions for 12 months to March 2022

We believe the answers lie in challenging building industry traditions with innovation in advanced materials and digital technologies.

Read more about Planet Passionate on page 64

Product Passionate

Kingspan is driven by a belief that advanced materials and methods of construction hold the answer to some of the great challenges that our planet and society face.

From products that insulate better while creating more internal space, to those that harness more natural daylight, we are dedicated to extending the limits of ultra-performance envelope design with a core focus on energy efficiency. We have innovated a portfolio of advanced products and solutions for architects and building owners which enable them to construct buildings that consume less resources, future proofing their investment, generating returns through enhanced internal space and operational performance, and facilitating efficient construction through thinner, lighter and safer to handle materials. Increasingly we are enhancing our service and solutions through digitalising our offer. By surfacing all of our products digitally, we're making it easier to find them, specify them, buy them, build with them and track them.

Kingspan's insulation systems, sold in 2022, will save an estimated 771 million MWh of energy or 173 million tonnes of CO2e over their lifetime.

Today, the construction and operation of buildings together account for 40% of energy related carbon emissions. The energy efficiency of buildings is therefore fundamental in combating climate change. Our advanced building envelope solutions help building owners to reduce energy emissions. Our solutions also help to enhance occupant health and wellbeing through improved thermal comfort, natural daylighting, natural ventilation, and increased space.

1 Assumes 60 year product life; based on an EU airline disclosure of over 9.2m tonnes of CO2e emissions for 12 months to March 2022
2 Assumes a 20 year product life
3 Assumes 10 x 60W bulbs per home

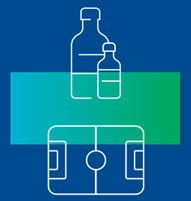
Ultra Energy-Efficient

173m tonnes

173 million tonnes of CO2e will be saved over the life of our insulation systems sold in 2022

Enough to power a major airline for over 15 years[1]

Recycled Materials



803m

In 2022 alone we upcycled 803 million waste plastic bottles

Enough recycled bottles to fill nearly 1,000 football pitches

Conserved Water

48bn litres

Over 48 billion litres of rainwater will be harvested by our tanks produced in 2022

Enough water to fill over 600 million baths[2]

Natural Daylight & Ventilation

9bn lumens

The capacity to create 9 billion lumens of natural light annually through our daylighting systems

Enough to light up 1 million homes[3]

Our advanced building envelope solutions help building owners to reduce their energy use and greenhouse gas emissions.

Amager Bakke
Copenhagen, Denmark
Roofing + Waterproofing
Derbigum® GC WW

Integrity of Product Information for the Digital Era

Ensuring the safe performance and use of our products is central to our approach to product development, testing, support and marketing.

At Kingspan we have implemented a global product compliance and marketing programme that ensures the accuracy of our product information, operating to the ISO 37301 global compliance standard and underpinned by a culture of integrity, honesty and compliance with the law.

In late 2022, we introduced a new global Environmental Claims Guide to ensure that all marketing claims relating to the sustainability performance of our products are robust and support our group vision of making a meaningful impact on decarbonisation and circularity in the built environment.

In parallel, we are developing and delivering a technology backbone for accurate digital product information that enables project efficiencies and better design decisions.

Havenlofts
Rotterdam,
The Netherlands
Insulation
TEK Bouwsysteem

Product Compliance

Product compliance operates first and foremost to the high standards set out in our Group Code of Conduct, which has been rolled out to all employees across the Group. The Kingspan Code of Conduct incorporates a whistleblower policy which was enhanced in 2021 with higher visibility in all manufacturing sites across the Group.

To support product compliance at senior management levels, a new group-wide Directors' Duties handbook was introduced in February 2022 with associated training.

The Group Compliance and Certification function, which was established in 2021, operates to the ISO 37301 compliance standard with internal auditing and Board oversight. ISO 37301 is an internationally recognised Type A management system standard which sets out the requirements and provides guidelines for establishing, developing, implementing, evaluating, maintaining, and continually improving a compliance management system (CMS).

The following structures are now in place:

- Group Head of Compliance and Certification (appointed in January 2021) reporting directly to the Group CEO.
- Product Compliance Officers in each business across Kingspan Group who provide monthly reports to the Group Head of Compliance together with updates to their divisional boards.
- The role of the Kingspan Group Audit Committee has been expanded into an Audit & Compliance Committee, with responsibility to monitor compliance in product testing and marketing.
- The role of the Kingspan Group Internal Auditing function has been expanded into an Internal Audit & Compliance function to audit product and marketing compliance.
- The Group Head of Compliance and Certification and the Head of Internal Audit & Compliance report regularly to the Audit & Compliance Committee.

↑

Sites Certified to ISO 37301

26
+189%

2021: 9 sites certified

Read more
see Planet Passionate on page 64

Product Safety and Testing

The safety of those working with our products, and living in buildings that have used our products, is absolutely paramount at Kingspan.

A cornerstone of our global compliance programme has been the opening of Kingspan's new Fire Engineering Research Centre (FERC) in Holywell, Wales which has enabled a significant increase in the frequency and scope of fire testing of products. The testing carried out at FERC is also building a bank of knowledge which is helping to ensure that fire safety continues to be central to Kingspan product innovation.

Fire safety is often reduced to a simplistic "combustible" versus "non-combustible" definition, based on a small-scale test. Important factors such as building design, installation methodology and the interaction of the different materials in the actual system are not tested in small-scale materials classification testing.

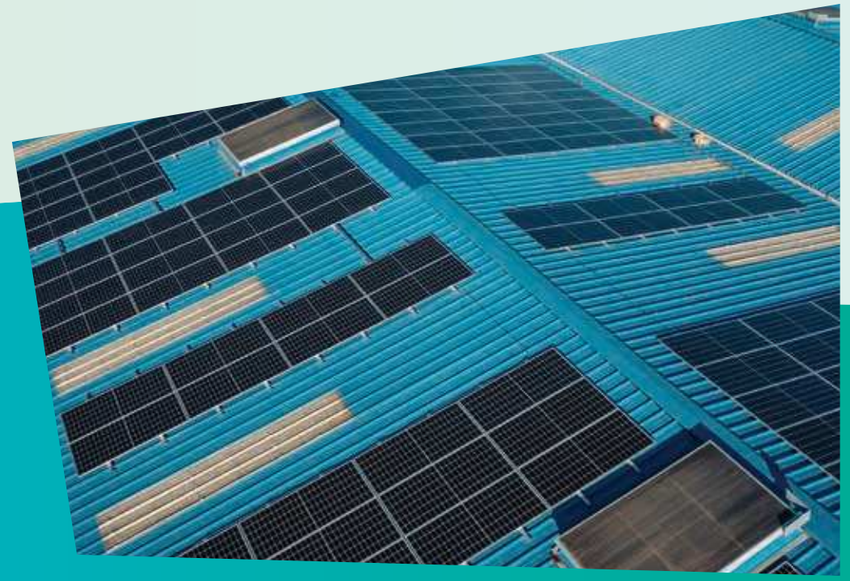
Hence, our approach to the safe use of our insulation and insulated panel products in buildings is founded on the principle that system testing is the best way to assess fire performance of any roof or cladding system, regardless of the classification of the insulation materials used.

A wide range of Kingspan insulated panels carry an FM (FM Global) or LPCB (Loss Prevention Certification Board) Approval, both of which are system testing regimes developed by the insurance industry. These approvals provide objective third-party testing, which is underpinned by quarterly, bi-annual and annual factory surveillance audits (depending on the region) to verify compliance. Independent certification bodies take samples of insulated panels from our factories and send them to their own laboratories for fire testing to verify ongoing compliance. These independent audits also include assessments of change control, formulations, processing parameters, labelling and internal testing.

The Kooltherm® range of insulation boards and KoolDuct® pre-insulated ductwork are manufactured with a phenolic insulation core, which has been proven to offer superior fire and smoke performance to other commonly used rigid thermoset insulants.

A comprehensive range of building facade systems incorporating our insulation board and insulated panels products have successfully passed large-scale facade tests around the globe including, but not limited to, NFPA 285 (North America), LEPIR II (France), SP 105 (Nordics), AS 5113 (Australia), ISO 13785-2 (Czech Republic) and MSZ 14800-6 (Hungary). As it relates to large scale fire tests, there are a total of 15 systems incorporating Kooltherm® which have met the requirements of BR135 when tested to BS 8414 (UK) and there are 6 insulated panel based systems that have met the requirements of BR 135 when tested to BS 8414.

During 2022, a total of 651 third party external products and system audits were carried out, providing reassurance on the safety of our products.



Wetterbest
Timisoara, Romania
Insulated Panels

Annually Generating

334MWh
(estimated)

Integrity of Product Marketing

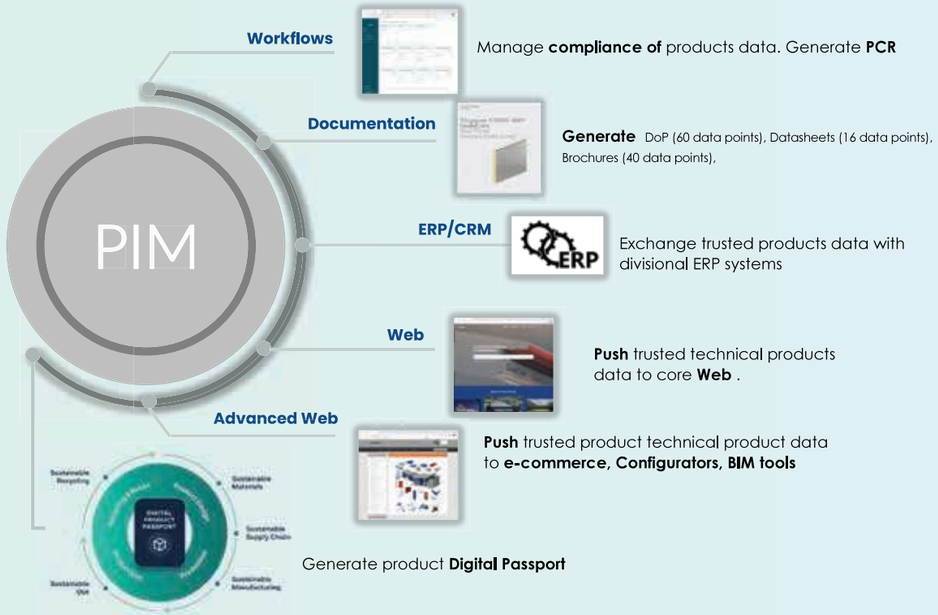
The Group Compliance Manual, which was first published in January 2021 and covers all aspects of the processes which have been implemented across the Kingspan Group, includes the requirement for a Register of External Certificates and Test Reports for each product.

In 2021, the Marketing Integrity Manual (MIM) was launched to ensure that the information in the Product Compliance Register is represented truthfully and accurately in product marketing information.

The Marketing Integrity Manual is built on 11 principles aligned with the UK Code of Construction Product Information. The overall programme includes:

- Group MIM e-learning which has been rolled out across all marketing team members.
- Fire Approvals e-learning which has been rolled out for appropriate marketing team members.
- A Skills, Knowledge, Experience and Behaviour (SKEB) competency assessment model which has been introduced with associated training and strict rules for publishing product information.
- A sign-off approvals process which has been implemented for our new global website infrastructure.

Furthermore, an internal ISO 37301 accredited auditing team has been appointed specifically for the MIM programme.



> **"Product integrity is a fundamental aspect of our overall value proposition to our customers. This programme will drive market-leading infrastructure, technology and knowledge to support this important agenda.**
>
> *Gene M. Murtagh*

Planet Passionate

Increasingly our customers want solutions which not only enable them to preserve resources, but solutions which are also sourced and manufactured in an environmentally responsible way.

In December 2019 Kingspan launched the next phase of our sustainability journey, our Planet Passionate programme. Through this programme we are working with our suppliers and throughout our business to meet our ambitious goals in the areas of carbon, energy, circularity and water. In an effort to reduce a key source of carbon in construction, embodied carbon, we are targeting Net Zero Carbon Manufacturing by 2030 and a 50% reduction in carbon intensity from our primary suppliers by 2030.

Our Global Head of Innovation works together with our Global Head of Sustainability, and our CEO, to ensure that product development is closely aligned with our Planet Passionate objectives.

In 2021, we chose to voluntarily update our existing science-based targets. These more ambitious targets were approved by the Science-Based Initiative in June 2021 and classified our ambition as aligned with a 1.5°C future.

PLANET PASSIONATE

Hradec Králové, Czech Republic
Insulated Panels

Annually Generating

417 MWh
(estimated)

Planet Passionate Targets	Target Year	Underlying Business			Whole Business		
		2020	2021	2022	2020	2021	2022
Carbon							
→ Net Zero Carbon Manufacturing (scope 1 & 2 GHG emissions[1] - tCO2e)	2030	410,224 [2]	389,299 [2]	**242,734**	517,972 [2,3]	519,576 [2,3]	**385,157** [3]
→ 50% reduction in product CO2e intensity from primary supply partners (%)	2030	-	-0.53	**0.04**	-	-0.53	**0.04**
→ Zero emission company cars - annual replacement (%)	2025	11	29	**60**	11	28.5	**58** [4]
Energy							
→ 60% Direct renewable energy (%)	2030	19.5	25.8 [2]	**34.3**	19.5	24.9 [2]	**33.4**
→ 20% on-site renewable energy generation (%)	2030	4.9	5.1 [2]	**7.2**	4.9	4.9 [2]	**7.1**
→ Solar PV systems on all wholly owned sites(%)	2030	21.7	28.4	**41.5**	21.7	29.2	**35.2**
→ Net Zero Energy (%)	2020	100	100	**100**	100	100	**n/a**[5]
Circularity							
→ Zero company waste to landfill (tonnes)	2030	18,642	16,359 [2]	**9,081**	18,642	17,150 [2]	**10,828**
→ Recycle 1 billion PET bottles into our manufacturing processes annually (million bottles)	2025	573	843	**803**	573	843	**803**
→ QuadCore™ products utilising recycled PET (no. of sites)	2025	1	1	**3**	1	1	**3**
Water							
→ Harvest 100 million litres of rainwater annually (million litres)	2030	20.1	20.5 [2]	**26.3**	20.1	20.5 [2]	**26.4**
→ Support 5 ocean clean-up projects (no. of projects)	2025	1	2	**3**	1	2	**3**

Underlying Business includes manufacturing and assembly sites within the Kingspan Group in 2020 plus their organic growth.
Whole Business includes all manufacturing and assembly sites within the Kingspan Group, including additions since 2020.

1: Excluding biogenic emissions.
2: Restated figures due to improved data collection methodologies.
3: GHG emissions were recalculated due to acquisitions that occurred in 2021 and 2022.
4: Excluding recent acquisitions due to unavailability of data at this time.
5: As we retire our Net Zero Energy target in favour of a carbon charge, newly acquired businesses are not included for this target.

3 GOOD HEALTH AND WELL-BEING · 6 CLEAN WATER AND SANITATION · 7 AFFORDABLE AND CLEAN ENERGY · 8 DECENT WORK AND ECONOMIC GROWTH · 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE · 11 SUSTAINABLE CITIES AND COMMUNITIES · 12 RESPONSIBLE CONSUMPTION AND PRODUCTION · 13 CLIMATE ACTION · 14 LIFE BELOW WATER · 15 LIFE ON LAND · 17 PARTNERSHIPS FOR THE GOALS

Carbon & Energy

Through our Planet Passionate programme, we aim to enable low carbon buildings, not only in the operational phase but also in the upfront and construction phase. 2022 highlights include:

- **Internal carbon charge:** From the 1st of January 2023 each business unit will have an internal charge of €70 per tonne for all energy related emissions (excluding process and biogenic emissions) emitted. This will help to further incentivise the rapid deployment of decarbonisation projects to support the achievement of our Net Zero Carbon manufacturing target.
- **Scope 1 & 2 GHG emissions:** A 37% reduction was achieved in 2022 via the implementation of new renewable energy contracts, deployment of solar PV systems and reduction in the use of high Global Warming Potential (GWP) blowing agents.
- **Scope 3 GHG emissions:** A key facet of our decarbonisation plan is to reduce our upstream carbon emissions, particularly as they relate to our purchased goods and services which in 2022 accounted for over 86% of our total value chain emissions. We have had significant engagement with our key raw material suppliers and tracking of their decarbonisation plans, and we had over 50 meetings on supply chain engagement in 2022. One outcome of the engagement programme was our increased investment in H2 Green Steel which aims to produce steel with 95% reductions in CO2 emissions compared to traditional steelmaking. This is a clear signal to the market about what we expect from our suppliers over the short to medium term.
- **Product:** In 2022, we launched our new QuadCore™ LEC insulated panel which has over 50% recycled content by weight and an estimated embodied carbon reduction of 17% carbon (across LCA modules A - C) versus the existing QuadCore™ insulated panel product.
- **Zero emission cars:** We installed an additional 82 new EV charging stations across our business, bringing the total number of systems to 198 in 2022. In addition, we converted 58% of our annual replacement cars to zero emissions cars.
- **Renewable energy use:** 19 new renewable energy projects that came online in 2022 will produce more than 9.9 GWh of energy annually. We also made significant progress with our energy suppliers, converting 24 electricity contracts (63 GWh) to renewable electricity.
- **On-site renewable energy generation:** We deployed 18 new rooftop solar-PV projects across our business that will generate 6.4 GWh annually.

Circularity

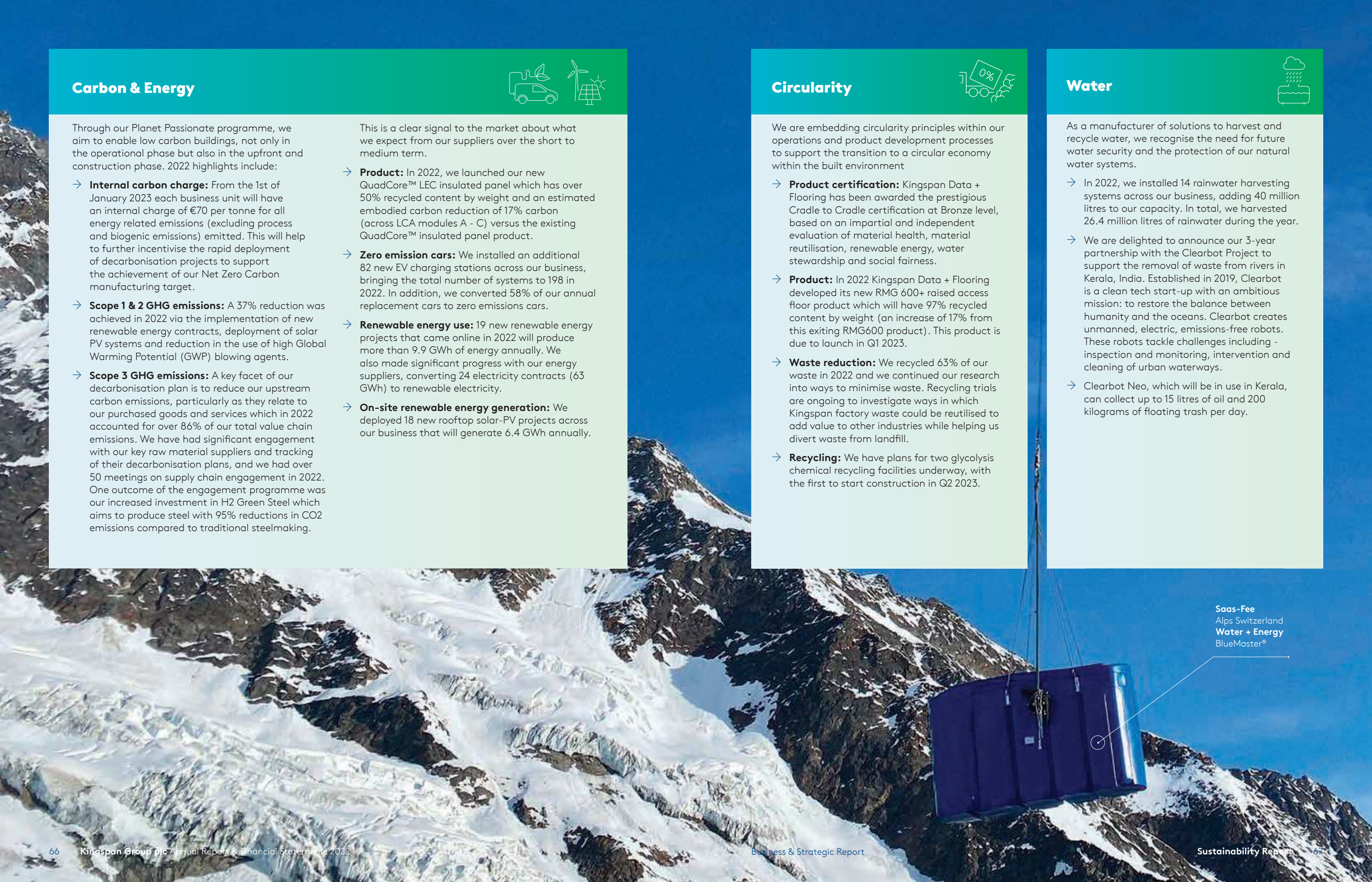
We are embedding circularity principles within our operations and product development processes to support the transition to a circular economy within the built environment

- **Product certification:** Kingspan Data + Flooring has been awarded the prestigious Cradle to Cradle certification at Bronze level, based on an impartial and independent evaluation of material health, material reutilisation, renewable energy, water stewardship and social fairness.
- **Product:** In 2022 Kingspan Data + Flooring developed its new RMG 600+ raised access floor product which will have 97% recycled content by weight (an increase of 17% from this exiting RMG600 product). This product is due to launch in Q1 2023.
- **Waste reduction:** We recycled 63% of our waste in 2022 and we continued our research into ways to minimise waste. Recycling trials are ongoing to investigate ways in which Kingspan factory waste could be reutilised to add value to other industries while helping us divert waste from landfill.
- **Recycling:** We have plans for two glycolysis chemical recycling facilities underway, with the first to start construction in Q2 2023.

Water

As a manufacturer of solutions to harvest and recycle water, we recognise the need for future water security and the protection of our natural water systems.

- In 2022, we installed 14 rainwater harvesting systems across our business, adding 40 million litres to our capacity. In total, we harvested 26.4 million litres of rainwater during the year.
- We are delighted to announce our 3-year partnership with the Clearbot Project to support the removal of waste from rivers in Kerala, India. Established in 2019, Clearbot is a clean tech start-up with an ambitious mission: to restore the balance between humanity and the oceans. Clearbot creates unmanned, electric, emissions-free robots. These robots tackle challenges including - inspection and monitoring, intervention and cleaning of urban waterways.
- Clearbot Neo, which will be in use in Kerala, can collect up to 15 litres of oil and 200 kilograms of floating trash per day.



Saas-Fee
Alps Switzerland
Water + Energy
BlueMaster®

People Passionate

Attract, Retain and Develop

What has been achieved at Kingspan would not be possible without the people that work hard every day to drive the business forward. A dynamic and motivated workforce is key to delivering the future growth strategy of the business.

For this reason, talent is at the heart of future planning at Kingspan. Kingspan's leadership team holds an annual Talent Forum to review succession plans, metrics on key positions hired throughout the year and to forecast future talent gaps as part of our human capital risk assessment.

Read more see Planet Passionate on page 64

Training and Development

During 2022 Kingspan continued to invest in developing leader capability and strengthening and deepening our talent pipelines to support workforce sustainability. Our people play a critical role in delivering our purpose and strategy, aligned to our values. Customer centricity is at the heart of our leadership development, underpinned by our focus on high performance and continuous innovation. We encourage our leaders to grow their careers in line with the growth of the Group. At Kingspan we are more than aware of the key role leaders play in achieving our strategy including our Planet Passionate goals. Our formal leadership development programmes are designed to equip our business leaders to drive the achievement of our mission to accelerate a net zero emissions future with the wellbeing of people and planet at its heart.

Yours to Shape - Graduate Attraction and Development

To continue to build leadership pipelines Kingspan further invested in our global graduate attraction and development programme, Yours to Shape. Over 190 graduates completed the programme since it was launched in its current format. The programme's objective is to support the successful transition of graduates from university to Kingspan, create an international collaborative network within the Group and develop the capabilities to drive their career in Kingspan forward. As a result of the global attraction campaign, 45 participants were hired for all divisions around the world. It is clear from the campaign that graduates are consistently attracted to Kingspan for its active and practical focus on sustainability. This year we attended University Career Fairs in-person and virtually across all regions. In line with our Planet Passionate goals, to offset our carbon emissions produced by attending each of these Career Fairs we partnered with Naturefund to plant a tree in Costa Rica for every person who registered their interest in our Graduate Programme at each Career Fair. This provided the students with an opportunity to give back to the planet and make a difference in the fight against climate change. As a result, we are committed to planting 500+ trees in Costa Rica on behalf of students across the globe.

The development programme spans 12-months of virtual and in-person workshops and assignments, peer coaching and masterclasses with senior executives. In 2022 the first half of the programme was all delivered virtually and by the second half in-person learning events were possible. Graduates visited our Joris Ide head quarters in Belgium as well as continuing their in-person learning workshops.

Each year the graduates work in cross-functional, regional teams and work on diverse business projects. The criteria for projects are that they must be innovative, aligned to Kingspan strategic priorities which includes sustainability and have a commercial benefit. In 2022 six projects were showcased to senior leaders in IKON and the presentations were live streamed to our facilities around the world. The level of innovation and the integration of sustainability into the projects was inspiring. The projects will be taken forward for further assessment with an aspiration of integration into the existing product range. Divisions have also taken forward innovative ideas to conserve energy and reduce waste.

The Yours to Shape programme is a key pillar for Kingspan's leadership development strategy. As talented people continue to join and develop fulfilling careers the longer-term high performance of the Group is safeguarded.

Programme for Executive Acceleration in Kingspan (PEAK)

The PEAK programme was launched in 2018. This is an accelerated development programme focused on supporting the transition to a more senior leadership position. The core objective of the programme is to deepen Kingspan's leadership strength to match the increasing scale and global nature of the business. An executive sponsor partners with participants during the programme, sharing leadership challenges and encouraging open discussion to learn together. Over 125 executives have participated in PEAK with over 50% of participants being promoted in the business soon after completing the programme. PEAK strengthens cross divisional relationships, as well as enabling further integration of executive talent from recent acquisitions.

Developing Leaders as Coaches (DLAC)

During 2022 Kingspan continued the Developing Leaders as Coaches programme. This is a cross divisional programme which focuses on developing leaders' coaching capability with the aim of being more effective in critical people conversations. This has led to the development of a Kingspan Code of Coaching which clarifies the rules of engagement and aligns with the Company's core values and Code of Conduct. In Q4 of 2022 we rolled out a Developing Leadership Coaching Capability Programme similar to DLAC. This time it was an international programme hosting participants from Ireland, UK and throughout Europe. We will continue to roll out this programme next year to ensure the ongoing development of formal coaching skills and consistency of practice globally. In parallel, we continue to assign internal coaches and mentors to sponsor high potential managers with particular emphasis on accelerating emerging female leaders to senior leadership positions.

Protect

Kingspan takes the safety of our employees incredibly seriously. All accidents, as well as near misses, are recorded and reviewed. Health and Safety (H&S) is under ongoing review at a facility and divisional level. We hosted a H&S Forum at IKON in December, attended by over 20 H&S professionals from across the global business. There were a number of presentations made during the forum, covering topics such as H&S management systems, learnings from serious incidents, best practice commissioning of new machinery, and employee training. While we are pleased to report there were no fatalities in Kingspan in 2022, we are always striving to advance our health and safety culture and sustain a safe working environment for our employees.

Hazard Identification Processes include (but are not limited to):

- All near misses are assessed and processes are updated.
- Employees are encouraged to make suggestions for process improvements.
- Safety walks by responsible persons.
- Periodic workplace inspections.
- Risk assessment on new machines at installation.

Initiatives implemented throughout 2022

- COVID-19 safety measures were an ongoing priority for 2022 and many safety initiatives to support the safe return to work were implemented across the Group.
- Contractor management and musculoskeletal disease prevention programmes introduced by Water + Energy sites in Australia.
- Roll out of standardised divisional lock-out tag-out try-out (LOTOTO) procedures across all Insulation business units.
- Site specific safety improvements including machinery guarding and electrical safety upgrades in Data + Flooring.

Equal opportunities, employee rights and diversity

Kingspan is committed to providing equal opportunities from recruitment and appointment, training and development to appraisal and promotion opportunities for a wide range of people, free from discrimination or harassment and in which all decisions are based on work criteria and individual performance. We see diversity and inclusiveness as an essential part of our productivity, creativity and innovation. Diversity is widely promoted within Kingspan, 46% of our most recent graduate programme are female and 25% of our senior executive team, reporting to the CEO, are female.

Gender Balance

	Male	Female
2022	79%	21%
2021	80%	20%
2020	81%	19%

Injury Frequency Rate

	p/100k hours
2022	1.0
2021	1.2
2020	1.2

Fatalities

2022	0
2021	1
2020	1

Supporting a School build in Madagascar 'L'Ecole des Petits Géants' (The School of Little Giants)

Our Communities

In Autumn 2021, we launched Planet Passionate Communities, the philanthropic arm of our 10-year Planet Passionate programme. At the heart of Planet Passionate Communities is an ambition to create a positive legacy as a business.

Locally, our businesses are devoting their time and resources to support community projects. The idea: to build a world that's powered by renewable energy, has net-zero carbon, manages water sustainably, and protects the earth's valuable resources by reducing, re-using and recycling.

On a global level, we've joined forces with GOAL, the international humanitarian response agency, in a five-year partnership that will make lives better for some of the world's most vulnerable people. Over these five years, we will be providing them with the expertise, products and financial contributions - all combining to €1.5m to develop critical infrastructure in healthcare and education with sustainability at its core. All in a rapid response to complex global issues.

More about GOAL
Humanitarian aid agency GOAL was founded in 1977 and is headquartered in Dublin. Over the last four decades, you'll find GOAL has responded to major humanitarian crisis after crisis. Today, it's working with vulnerable communities in 15 countries to help those facing poverty, conflict, hunger and climate change. GOAL brings emergency food and shelter when a crisis strikes; expertise and resources to strengthen healthcare systems; training leading to meaningful work and income; and education and support to fight hunger.

Puerto Cortés Hospital Honduras
When the COVID-19 pandemic hit Honduras, the Public Hospital of Puerto Cortés was nominated as the first line of response. When Hurricane Eta and Hurricane Iota storms hit later the same year, it became clear that the hospital simply couldn't cope. The chosen solution gave a chance for GOAL and Kingspan to join forces in building a new, state of the art hospital wing just 10 meters away from the existing Hospital. With 12 new beds, shared equally between a female and a male ward, this would add capacity for providing critical care to patients. The new Sayri Molina wing, named after a GOAL employee who lost her life to the pandemic, will use a combination of Kingspan's building envelope panel solutions for walls and roofs, and Cleanroom Modular Unit technology (prefabricated panels) providing hygienic and safe rooms.

Our policies

Aims

- Comply with all local laws in the countries we operate in.
- Ensure supply chain accountability.

Modern slavery

Slavery and human trafficking are abhorrent crimes and we all have a responsibility to ensure that they do not continue. At Kingspan we pride ourselves on conducting our business ethically and responsibly.

The Modern Slavery Act 2015 became UK legislation and required all large UK companies and businesses who supply goods or services in the UK to publish a slavery and human trafficking statement each financial year on their website. Kingspan is fully committed to ensuring that modern slavery is not taking place in our business or any of our supply chains. We adopted and published our policy statement at the end of 2016 and all our businesses are responsible for ensuring supplier compliance with the legislation.

Supply chain engagement

Kingspan continues to develop its ethical and environmental strategy for procuring materials and services. We seek to build and maintain long term relationships with key suppliers and contractors to ensure that they are aligned to the same goals and standards as Kingspan, to address strategic global issues, emerging trends and ultimately our customer needs. This approach has divisional and regional variances based on the local requirements and materials, but is built on core social, ethical and environmental standards. In all cases we aim to foster an environment of collaboration. In 2022, we adopted and published our Group Supplier Policy which sets out our expectations of suppliers in terms of business practices and integrity, ethical employment practices, anti-corruption and bribery and environmental responsibility.

EcoVadis

In late 2021, Kingspan subscribed to EcoVadis. The EcoVadis sustainability management platform will help us to monitor and track our suppliers ESG performance, promote transparency, reduce risk and identify areas for improvement. EcoVadis is a sustainability rating platform which assesses a company supply chain network under environmental, ethics, labour and human rights, and sustainable procurement criteria. The outcome of the assessment process is a company scorecard which provides an overall ESG performance rating of the supplier. In 2022, we began the roll out of EcoVadis questionnaire requests across our key supplier base. To date we have received score cards that cover 41% of our key supply base by spend.

Customer experience programme

Our Customer Experience programme is all about capturing what, how and why our customers experience the things they do. During 2022 we received feedback from over 14,500 customers in over 90 countries. As customer experience becomes more important in a digital world, our feedback programme gives us a means to hear what our customers have to say about their experience with us, keeps our finger on the pulse and provides us with the insights to develop and drive new digital technologies to help make meaningful change happen.

BaseCamp Lyngby
Copenhagen, Denmark
Roofing + Waterproofing
Derbigum ® GC AR

Munch Museum
Oslo, Norway
Insulated Panels
Paroc AST®

Leadership and Experience

The Board

Non-executive Chairman

Jost Massenberg

(Age 66)
Germany
Independent
N

Jost Massenberg was appointed to the Board in February 2018, and was appointed as non-executive Chairman of Kingspan in 2021.

Key strengths: Jost brings extensive board level experience, including at chairman and chief executive level, and has a wealth of industry experience in European steel and major manufacturing businesses. His in-depth knowledge of the steel industry and its workings furnish him with a keen understanding of the sector and challenges being addressed by Kingspan in decarbonising its supply chain.

Previous relevant experience: Jost is the former Chairman of VTG Aktiengesellschaft and former Chief Executive Officer of Benteler Distribution International GmbH, and prior to that he was the Chief Sales Officer and a member of the executive board of ThyssenKrupp Steel Europe AG.

Qualifications: PhD Business Admin.

Chief Executive Officer

Gene M. Murtagh

(Age 51)
Ireland

Gene Murtagh is the Group Chief Executive Officer. He was appointed to the Board in November 1999.

Key strengths: Gene has extensive experience across almost 30 years with Kingspan at operational and leadership levels. His deep knowledge of all of the Group's businesses and the wider construction materials industry, brings valuable insight to lead the Group's strategy and to advance our strategic pillars of Innovation, Planet Passionate, Completing the Envelope and Global.

Previous Kingspan roles: Gene joined the Group in 1993, and was appointed Chief Executive Officer in 2005. He was previously the Chief Operating Officer from 2003 to 2005, and prior to that he was managing director of the Group's Insulated Panels business and of the Water + Energy business.

Executive directors

Geoff Doherty

(Age 51)
Ireland

Geoff Doherty is the Group Chief Financial Officer. He joined the Group, and was appointed to the Board, in January 2011.

Key strengths: Geoff is a qualified chartered accountant, and brings extensive experience of capital markets and financial management in an international manufacturing environment. He oversees compliance of the Group's financial controls and cyber security programmes.

Previous relevant experience: Prior to joining Kingspan, Geoff was the Chief Financial Officer of Greencore Group plc and Chief Executive Officer of its property and agribusiness activities.

Principal external appointments: Non-executive director of Ryanair Holdings plc.

Russell Shiels

(Age 61)
United States of America

Russell Shiels is President of Kingspan's Insulated Panels business in the Americas as well as Kingspan's global Data + Flooring business. He joined the Board in December 1996.

Key strengths: Russell brings to the Board his particular knowledge of the building envelope market in the Americas, as well as his deep understanding of the global office and data centre market.

Previous Kingspan roles: Russell has experience in many of the Group's key businesses, and was previously managing director of Kingspan's Building Components and Raised Access Floors businesses in Europe.

Gilbert McCarthy

(Age 51)
Ireland

Gilbert McCarthy is Managing Director of Kingspan's Insulated Panels businesses in EMEAA. He was appointed to the Board in September 2011.

Key strengths: Gilbert brings to the Board his extensive knowledge of the building envelope industry, in particular in Western Europe and Australasia.

Previous Kingspan roles: He joined Kingspan in 1998, and has held a number of senior management positions including managing director of the Off-Site division and general manager of the Insulation business.

Board Committees: A Audit & Compliance N Nominations & Governance R Remuneration

Non-executive directors

Linda Hickey

(Age 61)
Ireland
Independent
R N

Linda Hickey was appointed to the Board in June 2013, and is appointed as the Senior Independent Director and the Workforce Engagement Director.

Key strengths: Linda's considerable knowledge and experience of capital markets and corporate governance provide important insights to the Board. In addition, she brings experience relating to environmental, social and governance matters from her board level positions to draw from as Senior Independent Director.

Previous relevant experience: Linda was previously the Head of Corporate Broking at Goodbody Capital Markets where she worked closely with multi-national corporates and the investor community. Prior to that Linda worked at NCB Stockbrokers in Dublin and Merrill Lynch in New York. She also previously served as Chair of the Irish Blood Transfusion Service.

Qualifications: B.B.S.

Principal external appointments: Non-executive director of Cairn Homes plc and Greencore Group plc.

Michael Cawley

(Age 68)
Ireland
Independent
A R

Michael Cawley was appointed to the Board in May 2014.

Key strengths: Michael's extensive international financial and business experience as well as his role on other audit committees are an asset to the Board and to the Audit & Compliance Committee. In addition, Michael has broad experience on governance matters and in addressing climate-related risks from his board positions at Hostelworld Group plc and previously at Flutter Entertainment plc.

Previous relevant experience: He is a chartered accountant and was formerly Chief Operating Officer & Deputy Chief Executive of Ryanair.

Qualifications: B. Comm., F.C.A.

Principal external appointments: Chairman of Hostelworld Group plc, and non-executive director of Ryanair Holdings plc.

John Cronin

(Age 63)
Ireland
Independent
N

John Cronin was appointed to the Board in May 2014.

Key strengths: John is a qualified solicitor and is a member of the International Bar Association. He has extensive experience in advising corporates, including on matters of risk and corporate governance. His valuable legal, corporate governance and capital markets experience brings a unique perspective to the Board.

Previous relevant experience: John is a former partner and chairman of McCann FitzGerald. He is a past President of the British Irish Chamber of Commerce.

Qualifications: B.A. (Mod) Legal Science; Solicitor in Ireland and England & Wales.

Anne Heraty

(Age 62)
Ireland
Independent
A R

Anne Heraty was appointed to the Board in August 2019.

Key strengths: Anne brings a wealth of experience from a career in running an international business and from her current role on the board of Ibec. As former Chief Executive Officer of Ireland's largest recruitment and outsourcing company, Anne has unparalleled experience of talent development and retention strategies. Anne also sits on the sustainability committee of Outsourcing Inc.

Previous relevant experience: Anne is the founder and former Chief Executive Officer of Cpl Resources Limited (formerly Cpl Resources plc). She previously held a number of other public and private non-executive directorships.

Qualifications: B.A. in Mathematics & Economics.

Principal external appointments: Non-executive director of Ibec, Outsourcing Inc. and Cpl Resources Limited

Board Committees: A Audit & Compliance N Nominations & Governance R Remuneration

Non-executive directors *(continued)*

Éimear Moloney

(Age 52)
Ireland
Independent
A

Éimear Moloney was appointed to the Board in April 2021.

Key strengths: Éimear has excellent knowledge and experience of capital markets and asset management. She has extensive financial and board governance experience as a fellow of the Institute of Chartered Accountants in Ireland, and a fellow of the Institute of Directors in Ireland. She also brings valued compliance experience from the pharmaceutical manufacturing environment to the Board and the Audit & Compliance Committee.

Previous relevant experience: Éimear was previously a senior investment manager in Zurich Life Assurance (Irl) plc.

Qualifications: B.A. Accounting & Finance; MSc. Investment and Treasury.

Principal external appointments: Non-executive director of Hostelworld Group plc, Irish Continental Group plc and Chanelle Pharmaceuticals Group.

Paul Murtagh

(Age 49)
United States of America

Paul Murtagh was appointed to the Board in April 2021.

Key strengths: Paul is the Chairman and Chief Executive Officer of Tibidabo Scientific Industries Ltd and previously worked in investment banking at Merrill Lynch in New York and Sydney. He brings to the Board his excellent understanding of the US market and his significant experience in building successful global businesses.

Previous relevant experience: Paul was formerly the Chairman and Chief Executive Officer of Faxitron Bioptics LLC and Chairman of Deerland Probiotics & Enzymes Inc.

Qualifications: B. Comm International.

Principal external appointments: Non-executive director in a number of private companies.

Senan Murphy

(Age 54)
Ireland
Independent
A

Senan Murphy was appointed to the Board in October 2022.

Key strengths: Senan has over 30 years' experience in international business across multiple industries including building materials, renewable energy, financial services and banking.

Previous relevant experience: He was previously the Group Finance Director of CRH plc where he also had responsibility for driving and reporting performance against the company's sustainability targets. Prior to joining CRH he was Bank of Ireland Group's Chief Operating Officer, having previously held positions as Chief Operating Officer and Finance Director at Ulster Bank, Chief Financial Officer at Airtricity and numerous senior financial roles in GE, both in Europe and the US.

Principal external appointments: He is a non-executive director of Bluestar Energy Capital, a US-based global investor in energy transition and renewable energy. He is also a member of the UCD College of Business Irish Advisory Board.

Company Secretary

Lorcan Dowd

(Age 54)
Ireland

Lorcan Dowd was appointed Head of Legal and Group Company Secretary in July 2005.

Relevant skills & experience: Lorcan qualified as a solicitor in 1992. Before joining Kingspan he was Director of Corporate Legal Services in PwC in Belfast, having previously worked as a solicitor in private practice.

Board Committees: A Audit & Compliance N Nominations & Governance R Remuneration

Report of the Nominations & Governance Committee

Jost Massenberg

Dear Shareholder

I am pleased to present the 2022 Nominations & Governance Committee report covering the work and activities of the committee during the year.

The Kingspan Board recognises that the values, integrity and behaviours that shape our culture and corporate governance are the foundation of long-term success. We are committed to ensuring that our long-term ambitions go hand in hand with high standards of corporate governance, in line with the principles of the 2018 UK Corporate Governance Code. We continually enhance our corporate governance practices and disclosures to ensure we not only meet the standards expected of us but, more importantly, we promote the success of the business for all of our stakeholders. We consistently strive to ensure that our reporting continues to be meaningful in detailing how we integrate the UK Corporate Governance Code's principles into our decision making, and we have made enhancements to our governance processes, based on our purpose, values, and strategy, all of which contribute to reducing business risk for stakeholders. At the heart of all these endeavours is an entrepreneurial Board that adheres to high standards of governance.

NodeCowork
North Devon, UK
Insulation
Kooltherm K103;
GreenGuard GG300

In 2022, the committee appointed Better Boards to carry out an independent evaluation of the Board, including its effectiveness, Board culture, Board committees, and Board composition and diversity. The timing of this review was important, as it followed my appointment in 2021 as independent Chairman of the Board, and also precedes a period of transition for the Board whereby a number of long serving non-executive directors are due to retire in the near-term. The external evaluation process gave valuable insights into the Board and its committees, and a summary of the Better Boards' report and recommendations are set out later in this report.

At Kingspan, we have always welcomed shareholder feedback and, where feasible, we seek to incorporate that feedback into our decision making and reporting. During the year, I was delighted to have the opportunity to engage with our shareholders in relation to our strategy, governance, remuneration and sustainability proposals. I wrote to shareholders representing over 70% of the register, and was very pleased to meet with several of our top shareholders to gain a greater understanding of some of the matters raised at our Annual General Meeting ('AGM'). A key topic of discussion with shareholders was the future composition and diversity of our Board, which has culminated in the adoption of Kingspan's Board Diversity Policy. Further details of our response to these shareholder engagements are set out later in this report.

I would like to thank all of those who provided their feedback to the Board during our various engagements, and I look forward to continuing these conversations both in the run up to and following our AGM this year.

Jost Massenberg
Chairman

21 Feb 2023

Boatman's House
London, UK
Insulated Panels
SFS light steel frame system

During the year, I was delighted to have the opportunity to engage with our shareholders in relation to our strategy, governance, remuneration and sustainability proposals.

Corporate Governance Statement

Kingspan is committed to operating best practice standards of good governance, accountability and transparency. This tone is set by the Group Board of Directors and communicated throughout the Group regardless of division or geographical location.

This statement outlines how Kingspan has applied the principles and complied with the provisions set out in the UK Corporate Governance Code (July 2018) (the 'Code') and the Irish Corporate Governance Annex (the 'Annex').

Both the Code and the Annex can be obtained from the following websites respectively: www.frc.org.uk and www.euronext.com

Statement of compliance
The directors confirm that the Company has throughout the accounting period ended 31 December 2022 complied with the provisions of the Code and the Annex as set out below.

Board committees
The Board has established three standing committees: Audit & Compliance, Nominations & Governance, and Remuneration.

All committees of the Board have written terms of reference setting out their authorities and duties (available on the Group's website www.kingspan.com). The members of each committee as at the date hereof, and the date of their first appointment to the committee, are set out in the adjacent tables. The details of each committee's activities during the year are detailed in their respective reports as set out in this Annual Report.

Attendance at Board and Committee meetings is also set out in the adjacent tables.

Audit & Compliance Committee		
Michael Cawley (Chair)	Appointed 2014	Independent
Anne Heraty	Appointed 2019	Independent
Éimear Moloney	Appointed 2021	Independent
Senan Murphy	Appointed 2022	Independent

Nominations & Governance Committee		
Jost Massenberg (Chair)	Appointed 2019	Independent
John Cronin	Appointed 2014	Independent
Linda Hickey	Appointed 2021	Independent

Remuneration Committee		
Linda Hickey (Chair)	Appointed 2015	Independent
Michael Cawley	Appointed 2014	Independent
Anne Heraty	Appointed 2021	Independent

Attendance at AGM, Board and Committee meetings
during the year ended 31 December 2022

	AGM 2022	Board	Audit & Compliance	Nominations & Governance	Remuneration
		(maximum 7)	(maximum 5)	(maximum 2)	(maximum 3)
Jost Massenberg	✓	7/7		2/2	
Gene M. Murtagh	✓	7/7			
Geoff Doherty	✓	7/7			
Russell Shiels	✓	7/7			
Gilbert McCarthy	✓	7/7			
Linda Hickey	✓	7/7		2/2	3/3
Michael Cawley	✓	7/7	5/5		3/3
John Cronin	✓	7/7		2/2	
Anne Heraty	✓	7/7	5/5		3/3
Éimear Moloney	✓	7/7	5/5		
Paul Murtagh	✓	7/7			
Senan Murphy*	N/A	2/2	2/2		

* Appointed as a director as of 1 October 2022

The Nominations & Governance Committee met twice in 2022. The activities of the committee included the following matters:

- Consider the feedback from the AGM;
- Agree shareholder engagement process;
- Consider the feedback from shareholder engagement;
- Set the criteria and process for the appointment of a non-executive director;
- Recommend the appointment of Senan Murphy to the Board;
- Agree the terms of reference for the independent Board evaluation by Better Boards;
- Consider the report from Better Boards and agree next steps and responses; and
- Recommend adoption of a Board Diversity Policy.

Further details of the Board renewal process, and the key outcomes of the Better Boards review are outlined later in this report.

Board responsibilities

There is a clear division of responsibilities within the Group between the Board and executive management, with the Board retaining control of key strategic and other major decisions. The Chairman leads the Board and is responsible for its overall effectiveness in directing the Company. One of the key roles of the Chairman in doing so is promoting a culture of objectivity, openness and debate. In addition, the Chairman facilitates constructive Board relations and the effective contribution of all non-executive directors, and ensures that directors receive accurate, timely and clear information.

The balance of skills, background and diversity of the Board contributes to the effective leadership of the business and the development of strategy. The Board's composition is central to ensuring all directors contribute to discussions. As outlined below, the Board continues to review its composition to ensure appropriate refreshment and renewal on an on-going basis.

As a means of fostering open dialogue and director engagement, the non-executive directors, led by the Senior Independent Director, meet without the Chairman present at least annually. Likewise, the Chairman holds meetings with the non-executive directors without the executives present. Each of these settings lends itself to a level of scrutiny, discussion and challenge, in a collaborative atmosphere.

All directors have access to the advice and services of the Company Secretary. Where necessary or requested, directors can also avail of independent third-party advice on Company issues or relevant Board matters – including, but not limited to matters such as remuneration and succession. The Company has procedures whereby all new directors receive formal induction and familiarisation with Kingspan's business operations, sustainability matters and systems on appointment, including trips to manufacturing sites with in-depth explanations of the processes involved at the site.

Workforce engagement

The Board recognises the importance of engaging with all of our key stakeholders, as set out in Provision 5 of the Code. Elsewhere in this Annual Report we have detailed the long-lasting partnerships we have developed with customers, suppliers and communities. We are also aware of the value of engagement with our workforce. Our people are key to developing and delivering on our strategy, and are fundamental to our long-term success.

Linda Hickey is appointed as the director responsible for workforce engagement to facilitate the channelling of employee views to Board discussions. During the year, she had the opportunity to hear employee views on a range of topics through participation in our graduate development programme, and by meeting employees on site during Board visits. In 2022 we worked with our employee representatives to establish a European Works Council which will provide a structure to engage with our employees at a European level on the development of the business, as well as employment, investments and transnational issues. The first meeting of the European Works Council will take place in the first half of 2023, and we look forward to constructive engagement with our employee representatives through this forum. In 2023 Kingspan will be launching its People Passionate programme across all its businesses which will develop wider employee engagement across the Group on a broad range of issues including culture, vision, health and well-being, and training and development. These processes of engagement will allow the Board to consistently assess and monitor the evolution of the Company's corporate culture, while promoting the ability of the workforce to provide feedback.

Shareholders' meetings and rights

The Company operates under the Irish Companies Act 2014 (the 'Act'). This Act provides for two types of shareholder meetings: the AGM with all other meetings being called Extraordinary General Meetings ('EGM').

The Company must hold an AGM each year in addition to any other shareholder meeting in that year. The AGM is an important forum for shareholders to meet with and hear from Company directors. The ordinary business of an AGM is to receive and consider the Company's Annual Report and statutory financial statements, to review the affairs of the Group, to elect directors, to declare dividends, to appoint or reappoint auditors and to fix the remuneration of auditors and directors. At the 2022 AGM, shareholders were provided with the facility to attend and participate either in person, by proxy or on-line using the latest technology platforms. Kingspan is committed to a continuing engagement with shareholders at and around our AGM.

The Chairman of the Board of Directors presides as chairman of every general meeting and in his absence, one of the directors present will act in the capacity of chairman. The quorum for a general meeting shall be not less than three members present in person or by proxy and entitled to vote. All ordinary shares rank pari passu and carry equal voting rights. Every member present in person or by proxy shall upon a show of hands have one vote and every member present in person or by proxy shall upon a poll have one vote for each share of which they are the holder. In the case of an equality of votes, both on a show of hands and at a poll, the Chairman shall have a casting vote. Further details of shareholders rights with respect to the General Meetings are set out in the Shareholder Information section of this Annual Report.

Board diversity

At our AGM last year, there were approx. 24% of votes cast against the re-election of the Chairman to the Board. Both prior to and following the AGM the Company engaged extensively with shareholders to develop a deeper understanding of any concerns shareholders may have. The Company wrote out to shareholders representing over 70% of the register, with the Chairman and the Senior Independent Director also meeting several of the top shareholders to discuss matters arising from the AGM. It was clear from these shareholder engagements that the vote primarily reflected shareholders' views about Board refreshment and diversity.

The Board has now adopted a Board Diversity Policy, which supports the recommendations set out in the Hampton-Alexander Review on gender diversity. The Board intends to:

- increase female representation on the Board over the coming years to achieve the best practice benchmark of a minimum 40% representation of both genders; and
- increase the international representation on the Board.

A copy of the Board's policy is available on the Group's website www.kingspan.com. The Board intends to achieve these objectives through future appointments as the Board is refreshed, having regard for the need to maintain a stable and effective Board during the transition period. To this end, three of the last five non-executive director appointments have been female. The Board currently comprises nine male and three female (25%) directors (including the Senior Independent Director), which will change to seven male and four female (36%) following the appointment of Louise Phelan and the retirement of Michael Cawley and John Cronin at our forthcoming AGM. This will meet the target set by the Irish Government's Balance for Better Business of 33% female representation on Boards by 2023, as the Company moves progressively towards the gender and international diversity targets set out in our Board Diversity Policy.

Board composition and renewal

Kingspan is committed to the on-going refreshment and renewal of the Board, which is essential to bring fresh thinking and constructive challenge to the Board's decision making. The Nominations & Governance Committee leads the process for Board appointments while ensuring plans are in place for orderly succession to both the Board and senior management positions.

In considering candidates for appointment as non-executive directors, the committee remains guided by the principle that all appointments will be made based on merit and skills, whilst having regard to our Board Diversity Policy, including, diversity of gender, age, nationality and ethnicity. The Board believes that international skills and experience are equally as important as nationality, and will have regard to both factors in making appointments.

In 2022, the committee led the search for the appointment of a new independent non-executive director. In considering the appointment, the committee had regard to the planned changes to the Board in the near-term, particularly the prospective retirement of Michael Cawley as a non-executive director and current chair of the Audit & Compliance Committee. The committee agreed the criteria for the new appointment, to include relevant financial skills, a background in industry, and broad international experience (particularly in the Americas). The committee considered whether or not to engage a firm of consultants to assist in the process of recruiting the new non-executive director, and agreed that in order to ensure best fit with the Company, it would use the extensive knowledge and contacts of the committee to identify suitable candidates.

The committee maintains a pool of potential candidates, and after considering Senan Murphy's skillset, which comprises more than 30 years' experience in international business across multiple industries including building materials, renewable energy, financial services and banking, he was considered the most suitable candidate. Mr Murphy's appointment broadens the skillset and diversity of the Board while reflecting our increasingly global footprint as a business.

Aligning succession planning to Kingspan's wider strategy is a cornerstone of strong Board governance, and has been, and will continue to be, a focus of the committee. A fundamental aspect of overseeing appointments to senior management remains the development of a diverse leadership pipeline. Among Kingspan's senior management team, 25% of senior leadership roles reporting directly to the CEO are held by females, which compares to the target set by the Irish Government's Balance for Better Business of 26% females in senior leadership roles by 2022. Furthermore, this year 28% and 34% of attendees on Kingspan's senior management and graduate development programmes respectively were female, and 76% and 41% of the participants in the respective programmes were from an international (non UK/Irish) background, as Kingspan is attracting more and more diversity into senior leadership roles.

Key strengths and relevant experience of each Director are set out on pages 75 to 77, and a breakdown of the background and principal skills and experience of the non-executive directors on the Board is set out in the table overleaf.

Experience/Skillset	Jost Massenberg	Linda Hickey	Michael Cawley	John Cronin	Anne Heraty	Éimear Moloney	Paul Murtagh	Senan Murphy
Resident	Germany	Ireland	Ireland	Ireland	Ireland	Ireland	USA	Ireland
International	✓	✓	✓	✓	✓	✓	✓	✓
Financial	✓	✓	✓	✓	✓	✓	✓	✓
Banking		✓	✓	✓	✓	✓	✓	✓
Governance	✓	✓	✓	✓	✓	✓	✓	✓
Leadership	✓	✓	✓	✓	✓	✓	✓	✓
Industry	✓		✓		✓	✓	✓	✓
Environmental*	✓		✓		✓			✓
Risk			✓	✓		✓		✓
Legal				✓				
Workforce		✓			✓			

*In particular, with respect to Kingspan's markets, raw materials and Planet Passionate strategy.

Board evaluation

Kingspan has in place formal procedures for the evaluation of its Board, committees and individual directors. The purpose of this formal evaluation is to ensure that the Board of Directors (on a collective and individual basis) is performing effectively and to ensure stakeholder confidence in the Board. The Chairman reviews the performance of the Board, and the conduct of Board and committee meetings annually, and an externally facilitated review of the Board's general corporate governance is carried out in every third year.

The Chairman conducts his review through a series of one to one meetings with each of the executive and non-executive directors, as well as by receiving feedback through the Senior Independent Director of the non-executive directors' collective views on the workings of the Board.

An external independent evaluation of the Board's performance was carried out in 2022 by Better Boards. The review format included a questionnaire completed by all Board members, a review of the Board papers, and a series of one to one interviews conducted with each of the executive and non-executive directors. The evaluation also measured the Board against selected peers.

The key areas of focus for the review were: Board leadership; Board culture; the Board committees; and Board composition and diversity. The results of the review were discussed by the Committee and presented to the Board at its meeting in December 2022. Overall the results were very positive, with the conclusion that the Board operates effectively, that there was a seamless transition to the new Chair, and that the Audit & Compliance Committee was effective in overseeing product compliance in line with its new terms of reference.

The review addressed in particular the Board's composition and diversity, and noted that the Board was evolving, with a number of long serving non-executive directors due to retire in the near-term. In addition the review addressed succession planning for the roles of Senior Independent Director and the Workforce Engagement Director, and the need to ensure continuity across both roles. The review recommended that the Board should adopt a formal Board Diversity Policy setting out its commitment to improving diversity on the Board, and that it should proactively use upcoming Board vacancies to respond to gender and diversity targets, having regard for the need to maintain a stable and effective Board during the transition period.

A number of other themes for further consideration were also proposed, as summarised below:

- Chairman to use one to one meetings with directors to maintain Board effectiveness;
- Board to seek on-going assurance of consistency of Kingspan culture throughout the Group;
- Enhanced reporting from sub-committees to the Board; and
- Effective succession planning and induction process for the Board over near-term, including for the role of the Senior Independent Director.

The Board has endorsed all the recommendations of the Better Boards report, and has adopted the Board Diversity Policy referred to above. The Board will monitor progress against the agreed action plan designed to further enhance Board effectiveness.

Conflicts of interests

The Board recognises the importance of independent representation to the effective functioning of the Board, as well as providing scrutiny and (where necessary) challenge to management, as part of an effective governance framework. The committee has adopted a Conflicts of Interest Policy which guides all decisions of the Board when actual or potential conflicts of interest might arise.

The policy stipulates that directors are required to avoid situations where they have, or could have, a direct or indirect interest that conflicts, or may conflict, with the Company's interests. Directors are required to give notice of any potential situational and/or transactional conflicts, which will then be notified to and considered by the Board. In deciding what approach to take, the Board will consider:

- whether the conflict needs to be avoided or simply documented;
- whether the conflict will realistically impair the director's capacity to impartially participate in decision-making;
- the possibility of creating an appearance of improper conduct that might impair confidence in, or the reputation of, the Company; and
- any measures that may be taken to avoid or mitigate the potential conflict.

Directors are not allowed to participate in such considerations or to vote regarding their own conflicts.

Effectiveness and independence

The committee has reviewed the size and performance of the Board during the year and this process occurs annually. The Board continues to ensure that each of the non-executive directors, remain impartial and independent in order to meet the challenges of the role. Throughout the year, more than half of the Board (58%), comprised independent non-executive directors. Linda Hickey is the Senior Independent Director on the Board. The Senior Independent Director provides a sounding board for the Chairman and serves as an intermediary for the other directors and shareholders when necessary. The directors consider that there is strong independent representation on the Board.

The Board has had due regard to various matters which might affect, or appear to affect, the independence of certain directors. The Board considers that each of the non-executive directors on the Board, excluding Paul Murtagh, are independent.

When considering John Cronin's independence, the Board noted that he was previously a partner at McCann FitzGerald, one of the Company's legal advisers, from which he retired in March 2021. The Board also had regard to Mr. Cronin's experience as an accomplished corporate lawyer who adds important legal and regulatory experience to the Board. In these circumstances the Board continues to be satisfied that Mr Cronin remains fully independent, and that there was no material relationship, financial or otherwise, which might influence his judgement.

In assessing the independence of Linda Hickey, the Board had due regard to her length of service on the Board, and to her previous position as a senior executive at Goodbody Stockbrokers, one of the Company's corporate brokers, from which she retired in April 2019. Having regard to the continuing evolution of the Board, the committee agreed to extend the term of Ms Hickey for a period of up to three years to 2025 (subject to annual re-election at the AGM) in order to maintain a stable and effective Board during the period. In assessing Ms Hickey's independence, the committee formed the view that she has always expressed a strongly independent voice at the Board and its committee meetings, including the Remuneration Committee of which she is chair, and that she has always exercised her judgement as a non-executive director, and as the Senior Independent Director, independent of any other relationships within the Board. The Board also took into account her unrivalled experience in capital markets and governance, which is hugely valuable to the Company and its shareholders, and concluded that her independence was not affected.

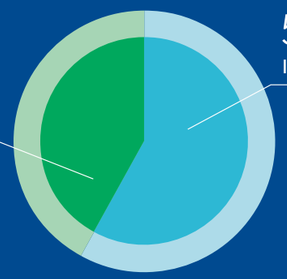
External commitments

Directors may serve on other boards provided they continue to demonstrate the requisite commitment to discharge their duties effectively. The committee reviews the extent of the directors' other interests on an ongoing basis throughout the year. The committee is satisfied that each of the directors commits sufficient time to their duties in relation to the Company. The Chairman and each of the directors have also confirmed that they have sufficient time to fulfil their obligations to the Company.

The committee will continue to keep under review the external commitments of all directors.

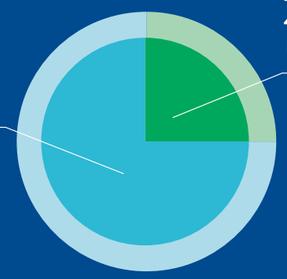
Board Balance as at 31 December 2022

Independence*



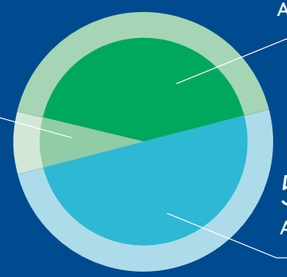
* Planned 55% independent from April 2023

Gender Diversity**

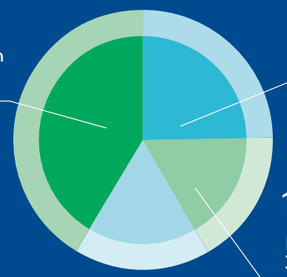


** Planned 36% female from April 2023

Age Range



Tenure



Report of the Remuneration Committee

Linda Hickey

Dear Shareholder

On behalf of the Remuneration Committee, I am pleased to present the 2022 Report on Directors' Remuneration.

Remuneration philosophy and policy
Kingspan's philosophy is to pay for performance and delivery of strategy, based on simple straightforward metrics, aligned with the interests of shareholders and wider stakeholders' interests.

During 2022, I reached out to over 70% of our shareholder register, and was very pleased to have the opportunity to meet with many of our most significant shareholders, to discuss with you Kingspan's remuneration philosophy and our policy proposals as we worked towards the triennial renewal of our policy at our 2022 Annual General Meeting ('AGM'). Many of you shared your feedback with us, both in writing and in discussion with the Company, and this has been very helpful in formulating the final shape of our updated Remuneration Policy.

During our extensive consultations with shareholders both before and again after the AGM, we highlighted the significant increase in scale and complexity of the business over the three years since our last Remuneration Policy was approved in 2019. Shareholders were, in general, supportive of our proposed policy changes, although some expressed concerns about including the flexibility to grant restricted shares in our recruitment policy, as well as the quantum and timing of the changes to the LTIP limits. The committee was very grateful for these shareholder responses and has incorporated that feedback into its decision-making as explained below.

The committee considered the feedback received, as well as its responsibility to develop a remuneration policy that is appropriate for the strategic development of the entire Kingspan Group, whilst also balancing the expectations of shareholders. In response to the feedback received, the committee:

- did not include the proposed restricted share units (which had been considered as a potential recruitment tool) as part of the updated Remuneration Policy;
- granted PSP awards to the CEO at 225% of base salary, and at 200% of base salary for the other executive directors, as proposed in last year's Report of the Remuneration Committee;
- confirmed that there is no current intention for any further step-change increases in PSP award levels; and
- agreed to engage with shareholders and consider their feedback before implementing any increase above 250% of salary during the current term of the Remuneration Policy.

As shareholders will know, Kingspan has delivered significant year on year earnings per share growth and long term shareholder returns. An important part of the committee's policy review was to ensure that our executive directors continued to be incentivised and fairly rewarded for this growth and the returns delivered to shareholders. The committee, as part of the policy review, looked carefully at both the levels and structure of remuneration. Our remuneration packages are weighted significantly towards variable pay with particular focus on the long-term as demonstrated by our CEO's maximum annual bonus opportunity of 150% of salary and long-term PSP award of 225% of salary. Incentivising longer term sustainable performance was very much the committee's objective in the review of our remuneration policy and the increase in PSP award levels. The committee's policy review took a prudent approach to increasing pay levels, whilst noting that the executive directors' remuneration packages remain below those in comparable Irish and UK listed businesses.

We were pleased that our updated Remuneration Policy was supported by almost 80% of shareholders who voted at last year's AGM, and at the same time the committee received 97% support for the Report of the Remuneration Committee at our AGM. Further details of our shareholder engagements during the year are set out later in this report.

2022 business performance and pay outcomes

2022 was another record year for Kingspan, despite challenging market conditions. Management delivered significant progress across its key strategic pillars, increasing geographic expansion and market penetration both organically and through acquisition, completing the envelope through the establishment of the new Roofing + Waterproofing division, and continued new product development introducing new and innovative building solutions. The result was that Group revenues increased to €8.3bn (up 28%), and trading profit was €833m (up 10%). Earnings Per Share ('EPS'), a key performance measure used to determine the executives' performance-related pay, increased to 329.5 cent (up 8% over prior year), a new record for Kingspan.

For 2022, all of our executive directors received basic salary increases of 4.5% which was in line with the general workforce increases for the markets in which they are based, except for Russell Shiels. As outlined in last year's Annual Report, in 2020 the committee carried out a review of Russell Shiels' role and responsibilities, and noted that this had increased significantly in recent years as a result of recent organic and inorganic expansion particularly in LATAM. The committee agreed to incrementally adjust Mr Shiels' package over the period 2021/2022, and for 2022 awarded Mr Shiels a 4% increase in salary above US inflation (giving a total increase of 10%) to reflect his increased responsibilities in the Americas. The committee is satisfied that these changes have properly aligned Mr Shiels' package with his increased responsibilities and no further adjustment is required.

Annual bonus payments to the executive directors for 2022 of between 82% and 86% of maximum reflect the Group's strong financial performance in the year, combined with the results of the non-financial measure of the Net Promoter Score (NPS). Details of the targets set and performance against them are set out later in this report.

At the same time a combination of external factors, including the war in Ukraine and increased inflation leading to general market uncertainty, have taken a toll on Kingspan's share price, with Total Shareholder Return ('TSR') for the 2020 PSP awards over the three-year performance period to 31 December 2022 being broadly flat at 1.4%. This resulted in a below median TSR performance against our selected peer group. As a result the TSR portion of the PSP awards did not vest, while the strong long-term EPS growth of 61% over the three-year period resulted in 50% of the total 2020 PSP awards vesting during 2023.

The committee considered business performance during 2022, as well as over the longer three-year performance period for the 2020 PSP awards, and is comfortable that the formulaic outcome of the incentives appropriately reflects Group performance as well as individual contribution and that no discretion to adjust is necessary. In particular, the committee reviewed the share price at the time the 2020 PSP awards were granted (€61.80) to see if market movements had created a windfall gain for the executives over the last three years. Noting that the share price at the time of grant was higher than the three month average prior to grant and also higher than the 31 December 2022 share price (€52.29), the committee concluded that there were no excess gains that required the committee to consider a scale back of the vesting levels.

2023 remuneration

The executive directors will receive basic salary increases of 3% in 2023, which is below general workforce increases of c. 4.5% to 6%, depending on region. In determining the appropriate salaries for the executive directors for 2023, the committee had regard to the increases awarded to the global workforce, particularly in the UK and Ireland, Western Europe and North America, where the rates of pay for the general workforce are set locally, and in some cases are dictated by local legislation. In some countries the businesses have responded to the widespread cost of living crisis by also making additional one-off payments to the workforce. The committee considers that the 3% increase awarded to the executive directors, which is substantially below general workforce increases, is appropriate in the current high inflationary environment.

Pension benefits continue to fall for all of the executive directors in line with the previously approved plan, to closer align with workforce levels.

The annual bonus maximum opportunity and PSP award levels remain unchanged from prior year for 2023. As the performance measures remain aligned with the Group's strategy, they are also unchanged. The targets we have set reflect stretching performance goals in an uncertain and challenging period ahead. Under the policy approved by shareholders at last year's AGM, the committee may adjust the 2023 PSP awards that vest if it considers the formulaic outcome is not representative of the underlying performance of the Company, investor experience or employee reward outcome.

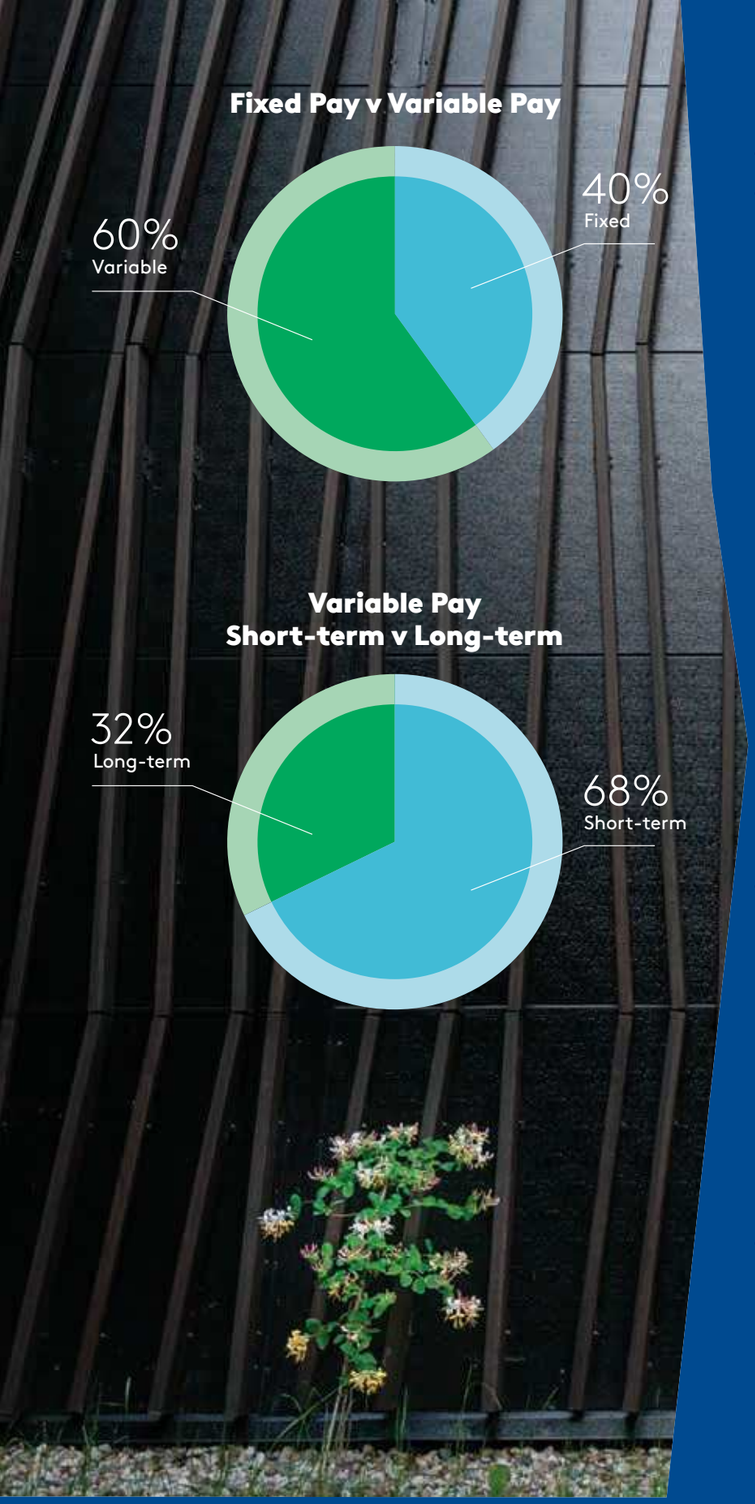
Conclusion

Kingspan's strong performance in a challenging trading environment is reflected in the incentive outcomes for 2022. The decisions that the committee has made, both in respect of our remuneration policy and the operation of that policy for 2023, are in line with our commitment to ensure that our remuneration framework drives superior performance and reflects the evolving needs of stakeholders.

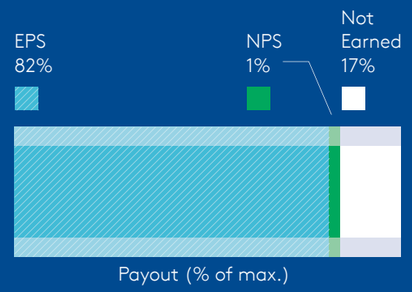
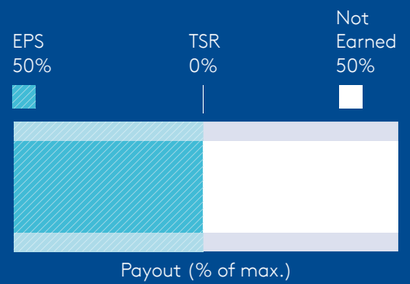
I hope that you will join the Board in approving the resolution on the Report of the Remuneration Committee at the AGM on 28 April 2023.

Linda Hickey
Chair of the Remuneration Committee

Hilton Canopy Hotel
Florida, USA
Insulated Panels
Dri-Design



Remuneration at a Glance

	Salary	Annual incentive	Long-term incentives
Implemented for year ended 31 December 2022	As outlined in last year's Annual Report, Russell Shiels received a base salary increase of 10% to reflect his increased responsibilities, with the other executives receiving a base salary increase of 4.5% in line with those awarded to the general workforce.	As provided by the approved remuneration policy, the maximum annual bonus potential for the executive directors is 150% of base salary, which remains unchanged. The CEO and CFO's annual bonus is based on the achievement of Group EPS performance targets and, additional non-financial NPS targets. For Divisional MDs, bonuses are based on a combination of stretching profit targets for their respective divisions, plus an element of Group EPS targets and, additional non-financial NPS targets. The 2022 targets and final outturns of the annual performance bonuses are detailed on page 99. **Annual Bonus CEO:**  	The Performance Share Plan ('PSP') awards vesting in February 2023, relate to awards granted in 2020. These awards were subject to EPS growth and relative TSR performance targets measured over the three year period from 2020 to 2022. Target and actual outturns are set out on page 100. Prior to confirming the pay-outs, the committee undertook an evaluation of whether vesting levels reflected Group performance, individual contribution and any wider circumstances over the three year period to December 2022. **PSP:** 
Planned for year ending 31 December 2023	The executive directors will receive basic increases of 3% which is substantially below general workforce rates of c. 4.5% to 6%, depending on markets. **Rationale:** These increases take account of the wider inflationary pressures that the business is experiencing in almost all markets.	The committee has determined that there will be no material changes to the bonus framework for 2023. The measures will remain unchanged and maximum bonuses will be capped at 150% of salary. **Rationale:** The bonus scheme has proven effective at driving a relentless focus on profitability, while extending the measures to include NPS, a core part of sustainable value creation.	As approved at the AGM in 2022, awards will be made at 225% of base salary to the CEO and 200% of base salary for the other executive directors. **Rationale:** As the business continues to grow at an exceptional rate, it is important to continue to drive superior returns and remain competitive.

Directors' Remuneration Policy

This section of the report outlines the current policy for the remuneration of the Company's directors. The current remuneration policy was approved by shareholders at the AGM on 29 April 2022 and is set out in full in the 2021 Annual Report, and can be found on the Company's website at www.kingspan.com.

Our remuneration philosophy

At Kingspan, we have developed a clear philosophy around remunerating and incentivising employees at all levels of the organisation. As detailed in prior reports, the principles against which we determine our approach to remuneration, and make decisions, are:

- **Pay for performance** ensuring that variable remuneration is only paid for strong performance and maximum payouts will only be realised for truly exceptional performance.
- **Simplicity** so that executives and shareholders can understand our pay arrangements without overly complex rules.
- **Transparency** so that it is objectively transparent with high levels of disclosure in the Annual Report.
- **Alignment with shareholders** by delivering a significant proportion of remuneration through equity, and by setting executive share ownership guidelines.

This approach cascades through the organisation and has played a key role in driving the growth of the business and significant value creation for stakeholders over the years.

The committee has considered the key parameters set out by the 2018 UK Corporate Governance Code (the 'Code'), which we believe our principles are aligned to:

Matters	Explanation
Clarity	The policy is clear, uncomplicated and well understood by the executive directors. It is based on measures aligned to strategy.
Simplicity	Aligned with our existing principle of simplicity, with clear and focused incentive plans that do not incorporate excessive measures.
Risk	The policy is designed to discourage inappropriate risk taking and to ensure that it is not rewarded. This is achieved by an appropriate balance between short-term and long-term incentive plans and the introduction of non-financial metrics, with clawback and recovery provisions and the ability of the committee to utilise discretion to adjust formulaic outcomes.
Predictability	Incentive plans are subject to established limits, with objective targets and straight line vesting dictating payouts.
Proportionality	Aligned with our principle of pay-for-performance, so that any pay is fully proportional to performance and stakeholder experience.
Alignment to culture	Our high performance culture is designed to drive superior returns for shareholders, whilst the introduction of sustainability measures embeds our Planet Passionate goals throughout the business.

At Kingspan, we have developed a clear philosophy around remunerating and incentivising employees at all levels of the organisation.

The policy for the key elements of an executive director's remuneration is set out in the table below:

Key element	Operation	Opportunity and measures
Fixed remuneration		
Base Salary To attract and retain the best global talent of the calibre required to deliver the Group's strategy.	Base salaries are reviewed annually by the Remuneration Committee in the last quarter of each year. A broad assessment of individual and business performance is used by the committee as part of the salary review. Increases will generally be in line with increases across the Group, but may be higher or lower in certain circumstances to reflect performance, changes in remit, roles and responsibilities, or to allow newly appointed executives to move progressively towards market norms.	Any increase will typically be in line with those awarded to the broader employee pay environment. The committee has discretion to award higher increases in circumstances that it considers appropriate, such as a change in role or responsibility.
Benefits To provide benefits which are competitive with the market.	In addition to their base salaries, executive directors' benefits include but are not limited to life and health insurance, the use by the executive directors of company cars (or a taxable car allowance) and relocation or similar allowances on recruitment, each in line with typical market practice.	Benefits are set at a level which the committee considers appropriate in light of the market and depending on the role and an individual's circumstances.
Pensions To provide a retirement benefit which is competitive with the market.	Kingspan operates a defined contribution pension scheme for executive directors. Pension contributions are calculated on base salary only. Alternatively, Kingspan may pay a cash amount subject to all applicable employee and employer payroll taxes and social security.	Incumbent executive director pensions will be reduced to 10% of salary by the end of 2024. Newly appointed executive directors' will be capped at the rate applicable in the relevant market.
Variable remuneration		
Annual performance bonus To reward the delivery of short-term performance targets and business strategy, satisfied in cash and deferred share awards, aligning management interests with shareholders and the longer term performance of the Group.	Executive directors receive an annual performance related bonus based on the attainment of financial and non-financial targets set prior to the start of each year. Bonuses are paid on a sliding scale if the targets are met. Maximum bonus is only achieved if ambitious incremental growth targets are achieved. No more than 100% of salary can be delivered in cash through the bonus plan. Any performance related bonus achieved in excess of the cash amount is satisfied by the grant of share awards, which are deferred for two years. The committee has discretion to adjust formulaic bonus outcomes in line with the Code.	The maximum potential bonus for the executive directors is 150% of base salary. The committee selects stretching performance targets each year, which are based on a mix of: → Group profit targets; → Divisional financial performance; → Net Promoter Score (Customer NPS). Bonus payment for financial targets is 0% at threshold. Bonus is paid on a straight line basis for achieving each point on the NPS target scale.

Key element	Operation	Opportunity and measures
Variable remuneration (continued)		
Long-term incentive plan (LTIP) To reward the sustained strong performance and delivery of Group strategic objectives over the longer term. Aligns the interests of executive directors and senior managers with those of the Group's shareholders and recognises and rewards value creation over the longer term.	Executive directors are entitled to participate in Kingspan's Performance Share Plan (PSP). Under the terms of the PSP, performance shares are awarded to the executive directors and the senior management team. The performance shares will vest after three years only if the Group's underlying performance has improved during the 3-year performance period, and if certain financial and non-financial ESG targets are achieved over the performance period. The awards are subject to a two-year post vesting holding period.	The maximum award level under the policy is 300% of salary. The committee will not increase awards above 250% of salary in the current policy period without first engaging with its largest investors and considering the feedback received. For 2023 the CEO will receive a maximum annual award over shares with a market value of 225% of base salary, and the other executive directors will receive awards over shares with a market value of 200% of base salary. Prior to granting an award, the Committee sets performance conditions which it considers to be appropriately stretching. The performance conditions for the PSP awards to be granted in 2023 are based on a mix of: → EPS growth; → TSR outperformance; and → Achievement of the Group's Planet Passionate targets. On achieving the threshold performance level for the EPS and TSR measures, 25% of the relevant element of the award will vest, 0% of the Planet Passionate award vests on threshold. Vesting is on a straight-line basis between threshold and maximum levels of performance.

The policy on non-executive directors' remuneration is as follows:

Key element	Operation	Opportunity
Non-executive director fees To reflect time commitment, experience and responsibilities, and to attract and retain high calibre non-executive directors by offering a market competitive fee level.	Non-executive director fee levels are reviewed annually. The Chairman receives a single fee for all their responsibilities. Other non-executive directors receive a basic board membership fee. The Chair of Board committees and the Senior Independent Director receive an additional fee for this role. Non-executive directors are entitled to the reimbursement of reasonable business expenses including any tax (grossed up) that may be payable on those expenses.	Fees for non-executive directors are within the limits set by the shareholders from time to time, with a current aggregate limit of €975,000.

The following are key structural aspects of the remuneration policy in relation to the directors' remuneration contracts:

Clawback and malus Ensures an appropriate balance between risk and reward.	Covers material misstatement of financial results, material breach of executive's employment contract, error in contract, failure of risk management, corporate failure, wilful misconduct, recklessness and or fraud resulting in serious damage to the financial condition or business reputation of the Company. The period within which clawback and malus can be operated is 2 years from payment of annual bonus and/or vesting of LTIP awards.
Shareholding guideline Ensures alignment between the interests of executive directors and shareholders.	200% of salary to be achieved through the retention of at least 50% of all vested variable pay awards (subject to sales to meet taxes). Achievement of guideline is measured through beneficially owned shares only. For new appointees, the committee may consider it appropriate to require a percentage of the annual bonus paid to be deferred into shares (rather than just bonus in excess of 100% of salary), in order to achieve this guideline.
Post cessation of employment and general shareholding requirements Ensures alignment between the interests of executive directors and shareholders.	All executive directors are subject to a post-employment shareholding requirement of the lower of (i) shares or equity interests held on cessation, and (ii) 200% of salary, for 2 years post-employment. Achievement is measured through beneficially owned shares, and the retention of vested deferred share and LTIP awards (subject to sales to meet taxes).
Approach to recruitment To attract an executive director of the calibre required to shape and deliver the Group's business strategy.	In exceptional circumstances, such as to facilitate recruitment, the committee may exercise its discretion and grant LTIPs up to a maximum of 400% of salary.
Termination - Notice Periods	Each of the executive directors has a service contract with the Company which provides for 12 months' notice of termination by the Company (or, at the discretion of the Company, payment for all or part thereof) and 6 or 12 months by the director and it is the Company's policy that notice periods will not exceed 12 months. The service contracts do not include any provision for compensation for loss of office, other than the notice period provisions set out above. There are no enhanced provisions on a change of control and there are no specific severance arrangements. The committee's policy in relation to termination of service contracts is to deal with each case on its merits having regard to the circumstances of the individual, the termination of employment, any legal advice received and what is in the best interests of the Company and its shareholders.
Termination - Annual Incentive Bonus and Long Term Incentive Plans	Annual bonuses and PSP awards are dealt with in accordance with the rules of the relevant plans. At the discretion of the committee (and normally where the individual has served a minimum of 6 months of the bonus year), a pro-rata bonus may become payable at the normal payment date for the period of service subject to full year performance targets being met. The default treatment for share based awards is that any unvested award will lapse on termination of employment. However, under the rules of the Performance Share Plan, in certain prescribed circumstances (e.g. "good leaver"), awards are eligible to vest subject to the performance conditions being met over the normal performance period (or a shorter period at the Committee's discretion) and with the award being reduced by an amount to reflect the proportion of the vesting period not actually served.

2022 Remuneration Outturn

Directors' Remuneration for year ended 31 December 2022										
Executive directors	**Gene Murtagh EUR'000**		**Geoff Doherty EUR'000**		**Russell Shiels[1] EUR'000**		**Gilbert McCarthy EUR'000**		**Total EUR'000**	
	2022	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
Fixed Remuneration										
Salary and Fees	**928**	888	**599**	573	**642**	520	**554**	530	**2,723**	2,511
Pension Contributions [2]	**148**	161	**120**	140	**154**	169	**94**	106	**516**	576
Benefits [3]	**37**	35	**35**	34	**73**	53	**40**	43	**185**	165
Total Fixed Remuneration	**1,113**	1,084	**754**	747	**869**	742	**688**	679	**3,424**	3,252
Performance Pay										
Annual Incentives [4]										
Cash Element	**928**	888	**599**	573	**642**	520	**554**	530	**2,723**	2,511
Deferred Share Awards	**225**	444	**145**	287	**181**	260	**125**	265	**676**	1,256
Long Term Incentives [5]										
LTI - Value at Grant [6] [7]	**750**	1,499	**415**	830	**384**	768	**384**	768	**1,933**	3,865
LTI - Share Price Growth [6] [7]	**(115)**	1,811	**(64)**	1,003	**(59)**	928	**(59)**	928	**(297)**	4,670
Total Performance Pay	**1,788**	4,642	**1,095**	2,693	**1,148**	2,476	**1,004**	2,491	**5,035**	12,302
Total Remuneration	**2,901**	5,726	**1,849**	3,440	**2,017**	3,218	**1,692**	3,170	**8,459**	15,554

Non-executive directors [8]	**2022**	**2021**
Jost Massenberg	**350**	258
Linda Hickey	**105**	85
Michael Cawley	**90**	85
John Cronin	**75**	75
Anne Heraty	**75**	75
Éimear Moloney	**75**	50
Paul Murtagh	**75**	50
Senan Murphy [9]	**19**	-
Bruce McLennan [10]	**-**	25
Eugene Murtagh [10]	**-**	64
Total non-executive pay	**864**	767
Total Directors' remuneration	**9,323**	16,321

(1) Russell Shiels' remuneration is denominated in USD, and has been converted to Euro at the following average rates USD:1.0544 (2021: 1.1828).

(2) The Group operates a defined contribution pension scheme for executive directors. Certain executives have elected to receive part of their prospective pension entitlement as a non-pensionable cash allowance in lieu of the pension benefit foregone, subject to all applicable employee and employer payroll taxes.

(3) Benefits principally relate to health insurance premiums and company cars/car allowances. In the case of Russell Shiels the cost of life insurance and permanent health benefit is also included.

(4) The annual incentive amount is earned for meeting clearly defined EPS growth, divisional profit and NPS targets. Details of the bonus plan and targets are set out on page 98 of the Report of the Remuneration Committee.

(5) Long-Term Incentives are granted annually pursuant to the Kingspan Group Performance Share Plan (PSP). Details of the PSP scheme and targets are set out on page 100 of the Report of the Remuneration Committee.

(6) The value of the 2020 LTIP award that will vest in 2023 has been calculated using the average share price for December 2022, being €52.29. The calculation for this award will be adjusted in next years' annual report to reflect the share price on the date of vesting (24/02/2023). The share price decreased from the date of grant (share price: €61.80) to the share price used to determine the vesting value (share price: €52.29).

(7) The value of the 2019 LTIP award that vested in 2022 has been calculated using the share price at the date of vesting (25/02/2022) of €85.66. The share price increased from the date of grant (share price: €38.80) to the date of vesting (share price: €85.66).

(8) Non-executive directors receive a base fee of €75,000 per annum, plus an additional fee of €15,000 for chairmanship of Board committees, as well as for the Senior Independent Director. They do not receive any pension benefit, or any performance or share based remuneration.

(9) Senan Murphy was appointed as a non-executive director on 1 October 2022.

(10) Bruce McLennan and Eugene Murtagh both retired as non-executive directors on 30 April 2021.

Base salary

All of the executive directors, except for Russell Shiels, received basic salary increases for 2022 of 4.5% which was in line with the general workforce increases for the markets in which they are based and within the overall global workforce range of c.3% to 6%. As outlined in last year's Annual Report, in 2020 the committee carried out a review of Mr Shiels' role and responsibilities, and noted that this had increased significantly in recent years as a result of recent organic and inorganic expansion particularly in LATAM. The committee agreed to incrementally adjust Mr Shiels' package over the period 2021/2022, and awarded Mr Shiels a 4% increase over US inflation in 2022 (giving a total increase of 10%) to reflect his increased responsibilities in the Americas. The committee is satisfied that these changes have properly aligned Mr Shiels' package with his increased responsibilities and no further adjustment is required.

Pension

As outlined in previous Annual Reports, all executive directors' contractual pension contributions will be reduced to 10% of base salary by the end of 2024. This approach was adopted by the committee and subsequently supported by shareholders following feedback on the 2019 Remuneration Policy. While recognising that certain shareholders may have differing expectations on the timing of the pension reductions, the committee believes this approach fairly and appropriately balances the legacy contractual entitlement of each of the executive directors with the general expectations of shareholders and wider stakeholders.

	Pension Contribution				
Executive Director	**2021**	**2022**	**2023**	**2024**	**2025**
Gene Murtagh	18%	16%	14%	12%	10%
Geoff Doherty	24%	20%	16%	13%	10%
Gilbert McCarthy	20%	17%	14%	12%	10%
Russell Shiels	33%	24%	18%	14%	10%

2022 performance related bonus

In 2022 all executive directors were eligible for a maximum performance related bonus opportunity of up to 150% of base salary. The CEO and CFO's annual performance related bonuses were based principally (93% of total opportunity) on Group EPS growth targets over prior year, with the maximum annual performance related bonus being payable on the achievement of 110% Group EPS growth over prior year. The committee considered this to be a stretching target, particularly in light of the global market conditions that were evident from the end of the prior year. The achievement of record EPS growth in such a challenging environment was an excellent result both individually and by the organisation as a whole, and resulted in the CEO and CFO achieving 87.5% of their maximum bonus opportunity against this metric.

For each of the Divisional MDs, up to 46.5% of their total bonus opportunity was based on achieving stretching divisional profit targets, with maximum bonus being payable on the achievement of 5% divisional profit growth. Strong divisional performance resulted in 100% of the maximum bonus opportunity being achieved by the Divisional MDs in respect of these financial metrics. Additional commentary on each of the divisions' performance is set out in the Chief Executive's Review. A further 46.5% of the Divisional MDs' total bonus opportunity was payable on the achievement of the same stretching Group EPS targets as for the CEO and CFO, ensuring a healthy balance between incentivising divisional and Group growth.

Up to 7% of each of the executive directors' total bonus opportunity (i.e. 10% of base salary) was based on achieving Group or divisional Net Promoter Score® ("NPS") targets. NPS is a measure of both brand loyalty and brand advocacy and is one of many metrics we use to measure customer experience as part of the global Voice of the Customer programme. As the programme has scaled, an external review by an independent third party has been introduced who validates the NPS scores and underlying methodology. The overall Group NPS score for the year was 41, which was somewhat behind prior year and at the lower end of target, whilst at a divisional level NPS scores varied with some showing improvements but others falling below target. This reflects in part the impacts experienced by supply chain shortages, the difficulties of passing on high raw material cost inflation during the year, and the ambitious targets set by the committee for this important metric of strategic performance.

Each executive's performance against targets, and bonus achieved, is set out in the table adjacent. The committee was satisfied that the formulaic outturn of the bonus plan for 2022 was an accurate reflection of underlying company performance, individual contribution and a holistic evaluation of wider circumstances. In particular, the committee considered the record financial performance of the Group, and the substantial growth in headcount and operational footprint.

All bonuses earned in excess of 100% of base salary will be satisfied by the grant of share awards, which are deferred for two years.

	Bonus measure	Max. opportunity/ weighting (as % salary)	Threshold target	Target for maximum	Performance	Outcome (% of weighted measure)	Total payout (% max. opportunity)
Chief Executive	EPS	140%	275.04 cent	336.16 cent	329.5 cent	87.5%	82.8%
	NPS	10%	NPS of 41 to 46		41	16.7%	
Chief Financial Officer	EPS	140%	275.04 cent	336.16 cent	329.5 cent	87.5%	82.8%
	NPS	10%	NPS of 41 to 46		41	16.7%	
Russell Shiels	Divisional profit	70%	90% of prior year	105% of prior year	138%	100%	85.5%
	EPS	70%	275.04 cent	336.16 cent	329.5 cent	75.1%	
	NPS	10%	Divisional NPS range not disclosed			57.1%	
Gilbert McCarthy	Divisional profit	70%	90% of prior year	105% of prior year	112%	100%	81.7%
	EPS	70%	275.04 cent	336.16 cent	329.5 cent	75.1%	
	NPS	10%	Divisional NPS range not disclosed			0.0%	

De Groene Kaap
Rotterdam,
The Netherlands
Insulation
Kooltherm K8

Performance Share Plan

In 2020, the committee granted PSP Awards that were 50% based on EPS growth targets and 50% based on TSR targets as outlined below.

	Weighting	Targets	Performance	Payout (% of max.)
EPS	50%	6% -12% CAGR	17.2% CAGR	100%
TSR	50%	Median to Upper Quartile	43rd percentile	0%

The peer group against which TSR performance was measured was as follows:

Armstrong World Industries Inc	LafargeHolcim Ltd
Boral Ltd	Mowhawk Industries Inc
Compagnie de Saint Gobain S.A.	Owens Corning Inc.
Cornerstone Building Brands Inc	Rockwood Intl. A/S
CRH plc	Sika AG
Geberit AG	Travis Perkins plc
Grafton Group plc	Wienerberger AG

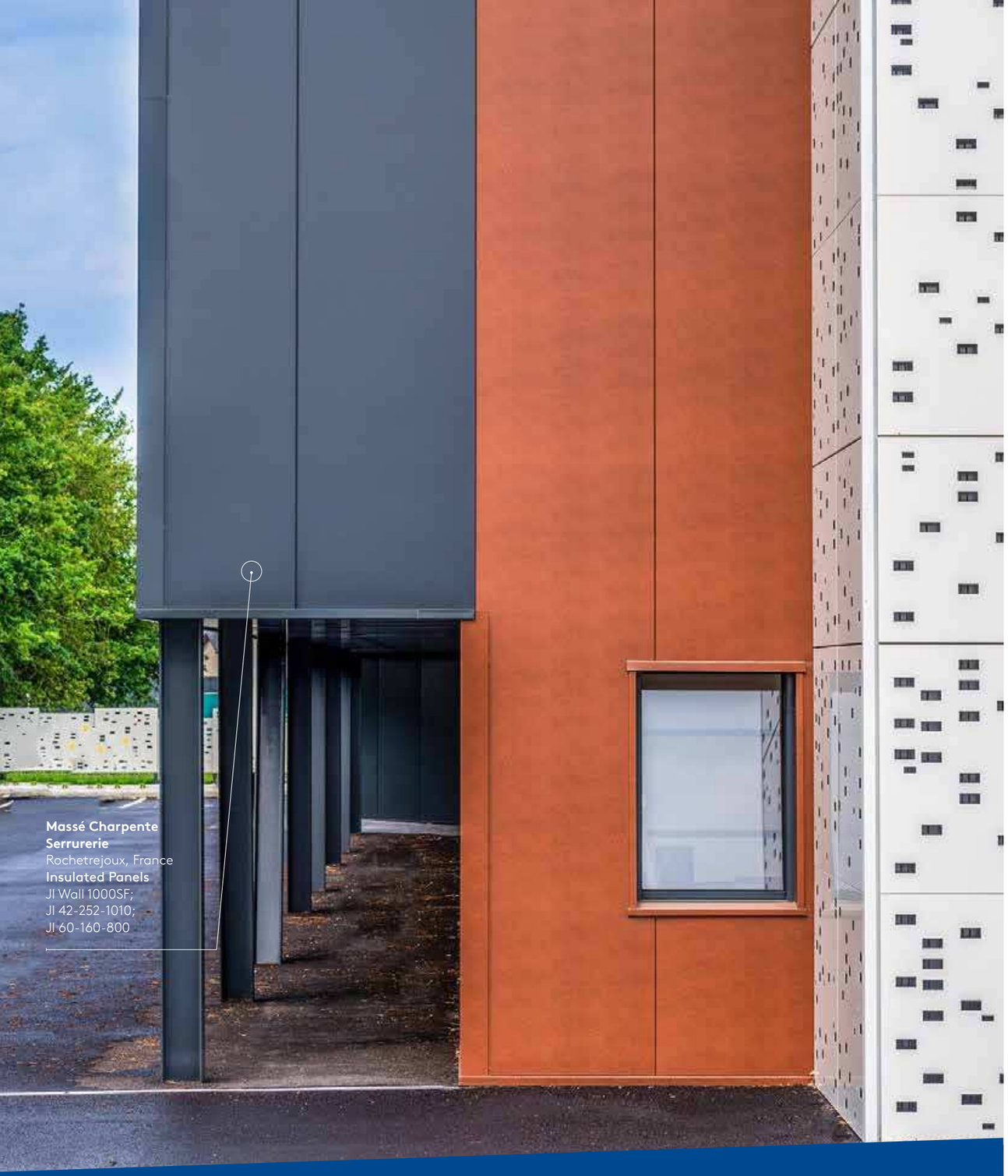
The committee reviewed the extent to which the vesting targets in respect of the PSP Awards granted in 2020 had been met by reference to the EPS and TSR targets over the three-year performance period to 31 December 2022. The committee noted that a combination of external factors, including the war in Ukraine and increased inflation leading to general market uncertainty had impacted Kingspan's share price, with TSR over the three-year performance period being broadly flat at 1.4%. This resulted in a below median TSR performance against the selected peer group. As a result the TSR portion of the 2020 PSP awards did not vest. At the same time, strong long-term EPS growth of 61% over the three-year period resulted in the EPS targets being exceeded and 50% of the total 2020 PSP awards vesting. In addition, and in line with the approach to reviewing bonus payouts, the committee reviewed overall performance and stakeholder experience during the three-year period up to 31 December 2022. Following a review of the vesting levels, the committee was satisfied that they reflected company and individual performance over the three-year period.

In respect of PSP awards granted during the year, the committee implemented the increase in the level of awards as flagged in last year's Remuneration Policy and Report as approved at the 2022 AGM. The committee granted awards to the CEO equivalent to 225% of base salary, and 200% of base salary for the other executive directors (increased from 200% and 175% of salary respectively). There are no increases to award levels for 2023 and following shareholder engagement and feedback, the committee has agreed not to increase PSP award levels above 250% of salary during the current policy period without first engaging with shareholders and considering their feedback.

The table below sets out the total number of PSPs held by the directors and the Company Secretary during the year:

Director	At 31 Dec 2021	Granted during year	Vested during year	Exercised or lapsed during year	At 31 Dec 2022	Option price €	Earliest exercise date	Latest expiry date
Gene M. Murtagh								
Unvested	89,988	24,803	(38,642)	-	76,149	0.13	24/02/2023	22/08/2029
Vested	36,578	-	38,642	-	75,220	0.13	26/02/2021	25/02/2026
	126,566	**24,803**	**-**	**-**	**151,369**	**0.13**		
Geoff Doherty								
Unvested	50,024	14,316	(21,396)	-	42,944	0.13	24/02/2023	22/08/2029
Vested	-	-	21,396	(21,396)[3]	-	0.13	-	-
	50,024	**14,316**	**-**	**(21,396)**	**42,944**	**0.13**		
Russell Shiels								
Unvested	46,276	14,677	(19,797)	-	41,156	0.13	24/02/2023	22/08/2029
Vested	-	-	19,797	(19,797)[4]	-	0.13	-	-
	46,276	**14,677**	**-**	**(19,797)**	**41,156**	**0.13**		
Gilbert McCarthy								
Unvested	46,276	13,240	(19,797)	-	39,719	0.13	24/02/2023	22/08/2029
Vested	88,793	-	19,797	(24,812)[2]	83,778	0.13	23/02/2019	25/02/2026
	135,069	**13,240**	**-**	**(24,812)**	**123,497**	**0.13**		
Company Secretary								
Lorcan Dowd								
Unvested	11,344	2,266	(4,378)	-	9,232	0.13	24/03/2023	23/02/2029
Vested	18,257	-	4,378	(5,230)[1]	17,405	0.13	23/02/2019	25/02/2026
	29,601	**2,266**	**-**	**(5,230)**	**26,637**	**0.13**		

1 Exercised on 18/02/2022. Market value on day of exercise €89.69.
2 Exercised on 22/02/2022. Market value on day of exercise €85.10.
3 Exercised on 05/05/2022. Market value on day of exercise €83.50.
4 Exercised on 08/11/2022. Market value on day of exercise €53.72.



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JI 42-252-1010;
JI 60-160-800

Deferred Share Plan

Director		At 31 Dec 2021	Granted during year	Vested & transferred during year	At 31 Dec 2022	Earliest vesting/ transfer date
Gene M. Murtagh	Unvested	813	5,021	(813)	5,021	31/03/2024
Geoff Doherty	Unvested	525	3,242	(525)	3,242	31/03/2024
Russell Shiels	Unvested	488	3,107	(488)	3,107	31/03/2024
Gilbert McCarthy	Unvested	-	2,998	-	2,998	31/03/2024

Directors' & Secretary's Interests in Shares

The beneficial interests of the directors and secretary and their spouses and minor children in the shares of the Company at the end of the financial year are as follows:

	31 Dec 2022	31 Dec 2021	Shareholding at 31 Dec 2022[1] (% Salary)	Shareholding requirement met (200% salary)
Executive directors				
Gene M. Murtagh	1,080,020	1,079,207	6,086%	Yes
Geoff Doherty	256,635	240,039	2,240%	Yes
Russell Shiels	219,797	200,000	1,790%	Yes
Gilbert McCarthy	282,833	258,021	2,670%	Yes
Non-executive directors				
Jost Massenberg (Chairman)	-	-		
Linda Hickey	5,000	5,000		
Michael Cawley	30,600	30,600		
John Cronin	8,000	8,000		
Anne Heraty	2,250	2,250		
Éimear Moloney	2,000	-		
Paul Murtagh	-	-		
Senan Murphy[2]	-	-		
Company Secretary				
Lorcan Dowd	3,457	3,318		

(1) Expressed as a percentage of base salary on 31 December 2022 and calculated using the average share price for December 2022.
(2) Appointed as a director as of 1 October 2022.

As at 16 February 2023, there have been no changes in the directors' and secretary's interests in shares since 31 December 2022.

Non-executive directors

The non-executive directors each received fees which are approved by the Board as a whole. The Chairman's fee is €350,000. The basic non-executive director fee is €75,000. An additional fee of €15,000 is paid for chairing the Remuneration Committee and the Audit & Compliance Committee, as well as for the Senior Independent Director to reflect the additional role and responsibilities.

Implementation of Remuneration Policy for 2023

The core principles of our remuneration philosophy as outlined earlier, frame our approach to 2023, namely reward for high-performance, simplicity, transparency and alignment with shareholders.

Base salary and pension

Notwithstanding the highly inflationary environment, the executive directors will receive basic salary increases of 3% in 2023, which compares with general workforce increases of c.4.5% to 6%, depending on region. In determining the appropriate salaries for the executive directors for 2023, the committee had regard to the rates awarded to the global workforce, particularly in the UK and Ireland, Western Europe and North America, where the rates of pay for the general workforce are set locally, and in some cases are dictated by local legislation. In some countries the businesses have responded to the widespread cost of living crisis by also making additional one-off payments to the workforce. The committee considers that the 3% increase awarded to the executive directors, which is substantially below general workforce rates, is appropriate in the current high inflationary environment.

As outlined previously, pension contributions of all incumbent executives are being reduced incrementally to 10% by December 2024 with rates applicable for 2023 set out in the table on page 98.

Annual bonus

The maximum bonus opportunity for all the executive directors remains at 150% of salary (unchanged from 2022). Up to 100% of salary earned through the bonus plan is delivered in cash, and any bonus earned in excess of that amount is deferred into shares in the Company for two years. For 2023, the committee has set stretching targets based on the budget for the year and market expectations, noting the continuing backdrop of high inflation rates impacting the construction market sentiment globally. Targets are commercially sensitive and will be disclosed retrospectively with performance against them in the 2023 Report of the Remuneration Committee.

Performance share awards

For 2023, the CEO will receive a PSP award over shares with a market value of 225% of base salary, and the other executive directors will receive PSP awards over shares with a market value of 200% of base salary. These grant levels are unchanged from prior year. As outlined above, following shareholder engagement and feedback, the committee has agreed not to increase PSP award levels above 250% of salary during the current policy period without first engaging with shareholders and considering their feedback. Overall, the annual bonus and long-term performance incentive opportunity, at up to 375% of salary in aggregate, remains below arrangements at similarly sized UK and Irish businesses.

The committee reviews annually the performance framework for the PSP scheme. For the 2023 PSP Awards, the committee has selected the same performance measures as the 2022 awards based 45% on EPS growth, 45% on relative TSR and 10% on our ESG Planet Passionate goals. The peer group against which TSR performance will be measured is set out in the below table.

Peer group for 2023 grant for PSP awards:

Armstrong World Industries Inc	Masco Corporation
Boral Ltd	Mohawk Industries Inc
Builders Firstsource Inc	Owens Corning Inc
Carlisle Construction Materials LLC	Recticel NV
Compagnie de Saint Gobain SA	Rockwool Intl. AS
CRH plc	Sika AG
Grafton Group plc	Wienerberger AG
Lafarge Holcim Ltd	

The committee reviewed the suitability of the constituent members of the PSP peer group, and noted that Cornerstone Building Brands Inc had delisted during the year, and also agreed to remove Geberit AG and Travis Perkins plc as they were no longer considered best fit as peers. The committee then considered potential replacements to add to the TSR peer group, having regard to market sector, size and geography and agreed to select Builders Firstsource Inc, Carlisle Construction Materials LLC, Masco Corporation and Recticel NV as replacements with effect for all future PSP grants.

The committee also reviewed the EPS targets to ensure they included significant stretch over the performance period ahead and are aligned with our principles of alignment and pay-for-performance. Having regard to the uncertain macro environment affecting our end-markets globally, and the record level of EPS achieved in prior year, the committee considered that target EPS growth of 3% to 6% compound over the three-year performance period was a proper stretch target and appropriately aligned with our risk appetite as well as internal and external forecasts.

There are no changes to the ESG measures included in the LTIP, which are measured against Kingspan's ambitious Planet Passionate goals, drawing a clear focus on achieving one of our core strategic pillars. Details of our achievements against our Planet Passionate targets are given in the below table.

PSP Performance Measure

	Performance Measure	Weighting	Percentage vesting at threshold	Threshold vesting target	Maximum vesting target*
Financial targets	EPS	45%	25%	3% p.a.	6% p.a
	TSR	45%	25%	Median	Upper quartile

*Straight line vesting between threshold and maximum vesting

		Performance Measure	Weighting	Percentage vesting at threshold	2020 Base Year	2021 Actual	2022 Actual	2025 Target	2030 Target
Planet Passionate Annual Targets	**Carbon**	Net Zero Carbon Manufacturing (scope 1 & 2 GHG emissions - tCO2e)	1%	0%	410,224	389,299	242,734	-	0
		Zero emissions company funded cars - annual replacement (%)	1%	0%	11	29	60	100	-
	Energy	60% Direct Renewable Energy Use (%)	1%	0%	19.5	25.8	34.3	-	60
		20% On-site energy generation (%)	1%	0%	4.9	4.9	7.2	-	20
		Solar PV systems on all wholly owned facilities (%)	1%	0%	21.7	28.4	41.5	-	100
	Circularity	Zero company waste to landfill (tonnes)	1%	0%	18,642	16,359	9,081	-	0
		Recycle 1 billion PET bottles into our manufacturing processes annually (million bottles)	1%	0%	573	843	803	1,000	-
		QuadCore™ products utilising recycled PET (no. of sites)	1%	0%	1	1	3	19	-
	Water	Harvest 100 million litres of rainwater annually (million litres)	1%	0%	20.1	20.5	26.3	-	100

For further details on the Planet Passionate targets please see page 65.

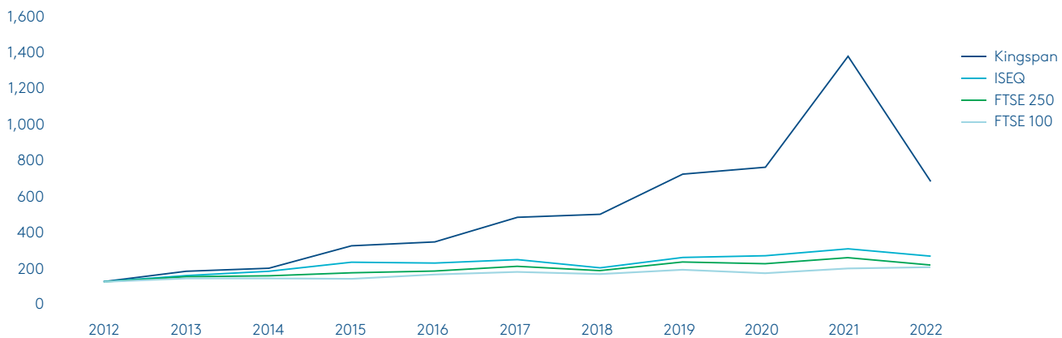
Committee Governance

Non-executive director fees

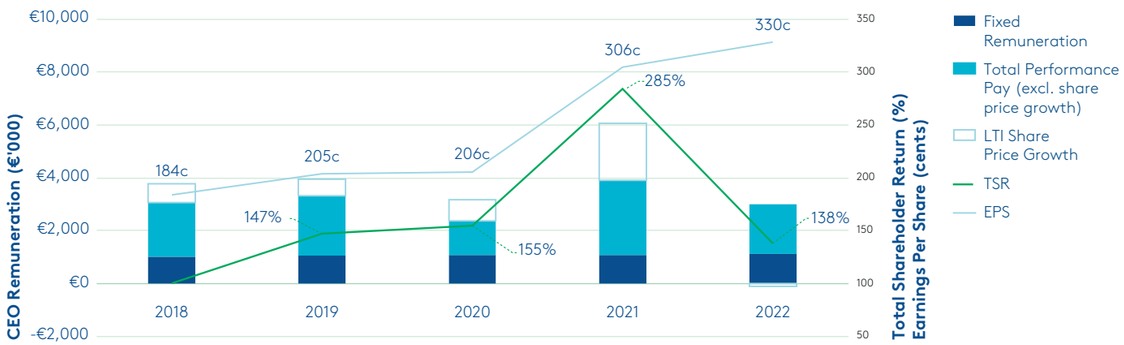
As reported last year, the independent non-executive Chairman's fee has been set at €350,000 for the year ahead. There is also no change from prior year to the basic non-executive fees of €75,000. A separate additional fee of €15,000 is paid to the chairs of the Remuneration Committee and the Audit & Compliance Committee, as well as for the Senior Independent Director.

The graph below shows the Company's TSR performance against the performance of the ISEQ and FTSE indices over the 10-year period to 31 December 2022:

Total Shareholder Returns



CEO Remuneration vs Kingspan Performance



Committee membership and attendance

Name	Number of Meetings Attended	Maximum Possible Meetings
Linda Hickey (Chair)	3	3
Michael Cawley	3	3
Anne Heraty	3	3

Key strengths and relevant experience of each member of the Committee is set out on page 84.

The Chief Executive does not normally attend meetings but provides input, where relevant, to the committee Chair prior to the meeting. No individual is present at a meeting when the terms of his or her own remuneration are discussed. The Company Secretary acts as the secretary to the committee. The terms of reference are available on the Company's website: www.kingspan.com

Key activities during the year

	FEB	JUN	DEC
Salary and fees			
Engage independent consultants for policy and benchmark review		●	
Review implementation of overall remuneration policy			●
Review and approve executives' salary, role and responsibilities for 2023			●
Review and approve non-executives' fees for 2023			●
Review remuneration benchmarking report			●
Review non-financial performance measures			●
Review and approve Chairman's fee			●
Performance pay			
Assess Group and individual performance against targets for 2021	●		
Review executive bonus measures and weighting for 2023			●
Agree Group and individual performance targets for 2023			●
PSP Awards			
Assess performance of 2019/2021 PSP Awards against targets	●		
Determine percentage of 2019/2021 PSP Awards which vest	●		
Review performance measures for grants of PSP Awards for 2022	●		
Agree targets and level for grants of PSP Awards for 2022	●	●	
Review non-financial Planet Passionate measures for 2022	●		
Review and approve PSP Sub-Plan		●	
Governance			
Review and approve Report of the Remuneration Committee for Annual Report 2021	●		
Update on governance and remuneration trends generally			●
Consider shareholder votes and feedback from AGM 2022		●	
Engage with shareholders post AGM		●	
Review and update of remuneration policy	●		
Engage with shareholders on remuneration policy	●		
Consider shareholder outreach and feedback			●

External advisors

The Remuneration Committee obtained advice during the year from independent remuneration consultants Korn Ferry. Korn Ferry is a member of the Remuneration Consultants Group and a signatory to its Code of Conduct, and all advice is provided in accordance with this code. Korn Ferry also provided some leadership and development services to Kingspan during the year. The committee concluded that the associated fee for the provision of this service was not material and would not affect Korn Ferry's independence and objectivity. Accordingly, the committee is satisfied that the advice obtained was objective and independent.

Shareholder Voting

The following table summarises the details of votes cast in respect of the resolutions on the Directors' remuneration policy and the Report of the Remuneration Committee at the 2022 AGM.

Resolution	Votes For		Votes Against		Total Votes		Votes Withheld
	Number	%	Number	%	Number	% Of Total Voting Rights	
Directors' Remuneration Policy	118,371,401	79.85%	29,864,415	20.15%	148,235,816	81.61%	37,146
Report of the Remuneration Committee	144,299,108	97.34%	3,937,125	2.66%	148,236,233	81.61%	36,729

Shareholder engagement

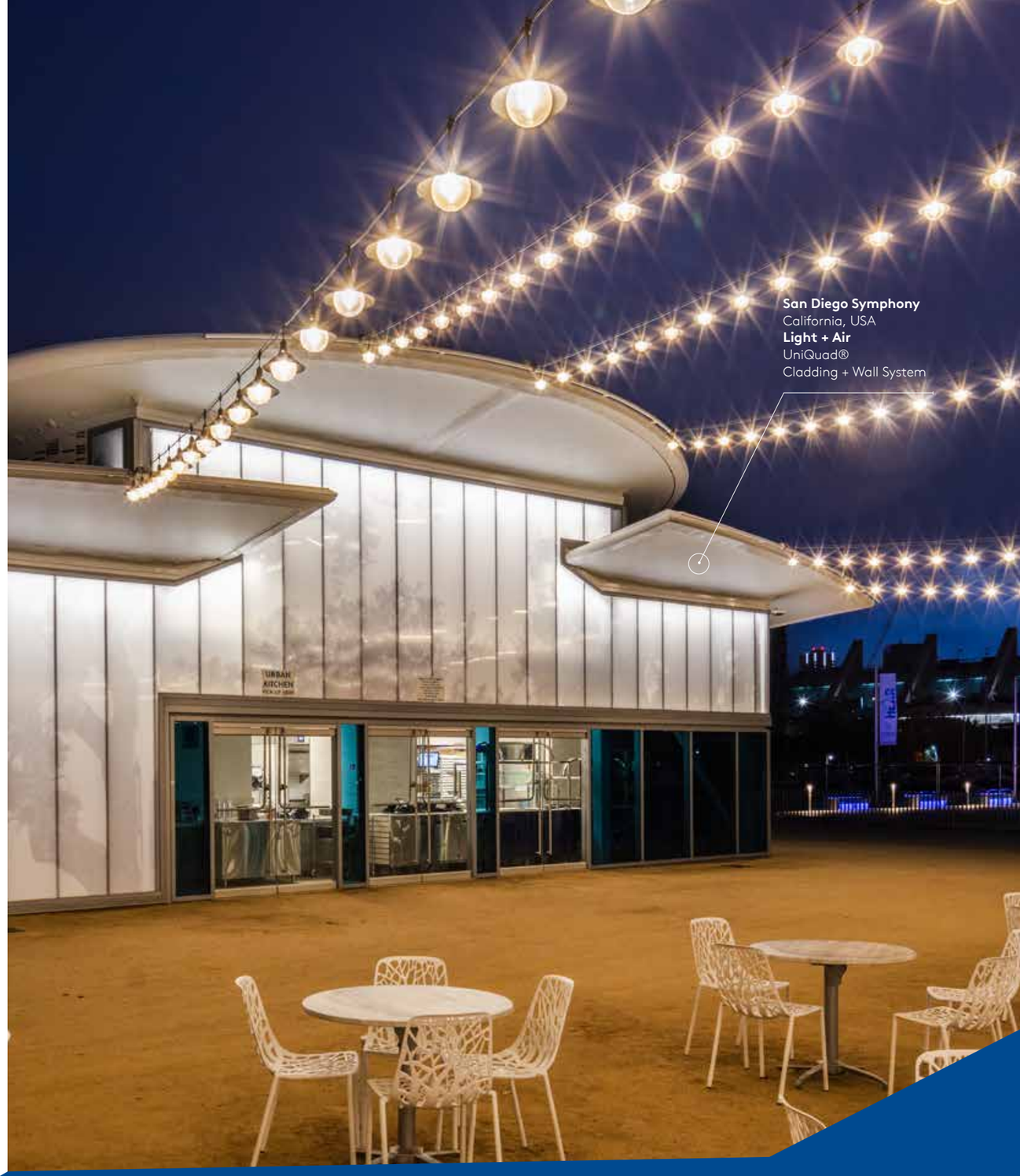
The committee always welcomes shareholder feedback and seeks to incorporate that feedback, where feasible, into its decision making and response.

During the year the committee engaged extensively with shareholders. Firstly, in advance of the 2022 AGM we contacted shareholders representing c. 70% of the register and the committee Chair met and spoke the majority of our top 10 shareholders, sharing with them our draft Remuneration Policy proposals. Whilst there was general support from shareholders for the proposed changes, following this engagement the draft policy was amended on the basis of feedback received to omit the proposed restricted share units (which had been considered as a potential recruitment tool), before being put to shareholders for approval. At the AGM, the updated Remuneration Policy was supported by our shareholders, with almost 80% of the votes cast in favour of the Policy, and at the same time the committee was pleased to receive 97% support for the Report of the Remuneration Committee.

Following the AGM the committee engaged once more with our shareholders, writing out to those representing over 70% of the register, and the committee Chair met with several of our most significant shareholders, receiving feedback overall from shareholders representing 45% of the register. In engaging with shareholders around the AGM, we developed a clear understanding of the concerns of those who voted against the updated Remuneration Policy, as well as those who supported it. While many shareholders acknowledged the significant increase in the scale and complexity of the business during recent years, some shareholders expressed concerns about the increase in the maximum LTIP award level in the policy and timing of the changes. Having considered the feedback, the committee noted its responsibility to develop a remuneration policy that is appropriate for the strategic development of the entire Kingspan Group, whilst also balancing the external expectations of some shareholders.

During the one to one engagements with the Chair, most of the feedback indicated that shareholders were primarily concerned about the maximum award level in the policy and not the actual level of increases proposed for 2022 PSP awards. Therefore, the committee implemented the increase in the level of PSP Awards as proposed for 2022, and will make PSP awards at the same level for 2023, being an award of 225% of base salary for the CEO, and 200% of base salary for the other executive directors (increased from 200% and 175% of salary respectively). As a response to feedback received on the maximum policy limit, the committee has agreed not to increase PSP award levels above 250% of salary during the current policy period without first engaging again with shareholders and considering their feedback. The committee is very grateful to those shareholders who engaged with the Company during the year, and whose feedback has helped shape our current Remuneration Policy.

The committee always welcomes shareholder feedback and seeks to incorporate that feedback, where feasible, into its decision making and response.



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Report of the Audit & Compliance Committee

Michael Cawley

As chairman of the Audit & Compliance Committee, I am pleased to present the report of the committee for the year ended 31 December 2022 to stakeholders and wider society.

This report details how the Audit & Compliance Committee has met its responsibilities under its Terms of Reference, the Irish Companies Act 2014 and under the UK Corporate Governance Code (July 2018) in the last twelve months.

The Audit & Compliance Committee focused particularly on the appropriateness of the Group's financial statements. The Audit & Compliance Committee has satisfied itself, and has advised the Board accordingly, that the 2022 Annual Report and financial statements are fair, balanced and understandable, and provide the information necessary for shareholders to assess the Company's performance, business model and strategy. The significant issues that the committee considered in relation to the financial statements and how these issues were addressed are set out in this report.

The Audit & Compliance Committee note the requirements under section 225 of the Companies Act 2014 and has ensured that the directors are aware of their responsibilities and comply fully with this provision.

One of the Audit & Compliance Committee's key responsibilities is to review the Group's risk management and internal controls systems, including in particular internal financial controls. During the year, the committee carried out a robust assessment of the principal risks facing the Company and monitored the risk management and internal control system on an ongoing basis. Further details regarding these matters are also set out in this report on page 48.

The Audit & Compliance Committee also reviewed the effectiveness of both the external audit process and the internal audit function as part of the continuous improvement of financial reporting and risk management across the Group.

The Audit & Compliance Committee also has responsibility for reviewing the effectiveness of the controls and processes relating to product compliance and monitoring the culture of compliance across the Group.

Michael Cawley
Chairman, Audit & Compliance Committee

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Role and Responsibilities

The Board has established an Audit & Compliance Committee to monitor the integrity of the Company's financial statements and the effectiveness of the Group's internal financial and IT general controls. Additionally, with effect from December 2020, the committee has responsibility for reviewing the effectiveness of the processes and controls associated with product certification and the marketing of the Group's products.

The committee's role and responsibilities are set out in the committee's Terms of Reference which are available from the Company and are displayed on the Group's website (www.kingspan.com). The Terms of Reference are reviewed annually and amended where appropriate. During the year the committee worked with management, the external auditors, Group Internal Audit, and other members of the senior management team in fulfilling these responsibilities.

The Audit & Compliance Committee report deals with the key areas in which the Audit & Compliance Committee plays an active role and has responsibility. These areas are as follows:

1. Financial reporting and related primary areas of judgement;
2. The external audit process;
3. The Group's internal audit function and risk management controls;
4. The Group's product compliance and certification function;
5. Compliance with the Group Marketing Integrity Manual; and
6. Governance.

Committee membership

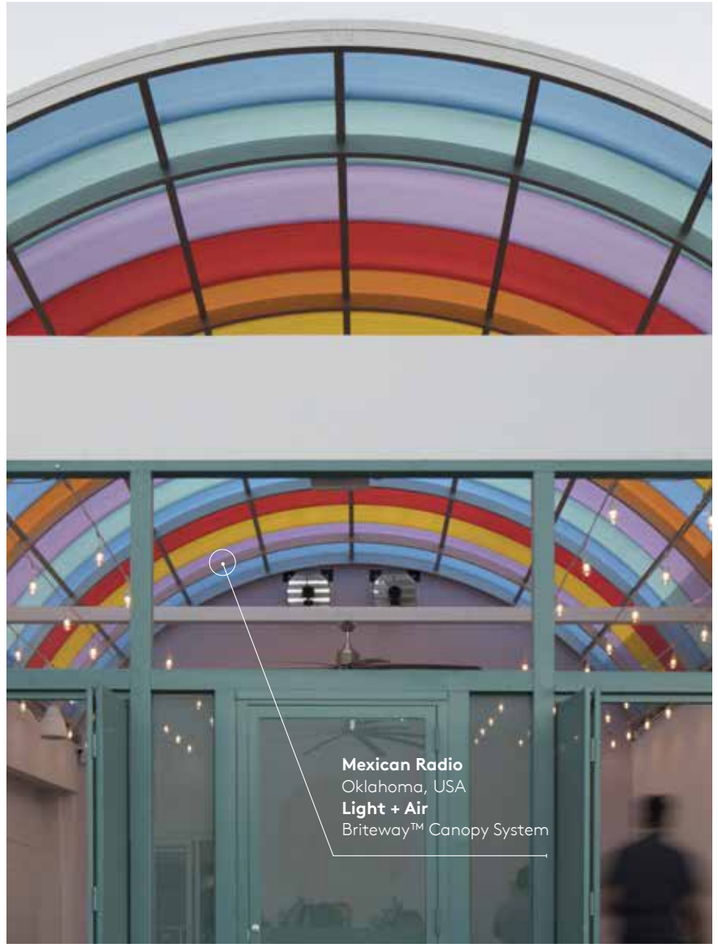
As at 31 December 2022, the Audit & Compliance Committee comprises four independent non-executive directors who are Michael Cawley (chairman), Anne Heraty, Éimear Moloney and Senan Murphy. Senan Murphy joined the committee in October 2022. The biographies of each can be found on pages 76 to 77.

The Board considers that the committee has an appropriate and experienced blend of commercial, financial and industry expertise to enable it to fulfil its duties, and that the committee chairman, Michael Cawley B.Comm., F.C.A., and its member, Senan Murphy B.Comm., F.C.A, have appropriate recent and relevant financial experience.

Meetings

The committee met five times during the year ended 31 December 2022 and attendance at the meetings is noted below. Matters under review by the Audit & Compliance Committee at each meeting is also noted overleaf.

Committee Member	Attended	Eligible	Appointment Date
Michael Cawley	5	5	2014
Anne Heraty	5	5	2019
Éimear Moloney	5	5	2021
Senan Murphy	2	2	2022



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Audit & Compliance Committee Activities	Feb	Jun	Aug	Oct	Nov
Financial Reporting					
Review and approve preliminary & half-year results	●		●		
Consider key audit and accounting issues and judgements	●	●	●		●
Approve going concern and viability statements	●		●		
Consider accounting policies and the impact of new accounting standards	●	●	●		●
Review management letter from auditors	●				
Review of any related party matters and intended disclosures	●		●		
Review Annual Report, and confirm if fair, balanced and understandable	●				
External Auditor (EY)					
Ongoing assessment of auditor performance	●	●	●		●
Approval of external audit plan		●	●		●
Review reports and correspondence from the auditor to the Audit & Compliance Committee	●	●	●		●
Confirm auditor independence and consider non-audit services and materiality of related fees	●				●
Review and consideration of audit fees					●
Internal Audit and Risk Management Controls					
Review of internal audit reports and monitor progress on open actions	●	●	●		●
Approve internal audit plan and resources, taking account of risk management	●	●	●		●
Review of financial and IT general controls	●	●	●		●
Review of Group cybersecurity strategy		●			
Review of internal audit reports for cybersecurity controls	●	●	●		●
Review and approve the structure of the internal audit team	●	●	●		●
Review details of global fraud and cyber-attack attempts and management response	●	●	●		●
Monitor Group whistleblowing procedures and reports	●	●	●		●
Assessment of compliance with Group Global Sanctions policy	●	●	●		●
Review of Group liquidity position	●	●	●		
Assessment of the principal risks and effectiveness of internal control systems					●
Product Compliance & Certification					
Review and approve internal audit plan for audit of product marketing compliance with Group Marketing Integrity Manual	●	●	●		●
Review of internal audit reports relating to product marketing compliance	●	●	●		●
Review and consider the structure and expertise of the product compliance and certification team				●	●
Meetings and updates from Group Head of Compliance & Certification and divisional compliance teams				●	●
Discussions with divisional management on product compliance and certification matters as well as site visits		●		●	●
Governance					
Review accounting regulator correspondence		●			●
Evaluation of external and internal audit functions	●	●	●		●
Review and approve Directors' Compliance Statement	●				

Each quarterly committee meeting was attended by the Group Chief Financial Officer and the Head of Internal Audit & Compliance. The external auditor also attended each quarterly meeting. The Company Secretary is the secretary of the Audit & Compliance Committee and also attended each meeting. Other directors can attend the meetings as required.

The chairman of the Audit & Compliance Committee also met with both the Head of Internal Audit & Compliance and the external audit lead partner outside of committee meetings as required throughout the year.

Committee evaluation

As outlined on page 84 within the Corporate Governance Statement, the review of the performance of the Board also includes a review of the committees. Any recommendations raised in relation to the Audit & Compliance Committee are acted upon in a formal and structured manner. No issues were identified for the year ended 31 December 2022.

Financial reporting

The committee is responsible for monitoring the integrity of the Group's financial statements and reviewing the financial reporting judgements contained therein. The financial statements are prepared by a finance team with the appropriate qualifications and expertise.

The committee confirmed to the Board that the Annual Report, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Company's position and performance, business model and strategy.

In respect of the year to 31 December 2022, the committee reviewed:

- the Group's Trading Updates issued in April, June and November 2022;
- the Group's Interim Report for the six months to 30 June 2022; and
- the Preliminary Announcement and Annual Report to 31 December 2022.

In carrying out these reviews, the committee:

- reviewed the appropriateness of Group accounting policies and monitored changes to, and compliance with, accounting standards on an ongoing basis;
- discussed with management and the external auditor the critical accounting policies and judgements that had been applied;
- compared the results with management accounts and budgets, and reviewed reconciliations between these and the final results;
- discussed a report from the external auditor at that meeting identifying the significant accounting and judgemental issues that arose in the course of the audit;
- considered the management representation letter requested by the external auditor for any non-standard issues and monitored action taken by management as a result of any recommendations;
- discussed with management future accounting developments which are likely to affect the financial statements;
- reviewed the budgets and strategic plans of the Group to ensure that all forward looking statements made within the Annual Report reflect the actual position of the Group; and
- considered key areas in which estimates and judgement had been applied in preparation of the financial statements including, but not limited to, a review of fair values on acquisition, the carrying amount of goodwill, intangible assets and property, plant and equipment, litigation and warranty provisions, recoverability of trade receivables, valuation of inventory, hedge accounting treatments, treasury matters and tax matters.

The committee confirmed to the Board that the Annual Report, taken as a whole, is fair, balanced, and understandable and provides the information necessary for shareholders to assess the Company's position and performance, business model and strategy.

The primary areas of judgement considered by the committee in relation to the Group's 2022 financial statements, and how they were addressed by the committee are set out overleaf.

Each of these areas received particular focus from the external auditor, who provided detailed analysis and assessment of the matter in their report to the committee.

In addition, the Internal Audit team reviews the businesses covered in its annual Internal Audit Plan, as agreed by the committee, and reports its findings to the Audit & Compliance Committee throughout the year. These internal audit reviews are focused on areas of judgement such as warranty provisions, trade receivables and inventory, and provide the committee with information on the adequacy and appropriateness of provisions in these areas.

Primary areas of judgement	Committee activity
Adequacy of warranty provisions	The committee reviewed the judgements applied by management in assessing both specific and risk based warranty provisions at 31 December 2022. The committee reviewed and discussed with management the monthly reports presented to the Board which set out, for each of the Group's divisions, warranty provisions and warranty costs and analyse these costs as a percentage of divisional sales. Warranty provisions are reviewed on an ongoing basis throughout the year in conjunction with the internal audit process. The committee was satisfied that such judgements were appropriate and the risk had been adequately addressed.
Recoverability of trade receivables and adequacy of provision	The committee reviewed the judgements applied by management in determining the provision for expected credit loss at 31 December 2022. The committee reviewed and discussed with management the monthly board report which sets out aged analysis of gross receivables balances and associated provisions for expected credit loss and reviewed security (including credit insurance) that is in place. Expected credit loss provisions are reviewed on an ongoing basis throughout the year in conjunction with the internal audit process. The committee was satisfied that such judgements were appropriate and the risk had been adequately addressed.
Accounting for acquisitions	Total acquisition consideration in 2022 amounted to €887.0m. The committee discussed with management and the external auditors the accounting treatment for newly acquired businesses, and the related judgements made by management, and were satisfied that the treatment in the Group's financial statements was appropriate.
Consideration of impairment of goodwill	The committee considered the annual impairment assessment of goodwill prepared by management for each Cash Generating Unit ("CGU") using a discounted cash flow analysis based on the strategic plans approved by the Board, including a sensitivity analysis on key assumptions. The primary judgement areas were the achievability of the long term business plans and the key macroeconomic and business specific assumptions. In considering the matter, the committee discussed with management the judgements made and the sensitivities performed. Further detail of the methodology is set out in Note 10 to the financial statements. EY also provided the committee with their evaluation of the impairment review process. Kingspan completed 6 acquisitions during the financial year. The measurement of goodwill is not yet finalised for all acquisitions but the methodology of the assessments of such items of goodwill was presented to the committee and the results were deemed appropriate.
Valuation of inventory and adequacy of inventory provision	The committee reviewed the valuation and provisioning for inventory at 31 December 2022. The main area of judgement was the level of provisioning required for slow moving and obsolete inventory. The committee reviewed and discussed with management the monthly board report which sets out, for each of the Group's divisions, gross inventory balances and associated obsolescence provision including an analysis by inventory, category and ageing. Inventory provisions are reviewed on an ongoing basis throughout the year in conjunction with the internal audit process. The committee was satisfied that such judgements were appropriate, and the risk had been adequately addressed.
Taxation	Provisioning for potential current tax liabilities and the level of deferred tax asset recognition in relation to accumulated tax losses are underpinned by a range of judgements. The committee addresses these issues through a range of reporting from senior management and a process of challenging the appropriateness of management's views including the degree to which these are supported by professional advice from external legal and other advisory firms. This assessment was conducted in line with the provisions of IFRIC 23. The Group's accounting manual sets out detailed policies that prescribe the methodology to be used by management in calculating the above provisions. Each division formally confirms compliance with these policies on an annual basis. The committee was satisfied that such judgements were appropriate, and the risk had been adequately addressed.

External auditor

The Audit & Compliance Committee has responsibility for overseeing the Group's relationship with the external auditor including reviewing the audit team, the quality and effectiveness of their performance, their external audit plan and process, their independence from the Group, their appointment and their audit fee proposals.

Performance and audit plan

Following the completion of the 2021 year end audit, the committee carried out a review of the effectiveness of the external auditor and the audit process. This review involved discussions with both Group management and internal audit, and feedback provided by divisional management. The committee continues to monitor the performance, independence and objectivity of the external auditors and takes this into consideration when making its recommendations to the Board on the remuneration, the terms of engagement and the re-appointment, or otherwise, of the external auditors.

Prior to commencement of the 2022 year end audit, the committee approved the external auditor's work plan and resources and agreed with the auditor's various key areas of focus, including accounting for acquisitions, warranty provisions and revenue recognition.

During the year the committee met with the external auditor without management being present. This meeting provided the opportunity for direct dialogue and feedback between the committee and the auditor, where they discussed inter alia some of the key audit management letter points.

EU audit reform

The regulatory framework for the Group's statutory audit is governed by EU legislation under Directive 2014/56/EU and Regulation EU No. 537/2014. EU Audit reform legislation is applicable in the Member States of the European Union, including Ireland. Under this legislation, Kingspan Group plc is considered a Public Interest Entity ("PIE"). Key developments falling from the implementation of this legislation are:

- a requirement that the PIE changes its statutory auditor every ten years (following rotation, the statutory audit firm cannot be reappointed for four years);
- a requirement that certain procedures are followed for the selection of the new statutory auditor; and
- restrictions on the entitlement of the statutory auditing firm to provide certain non-audit services.

Kingspan Group plc has fully complied with such EU Audit Reform. With regards audit firm rotation, EY, has been the external auditor since the financial year commencing 1 January 2020.

Independence and objectivity

The committee is responsible for ensuring that the external auditor is objective and independent. EY was appointed as the Group's auditor on 1 May 2020, following a formal tender process in which several leading global firms submitted written tenders and delivered in-person presentations. The lead audit partner is rotated every five years and is currently Pat O'Neill.

The committee received confirmation from the external auditor that they are independent of the Group under the requirements of the IAASA Ethical Standard for Auditors (Ireland) 2020.

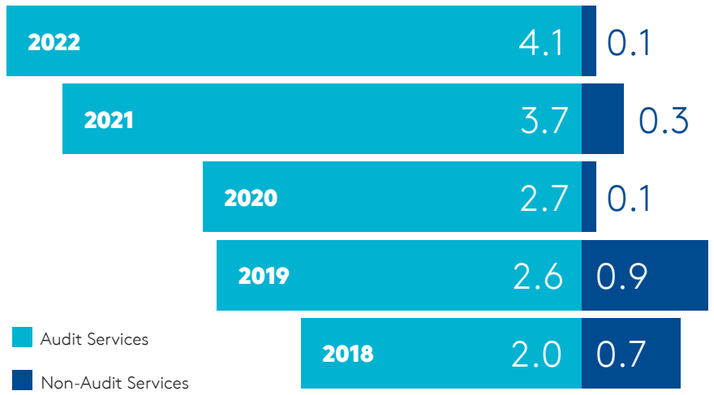
The external auditor also confirmed that they were not aware of any relationships between the Group and the firm or between the firm and any persons in financial reporting oversight roles in the Group that may affect its independence.

Non-audit services

To further ensure independence, the committee has a policy on the provision of non-audit services by the external auditor that seeks to ensure that the services provided by the external auditor are not, or are not perceived to be, in conflict with auditor independence. By obtaining an account of all relationships between the external auditor and the Group, and by reviewing the economic importance of the Group to the external auditor by monitoring the audit fees as a percentage of total income generated from the relationship with the Group, the committee ensured that the independence of the external audit was not compromised. The committee's policy on the provision of non-audit services by the Group's external auditor is fully compliant with EU Audit Reform legislation.

An analysis of fees paid to the external auditor, including the non-audit fees, is set out in Note 6 and below:

Audit V Non-Audit Services (€m)



Internal audit & compliance

The committee reviewed and agreed the annual internal audit plan, which the committee believes is appropriate to the scope and nature of the Group. The internal audit plan is risk based, with all divisions audited every year, and all new businesses audited within 12 months of acquisition.

The committee reviewed reports from the Head of Internal Audit & Compliance at its quarterly meetings. These reports enable the committee to monitor the progress of the internal audit plan, to discuss key findings and the plan to address them in addition to status updates of previous key findings.

The committee is responsible for reviewing the effectiveness of the internal audit function and does so based upon discussion with Group management, the Group's external auditor and feedback provided by divisional management. The committee was satisfied that the internal audit function is working effectively, improves risk management throughout the Group and that the internal audit function team is sufficiently resourced in addition to having the adequate level of experience and expertise.

The terms of reference of the Audit & Compliance Committee were extended in December 2020 to include oversight of the processes around product certification and product marketing. The Head of Internal Audit & Compliance also reports to the committee in this regard.

Risk management and internal controls

The Audit & Compliance Committee has been delegated, from the Board, the responsibility for monitoring the effectiveness of the Group's system of risk management and internal control. The Audit & Compliance Committee monitors the Group's risk management and internal control processes through detailed discussions with management and executive directors, the review and approval of the internal audit reports, which focus on the areas of greatest risk to the Group, and the external audit reports, as part of both the year end audit and the half year review process, all of which highlight the key areas of control weakness in the Group. All weaknesses identified by either internal or external audit are discussed by the committee with Group management and an implementation plan for the targeted improvements to these systems is put in place. The implementation plan is overseen by the Group Chief Financial Officer and the committee is satisfied that this plan is being properly executed.

As part of its standing schedule of business, the committee carried out an annual risk assessment of the business to formally identify the key risks facing the Group. Full details of this risk assessment and the key risks identified are set out in the Risks & Risk Management section of this Annual Report on pages 49 - 54.

These processes, which are used by the Audit & Compliance Committee to monitor the effectiveness of the Group's system of risk management and internal control, are in place throughout the accounting period and remain in place up to the date of approval of this Annual Report.

The main features of the Group's internal control and risk management systems that specifically relate to the Group's financial reporting and accounts consolidation process are set out in the Report of the Directors on page 120.

Product compliance & certification

With effect from December 2020, the Audit & Compliance Committee has responsibility for reviewing the effectiveness of the processes and controls associated with product compliance and monitoring the culture of compliance across the Group.

The Group product compliance framework can be split into two categories:

1. Compliance of products with product specific laws and regulations, testing, certification and accreditation; and
2. The accuracy and consistency of product marketing materials.

The Group Product Compliance & Certification Team, led by the Group Head of Compliance & Certification, is independent of divisional management and performs the following functions:

- Supports compliance governance across the Group in implementing policies, processes, and procedures to ensure continued improvement in management systems. This includes ownership of the Group Product Compliance Policy;
- Performs extensive audits of processes and controls associated with product compliance and the monitoring of compliance across the Group; and
- Leads the Group Compliance Management System (CMS) which has achieved the international ISO 37301 standard.

The Audit & Compliance Committee meet with the Group Head of Compliance & Certification for updates on the Group's compliance and certification agenda. This includes updates on the product compliance audit schedule and the results of completed audits as well as reviewing the Group Compliance Auditing Guidelines. The Audit & Compliance Committee also visit sites with the Group Product Compliance & Certification team to better understand the product compliance culture at an operational level.

The Audit & Compliance Committee also meet regularly with the Group Head of Internal Audit & Compliance in relation to product marketing compliance matters. Following the adoption of the Group Marketing Integrity Manual in September 2021, the Group Internal Audit Plan includes specific audits, performed by appropriately trained internal auditors, of product marketing compliance with the Group Marketing Integrity Manual.

Read more in our Sustainability Report on pages 56 - 73

NFL
California, USA
Data + Flooring
ConCore®

The Audit & Compliance Committee noted the following product compliance highlights in 2022:

- An additional 17 sites have been accredited with the leading international compliance standard, ISO 37301. This now brings the total number of sites with this accreditation to 26 with a plan to have 58 sites certified to the standard by the end of 2023.
- Updated Group Compliance Auditing Guidelines issued.
- 98 internal product compliance audits were conducted by the Group Product Compliance and Certification team.
- 651 external product compliance audits were conducted by independent certification bodies.
- 19 product marketing audits were performed by the Group Internal Audit & Compliance team.
- ISO 37301 education and training systems launched.
- Incorporation of newly acquired businesses into the Compliance Management System (CMS).
- Recruitment of additional compliance experts for Group Internal Audit and Group Compliance & Certification teams.
- Divisional Compliance Managers reporting to Group Compliance & Certification team monthly.
- Product compliance registers in place across all divisions.

Whistleblowing procedures

The Group has a Code of Conduct, full details of which are available on the Group's website (www.kingspan.com).

Based on the standards set out in this Code of Conduct, the Group employs a comprehensive, confidential, and independent whistleblowing service to allow all employees to raise their concerns about their working environment and business practices. This service then allows management and employees to work together to address any instances of fraud, abuse, and other misconduct in the workplace.

Any instances of fraud, abuse or misconduct reported on the whistleblowing service are reported to the Head of Internal Audit & Compliance and the Company Secretary, who ensure each incident is appropriately investigated and then report to the committee details of the incident, key control failures, any financial loss and actions for improvement. All reports through the whistleblower line and all fraud attempts are presented at each Audit & Compliance Committee meeting.

During the year, the committee reviewed the Group's whistleblowing process and were satisfied with the design and operating effectiveness of the process.

Report of the Directors

Gene M. Murtagh
Geoff Doherty

The directors of Kingspan Group plc ("Kingspan") have pleasure in presenting their report with the audited financial statements for the year ended 31 December 2022.

This Report of the Directors and the Business & Strategic Report on pages 20-73 together comprise the 'Management Report' for the purposes of the Transparency (Directive 2004/109/EC) Regulations 2007 of Ireland and the Disclosure Guidance and Transparency Rules of the UK Financial Conduct Authority.

Băicoi, Romania
Insulated Panels

Annually Generating

422MWh
(estimated)

Information incorporated by reference

The following information is provided in other appropriate sections of this Annual Report and the financial statements and is incorporated into this Report of the Directors by reference:

Information	Reported in	Page(s)
A review of the business of the Group.	Chief Executive's Review	32-41
The Group's Key Performance Indicators.	Financial Review	43-47
A description of likely future developments in the Group's business.	Chief Executive's Review	41
A description of the principal risks and uncertainties that could affect the Group's business.	Risk & Risk Management	49-54
The Company's application of the principles, and compliance with the provisions, of the 2018 UK Corporate Governance Code and the Irish Corporate Governance Annex.	Report of the Nominations & Governance Committee	78-86
The names and biographical details of the Directors.	The Board	75-77
The Directors' and Company Secretary's interests in shares and debentures.	Report of the Remuneration Committee	101-103
The Group's financial risk management objectives and policies and a description of the use of financial instruments.	Financial Statements, Note 20	170-177
The amount of interim dividends (if any) paid by the Company during the year and the amount (if any) that the directors recommend should be paid by way of final dividend.	Financial Review	44
Information required by the European Union (Disclosure of Non-Financial and Diversity Information by certain large undertakings and groups) Regulations 2017.	Sustainability Report	56-72

Principal Activities

Kingspan is the global leader in high-performance insulation and building envelope solutions. Kingspan Group plc is a holding company for the Group's subsidiaries and other entities. The Group's principal activities comprise the manufacture and distribution of the following product suites as part of the complete "Building Envelope":

Insulated Panels
Manufacture of insulated panels, structural framing and metal facades.

Insulation
Manufacture of rigid insulation boards, technical insulation and engineered timber systems.

Light + Air
Manufacture of daylighting, smoke management, ventilation systems and service activities.

Water + Energy
Manufacture of energy and water solutions and all related service activities.

Data + Flooring
Manufacture of data centre storage solutions and raised access floors.

Roofing + Waterproofing
Manufacture of roofing and waterproofing solutions for renovation and new construction of buildings.

Read more about our directors on page 75-77

Kingspan's six key business divisions offer a suite of complementary building envelope solutions for both the new build and refurbishment markets.

Innovation

At Kingspan, innovation is a core pillar of our strategy and we view it as a key strategic advantage. We believe building industry traditions must be challenged through innovation in advanced materials and digital technologies in order to achieve a net zero emissions future.

We have innovated a portfolio of advanced products and solutions for architects and building owners which enable them to construct buildings that consume less resources. Future proofing their investment, generating returns through enhanced internal space and operational performance, and facilitating efficient construction through thinner, lighter and safer to handle materials. Increasingly we are enhancing our service and solutions through digitisation. By surfacing our products digitally, we're making it easier to find them, specify them, buy them, build with them and track them.

In the year ended 31 December 2022, the Group's research and development expenditure amounted to €60.3m (2021: €40.9m). Research and development expenditure is generally expensed in the year in which it is incurred. Kingspan's continuing investment in research and development involves a number of key projects which include:

- PV solar-integrated PowerPanel™ Wall;
- QuadCore™ 2.0;
- Kooltherm® 200 series;
- Launch of lower embodied carbon insulated panel;
- Decarbonisation of materials;
- Digitalisation of the construction industry;
- Translucent insulated solutions;
- Lower carbon acoustic solutions; and
- Bio-based low carbon insulation.

Internal control and risk management systems

The Board confirms that there is an ongoing process for identifying, evaluating and managing any significant risks faced by the Group. This process has been in place for the year under review and up to the date of approval of the financial statements, and it is regularly reviewed by the Board in compliance with 'Guidance on Risk Management, Internal Control and Related Financial and Business Reporting' issued by the Financial Reporting Council.

The Board has delegated responsibility to the Audit & Compliance Committee to monitor and review the Group's risk management and internal control processes, including the financial, operational and compliance controls. This is done through detailed discussions with management and the executive directors, the review and approval of the internal audit reports, which focus on the areas of greatest risk to the Group, and the external audit reports, as part of both the year end audit and the half year process, all of which are designed to highlight the key areas of control weakness in the Group. Further details of the work conducted by the Audit & Compliance Committee in this regard is detailed in the Report of the Audit & Compliance Committee contained in this Annual Report.

The main features of the Group's internal control and risk management systems that relate specifically to the Group's financial reporting processes are:

- Budgets and strategic plans are approved annually by the Board and compared to actual performance and forecasts on a monthly basis;
- Sufficiently sized finance teams with appropriate level of experience and qualifications throughout the Group;
- Formal Group Accounting Manual in place which clearly sets out the Group financial policies in addition to the formal controls;
- Formal IT and treasury policies and controls in place;
- Centralised tax and treasury functions;
- Sales are submitted and reviewed on a weekly basis whilst full reporting packs are submitted and reviewed on a monthly basis; and
- Internal audit function review financial controls and report results/findings on a quarterly basis to the Audit & Compliance Committee.

The main features of the Group's internal control and risk management systems that relate specifically to the Group's consolidation process are:

- The review of reporting packages for each entity as part of the year end audit process;
- The reconciliation of reporting packages to monthly management packs as part of the audit process and as part of management review;
- The validation of consolidation journals as part of the management review process and as an integral component of the year end audit process;
- The review and analysis of results by the Chief Financial Officer and the internal auditors with the management of each division;
- Consideration by the Audit & Compliance Committee of the outcomes from the annual risk assessment of the business; and
- The review of internal and external audit management letters by the Chief Financial Officer, Head of Internal Audit & Compliance and the Audit & Compliance Committee and the follow up of any critical management letter points to ensure issues highlighted are addressed.

In addition, the remit of the Audit & Compliance Committee also includes reviewing the effectiveness of the controls and processes relating to product compliance by:

- Reviewing reports from the Group Head of Compliance relating to product compliance, certification and accreditation, including implementation status of the Group's ISO 37301 Compliance Management Systems targets;
- Auditing compliance with the Group Marketing Integrity Manual incorporating the CCPI best practice principles; and
- Monitoring the culture of compliance across the Group.

Further information on the risks faced by the Group and how they are managed are set out in the Risk & Risk Management section of this Annual Report.

Accounting Records

The directors are responsible for ensuring that accounting records, as outlined in Sections 281 to 285 of the Companies Act 2014, are kept by the Group. The directors have provided appropriate systems and resources, including the appointment of suitably qualified accounting personnel, to maintain adequate accounting records throughout the Group, in order to ensure that the requirements of Sections 281 to 285 are complied with. The accounting records of the Company are maintained at the principal executive offices located at Dublin Road, Kingscourt, Co. Cavan, A82 XY31, Ireland.

The European Communities (Takeover Bids (Directive 2004/25/EC)) Regulations 2006

The information required by Regulation 21 of the above Regulations as at 31 December 2022 is set out below.

Structure of the Company's share capital

At 31 December 2022, the Company had an authorised share capital comprised of 250,000,000 (2021: 250,000,000) ordinary shares of €0.13 each and the Company's total issued share capital comprised 183,591,682 (2021: 183,591,682) ordinary shares.

TopTex
La Louvière, Belgium
Insulated Panels
JI Wall 1000VB PIR

Analysis of registered shareholding accounts as at 31 December 2022:

Shareholding range	Number of accounts	% of total	Number of shares held	% of total
1 - 1,000	1,410	69.76	613,413	0.33
1,001 - 10,000	563	27.86	1,557,818	0.85
10,001 - 100,000	42	2.08	926,289	0.51
100,001 - 1,000,000	3	0.15	392,162	0.21
Over 1,000,000	3	0.15	180,102,000	98.10
	2,021	**100.00**	**183,591,682**	**100.00**

As at 16 February 2023, the Company had received notification of the interests outlined in the table below, in its ordinary share capital, which were equal to, or in excess of, 3%:

Notification Date	Shareholder	Shares held	%
27/01/2021	Eugene Murtagh	27,018,000	14.88%
10/02/2023	Blackrock, Inc.	12,742,227	7.00%
14/09/2022	The Capital Group Companies, Inc.	12,656,818	6.97%
16/08/2022	FMR LLC	9,140,784	5.03%
30/06/2022	Allianz Global Investors GmbH	9,036,243	4.97%
07/11/2022	Generation Investment Management LLP	7,273,788	4.00%

The number of shares held as treasury shares at the beginning of the year was 2,254,140 (1.24% of the then issued share capital (excluding treasury shares)) with a nominal value of €293,037. A total of 287,028 shares (0.16% of the issued share capital (excluding treasury shares)) with a nominal value of €37,313 were re-issued during the year consequent to the exercise of share options under the Kingspan Group Performance Share Plan and the Kingspan Group Employee Benefit Trust. A further 15,361 shares (with a nominal value of €1,997) were bought back by the Company and held in treasury for the purpose of the Deferred Bonus Scheme, leaving a balance held as treasury shares as at 31 December 2022 of 1,982,473 (1.09% of the issued share capital (excluding treasury shares)) with a nominal value of €257,721.

Rights and obligations attaching to the ordinary shares
The Company has no securities in issue conferring special rights with regards control of the Company.

All ordinary shares rank *pari passu*, and the rights attaching to the ordinary shares (including as to voting and transfer) are as set out in the Company's Articles of Association ("Articles"). The Articles also contain the rules relating to the appointment and removal of directors, rules relating to amending the Articles, the powers of the Company's directors and in relation to issuing or buying back by the Company of its shares. A copy of the Articles may be found on www.kingspan.com or may be obtained on request from the Company Secretary.

Holders of ordinary shares are entitled to receive duly declared dividends in cash or, when offered, additional ordinary shares. In the event of any surplus arising on the occasion of the liquidation of the Company, shareholders would be entitled to a share in that surplus pro rata to their holdings of ordinary shares.

Holders of ordinary shares are entitled to receive notice of and to attend, speak and vote in person or by proxy, at general meetings having, on a show of hands, one vote, and, on a poll, one vote for each ordinary share held. Procedures and deadlines for entitlement to exercise, and exercise of, voting rights are specified in the notice convening the general meeting in question. There are no restrictions on voting rights except in the circumstances where a "Specified Event" (as defined in the Articles) shall have occurred and the directors have served a Restriction Notice on the shareholder. Upon the service of such Restriction Notice, no holder of the shares specified in the notice shall, for so long as such notice shall remain in force, be entitled to attend or vote at any general meeting, either personally or by proxy.

Holding and transfer of ordinary shares
The ordinary shares may be held in either certificated or uncertificated form (through the Euroclear Bank system or (via a holding of CDIs) the CREST system).

Save as set out below, there is no requirement to obtain the approval of the Company, or of other shareholders, for a transfer of ordinary shares. The directors may decline to register (a) any transfer of a partly-paid share to a person of whom they do not approve, (b) any transfer of a share to more than four joint holders, (c) any transfer of a share on which the Company has a lien, and (d) any transfer of a certificated share unless accompanied by the share certificate and such other evidence of title as may reasonably be required. The registration of transfers of shares may be suspended at such times and for such periods (not exceeding 30 days in each year) as the directors may determine.

Transfer instruments for certificated shares are executed by or on behalf of the transferor and, in cases where the share is not fully paid, by or on behalf of the transferee. Transfers of uncertificated shares may be effected by means of a relevant system in the manner provided for in the Regulation (EU) No. 909/2014 of the European Parliament and of the Council of 23 July 2014 (the "CSD Regulations") and the rules of the relevant system. The directors may refuse to register a transfer of uncertificated shares only in such circumstances as may be permitted or required by the CSD Regulations.

Rules concerning the appointment and replacement of the directors and amendment of the Company's Articles
Unless otherwise determined by ordinary resolution of the Company, the number of directors shall not be less than two or more than 15.

Subject to that limit, the shareholders in general meeting may appoint any person to be a director either to fill a vacancy or as an additional director. The directors also have the power to co-opt additional persons as directors, but any director so co-opted is under the Articles, required to be submitted to shareholders for re-election at the first Annual General Meeting ('AGM') following his or her co-option.

The Articles require that at each AGM of the Company one-third of the directors retire by rotation. However, in accordance with the recommendations of the UK Corporate Governance Code, the directors have resolved they will all retire and submit themselves for re-election by the shareholders at the AGM to be held on 28 April 2023.

The Company's Articles may be amended by special resolution (75% majority of votes cast) passed at general meeting.

Powers of directors including powers in relation to issuing or buying back by the Company of its shares
Under its Articles, the business of the Company shall be managed by the directors, who exercise all powers of the Company as are not, by the Companies Acts or the Articles, required to be exercised by the Company in general meeting.

The directors are currently authorised to issue a number of shares equal to the authorised but as yet unissued share capital of the Company on such terms as they may consider to be in the best interests of the Company, under an authority that was conferred on them at the AGM held on 29 April 2022. The directors are also currently authorised on the issue of new equity for cash to disapply the strict statutory pre-emption provisions that would otherwise apply, provided that the disapplication is limited to the allotment of equity securities in connection with (i) any rights issue or any open offer to shareholders, or (ii) the allotment of shares not exceeding in aggregate 5% of the nominal value of the Company's issued share capital, or (iii) for the purpose of financing (or refinancing) an acquisition or other capital investment of a kind contemplated by the UK Pre-Emption Group not exceeding in aggregate 5% of the nominal value of the Company's issued share capital. Both these authorities expire on 29 July 2023 unless renewed and resolutions to that effect are being proposed at the AGM to be held on 28 April 2023.

The Company may, subject to the Companies Acts and the Articles, purchase any of its shares and may either cancel or hold in treasury any shares so purchased, and may re-issue any such treasury shares on such terms and conditions as may be determined by the directors. The Company shall not make market purchases of its own shares unless such purchases have been authorised by a special resolution passed by the members of the Company at a general meeting. At the AGM held on 29 April 2022, shareholders passed a resolution giving the Company, or any of its subsidiaries, the authority to purchase up to 10% of the Company's issued ordinary shares. At the AGM to be held on 28 April 2023, shareholders are being asked to renew this authority.

Miscellaneous
There are no agreements between shareholders that are known to the Company which may result in restrictions on the transfer of securities or voting rights.

Certain of the Group's banking facilities include provisions that, in the event of a change of control of the Company, could oblige early prepayment of the facilities. Certain of the Company's joint venture arrangements also contain provisions that would allow the counterparty to terminate the agreement in the event of a change of control of the Company. The Company's Performance Share Plan contains change of control provisions which allow for the acceleration of the exercise of awards in the event of a change of control of the Company.

There are no agreements between the Company and its directors or employees providing for compensation for loss of office or employment (whether through resignation, purported redundancy or otherwise) that occurs because of a takeover bid.

Directors and Secretary
The directors and secretary of the Company at the date of this report are as shown in this Annual Report on pages 75 to 77. Mr. Senan Murphy was appointed as a non-executive director on 1 October 2022. Mr. Michael Cawley and Mr. John Cronin will be retiring as non-executive directors following the conclusion of the AGM on 28 April 2023.

Conflicts Of Interest
None of the directors have any direct or indirect interest in any contract or arrangement subsisting at the date hereof which is significant in relation to the business of the Company or any of its subsidiaries nor in the share capital of the Company or any of its subsidiaries.

Financial Instruments
In the normal course of business, the Group has exposure to a variety of financial risks, including foreign currency risk, interest rate risk, liquidity risk, and credit risk. The Company's financial risk objectives and policies are set out in Note 20 of the Financial Statements.

Political Donations
Neither the Company nor any of its subsidiaries have made any political donations in the year which would be required to be disclosed under the Electoral Act 1997 (2021: €nil).

Subsidiary Companies
Kingspan is a truly global business, trading in over 80 countries with 212 manufacturing sites across the globe.

The Company's principal subsidiaries and substantial undertakings at 31 December 2022, country of incorporation and nature of business are listed on pages 193 to 194 of this Annual Report.

The Company does not have any branches outside of Ireland.

Significant Events Since Year End
There have been no significant events since the year end which would require adjustment to, or disclosure in this report.

Going Concern
The directors have reviewed budgets and projected cash flows for a period of not less than 12 months from the date of this Annual Report, and considered its net debt position and capital commitments, available committed banking facilities and other relevant information including the economic conditions currently affecting the building environment generally and the Group's Strategic Plan. On the basis of this review the directors have concluded that there are no material uncertainties that would cast significant doubt over the Company's and the Group's ability to continue as a going concern. For this reason, the directors consider it appropriate to adopt the going concern basis in preparing the financial statements.

Viability Statement
In accordance with Provision 31 of the 2018 UK Corporate Governance Code, the directors are required to assess the prospects of the Company, explain the period over which we have done so and state whether we have a reasonable expectation that the Company will be able to continue in operation and meet liabilities as they fall due over this period of assessment.

The directors have assessed the prospects of the Group over the three-year period to February 2026.

The directors concluded that three years was an appropriate period for the assessment, having had regard to:

- the Group's rolling Strategic Plan which extends to 2026;
- the Group's long-term funding commitments, some of which fall to be repaid during the period;
- the inherent short-cycle nature of the construction market including the Group's order bank and project pipeline; and
- the potential impact of macro-economic events and political uncertainty in some regions.

It is recognised that such future assessments are subject to a level of uncertainty that increases with time, and therefore future outcomes cannot be guaranteed or predicted with certainty.

The Group Strategic Plan is approved by the Board, building upon the several divisional management plans as well as the Group's strategic goals. It is based on a number of cautious assumptions concerning macro growth and stability in our key markets, and continued access to capital to support the Group's ongoing investments. The strategic plan is subject to stress testing which involves flexing a number of the main assumptions underlying the forecast in severe but reasonable scenarios. Such assumptions are rigorously tested by management and the directors. It is reviewed and updated annually and was considered and approved by the Board at its meeting in October 2022.

In making this assessment, the directors have considered the resilience of the Group, taking account of its current position and the principal risks facing the business as outlined in the Risk & Risk Management Report contained in this Annual Report, and the Group's ability to manage those risks. The risks have been identified using a top-down and bottom-up approach, and their potential impact was assessed having regard to the effectiveness of controls in place to manage each risk. In assessing the prospects of the Group such potential impacts have been considered as have the mitigating factors in place.

Based on this assessment the directors have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the three-year period of their assessment.

Read more about our principal subsidiaries and substantial undertakings on pages 193-194

Directors' Responsibility Statement
Each of the directors whose names and functions are set out in the Board section of this Annual Report confirm their responsibility for preparing the Annual Report and the consolidated and Company financial statements in accordance with applicable Irish law and regulations.

Company law in Ireland requires the directors to prepare financial statements for each financial year. Under that law the directors have to prepare the consolidated financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union (EU). The directors have elected to prepare the Company financial statements in accordance with IFRSs as adopted by the EU and as applied by the Companies Act 2014. The financial statements are required by law to give a true and fair view of the assets, liabilities and financial position of the Group and Company as at 31 December 2022 and of the profit or loss of the Group for that period. In preparing those financial statements, the directors are required to:

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

The directors are responsible for keeping accounting records which disclose with reasonable accuracy at any time the financial position of the Group and the Company and which enable them to ensure that the financial statements comply with the Companies Act 2014 and Article 4 of the IAS Regulation.

Kingspan is truly a global business, trading in over 80 countries with 212 manufacturing sites across the globe.

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

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

In accordance with Transparency (Directive 2004/109/EC) Regulations 2007 and the Transparency Rules of the Financial Regulator, the directors confirm that to the best of their knowledge:

- the Group financial statements and the Company financial statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group and Company; and
- the Report of the Directors includes a fair review of the development and performance of the business and the position of the Group and Company, together with a description of the principal risks and uncertainties that they face.

They are also satisfied in compliance with Provision 27 of the 2018 UK Corporate Governance Code:

- that the Annual Report and financial statements, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position, business model and strategy.

Directors' Compliance Statement

The directors acknowledge that they are responsible for securing the Company's compliance with its relevant obligations in accordance with Section 225(2)(a) of the Companies Act 2014 (the "Act") (described below as the "Relevant Obligations").

In accordance with Section 225 (2)(b) of the Act, the directors confirm that they have:

1. drawn up a Compliance Policy Statement setting out the Company's policies (that are, in the opinion of the directors, appropriate to the Company) in respect of the compliance by the Company with its Relevant Obligations;

2. put in place appropriate arrangements or structures that, in the opinion of the directors, provide a reasonable assurance of compliance in all material respects with the Company's Relevant Obligations; and

3. during the financial year to which this report relates, conducted a review of the arrangements or structures that the directors have put in place to ensure material compliance with the Company's Relevant Obligations.

Audit Information

Each of the directors have taken all the steps that they should or ought to have taken as a director in order to make himself or herself aware of any relevant audit information and to establish that the Group's statutory auditor is aware of that information. So far as the directors are aware, there is no relevant information of which the Group's statutory auditor is unaware.

Auditor

In accordance with Section 383(2) of the Companies Act 2014, the Company's auditor, EY, will continue in office. EY were first appointed as the Company's auditor on 1 May 2020, with effect for the financial year ending 31 December 2020. A resolution authorising the directors to determine their remuneration will be proposed at the AGM.

On behalf of the Board

Gene M. Murtagh
Chief Executive Officer

Geoff Doherty
Chief Financial Officer

21 February 2023

We have innovated a portfolio of advanced products and solutions for architects and building owners which enable them to construct buildings that consume less resources.

The "C" House
Reims, France
Insulated Panels
JI Wall 1000SF
JI Roof PIR
JI 106-250-750

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Independent Auditor's Report

to the Members of Kingspan Group plc

Report on the audit of the financial statements

Opinion

We have audited European Single Electronic Format financial statements ('the financial statements') of Kingspan Group plc ('the Company') and its subsidiaries ('the Group') for the year ended 31 December 2022, which comprise the Consolidated Income Statement, the Consolidated Statement of Comprehensive Income, the Consolidated Statement of Financial Position, the Consolidated Statement of Changes in Equity, the Consolidated Statement of Cash Flows, the Company Statement of Financial Position, the Company Statement of Changes in Equity, the Company Statement of Cash Flows and notes to the financial statements, including the summary of significant accounting policies set out in note 1. The financial reporting framework that has been applied in their preparation is Irish law and International Financial Reporting Standards (IFRS) as adopted by the European Union and, as regards the Company financial statements, as applied in accordance with the provisions of the Companies Act 2014.

In our opinion:

- the Group financial statements give a true and fair view of the assets, liabilities and financial position of the group as at 31 December 2022 and of its profit for the year then ended;
- the Company financial statements give a true and fair view of the assets, liabilities and financial position of the Company as at 31 December 2022;
- the Group financial statements have been properly prepared in accordance with IFRS as adopted by the European Union;
- the Company financial statements have been properly prepared in accordance with IFRS as adopted by the European Union as applied in accordance with the provisions of the Companies Act 2014; and
- the Group financial statements and Company financial statements have been properly prepared in accordance with the requirements of the Companies Act 2014 and, as regards the Group financial statements, Article 4 of the IAS Regulation.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (Ireland) (ISAs (Ireland)) and applicable law. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Group and Company in accordance with ethical requirements that are relevant to our audit of financial statements in Ireland, including the Ethical Standard as applied to public interest entities issued by the Irish Auditing and Accounting Supervisory Authority (IAASA), and we have fulfilled our other ethical responsibilities in accordance with these requirements.

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

Conclusions relating to going concern

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

- We confirmed our understanding of management's going concern assessment process and also engaged with management early to ensure all key factors were considered in their assessment;
- We obtained management's going concern assessment, including the cash forecasts and covenant calculations for the going concern period, which covers a period of at least 12 months from the date the financial statements are authorised for issue;
- We considered the appropriateness of the methods used to calculate the cash forecasts and covenant calculations and determined through inspection and testing of the methodology and calculations that the methods utilised were appropriately sophisticated to be able to make an assessment for the Group;
- We considered the mitigating factors included in the cash forecasts and covenant calculations that are within the control of the Group. This included our review of the Group's non-operating cash outflows and evaluating the Group's ability to control these outflows as mitigating actions if required. We also verified credit facilities available to the Group;
- We have performed reverse stress testing in order to identify what factors would lead to the Group utilising all liquidity or breaching the financial covenants during the going concern period; and
- We reviewed the Group's going concern disclosures included in the annual report in order to assess that the disclosures were appropriate and in conformity with the reporting standards.

We have observed that the impact of the Covid-19 pandemic and the ongoing war in Ukraine has not had a detrimental impact on the Group which has seen an increase in trading profit in all of its five legacy operating segments during 2022. The Group continued to generate significant operating cash flows of €692 million in 2022. The Group is not expected to be significantly impacted by Covid-19 or the ongoing war in Ukraine in the going concern assessment period. Further, the Group has access to significant liquidity. The majority of the Group's long-term funding commitments (83% or €1.1 billion) matures after February 2025. At 31 December 2022, the Group has unrestricted cash and cash equivalents of €0.65 billion and unused committed debt facilities of up to €0.8 billion from a revolving bank credit facility expiring in May 2026.

Conclusion

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

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

Our responsibilities and the responsibilities of the Directors with respect to going concern are described in the relevant sections of this report. However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the Group's and Company's ability to continue as a going concern.

Independent Auditor's Report

to the Members of Kingspan Group plc (continued)

Overview of our audit approach

Key audit matters	The key audit matters that we identified in the current year were: » Warranty provisions » Revenue recognition » Accounting for significant acquisitions
Audit scope	We performed an audit of the complete financial information of 26 components and performed audit procedures on specific balances for a further 35 components We performed procedures at a further 21 components that were specified by the Group audit team in response to specific risk factors The components where we performed full or specific audit procedures accounted for 74% of the Group's Profit before tax adjusted for the Non trading item, 72% of the Group's Revenue and 81% of the Group's Total Assets 'Components' represent business units across the Group considered for audit scoping purposes
Materiality	Overall Group materiality was assessed to be €38.2 million which represents approximately 5% of Profit before tax adjusted for the Non trading item.

Key audit matters

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

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Warranty provisions (2022: €181.5 million, 2021: €142.7 million) The Group's business involves the sale of products under warranty, some of which use new technology and applications. Due to the nature of its product offering, the Group has significant exposure to warranty claims which are inherently uncertain in nature. Management are required to exercise significant judgement with regard to warranty provision assumptions. Given the level of judgement required, there is a significant risk that warranty provisions may be over or understated. Changes in these assumptions, which may be subject to management override, can materially affect the levels of provisions recorded in the financial statements due to the higher estimation uncertainty on the Group's costs of repairing and replacing, or otherwise making reparations for the consequences of, product that is ascertained to be faulty. Refer to the Audit and Compliance Committee Report (page 110); the Statement of Accounting Policies (page 145); and note 21 of the Group Financial Statements (page 178).	We performed audit procedures that included understanding the Company's process for recording and monitoring potential warranty claims incorporating management's review of significant assumptions used in the provision calculation and the recording of the resulting amounts (including walkthroughs of the design and implementation of relevant controls); consideration of the nature and basis of the provision; review and assessment of correspondence in relation to specific claims; progress on individual significant claims; and relevant settlement history of claims and utilisation of related provisions. We tested the validity, completeness and accuracy of the data used in the calculations of product return rates. We evaluated and challenged the Group's assumptions in relation to potential failure rates, considering past failure rates, the costs estimated for remediation, examining related settlements where necessary. We considered whether alternative rates to those employed by management might be more appropriate. We substantively tested material movements in the provisions, including warranty provisions arising on acquisitions, and considered the accounting for movements in the provision balances and the related disclosures for compliance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*. The above procedures are performed both locally and by the Group audit team.	Our observations included an outline of the range of audit procedures performed, the key judgements involved and the results of our testing. We also provided our assessment of the level of subjectivity involved in warranty provision estimates.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Revenue recognition (2022: €8,340.9 million, 2021: €6,497.0 million) The Group has a number of revenue streams with different revenue recognition policies across its divisions. There is a significant risk that revenue may be recognised in an incorrect period as a result of management accelerating revenue recognition to achieve revenue targets or forecasts. Refer to the Audit and Compliance Committee Report (page 110); the Statement of Accounting Policies (page 145); and note 2 of the Group Financial Statements (page 154).	We performed procedures on revenue at all relevant in-scope components, as outlined in further detail in the 'Tailoring the scope' section below. Detailed transactional testing of revenue recognised throughout the year was performed, commensurate with the higher audit risk assigned to revenue. Dependent on the nature of the revenue recognised at each component, we obtained an understanding of each in-scope component's revenue recognition policy and how it was applied, including a walkthrough of the design and implementation of relevant controls; examined supporting documentation including customer contracts, statements of works or purchase orders, sales invoices, customer balance confirmations and cash receipts. In addition, we performed cut-off procedures, revenue journal testing and customer balance confirmations. In some components data analytics procedures were also performed. We audited key financial statement disclosures for compliance with IFRS 15 *Revenue from Contracts with Customers*.	Our observations included an overview of the risk, outline of the audit procedures performed, the judgements we focused on and the results of our testing.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Accounting for significant acquisitions Significant acquisitions identified during the year relate to Troldtekt in Denmark (consideration of €220.4 million), Derbigum in Belgium (consideration of €95.0 million) and Ondura Group in France (consideration of €515.6 million). There is a risk of improper accounting for the treatment of acquired businesses, due to the level of estimation uncertainty included in management's assessments. Specifically, fair value adjustments to property, plant and equipment (PP&E) and the need for complex and judgemental valuation techniques to be utilised, the recognition and valuation of fair value adjustments to provisions recorded in the opening balance sheets, require significant estimates and judgements to be made by management. Refer to the Audit and Compliance Committee Report (page 110); the Statement of Accounting Policies (page 145); and note 23 of the Group Financial Statements (page 179).	We obtained an understanding of the Group's process for accounting for acquisitions, including a walkthrough of the design and implementation of relevant controls. We completed detailed procedures on the opening balance sheets, purchase price allocations and fair value adjustments. We reviewed key agreements including the share purchase agreements for each acquisition to understand the key terms and conditions. We identified the key assumptions and judgements made by management and challenged the appropriateness thereof by reference to external information, where available. In respect of the recognition and valuation of the fair value adjustments to PP&E and provisions, we examined how the Group identified all material adjustments, obtained related evidence and examined the key assumptions and calculations used to ensure they were recorded in accordance with IFRS 3 *Business Combinations*. We also performed an evaluation of any experts engaged by management and sought assistance from our own specialists where necessary. Whilst our procedures were principally focused on recognition and valuation, we also assessed the completeness of recorded provisions. We also considered the adequacy of the related disclosures.	Our procedures were focused on Troldtekt and Derbigum with limited work on Ondura given the timing of this acquisition. Our observations included an outline of the range of audit procedures performed, and the results of our related testing, including the fact that the purchase price allocations for all three acquisitions were preliminary to the extent disclosed in the related financial statements footnote, that the provisional fair value adjustments made in the preliminary allocations did not result in material fair value adjustments, subject to the necessary finalisation of the fair value reviews and purchase price allocations. Our planned audit procedures in respect of significant acquisitions were completed without exception.

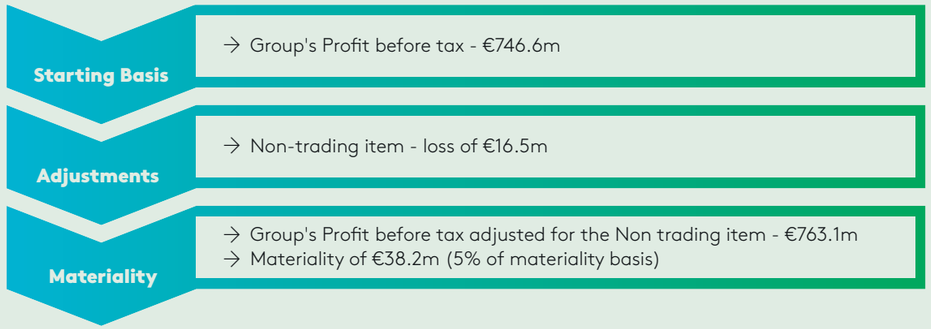
Our application of materiality

We apply the concept of materiality in planning and performing the audit, in evaluating the effect of identified misstatements on the audit and in forming our audit opinion.

Materiality

Materiality is the magnitude of an omission or misstatement that, individually or in the aggregate, could reasonably be expected to influence the economic decisions of the users of the financial statements. Materiality provides a basis for determining the nature and extent of our audit procedures.

We determined materiality for the Group to be €38.2 million (2021: €34.5 million), which is approximately 5% of Group's Profit before tax adjusted for the Non trading item. Profit before tax is a key performance indicator for the Group and is also a key metric used by the Group in the assessment of the performance of management. We therefore considered the Group's Profit before tax adjusted for the Non trading item to be the most appropriate performance metric on which to base our materiality calculation as we consider it to be the most relevant performance measure to the stakeholders of the Group.



We determined materiality for the Company to be €13.5 million (2021: €14.1 million), which is approximately 1% of total equity.

During the course of our audit, we reassessed initial materiality and considered that no further changes to materiality were necessary.

Performance materiality

Performance materiality is the application of materiality at the individual account or balance level. It is set at an amount to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality.

On the basis of our risk assessments, together with our assessment of the Group's overall control environment, our judgement was that performance materiality should be set at 50% (2021: 50%) of our planning materiality, namely €19.1 million (2021: €17.25 million). We have set performance materiality at this percentage based on our assessment of the risk of misstatements, both corrected and uncorrected.

Audit work at component locations for the purpose of obtaining audit coverage over significant financial statement accounts is undertaken based on a percentage of total performance materiality. The performance materiality set for each component is based on the relative scale and risk of the component to the Group as a whole and our assessment of the risk of misstatement at that component.

In the current year, the range of performance materiality allocated to components was €3.5 million to €5.25 million (2021: €3.0 million to €5.625 million).

Reporting threshold

Reporting threshold is an amount below which identified misstatements are considered as being clearly trivial. We agreed with the Audit Committee that we would report to them all uncorrected audit differences in excess of €1.91 million, which is set at approximately 5% of planning materiality, as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds.

We evaluate any uncorrected misstatements against both the quantitative measures of materiality discussed above and in light of other relevant qualitative considerations in forming our opinion.

An overview of the scope of our audit report

Tailoring the scope

Our assessment of audit risk, our evaluation of materiality and our allocation of performance materiality determine our audit scope for each entity within the Group. Taken together, this enables us to form an opinion on the consolidated financial statements.

In determining those components in the Group at which we perform audit procedures, we utilised size and risk criteria in accordance with ISAs (Ireland).

In assessing the risk of material misstatement to the Group financial statements, and to ensure we had adequate quantitative coverage of significant accounts in the financial statements, we selected 93 components covering entities across Europe, the Americas, the Middle East and Australia, which represent the principal business units within the Group.

Of the 93 components selected, we performed an audit of the complete financial information of 26 components ('full scope components') which were selected based on their size or risk characteristics. For the remaining 35 components ('specific scope components'), we performed audit procedures on specific accounts within that component that we considered had the potential for the greatest impact on the significant accounts in the financial statements either because of the size of these accounts or their risk profile.

In addition to the 61 components discussed above, we selected a further 21 components where we performed procedures at the component level that were specified by the Group audit team in response to specific risk factors. Also, we performed review procedures at an additional 11 components.

The reporting components where we performed either full or specific scope audit procedures accounted for 74% of the Group's Profit before tax adjusted for the Non trading item, 72% of the Group's Revenue and 81% of the Group's Total Assets.

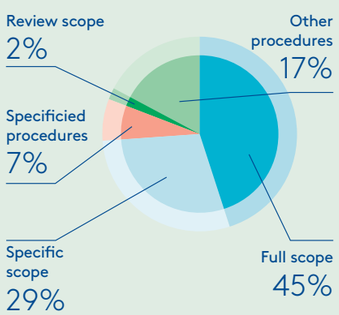
The full scope components contributed 45% of the Group's Profit before tax adjusted for the Non trading item, 48% of the Group's Revenue and 62% of the Group's Total Assets. The specific scope components contributed 29% of the Group's Profit before tax adjusted for the Non trading item, 24% of the Group's Revenue and 19% of the Group's Total Assets.

The components where we either performed procedures that were specified by the Group audit team in response to specific risk factors or review scope procedures contributed 7% and 2% respectively of the Group's Profit before tax adjusted for the Non trading item from continuing operations, 1% and 5% respectively of the Group's Revenue and 0% and 2% respectively of the Group's Total Assets. The audit scope of these components may not have included testing of all significant accounts of the component but will have contributed to the coverage of significant accounts tested for the Group.

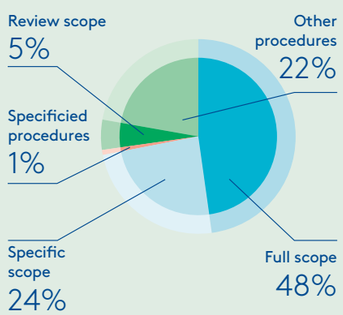
Of the remaining components, which together represent 17% of the Group's Profit before tax adjusted for the Non trading item, none is individually greater than 1% of the Group's Profit before tax adjusted for the Non trading item. For these components, we performed other procedures, including analytical review, confirmation of cash balances, testing of consolidation journals and intercompany eliminations and foreign currency translation recalculations to respond to any potential risks of material misstatement to the Group financial statements.

The charts below illustrate the coverage obtained from the work performed by our audit teams based on continuing operations.

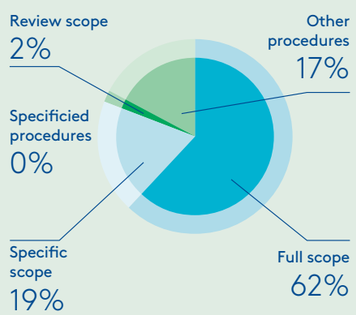
Group's Profit before tax adjusted for the Non trading item



Group's Revenue



Group's Total Assets



Independent Auditor's Report
to the Members of Kingspan Group plc (continued)

Involvement with component teams

In establishing our overall approach to the Group audit, we determined the type of work that needed to be undertaken at each of the components by us, as the Group audit engagement team, or by component auditors from other EY global network firms or non-EY firms operating under our instruction. Of the 26 full scope components, audit procedures were performed on 4 of these directly by senior members of the Group audit team and on 22 by component audit teams. For the specific scope components, where the work was performed by component auditors, we determined the appropriate level of involvement to enable us to determine that sufficient audit evidence had been obtained as a basis for our opinion on the Group as a whole.

We issued detailed instructions to each component auditor in scope for the Group audit, with specific audit requirements and requests across key areas. The Group audit team have completed a programme of planned visits designed to ensure that senior members of the Group audit team, including the Audit Engagement Partner, visit a number of overseas locations. During the current year's audit cycle, visits were undertaken by the primary audit team to component teams in the Netherlands, UK, Denmark, Germany, France. The Group audit team performed virtual visits in respect of our other key component teams in Poland and the UAE. These visits involved discussing the audit approach and any issues arising with the component team and holding discussions with local management and attending closing meetings.

The primary team interacted regularly with the component teams where appropriate during various stages of the audit, reviewed key working papers and were responsible for the scope and direction of the audit process. This, together with the additional procedures performed at Group level, gave us appropriate evidence for our opinion on the Group financial statements.

Conclusions relating to principal risks, going concern and viability statement

We have nothing to report in respect of the following information in the annual report, in relation to which the ISAs (Ireland) require us to report to you whether we have anything material to add or draw attention to:

- the disclosures in the Annual Report set out on pages 48 to 54 that describe the principal risks and explain how they are being managed or mitigated;
- the Directors' confirmation set out on page 125 in the Annual Report that they have carried out a robust assessment of the principal risks facing the Group and the Company, including those that would threaten its business model, future performance, solvency or liquidity;
- the Directors' statement set out on page 124 in the Annual Report about whether the Directors considered it appropriate to adopt the going concern basis of accounting in preparing the financial statements and the Directors' identification of any material uncertainties to the Group's and the parent company's ability to continue to do so over a period of at least 12 months from the date of approval of the financial statements;
- whether the Directors' statement relating to going concern required under the Listing Rules of Euronext Dublin and the UK Listing Authority is materially inconsistent with our knowledge obtained in the audit; or
- the Directors' explanation set out on pages 124 and 125 in the Annual Report as to how they have assessed the prospects of the Group and the Company, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group and the Company will be able to continue in operation and meet their liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

Corporate Governance Statement

We report, in relation to information given in the Corporate Governance Statement included in the Directors' Report and elsewhere in the Annual Report that:

- In our opinion, based on the work undertaken during the course of the audit, the information given in the Corporate Governance Statement pursuant to subsections 2(c) and (d) of section 1373 of the Companies Act 2014 is consistent with the Company's statutory financial statements in respect of the financial year concerned and such information has been prepared in accordance with the Companies Act 2014. Based on our knowledge and understanding of the Company and its environment obtained in the course of the audit, we have not identified any material misstatements in this information;
- In our opinion, based on the work undertaken during the course of the audit, the Corporate Governance Statement contains the information required by Regulation 6(2) of the European Union (Disclosure of Non-Financial and Diversity Information by certain large undertakings and groups) Regulations 2017; and
- In our opinion, based on the work undertaken during the course of the audit, the information required pursuant to section 1373(2)(a), (b), (e) and (f) of the Companies Act 2014 is contained in the Corporate Governance Statement.

Other information

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

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

In this context, we also have nothing to report in regard to our responsibility to specifically address the following items in the other information and to report as uncorrected material misstatements of the other information where we conclude that those items meet the following conditions:

- *Fair, balanced and understandable* (set out on pages 125 and 126) – the statement given by the Directors that they consider the Annual Report and financial statements taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's and the parent company's performance, business model and strategy, is materially inconsistent with our knowledge obtained in the audit; or
- *Audit Committee reporting* (set out on pages 110 to 117) – the section describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee or is materially inconsistent with our knowledge obtained in the audit; or
- *Directors' statement of compliance with the UK Corporate Governance Code* (set out on page 80) – the parts of the Directors' statement required under the Listing Rules relating to the Company's compliance with the UK Corporate Governance Code containing provisions specified for review by the auditor in accordance with the Listing Rules of Euronext Dublin and the UK Listing Authority do not properly disclose a departure from a relevant provision of the UK Corporate Governance Code.

Opinions on other matters prescribed by the Companies Act 2014

Based solely on the work undertaken in the course of the audit, we report that:

- in our opinion, the information given in the Directors' Report, other than those parts dealing with the non-financial statement pursuant to the requirements of S.I. No. 360/2017 on which we are not required to report in the current year, is consistent with the financial statements; and
- in our opinion, the Directors' Report, other than those parts dealing with the non-financial statement pursuant to the requirements of S.I. No. 360/2017 on which we are not required to report in the current year, has been prepared in accordance with the Companies Act 2014.

We have obtained all the information and explanations which, to the best of our knowledge and belief, are necessary for the purposes of our audit.

In our opinion the accounting records of the Company were sufficient to permit the financial statements to be readily and properly audited and the Company Statement of Financial Position is in agreement with the accounting records.

Matters on which we are required to report by exception

Based on the knowledge and understanding of the Group and its environment obtained in the course of the audit, we have not identified material misstatements in the Directors' Report.

The Companies Act 2014 requires us to report to you if, in our opinion, the disclosures required by sections 305 to 312 of the Act, which relate to disclosures of Directors' remuneration and transactions, are not complied with by the Company. We have nothing to report in this regard.

We have nothing to report in respect of section 13 of the European Union (Disclosure of Non-Financial and Diversity Information by certain large undertakings and groups) Regulations 2017, which require us to report to you if, in our opinion, the Company has not provided in the non-financial statement the information required by Section 5(2) to (7) of those Regulations, in respect of year ended 31 December 2021.

The Companies Act 2014 also requires us to report to you if, in our opinion, the Company has not provided the information required by Section 1110N in relation to its remuneration report for the financial year 31 December 2021. We have nothing to report in this regard.

The Listing Rules of the Irish Stock Exchange require us to review:

- the Directors' statement, set out on pages 124 and 125, in relation to going concern and longer-term viability
- the part of the Corporate Governance Statement on page 80 relating to the Company's compliance with the provisions of the UK Corporate Governance Code and the Irish Corporate Governance Annex specified for our review
- certain elements of disclosures in the report to shareholders by the Board on Directors' remuneration

Respective responsibilities

Responsibilities of Directors for the financial statements

As explained more fully in the Directors' Responsibility Statement set out on pages 125 and 126, the Directors are responsible for the preparation of the financial statements in accordance with the applicable financial reporting framework that they give a true and fair view, and 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 and the parent company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or the parent company or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (Ireland) 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.

Explanation to what extent the audit was considered capable detecting irregularities, including fraud

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect irregularities, including fraud, that could reasonably be expected to have a material effect on the financial statements. 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. In addition, the further removed any non-compliance is from the events and transactions reflected in the financial statements, the less likely it is that our procedures will identify such non-compliance. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below. However, the primary responsibility for the prevention and detection of fraud rests with both those charged with governance of the Company and management.

Our approach was as follows:

- We obtained an understanding of the legal and regulatory frameworks that are applicable to the Group across the various jurisdictions globally in which the Group operates. We determined that the most significant are those that relate to the form and content of external financial and corporate governance reporting including company law, tax legislation, employment law and regulatory compliance
- We understood how Kingspan Group plc is complying with those frameworks by making enquiries of management, internal audit, those responsible for legal and compliance procedures and the Company Secretary. We corroborated our enquiries through our review of the Group's Compliance Policies, board minutes, papers provided to the Audit Committee and correspondence received from regulatory bodies
- We assessed the susceptibility of the Group's financial statements to material misstatement, including how fraud might occur, by meeting with management, including within various parts of the business, to understand where they considered there was susceptibility to fraud. We also considered performance targets and the potential for management to influence earnings or the perceptions of analysts. Where this risk was considered to be higher, we performed audit procedures to address each identified fraud risk. These procedures included testing manual journals and were designed to provide reasonable assurance that the financial statements were free from fraud or error
- Based on this understanding we designed our audit procedures to identify non-compliance with such laws and regulations. Our procedures included a review of board minutes to identify any non-compliance with laws and regulations, a review of the reporting to the Audit Committee on compliance with regulations, enquiries of internal and external legal counsel and management

A further description of our responsibilities for the audit of the financial statements is located on the IAASA's website at: http://www.iaasa.ie/getmedia/b2389013-1cf6-458b-9b8f- a98202dc9c3a/Description_of_auditors_responsibilities_for_audit.pdf This description forms part of our auditor's report.

Other matters which we are required to address

We were appointed by the Board of Directors following the AGM held on 1 May 2020 to audit the financial statements for the year ended 31 December 2020 and subsequent financial periods. The period of total uninterrupted engagement including previous renewals and reappointments of the firm is three years.

The non-audit services prohibited by IAASA's Ethical Standard were not provided to the Group or Company and we remain independent of the Group and Company in conducting our audit.

Our audit opinion is consistent with the additional report to the Audit Committee.

The purpose of our audit work and to whom we owe our responsibilities

Our report is made solely to the Company's members, as a body, in accordance with section 391 of the Companies Act 2014. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members, as a body, for our audit work, for this report, or for the opinions we have formed.

Pat O'Neill
for and on behalf of
Ernst & Young,
Chartered Accountants
and Statutory Audit Firm
Dublin

22 February 2023

Consolidated Income Statement

For The Year Ended 31 December 2022

	Note	2022 €m	2021 €m
REVENUE	2	**8,340.9**	6,497.0
Cost of sales		**(6,124.6)**	(4,640.9)
GROSS PROFIT		**2,216.3**	1,856.1
Operating costs, excluding intangible amortisation		**(1,383.1)**	(1,101.3)
TRADING PROFIT	2	**833.2**	754.8
Intangible amortisation	11	**(32.4)**	(29.5)
Non trading item	3	**(16.5)**	-
OPERATING PROFIT		**784.3**	725.3
Finance expense	5	**(39.4)**	(36.3)
Finance income	5	**1.7**	-
PROFIT FOR THE YEAR BEFORE INCOME TAX	6	**746.6**	689.0
Income tax expense	8	**(130.6)**	(118.4)
PROFIT FOR THE YEAR FROM CONTINUING OPERATIONS		**616.0**	570.6
Attributable to owners of Kingspan Group plc		**598.0**	554.1
Attributable to non-controlling interests	29	**18.0**	16.5
		616.0	570.6
EARNINGS PER SHARE FOR THE YEAR			
Basic	9	**329.5c**	305.6c
Diluted	9	**326.9c**	303.0c

Gene M. Murtagh
Chief Executive Officer

Geoff Doherty
Chief Financial Officer

21 February 2023

Consolidated Statement of Comprehensive Income

For The Year Ended 31 December 2022

	Note	2022 €m	2021 €m
Profit for the year		**616.0**	570.6
Other comprehensive (loss)/income:			
Items that may be reclassified subsequently to profit or loss			
Exchange differences on translating foreign operations		**(24.7)**	123.1
Effective portion of changes in fair value of cash flow hedges		**-**	0.3
Items that will not be reclassified subsequently to profit or loss			
Actuarial (losses)/gains on defined benefit pension schemes	32	**(20.3)**	21.5
Income taxes relating to actuarial losses/gains on defined benefit pension schemes	22	**4.9**	(5.5)
Equity investments at FVOCI - net change in fair value	13	**(32.6)**	-
Total other comprehensive (loss)/income		**(72.7)**	139.4
Total comprehensive income for the year		**543.3**	710.0
Attributable to owners of Kingspan Group plc		**521.3**	691.8
Attributable to non-controlling interests	29	**22.0**	18.2
		543.3	710.0

Consolidated Statement of Financial Position

As At 31 December 2022

	Note	2022 €m	2021 €m
ASSETS			
NON-CURRENT ASSETS			
Goodwill	10	**2,495.5**	1,908.6
Other intangible assets	11	**191.8**	93.2
Financial assets	13	**93.6**	13.2
Property, plant and equipment	12	**1,437.9**	1,155.8
Right of use assets	17	**205.3**	155.5
Retirement benefit assets	32	**3.3**	17.9
Deferred tax assets	22	**40.1**	34.7
		4,467.5	3,378.9
CURRENT ASSETS			
Inventories	14	**1,235.8**	1,138.9
Trade and other receivables	15	**1,328.4**	1,228.4
Derivative financial instruments	20	**0.4**	0.3
Cash and cash equivalents	18	**649.3**	641.4
		3,213.9	3,009.0
TOTAL ASSETS		**7,681.4**	6,387.9
LIABILITIES			
CURRENT LIABILITIES			
Trade and other payables	16	**1,368.7**	1,389.8
Provisions for liabilities	21	**74.0**	67.8
Lease liabilities	17	**43.2**	35.0
Deferred contingent consideration	19	**174.9**	41.7
Interest bearing loans and borrowings	18	**85.0**	77.4
Current income tax liabilities		**54.9**	57.7
		1,800.7	1,669.4
NON-CURRENT LIABILITIES			
Retirement benefit obligations	32	**52.8**	45.9
Provisions for liabilities	21	**107.5**	74.9
Interest bearing loans and borrowings	18	**2,103.9**	1,320.1
Lease liabilities	17	**153.6**	123.0
Deferred tax liabilities	22	**55.2**	34.7
Deferred contingent consideration	19	**12.2**	160.6
		2,485.2	1,759.2
TOTAL LIABILITIES		**4,285.9**	3,428.6
NET ASSETS		**3,395.5**	2,959.3
EQUITY			
Share capital	24	**23.9**	23.9
Share premium	25	**112.4**	94.4
Capital redemption reserve		**0.7**	0.7
Treasury shares	26	**(56.9)**	(57.3)
Other reserves		**(288.0)**	(277.7)
Retained earnings		**3,527.6**	3,108.1
EQUITY ATTRIBUTABLE TO OWNERS OF KINGSPAN GROUP PLC		**3,319.7**	2,892.1
NON-CONTROLLING INTEREST	29	**75.8**	67.2
TOTAL EQUITY		**3,395.5**	2,959.3

Gene M. Murtagh
Chief Executive Officer

Geoff Doherty
Chief Financial Officer

21 February 2023

Consolidated Statement of Changes in Equity

For The Year Ended 31 December 2022

	Share Capital	Share Premium	Capital Redemption Reserve	Treasury Shares	Translation Reserve	Cash Flow Hedging Reserve	Share Based Payment Reserve	Revaluation Reserve	Put Option Liability Reserve	Retained Earnings	Total Attributable to Owners of the Parent	Non- Controlling Interest	Total Equity
	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
Balance at 1 January 2022	23.9	94.4	0.7	(57.3)	(108.5)	0.6	57.3	0.7	(227.8)	3,108.1	2,892.1	67.2	**2,959.3**
Transactions with owners recognised directly in equity													
Employee share based compensation	-	-	-	-	-	-	18.4	-	-	-	18.4	-	**18.4**
Tax on employee share based compensation	-	-	-	-	-	-	(11.4)	-	-	2.5	(8.9)	-	**(8.9)**
Exercise or lapsing of share options	-	18.0	-	1.8	-	-	(9.2)	-	-	(10.6)	-	-	**-**
Repurchase of shares	-	-	-	(1.4)	-	-	-	-	-	-	(1.4)	-	**(1.4)**
Dividends	-	-	-	-	-	-	-	-	-	(93.7)	(93.7)	-	**(93.7)**
Transactions with non-controlling interests:													
Settlement of put option	-	-	-	-	-	-	-	-	36.6	(28.3)	8.3	(8.3)	**-**
Purchase of NCI	-	-	-	-	-	-	-	-	-	(0.4)	(0.4)	(1.6)	**(2.0)**
Dividends to NCI	-	-	-	-	-	-	-	-	-	-	-	(3.5)	**(3.5)**
Fair value movement	-	-	-	-	-	-	-	-	(16.0)	-	(16.0)	-	**(16.0)**
Transactions with owners	-	18.0	-	0.4	-	-	(2.2)	-	20.6	(130.5)	(93.7)	(13.4)	**(107.1)**
Total comprehensive income for the year													
Profit for the year	-	-	-	-	-	-	-	-	-	598.0	598.0	18.0	**616.0**
Other comprehensive loss:													
Items that may be reclassified subsequently to profit or loss													
Exchange differences on translating foreign operations	-	-	-	-	(28.7)	-	-	-	-	-	(28.7)	4.0	**(24.7)**
Items that will not be reclassified subsequently to profit or loss													
Actuarial losses on defined benefit pension scheme	-	-	-	-	-	-	-	-	-	(20.3)	(20.3)	-	**(20.3)**
Income taxes relating to actuarial losses on defined benefit pension scheme	-	-	-	-	-	-	-	-	-	4.9	4.9	-	**4.9**
Equity investments at FVOCI – net change in fair value	-	-	-	-	-	-	-	-	-	(32.6)	(32.6)	-	**(32.6)**
Total comprehensive income for the year	-	-	-	-	(28.7)	-	-	-	-	550.0	521.3	22.0	**543.3**
Balance at 31 December 2022	23.9	112.4	0.7	(56.9)	(137.2)	0.6	55.1	0.7	(207.2)	3,527.6	3,319.7	75.8	**3,395.5**

Consolidated Statement of Changes in Equity

For The Year Ended 31 December 2021

	Share Capital	Share Premium	Capital Redemption Reserve	Treasury Shares	Translation Reserve	Cash Flow Hedging Reserve	Share Based Payment Reserve	Revaluation Reserve	Put Option Liability Reserve	Retained Earnings	Total Attributable to Owners of the Parent	Non- Controlling Interest	Total Equity
	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
Balance at 1 January 2021	23.8	95.6	0.7	(11.6)	(229.9)	0.3	40.4	0.7	(168.3)	2,597.2	2,348.9	48.7	**2,397.6**
Transactions with owners recognised directly in equity													
Employee share based compensation	0.1	-	-	-	-	-	17.7	-	-	-	17.8	-	**17.8**
Tax on employee share based compensation	-	-	-	-	-	-	9.7	-	-	3.8	13.5	-	**13.5**
Exercise or lapsing of share options	-	(1.2)	-	1.2	-	-	(10.5)	-	-	10.5	-	-	**-**
Repurchase of shares	-	-	-	(46.9)	-	-	-	-	-	-	(46.9)	-	**(46.9)**
Dividends	-	-	-	-	-	-	-	-	-	(73.5)	(73.5)	-	**(73.5)**
Transactions with non-controlling interests:													
Arising on acquisition	-	-	-	-	-	-	-	-	-	-	-	3.5	**3.5**
Dividends to NCI	-	-	-	-	-	-	-	-	-	-	-	(3.2)	**(3.2)**
Fair value movement	-	-	-	-	-	-	-	-	(59.5)	-	(59.5)	-	**(59.5)**
Transactions with owners	0.1	(1.2)	-	(45.7)	-	-	16.9	-	(59.5)	(59.2)	(148.6)	0.3	**(148.3)**
Total comprehensive income for the year													
Profit for the year	-	-	-	-	-	-	-	-	-	554.1	554.1	16.5	**570.6**
Other comprehensive income:													
Items that may be reclassified subsequently to profit or loss													
Cash flow hedging in equity													
- current year	-	-	-	-	-	0.3	-	-	-	-	0.3	-	**0.3**
- tax impact	-	-	-	-	-	-	-	-	-	-	-	-	**-**
Exchange differences on translating foreign operations	-	-	-	-	121.4	-	-	-	-	-	121.4	1.7	**123.1**
Items that will not be reclassified subsequently to profit or loss													
Actuarial gains on defined benefit pension scheme	-	-	-	-	-	-	-	-	-	21.5	21.5	-	**21.5**
Income taxes relating to actuarial gains on defined benefit pension scheme	-	-	-	-	-	-	-	-	-	(5.5)	(5.5)	-	**(5.5)**
Total comprehensive income for the year	-	-	-	-	121.4	0.3	-	-	-	570.1	691.8	18.2	**710.0**
Balance at 31 December 2021	23.9	94.4	0.7	(57.3)	(108.5)	0.6	57.3	0.7	(227.8)	3,108.1	2,892.1	67.2	**2,959.3**

Consolidated Statement of Cash Flows

For The Year Ended 31 December 2022

	Note	2022 €m	2021 €m
OPERATING ACTIVITIES			
Profit for the year		**616.0**	570.6
Add back non-cash and/or non-operating expenses:			
Income tax expense	8	**130.6**	118.4
Depreciation	6	**165.1**	138.4
Amortisation of intangible assets	11	**32.4**	29.5
Impairment of non-current assets	12	**-**	3.1
Loss on divestment of subsidiary	3	**16.5**	-
Employee equity-settled share options		**18.4**	17.7
Finance income	5	**(1.7)**	-
Finance expense	5	**39.4**	36.3
(Profit)/loss on sale of property, plant and equipment	6	**(0.4)**	0.4
Movement of deferred consideration		**-**	0.4
Changes in working capital:			
Inventories		**14.6**	(525.7)
Trade and other receivables		**25.7**	(298.8)
Trade and other payables		**(176.5)**	395.2
Other:			
Change in provisions		**7.7**	6.9
Pension contributions	32	**(3.8)**	(1.8)
Cash generated from operations		**884.0**	490.6
Income tax paid		**(158.4)**	(126.8)
Interest paid		**(33.6)**	(34.6)
Net cash flow from operating activities		**692.0**	329.2
INVESTING ACTIVITIES			
Additions to property, plant and equipment		**(269.2)**	(168.8)
Proceeds from disposals of property, plant and equipment		**18.6**	5.2
Purchase of subsidiary undertakings (including net debt/cash acquired)	23	**(887.0)**	(540.2)
Purchase of non-controlling interest		**(2.0)**	-
Purchase of financial asset	13	**(113.3)**	(5.0)
Divestment of subsidiary		**(6.4)**	-
Payment of deferred contingent consideration	19	**(45.4)**	-
Interest received		**1.7**	0.1
Net cash flow from investing activities		**(1,303.0)**	(708.7)
FINANCING ACTIVITIES			
Drawdown of loans	30	**846.0**	55.1
Repayment of loans and borrowings	30	**(66.0)**	(263.2)
Settlement of derivative financial instrument	30	**-**	18.5
Payment of lease liability	17	**(50.6)**	(38.6)
Proceeds from share issues	24	**-**	0.1
Repurchase of shares	26	**(1.4)**	(46.9)
Dividends paid to non-controlling interest	29	**(3.5)**	(3.2)
Dividends paid	28	**(93.7)**	(73.5)
Net cash flow from financing activities		**630.8**	(351.7)
INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	30	**19.8**	(731.2)
Effect of movement in exchange rates on cash held		**(11.9)**	42.9
Cash and cash equivalents at the beginning of the year		**641.4**	1,329.7
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR		**649.3**	641.4

Company Statement of Financial Position

As At 31 December 2022

	Note	2022 €m	2021 €m
ASSETS			
NON-CURRENT ASSETS			
Investments in subsidiaries	13	**1,238.5**	1,226.7
CURRENT ASSETS			
Amounts owed by group undertakings	15	**300.1**	318.4
Cash and cash equivalents		**0.4**	0.1
TOTAL ASSETS		**1,539.0**	1,545.2
LIABILITIES			
CURRENT LIABILITIES			
Amounts owed to group undertakings	16	**195.5**	137.7
Payables	16	**0.2**	0.2
TOTAL LIABILITIES		**195.7**	137.9
NET ASSETS		**1,343.3**	1,407.3
EQUITY			
Equity attributable to owners of Kingspan Group plc			
Share capital	24	**23.9**	23.9
Share premium	25	**112.4**	94.4
Capital redemption reserve		**0.7**	0.7
Treasury shares	26	**(56.9)**	(57.3)
Retained earnings	27	**1,263.2**	1,345.6
TOTAL EQUITY		**1,343.3**	1,407.3

In accordance with section 304 of the Companies Act 2014, the Company's loss for the financial year was €0.5m (2021: profit of €136.0m).

Gene M. Murtagh
Chief Executive Officer

Geoff Doherty
Chief Financial Officer

21 February 2023

Company Statement of Changes in Equity

For The Year Ended 31 December 2022

	Share Capital €m	Share Premium €m	Capital Redemption Reserves €m	Treasury Shares €m	Retained Earnings €m	Shareholders' Equity €m
Balance at 1 January 2022	23.9	94.4	0.7	(57.3)	1,345.6	**1,407.3**
Shares issued	-	18.0	-	1.8	(6.6)	**13.2**
Repurchase of shares	-	-	-	(1.4)	-	**(1.4)**
Employee share based compensation	-	-	-	-	18.4	**18.4**
Dividends paid	-	-	-	-	(93.7)	**(93.7)**
Transactions with owners	-	18.0	-	0.4	(81.9)	**(63.5)**
Loss for the year	-	-	-	-	(0.5)	**(0.5)**
Balance at 31 December 2022	23.9	112.4	0.7	(56.9)	1,263.2	**1,343.3**

	Share Capital €m	Share Premium €m	Capital Redemption Reserves €m	Treasury Shares €m	Retained Earnings €m	Shareholders' Equity €m
Balance at 1 January 2021	23.8	95.6	0.7	(11.6)	1,265.4	**1,373.9**
Shares issued	0.1	(1.2)	-	1.2	-	**0.1**
Repurchase of shares	-	-	-	(46.9)	-	**(46.9)**
Employee share based compensation	-	-	-	-	17.7	**17.7**
Dividends paid	-	-	-	-	(73.5)	**(73.5)**
Transactions with owners	0.1	(1.2)	-	(45.7)	(55.8)	**(102.6)**
Profit for the year	-	-	-	-	136.0	**136.0**
Balance at 31 December 2021	23.9	94.4	0.7	(57.3)	1,345.6	**1,407.3**

Company Statement of Cash Flows

For The Year Ended 31 December 2022

	2022 €m	2021 €m
OPERATING ACTIVITIES		
(Loss)/profit for the year after tax	**(0.5)**	136.0
Net cash flow from operating activities	**(0.5)**	136.0
FINANCING ACTIVITIES		
Change in receivables	**18.3**	(82.3)
Change in payables	**57.8**	66.6
Repurchase of shares	**(1.4)**	(46.9)
Proceeds from share issues	**19.8**	0.1
Dividends paid	**(93.7)**	(73.5)
Net cash flow from financing activities	**0.8**	(136.0)
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	**0.1**	0.1
Net increase in cash and cash equivalents	**0.3**	-
CASH AND CASH EQUIVALENTS AT END OF YEAR	**0.4**	0.1

Notes to the Financial Statements

For The Year Ended 31 December 2022

1 Statement of Accounting Policies

General information

Kingspan Group plc is a public limited company registered and domiciled in Ireland. Its registered number is 70576 and the address of its registered office is Dublin Road, Kingscourt, Co Cavan.

The Group's principal activities comprise the manufacture of insulated panels, rigid insulation boards, technical insulation, architectural facades, roofing and waterproofing solutions, data and flooring technology, daylighting and ventilation systems and water and energy solutions. The Group's Principal Subsidiaries and Substantial Undertakings are set out on page 193 to 194.

Statement of compliance

The consolidated and Company financial statements have been prepared in accordance with International Financial Reporting Standards (IFRSs) and their interpretations issued by the International Accounting Standards Board (IASB) as adopted by the EU and those parts of the Companies Acts 2014, applicable to companies reporting under IFRS and Article 4 of the IAS Regulation.

The Company has availed of the exemption in Section 304 of the Companies Act 2014 and has not presented the Company Income Statement, which forms part of the Company's financial statements, to its members and the Registrar of Companies.

Basis of preparation

The financial statements have been prepared on a going concern basis, under the historical cost convention, as modified by:

- measurement at fair value of share based payments at initial date of award;
- certain financial assets (including derivative financial instruments) and deferred contingent consideration recognised and measured at fair value; and
- recognition of the defined benefit liability as plan assets less the present value of the defined benefit obligation.

The accounting policies set out below have been applied consistently to all years presented in these financial statements, unless otherwise stated.

These consolidated financial statements have been prepared in Euro. The Euro is the presentation currency of the Group and the functional and presentation currency of the Company.

The Group uses a number of Alternative Performance Measures (APMs) throughout these financial statements to give assistance to investors in evaluating the performance of the underlying business and to give a better understanding of how management review and monitor the business on an ongoing basis. These APMs have been defined and explained in more detail on page 190 to 192.

Changes in Accounting Policies and Disclosures

New and amended standards and interpretations effective during 2022

The following amendments to standards and interpretations are effective for the Group from 1 January 2022 and do not have a material effect on the results or financial position of the Group:

	Effective Date – periods beginning on or after
Amendments to IFRS 3 *Business Combinations* - Reference to the Conceptual Framework	1 January 2022
Amendments to IAS 16 *Property, Plant and Equipment* - Proceeds before Intended Use	1 January 2022
Amendments to IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* - Onerous Contracts – Costs of Fulfilling a Contract	1 January 2022
Annual improvements to IFRS Standards 2018-2020	1 January 2022

1 Statement of Accounting Policies (continued)

There are a number of new standards, amendments to standards and interpretations that are not yet effective and have not been applied in preparing these consolidated financial statements. These new standards, amendments to standards and interpretations are either not expected to have a material impact on the Group's financial statements or are still under assessment by the Group. The principal new standards, amendments to standards and interpretations are as follows:

	Effective Date – periods beginning on or after
IFRS 17 *Insurance Contracts*	1 January 2023
Amendments to IAS 12 *Income Taxes* - Deferred Tax related to Assets and Liabilities arising from a Single Transaction	1 January 2023
Amendments to IAS 1 *Presentation of Financial Statements* and IFRS Practice Statement 2 - Disclosure of Accounting Policies	1 January 2023
Amendments to IAS 8 *Accounting policies, Changes in Accounting Estimates and Errors* - Definition of Accounting Estimates	1 January 2023
Amendments to IFRS 17 *Insurance Contracts*: Initial Application of IFRS 17 and IFRS 9 – Comparative information	1 January 2023
Amendments to IAS 1 *Presentation of Financial Statements* - Classification of Liabilities as Current or Non-current Date, Classification of Liabilities as Current or Non-current – Deferral of Effective Date and Non-current Liabilities with Covenants	1 January 2024*
Amendments to IFRS 16 *Leases*: Lease Liability in a Sale and Leaseback	1 January 2024*

*Not EU endorsed

Basis of consolidation

The Group consolidated financial statements incorporate the financial statements of the Company and its subsidiary undertakings.

Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has the rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

Subsidiaries are included in the Group financial statements from the date on which control over the entity is obtained and cease to be consolidated from the date on which control is transferred out of the Group.

Transactions eliminated on consolidation

Intragroup transactions and balances, and any unrealised gains arising from such transactions, are eliminated in preparing the consolidated financial statements. Unrealised losses are eliminated in the same manner as unrealised gains, but only to the extent that there is no evidence of impairment.

Segment reporting

The Group's accounting policy for identifying segments is based on internal management reporting information that is routinely reviewed by the Board of Directors, which is the Chief Operating Decision Maker (CODM) for the Group.

The measurement policies used for the segment reporting under IFRS 8 *Operating Segments* are the same as those used in the consolidated financial statements. Segment results that are reported to the CODM include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Unallocated items comprise mainly corporate assets, finance income and expenses and tax assets and liabilities.

The Group has determined that it has six operating segments: Insulated Panels, Insulation, Water + Energy, Data + Flooring, Light + Air and Roofing + Waterproofing.

Revenue recognition

The Group recognises revenue exclusive of sales tax and trade discounts which would occur over time or at a point in time. The Group uses the five-step model as prescribed under IFRS 15 *Revenue from Contracts with Customers* on the Group's revenue transactions. This includes the identification of the contract, identification of the performance obligations under same, determination of the transaction price, allocation of the transaction price to performance obligations and recognition of revenue. Typically, individual performance obligations are specifically called out in the contract which allows for accurate recognition of revenue as and when performances are fulfilled.

The Group has generally concluded that it is the principal in its revenue arrangements, because it typically controls the goods or services before transferring them to the customers.

1 Statement of Accounting Policies (continued)

The Group has identified a number of revenue streams where revenue is recognised at a point in time and/or over time. These are detailed below:

Supply only contracts

The point of recognition arises when the Group satisfies a performance obligation by transferring control of a promised good or service to the customer, which could occur over time or at a point in time. Revenue is recognised at the time of delivery at the delivery address (where Kingspan is to deliver the goods to the delivery address) or at Kingspan's works (where the customer is to collect the goods) or, if the customer wrongfully fails to take delivery of the goods, the time when Kingspan has tendered delivery of the goods. Invoicing occurs at the point of final delivery of the product or performance obligation, at which point a right is established for unconditional consideration as control passes to the customer. Typically, payment terms are 30 days from the end of the month in which the invoice is raised.

Supply and install projects

If a contract requires the Group to install or commission a product and the product can be separated or sold separately from the installation service and the contract specifically separates the performance obligations then the product only supply element is recognised in line with the criteria set out in the supply only policy. The installation element is recognised over time in line with the milestones set out in the contract. If there is significant integration provided for in the contract then a single purchase order is identified and the revenue is recognised over time.

Service and maintenance

Where the Group provides a post-sale Service and Maintenance offering the revenue associated with this separately identifiable performance obligation is initially recognised in deferred income. The revenue is recognised in the Consolidated Income Statement as each site visit occurs.

Research and Development

Expenditure on research and development is recognised as an expense in the period in which it is incurred. An asset is recognised only when all the conditions set out in IAS 38 *Intangible Assets* are met.

Non trading items

Non trading items refer to certain items, which by virtue of their nature and amount, are disclosed separately in order for the user to obtain a proper understanding of the financial information. Non-trading items include gains or losses on the disposal or acquisition of businesses and material related acquisition and integration costs, and material impairments to the carrying value of intangible assets or property, plant and equipment. It is determined by management that each of these items relate to events or circumstances that are non-recurring in nature.

Business Combinations

Business combinations are accounted for using the acquisition method as at the date of acquisition.

In accordance with IFRS 3 *Business Combinations*, the fair value of consideration paid for a business combination is measured as the aggregate of the fair values at the date of exchange of assets given and liabilities incurred or assumed in exchange for control. The assets, liabilities and contingent liabilities of the acquired entity are measured at fair value as at the acquisition date. When the initial accounting for a business combination is determined, it is done so on a provisional basis with any adjustments to these provisional values made within 12 months of the acquisition date and are effective as at the acquisition date.

To the extent that deferred consideration is payable as part of the acquisition cost and is payable after one year from the acquisition date, the deferred consideration is discounted at an appropriate interest rate and, accordingly, carried at net present value (amortised cost) in the Consolidated Statement of Financial Position. The discount component is then unwound as an interest charge in the Consolidated Income Statement over the life of the obligation.

Where a business combination agreement provides for an adjustment to the cost of a business acquired contingent on future events, other than put options held by non-controlling interests, the Group accrues the fair value of the additional consideration payable as a liability at acquisition date. This amount is reassessed at each subsequent reporting date with any adjustments recognised in the Consolidated Income Statement.

If the business combination is achieved in stages, the fair value of the acquirer's previously held equity interest in the acquiree is re-measured at the acquisition date through the Consolidated Income Statement or the Consolidated Statement of Other Comprehensive Income.

For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets.

Transaction costs are expensed to the Consolidated Income Statement as incurred.

Put options held by non-controlling interest shares

Any contingent consideration is measured at fair value at the date of acquisition. Where a put option is held by a non-controlling interest ("NCI") in a subsidiary undertaking, whereby that party can require the Group to acquire the NCI's shareholding in the subsidiary at a future date, but the NCI retains present access to the results of the subsidiary, the Group applies the present access method of accounting to this arrangement. The Group recognises a contingent consideration liability at fair value, being the Group's estimate of the amount required to settle that liability and a corresponding reserve in equity. Any subsequent remeasurements required due to changes in fair value of the put liability estimation are recognised in the Put Option Liability Reserve in equity.

Goodwill

Goodwill arises on business combinations and represents the difference between the fair value of the consideration and the fair value of the Group's share of the identifiable net assets of a subsidiary at the date of acquisition.

The Group measures goodwill at the acquisition date as:

- the fair value of the consideration transferred; plus
- the recognised amount of any non-controlling interests in the acquiree; plus
- if the business combination is achieved in stages, the fair value of the pre-existing equity interest in the acquiree; less
- the net recognised amount (generally fair value) of the identifiable assets acquired and liabilities assumed.

Following initial recognition, goodwill is measured at cost less any accumulated impairment losses.

1 Statement of Accounting Policies (continued)

As at the acquisition date, any goodwill acquired is allocated to each of the cash generating units expected to benefit from the combination's synergies. The cash generating units represent the lowest level within the Group which generate largely independent cash inflows and these units are not larger than the operating segments (before aggregation) determined in accordance with IFRS 8 *Operating Segments*.
Goodwill is tested for impairment at the same level as the goodwill is monitored by management for internal reporting purposes, which is at the individual cash generating unit level.

Goodwill is subject to impairment testing on an annual basis and at any time during the year if an indicator of impairment is considered to exist. The goodwill impairment tests are undertaken at a consistent time each year. Impairment is determined by assessing the recoverable amount of the cash generating unit to which the goodwill relates. Where the recoverable amount of the cash generating unit is less than the carrying amount, an impairment loss is recognised in the Consolidated Income Statement. Impairment losses arising in respect of goodwill are not reversed following recognition.

On disposal of a subsidiary, the attributable amount of goodwill, not previously written off, is included in the calculation of the profit or loss on disposal.

Intangible Assets (other than goodwill)

Intangible assets separately acquired are capitalised at cost. Intangible assets acquired as part of a business combination are capitalised at fair value as at the date of acquisition.

Following initial recognition, intangible assets, which have finite useful lives, are carried at cost or initial fair value less accumulated amortisation and accumulated impairment losses.

The amortisation of intangible assets is calculated to write off the book value of intangible assets over their useful lives on a straight-line basis on the assumption of zero residual value. Amortisation charged on these assets is recognised in the Consolidated Income Statement.

The carrying amount of intangible assets is reviewed for indicators of impairment at each reporting date and is subject to impairment testing when events or changes of circumstances indicate that the carrying values may not be recoverable.

The estimated useful lives are as follows:

Customer relationships	2 - 6 years
Trademarks & Brands	2 - 12 years
Patents	8 years
Technological know how and order backlogs	1 - 10 years

Amortisation methods, useful lives and residual values are reviewed at each reporting date and adjusted as necessary.

Foreign currency

Functional and presentation currency

The individual financial statements of each Group company are measured and presented in the currency of the primary economic environment in which the company operates, the functional currency. The Group financial statements are presented in Euro, which is the Company's functional currency.

Transactions and balances

Transactions in foreign currencies are translated into the functional currency at the exchange rates at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated to the functional currency at the exchange rates at the reporting date. All currency translation differences on monetary assets and liabilities are taken to the Consolidated Income Statement, except when deferred in equity as qualifying net investment hedges, which are recognised in the Consolidated Statement of Comprehensive Income.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are initially translated at the exchange rate at the date of acquisition and then subsequently these assets and liabilities are treated as part of a foreign entity and are translated at the closing rate.

Exchange rates of material currencies used were as follows:

	Average rate		Closing rate	
Euro =	**2022**	2021	**2022**	2021
Pound Sterling	**0.853**	0.860	**0.886**	0.838
US Dollar	**1.054**	1.183	**1.067**	1.133
Canadian Dollar	**1.370**	1.483	**1.444**	1.442
Australian Dollar	**1.517**	1.575	**1.569**	1.558
Czech Koruna	**24.562**	25.642	**24.143**	24.851
Polish Zloty	**4.685**	4.565	**4.680**	4.588
Hungarian Forint	**391.09**	358.52	**400.190**	368.89
Brazilian Real	**5.442**	6.381	**5.632**	6.309

Foreign operations

The Income Statement, Statement of Financial Position and Cash Flow Statement of Group companies that have a functional currency different from that of the Company are translated as follows:

- Assets and liabilities at each reporting date are translated at the closing rate at that reporting date.
- Results and cash flows are translated at actual exchange rates for the year, or an average rate where this is a reasonable approximation.

All resulting exchange differences are recognised in the Consolidated Statement of Comprehensive Income and accumulated as a separate component of equity, the Translation Reserve.

On disposal of a foreign operation, any such cumulative retranslation differences, previously recognised in equity, are reclassified to the Consolidated Income Statement as part of gain or loss on disposal.

1 Statement of Accounting Policies (continued)

Inventories

Inventories are stated at the lower of cost and net realisable value.

Cost is based on the first-in, first-out principle and includes all expenditure incurred in acquiring the inventories and bringing them to their present location and condition.

- Raw materials are valued at the purchase price including transport, handling costs and net of trade discounts.
- Work in progress and finished goods are carried at cost consisting of direct materials, direct labour and directly attributable production overheads and other costs incurred in bringing them to their existing location and condition.

Net realisable value represents the estimated selling price less costs to completion and appropriate marketing, selling and distribution costs.

A provision is made, where necessary, in all inventory categories for obsolete, slow-moving and defective items.

Income tax

Income tax in the Consolidated Income Statement represents the sum of current income tax and deferred tax not recognised in other comprehensive income or directly in equity.

Current tax

Current tax represents the expected tax payable or recoverable on the taxable profit for the year using tax rates and laws that have been enacted, or substantively enacted, at the reporting date and taking into account any adjustments from prior years. Liabilities for uncertain tax treatments are recognised in accordance with IFRIC 23 *Uncertainty Over Income Tax Treatments* and are measured using either the most likely amount method or the expected value method – whichever better predicts the resolution of the uncertainty.

Deferred Tax

Deferred tax is provided using liability method on temporary differences at the reporting date. Temporary differences are defined as the difference between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred tax assets and liabilities are not subject to discounting and are measured at the tax rates that are expected to apply in the period in which the asset is realised or the liability is settled based on tax rates and tax laws that have been enacted or substantively enacted at the reporting date.

The Group offsets deferred tax assets and deferred tax liabilities only if it has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

Deferred tax liabilities are recognised for all taxable temporary differences (i.e. differences that will result in taxable amounts in future periods when the carrying amount of the asset or liability is recovered or settled).

Deferred tax assets are recognised in respect of all deductible temporary differences (i.e. differences that give rise to amounts which are deductible in determining taxable profits in future periods when the carrying amount of the asset or liability is recovered or settled), carry-forward of unused tax credits and unused tax losses to the extent that it is probable that taxable profits will be available against which to offset these items.

The carrying amounts of deferred tax assets are subject to review at each reporting date and reduced to the extent that future taxable profits are considered to be inadequate to allow all or part of any deferred tax asset to be utilised.

Changes in deferred tax assets or liabilities are recognised as a component of tax income or expense in profit or loss, except where they relate to items that are recognised in other comprehensive income or directly in equity, in which case the related deferred tax is also recognised in other comprehensive income or equity, respectively.

Grants

Grants are initially recognised as deferred income at their fair value when there is a reasonable assurance that the grant will be received, and all relevant conditions have been complied with.

Capital grants received and receivable in respect of property, plant and equipment are treated as a reduction in the cost of that asset and thereby amortised to the Consolidated Income Statement in line with the underlying asset.

Revenue grants are recognised in the Consolidated Income Statement to offset the related expenditure.

Investments in subsidiaries

Investments in subsidiaries held by the Parent Company are carried at cost less accumulated impairment losses.

Property, Plant and Equipment

Property, plant and equipment is measured at cost less accumulated depreciation and accumulated impairment losses.

Depreciation is provided on a straight line basis at the rates stated below, which are estimated to reduce each item of property, plant and equipment to its residual value by the end of its useful life:

Freehold buildings	2% - 2.5% on cost
Plant and machinery	4% to 20% on cost
Fixtures and fittings	10% to 20% on cost
Computer equipment	12.5% to 33% on cost
Motor vehicles	10% to 25% on cost

Freehold land is stated at cost and is not depreciated.

1 Statement of Accounting Policies (continued)

The estimated useful lives and residual values of property, plant and equipment are determined by management at the time the assets are acquired and subsequently, re-assessed at each reporting date. These lives are based on historical experience with similar assets across the Group.

In accordance with IAS 36 *Impairment of Assets*, the carrying values of property, plant and equipment are reviewed at each reporting date to determine whether there is any indication of impairment. An impairment loss is recognised whenever the carrying value of an asset or its cash generating unit exceeds its recoverable amount.

Impairment losses are recognised in the Consolidated Income Statement. Following the recognition of an impairment loss, the depreciation charge applicable to the asset or cash-generating unit is adjusted to allocate the revised carrying amount, net of any residual value, over the remaining useful life.

Assets under construction are carried at cost less any recognised impairment loss. Depreciation of these assets commences when the assets are ready for their intended use.

Leases

The Group recognises right of use assets representing its right to use the underlying assets and lease liabilities representing its obligation to make lease payments at the lease commencement date. The right of use assets are initially measured at cost, and subsequently measured at cost less accumulated depreciation and impairment losses. The cost of the right of use asset consists of the initial measurement of the lease liability, any initial direct costs incurred in entering into the lease, restoration costs and any payments made on or before the lease commencement date, net any lease incentives received.

Depreciation is provided on a straight line basis over the period of the lease, or useful life if shorter.

Lease liabilities are measured at the present value of the future lease payments, discounted at the Group's incremental borrowing rate. Subsequent to the initial measurement, the lease liabilities are increased by the interest cost and reduced by lease payments made.

The right of use assets and lease liabilities are remeasured when there are changes in the assessment of whether an extension option is reasonably certain to be exercised or a termination option is reasonably certain not to be exercised or where there is a change in future lease payments as a result of a change in an index or rate. The Group applies judgement when determining the lease term where renewal and termination options are contained in the lease contract.

The Group applies the short-term lease recognition exemption to leases that have a lease term of 12 months or less from the commencement date. The Group also applies the lease of low-value assets recognition exemption to leases of equipment that are considered to be low value. Lease payments on short-term leases and leases of low-value assets are recognised as an expense on a straight-line basis over the term of the lease.

Retirement benefit obligations

The Group operates defined contribution and defined benefit pensions schemes.

Defined contribution pension schemes

The costs arising on the Group's defined contribution schemes are recognised in the Consolidated Income Statement in the period in which the related service is provided. The Group has no legal or constructive obligation to pay further contributions in the event that these plans do not hold sufficient assets to provide retirement benefits.

Defined benefit pension schemes

The Group's net obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods, discounting that amount and deducting the fair value of any plan assets.

The calculation is performed annually by a qualified actuary using the projected unit credit method. When the calculation results in a benefit to the Group, the recognised asset is limited to the total of any unrecognised past service costs and the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan.

Remeasurements of the net defined benefit liability or asset, which comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling, are recognised immediately in other comprehensive income.

The Group determines the net interest expense on the net defined benefit liability or asset by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then net defined benefit liability or asset, taking into account any changes in the net defined benefit liability or asset during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognised in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in profit or loss. The Group recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs.

Provisions

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

A specific provision is created when a claim has actually been made against the Group or where there is a known issue at a known customer's site, both relating to a product or service supplied in the past. In addition, a risk-based provision is created where future claims are considered incurred but not reported. The warranty provision is based on historical warranty data and a weighting of all possible outcomes against their associated probabilities.

Specific provisions will generally be aged as a current liability, reflecting the assessment that a current liability exists to replace or repair product sold on foot of an accepted valid warranty issue. Only where the liability is reasonably certain not to be settled within the next 12 months, will a specific provision be categorised as a long-term obligation. Risk-based provisions will generally be aged as a non-current liability, reflecting the fact that no warranty claim has yet been made by the customer.

1 Statement of Accounting Policies (continued)

Provisions which are not expected to give rise to a cash outflow within 12 months of the reporting date are, where material, determined by discounting the expected future cash flows. The unwinding of the discount is recognised as a finance expense.

Dividends

Final dividends on ordinary shares are recognised as a liability in the financial statements only after they have been approved at the Annual General Meeting of the Company. Interim dividends on ordinary shares are recognised when they are paid.

Cash and cash equivalents

Cash and cash equivalents principally comprise cash at bank and in hand and short term deposits with an original maturity of three months or less.

Derivative financial instruments

Derivative financial instruments, principally interest rate and currency swaps, are used to hedge the Group's foreign exchange and interest rate risk exposures.

Derivative financial instruments are recognised initially at fair value and thereafter are subsequently remeasured at their fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value of these instruments is the estimated amount that the Group would receive or pay to terminate the swap at the reporting date, taking into account current interest and currency exchange rates and the current creditworthiness of the swap counterparties.

The Group designates all of its derivatives in one or more of the following types of relationships:

i. *Fair value hedge:* Hedges the exposure to movements in fair value of recognised assets or liabilities that are attributable to hedged risks.
ii. *Cash flow hedge:* Hedges the Group's exposures to fluctuations in future cash flow derived from a particular risk associated with recognised assets or liabilities or forecast transactions.
iii. *Net investment hedge:* Hedges the exchange rate fluctuations of a net investment in a foreign operation.

At inception of the transaction, the Group documents the relationship between the hedging instruments and hedged items, including the risk management objectives and strategy in undertaking the hedge transactions. The Group also documents its assessment, both at inception and on an ongoing basis, as to whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items.

Fair value hedge

Any gain or loss resulting from the re-measurement of the hedging instrument to fair value is reported in the Consolidated Income Statement, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. The gains or losses of a hedging instrument that are in hedge relationships with borrowings are included within Finance Income or Finance Expense in the Consolidated Income Statement. In the case of the related hedged borrowings, any gain or loss on the hedged item which is attributable to the hedged risk is adjusted against the carrying amount of the hedged item and is also included within Finance Income or Finance Expense in the Consolidated Income Statement.

If the hedge no longer meets the criteria for hedge accounting, the adjustment to the carrying amount of the hedged item is amortised on an effective interest basis to the Consolidated Income Statement with the objective of achieving full amortisation by maturity of the hedged item.

Cash flow hedge

The effective part of any gain or loss on the derivative financial instrument is recognised in other comprehensive income and presented in the Cash Flow Hedge Reserve in equity with the ineffective portion being recognised within Finance Income or Finance Expense in the Consolidated Income Statement. If a hedge of a forecasted transaction subsequently results in the recognition of a financial asset or a financial liability, the associated gains and losses that were recognised directly in other comprehensive income are reclassified into profit or loss in the same period or periods during which the asset acquired or liability assumed affects profit or loss. For cash flow hedges, other than those covered by the preceding statements, the associated cumulative gain or loss is removed from other comprehensive income and recognised in the Consolidated Income Statement in the same period or periods during which the hedged forecast transaction affects profit or loss. The ineffective part of any gain or loss is recognised immediately in the Consolidated Income Statement.

Hedge accounting is discontinued when a hedging instrument expires or is sold, terminated or exercised, or no longer qualifies for hedge accounting. The cumulative gain or loss at that point remains in other comprehensive income and is recognised when the transaction occurs. If a hedged transaction is no longer expected to occur, the net cumulative gain or loss recognised in other comprehensive income is transferred to the Consolidated Income Statement in the period.

Net investment hedge

Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income and presented in the Translation Reserve in equity. The gain or loss relating to the ineffective portion is recognised immediately in either Finance Income or Finance Expense in the Consolidated Income Statement. Cumulative gains or losses remain in equity until disposal of the net investment in the foreign operation at which point the related differences are reclassified to the Consolidated Income Statement as part of the overall gain or loss on sale.

Financial Assets

On initial recognition, a financial asset is classified as measured at amortised cost and subsequently measured using the effective interest rate (EIR) method and subject to impairment. Financial assets may also be initially measured at fair value with any movement being reflected through other comprehensive income or the Consolidated Income Statement.

On initial recognition of an equity investment that is not held for trading, the Group may irrevocably elect to present subsequent changes in the investment's fair value in other comprehensive income. This election is made on an investment-by-investment basis.

1 Statement of Accounting Policies (continued)

The Group applies the simplified approach for expected credit losses (ECL) under IFRS 9 *Financial Instruments*, which requires expected lifetime losses to be recognised from initial recognition of receivables. Under IFRS 9 *Financial Instruments*, the Group uses an allowance matrix to measure Expected Credit Loss (ECL) of trade receivables from customers. Loss rates are calculated using a "roll rate" method based on the probability of a receivable progressing through successive chains of non-payment to write-off. The rates are calculated at a business unit level which reflects the risks associated with geographic region, age, mix of customer relationship and type of product purchased.

Financial Liabilities

Financial liabilities held for trading are measured at fair value through the profit and loss, and all other financial liabilities are measured at amortised cost unless the fair value option is applied.

Finance Income

Finance income comprises interest income on funds invested and any gains on hedging instruments that are recognised in the Consolidated Income Statement. Interest income is recognised as it accrues using the effective interest rate method.

Finance Expense

Finance expense comprises negative interest charged on cash balances held in certain currencies, interest payable on borrowings calculated using the effective interest rate method, fair value gains and losses on hedging instruments that are recognised in the Consolidated Income Statement, the net finance cost of the Group's defined benefit pension scheme, lease interest and the discount component of the deferred consideration which is unwound as an interest charge in the Consolidated Income Statement over the life of the obligation.

Borrowing costs

Borrowing costs directly attributable to qualifying assets, as defined in IAS 23 *Borrowing costs*, are fully capitalised during the period of time that is necessary to complete and prepare the asset for its intended use. Other borrowing costs are expensed to the Consolidated Income Statement in the period in which they are incurred.

Share-Based Payment Transactions

The Group grants equity settled share based payments to employees through the Performance Share Plan and the Deferred Bonus Plan.

The fair value of these equity settled transactions is determined at grant date and is recognised as an employee expense in the Consolidated Income Statement, with the corresponding increase in equity, on a straight line basis over the vesting period. The fair value at the grant date is determined using a combination of the Monte Carlo simulation technique and the Black Scholes model, excluding the impact of any non-market conditions. Non-market vesting conditions are included in the assumptions about the number of options that are expected to vest. At each reporting date, the Group revises its estimates of the number of options that are likely to vest as a result of non-market conditions. Any adjustment from this revision is recognised in the Consolidated Income Statement with a corresponding adjustment to equity.

Where the share based payments give rise to the issue of new share capital, the proceeds received by the Company are credited to share capital (nominal value) and share premium (where applicable) when the share entitlements are exercised. Where the share-based payments give rise to the re-issue of shares from treasury shares, the proceeds of issue are credited to share premium.

The Group does not operate any cash-settled share-based payment schemes or share-based payment transactions with cash alternatives as defined in IFRS 2.

Treasury Shares

Where the Company purchases its own equity share capital, the consideration paid is deducted from total shareholders' equity and classified as treasury shares until such shares are cancelled or reissued. Where such shares are subsequently sold or reissued, any consideration received is included in share premium account. No gains or losses are recognised on the purchase, sale, cancellation or issue of treasury shares.

Non-controlling interest

Non-controlling interests represent the portion of the equity of a subsidiary not attributable either directly or indirectly to the parent company and are presented separately in the Consolidated Income Statement and within equity in the Consolidated Statement of Financial Position, distinguished from shareholders' equity attributable to owners of the parent company.

Accounting Estimates and Judgements

In the process of applying the Group's accounting policies, as set out on pages 145 to 153, management are required to make estimates and judgements that could materially affect the Group's reported results or net asset position.

The preparation of the Group's consolidated financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities in future periods. The Group has considered the impact of climate change on the consolidated financial statements, including the carrying value of assets, the useful economic life of assets, and provisions.

The areas where key estimates and judgements were made by management and are material to the Group's reported results or net asset position, are as follows:

Impairment (Note 10)

The Group is required to review assets for objective evidence of impairment.

It does this on the basis of a review of the budget and rolling 5 year forecasts (4 year strategic plan, as approved by the Board, plus year 5 forecasted by management), which by their nature are based on a series of assumptions and estimates.

Notes to the Financial Statements (continued)
For The Year Ended 31 December 2022

1 Statement of Accounting Policies (continued)

The Group has performed impairment tests on those cash generating units which contain goodwill, and on any assets where there are indicators of impairment. The key assumptions associated with these reviews are detailed in Note 10. The Group also considered the potential impact of climate change. This is an area of estimation and judgement.

Guarantees & warranties (Note 21)

Certain products carry formal guarantees of satisfactory functional and aesthetic performance of varying periods following their purchase. Local management evaluate the constructive or legal obligation arising from customer feedback and assess the requirement to provide for any probable outflow of economic benefit arising from a settlement. This is an area of estimation and judgement.

Recoverability of trade receivables (Note 15)

The Group provides credit to customers and as a result there is an associated risk that the customer may not be able to pay outstanding balances.

Under IFRS 9 the Group uses an allowance matrix to measure Expected Credit Loss (ECL) of trade receivables from customers. Loss rates are calculated using a "roll rate" method based on the probability of a receivable progressing through successive chains of non-payment to write-off. The rates are calculated at a business unit level which reflects the risks associated with geographic region, age, mix of customer relationship and type of product purchased. This is an area of estimation and judgement.

Valuation of inventory (Note 14)

Inventories are measured at the lower of cost and net realisable value. The Group's policy is to hold inventories at original cost and create an inventory provision where evidence exists that indicates net realisable value is below cost for a particular item of inventory. Damaged, slow-moving or obsolete inventory are typical examples of such evidence. This is an area of estimation and judgement.

Leases (Note 17)

The Group has applied judgement to determine the lease term of contracts that include termination and extension options. If the Group is reasonably certain to exercise such options, the relevant amount of right of use assets and lease liabilities are recognised.

The Group has also applied judgement in determining the incremental borrowing rates (IBR). The incremental borrowing rate is the rate of interest that a lessee would expect to incur on funds borrowed over a similar term and security to obtain a comparable value to the right of use asset in the relevant economic environment. The Group estimates the IBR using observable inputs (such as market interest rates) when available and makes certain entity-specific estimates (such as country risk and entity specific credit rating) as required.

Business Combinations (Note 23)

Business combinations are accounted for using the acquisition method which requires that the assets and liabilities assumed are recorded at their respective fair values at the date of acquisition. The application of this method requires certain estimates and assumptions relating, in particular, to the determination of the fair values of the acquired assets and liabilities assumed at the date of acquisition.

For intangible assets acquired, the Group bases valuations on expected future cash flows. This method employs a discounted cash flow analysis using the present value of the estimated cash flows expected to be generated from these intangible assets using appropriate discount rates and revenue forecasts. The period of expected cash flows is based on the expected useful life of the intangible asset acquired.

Measurement of deferred contingent consideration and put option liabilities related to business combinations require assumptions to be made regarding profit forecasts and discount rates used to arrive at the net present value of the potential obligations. The Group has considered all available information in arriving at the estimate of liabilities associated with deferred contingent consideration obligations. This is an area of estimation and judgement.

Income taxes (Note 8)

The Group is subject to income tax in numerous jurisdictions. Significant judgement is required in determining the worldwide provision for income taxes. There are many transactions for which the ultimate tax determination is uncertain. The Group recognises liabilities based on estimates of whether additional taxes will be due. Once it has been concluded that a liability needs to be recognised, the liability is measured based on the tax laws that have been enacted or substantially enacted at the end of the reporting period. The amount shown for current taxation includes an estimate for uncertain tax treatments where the Group considers it probable that uncertain tax treatments will not be accepted by tax authorities and the estimate is measured using either the most likely amount method or the expected value method, as appropriate, prescribed by IFRIC 23. Where the final tax outcome of these matters is different from the amounts that were initially estimated, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

Deferred tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the unused tax losses and unused tax credits can be utilised. The Group estimates the most probable amount of future taxable profits, using assumptions consistent with those employed in impairment calculations, and taking into consideration applicable tax legislation in the relevant jurisdiction. These calculations also require the use of estimates and judgement.

Deferred Contingent Consideration (Note 19)

Measurement of put option liabilities require assumptions to be made regarding profit forecasts and discount rates used to arrive at the net present value of the potential obligations. The Group has considered all available information in arriving at the estimate of liabilities associated with put option obligations. This is an area of estimation.

2 Segment Reporting

In identifying the Group's operating segments, management based its decision on the product supplied by each segment and the fact that each segment is managed and reported separately to the Chief Operating Decision Maker. These operating segments are monitored and strategic decisions are made on the basis of segment operating results.

The Group established a new division, Roofing + Waterproofing, during the financial year. This encompasses the Group's waterproof membrane roofing solutions activities which has resulted from the acquisition of Ondura Group and Derbigum during the financial year. There were no operations or activities in 2021 that are related to the new segment and therefore no changes have been made to the comparatives in relation to the new division.

Operating segments

The Group has the following six operating segments:

Insulated Panels	Manufacture of insulated panels, structural framing and metal facades.
Insulation	Manufacture of rigid insulation boards, technical insulation and engineered timber systems.
Light + Air	Manufacture of daylighting, smoke management, ventilation systems and service activities.
Water + Energy	Manufacture of energy and water solutions and all related service activities.
Data + Flooring	Manufacture of data centre storage solutions and raised access floors.
Roofing + Waterproofing	Manufacture of roofing and waterproofing solutions for renovation and new construction of buildings.

Analysis by class of business

Segment revenue and disaggregation of revenue

	Insulated Panels €m	Insulation €m	Light + Air €m	Water + Energy €m	Data + Flooring €m	Roofing + Waterproofing €m	Total €m
Total revenue – 2022	5,181.5	1,658.3	700.7	287.1	360.1	153.2	**8,340.9**
Total revenue – 2021	4,229.2	1,182.9	552.2	261.3	271.4	-	6,497.0
Disaggregation of revenue 2022							
Point of Time	5,147.7	1,633.1	409.5	286.6	325.4	153.2	**7,955.5**
Over Time & Contract	33.8	25.2	291.2	0.5	34.7	-	**385.4**
	5,181.5	1,658.3	700.7	287.1	360.1	153.2	**8,340.9**
Disaggregation of revenue 2021							
Point of Time	4,210.9	1,152.0	296.3	258.8	240.1	-	6,158.1
Over Time & Contract	18.3	30.9	255.9	2.5	31.3	-	338.9
	4,229.2	1,182.9	552.2	261.3	271.4	-	6,497.0

The disaggregation of revenue by geography is set out in more detail on page 156.

The segments specified above capture the major product lines relevant to the Group.

The combination of the disaggregation of revenue by product group, geography and the timing of revenue recognition capture the key categories of disclosure with respect to revenue. Typically, individual performance obligations are specifically called out in the contract which allow for accurate recognition of revenue as and when performances are fulfilled. Given the nature of the Group's product set, customer returns are not a significant feature of our business model. No further disclosures are required with respect to disaggregation of revenue other than what has been presented in this note.

Inter-segment transfers are carried out at arm's length prices and using an appropriate transfer pricing methodology. As inter-segment revenue is not material, it is not subject to separate disclosure in the above analysis. For the purposes of the segmental analysis, corporate overheads have been allocated to each division based on their respective revenue for the year.

2 Segment Reporting (continued)

	Insulated Panels €m	Insulation €m	Light + Air €m	Water + Energy €m	Data + Flooring €m	Roofing + Waterproofing €m	Total 2022 €m	Total 2021 €m
Trading profit – 2022	548.7	165.2	52.3	15.4	43.1	8.5	**833.2**	
Intangible amortisation	(13.0)	(9.4)	(4.6)	(0.5)	(0.1)	(4.8)	**(32.4)**	
Non trading item	(16.5)	-	-	-	-	-	**(16.5)**	
Operating profit – 2022	519.2	155.8	47.7	14.9	43.0	3.7	**784.3**	
Trading profit – 2021	519.8	146.7	36.0	20.0	32.3	-		754.8
Intangible amortisation	(13.7)	(8.6)	(5.8)	(1.2)	(0.2)	-		(29.5)
Operating profit - 2021	506.1	138.1	30.2	18.8	32.1	-		725.3
Net finance expense							**(37.7)**	(36.3)
Profit for the year before tax							**746.6**	689.0
Income tax expense							**(130.6)**	(118.4)
Net profit for the year							**616.0**	570.6

Segment assets

	Insulated Panels €m	Insulation €m	Light + Air €m	Water + Energy €m	Data + Flooring €m	Roofing + Waterproofing €m	Total 2022 €m	Total 2021 €m
Assets – 2022	3,350.6	1,683.4	686.5	247.6	240.4	783.1	**6,991.6**	
Assets – 2021	3,266.4	1,309.4	665.0	243.5	227.2	-		5,711.5
Derivative financial instruments							**0.4**	0.3
Cash and cash equivalents							**649.3**	641.4
Deferred tax asset							**40.1**	34.7
Total assets as reported in the Consolidated Statement of Financial Position							**7,681.4**	6,387.9

Segment liabilities

	Insulated Panels €m	Insulation €m	Light + Air €m	Water + Energy €m	Data + Flooring €m	Roofing + Waterproofing €m	Total 2022 €m	Total 2021 €m
Liabilities – 2022	(1,080.7)	(320.8)	(248.1)	(95.7)	(77.9)	(163.7)	**(1,986.9)**	
Liabilities – 2021	(1,240.7)	(307.1)	(218.1)	(98.4)	(74.4)	-		(1,938.7)
Interest bearing loans and borrowings (current and non-current)							**(2,188.9)**	(1,397.5)
Derivative financial instruments (current and non-current)							**-**	-
Income tax liabilities (current and deferred)							**(110.1)**	(92.4)
Total liabilities as reported in the Consolidated Statement of Financial Position							**(4,285.9)**	(3,428.6)

2 Segment Reporting (continued)

Other segment information

	Insulated Panels €m	Insulation €m	Light + Air €m	Water + Energy €m	Data + Flooring €m	Roofing + Waterproofing €m	Total €m
Capital investment – 2022 *	178.8	136.8	12.1	8.8	6.2	208.7	**551.4**
Capital investment – 2021 *	164.3	94.2	32.3	8.4	5.5	-	304.7
Depreciation included in segment result – 2022	(85.1)	(41.7)	(18.9)	(8.1)	(6.6)	(4.7)	**(165.1)**
Depreciation included in segment result – 2021	(77.7)	(32.2)	(15.8)	(7.0)	(5.7)	-	(138.4)
Non-cash items included in segment result – 2022	(10.0)	(4.1)	(1.4)	(1.3)	(1.5)	(0.1)	**(18.4)**
Non-cash items included in segment result – 2021	(10.2)	(3.4)	(1.4)	(1.1)	(1.6)	-	(17.7)

* Capital investment also includes fair value of property, plant and equipment and intangible assets acquired in business combinations.

Analysis of segmental data by Geography

	Western & Southern Europe €m	Central & Northern Europe €m	Americas €m	Rest of World €m	Total €m
Income Statement Items					
Revenue – 2022	3,850.2	2,133.3	1,823.7	533.7	**8,340.9**
Revenue – 2021	3,239.8	1,629.8	1,269.8	357.6	6,497.0
Statement of Financial Position Items					
Non-current assets – 2022 *	2,248.0	1,121.9	784.4	273.1	**4,427.4**
Non-current assets – 2021 *	1,535.8	842.2	720.8	245.4	3,344.2
Other segmental information					
Capital investment – 2022	318.3	167.9	45.2	20.0	**551.4**
Capital investment – 2021	97.3	130.6	66.3	10.5	304.7

* Total non-current assets excluding deferred tax assets.

The Group is trading in over 80 countries worldwide. Foreign regions of operation are as set out above and specific countries of operation are highlighted separately below on the basis of materiality where revenue exceeds 15% of total Group revenues. Revenues, non-current assets and capital investment (as defined in IFRS 8) attributable to France were €1,238.1m (2021: €988.3m), €734.1m (2021: €251.2m) and €161.1m (2021: €29.3m) respectively.

Revenues, non-current assets and capital investment (as defined in IFRS 8) attributable to the country of domicile (Ireland) were €256.5m (2021: €206.0m), €168.0m (2021: €89.0m) and €15.5m (2021: €19.3m) respectively.

The country of domicile (Ireland) is included in Western & Southern Europe. Western & Southern Europe also includes France, Benelux, Spain, and Britain while Central & Northern Europe includes Germany, the Nordics, Poland, Hungary, Romania, Czech Republic, the Baltics and other South Central European countries. Americas comprises the US, Canada, Central Americas and South America. Rest of World is predominantly Australasia and the Middle East.

There are no material dependencies or concentrations on individual customers which would warrant disclosure under IFRS 8. The individual entities within the Group each have a large number of customers spread across various activities, end-uses and geographies.

3 Non Trading Item

	2022 €m	2021 €m
Loss on disposal of subsidiary	**16.5**	-

During the year the Group's Russian operations were divested in full which resulted in a loss on disposal of €16.5m (2021: €nil).

4 Employees

a) Employee numbers

The average number of persons employed by the Group in the financial year was:

	2022 Number	2021 Number
Production	**12,491**	11,062
Sales and distribution	**4,598**	3,873
Management and administration	**3,501**	2,945
	20,590	17,880

b) Employee costs, including executive directors

	2022 €m	2021 €m
Wages and salaries	**1,025.2**	832.8
Social welfare costs	**128.3**	104.5
Pension costs - defined contribution (Note 32)	**32.3**	26.3
Share based payments and awards	**18.4**	17.7
	1,204.2	981.3
Actuarial losses/(gains) recognised in other comprehensive income	**20.3**	(21.5)
	1,224.5	959.8

c) Employee share based compensation

The Group currently operates a number of equity settled share based payment schemes; a Performance Share Plan (PSP) and a Deferred Bonus Plan, which was introduced in 2015. The details of these schemes are provided in the Report of the Remuneration Committee.

Performance Share Plan (PSP)

	Number of PSP Options 2022	2021
Outstanding at 1 January	**1,713,261**	1,772,438
Granted	**347,121**	397,929
Forfeited	**(60,747)**	(67,236)
Lapsed	**-**	-
Exercised	**(284,756)**	(389,870)
Outstanding at 31 December	**1,714,879**	1,713,261
Of which, exercisable	**554,517**	337,352

The Group recognised a PSP expense of €18.4m (2021: €17.7m) in the Consolidated Income Statement during the year. All PSP options are exercisable at €0.13 per share. For PSP options that were exercised during the year the average share price at the date of exercise was €71.33 (2021: €82.55). The weighted average contractual life of share options outstanding at 31 December 2022 is 4.2 years (2021: 4.6 years). The weighted average exercise price during the period was €0.13 (2021: €0.13).

4 Employees (continued)

The fair values of options granted under the PSP scheme during the current and prior year were determined using the Black Scholes Model or the Monte Carlo Pricing Model as appropriate. The key assumptions used in the model were as follows:

	2022 Awards	2021 Awards	2021 Awards
	22 February 2022	23 August 2021	24 February 2021
Share price at grant date	**€88.60**	€96.16	€61.0
Exercise price per share	**€0.13**	€0.13	€0.13
Expected volatility	**36.7%**	35.9%	35.6%
Expected dividend yield	**1.25%**	0.42%	0.51%
Risk-free rate	**(0.2%)**	(0.8%)	(0.7%)
Expected life	**3 years**	3 years	3 years

The resulting weighted average fair value of options granted in the year was €61.55 (2021: €51.41).

As set out in the Report of the Remuneration Committee, the number of options that will ultimately vest is contingent on market conditions such as Total Shareholder Return and non-market conditions such as the Earnings Per Share of the Group and its Net Promotor Score (NPS). Market conditions were taken into account in determining the above fair value, and non-market conditions were considered when estimating the number of shares that will eventually vest. Expected volatility was determined by calculating the historical volatility of the Group and peer company share prices over the previous 3 years. The Report of the Remuneration Committee sets out the current companies within the peer group.

Deferred Bonus Plan

As set out in the Report of the Remuneration Committee, the Deferred Bonus Plan (DBP) is intended to reward incremental performance over and above the growth targeted by the annual performance related bonus. Any DBP bonus earned for such incremental performance is satisfied by the payment of deferred share awards. These shares are held for the benefit of the individual participants for two years without any additional performance conditions. These shares vest after two years but are forfeited if the participant leaves the Group within that period.

During the year, 21,438 (2021: nil) awards were granted under the DBP and 2,272 (2021: 15,718) awards were exercised. 21,438 awards remain outstanding at 31 December 2022. A charge of €0.9m was recognised in the Consolidated Income Statement for 2022 (2021: €1.5m).

5 Finance Expense And Finance Income

	2022 €m	2021 €m
Finance expense		
Lease interest	**4.7**	3.7
Deferred contingent consideration fair value movement	**-**	0.1
Bank loan interest	**10.1**	5.4
Private placement loan note interest	**24.5**	26.8
Other interest	**0.1**	0.3
	39.4	36.3
Finance income		
Interest earned	**(1.7)**	-
Net finance expense	**37.7**	36.3

€0.7m of borrowing costs were capitalised during the year (2021: €3.9m). No costs were reclassified from other comprehensive income to profit during the year (2021: €nil).

6 Profit For The Year Before Income Tax

	2022 €m	2021 €m
The profit before tax for the year is stated after charging / (crediting):		
Distribution expenses	**339.5**	277.1
Product development costs (total, including payroll)	**60.3**	40.9
Depreciation	**165.1**	138.4
Amortisation of intangible assets	**32.4**	29.5
Impairment of property, plant and equipment	**-**	3.1
Foreign exchange net losses/(gains)	**13.0**	(2.0)
(Profit)/loss on sale of property, plant and equipment	**(0.4)**	0.4

Analysis of total auditor's remuneration

	EY Ireland 2022 €m	**Other EY Offices 2022 €m**	**Total 2022 €m**	EY Ireland 2021 €m	Other EY Offices 2021 €m	Total 2021 €m
Audit of Group	**1.4**	**-**	**1.4**	1.0	-	1.0
Audit of other subsidiaries	**-**	**2.7**	**2.7**	-	2.7	2.7
Tax compliance and advisory services	**-**	**0.1**	**0.1**	0.3	-	0.3
	1.4	**2.8**	**4.2**	1.3	2.7	4.0

Included in Audit of Group are total fees of €0.4m which are due to EY in respect of the audit of the Parent Company (2021: €0.4m).

7 Directors' Remuneration

	2022 €m	2021 €m
Fees	**0.9**	0.7
Other emoluments	**6.3**	2.7
Pension costs	**0.5**	0.6
	7.7	4.0
Performance Share Plan accounting charge	**3.5**	3.1
	11.2	7.1

In accordance with the Statement of Accounting Policies (Share-Based Payment Transactions) and Note 4, the Performance Share Plan accounting charge of €3.5m (2021: €3.1m) is the fair value expense, accounted for in accordance with IFRS 2, of equity settled share-based payments attributable to directors for the period. The fair value of each equity settled share-based payment is determined at grant date and is recognised as an employee expense in the Consolidated Income Statement on a straight-line basis over the vesting period.

Pursuant to the Companies Act 2014 and related guidance, the Report of the Remuneration Committee reports share-based payments which vested in the period, and they are measured at market value rather than fair value. This explains differences between the total Directors' Remuneration expense of €11.2m in this Note and the total Director's Remuneration expense of €9.3m in the Report of the Remuneration Committee.

Aggregate gains of €4.9m (2021: €2.9m) were realised with respect to share options exercised by directors during the financial year. Details of the number of share options exercised by each director, the market value of the shares on the date of exercise, and the exercise price are included in the Performance Share Plan section of the Report of the Remuneration Committee.

A detailed analysis of directors' remuneration is contained in the Report of the Remuneration Committee.

8 Income Tax Expense

	2022 €m	2021 €m
Tax recognised in the Consolidated Income Statement		
Current taxation:		
Current tax expense	**148.9**	129.3
Adjustment in respect of prior years	**1.0**	1.1
	149.9	130.4
Deferred taxation:		
Origination and reversal of temporary differences	**(18.7)**	(14.7)
Effect of rate change	**(0.6)**	2.7
	(19.3)	(12.0)
Income tax expense	**130.6**	118.4

The following table is the numerical reconciliation between tax expenses and the product of accounting profit multiplied by the applicable tax rate:

	2022 €m	2021 €m
Profit for the year	**746.6**	689.0
Applicable notional tax charge (12.5%)	**93.3**	86.1
Expenses not deductible for tax purposes	**21.5**	17.5
Net effect of differing tax rates	**33.7**	27.3
Utilisation of unprovided deferred tax assets	**(1.6)**	(1.9)
Other items	**(16.3)**	(10.6)
Total income tax expense	**130.6**	118.4

The total tax charge in future periods will be affected by any changes to the corporation tax rates in force in the countries in which the Group operates. Changes in the geographical mix of future earnings will also impact the total tax charge.

The methodology used to determine the recognition and measurement of uncertain tax positions is set out in Note 1 'Statement of Accounting Policies'.

The total value of deductible temporary differences which have not been recognised is €31.8m (2021: €23.7m) consisting mainly of tax losses forward. €0.1m (2021: €0.3m) of the losses expire within 5 years while all other losses may be carried forward indefinitely.

No provision has been made for tax in respect of temporary differences arising from unremitted earnings of foreign operations as there is no commitment to remit such earnings and no current plans to do so. Deferred tax liabilities of €19.6m (2021: €16.1m) have not been recognised for withholding tax that would be payable on unremitted earnings of €391.3m (2021: €322.2m) in certain subsidiaries.

9 Earnings Per Share

	2022 €m	2021 €m
The calculations of earnings per share are based on the following:		
Profit attributable to ordinary shareholders	**598.0**	554.1
	Number of shares ('000) 2022	Number of shares ('000) 2021
Weighted average number of ordinary shares for the calculation of basic earnings per share	**181,487**	181,348
Dilutive effect of share options	**1,451**	1,565
Weighted average number of ordinary shares for the calculation of diluted earnings per share	**182,938**	182,913
	2022 € cent	2021 € cent
Basic earnings per share	**329.5**	305.6
Diluted earnings per share	**326.9**	303.0

Dilution is attributable to the weighted average number of share options outstanding at the end of the reporting period.

The number of options which are anti-dilutive and have therefore not been included in the above calculations is nil (2021: nil).

10 Goodwill

	2022 €m	2021 €m
At 1 January	**1,908.6**	1,478.8
Additions relating to acquisitions (Note 23)	**578.7**	380.4
Net exchange movement	**8.2**	49.4
Carrying amount 31 December	**2,495.5**	1,908.6
At 31 December		
Cost	**2,563.2**	1,976.3
Accumulated impairment losses	**(67.7)**	(67.7)
Carrying amount	**2,495.5**	1,908.6

Cash generating units

Goodwill acquired through business combinations is allocated, at acquisition, to CGUs that are expected to benefit from synergies in that combination. The CGUs are the lowest level within the Group at which the associated goodwill is monitored for internal management reporting purposes and are not larger than the operating segments determined in accordance with IFRS 8 *Operating Segments*.

The Group has established a new division, Roofing + Waterproofing, during the financial year. This encompasses the Group's waterproof membrane roofing solution activities which has resulted from the acquisition of Ondura Group and Derbigum during the financial year. On that basis and following an assessment of the Group's CGUs, Roofing + Waterproofing is listed as a separate CGU below. A total of 12 (2021: 11) CGUs have been identified and these are analysed between the six business segments in the Group as set out below. Assets and liabilities have been assigned to the CGUs on a reasonable and consistent basis.

10 Goodwill (continued)

	Cash-generating units		Goodwill (€m)	
	2022	2021	**2022**	2021
Insulated Panels	**6**	6	**996.6**	962.8
Insulation	**1**	1	**620.5**	457.1
Light + Air	**1**	1	**296.9**	287.6
Water + Energy	**1**	1	**107.3**	110.0
Data + Flooring	**2**	2	**92.3**	91.1
Roofing + Waterproofing	**1**	-	**381.9**	-
Total	**12**	11	**2,495.5**	1,908.6

Significant goodwill amounts

Management has assessed that, in line with IAS 36 *Impairment of Assets*, there are five CGUs that are individually significant (greater than 10% of total goodwill) that require additional disclosure and are as follows:

	Panels Western Europe		Panels Joris Ide		Insulation		Light + Air		Roofing + Waterproofing	
	2022	2021	**2022**	2021	**2022**	2021	**2022**	2021	**2022**	2021
Goodwill (€m)	**340.2**	313.8	**342.0**	344.4	**620.5**	457.1	**296.9**	287.6	**381.9**	n/a
Discount rate (%)	**9.6**	7.6	**9.9**	8.1	**9.9**	7.9	**9.2**	7.4	**10.2**	n/a
Excess of value-in-use over carrying amount (€m)	**2,057.9**	2,810.6	**1,322.2**	1,862.6	**1,127.3**	2,590.4	**697.2**	786.8	**192.4**	n/a

The goodwill allocated to these 5 CGUs (2021: 4 CGUs) accounts for 79% (2021: 74%) of the total carrying amount of €2,495.5m (2021: €1,908.6m). The remaining goodwill balance of €514.0m (2021: €505.7m) is allocated across the other 7 CGUs (2021: 7 CGUs), none of which are individually significant. Similar assumptions and techniques are applied on the impairment testing of these CGUs.

None of the individually significant CGUs are included in the "Sensitivity analysis" section as it is not considered reasonably possible that there would be a change in the key assumptions such that the carrying amount would exceed value-in-use. Consequently, no further disclosures have been provided for these CGUs.

Impairment testing

Goodwill acquired through business combinations has been allocated to the above CGUs for the purpose of impairment testing. Impairment of goodwill occurs when the carrying value of the CGU is greater than the present value of the cash that it is expected to generate (i.e. the recoverable amount). The Group reviews the carrying value of each CGU at least annually or more frequently if there is an indication that a CGU may be impaired.

The recoverable amount of each CGU is determined from value-in-use calculations. The forecasts used in these calculations are based on a 4 year financial plan approved by the Board of Directors, plus year 5 as forecasted by management, and specifically excludes any future acquisition activity. They include assumptions regarding future organic growth with cash flows after year 5 assuming to continue in perpetuity at a general growth rate of 2% to 5% (Panels LATAM 5%), reflecting the relevant CGU market growth. The use of cash flows in perpetuity is considered appropriate in light of the Group's established history of earnings growth and cash flow generation, its strong financial position and the nature of the industry in which the Group operates.

The value in use calculation represents the present value of the future cash flows, including the terminal value, discounted at a rate appropriate to each CGU. The real pre-tax discount rates used range from 9.2% to 18.4% (2021: 7.4% to 17.7%). These rates are based on the Group's estimated weighted average cost of capital, adjusted for risk, and are consistent with external sources of information.

The cash flows and the key assumptions used in the value in use calculations are determined based on the historical performance of the Group, its strong current financial position as well as management's knowledge and expectation of future trends in the industry. Expected future cash flows are, however, inherently uncertain and are therefore liable to material change over time. The key assumptions used in the value in use calculations are subjective and include projected EBITDA margins, net cash flows, discount rates used and the duration of the discounted cash flow model. Net cashflows incorporate the estimated capital expenditure required to meet the Group's Planet Passionate targets.

Sensitivity analysis

Sensitivity analysis was performed by adjusting cash flows by 20%, the discount rate by 17%, the average operating margin of each division by over 25% and by reducing the long-term growth rate to 1.5%. Each test resulted in a positive recoverable amount for each CGU under each approach. Management believes, therefore, that any reasonable change in any of the key assumptions would not cause the carrying value of goodwill to exceed the recoverable amount, thereby giving rise to an impairment.

11 Other Intangible Assets

2022	**Customer Relationships €m**	**Patents & Brands €m**	**Other Intangibles €m**	**Total €m**
Cost				
At 1 January	50.4	157.7	60.1	268.2
Acquisitions (Note 23)	75.9	40.7	13.6	130.2
Net exchange difference	0.5	0.8	1.0	2.3
At 31 December	**126.8**	**199.2**	**74.7**	**400.7**
Accumulated amortisation				
At 1 January	40.8	92.7	41.5	175.0
Charge for the year	9.5	15.9	7.0	32.4
Net exchange difference	0.4	0.5	0.6	1.5
At 31 December	**50.7**	**109.1**	**49.1**	**208.9**
Net Book Value as at 31 December 2022	**76.1**	**90.1**	**25.6**	**191.8**

2021	Customer Relationships €m	Patents & Brands €m	Other Intangibles €m	Total €m
Cost				
At 1 January	48.9	134.5	40.3	223.7
Acquisitions (Note 23)	0.8	19.2	18.5	38.5
Net exchange difference	0.7	4.0	1.3	6.0
At 31 December	50.4	157.7	60.1	268.2
Accumulated amortisation				
At 1 January	35.0	76.2	29.8	141.0
Charge for the year	5.2	13.9	10.4	29.5
Net exchange difference	0.6	2.6	1.3	4.5
At 31 December	40.8	92.7	41.5	175.0
Net Book Value as at 31 December 2021	9.6	65.0	18.6	93.2

Other intangibles relate primarily to technological know how and order backlogs.

12 Property, Plant And Equipment

	Land and buildings €m	Plant, machinery and other equipment €m	Motor vehicles €m	Total €m
As at 31 December 2022				
Cost	959.7	1,920.6	62.3	2,942.6
Accumulated depreciation and impairment charges	(302.5)	(1,162.8)	(39.4)	(1,504.7)
Net carrying amount	**657.2**	**757.8**	**22.9**	**1,437.9**
At 1 January 2022, net carrying amount	551.6	585.6	18.6	1,155.8
Acquisitions through business combinations (Note 23)	85.2	58.4	1.3	144.9
Divestment	(3.0)	(2.1)	(0.2)	(5.3)
Additions	56.8	209.6	9.9	276.3
Disposals	(11.1)	(6.5)	(0.6)	(18.2)
Reclassification	(0.2)	(0.8)	1.0	-
Depreciation charge for year	(21.8)	(88.9)	(7.2)	(117.9)
Impairment charge for year	-	-	-	-
Effect of movement in exchange rates	(0.3)	2.5	0.1	2.3
At 31 December 2022, net carrying amount	**657.2**	**757.8**	**22.9**	**1,437.9**

	Land and buildings €m	Plant, machinery and other equipment €m	Motor vehicles €m	Total €m
As at 31 December 2021				
Cost	826.0	1,609.3	53.0	2,488.3
Accumulated depreciation and impairment charges	(274.4)	(1,023.7)	(34.4)	(1,332.5)
Net carrying amount	551.6	585.6	18.6	1,155.8
At 1 January 2021, net carrying amount	468.1	488.2	16.6	972.9
Acquisitions through business combinations (Note 23)	52.8	39.2	2.0	94.0
Additions	36.5	129.3	6.4	172.2
Disposals	(2.6)	(2.6)	(0.4)	(5.6)
Reclassification	6.0	(5.6)	(0.4)	-
Depreciation charge for year	(17.5)	(77.9)	(6.0)	(101.4)
Impairment charge for year	(2.3)	(0.8)	-	(3.1)
Effect of movement in exchange rates	10.6	15.8	0.4	26.8
At 31 December 2021, net carrying amount	551.6	585.6	18.6	1,155.8

Included in land and buildings and plant, machinery and other equipment were amounts of €14.7m and €121.4m respectively (2021: of €6.2m and €81.2m) relating to expenditure for assets in the course of construction. These assets have not yet been depreciated.

The Group has no material investment properties and hence no property assets are held at fair value.

No property, plant or equipment have been pledged as security for liabilities entered into by the Group.

13 Financial Assets

	2022 €m	2021 €m
Equity investments designated as at FVOCI		
At 1 January	**13.2**	8.2
Additions	**113.3**	5.0
Fair value remeasurement	**(32.6)**	-
Effect of movement in exchange rates	**(0.3)**	-
At 31 December	**93.6**	13.2

In August 2022, the Group acquired a strategic minority interest of 24% in Nordic Waterproofing Holding AB. Nordic Waterproofing Holding AB is a publicly listed company on the Nasdaq Stockholm and is a market leader in waterproofing products and services for the protection of buildings and infrastructure. The Group does not have significant influence in this entity and therefore it is accounted for as an equity investment.

In September 2022, the Group also increased its shareholding in H2 Green Steel.

Investments in Subsidiaries

	2022 €m	2021 €m
Company		
At 1 January	**1,226.7**	1,212.8
Share options and awards	**11.8**	13.9
At 31 December	**1,238.5**	1,226.7

The share options and awards addition reflect the cost of share based payments attributable to employees of subsidiary undertakings, which are treated as capital contributions by the Company. The carrying value of investments is reviewed at each reporting date and there were no indicators of impairment.

14 Inventories

	2022 €m	2021 €m
Raw materials and consumables	**920.4**	916.7
Work in progress	**49.2**	29.9
Finished goods	**400.2**	291.8
Inventory impairment allowance	**(134.0)**	(99.5)
At 31 December	**1,235.8**	1,138.9

A total of €5.1bn (2021: €3.9bn) of inventories was included in the Consolidated Income Statement as an expense. This includes a net income statement charge of €26.3m (2021: €19.3m) arising on the inventory impairment allowance. Inventory impairment allowance levels are continuously reviewed by management and revised where appropriate, taking account of the latest available information on the recoverability of carrying amounts.

No inventories have been pledged as security for liabilities entered into by the Group.

15 Trade And Other Receivables

	2022 €m	2021 €m
Amounts falling due within one year:		
Trade receivables, gross	**1,262.3**	1,110.3
Expected credit loss allowance	**(125.5)**	(87.4)
Trade receivables, net	**1,136.8**	1,022.9
Other receivables	**129.9**	134.5
Prepayments	**61.7**	69.2
Value added tax recoverable	**-**	1.8
	1,328.4	1,228.4

The maximum exposure to credit risk for trade and other receivables at the reporting date is their carrying amount.

The Group uses an allowance matrix to measure Expected Credit Loss (ECL) of trade receivables from customers. The simplified approach has been adopted and this gives rise to an ECL of €125.5m in 2022 (2021: €87.4m). This is presented in more detail in Note 20.

Company

	2022 €m	2021 €m
Amounts falling due within one year:		
Amounts owed by group undertakings	**300.1**	318.4
	300.1	318.4

The amounts due from group undertakings are unsecured, interest free and are repayable on demand.

16 Trade And Other Payables

	2022 €m	2021 €m
Current		
Trade payables	**661.7**	726.8
Accruals	**526.1**	519.5
Deferred income and customer prepayments	**117.2**	99.5
Income tax & social welfare	**48.4**	44.0
Value added tax	**15.3**	-
	1,368.7	1,389.8

Deferred income primarily relates to service and maintenance and projected related revenue and is primarily short term.

The directors consider that the carrying amount of trade and other payables approximates to their fair value.

Company

	2022 €m	2021 €m
Current		
Amounts owed to group undertakings	**195.5**	137.7
Payables	**0.2**	0.2
	195.7	137.9

The amounts due to group undertakings are unsecured, interest free and are repayable on demand.

17 Leases

Right of use asset

	Land and buildings €m	Plant, machinery and other equipment €m	Motor vehicles €m	Total 2022 €m
At 1 January 2022	**119.0**	**14.7**	**21.8**	**155.5**
Additions	**21.6**	**3.8**	**15.9**	**41.3**
Arising on acquisitions (Note 23)	**22.2**	**8.0**	**6.0**	**36.2**
Remeasurement	**18.9**	**(0.1)**	**0.8**	**19.6**
Terminations	**(1.1)**	**(0.1)**	**(0.5)**	**(1.7)**
Depreciation charge for the year	**(28.1)**	**(4.6)**	**(14.5)**	**(47.2)**
Reclassification	**-**	**-**	**-**	**-**
Effect of movement in exchange rates	**1.8**	**-**	**(0.2)**	**1.6**
At 31 December 2022	**154.3**	**21.7**	**29.3**	**205.3**

	Land and buildings €m	Plant, machinery and other equipment €m	Motor vehicles €m	Total 2021 €m
At 1 January 2021	89.6	6.8	16.6	113.0
Additions	11.8	3.8	12.8	28.4
Arising on acquisitions (Note 23)	26.5	2.3	3.4	32.2
Remeasurement	11.2	5.4	0.7	17.3
Terminations	(2.2)	(0.2)	(0.5)	(2.9)
Depreciation charge for the year	(21.9)	(3.6)	(11.5)	(37.0)
Reclassification	-	(0.1)	0.1	-
Effect of movement in exchange rates	4.0	0.3	0.2	4.5
At 31 December 2021	119.0	14.7	21.8	155.5

Lease liability

	2022 €m	2021 €m
At 1 January	**158.0**	114.8
Additions	**39.7**	27.0
Arising on acquisitions (Note 23)	**25.3**	32.1
Remeasurement	**19.6**	17.3
Terminations	**(1.7)**	(3.0)
Payments	**(50.6)**	(38.6)
Interest	**4.7**	3.7
Effect of movement in exchange rates	**1.8**	4.7
At 31 December	**196.8**	158.0
Split as follows:		
Current liability	**43.2**	35.0
Non-current liability	**153.6**	123.0
At 31 December	**196.8**	158.0

Expenses of €9.6m (2021: €6.8m) relating to short term leases, leases of low-value assets and variable lease payments were recognised in the Consolidated Income Statement.

18 Interest Bearing Loans And Borrowings

	2022 €m	2021 €m
Current financial liabilities		
Private placements	**42.5**	66.0
Bank loans	**40.2**	11.3
Lease obligations per banking covenants	**2.3**	0.1
	85.0	77.4

	2022 €m	2021 €m
Non-current financial liabilities		
Private placements	**1,279.5**	1,311.1
Bank loans (unsecured)	**814.6**	6.7
Lease obligations per banking covenants	**9.8**	2.3
	2,103.9	1,320.1

Analysis of Net debt

	2022 €m	2021 €m
Cash and cash equivalents	**649.3**	641.4
Current borrowings	**(85.0)**	(77.4)
Non-current borrowings	**(2,103.9)**	(1,320.1)
Total Net debt	**(1,539.6)**	(756.1)

The Group's core funding is provided by six (2021: six) private placement loan notes; one (2021: one) USD private placement totalling $200m (2021: $200m) maturing in December 2028 and five (2021: five) EUR private placements totalling €1.1bn (2021: €1.2bn) which will mature in tranches between March 2023 and December 2032. The notes have a weighted average maturity of 5.7 years (2021: 6.4 years).

The primary bank debt facility is a €800m revolving credit facility, which was undrawn at year end, and which matures in May 2026. The revolving credit facility was increased by €100m in December 2022 under the facility's accordion clause.

In April 2022, the Group arranged two additional banking finance facilities with an aggregate value of €800m (€500m maturing April 2024, €300m maturing April 2025). The facilities were fully drawn at year end.

Included in cash at bank and in hand are overdrawn positions of €1,456.8m (31 December 2021: €1,439.8m). These balances form part of a notional cash pool arrangement and are netted against cash balances of €1,480.2m (31 December 2021: €1,463.6m). The net cash pool balance of €23.4m (31 December 2021: €23.8m) is included in the cash and cash equivalents balance above. There is a legal right of offset between these balances and the balances are physically settled on a regular basis.

More details of the Group's loans and borrowings are set out in Note 20.

Net debt, which is an Alternative Performance Measure, is stated net of interest rate and currency hedges which relate to hedges of debt. Foreign currency derivative assets of €0.4m (2021: €0.3m) and foreign currency derivative liabilities of €nil (2021: €nil) which are used for transactional hedging are not included in the definition of net debt. Lease liabilities recognised due to the implementation of IFRS 16 and deferred contingent consideration have also been excluded from the calculation of net debt which is consistent with the terms and conditions of the covenants as set out in the Group's external borrowing arrangements.

19 Deferred Contingent Consideration

	2022 €m	2021 €m
At 1 January	**202.3**	127.6
Deferred contingent consideration arising on acquisitions (Note 23)	**-**	12.1
Movement in deferred contingent consideration arising from fair value adjustment	**-**	0.5
Movement in put liability arising from fair value adjustment	**16.0**	59.5
Amounts paid	**(45.4)**	-
Effect of movement in exchange rates	**14.2**	2.6
At 31 December	**187.1**	202.3
Split as follows:		
Current liabilities	**174.9**	41.7
Non-current liabilities	**12.2**	160.6
	187.1	202.3
Analysed as follows:		
Deferred contingent consideration	**15.7**	24.1
Put liability	**171.4**	178.2
	187.1	202.3

Included in the amounts paid during the period was a payment of €36.6m to acquire the remaining 15% of shares in Bacacier which were held by a non-controlling interest.

For each acquisition for which deferred contingent consideration has been provided, an annual review takes place to evaluate if the payment conditions are likely to be met. For the purposes of the fair value assessments all of the put option liabilities are valued using the option price formula in the shareholder's agreement and the most recent financial projections. These are classified as unobservable inputs. The significant unobservable inputs used in the fair value measurements and the quantitative sensitivity analysis are shown in the table below:

Type	Valuation technique	Significant unobservable inputs	Sensitivity of the input to the fair value
Deferred contingent consideration	*Discounted cashflow method* The net present value of the expected payment is calculated by using a risk adjusted discount rate. The expected payments are valued using the earn out formula in the shareholder's agreement and the most recent financial projections.	→ Risk adjusted discount rates of between 0.0% and 1.5%. → EBITDA multiples of between 2.8 and 8.1.	→ A 10% decrease in the risk adjusted discount rate would result in an increase in the fair value of the deferred contingent consideration of €0.1m. → A 5% increase in the assumed profitability of the acquired entities would result in an increase in the fair value of the deferred contingent consideration of €0.5m.
Put option liabilities	*Discounted cashflow method* The net present value of the expected payment is calculated by using a risk adjusted discount rate. The expected payments are valued using the option price formula in the shareholder's agreement and the most recent financial projections.	→ Risk adjusted discount rates of between 0.6% and 6.1%. → EBITDA multiples of between 6.5 and 8.57.	→ A 10% decrease in the risk adjusted discount rate would result in an increase in the fair value of the put option liabilities of €0.2m. → A 5% increase in the assumed profitability of the acquirees would result in an increase in the fair value of the put option liabilities of €8.3m.

The amount of the deferred contingent consideration and put liability that have been recognised are arrived at by the application of a range of outcomes and associated probabilities in order to determine the carrying amounts.

Liabilities in the range of €nil (2021: €nil) to €15.7m (2021: €24.1m) could arise with respect to potential deferred contingent consideration obligations and €nil (2021: €nil) to €171.4m (2021: €178.2m) with respect to potential put option obligations.

19 Deferred Contingent Consideration (continued)

The put option in the shareholders' agreement with non-controlling shareholders of Isoeste is exercisable from 2023. The undiscounted expected cash outflow is estimated to be €157.2m (2021: €134.8m).

The put option in the shareholders' agreement with non-controlling shareholders of PanelMET has been exercisable since 2022. The undiscounted expected cash outflow is estimated to be €6.4m (2021: €6.1m).

The put option in the shareholders' agreement with non-controlling shareholders of Kingspan Jindal has been exercisable since 2022. The undiscounted expected cash outflow is estimated to be €10.1m (2021: €14.0m).

In the case of Isoeste, PanelMET and Kingspan Jindal, call options rest over the remaining shareholding held by non-controlling interests, which are exercisable by the Group in a very limited range of circumstances. No value has been attributed to these call options.

20 Financial Risk Management and Financial Instruments

Financial Risk Management

In the normal course of business, the Group and Company have exposure to a variety of financial risks, including foreign currency risk, interest rate risk, liquidity risk and credit risk. The Group's and Company's focus is to understand these risks and to put in place policies that minimise the economic impact of an adverse event on the Group's performance. Meetings are held on a regular basis to review the result of the risk assessment, approve recommended risk management strategies and monitor the effectiveness of such policies.

The Group's and Company's risk management strategies include the usage of derivatives (other than for speculative transactions), principally forward exchange contracts, interest rate swaps, and cross currency interest rate swaps.

Liquidity risk

In addition to the high level of free cash flow, the Group operates a prudent approach to liquidity management using a mixture of long-term debt together with short-term debt, cash and cash equivalents, to enable it to meet its liabilities when due.

The Group's core funding is provided by a number of private placement loan notes totalling €1,322.0m (2021: €1,377.1m). The notes have a weighted average maturity of 5.7 years (2021: 6.4 years).

The primary bank debt facility is a €800m revolving credit facility, which was undrawn at year end and which matures in May 2026. The Revolving Credit Facility was increased by €100m in December 2022 under the facility's accordion clause.

In April 2022, the Group arranged two additional banking finance facilities with an aggregate value of €800m (€500m maturing April 2024, €300m maturing April 2025). The facilities were fully drawn at year end.

Both the private placements and the banking facilities (revolving credit facility and two additional banking facilities) have an interest cover test (EBITDA: Net interest must not be less than 4 times) and a net debt test (Net debt: EBITDA must not exceed 3.5 times). These covenant tests have been met for the covenant test period to 31 December 2022.

The Group also has in place a number of uncommitted bilateral working capital facilities to serve its working capital requirements. These facilities total €64.0m (2021: €65.2m) and are supported by a Group guarantee. Core funding arrangements arise from a wide and varied number of institutions and, as such, there is no significant concentration of liquidity risk.

20 Financial Risk Management and Financial Instruments (continued)

The following are the carrying amounts and contractual maturities of financial liabilities (including estimated interest payments):

As at 31 December 2022	**Carrying amount 2022 €m**	**Contractual cash flow €m**	**Within 1 year €m**	**Between 1 and 2 years €m**	**Between 2 and 5 years €m**	**Greater than 5 years €m**
Non derivative financial instruments						
Bank loans	854.8	892.3	61.9	517.9	310.7	1.8
Private placement loan notes	1,322.0	1,455.7	65.3	215.2	286.2	889.0
Lease obligations per banking covenants	12.1	12.1	2.3	2.1	6.2	1.5
Lease liabilities	196.8	226.6	50.8	39.8	70.7	65.3
Trade and other payables	1,251.5	1,251.5	1,251.5	-	-	-
Deferred contingent consideration	187.1	189.3	177.1	4.2	8.0	-
Derivative financial liabilities / (assets)						
Interest rate swaps used for hedging:						
Carrying values	-	-	-	-	-	-
Net inflows	-	-	-	-	-	-
Cross currency interest rate swaps used for hedging:						
Carrying value	-	-	-	-	-	-
- outflow	-	-	-	-	-	-
- inflow	-	-	-	-	-	-
Foreign exchange forwards used for hedging:						
Carrying value assets	(0.4)	-	(0.4)	-	-	-
Carrying value liabilities	-	-	-	-	-	-
- outflow	-	12.4	12.4	-	-	-
- inflow	-	(12.8)	(12.8)	-	-	-

As at 31 December 2021	Carrying amount 2021 €m	Contractual cash flow €m	Within 1 year €m	Between 1 and 2 years €m	Between 2 and 5 years €m	Greater than 5 years €m
Non derivative financial instruments						
Bank loans	18.0	18.8	11.6	1.8	4.5	0.9
Private placement loan notes	1,377.1	1,533.2	90.0	65.0	454.9	923.3
Lease obligations per banking covenants	2.4	2.4	0.1	0.1	0.3	1.9
Lease liabilities	158.0	181.3	39.0	32.7	63.4	46.2
Trade and other payables	1,290.3	1,290.3	1,290.3	-	-	-
Deferred contingent consideration	202.3	212.2	41.7	161.3	9.2	-
Derivative financial liabilities / (assets)						
Interest rate swaps used for hedging:						
Carrying values	-	-	-	-	-	-
Net inflows	-	-	-	-	-	-
Cross currency interest rate swaps used for hedging:						
Carrying value	-	-	-	-	-	-
- outflow	-	-	-	-	-	-
- inflow	-	-	-	-	-	-
Foreign exchange forwards used for hedging:						
Carrying value assets	(0.3)	-	-	-	-	-
Carrying value liabilities	-	-	-	-	-	-
- outflow	-	12.4	12.4	-	-	-
- inflow	-	(12.7)	(12.7)	-	-	-

20 Financial Risk Management and Financial Instruments (continued)

For provisions, the carrying amount represents the Group's best estimate of the expected future outflows. As it does not represent a contractual liability at the year end, no amount has been included as a contractual cash flow.

Deferred contingent consideration, which includes any put option liabilities, is valued using the relevant agreed multiple of the expected future EBITDA in each acquired business which is appropriately discounted using a risk-adjusted discount rate. The estimated fair value of deferred contingent consideration would decrease if EBITDA was lower or if the risk adjusted discount rate was higher. The range of outcomes are set out in Note 19.

The actual future cash flows could be different from the amounts included in the tables above, if the associated obligations were to become repayable on demand as a result of non-compliance with covenants or other contractual terms. No such non-compliance is envisaged.

Market Risks

Foreign exchange risk

There are two types of foreign currency risk to which the Group is exposed, namely transaction risk and translation risk. The objective of the Group's foreign currency risk management strategy is to manage and control market risk exposures within acceptable parameters. As set out below the Group uses derivatives to manage foreign exchange risk. Transactions involving derivatives are carried out in accordance with the Treasury policy. The Group seeks to apply hedge accounting, where practicable, to manage volatility in profit or loss.

Transaction risk

Apart from transaction risk on debt, this arises where operating units have input costs or sales in currencies other than their functional currencies. These exposures are internally hedged as far as possible. Group policy is to hedge up to a maximum of 75% of a forecast exposure. Material exposures are hedged on a rolling 12 months basis. The Group's principal exposure relates to GBP and USD, with less significant exposures to certain central European currencies.

In addition, where operating entities carry monetary assets and liabilities at year end denominated other than in their functional currency, their translation at the year end rates of exchange into their functional currency will give rise to foreign currency gains and losses. The Group seeks to manage these gains and losses to net to nil.

Based on current cash flow projections for the businesses to 31 December 2023, it is estimated that the Group is long GBP95m (2021: long GBP67m) and short US$9m (2021: long US$8m). At 31 December 2022 these amounts were unhedged.

Translation risk

This exists due to the fact that the Group has operations whose functional currency is not the Euro, the Group's presentational currency. Changes in the exchange rate between the reporting currencies of these operations and the Euro, have an impact on the Group's consolidated reported result. For 2022, the impact of changing currency rates versus Euro compared to the average 2021 rates was negative €24.7m (2021: positive €123.1m). The key drivers of the change year on year are the movements in GBP and USD. In common with many other international groups, the Group does not currently seek to externally hedge its translation exposure.

Sensitivity analysis for primary currency risk

A 10% volatility of the EUR against GBP and USD in respect of transaction risk in the reporting entities functional currency would impact reported after tax profit by €10m (2021: €8.0m) and equity by €9m (2021: €8.0m).

Interest rate risk

The Group has an exposure to movements in interest rates on its debt portfolio, and on its cash and cash equivalent balances and derivatives. The Group policy is to ensure that at least 40% of its debt is fixed rate.

In respect of interest bearing loans and borrowings, the following table indicates the effective average interest rates at the year end and the periods over which they mature. Interest on interest bearing loans and borrowings classified as floating rate is repriced at intervals of less than one year. The table further analyses interest bearing loans and borrowings by currency and fixed/floating mix.

20 Financial Risk Management and Financial Instruments (continued)

As at 31 December 2022	**Weighted average effective interest rate**	**Total €m**	**At fixed interest rate €m**	**At floating interest rate €m**	**Under 5 years €m**	**Over 5 years €m**
Bank loans	2.60%	854.8	54.8	800.0	853.0	1.8
Loan notes	1.76%	1,322.0	1,322.0	-	469.0	853.0
		2,176.8	**1,376.8**	**800.0**	**1,322.0**	**854.8**

	Total €m	**At fixed interest rate €m**	**At floating interest rate €m**
Euro	1,989.3	1,189.3	800.0
USD	187.5	187.5	-
Other	-	-	-
	2,176.8	**1,376.8**	**800.0**

The weighted average maturity of debt is 4.1 years as at 31 December 2022 (2021: 6.3 years).

As at 31 December 2021	Weighted average effective interest rate	Total €m	At fixed interest rate €m	At floating interest rate €m	Under 5 years €m	Over 5 years €m
Bank loans	3.0%	18.0	12.5	5.5	17.2	0.8
Loan notes	1.7%	1,377.1	1,377.1	-	505.0	872.1
		1,395.1	1,389.6	5.5	522.2	872.9

	Total €m	At fixed interest rate €m	At floating interest rate €m
Euro	1,202.4	1,202.4	-
USD	182.4	176.9	5.5
Other	10.3	10.3	-
	1,395.1	1,389.6	5.5

An increase or decrease of 100 basis points in each of the applicable rates and interest rate curves would impact reported after tax profit by €7m (2021: €nil) and equity by €7m (2021: €nil) as there are floating rate borrowings in place through the two additional banking facilities established in 2022.

Credit risk

Credit risk encompasses the risk of financial loss to the Group of counterparty default in relation to any of its financial assets. The Group's maximum exposure to credit risk is represented by the carrying value of each financial asset:

	2022 €m	2021 €m
Cash & cash equivalents	**649.3**	641.4
Trade receivables	**1,262.3**	1,110.3
Derivative financial assets	**0.4**	0.3

Trade receivables arise from a wide and varied customer base spread across various activities, end users and geographies, and as such there is no significant concentration of credit risk. The Group's credit risk management policy in relation to trade receivables involves periodically assessing the financial reliability of customers, taking into account their financial position, past experience and other factors. The utilisation of credit limits is regularly monitored and a significant element of credit risk is covered by credit insurance or other forms of collateral such as letters of credit or bank guarantees.

20 Financial Risk Management and Financial Instruments (continued)

At the year end, the Group was carrying a receivables book of €1,136.8m (2021: €1,022.9m) expressed net of provision for default in payment. This represents a net risk of 14% (2021: 16%) of sales. Of these net receivables, approximately 60% (2021: 61%) were covered by credit insurance or other forms of collateral such as letter of credit and bank guarantees.

At 31 December, the exposure to credit risk for trade receivables by geographic region was as follows:

	2022 €m	2021 €m
Western & Southern Europe	**690.0**	669.1
Central & Northern Europe	**219.7**	155.7
Americas	**248.2**	221.6
Rest of World	**104.4**	63.9
	1,262.3	1,110.3

At 31 December, the exposure to credit risk for trade receivables by customer type was as follows:

	2022 €m	2021 €m
Insulated Panels customers	**755.5**	692.5
Insulation customers	**237.3**	207.1
Other customers	**269.5**	210.7
	1,262.3	1,110.3

The Group uses an allowance matrix to measure Expected Credit Loss (ECL) of trade receivables from customers. The ECL simplified approach has been adopted.

Loss rates are calculated using a roll rate method based on the probability of a receivable progressing through successive chains of non-payment to write-off. The rates are calculated at a business unit level which reflects the risks associated with geographic region, age, mix of customer relationship and type of product purchased. The identifiable loss pertaining to cash positions is immaterial.

The following table provides the information about the exposure to credit risk and ECL's for trade receivables as at 31 December 2022.

	Weighted average loss rate %	**Gross carrying amount €m**	**Loss allowance €m**
Current (not past due)	1%	887.3	10.1
1-30 days past due	3%	207.4	6.1
31-60 days past due	12%	50.1	5.8
61-90 days past due	30%	19.3	5.7
More than 90 days past due	100%	98.2	97.8
		1,262.3	**125.5**

The following table provides the information about the exposure to credit risk and ECL's for trade receivables as at 31 December 2021.

	Weighted average loss rate %	Gross carrying amount €m	Loss allowance €m
Current (not past due)	2%	783.0	12.8
1-30 days past due	2%	190.8	4.7
31-60 days past due	11%	55.0	5.9
61-90 days past due	23%	17.4	4.1
More than 90 days past due	93%	64.1	59.9
		1,110.3	87.4

Loss rates are based on actual credit loss experience over an appropriate diverse sample of trading periods. Trade receivables are written off when there is no reasonable expectation of recovery.

20 Financial Risk Management and Financial Instruments (continued)

Movements in the allowance for impairment in respect of trade receivables

The movement in the allowance for impairment in respect of trade receivables during the year was as follows:

	2022 €m	2021 €m
Balance at 1 January	**87.4**	65.1
Arising on acquisition	**5.1**	10.3
Written off during the year	**(7.4)**	(6.0)
Net remeasurement of loss allowance	**40.3**	15.3
Effect of movement in exchange rates	**0.1**	2.7
At 31 December	**125.5**	87.4

There are no material trade receivables written off during 2022 (2021: €nil) which are still subject to enforcement activity.

The increase in the expected credit loss allowance during 2022 reflects sales growth during the year.

Cash & cash equivalents

On the Group's cash and cash equivalents and derivatives, counterparty risk is managed by dealing with banks that have a minimum credit rating and by spreading business across a portfolio of 10 relationship banks (2021: 10).

Financial instruments by category

The carrying amount of financial assets presented in the Consolidated Statement of Financial Position relate to the following measurement categories as defined in IFRS 9:

	Financial asset at fair value through OCI €m	**Assets at amortised cost €m**	**Derivatives designated as hedging instrument €m**	**Total €m**
2022				
Current:				
Trade receivables, net	-	1,136.8	-	**1,136.8**
Other receivables	-	129.9	-	**129.9**
Cash and cash equivalents	-	649.3	-	**649.3**
Derivative financial instruments	-	-	0.4	**0.4**
	-	**1,916.0**	**0.4**	**1,916.4**
Non-current:				
Financial asset	93.6	-	-	**93.6**
	93.6	**-**	**-**	**93.6**
2021				
Current:				
Trade receivables, net	-	1,022.9	-	1,022.9
Other receivables	-	136.3	-	136.3
Cash and cash equivalents	-	641.4	-	641.4
Derivative financial instruments	-	-	0.3	0.3
	-	1,800.6	0.3	1,800.9
Non-current:				
Financial asset	13.2	-	-	13.2
	13.2	-	-	13.2

It is considered that the carrying amounts of the above financial assets approximate their fair values.

20 Financial Risk Management and Financial Instruments (continued)

The carrying amounts of financial liabilities presented in the Consolidated Statement of Financial Position relate to the following measurement categories as defined in IFRS 9:

	Financial liabilities at fair value through profit or loss €m	Financial liabilities measured at amortised cost €m	Financial liabilities at fair value though OCI €m	Derivatives designated as hedging instrument €m	Total €m
2022					
Current:					
Borrowings	-	85.0	-	-	**85.0**
Lease liabilities	-	43.2	-	-	**43.2**
Trade payables	-	661.7	-	-	**661.7**
Accruals	-	526.1	-	-	**526.1**
Deferred contingent consideration	3.5	-	171.4	-	**174.9**
	3.5	**1,316.0**	**171.4**	**-**	**1,490.9**
Non-current:					
Borrowings	-	2,103.9	-	-	**2,103.9**
Lease liabilities	-	153.6	-	-	**153.6**
Deferred contingent consideration	12.2	-	-	-	**12.2**
	12.2	**2,257.5**	**-**	**-**	**2,269.7**
2021					
Current:					
Borrowings	-	77.4	-	-	77.4
Lease liabilities	-	35.0	-	-	35.0
Trade payables	-	726.8	-	-	726.8
Accruals	-	519.5	-	-	519.5
Deferred contingent consideration	8.6	-	33.1	-	41.7
	8.6	1,358.7	33.1	-	1,400.4
Non-current:					
Borrowings	-	1,320.1	-	-	1,320.1
Lease liabilities	-	123.0	-	-	123.0
Deferred contingent consideration	15.5	-	145.1	-	160.6
	15.5	1,443.1	145.1	-	1,603.7

Fair value hierarchy

Financial assets and liabilities recognised at fair value are analysed between those based on quoted prices in active markets for identical assets or liabilities (Level 1), those involving inputs other than quoted prices that are observable for the assets or liabilities, either directly or indirectly (Level 2); and those involving inputs for the assets or liabilities that are not based on observable market data (Level 3) as set out in Note 19.

Normally, the derivatives entered into by the Group are not traded in active markets. The fair values of these contracts are estimated using a valuation technique that maximises the use of observable market inputs, e.g. market exchange and interest rates (Level 2). All derivatives entered into by the Group are included in Level 2 and consist of foreign currency forward contracts, interest rate swaps and cross currency interest rate swaps.

	As at 31 December 2022			As at 31 December 2021		
	Level 1 €m	Level 2 €m	Level 3 €m	Level 1 €m	Level 2 €m	Level 3 €m
Financial Assets						
Equity investments	**76.0**	**17.6**	**-**	-	13.2	-
Foreign exchange contracts for hedging	**-**	**0.4**	**-**	-	0.3	-
Financial Liabilities						
Deferred contingent consideration	**-**	**-**	**15.7**	-	-	24.1
Put option liabilities	**-**	**-**	**171.4**	-	-	178.2
Foreign exchange contracts for hedging	**-**	**-**	**-**	-	-	-

20 Financial Risk Management and Financial Instruments (continued)

The principal movements in Level 3 liabilities in 2022 are set out in the table below:

	Balance 1 Jan 2022 €m	Settlement €m	Fair value movement €m	Arising on acquisition €m	Translation adjustment €m	Balance 31 Dec 2022 €m
Deferred contingent consideration	24.1	(8.8)	-	-	0.4	**15.7**
Put option liabilities	178.2	(36.6)	16.0	-	13.8	**171.4**
	202.3	**(45.4)**	**16.0**	**-**	**14.2**	**187.1**

The principal movements in Level 3 liabilities in 2021 are set out in the table below:

	Balance 1 Jan 2021 €m	Settlement €m	Fair value movement €m	Arising on acquisition €m	Translation adjustment €m	Balance 31 Dec 2021 €m
Deferred contingent consideration	10.3	-	0.5	12.1	1.2	24.1
Put option liabilities	117.3	-	59.5	-	1.4	178.2
	127.6	-	60.0	12.1	2.6	202.3

During the year ended 31 December 2022, the put liabilities were reassessed based on the most recent available financial information. There were no other significant changes in the business or economic circumstances that affect the fair value of the remaining financial assets and liabilities, no reclassifications and no transfers between levels of the fair value hierarchy used in measuring the fair value of the financial instruments.

Except as detailed below, it is considered that the carrying amounts of financial assets and financial liabilities recognised at amortised cost approximate their fair values. The fair value of the level 2 financial liabilities below has been determined through the use of external market data available publicly.

	As at 31 December 2022			As at 31 December 2021		
	Carrying amount €m	Fair Value €m	Level €m	Carrying amount €m	Fair Value €m	Level €m
Private placement loan notes	**1,322.0**	**1,251.2**	**2**	1,377.1	1,498.2	2

Capital Management Policies and Procedures

The Group employs a combination of debt and equity to fund its operations. As at 31 December the total capital employed in the Group was as follows:

	2022 €m	2021 €m
Net debt	**1,539.6**	756.1
Equity	**3,395.5**	2,959.3
Total Capital Employed	**4,935.1**	3,715.4

The Board's objective when managing capital is to maintain a strong capital base so as to maintain the confidence of investors, creditors and the market. The Board monitors the return on capital (defined as total shareholders' equity plus net debt), and targets a return in excess of 20% together with a dividend level that is compatible with industry norms, but which also reflects any exceptional market conditions.

The Board seeks to maintain a balance between the higher returns that might be possible with higher levels of borrowings and the advantages and security afforded by a sound capital position. The Group actively manages foreign currency and interest rate exposure, as well as actively managing the net asset position, in order to create bottom line value. This necessitates the development of a methodology to optimise the allocation of financial resources on the one hand and the return on capital on the other.

The Board closely monitors externally imposed capital restrictions which are present due to covenants within the Group's core banking facilities.

There were no material changes to the Group's approach to capital management during the year.

21 Provisions For Liabilities

	2022 €m	2021 €m
Guarantees and warranties		
At 1 January	**142.7**	119.0
Arising on acquisitions (Note 23)	**31.7**	12.5
Provided during year	**84.6**	58.8
Claims paid	**(48.1)**	(34.7)
Provisions released	**(28.6)**	(17.2)
Effect of movement in exchange rates	**(0.8)**	4.3
At 31 December	**181.5**	142.7
Current liability	**74.0**	67.8
Non-current liability	**107.5**	74.9
	181.5	142.7

The Group manufactures a wide range of insulation and related products for use primarily in the construction sector. Some products carry formal guarantees of satisfactory performance of varying periods following their purchase by customers and a provision is carried in respect of the expected costs of settling warranty and guarantee claims which arise. The Group in the course of its operations can be party to claims, litigation or enforcement actions. Both the number of claims and the cost of settling the claim are sensitive to change. In most cases, a reasonably reliable estimate can be made based on a range of possible outcomes. If the extent and cost of settling a claim or potential claim or enforcement action is not yet reasonably determinable, no provision is made until such a reliable estimate can be made. Provisions are reviewed by management on a regular basis, and adjusted to reflect the current best estimate of the economic outflow. If it is no longer probable that an outflow of economic benefits will be required, the related provision is reversed.

For the non-current element of the provision, the Group anticipates that these will be utilised within three years of the reporting date. Discounting of the non-current element has not been applied because the discount would be immaterial.

22 Deferred Tax Assets And Liabilities

Deferred tax assets and liabilities arising from temporary differences and unused tax losses after offset are as follows:

	2022 €m	2021 €m
Deferred tax assets	**40.1**	34.7
Deferred tax liabilities	**(55.2)**	(34.7)
Net Position	**(15.1)**	-

Deferred tax arises from differences in the carrying value of items such as property, plant and equipment, intangibles, pension obligations, and other temporary differences in the financial statements and the tax base established by the tax authorities.

22 Deferred Tax Assets And Liabilities (continued)

The movement in the net deferred tax position for 2022 is as follows:

	Balance 1 Jan 2022 €m	Recognised in profit or loss €m	Recognised in equity €m	Recognised in other comprehensive income €m	Translation adjustment €m	Arising on acquisitions €m	Balance 31 Dec 2022 €m
Property, plant and equipment	(51.7)	(3.4)	-	-	(0.4)	2.1	**(53.4)**
Intangibles	(29.8)	6.4	-	-	(0.4)	(37.1)	**(60.9)**
Other temporary differences	73.3	7.8	(11.4)	-	0.3	7.5	**77.5**
Pension obligations	0.7	0.1	-	4.9	0.2	0.5	**6.4**
Unused tax losses	7.5	8.4	-	-	(0.3)	(0.3)	**15.3**
	-	**19.3**	**(11.4)**	**4.9**	**(0.6)**	**(27.3)**	**(15.1)**

The movement in the net deferred tax position for 2021 is as follows:

	Balance 1 Jan 2021 €m	Recognised in profit or loss €m	Recognised in equity €m	Recognised in other comprehensive income €m	Translation adjustment €m	Arising on acquisitions €m	Balance 31 Dec 2021 €m
Property, plant and equipment	(49.0)	(1.5)	-	-	(1.1)	(0.1)	(51.7)
Intangibles	(25.8)	3.9	-	-	(0.8)	(7.1)	(29.8)
Other temporary differences	55.1	7.2	9.7	-	(2.5)	3.8	73.3
Pension obligations	6.1	(0.6)	-	(5.5)	0.4	0.3	0.7
Unused tax losses	4.2	3.0	-	-	(0.2)	0.5	7.5
	(9.4)	12.0	9.7	(5.5)	(4.2)	(2.6)	-

23 Business Combinations

A key strategy of the Group is to create and sustain market leading positions through acquisitions in markets it currently operates in, together with extending the Group's footprint in new geographic markets. In line with this strategy, the principal acquisitions completed during the year was as follows:

In April 2022, the Group acquired 100% of the share capital of Troldtekt, a Danish natural acoustic insulation producer. The total consideration, including net debt acquired amounted to €220.4m.

In September 2022, the Group acquired 100% of the share capital of Ondura Group, a French headquartered global provider of roofing membranes and associated roofing solutions, for a total consideration, including net debt acquired of €515.6m.

The Group also made a number of smaller acquisitions during the year for a combined cash consideration of €151.0m:

- The Roofing + Waterproofing division acquired 100% of the share capital of Derbigum, a Belgian producer of waterproofing membranes for a total consideration, including net debt acquired of €95.0m in June 2022;
- The Insulated Panels division acquired 100% of the share capital of THU Perfil in February 2022 and 100% of the share capital of Invespanel in Spain in September 2022;
- The Insulation division acquired the assets of Calostat in the UK in September 2022.

The table below reflects the provisional fair value of the identifiable net assets acquired in respect of the acquisitions completed during the year. Any amendments to fair values will be made within the twelve month period from the date of acquisition, as permitted by IFRS 3, *Business Combinations*.

23 Business Combinations (continued)

	Ondura €m	Troldtekt €m	Other* €m	Total €m
Non-current assets				
Intangible assets	77.9	30.1	22.2	**130.2**
Property, plant and equipment	86.3	31.6	27.0	**144.9**
Right of use assets	27.0	1.8	7.4	**36.2**
Deferred tax asset	0.5	-	1.2	**1.7**
Current assets				
Inventories	86.0	13.2	21.5	**120.7**
Trade and other receivables	75.1	16.6	35.6	**127.3**
Current liabilities				
Trade and other payables	(96.2)	(14.7)	(52.9)	**(163.8)**
Provisions for liabilities	(21.9)	(0.3)	(9.5)	**(31.7)**
Lease liabilities	(4.2)	(0.8)	(1.5)	**(6.5)**
Non-current liabilities				
Retirement benefit obligations	(2.8)	-	(0.1)	**(2.9)**
Lease liabilities	(12.1)	(1.0)	(5.7)	**(18.8)**
Deferred tax liabilities	(21.7)	(5.2)	(2.1)	**(29.0)**
Total identifiable assets	193.9	71.3	43.1	**308.3**
Goodwill	321.7	149.1	107.9	**578.7**
Total consideration	515.6	220.4	151.0	**887.0**
Satisfied by:				
Cash (net of cash acquired)	515.6	220.4	151.0	**887.0**
Deferred contingent consideration	-	-	-	**-**
	515.6	220.4	151.0	**887.0**

*Included in Other are certain immaterial remeasurements of prior year accounting estimates as a result of the finalisation of the assignment of fair values to identifiable net assets.

The acquired goodwill is attributable principally to the profit generating potential of the businesses, together with cross-selling opportunities and other synergies expected to be achieved from integrating the acquired businesses into the Group's existing business.

In the post-acquisition period to 31 December 2022, the businesses acquired during the current year contributed revenue of €252.0m and trading profit of €21.6m to the Group's results.

The full year revenue and trading profit had the acquisitions taken place at the start of the year, would have been €8,762.6m and €875.7m respectively.

The gross contractual value of trade and other receivables as at the respective dates of acquisition amounted to €132.4m. The fair value of these receivables is €127.3m, all of which is recoverable, and is inclusive of an aggregate impairment provision of €5.1m.

There is €Nil of goodwill (2021: €34.5m) which is expected to be deductible for tax purposes.

The Group incurred acquisition related costs of €8.3m (2021: €9.4m) relating to external legal fees and due diligence costs. These costs have been included in operating costs in the Consolidated Income Statement.

The initial assignment of fair values to identifiable net assets acquired has been performed on a provisional basis due to the relative size of the acquisitions and the timing of the transactions. Any amendments to these fair values within the twelve-month timeframe from the date of acquisition will be disclosable in the 2023 Annual Report, as stipulated by IFRS 3.

23 Business Combinations (continued)

Prior year acquisitions

In February 2021, the Group acquired 100% of the share capital of TeraSteel a Romanian based manufacturer of insulated panels. The total consideration, including net debt acquired amounted to €81.6m.

In June 2021, the Group acquired 100% of the share capital of Logstor a leading global supplier of technical insulation solutions. The total consideration, including net debt acquired amounted to €244.5m.

The Group also made a number of smaller acquisitions during the year for a combined cash consideration of €214.1m :

- The Insulated Panels division acquired 51% of Bromyros in Uruguay, the remaining 50% of Dome Solar in France, Solarsit in France and the assets of Krohn in Russia;
- The Insulation division acquired Thermakraft in Australasia, Hectar in the Netherlands, the assets of Dyplast Products, Diversifoam Products and Thermal Visions in North America;
- The Light + Air division acquired Skydome in Western Europe and Major Industries and Solatube International in North America;
- The Water + Energy division acquired BAGA in Sweden, Heritage Tanks in Australia and the assets of Enviro Water Tanks in Australia.

The fair values as recognised at 31 December 2021 of the acquired assets and liabilities at acquisition are set out below:

	Logstor €m	TeraSteel €m	Other* €m	Total €m
Non-current assets				
Intangible assets	20.4	6.4	11.7	38.5
Property, plant and equipment	36.0	22.9	35.1	94.0
Right of use assets	10.8	0.3	21.1	32.2
Deferred tax asset	2.6	0.3	2.2	5.1
Current assets				
Inventories	40.0	24.3	27.8	92.1
Trade and other receivables	53.6	9.4	32.7	95.7
Current liabilities				
Trade and other payables	(68.7)	(19.5)	(37.1)	(125.3)
Provisions for liabilities	(5.3)	(2.2)	(5.0)	(12.5)
Lease liabilities	(3.9)	-	(2.5)	(6.4)
Non-current liabilities				
Retirement benefit obligations	(1.3)	-	(1.7)	(3.0)
Lease liabilities	(6.9)	(0.3)	(18.5)	(25.7)
Deferred tax liabilities	(4.2)	(1.1)	(2.4)	(7.7)
Total identifiable assets	73.1	40.5	63.4	177.0
Non-controlling interest arising on acquisition** (Note 29)	-	-	(3.5)	(3.5)
Goodwill	171.4	41.1	167.9	380.4
Joint Venture becoming subsidiary	-	-	(1.6)	(1.6)
Total consideration	244.5	81.6	226.2	552.3
Satisfied by:				
Cash (net of cash acquired)	244.5	81.6	214.1	540.2
Deferred contingent consideration	-	-	12.1	12.1
	244.5	81.6	226.2	552.3

In the post-acquisition period to 31 December 2021, the businesses acquired during the current year contributed revenue of €478.8m and trading profit of €64.1m to the Group's results.

The full year revenue and trading profit had the acquisitions taken place at the start of the year, would have been €6,755.7m and €778.1m respectively.

The gross contractual value of trade and other receivables as at the respective dates of acquisition amounted to €106.0m. The fair value of these receivables is €95.7m, all of which is recoverable, and is inclusive of an aggregate impairment provision of €10.3m.

There is €34.5m of goodwill (2020: €nil) which is expected to be deductible for tax purposes.

The Group incurred acquisition related costs of €9.4m (2020: €5.4m) relating to external legal fees and due diligence costs. These costs have been included in operating costs in the Consolidated Income Statement.

24 Share Capital

	2022 €m	2021 €m
Authorised		
250,000,000 Ordinary shares of €0.13 each (2021: 250,000,000 Ordinary shares of €0.13 each)	**32.5**	32.5
Issued and fully paid		
Ordinary shares of €0.13 each		
Opening balance – 183,591,682 (2021: 183,402,238) shares	**23.9**	23.8
Shares allotted – nil (2021: 189,444) shares	**-**	0.1
Closing balance – 183,591,682 (2021: 183,591,682) shares	**23.9**	23.9

There were no adjustments to the authorised share capital during the year (2021: nil).
Details of share options exercised are set out in Note 4 to the financial statements.

25 Share Premium

	2022 €m	2021 €m
At 1 January	**94.4**	95.6
Re-issued treasury shares	**18.0**	(1.2)
At 31 December	**112.4**	94.4

During the year, the Company issued treasury shares in satisfaction of obligations falling under share schemes. The treasury shares were issued for consideration exceeding their carrying value and the difference has been accounted for as share premium.

In prior years, treasury shares were re-issued for consideration less than their carrying value and the difference was accounted for as an adjustment to share premium.

26 Treasury Shares

Consideration paid

	2022			2021		
	No. of shares	**Consideration paid €**	**Total €m**	No. of shares	Consideration paid €	Total €m
At 1 January	**2,254,140**	**25.42**	**57.3**	1,870,284	6.21	11.6
Repurchase of shares	**15,361**	**94.38**	**1.4**	600,000	78.16	46.9
Shares issued	**(287,028)**	**6.64**	**(1.8)**	(216,144)	5.66	(1.2)
At 31 December	**1,982,473**	**28.74**	**56.9**	2,254,140	25.42	57.3

Nominal value

	2022			2021		
	No. of shares	**Nominal value €**	**Total €**	No. of shares	Nominal value €	Total €
At 1 January	**2,254,140**	**0.13**	**293,037**	1,870,284	0.13	243,136
Repurchase of shares	**15,361**	**0.13**	**1,997**	600,000	0.13	78,000
Shares issued	**(287,028)**	**0.13**	**(37,313)**	(216,144)	0.13	(28,099)
At 31 December	**1,982,473**	**0.13**	**257,721**	2,254,140	0.13	293,037

26 Treasury Shares (continued)

During the year, the Company issued 287,028 (2021: 216,144) shares in satisfaction of obligations falling under share schemes.

The Company repurchased 15,361 shares during the year (2021: 600,000).

The Company holds 1.1% (2021: 1.2%) of the issued ordinary share capital as treasury shares.

27 Retained Earnings

In accordance with Section 304 of the Companies Act 2014, the Company is availing of the exemption from presenting its individual Income Statement to the Annual General Meeting and from filing it with the Registrar of Companies. The Company's loss for the financial year was €0.5m (2021: profit of €136.0m).

28 Dividends

	2022 €m	2021 €m
Equity dividends on ordinary shares:		
2022 Interim dividend 25.6 cent (2021: 19.9 cent) per share	**46.5**	36.1
2021 Final dividend 26.0 cent (2020: 20.6 cent) per share	**47.2**	37.4
	93.7	73.5
Proposed for approval at AGM		
Final dividend of 23.8 cent (2021: 26.0 cent) per share	**43.3**	47.2

The proposed final dividend for 2022 is subject to approval by the shareholders at the Annual General Meeting and has not been included as a liability in the Consolidated Statement of Financial Position of the Group as at 31 December 2022 in accordance with IAS 10 *Events after the Reporting Period*. The proposed final dividend for the year ended 31 December 2022 will be payable on 9 May 2023 to shareholders on the Register of Members at close of business on 14 April 2023.

29 Non-Controlling Interest

	2022 €m	2021 €m
At 1 January	**67.2**	48.7
Profit for the year attributable to non-controlling interest	**18.0**	16.5
Arising on acquisition (Note 23)	**-**	3.5
Purchase of non-controlling interest	**(9.9)**	-
Dividends paid to minorities	**(3.5)**	(3.2)
Share of foreign operations' translation movement	**4.0**	1.7
At 31 December	**75.8**	67.2

During the year the Group acquired the remaining 15% of shares in Bacacier which were held by a non-controlling interest for €36.6m.

30 Reconciliation Of Net Cash Flow To Movement In Net Debt

	2022 €m	2021 €m
Movement in cash and bank overdrafts	**19.8**	(731.2)
Drawdown of loans	**(846.0)**	(55.1)
Repayment of loans and borrowings	**66.0**	263.2
Settlement of derivative financial instrument	**-**	(18.5)
Change in net debt resulting from cash flows	**(760.2)**	(541.6)
Translation movement - relating to US dollar loan	**(10.9)**	(19.7)
Translation movement – other	**(12.4)**	42.7
Derivative financial instruments movement	**-**	(1.3)
Net movement	**(783.5)**	(519.9)
Net debt at start of the year	**(756.1)**	(236.2)
Net debt at end of the year	**(1,539.6)**	(756.1)

Lease liabilities of €196.8m (2021: €158.0m) are excluded from net debt.

A reconciliation of liabilities arising from financing activities in 2022 is set out below.

	Balance 1 Jan 2022 €m	Repayments €m	Drawdowns / Receipts €m	Non cash movements €m	Balance 31 Dec 2022 €m
Bank loans and borrowings	20.4	-	846.0	0.5	**866.9**
Loan notes	1,377.1	(66.0)	-	10.9	**1,322.0**
Derivatives	-	-	-	-	**-**
	1,397.5	**(66.0)**	**846.0**	**11.4**	**2,188.9**

A reconciliation of liabilities arising from financing activities in 2021 is set out below.

	Balance 1 Jan 2021 €m	Repayments €m	Drawdowns / Receipts €m	Non cash movements €m	Balance 31 Dec 2021 €m
Bank loans and borrowings	57.6	(50.0)	12.6	0.2	20.4
Loan notes	1,528.1	(213.2)	42.5	19.7	1,377.1
Derivatives	(19.8)	18.5	-	1.3	-
	1,565.9	(244.7)	55.1	21.2	1,397.5

31 Guarantees And Other Financial Commitments

(i) Guarantees and contingencies

The Group's principal debt facilities are secured by means of cross guarantees provided by Kingspan Group plc. These include drawn private placement notes of US$200m (2021: US$200m) and €1,134.5m (2021: €1,200.5m), an undrawn bank facility of €800m (2021: €700m) and two additional banking finance facilities with an aggregated value of €800m drawn in 2022.

Kingspan Group plc has guaranteed the relevant debts of certain of its Dutch and German subsidiaries in accordance with Article 403, Book 2 of the Dutch Civil Code and Section 264 of the German Commercial Code (HGB) respectively. The respective entities have therefore availed of the exemption from preparing and filing audited financial statements and management reports in the Netherlands and Germany.

31 Guarantees And Other Financial Commitments (continued)

(ii) Future capital expenditure

Capital expenditure in subsidiary entities, approved by the directors but not provided in the financial statements, is as follows:

	2022 €m	2021 €m
Contracted for	**96.9**	121.3
Not contracted for	**97.9**	98.4
	194.8	219.7

32 Pension Obligations

The Group operates defined contribution schemes in each of its main operating locations. The Group also has a number of defined benefit schemes in the UK and mainland Europe.

Defined contribution schemes

The total cost charged to profit or loss of €32.3m (2021: €26.3m) represents employer contributions payable to these schemes in accordance with the rules of each plan. An amount of €5.3m (2021: €4.4m) was included at year end in accruals in respect of defined contribution pension accruals.

Defined benefit schemes / obligations

The Group has three defined benefit schemes in the UK, all of which are closed to new members and to future accrual. The total pension contributions to these schemes for the year amounted to €1.8m (2021: €nil) and the expected contributions for 2023 are €nil (2021: €nil). On 6 December 2022, the Group executed a €150.8m bulk insurance annuity insurance policy 'buy in' for the Colt Life Assurance and Retirement Scheme ('CLARS'). This buy-in ensures that an insurance asset fully matches the remaining pension liability. Therefore for this particular scheme the Group is no longer exposed to the pension risks as outlined below. As the scheme was in an accounting surplus position, the impact of this transaction was to record a re-measurement loss of €28.1m within the consolidated statement of comprehensive income. There was no impact on profit before tax from this transaction.

The Group also has pension obligations in mainland Europe which are accounted for as defined benefit obligations. These obligations have been accounted for in line with the Group's existing pension obligations whereby companies are not required to fund independent schemes for post employment benefit obligations. Instead, commencing from the date the employee becomes eligible to receive the income stream, this obligation is satisfied from available cash resources of the relevant employing company. A provision has been made for the unfunded liability. €1.7m of pension entitlements have been paid to retired former employees during the year (2021: €1.6m).

The pension costs relating to all of the above defined benefit obligations are assessed in accordance with the advice of qualified actuaries. In the case of the three UK legacy schemes, the most recent actuarial valuations were performed as of 31 December 2022. In general, actuarial valuations are not available for public inspection; however, the results of valuations are advised to members of the various schemes.

The UK and European defined benefit schemes expose the Group to the following risks:

Interest Rate Risk: The discount rates employed in determining the present value of the Group's defined benefit liabilities are set with reference to corporate bond yields. A decrease in corporate bond yields would increase the schemes' defined benefit obligation. Such movements in bond yields would result in volatility in the Group's Consolidated Financial Statements.

Inflation Risk: A significant proportion of the Group's defined benefit obligation is linked to inflation therefore higher inflation will result in a higher defined benefit obligation (subject to the appropriate caps in place to protect the schemes against extreme inflation). This is however expected to be offset to an extent by an increase in the value of the Group's holdings in liability driven investments (LDI)-type plan assets.

Longevity Risk: The present value of the Group's defined benefit obligation is calculated with reference to the mortality of scheme members, both during and after employment. If scheme members live longer than expected, the scheme's benefits will need to be paid for longer, increasing the scheme's defined benefit obligation.

The directors note that the Group's UK defined benefit schemes are also exposed to the following significant risk:

Asset Volatility: The Group's defined benefit obligations are calculated using discount rates set with reference to corporate bond yields. The schemes' assets comprise of equities, bonds, property and LDI, all of which may fluctuate significantly in value. These assets are expected to outperform corporate bonds in the long term, but provide volatility and risk in the short term.

The extent of the Group's obligation under these schemes is sensitive to judgemental actuarial assumptions, of which the principal ones are set out below. It is not considered that any reasonable sensitivity analysis on these assumptions would materially alter the scheme obligations.

32 Pension Obligations (continued)

	2022		2021	
	Funded Schemes	**Un-funded Schemes**	Funded Schemes	Un-funded Schemes
Life expectancies				
Life expectancy for someone aged 65 - Males	**22.0**	**21.1**	22.0	21.1
Life expectancy for someone aged 65 - Females	**24.5**	**25.4**	24.1	25.4
Life expectancy at age 65 for someone aged 45 - Males	**23.4**	**23.3**	23.5	23.3
Life expectancy at age 65 for someone aged 45 - Females	**26.0**	**28.1**	25.7	28.1
Rate of increase in salaries	**-**	**2.50% - 3.50%**	-	1% - 2.75%
Rate of increase of pensions in payment	**0% - 3.03%**	**1.50% - 2.60%**	3.08%	0%-3.15%
Rate of increase for deferred pensioners	**2.30%**	**-**	2.70%	-
Discount rate	**4.85%**	**0.40% - 3.99%**	1.90%	(0.15%) - 1.85%
Inflation rate	**3.10%**	**1.75% - 3.10%**	3.30%	1.35% - 3.25%

It is noted that the 'Funded Schemes' relate to the wholly and partly funded UK schemes and 3 partially funded immaterial European schemes. The 'Un-funded Schemes' covers all other European DBOs.

The table below gives an indication of the impact of a change in the principal actuarial assumptions on the funded defined benefit scheme liabilities.

	Assumption	Change in assumption	Impact on plan liabilities	
			2022	2021
Funded Schemes	Discount rate	Increase/decrease by 0.5%	**Decrease by 6% / increase by 7%**	Decrease by 10% / increase by 12%
Un-Funded Schemes	Discount rate	Increase by 0.25%	**Decrease by 3%**	Decrease by 4%
Funded Schemes	Inflation rate	Increase/decrease by 0.5%	**Increase by 4% / decrease by 4%**	Increase by 5% / decrease by 5%
Un-Funded Schemes	Inflation rate	Increase by 0.25%	**Increase by 3%**	Increase by 3%
Funded Schemes	Mortality assumptions	Increase by 1 year	**Increase by 3%**	Increase by 4%
Un-Funded Schemes	Mortality assumptions	Increase by 1 year	**Increase by 4% -6%**	Increase by 4% - 6%

The sensitivity analyses above have been determined on a method that extrapolates the impact on the defined benefit obligation as a result of reasonable changes in key assumptions occurring at the end of the reporting period. The sensitivity analyses are based on a change in a significant assumption, keeping all other assumptions constant. The sensitivity analyses may not be representative of an actual change in the defined benefit obligation as it is unlikely that changes in assumptions would occur in isolation from one another.

Movements in net liability recognised in the Consolidated Statement of Financial Position

	2022 €m	2021 €m
Net liability in schemes at 1 January	**(28.0)**	(45.9)
Acquired	**(2.9)**	(3.0)
Employer contributions	**3.8**	1.8
Recognised in consolidated income statement	**(1.2)**	(2.2)
Recognised in consolidated statement of comprehensive income	**(20.3)**	21.5
Foreign exchange movement	**(0.9)**	(0.2)
Net liability in schemes at 31 December	**(49.5)**	(28.0)

32 Pension Obligations (continued)

Defined benefit pension income/expense recognised in the Consolidated Income Statement

	2022 €m	2021 €m
Current service cost	**(1.0)**	(0.7)
Other expenses	**(0.3)**	(1.4)
Settlements of scheme obligations	**0.2**	0.1
Total, included in operating costs	**(1.1)**	(2.0)
Movement on scheme obligations	**(5.0)**	(4.0)
Interest on scheme assets	**4.9**	3.8
Net interest expense, included in finance expense (Note 5)	**(0.1)**	(0.2)

Analysis of amount included in other comprehensive income

	2022 €m	2021 €m
Actual return less interest on scheme assets	**(119.3)**	4.9
Experience (loss)/gain arising on scheme liabilities	**(4.1)**	4.2
Actuarial (loss)/gain arising from changes in demographic assumptions	**(0.7)**	1.7
Actuarial gain arising from changes in financial assumptions	**103.8**	10.7
(Loss)/gain recognised in other comprehensive income	**(20.3)**	21.5

The cumulative actuarial loss recognised in other comprehensive income to date is €37.2m (2021: €16.9m).

In 2022, the actual return on plan assets was a loss of €118.8m (2021: gain of €1.6m).

Asset Classes and Expected Rate of Return

The assets in the scheme at each year end were as follows:

	2022	2021
Asset Classes as % of Total Scheme Assets		
Equities	**10.3%**	49.5%
Bonds (Corporates)	**0.2%**	7.1%
Cash	**0.6%**	4.0%
Property	**5.8%**	3.4%
Liability Driven Investment	**19.2%**	36.0%
Insurance Policy net of Insurance Premium due	**63.9%**	-
	100%	100%

	2022 €m		2021 €m	
	Funded Schemes	**Un-funded Schemes**	Funded Schemes	Un-funded Schemes
Equities	**15.0**	-	140.1	-
Bonds (Corporates)	**0.7**	-	20.5	-
Cash	**0.9**	-	11.2	-
Property	**8.2**	-	9.5	-
Liability Driven Investment	**27.8**	-	101.5	-
Insurance Policy net of Insurance Premium due	**93.0**	-	-	-
Fair market value of plan assets	**145.6**	-	282.8	-
Present value of obligation	**(159.1)**	**(36.0)**	(266.2)	(44.6)
Deficit	**(13.5)**	**(36.0)**	16.6	(44.6)

32 Pension Obligations (continued)

The net pension liability is analysed as follows:

	2022 €m	2021 €m
Analysed between:		
Funded schemes' surplus	**3.3**	17.9
Unfunded obligations	**(52.8)**	(45.9)
	(49.5)	(28.0)
Related deferred tax (asset)	**(6.4)**	(0.7)

	2022 €m	2021 €m
Changes in present value of defined benefit obligations		
At 1 January	**310.8**	311.2
Acquired through business combination (Note 23)	**2.9**	3.0
Current service cost	**1.0**	0.7
Other expenses	**(0.2)**	0.8
Interest cost	**5.0**	4.0
Benefits paid	**(10.9)**	(11.9)
Settlement	**(0.3)**	(0.1)
Actuarial gains	**(99.0)**	(16.6)
Effect of movement in exchange rates	**(14.2)**	19.7
At 31 December	**195.1**	310.8

	2022 €m	2021 €m
Changes in present value of scheme assets during year		
At 1 January	**282.8**	265.3
Interest on scheme assets	**4.9**	3.8
Employer contributions	**2.0**	0.1
Benefits paid	**(9.1)**	(10.2)
Other expenses	**(0.6)**	(0.6)
Actual return less interest	**(119.3)**	4.9
Effect of movement in exchange rates	**(15.1)**	19.5
At 31 December	**145.6**	282.8

The weighted average duration of the defined benefit obligation at 31 December 2022 was 13.8 years (2021: 16.7 years).

33 Related Party Transactions

The principal related party relationships requiring disclosure under IAS 24 *Related Party Disclosures* relate to (i) transactions between group companies, (ii) compensation of key management personnel and (iii) goods and services purchased from directors.

(i) Transactions between subsidiaries are carried out on an arm's length basis.

The Company received €nil dividends from subsidiaries (2021: €120.0m), and there was a net decrease in the intercompany balance of €76.1m (2021: €19.5m increase).

Transactions with the Group's non wholly-owned subsidiaries primarily comprise trading sales and capital funding, carried out on an arm's length basis. These transactions are not considered to be material.

(ii) For the purposes of the disclosure requirements of IAS 24 *Related Party Disclosures*, the term "key management personnel" (i.e. those persons having the authority and responsibility for planning, directing and controlling the activities of the Company), comprise the board of directors (executive and non-executive directors) who manage the business and affairs of the Company. As identified in the Report of the Remuneration Committee, the directors, other than the non-executive directors, serve as executive officers of the Group. Key management personnel compensation is set out in Note 7. Dividends of €1.0m were paid to other key management personnel (2021: €0.7m). €Nil(2021: €nil) was outstanding at year end.

(iii) During the financial year, there were no disclosable goods or services purchased from directors. During 2021, the Group purchased legal services in the sum of €160,373 from McCann FitzGerald, a firm in which Mr John Cronin was a partner. John Cronin retired as a partner of McCann FitzGerald in March 2021.

34 Events Subsequent To Year End

There have been no material events subsequent to 31 December 2022 which would require adjustment to, or disclosure in this report.

35 Approval Of Financial Statements

The financial statements were approved by the directors on 21 February 2023.

Alternative Performance Measures

The Group uses a number of metrics, which are non-IFRS measures, to monitor the performance of its operations.

The Group believes that these metrics assist investors in evaluating the performance of the underlying business. Given that these metrics are regularly used by management, they also give the investor an insight into how Group management review and monitor the business on an ongoing basis.

The principal Alternative Performance Measures (APMs) used by the Group are defined as follows:

Trading profit

This comprises the operating profit as reported in the Consolidated Income Statement before intangible asset amortisation and non trading items. This equates to the Earnings Before Interest, Tax and Amortisation ("EBITA") of the Group. Trading profit is used by management as it excludes items which may hinder year on year comparisons.

	Financial Statements Reference	2022 €m	2021 €m
Trading profit	Consolidated Income Statement	**833.2**	754.8

Trading margin

Measures the trading profit as a percentage of revenue.

	Financial Statements Reference	2022 €m	2021 €m
Trading profit	Consolidated Income Statement	**833.2**	754.8
Revenue	Consolidated Income Statement	**8,340.9**	6,497.0
Trading margin		**10.0%**	11.6%

EBITDA

The Group has updated its definition of EBITDA as earnings before finance expenses, income taxes, depreciation, amortisation and non trading items. In the prior year the Group did not record a non trading item and therefore it was not reflected in the definition of EBITDA.

	Financial Statements Reference	2022 €m	2021 €m
Trading profit	Consolidated Income Statement	**833.2**	754.8
Depreciation	Consolidated Statement of Cash Flows	**165.1**	138.4
EBITDA		**998.3**	893.2

Free cash flow

Free cash flow is the cash generated from operations after net capital expenditure, interest paid, income taxes paid and lease payments and reflects the amount of internally generated capital available for re-investment in the business or for distribution to shareholders.

	Financial Statements Reference	2022 €m	2021 €m
Net cash flow from operating activities	Consolidated Statement of Cash Flows	**692.0**	329.2
Additions to property, plant and equipment	Consolidated Statement of Cash Flows	**(269.2)**	(168.8)
Proceeds from disposals of property, plant and equipment	Consolidated Statement of Cash Flows	**18.6**	5.2
Interest received	Consolidated Statement of Cash Flows	**1.7**	0.1
Lease payments	Consolidated Statement of Cash Flows	**(50.6)**	(38.6)
Free cash flow		**392.5**	127.1

Alternative Performance Measures (continued)

Return on capital employed (ROCE)

ROCE is the operating profit before interest and tax expressed as a percentage of the net assets employed. The net assets employed reflect the net assets, excluding net debt, at the end of each reporting period.

	Financial Statements Reference	2022 €m	2021 €m
Net assets	Consolidated Statement of Financial Position	**3,395.5**	2,959.3
Net debt	Note 18	**1,539.6**	756.1
		4,935.1	3,715.4
Operating profit before interest and tax	Consolidated Income Statement	**784.3**	725.3
Return on capital employed		**15.9%**	19.5%

Banking Covenants

The Net debt:EBITDA and the EBITDA:Net Interest ratios disclosed in this report are calculated in accordance with the terms and conditions of the covenants as set out in the Group's external borrowing arrangements. Therefore, EBITDA and Net Interest are adjusted to exclude the impact of IFRS 16 *Leases* for these calculations.

Net debt

Net debt represents the net total of current and non-current borrowings, current and non-current derivative financial instruments, (excluding foreign currency derivatives which are used for transactional hedging), and cash and cash equivalents as presented in the Consolidated Statement of Financial Position. Lease liabilities recognised due to the implementation of IFRS 16 and deferred contingent consideration have also been excluded from the calculation of net debt. Consistent with the 2021 APMs, this definition is in accordance with the terms and conditions of the covenants as set out in the Group's external borrowing arrangements.

	Financial Statements Reference	2022 €m	2021 €m
Net debt	Note 18	**1,539.6**	756.1

Net debt: EBITDA

Net debt as a ratio to 12 month EBITDA. For the purpose of this calculation, EBITDA is solely adjusted for the impact of IFRS 16 *Leases*.

	Financial Statements Reference	2022 €m	2021 €m
EBITDA		**998.3**	893.2
Lease liability payments	Consolidated Statement of Cash Flows	**(50.6)**	(38.6)
EBITDA (adjusted for the impact of IFRS 16)		**947.7**	854.6

	Financial Statements Reference	2022 €m	2021 €m
Net debt	Note 18	**1,539.6**	756.1
EBITDA (adjusted for the impact of IFRS 16)		**947.7**	854.6
Net debt : EBITDA times		**1.62**	0.88

Alternative Performance Measures (continued)

Net interest

The Group defines net interest as the net total of finance expense and finance income as presented in the Consolidated Income Statement. The impact of IFRS 16 is excluded from the calculation which is consistent with the terms and conditions of the covenants as set out in the Group's external borrowing arrangements.

	Financial Statements Reference	2022 €m	2021 €m
Finance expense	Note 5	**39.4**	36.3
Finance income	Note 5	**(1.7)**	-
Less lease interest (IFRS 16)	Note 5	**(4.7)**	(3.7)
Net Interest		**33.0**	32.6

Working capital

Working capital represents the net total of inventories, trade and other receivables and trade and other payables, net of transactional foreign currency derivatives excluded from net debt.

	Financial Statements Reference	2022 €m	2021 €m
Trade and other receivables	Note 15	**1,328.4**	1,228.4
Inventories	Note 14	**1,235.8**	1,138.9
Trade and other payables	Note 16	**(1,368.7)**	(1,389.8)
Foreign currency derivatives excluded from net debt	Note 20	**0.4**	0.3
Working capital		**1,195.9**	977.8

Working capital ratio

Measures working capital as a percentage of October to December turnover annualised. The annualisation of turnover reflects the current profile of the Group rather than a partial reflection of any acquisitions completed during the period.

	Financial Statements Reference	2022 €m	2021 €m
Working capital		**1,195.9**	977.8
October - December turnover annualised		**8,272.2**	7,070.0
Working capital ratio		**14.5%**	13.8%

Total shareholder return (TSR)

Total shareholder return (TSR) is a key performance metric for the Performance Share Plan (PSP).

The methodology for calculating the total shareholder return assumes the following: the open price is set as the closing price of the final trading day prior to the beginning of the performance period; the close price is set as the closing price on the final trading day of the performance period; the calculation assumes all dividends are reinvested on the ex-dividend date, at the closing price on that day.

	Financial Statements Reference	2022 %	2021 %
Total Shareholder Return	Page 47	**-51.5**	83.9

Principal Subsidiaries and Substantial Undertakings

	% Shareholding	Nature of Business
AUSTRALIA		
Kingspan Insulated Panels Pty Limited	100	Manufacturing
Kingspan Insulation Pty Limited	100	Manufacturing
Kingspan Water & Energy Pty Limited	85	Manufacturing
BELGIUM		
Imperbel NV	100	Manufacturing
Joris Ide NV	100	Manufacturing
Kingspan Insulation NV	100	Manufacturing
BRAZIL		
Kingspan Isoeste Trade Importadora E Exportadora Limitada	51	Sales & Marketing
Kingspan-Isoeste Construtivos Isotérmicos S/A	51	Manufacturing
CANADA		
Kingspan Insulated Panels Limited	100	Manufacturing
Vicwest Inc.	100	Manufacturing
CZECH REPUBLIC		
Kingspan AS	100	Manufacturing
DENMARK		
LOGSTOR Denmark Holding ApS	100	Manufacturing
Troldtekt A/S	100	Manufacturing
FINLAND		
Kingspan Oy	100	Sales & Marketing
FRANCE		
CBI Poitou SAS	100	Manufacturing
Ecodis SAS	100	Sales & Marketing
Groupe Bacacier SAS	100	Manufacturing
Isocab France SAS	100	Manufacturing
Joris Ide Auvergne SAS	100	Manufacturing
Joris Ide Sud Ouest SAS	100	Manufacturing
Metal SAS	100	Manufacturing
Onduline France SAS	100	Manufacturing
Profinord Sarl	100	Manufacturing
Skydôme SAS	100	Manufacturing
Societe Bretonne de Profilage SAS	100	Manufacturing

	% Shareholding	Nature of Business
GERMANY		
Alwitra GmbH	100	Manufacturing
Colt International GmbH	100	Manufacturing
Essmann Gebäudetechnik GmbH	100	Manufacturing
Joris Ide Deutschland GmbH	100	Manufacturing
Kingspan Access Floors GmbH	100	Manufacturing
Kingspan GmbH	100	Sales & Marketing
Kingspan Insulation GmbH & Co. KG	100	Manufacturing
Kingspan Services Deutschland GmbH	100	Sales & Marketing
LOGSTOR Deutschland GmbH	100	Sales & Marketing
STG Beikirch GmbH	100	Manufacturing
HUNGARY		
Kingspan Kft	100	Manufacturing
INDIA		
Kingspan Jindal Private Limited	51	Manufacturing
INDONESIA		
PT Onduline Indonesia	100	Sales & Marketing
IRELAND		
Kingspan Holdings (Irl) Limited	100	Management & Procurement
Kingspan Holdings (North America) Limited	100	Holding Company
Kingspan Holdings (Overseas) Limited	100	Holding Company
Kingspan Holdings Limited	100	Holding Company
Kingspan Insulation Limited	100	Manufacturing
Kingspan International Finance Unlimited Company	100	Finance Company
Kingspan Light & Air Limited	100	Sales & Marketing
Kingspan Limited	100	Manufacturing
Kingspan Nominees Limited	100	Holding Company
Kingspan Securities Limited	100	Finance Company
MALAYSIA		
Onduline Building Materials (M) SDN BHD	100	Manufacturing
MEXICO		
Kingspan Insulated Panels SA DE CV	100	Manufacturing

Principal Subsidiaries and Substantial Undertakings (continued)

	% Shareholding	Nature of Business
NETHERLANDS		
Colt International Beheer BV	100	Holding Company
Colt International BV	100	Sales & Marketing
Colt International Productie BV	100	Manufacturing
Joris Ide Netherlands BV	100	Manufacturing
Kingspan BV	100	Sales & Marketing
Kingspan Holding Netherlands BV	100	Holding Company
Kingspan Insulation BV	100	Manufacturing
Kingspan Light + Air NL BV	100	Manufacturing
Kingspan Light + Air Production NL BV	100	Manufacturing
Kingspan Unidek BV	100	Manufacturing
NEW ZEALAND		
Kingspan Insulation NZ Limited	100	Manufacturing
PHILIPPINES		
OFIC Philippines Inc.	100	Sales & Marketing
POLAND		
Balex Metal Sp. Z.o.o.	100	Manufacturing
CB SA	100	Manufacturing
Kingspan Sp. Z.o.o.	100	Manufacturing
LOGSTOR International Sp. Z.o.o.	100	Holding Company
ROMANIA		
Terasteel SA	99	Manufacturing
Wetterbest SA	100	Manufacturing
SPAIN		
Huurre Iberica SA	100	Manufacturing
Kingspan Insulation SA	100	Manufacturing
Synthesia Technology Europe SLU	100	Manufacturing
Teczone Española SA	100	Manufacturing
THU Perfil SLU	100	Manufacturing

	% Shareholding	Nature of Business
SWEDEN		
Kingspan AB	100	Sales & Marketing
Kingspan Insulation AB	100	Manufacturing
Nordic Waterproofing Holding AB	24	Holding Company
TURKEY		
Kingspan Yapi Elemanlari AS	85	Manufacturing
Onduline Avrasya Insaat Malzemeleri Sanayi Ve Ticaret AS	100	Manufacturing
UNITED ARAB EMIRATES		
Kingspan Insulated Panels Manufacturing LLC	85	Manufacturing
Kingspan Insulation LLC	95	Manufacturing
UNITED KINGDOM		
Colt Group Limited	100	Holding Company
Colt International Limited	100	Sales & Marketing
Euroclad Group Limited	100	Manufacturing
Kingspan Limited	100	Manufacturing
Kingspan Group Limited	100	Holding Company
Kingspan Insulation Limited	100	Manufacturing
Kingspan Services (UK) Limited	100	Management & Procurement
Kingspan Water & Energy Limited	100	Manufacturing
UNITED STATES		
Kingspan Insulated Panels Inc.	100	Manufacturing
Kingspan Insulation LLC	100	Manufacturing
Kingspan Light & Air LLC	100	Manufacturing
Morin Corporation	100	Manufacturing
Pre-Insulated Metal Technologies Inc.	100	Manufacturing
Tate Access Floors Inc.	100	Manufacturing
URUGUAY		
Bromyros SA	51	Manufacturing

Pursuant to section 316 of the Companies Act 2014, a full list of subsidiaries, joint ventures and substantial undertakings will be annexed to the Company's Annual Return to be filed in the Companies Registration Office in Ireland.

Shareholder Information

The Annual General Meeting

The Annual General Meeting ('AGM') of the Company will be held on Friday 28 April 2023 at 9.00 a.m.

Notice of the 2023 AGM will be made available to view online at http://www.kingspan.com/agm2023

You may submit your votes electronically by accessing Computershare's website: http://www.eproxyappointment.com/

You will be asked for your Shareholder Reference Number (SRN), Control Number, and PIN, all of which will have been sent to shareholders in advance of the meeting. To be valid, your proxy vote must be received by Computershare no later than 9.00 a.m. on Wednesday 26 April 2023 (48 hours before the meeting).

Amalgamation of Shareholding Accounts

Shareholders who receive duplicate sets of Company mailings due to multiple accounts in their name should write to the Company's Registrar to have their accounts amalgamated.

Company Information

Kingspan Group plc was incorporated on 14 August 1979. It is an Irish domiciled company and the registered office is Kingspan Group plc, Dublin Road, Kingscourt, Co. Cavan, A82 XY31, Ireland. The registered company number of Kingspan Group plc is 70576.

Share Registrar
Administrative enquiries about the holding of Kingspan Group plc shares should be directed to:

The Company Registrar:
Computershare Investor Services (Ireland) Limited,
3100 Lake Drive,
Citywest Business Campus,
Dublin 24,
D24 AK82.

Financial Calendar

Preliminary Results	17 February 2023
Trading Update	28 April 2023
AGM	28 April 2023
Half-Yearly Results	18 August 2023
Trading Update	6 November 2023

Banks

Bank of America Merrill Lynch	HSBC Bank plc
ING Bank NV	BNP Paribas
Commerzbank	Danske Bank AS
KBC Bank NV	NatWest Bank Plc
Bank of Ireland	Unicredit Bank AG

Stockbrokers

Goodbody,
2 Ballsbridge Park,
Ballsbridge,
Dublin 4,
Ireland.

Bank of America Merrill Lynch,
2 King Edward St,
Farringdon,
London,
EC1A 1HQ,
England.

Auditor

Ernst & Young,
Chartered Accountants,
EY Buildings,
Harcourt Centre,
Harcourt Street,
Dublin 2,
Ireland.

Solicitors

McCann FitzGerald,
Riverside One,
Sir John Rogerson's Quay,
Dublin 2,
Ireland.

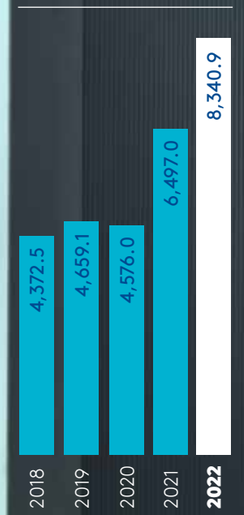
5 Year Summary

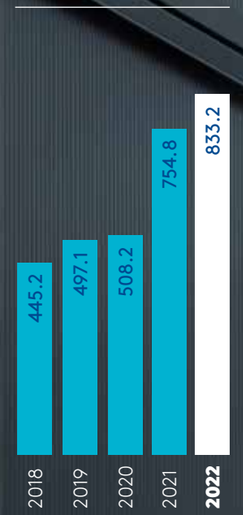
Results (amounts in €m)	2022	2021	2020	2019	2018
Revenue	**8,340.9**	6,497.0	4,576.0	4,659.1	4,372.5
Trading profit	**833.2**	754.8	508.2	497.1	445.2
Net profit before tax	**746.6**	689.0	459.7	454.4	404.9
Operating cashflow	**884.0**	490.6	750.8	627.1	530.3

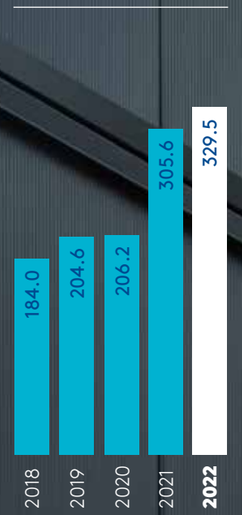
Equity (amounts in €m)	2022	2021	2020	2019	2018
Gross assets	**7,681.4**	6,387.9	5,341.6	4,288.4	4,029.4
Working capital	**1,195.9**	977.8	450.8	582.8	543.9
Total shareholder equity	**3,395.5**	2,959.3	2,397.6	2,120.4	1,788.9
Net debt	**1,539.6**	756.1	236.2	633.2	728.3

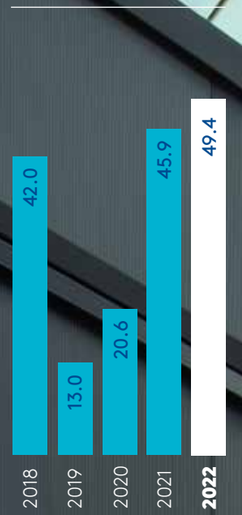
Ratios	2022	2021	2020	2019	2018
Net debt as % of total shareholders' equity	**45.3%**	25.5%	9.9%	29.9%	40.7%
Current assets / current liabilities	**1.78**	1.80	2.21	1.66	1.59
Net debt / EBITDA	**1.62**	0.88	0.40	1.09	1.40

Per Ordinary Share (amounts in €cent)	2022	2021	2020	2019	2018
Earnings	**329.5**	305.6	206.2	204.6	184.0
Operating cashflows	**487.1**	270.5	414.3	347.3	294.9
Net assets	**1,870.9**	1,631.8	1,323.1	1,174.2	994.7
Dividends	**49.4**	45.9	20.6	13.0	42.0
Average number of employees	**20,590**	17,880	15,424	14,529	13,469









design: reddog.ie

Aligned with our Planet Passionate strategy, we are committed to producing an environmentally conscious Annual Report. To reduce our environmental impact, this report is printed on 100% recycled pre- and post-consumer waste, forest-certified, carbon-balanced paper.

Recycling paper reduces waste that would otherwise go to landfill. This, in turn, reduces the carbon based emissions that would have been released through landfill degradation. The effects of climate change and growing pressures on the planet's limited resources necessitate the move towards a low-carbon circular economy. Paper is a truly sustainable product, and recycled paper is an absolute example of a circular product in action.

Source: revivepaper.com

Environmental Credentials

PAPER

Revive 100% recycled. See more at revivepaper.com

PAPER CREDENTIALS

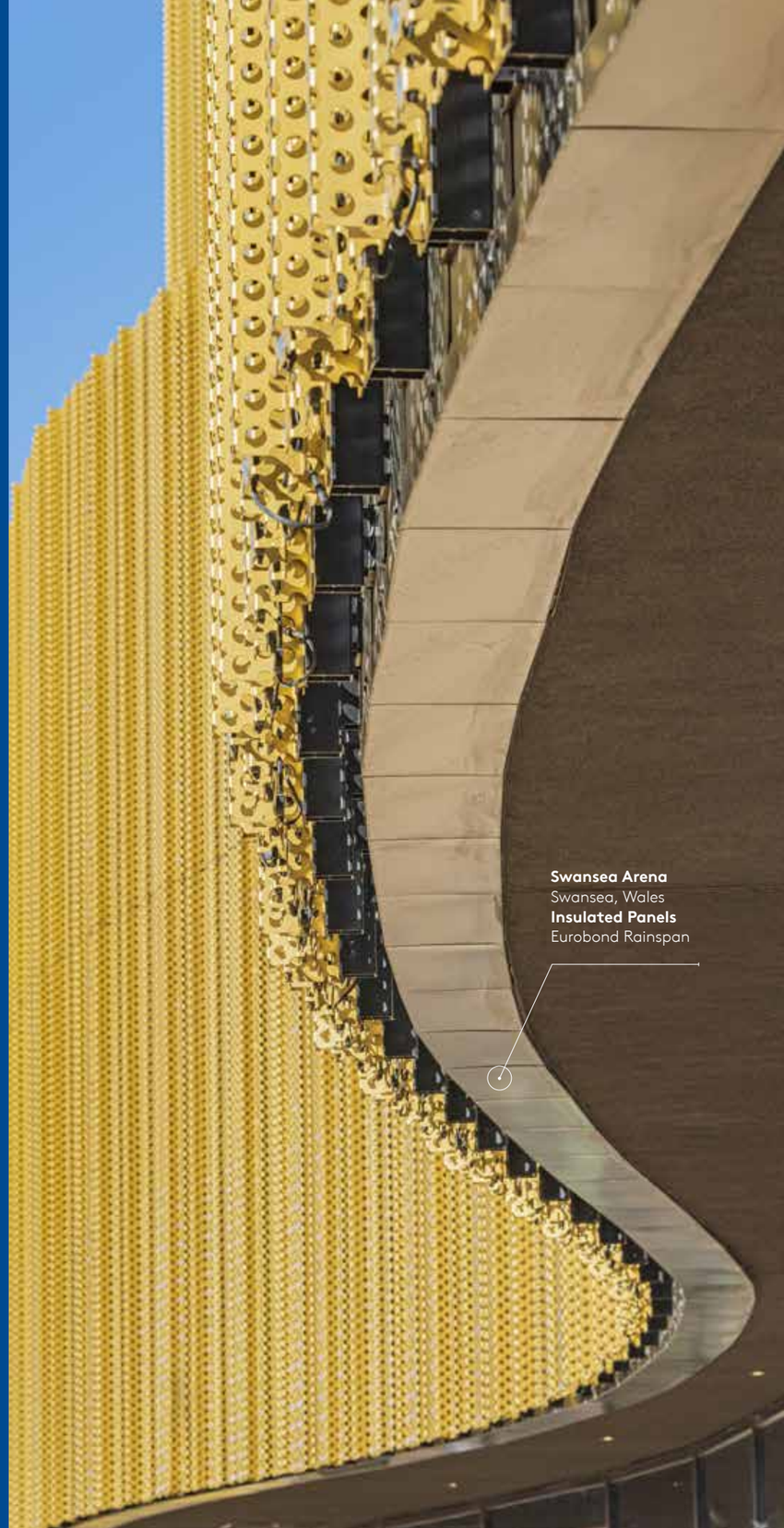
- Manufactured from FSC® recycled certified fibre derived from 100% pre- and post-consumer waste.
- Manufactured in accordance with ISO certified standards for environmental, quality and energy management.
- Carbon balanced.
- BRC certified storage and distribution.

PRINT CREDENTIALS

- 98% vegetable based inks.
- The bioglaze laminate used on this cover can be recycled along with paper, as it is an acetate polymer made from wood pulp and cotton.

NAU High-Performance Athletic Centre
Arizona, USA
Insulated Panels
KS Series Mini Micro-Rib

Scan here to explore our digital report



Swansea Arena
Swansea, Wales
Insulated Panels
Eurobond Rainspan

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