



# Chairman's Statement

Jost Massenberg



**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).**

### 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.



### Revenue

**€8.3bn**  
**+28%**

2021: €6.5bn

## 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

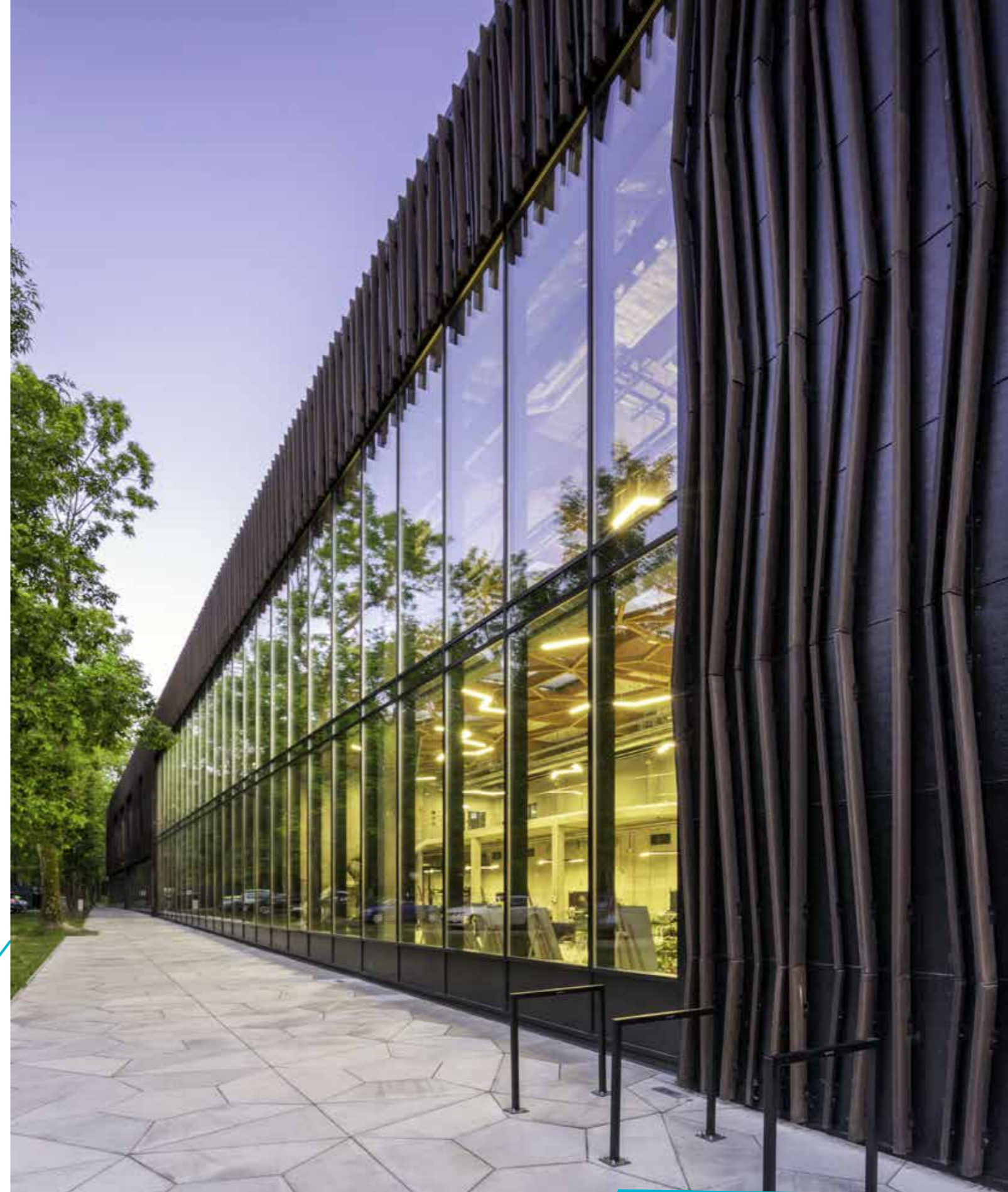


### Trading Profit

€833m

+10%

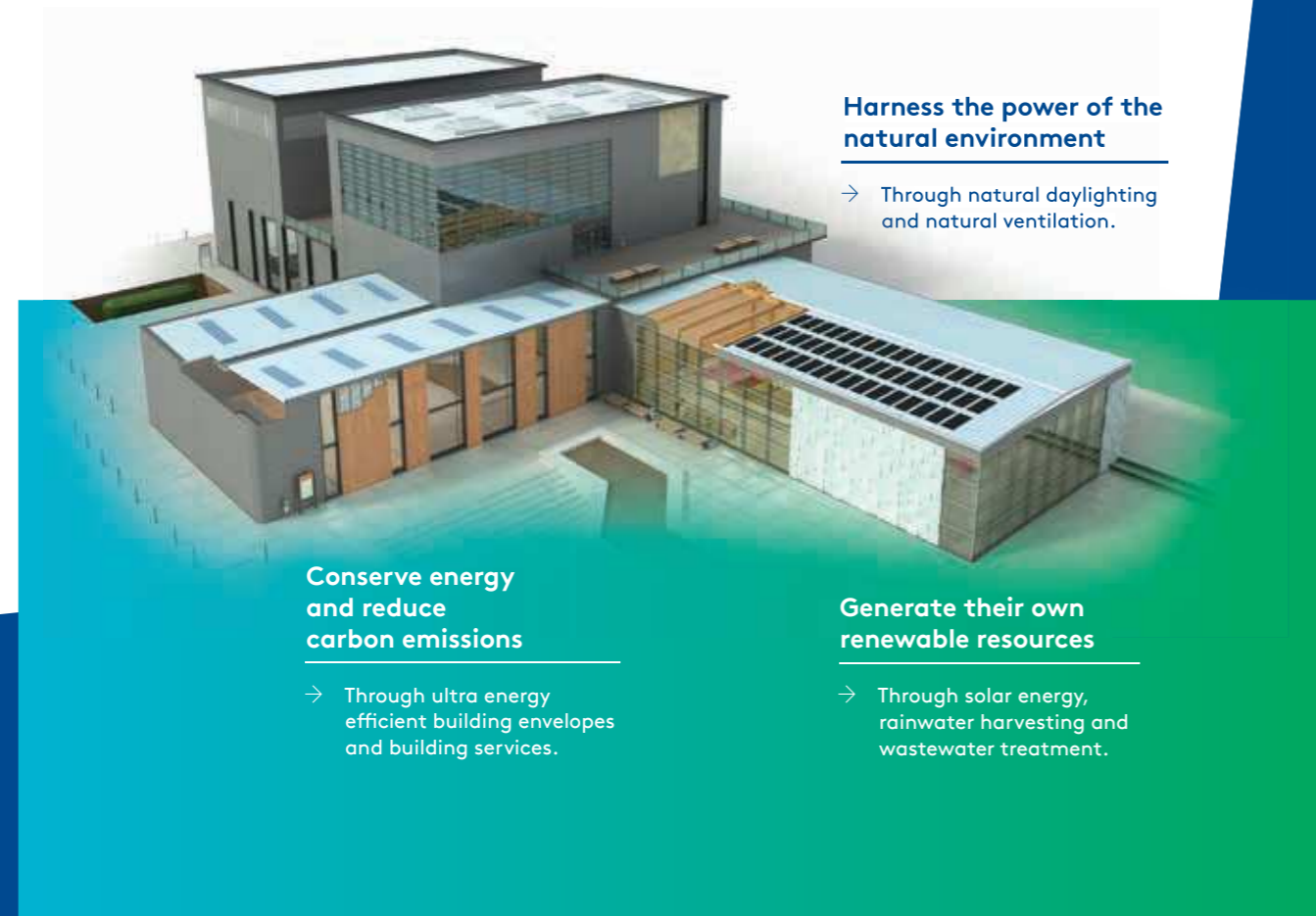
2021: €755m



# 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



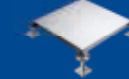
### Insulated Panels

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 floor space 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.



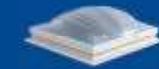
### Data + Flooring

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.



### 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 Troldekt, 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<sup>1</sup>

€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

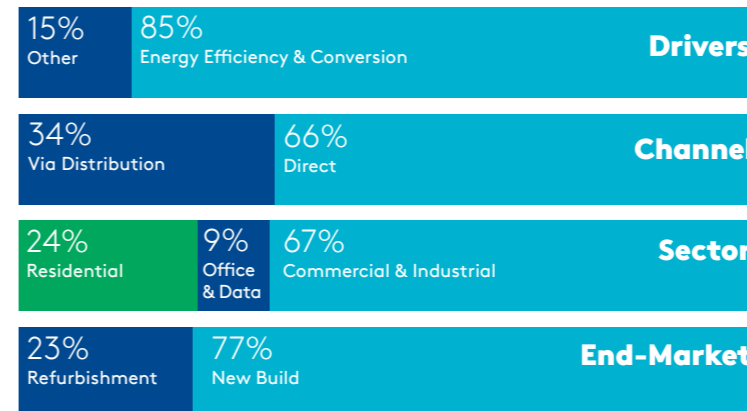
Global manufacturing facilities

22,000+

## Employees

- Management controls
- Quality systems
- Responsible supply chain partnerships

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



## Value created

### EBITDA<sup>2</sup>

€998.3m

+12%

2021: €893.2m

### EPS

329.5c

+8%

2021: 305.6c

### ROCE

15.9%

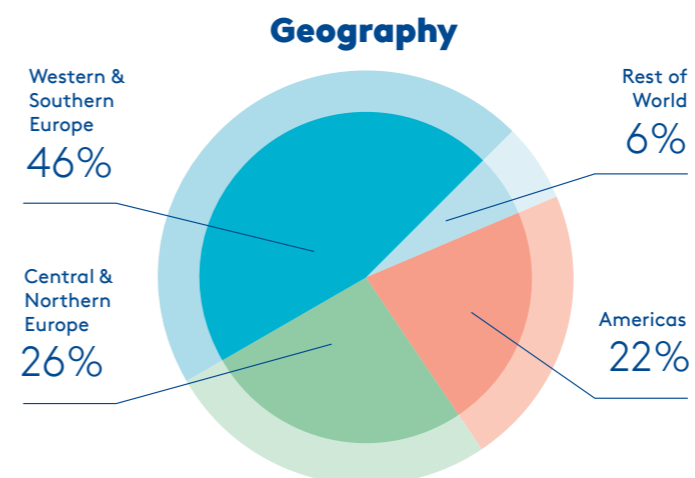
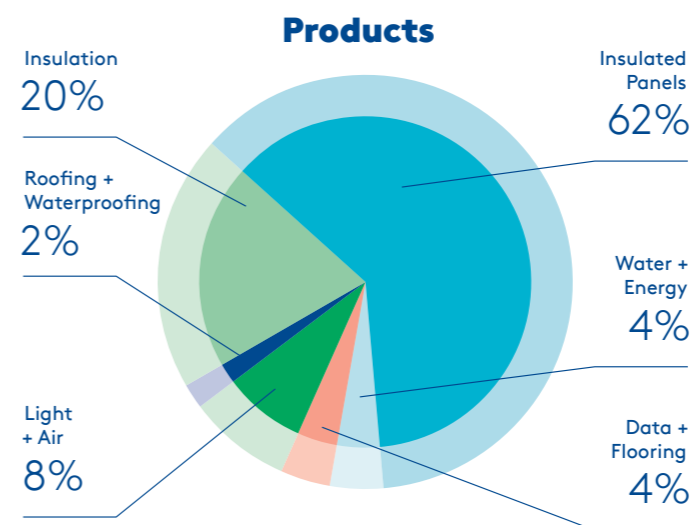
2021: 19.5%

### 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 CO<sub>2</sub>e, 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.

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

## 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.

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

## Financial Highlights

28% ↑

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

10% ↑

Trading profit<sup>1</sup> 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<sup>2</sup> 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<sup>3</sup> of €1,539.6m (2021:  
€756.1m). Net debt to EBITDA<sup>4</sup> 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		Whole Business	
			2020	2022	2020	2022
	<b>Carbon</b>					
	→ Net Zero Carbon Manufacturing - scope 1 & 2 GHG emissions <sup>1</sup> (t/CO <sub>2</sub> e)	2030	410,224 <sup>2</sup>	<b>242,734</b>	517,972 <sup>2,3</sup>	<b>385,157<sup>3</sup></b>
	→ 50% reduction in product CO <sub>2</sub> e intensity from primary supply partners (%)	2030	-	<b>0.04</b>	-	<b>0.04</b>
	→ Zero emission company funded cars (annual replacement %)	2025	11	<b>60</b>	11	<b>58<sup>4</sup></b>
	<b>Energy</b>					
	→ 60% Direct renewable energy (%)	2030	19.5	<b>34.3</b>	19.5	<b>33.4</b>
	→ 20% On-site renewable energy generation (%)	2030	4.9	<b>7.2</b>	4.9	<b>7.1</b>
	→ Solar PV systems on all wholly owned facilities (%)	2030	21.7	<b>41.5</b>	21.7	<b>35.2</b>
→ Net Zero Energy (%)	2020	100	<b>100</b>	100	<b>n/a<sup>5</sup></b>	
	<b>Circularity</b>					
	→ Zero company waste to landfill (tonnes)	2030	18,642	<b>9,081</b>	18,642	<b>10,828</b>
	→ Recycle 1 billion PET bottles into our manufacturing processes annually (million bottles)	2025	573	<b>803</b>	573	<b>803</b>
→ QuadCore™ products utilising recycled PET (no. of sites)	2025	1	<b>3</b>	1	<b>3</b>	
	<b>Water</b>					
	→ Harvest 100 million litres of rainwater annually (million litres)	2030	20.1	<b>26.3</b>	20.1	<b>26.4</b>
→ Support 5 ocean clean-up projects (no. of projects)	2025	1	<b>3</b>	1	<b>3</b>	

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 (tCO <sub>2</sub> e/€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 CO<sub>2</sub>e 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

**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™, 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



Turnover

€5,181.5m

+23%<sup>(1)</sup>

2021: €4,229.2m



Trading Profit

€548.7m

+6%

2021: €519.8m



Trading Margin

10.6%

-170bps

2021: 12.3%

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



GRID  
Dundee, UK  
Insulation  
Kooltherm K103  
Floorboard;  
GreenGuard GG300



Turnover

€1,658.3m

+40%<sup>(1)</sup>

2021: €1,182.9m



Trading Profit

€165.2m

+13%

2021: €146.7m



Trading Margin

10.0%

-240bps

2021: 12.4%

<sup>1</sup> Comprising underlying +12%, currency +2% and acquisitions +26%.

## Insulation

**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 Troldekt (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. Troldekt 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

↑	↑	↑
<b>Turnover</b>	<b>Trading Profit</b>	<b>Trading Margin</b>
€700.7m	€52.3m	7.5%
+27% <sup>(1)</sup>	+45%	+100bps
2021: €552.2m	2021: €36.0m	2021: 6.5%

<sup>1</sup> 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%<sup>(1)</sup>

2021: €271.4m



Trading Profit

€43.1m

+33%

2021: €32.3m



Trading Margin

12.0%

+10bps

2021: 11.9%

<sup>1</sup> 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%<sup>(1)</sup>

2021: €261.3m



Trading Profit

€15.4m

-23%

2021: €20.0m



Trading Margin

5.4%

-220bps

2021: 7.6%

<sup>1</sup> 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%
<b>Group</b>	<b>+16%</b>	<b>+3%</b>	<b>+9%</b>	<b>+28%</b>

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%
<b>Group</b>	<b>-1%</b>	<b>+3%</b>	<b>+8%</b>	<b>+10%</b>

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 Troldekt, 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).

		2022	2021
	<b>Covenant</b>	<b>Times</b>	<b>Times</b>
Net debt/EBITDA	Maximum 3.5	<b>1.62</b>	0.88
EBITDA/Net interest	Minimum 4.0	<b>28.7</b>	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

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



# Risk & Risk Management

CEBRA Architecture  
Offices  
Aarhus, Denmark  
Insulation  
Troldekt 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

## 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 cyclical 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

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.

### Actions to mitigate

- 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

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.

### Actions to mitigate

- 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

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.

### Actions to mitigate

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 CO2e 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**

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.

**Actions to mitigate**

- 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**

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.

**Actions to mitigate**

- 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**

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.

**Actions to mitigate**

- 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**

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.

**Actions to mitigate**

- 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.

## Fraud and cybercrime

### Risk and impact

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.

### Actions to mitigate

- 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

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.

### Actions to mitigate

- 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.



# 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<sub>2</sub>e will be saved over the life of our insulation systems sold in 2022



Enough to power a major airline for over 15 years<sup>1</sup>

<sup>1</sup> Assumes 60 year product life; based on an EU airline disclosure of over 9.2m tonnes of CO<sub>2</sub>e 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.



Kingspan Modesto  
California, USA  
Insulated Panels

Annually Generating

1,400 MWh  
(estimated)

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

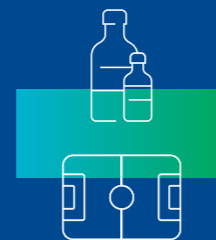


**173m tonnes**

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<sup>1</sup>**

## 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<sup>2</sup>**

## 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<sup>3</sup>**

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.

## 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.



**Havenlofts**  
Rotterdam,  
The Netherlands  
**Insulation**  
TEK Bouwstelsysteem



**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.

## 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.

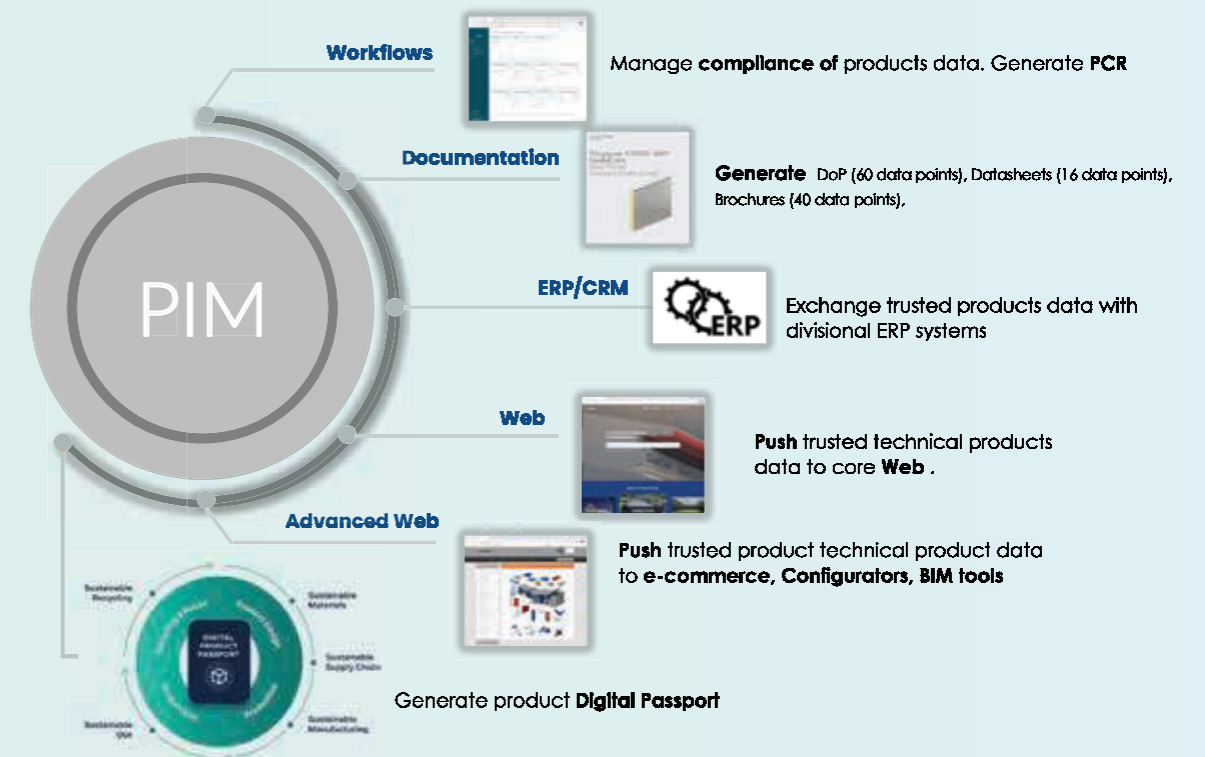
In 2021, the Marketing Integrity Manual (MIM) was launched to ensure that the information in the Product Compliance Register is represented truthfully and accurately in product marketing information.

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.



Wetterbest  
Timisoara, Romania  
Insulated Panels

Annually Generating

334MWh  
(estimated)



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.



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

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.



## 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.
- 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.

### 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.

### 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.



Supporting a School build in Madagascar 'L'École 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.

### Gender Balance

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

### Injury Frequency Rate

Year	Rate (p/100k hours)
2022	1.0
2021	1.2
2020	1.2

### Fatalities

Year	Count
2022	0
2021	1
2020	1

Male Female

p/100k hours

## 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 supplier 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