

CFA Institute Research Challenge

Hosted in
CFA Society Ireland
University College Cork

Disclosures:

Ownership and material conflicts of interest:

The author(s), or a member of their household, of this report does not hold a financial interest in the securities of this company.

The author(s), or a member of their household, of this report does not know of the existence of any conflicts of interest that might bias the content or publication of this report.

Receipt of compensation:

Compensation of the author(s) of this report is not based on investment banking revenue.

Position as a officer or director:

The author(s), or a member of their household, does not serve as an officer, director or advisory board member of the subject company.

Market making:

The author(s) does not act as a market maker in the subject company's securities.

Disclaimer:

The information set forth herein has been obtained or derived from sources generally available to the public and believed by the author(s) to be reliable, but the author(s) does not make any representation or warranty, express or implied, as to its accuracy or completeness. The information is not intended to be used as the basis of any investment decisions by any person or entity. This information does not constitute investment advice, nor is it an offer or a solicitation of an offer to buy or sell any security. This report should not be considered to be a recommendation by any individual affiliated with CFA Society Ireland, CFA Institute or the CFA Institute Research Challenge with regard to this company's stock.



CFA Institute Research Challenge

University College Cork

This report is published for educational purposes only by students competing in the CFA Institute Research Challenge.

Ticker: KSP.I

Industrials Sector: Building Products & Equipment

Closing Price: €80.44

Kingspan Group plc

Euronext Dublin London Stock Exchange

Date: 16/02/2024

Recommendation: HOLD Target Price: €78.45

INVESTMENT SUMMARY

Market Snapshot	
Volatility (%)	6.43
Dividend Yield (%)	0.68
12 Mth Price Rtn (%)	51.87
52-Week High (€)	80.66
52-Week Low (€)	51.62
Shares O/S (mn)	181.6
Market Cap (€bn)	14.30
EPS (2023)	3.39
Beta	1.06
Free Float (%)	84.20

Fig 1: Organic Growth Trend

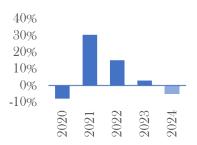


Fig 2: Historical Net Debt vs Acquisitions Spend (Millions)

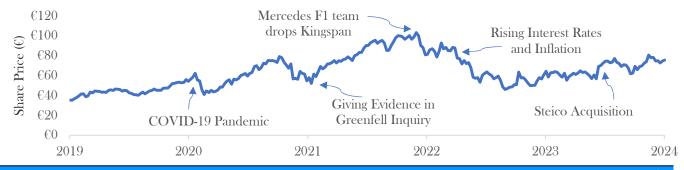


We issue a HOLD recommendation for Kingspan Group plc (Kingspan) with a target price of £78.45 representing a 2.5% downside from the closing price of £80.44 on 16/02/2024. Kingspan is a financially sound company with many positive characteristics, including its regular dividends and operation in a global growth area. The move towards sustainability in the construction industry and Kingspan's position as a global leader in this field gives us confidence in its long-term credentials. However, the company is facing headwinds in the short (1-2 years) and medium-term (3-5 years) that limit its ability to fully capitalise on its long-term growth potential. Kingspan has been growing strongly in recent years but most of this growth is attributable to acquisitions which we do not expect to continue at the same rate. Accordingly, we issue a HOLD recommendation, investors should monitor Kingspan's ability to manage its performance as it navigates turbulence in the near term. A significant drop in price in response to expected below trend performance can be viewed as a buying opportunity.

Positive long-term outlook: While short to medium-term growth is expected to slow, we believe long-term trends are positive for Kingspan. Its recent expansion into Vietnam and Indonesia, and continuing expansion across the US provides the opportunity to enter untapped markets. Kingspan is primely positioned to capitalise on global sustainability trends as customers move to greener initiatives. Kingspan's investment in research and development has produced a suite of insulation products ahead of its peers for sustainability and useful lifespan. The company targets a position of global supplier with a comprehensive suite of products and solutions, as part of its Completing the Envelope strategy.

Acquisition Stagnation: Kingspan's substantial revenue growth in the 2020-2023 period has largely been driven by takeovers, with the company spending €3.03 billion since the beginning of 2017. Funding acquisitions with debt will be more expensive in the current environment of heightened interest rates. Kingspan has reduced its net debt by approximately one third in 2023 to €1.05 billion. As a result, fewer acquisitions are expected going forward, which will decrease overall revenue and profit growth rates. Furthermore, the company faces the challenge of successfully integrating and streamlining these acquired businesses while it navigates new markets.

Slow Organic Growth: Contrasting with strong growth due to acquisitions has been Kingspan's sluggish organic growth in the 2020-2023 period. We expect these headwinds to continue in the short-to-medium term for two reasons; Kingspan's Costs of Goods Sold (COGS) increased greatly during the period, but Kingspan was able to pass this on to customers. We believe this pricing power has been fully utilised, meaning Kingspan will be less able to boost revenue through pricing power alone. Customers will have difficulties financing projects due to higher interest rates which will cause some to be priced out of Kingspan's premium insulated panels products.



BUSINESS DESCRIPTION

Fig 3: Geographical Revenue



Fig 4: Division Revenue



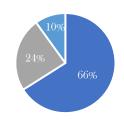
Kingspan is a global manufacturer of building materials, specialising in high-performance insulation, and building envelope solutions (everything that separates the inside and outside of a building). Its primary listing is on Euronext Dublin, but also trades on the London Stock Exchange. It is a constituent of the ISEQ 20. Kingspan has a global presence with over 210 manufacturing sites in operation across 80 countries. The business is divided into five divisions: Insulated Panels (IP), Insulated Boards (IB), Light + Air + Water (LAW), Data + Flooring (DF), and Roofing + Waterproofing (RW).

Geographical Breakdown: Most the company's revenue comes from Europe (72%), but its reach across the globe has increased in recent years. Its presence in the Americas and Asia are expected to further increase with a global organic expansion plan facilitated by new product lines and plants in countries like the US, Brazil, Vietnam, and Indonesia.

Key Products: Kingspan's revenue and subsequent profits are driven by the Insulated Panels, and Insulation divisions (58% and 19% of 2023 revenue respectively). Its Insulated Panels division offers a number of high-performance products, such as QuadCore, Rooftricity and PowerPanel, which are designed to provide operational efficiencies and renewable energy solutions. The insulated panels are designed to be removable and recyclable at the end of their useful life. Kingspan's aim is to become the single supplier for all its customers' building needs, by integrating each division and providing a comprehensive set of solutions.

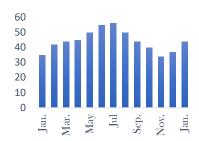
INDUSTRY OVERVIEW AND COMPETITIVE POSITIONING

Fig 5: Sector Diversity



- Commercial Residential
- Office & Data

Fig 6: US Housing Market Index 2023



Kingspan is in the building products & equipment industry which is a part of the larger construction sector. The construction sector is cyclical, where demand is influenced by changes across the business cycle. Fluctuations in the prices of raw materials in global commodity markets such as steel affect Kingspan's revenues. Kingspan maintains relationships with multiple raw material suppliers to minimize the effects of supply chain disruptions.

SHORT-TERM MACRO OUTLOOK

The construction industry is operating in a growth trend due to positive global economic conditions; however, a slowdown is projected in the short-term. Input costs have settled between 35-40% higher than pre-pandemic rates and labour costs continue to rise at 4% annually across the Americas and Europe. Higher interest rates and frictions in doing business means it is more expensive for construction companies to borrow. This will lead to less investment in capital projects and Kingspan's premium products becoming less affordable.

The Wells Fargo Housing Market Index survey of National Association of Home Builders members has remained below 50% for most of the trailing-twelve-months to January 2024, indicating that fewer builders see favourable conditions for the near future. Spending on non-residential buildings increased by more than 20% in 2023 but is expected to decline to 4% growth in 2024, falling to 1% growth in 2025.

Kingspan has managed to maintain its pricing power post-pandemic, in the wake inflation pressures in 2021-2022. However, we believe this will not continue with its customers feeling inflationary effects and tighter credit conditions, in combination with a decrease in aggregate demand.

Fig 7: Global Productivity Rebased Real Value Added Per Hour Worked

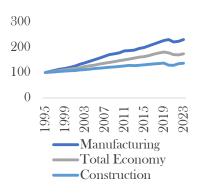


Fig 8: Percentage of Americans
Working Remotely



Fig 9: R&D Spending

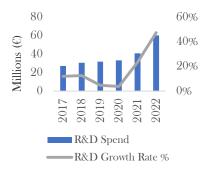
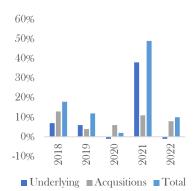


Fig 10: Trading Profit Growth



LONG-TERM KEY DRIVERS

Emissions impact: The International Energy Agency (IEA) approximated that 26% of global energy-related emissions are a result of the operations of buildings. The United Nations Environment Programme goes further, estimating that the building and construction industry accounts for up to 37% of global greenhouse gas emissions. Most countries in which Kingspan operates have pledged to achieve the IEA's goal of net-zero emissions by the year 2050. This presents a substantial long-term growth opportunity for which Kingspan is suitably positioned, with a suite of market leading sustainable insulation products and solutions to take advantage of these greener trends.

Productivity opportunity: The building industry heavily lags other sectors in terms of labour productivity. Research shows that since 1995 the global average valued added-per hour has increased four times as quickly in manufacturing compared to construction. Kingspan process is well positioned to benefit from resolving customers' productivity problems. The focus on delivering premanufactured products moves work off site to a more efficient factory setting. Its policy of providing a complete suite of solutions of compatible products minimises installation frictions on site.

Structural change in demand: Expenditure growth on commercial property is projected to decelerate in the coming years. We are concerned this change may be structural, rather than cyclical as companies across the globe have increasingly switched to remote work since the onset of the pandemic. If this trend continues it indicates that reduced demand for commercial property will be permanent rather than cyclical.

CORPORATE STRATEGY

Kingspan builds its competitive strategy on four pillars: *Innovation, Planet Passionate, Completing the Envelope*, and *Globalisation*. Through constant innovation and acquiring new businesses, the company integrates its divisions to offer a comprehensive suite of products to current and prospective customers across the globe. For instance, the newly established Roofing + Waterproofing division has attracted new clients, with the expectation that it will generate additional interest in insulation products.

Technology: Kingspan has invested significantly in Research and Development (R&D) as part of its Innovation strategy, equivalent to approximately 9% of its annual net profit since 2017. Internally developed products have become increasingly popular. Sales of QuadCore insulated panels increased 46% from 2021-2022. QuadCore offers twenty-five years of thermal performance; a positive step toward a sustainable future and Kingspan's *Planet Passionate* programme. The consistent growth in R&D investment has been key to maintaining its position as the global leader in insulated solutions.

Acquisitions: A major part of Kingspan's globalisation strategy over the last five years has been acquiring other businesses. Between 2017-2023, the company has spent over €3.03 billion on acquisitions. It is a global leader in each of its divisions bar Roofing + Waterproofing, where there is a global-scale growth opportunity. Kingspan have focused on acquiring companies that align with both its *Planet Passionate* programme and *Completing the Envelope* strategy.

However, we believe the rate at which Kingspan acquires companies has peaked and will significantly decrease going forward. Through its recent takeovers, Kingspan has acquired significant debt, and its cash balance has fallen from €1.33 billion in 2020 to €649.3 million in 2022. Furthermore, the cost of acquiring further debt and servicing existing debt will increase due to higher interest rates as current revolving credit lines mature.

Fig 11: Pioneers in Sustainability

(Pa)	Energy Efficiency
¥	Embodied Carbon
دُمُ	Recycling
laa .	Occupant Wellbeing
-	Water Management

Expansions: Kingspan made significant capital expenditure, totalling €1.059 billion between 2018-2023. Part of this expenditure went to maintenance of existing facilities, but most was focused on Kingspan's expansion strategy across the globe. The company has placed emphasis on establishing a presence in the US. Currently, there are ten new plants, lines and facilities planned there, with estimated project completion dates ranging from 2024-2026. Kingspan have additional plans to expand into the Asian market, having recently set up in Saudi Arabia and Vietnam and have projects underway in Indonesia. We believe the company can use its experience from Europe and its technology edge to successfully integrate its business across new markets.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE

Fig 12: 2023 Planet Passionate Progress (%)

	Net Zero Carbon Manufacturing	73
Carbon	50% reduction in product CO2	7
రో	Zero emissions company funded cars	70
	60% Direct Renewable Energy	63
Energy	20% on-site renewable energy generation	50
	Solar PV systems on owned sites	54
	Zero waste to landfill	56
tecycling	PET bottles Recycle	86
Rec	QuadCore [™] products utilising recycled PET	42
	Harvest rainwater	56
Wate	Support five ocean clean-up projects	80

Fig 13: Gender Ratio



■ Male ■ Female

Kingspan have a stated commitment to sustainability, outlining that the company's mission is to contribute to a net-zero emissions future while prioritising minimal impact on the planet and maximising welfare of the population. Kingspan publishes its sustainability report *Planet Passionate*, annually. Kingspan holds an impressive AA MSCI rating, which signifies the importance the company places on sustainability and its position as a leader in this space compared to the wider industry.

ENVIRONMENTAL

Kingspan operates the ten-year programme, *Planet Passionate*, which aims to address global challenges resulting from climate change. The programme has four main pillars in carbon, energy, recycling, and water. Kingspan has stated its commitment to achieving a 90% reduction in absolute Scope 1 and 2 greenhouse gas (GHG) emissions by 2030, and absolute Scope 3 GHG emissions by 42%, from a 2020 baseline. Additionally, Kingspan is engaged in the Carbon Disclosure Project to better disclose its environmental impact. The company has made good progress towards its sustainability targets with nine out of eleven targets exceeding a 50% completion rate, which is on schedule.

Kingspan aim to closely track its environmental targets. All ten operating businesses globally adhere to sustainability goals, reviewed monthly by at least two executive directors. The appointment of a Global Head of Sustainability in 2019 underscores Kingspan's commitment. Reporting directly to the CEO and the Board, the Global Head of Sustainability leads a team of fifteen representatives from different business units.

SOCIAL

Kingspan has stated its prioritisation of a culture centered around diversity, inclusion, health and safety, and zero tolerance of bullying and harassment. We feel that Kingspan have demonstrated that employee safety is a key concern. Between 2020-2022 only two workspace fatalities were reported globally. The Injury Frequency Rate decreased by 16.7% to 1.0 person/100 thousand hours in 2022, reflecting a continuous focus on enhancing safety measures.

Acknowledging challenges in the construction industry where female employees are significantly underrepresented, Kingspan demonstrates its stated commitment to gender balance. In 2022, the company saw a 15% increase in its workforce, where the ratio of female employees increased from 20% to 21%, showcasing progress in fostering diversity.

In 2022, Kingspan established the Group Supplier Policy. The policy aims to reinforce standards of Kingspan's suppliers. The key points examined are business practices, integrity, ethical employment practices, bribery prevention, corruption prevention and

Fig 14: Injury Frequency Rate

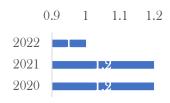


Fig 15: ESG Risk Ratings

Company	ESG Risk
Kingspan	Low
Holcim AG	Medium
Owens Corning	Low
SIG Plc	Medium
Compagnie de SG	Medium
Rockwool	Medium

Fig 16: Top 10 Owners

•	
Owner	%
Eugene Murtagh	14.76
Capital Research	7.99
BlackRock U.K.	6.94
Fidelity	5.03
Generation Invest	4.00
Allianz Global	3.99
Vanguard	2.41
Norges Bank	2.23
Comgest S.A.	1.99
BlackRock N.A.	1.40

the promotion of environmental responsibility. Kingspan also adopted EcoVadis, a sustainability management platform to mainly help track supplier's ESG performance.

In 2021, Kingspan introduced *Planet Passionate Communities* an integral part of its tenyear sustainability programme. This initiative aims to support global communities and promote sustainable practices using responsibly sourced materials. On a local level, Kingspan is actively involved in community projects, while globally, the company has partnered with GOAL, the international humanitarian aid agency, to develop sustainable infrastructure in healthcare and education.

GOVERNANCE

The Kingspan Board has eleven directors, four Executive and seven Non-Executive Directors (including the Chairperson). The Non-Executive Directors, excluding the Senior Independent Director, have an average tenure of 2.8 years. The Senior Independent Director who has been on the Board for eleven years is elected to gather opinions from other Non-Executive Directors. It should be noted that according to the UK Corporate Governance code that after a tenure of nine years a Non-Executive Director is no longer considered independent. The Board meets formally nine times a year, overseeing three committees: Audit & Compliance, Remuneration, and Nominations.

A recent board change in April 2023 saw the retirement of two independent Non-Executive Directors, with one female Non-Executive Director joining the Board, in line with Kingspan's stated aim of gender equality. The Board has adopted a Board Diversity Policy, which aligns with the Hampton-Alexander Review on gender diversity, aiming for a minimum 40% representation of females and increased international representation.

Kingspan seeks to maintain rigorous internal audit and compliance reviews. In 2020, the Code of Conduct was translated into ten languages for widespread employee training. While actively advertising its anti-bribery and corruption policy internally, we believe that there is scope for improvement as the policy on Kingspan's official website has not been updated for ten years.

The top ten owners own 50.74% of the company. Multiple well-established institutional investors holding significant stakes such as Blackrock and Vanguard. The founder, Eugene Murtagh, is Kingspan's largest shareholder and owns 14.76%. He has a significant influence but does not have the power to make dominant decisions. It should be noted that his son has been appointed as CEO of Kingspan.

FINANCIAL ANALYSIS

Fig 17: DuPont Analysis

DuPont Analysis	
Net Profit Margin (%)	7.39
Total Asset Turnover	1.09
Equity Multiplier	2.21
Return on Equity (%)	17.75

Kingspan experienced remarkable growth over 2017-2022 in revenue (17.8% Compound Annual Growth Rate (CAGR)) and profits (15% CAGR), outperforming the global construction industry CAGR of 4.6% over the same period. However, the reported figures are disproportionately influenced by acquisitions and inflation rather than underlying growth.

Revenue Growth: Kingspan's revenue rose from €3.7 billion in 2017 to €8.3 billion in 2022. Most of the revenue comes from the Insulated Panels and Insulated Boards divisions, accounting for 77% of revenue in 2022. Kingspan attributes much of this growth to product innovation and differentiation. This is true in certain respects; its global sales volume for its internally developed QuadCore insulated panel increased by 46% in 2022, and it continues to launch products such as the Lower Embodied Carbon insulated panel and AlphaCore Pad insulated board. However, Kingspan organic revenue CAGR estimated at 8% over 2017-2022. This only slightly outpaces Eurostat's estimation of

Fig 18: EBIT Drivers

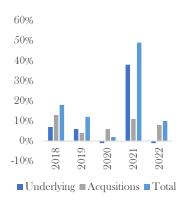


Fig 19: Total Debt (Millions)

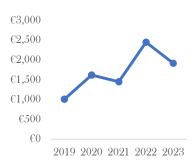


Fig 20: Kingspan D/E vs Peers

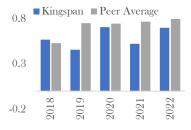
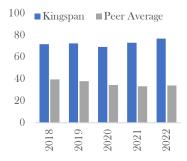


Fig 21: Kingspan CCC vs Peers



Europe's construction costs inflation of 5.9% during this period and lags behind the Producer Price Index for construction materials in the US, which was 8.6%. Aside from slight fluctuations in year-to-year currency translations, acquisitions make up the rest of Kingspan's revenue growth (9.9% CAGR).

Profit Margins: Kingspan's operating profit increased from €377.5 million in 2017 to €833.2 million in 2022, representing a CAGR of 17.2%, with an average operating profit margin of 10.33%. COGS increased at a CAGR of 18.6% during this time, meaning that Kingspan was able to pass on most of, but not all, the inflation costs to its customers. The company has maintained a consistent Net Profit Margin, averaging 8.1%, over the past five years. This is in contrast to Kingspan's peers which exhibited varying degrees of instability in its Net Profit Margins due to challenges presented by the pandemic. While its peers were notably impacted, Kingspan remained resilient, reflecting positively on its performance.

Gearing: The total debt has increased from €662 million in 2017 to €1.918 billion in 2023. Kingspan generated most of this debt funding acquisitions. Kingspan's debt is provided through syndicated bank facilities and private placement loan notes. The company's cost of debt stands at 1.65%. However, in the current environment of higher interest rates, we do not believe the company will be able to acquire debt at the same rate. The D/E ratio of the firm has increased from 0.45 in 2017 to 0.70 in 2022, similar to peer average D/E which increased from 0.53 to 0.81 over the same period.

Liquidity: Kingspan has a solid position, given that its current assets are sufficient to cover its current liabilities. The Current Ratio of 1.78 for 2022 is slightly better than the average of its peers, which stands at 1.65. Kingspan has a healthy interest coverage ratio of 20, although we expect this to fall in the future once the company's current revolving credit facilities mature. Kingspan's Cash Conversion Cycle (CCC) stands at 77.12, twice that of the industry average of 34.11, indicating that it has an opportunity to improve efficiency here. Overall, there is no immediate concern regarding the firm's liquidity.

Dividend Policy. The dividend payout ratio is currently below the industry average at 15%, with the company opting to reinvest most of its earnings back into growth and reducing debt. As the company matures, we expect the dividend payout ratio to increase and converge with its peer average of 30%.

CONCERNS

Accounting for significant acquisitions. Kingspan made significant acquisitions during the year. These acquisitions pose a risk of improper accounting due to the high level of estimation uncertainty in management's assessments, especially concerning fair value adjustments to property, plant, and equipment (PP&E), and the recognition and valuation of provisions in the opening balance sheets.

Warranty Provisions. Kingspan has €181.5 million warranty provisions which accounts for 2.2% of its revenue. As many of Kingspan's products incorporate new technology, there is a high risk of warranty claims that are uncertain. Kingspan's management must make significant judgements about warranty provision assumptions, which poses a considerable risk of these provisions being inaccurately estimated, either overstated or understated in expense and liability.

Revenue Recognition. Kingspan operates multiple revenue streams, each governed by varying revenue recognition policies across its divisions, posing a significant risk of revenue being recognized in incorrect periods. This risk is particularly pronounced if management attempts to prematurely recognize revenue to meet specific revenue targets or forecasts.

Fig 22: Historical and Forecast Financial Ratios for Kingspan

Profitability	2020A	2021A	2022A	2023A	2024F	2025F	2026F	2027F
Gross Profit Margin (%)	29.76	28.11	26.18	27.99	27.84	27.62	26.45	26.88
Operating Profit Margin (%)	10.71	11.31	9.70	10.33	10.17	9.98	9.76	9.89
Net Profit Margin (%)	8.41	8.78	7.39	8.07	7.98	7.77	7.52	7.62
Return on Cap Employed (%)	11.11	14.60	12.70	13.08	13.72	13.92	14.15	14.32
Return on Equity (%)	17.03	21.30	19.39	19.41	19.76	19.99	20.46	21.02
Liquidity								
Current Ratio	2.21	1.80	1.78	1.91	2.02	2.10	2.05	1.87
Quick Ratio	1.76	1.08	1.06	1.19	1.31	1.42	1.36	1.17
Cash Ratio	1.11	0.38	0.36	0.47	0.52	0.58	0.54	0.46
Efficiency								
Days of Sales Outstanding	56.57	48.46	47.25	47.11	48.58	49.38	46.32	43.45
Days of Inventory on hand	60.39	64.27	70.39	71.28	73.54	76.51	73.88	71.46
Number Days of Payables	47.60	39.46	40.52	42.35	43.77	42.9	42.16	41.18
Cash Conversion Cycle	69.36	73.27	77.12	76.04	78.35	82.99	78.04	73.73
Solvency								
Debt to Assets	0.55	0.54	0.56	0.49	0.53	0.52	0.51	0.55
Debt to Equity	0.71	0.53	0.70	0.52	0.57	0.55	0.53	0.61

VALUATION

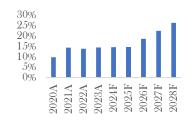
Fig 23: Model Valuations

Model	Target Price
FCFE	€78.45
FCFF	€76.42
DDM	€60.85

Fig 24: Model Parameters

Model Parameters	
LTG	3.25%
Cost of equity	8.31%
Leveraged beta	1.06
Cost of debt	1.65%
WACC	7.31%

Fig 25: Kingspan dividend payout forecast



VALUATION

We value Kingspan at $\[mathebox{\ensuremath{$\ell$}}\]$ using a Free Cash Flow to Equity (FCFE) model. We issue a HOLD recommendation based on this valuation, a 2.5% downside on the closing price of 16/02/2024. This recommendation is supported by alternative valuation models, relative valuation metrics and stress tests. A Free Cash Flow to the Firm (FCFF) model produced a similar valuation of $\[mathebox{\ensuremath{$\ell$}}\]$ However, we prefer FCFE as the primary valuation model due to the difficulty in accurately calculating Kingspan's cost of debt. This is a result of Kingspan's use of low, fixed-rate private placement as its predominant debt source making its cost of debt artificially low given the current interest rate climate. A Dividend Discount Model (DDM) produced valuation of $\[mathebox{\ensuremath{$\ell$}}\]$ we feel that this is too conservative as Kingspan have such a low dividend payout relative to its peers. However, this can be considered as a floor to our valuation.

FORECASTING

Earnings Growth: We estimate Kingspan's short-term real revenue growth to be 1%. This estimate is generated by aggregating separate growth estimates for each of Kingspan's divisions. This is below the expected industry average of 4.1% and a result of expected low real economic growth. We forecast growth to rise to 3.25% in the long-term.

Profit Margins: Operating Profit Margins are expected to decrease slightly in the short-to-medium term by 2%, as COGS increase faster than the rate of revenue and pricing power gained from the 2021-2022 inflationary period is fully utilised. We forecast that profit margins will settle at the industry average of approximately 10.1% in the long-term.

Tax Rates: We expect Kingspan to maintain its effective tax rate of 17% in the short-term with this rising to a long-term average 18.5% from 2026. The global convergence to a 15% corporate tax rate will increase the overall tax bill of a company with profits housed either predominately or entirely in Ireland, a low-tax jurisdiction.

Fig 26: Kingspan DPS forecast



Fig 27: Kingspan EV/EBITDA vs peers

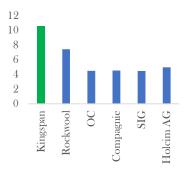


Fig 28: Kingspan PEG vs peers

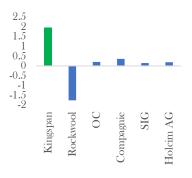
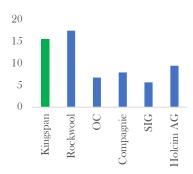


Fig 29: Kingspan P/E vs peers



Acquisitions: We do not expect any earnings growth from acquisitions as we assume no additional takeovers in the short-term. This has previously been a key driver of growth; however, additional acquisitions are not feasible with Kingspan's stated policy to reduce debt, the already high gearing, and an insufficient cash balance to complete acquisitions without debt.

Dividends: We expect Kingspan to maintain its dividend payout ratio at approximately 15% in the medium-term as the company reduces debt. As excess cash will not be used for acquisitions, we project a convergence to the peer average of approximately 30% in the long-term.

Model Parameters: The model uses a long-term average growth rate (LTG) of 3.25% and a cost of equity of 8.31%, based on a leveraged beta of 1.06. We estimate a cost of debt of 1.65% which contributes to a weighted average cost of capital (WACC) of 7.31% for the Free Cash Flow to the Firm model.

RELATIVE VALUATION

We value Kingspan relative to its peers, and, while the results are inconsistent, they indicate the possibility that Kingspan is overvalued. This can be a cause for concern, but we feel that, while the relative valuation does not support the valuation suggested by the FCFE model, Kingspan is a solidly run company with a superior long-term strategy that offers greater growth potential than its peer companies. We use three multiples, EV/EBITDA, Price/Earnings Growth (PEG) and Price to Earnings (P/E) to compare Kingspan to its peers. Kingspan's EV/EBITDA of 10.59 is much higher than that of its peers who range from 4.47 to 7.46. Kingspan's PEG ratio of 1.96 is, again, higher than the peer median average of 0.23. While a lower PEG ratio would be preferable Kingspan is within the range of being fairly valued based on this ratio. Kingspan's P/E ratio of 15.47 is higher than that of its peers, with a median average of 7.87, an indication that Kingspan is overvalued. However, the industry overall is below the market average, Kingspan's P/E being only slightly above that of the ISEQ and FTSE250, at 12.1 and 12.5 respectively. It should be noted that there has been significant volatility in these multiples for both Kingspan and its peers since the pandemic, however, multiples from previous years also indicated Kingspan to be overvalued. With the volatility easing off we see Kingspan settling on a higher rating than its peers.

STRESS TESTING

Sensitivity Analysis: We conducted Sensitivity Analysis on the key model inputs: long-term growth rates and cost of equity; using values both above and below those used in the base case FCFE model. The price matrix shows that our FCFE model is not highly dependent on the parameter choices. Both the best-case and worst-case-scenarios from the sensitivity analysis are approximately 20% away from the Base Case model price. The symmetrical nature of the sensitivity matrix, the number of Buy and Sell scenarios are similar within a margin of error, supports our HOLD recommendation. A Monte Carlo simulation produced similar results.

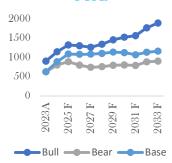
Fig 30: Kingspan's peer group



Fig 31: Peer Cost of Equity (COE)

Company	COE
Kingspan	8.31
Holcim AG	4.88
SIG plc	11.53
Compagnie de SG	11.12
Rockwool	8.6
Owens Corning	12.16

Fig 32: Scenario Analysis annual FCFE



		Long-term Growth				
		2.75%	3.00%	3.25%	3.50%	3.75%
	8.81%	66.21	68.17	70.29	72.62	75.18
luity	8.56%	69.63	71.81	74.19	76.81	79.7
Cost of Equity	8.31%	73.34	75.77	78.45	81.4	84.68
Cost	8.06%	77.44	80.18	83.21	86.57	90.32
	7.81%	81.93	85.03	88.47	92.3	96.61

Bull/Bear Scenario Analysis: Finally, we conduct a scenario analysis in which we alter our central estimate of revenue growth to reflect Bull and Bear scenarios. In the Bull scenario we assume a peak 7.5% CAGR continuing for three years before a decline to the long-term growth rate of 3.25%. This scenario produces a target price of £103.02, representing a 31.29% upside from the Base Case model. In the Bear Scenario we assume a revenue decrease in the short term of -1.5%, recovering to the long-term growth rate in the medium term and remaining at this rate. This scenario produces a target price of £56.97, representing a 27.38% downside from the base case. This valuation represents a worst-case-scenario for Kingspan. The upside/downside potential is close to symmetrical, consistent with our HOLD recommendation.

INVESTMENT RISKS

Fig 33: Kingspan Main Global Organic Expansion Plan

Project	Countries
Insulated	Paraguay, Brazil,
Panel Line	Vietnam, Indonesia,
	Colombia, USA,
	France
Building	Ukraine
Technology	
Campus	
Mineral	Czech Republic,
Fibre	Australia, USA
Panel	
Data +	Belgium, USA
Flooring	
Plant	
PIR	Saudi Arabia, France,
Board	Romania

In light of the HOLD recommendation, the risks presented contain both a potential upside and downside for Kingspan. We emphasise downside risks as we feel Kingspan have greater exposure to these risks. However, we recognise that there are upside risks to our valuation which would result in the Kingspan share price significantly overshooting our base case. If manifested, these upside risks would result in potential investors missing out on significant gains.

FIRM-SPECIFIC RISKS (FR)

FR1: Friction in Expansion: Kingspan is dedicated to its global expansion strategy. Should Kingspan encounter headwinds in these new markets, such as greater competition in the Insulated Panels industry in Asia compared to current markets, medium-to-long-term revenues may be adversely affected. Impact: A 1% CAGR increase in Capital Expenditure leads to a 5.3% downside in the valuation.

FR2: Integration Risk: Kingspan have pursued a strategy of extensive acquisitions. If the company encounters issues integrating these new business units into the core business, it may struggle to extract synergies. Impact: Subtracting Kingspan's revenue growth from acquisitions in 2022 and projecting forward from this new growth baseline leads to a 10.5% downside impact on valuation.

FR3: Global Workforce Shortage: A global skills shortage in the construction industry may adversely affect the operating costs of Kingspan, whose workers deal with highly technical products requiring specialized skills and training. Impact: A 1.5% increase in the operating costs leads to a 3.2% downside impact on valuation.

Fig 34: Key Products Launched

Year	Product	Division
2023	AlphaCore	IB
2023	Optim-R	IB
2023	BioKor	IB
2022	PowerPanel	IP
	QuadCore	
2022	LEC	IP
2022	Rooftricity	IP
2022	Solatube	LAW

Fig 35: Percentage Change in hourly labour costs



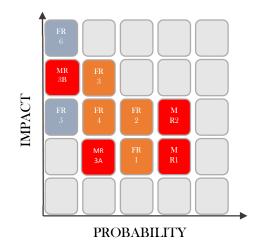
Fig 36: Kingspan's acquisitions



FR4: Product Failure: As Kingspan attempts to innovate continuously, there is a significant risk new products will not function as intended which could result in contingency liability or reputational damage. Impact: A 10% Insulated Panel division revenue growth decrease in 2023 leads to 2.1% downside impact on valuation.

FR5: Underestimation of Future Acquisition Potential: Kingspan may have the ability to generate efficient cash and maintain its low cost of debt to maintain the current growth strategy of acquiring more companies in the future. Impact: A 10% increase short-term revenue growth rate leads to 7.3% upside impact on valuation.

FR6: Takeover Possibility: Alternative: Kingspan is a conservatively run company, with a well-balanced product portfolio, and a significant competitive advantage in insulated panels. These characteristics make Kingspan an attractive takeover prospect for a private equity firm, to



restructure its finance and improve efficiency with the goal of generating a large premium. **Impact:** Successful takeover would lead to a 25-30% upside in valuation.

MARKET RISKS (MR)

MR1: Recession: We forecast low economic growth in the valuation model. An economic slowdown beyond the projections, will have a knock-on effect in the firm's ability to capture revenue and grow. **Impact:** A 5% decrease in revenue growth leads to a 5.8% downside impact on valuation.

MR2: Supply Chain and Customer Credit: We have projected Kingspan's profit margin to fall slightly in the short term. Interest rates have risen sharply in the last 2-3 years meaning Kingspan's customers have less access to capital and are less able to purchase the premium products on which Kingspan generates most of its margins. Factors affecting its customers may cause margins to fall significantly below our forecast. Impact: 3% decrease in the operating profit margin leads to an 18.9% impact on valuation.

MR3A/B: Regulation Changes: Kingspan is subjected to environmental policies and regulations that greatly impact business operations. Non-compliance with these directives can lead to legal issues that impact the growth potential of Kingspan. It also has the opportunity benefit from changes in regulations that encourage the use of sustainable insulation or penalise the use of less sustainable insulated solutions. Impact: A 1% increase in Operating Costs leads to 2.85% impact on valuation. A 3% increase in revenue growth leads to 7.6% impact on valuation.

CONCLUSION

We reiterate our HOLD recommendation for Kingspan. The company has strong long-term prospects with expansions into new global markets and the launch of new products to augment the existing product suite. However, Kingspan faces a number of short-term challenges. It is limited by low organic growth, while growing through acquisitions in the short-term is not feasible. Kingspan faces challenges of integrating newly acquired business units into its core business and extracting synergies. Finally, the company faces economic headwinds with low economic growth expectations.

Appendix

1.	SWOT Analysis	6.	FCFF	11.	Peers Analysis
2.	PESTEL Analysis	7.	DDM	12.	ESG Ratings
3.	Porter's Five Forces	8.	Share Price Sensitivity	13	Planet Passionate
4.	Model Parameters	9.	Monte Carlo Simulation	14	Acquisition History
5.	FCFE	10.	Peer Companies	15	Board of Directors

1. SWOT Analysis



Global leader in Insulated Panels.

Increasingly diversified product portfolio.

Focus on sustainability with societal demand for sustainable construction.

Weaknesses



Limited organic growth.

Relying on acquisitions to generate profit.

Over 50% of revenue derived from Insulated Panels division.

Opportunities



'Completing the envelope' strategy to develop insulation pull-through.

> Expansion into new markets.

Continued growth of urbanisation.

Threats



Customer credit issues shifting preferences to cheaper materials.

Vulnerability to bad news stories.

Unfavourable regulation changes.

2. PESTEL Analysis

Political Economic

- * Majority of revenue is from affluent European countries and the United States.
- Low political risk in advanced economies, aligning with sustainable product preferences in these countries.
- ❖ Sluggish short-term economic growth will be the driver of slow short-term revenue growth.
- ❖ Weaker residential market impacting on Insulation revenues and profits.

Social **Technological**

- ❖ Societal Demand: Growing societal and economic demand for sustainable construction.
- ❖ Urbanization: With 68% of people projected to live in urban areas by 2050, the ongoing need for larger cities, new homes, and infrastructure will benefit Kingspan.
- ❖ Products & Sustainability: Kingspan has a high R&D spend to develop existing sustainable product suite and launch new products as part of *Complete the* Envelope.
- Changes in Customer Needs: Evolving customer demands in building projects leading to increasingly technically advanced product development.

Environmental Legal

- Safety of Products: Extensive testing in conjunction with Kingspan's new Fire Engineering Research Centre.
- ❖ Impact of production: Focus on carbon neutrality push of product offering.
- Environmental regulations: Susceptible to changes in regulations or building codes causing industry disruption, particularly those related to climate change.

3. Porter's Five Forces

Threat of Substitution - Moderate 3.2

- Amplified by their premium price and customer's more limited ability to borrow customers may seek lower priced insulations solutions than those of Kingspan and make the corresponding sacrifice on quality.
- Rivalry is higher in the less premium sub-strata of the Insulated Panels industry therefore there are several competitor firms that could substitute if a customer moved to a lower price point.
- Product differentiation is high; hence a substitute will likely not achieve the same use case as the Kingspan offering if that use case is exact to customers' needs and specifications.
- Across other divisions, competition is greater therefore customers can substitute Kingspan's offering with that of competitors, disrupting Kingspan's ability to employ their 'Complete the Envelope' solution.

Power of Suppliers - Low to Moderate 2.2

- Kingspan maintains relationships with several raw materials suppliers, reducing their dependence on singular suppliers and mitigates any disruption in the raw materials supply chain.
- Suppliers experienced geopolitical pressure from the war in Ukraine and passed higher costs onto Kingspan and other companies in the industry. Kingspan must take on these additional costs but has previously passed this on to customers.
- Suppliers have low probability of joining the industry independently, making them independent on the patronage of companies like Kingspan.

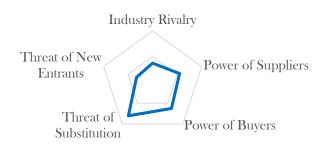
Power of Buyers - Low to Moderate 2.5

- Buyers have more limited access to credit compared with previous years, making them less able to pay Kingspan's premium prices.
- For customers who can pay these prices, in the Insulated Panel industry, few companies can compete with Kingspan's product offering in sustainability or efficiency terms.
- Across other division, the higher industry rivalry draws more power to the buyers as there are more credible competitors to Kingspan.
- Buyers have a low probability of integrating backwards into the industry and becoming their own suppliers, creating a dependency on companies like Kingspan.

Threat of New Entry - Low 1

- Any potential new entrant into the market to compete with Kingspan would require a sizable R&D and marketing spend.
- * Regulations with the industry can create additional barriers to entry for new firms.
- Economies of scale achieved by Kingspan are difficult to achieve.
- Product differentiation is already strong, meaning a new firm cannot separate itself by offering a more bespoke product.

Industry Rivalry - Low 1.5



- Kingspan is dominant in the Insulated Panels industry, offering a premium product in this sector.
- ❖ In its smaller division there is more competition, however, these smaller divisions make up only 23% of annual group revenue.
- Kingspan continues to develop its product portfolio to maintain its advantage in the industry with products like QuadCore.

4. Valuation Parameters

This section sets out the key parameters that were used in the valuation model alongside their constituent components and the assumptions used to generate them.

Cost of Equity	Forecast Methodology
Risk-Free Rate	The risk-free rate of 2.49% is the German 30-year Government Bond rate as of 2^{11} February 2024.
Beta	Calculated as 1.06 from a regression of five-year weekly returns of Kingspan and its peer companies using the average weekly price return as a proxy for market return. Unlevered and Re-levered Beta using peer average Debt/Equity ratio and Kingspan's 2022 Debt/Equity Ratio.
Capital Asset Pricing Model (CAPM)	To calculate the cost of equity, the team used CAPM. The Equity Risk premium of 5.48% is that for Ireland as per the Aswath Damodaran paper 'Equity Risk Premiums (ERP): Determinant, Estimation, and Implications.
Growth Rate	Forecast Methodology
Terminal Growth Rate	The 3.25% terminal growth rate effective after 2032 is based upon the expected GDP growth rate in Kingspan's primary geographic operating markets (Ireland, UK, and US).
Revenue	Forecast Methodology
Insulated Panels	Low S/T growth, M/T growth derived from 5 -year average top-line revenue growth subtracting inflation. Adjusting for organic sales growth to a peak of 7.5% . Linear decline to terminal growth rate of 3.25% .
Insulation	Low S/T growth, M/T growth derived from 5-year average top-line revenue growth subtracting inflation. Adjusting for organic sales growth to a peak of 7.5%. Linear decline to terminal growth rate of 3.25%.
Light, Air + Water	Low S/T growth, M/T growth derived from 5-year average top-line revenue growth subtracting inflation. Adjusting for organic sales growth to a peak of 9%. Linear decline to terminal growth rate of 3.25%.

Data + Flooring	Low S/T growth, M/T growth derived from 5-year average top-line revenue growth subtracting inflation. Adjusting for organic sales growth to a peak of 6.5%. Linear decline to terminal growth rate of 3.25%.
Roofing + Waterproofing	Low S/T growth, M/T difficult to project given lack of previous data, assumed to grow linearly peaking at 5%. Linear decline to terminal growth rate of 3.25%.
IS Line Item	Forecast Methodology
Cost of Revenue	Historical average ratio of revenue projected forwards for 10 years.
Operating Cost	Historical average ratio of revenue projected forwards for 10 years.
Depreciation & Amortisation	Historical average ratio of revenue projected forwards for 10 years.
Interest Expense	Average historical effective interest expense applied in line with revenue growth and debt balance.
Income Tax Expense	Historical average ratio of EBT (17%) converging towards 18.5% as global minimum corporate tax rate of 15% begins to apply.
All other line items	Forecasted forward based on historical average ratio in line with growth in revenue.
BS Line Item	Forecast Methodology
Current Assets	Cash Balance sourced from projected cash flow statements. Remaining current assets estimated in line with rise in forecasted revenue.
Fixed Assets	Fixed assets are estimated in line with the rise in forecasted revenue.
Total Debt	Forecasted in line with debt-to-equity target ratio (0.5-0.6).
Equity	After share repurchase in 2021, not change expected in common stock.
Retained Earnings	Calculated from the retained earnings of the previous year in addition to any Net Profit generated for a given year, projected forward for 10 years.
CF Line Item	Forecast Methodology
Net Income	
	Derived from Income Statement projections of Net Income
Non-cash item	Derived from Income Statement projections of Net Income Derived from Income Statement projections of Depreciation and Amortisation.
Non-cash item Investing Activities	
	Derived from Income Statement projections of Depreciation and Amortisation. CapEx derived from projected changes in fixed assets in line with revenue and investment

5.Free Cash Flow to Equity Model.

Particulars	2024 F	2025 F	2026 F	2027 F	2028 F	2029 F	2030 F	2031 F	2032 F	2033 F
Net Income	700.41	737.76	793.10	831.44	882.02	929.43	972.80	1,011.31	1,044.18	1,078.11
(+) Depreciation	190.09	200.23	215.25	225.66	239.38	252.25	264.02	274.47	283.39	292.60
(-) ΔWC	147.39	225.38	(46.42)	114.64	184.98	142.22	111.25	62.07	90.11	99.24
(-) CapEx	(270.49)	(284.91)	(306.28)	(321.09)	(340.62)	(358.93)	(375.68)	(390.55)	(403.25)	(416.35)
(+)Net Borrowing	120.29	210.17	69.54	231.36	136.24	172.47	149.44	109.99	117.40	107.88
FCFE	887.69	1,088.64	725.19	1,082.00	1,102.00	1,137.43	1,121.83	1,067.29	1,131.83	1,161.48

6. Free Cash Flow to Firm Model

While not used as the primary model on account of Kingspan's low cost of debt in comparison to its peers, the team produced a Free Cash Flow to the firm model which generated a valuation of €76.42, a 5% downside from the 16/02/2024 closing price of €80.44.

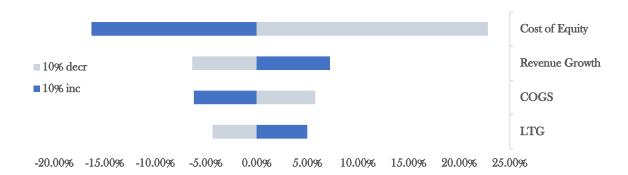
FCFF	2024 F	2025 F	2026 F	2027 F	2028 F	2029 F	2030 F	2031 F	2032 F	2033 F
Cash Flow from Operations	846.33	891.46	958.32	1004.66	1065.77	1123.06	1175.47	1222.00	1261.71	1302.72
Interest	44.29	46.66	50.16	52.58	55.78	58.78	61.52	63.96	66.04	68.18
Tax Rate	16.98%	16.98%	16.98%	18.50%	18.50%	18.50%	18.50%	18.50%	18.50%	18.50%
Interest (1- Tax)	36.77	38.74	41.64	42.85	45.46	47.90	50.14	52.12	53.82	55.57
Change in CapEx	-270.49	-284.91	-306.28	-321.09	-340.62	-358.93	-375.68	-390.55	-403.25	-416.35
FCFF	612.61	645.29	693.68	726.42	770.61	812.03	849.93	883.57	912.28	941.93

7.Divident Discount Model

Year	2024 F	2025 F	2026 F	2027 F	2028 F	2029 F	2030 F	2031 F	2032 F	2033 F
Net Income	700.41	737.76	793.10	831.44	882.02	929.43	972.80	1,011.31	1,044.18	1,078.11
EPS	3 . 86	4.06	4.37	4.58	4.86	5.12	5. 36	5.57	5.75	5.94
Retention Rate	0.15	0.18	0.21	0.24	0.27	0.25	0.30	0.30	0.30	0.30
DPS	3.28	3.33	3.45	3.48	3.55	3.84	3.75	3.90	4.02	4.16
Discounted DPS	3.03	2.84	2.72	2.53	2.38	2.38	2.14	2.06	1.96	1.87

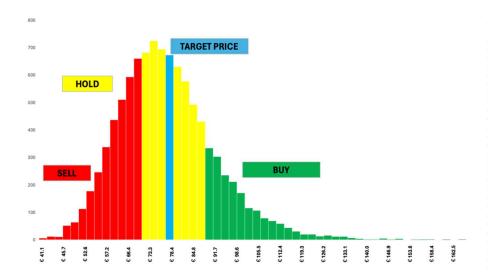
8. Share Price Sensitivity

We tested the sensitivity of the FCFE model to changes in their direct and indirect model inputs. Change in Cost of Equity proved to be most sensitive which can be explained by Kingspan's high weight of market value of equity relative to its market value of debt.



9. Monte Carlo Simulation

The sensitivity of the FCFE model to key parameters was tested by Monte Carlo Simulation. The simulations varied the estimates of cost of equity and long-term growth and had 10,000 iterations. The outcomes were consistent with our model's expectations with most simulations being in the price range of a HOLD recommendation.



Max	162.5
Min	41.1
Mean	77.92
Std. Dev	14.45
Sample	10000

10.Peer Companies

Holcim A/G

Holcim AG is a Swiss-based company operating in the building materials industry. The Company's business segments include Cement, Aggregates, Ready-Mix Concrete and Solutions & Products. The company employs a unique approach by utilizing a special concrete mix to achieve insulation in its builds. With a substantial market capitalization



of €39.25 billion, Holcim AG stands as one of the major players in this sector. They currently have 60,400 employees spread in 60 countries.

Owens Corning



Owens Corning are an American company specializing in the development and production of insulation, roofing, and fiberglass composites. Its Insulation segment provides a range of thermal products, catering to markets in the United States, Europe, Asia-Pacific region, and Latin America. As the world's largest manufacturer of fiberglass composites, Owens Corning employs approximately 19,000 people worldwide. The company has consistently held a position on the Fortune 500 list since its inception in 1955. Owens Corning's current market capitalization stands at €12.1 billion.

SIG plc

SIG plc are a UK-based international supplier of insulation, commercial interiors, roofing, and specialist construction products. The company provides a comprehensive range of insulation, interiors, roofing, and exterior products, covering structural insulation, construction accessories, roofing materials, and solar electricity panels. With a workforce of 7,200 employees and a market capitalization of ϵ 450 million it is a smaller peer company, primarily concentrating on European markets.



Compagnie de Saint Gobain SA



Compagnie de Saint Gobain SA (Saint-Gobain), a French group, is dedicated to designing, manufacturing, and distributing building materials. Its Construction Products sector consists of both interior and exterior solutions, with an emphasis on insulation products. Operating in 76 countries, Saint-Gobain, as of 2022, has a workforce exceeding 170,000 and a market capitalization of €31.23 billion.

Rockwool A/S

Rockwool A/S, formerly Rockwool International A/S is a Danish manufacturer of mineral wool products. The Company offers floor insulation that is made from stone wool and aim to improve a building's thermal and acoustic performance. Rockwool is a supplier of fire-resistant stone wool insulation. Rockwool A/S currently have 11,900 employees working for them over 45 manufacturing facilities spread across 39 countries. It holds a Market Capitalization of $\pounds 5.4$ billion, with its primary market orientation centered on Europe and America.



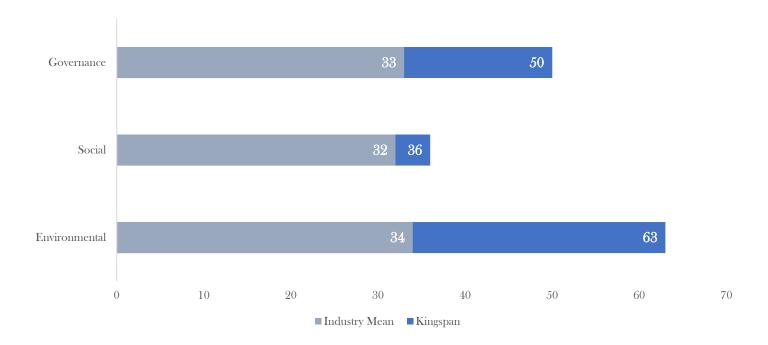
Company Name	Ticker	Market Cap. (Billion EUR)	Origin Country
Kingspan	KSP.I	13.54	Ireland
Holcim	HOLN.S	39.25	Switzerland
SIG	SHI.L	0.45	United Kingdom
Owens Corning	OC	12.1	USA
Compagnie de Saint Gobain	SGOB.PA	31.23	France
Rockwool	ROCKb.CO	5.4	Denmark

11.Peer Analysis:

Operating Profit Margin (%)	2020	2021	2022	3 Year Average
KSP.I	10.71	11.31	9.70	10.57
HOLN.S	14.57	16.40	11.03	14.00
SHI.L	-8.54	0.61	2.05	-1.96
OC	-1.96	16.92	17.56	10.84
SGOB.PA	7.24	9.59	9.60	8.81
ROCKb.CO	13.11	12.99	10.29	12.13
Peer Average	4.88	11.30	10.11	8.76
EV/EBITDA	2020	2021	2022	3 Year Average
KSP.I	17.06	22.19	10.59	16.61
HOLN.S	6.99	6.38	4.99	6.12
SHI.L	23.41	7.87	4.47	11.92
OC	7.71	5.70	4.50	5.97
SGOB.PA	5.83	6.45	4.55	5.61
ROCKb.CO	12.05	12.54	7.46	10.68
Peer Average	11.20	7.79	5.19	8.06
Price/Earnings	2020	2021	2022	3 Year Average
KSP.I	28.09	34.66	15.47	26.07
HOLN.S	14.82	10.5	9.44	11.59
SHI.L	-	_	5.64	5.64
OC	_	9.49	6.72	8.11
SGOB.PA	44.35	13	7.87	21.74
ROCKb.CO	26.58	27.44	17.39	23.80
Peer Average	28.46	19.02	10.42	19.30
ROE (%)	2020	2021	2022	3 Year Average
KSP.I	15.35	19.56	17.75	17.55
HOLN.S	6.66	8.66	11.27	8.86
SHI.L	-57.87	-11.05	5.91	-21.00
OC	-8.90	24.03	27.72	14.28
SGOB.PA	2.57	13.29	14.01	9.96
ROCKb.CO	9.73	11.74	10.58	10.68
Peer Average	-9.56	9.34	13.90	4.56
Cash Conversion Cycle	2020	2021	2022	3 Year Average
KSP.I	69.36	73.27	77.12	73.25
HOLN.S	9	6.6	7.9	7.83
SHI.L	47.5	53.7	54.6	51.93
OC	48.9	41.2	37.5	42.53
SGOB.PA	19.01	19.19	18.24	18.81
ROCKb.CO	48.08	46.50	52.29	48.96
Peer Average	34.50	33.44	34.11	34.02
Price/Earnings Growth	2020	2021	2022	3 Year Average
KSP.I	38.45	0.72	1.96	13.71
HOLN.S	-0.7	0.35	0.19	-0.05
SHI.L	-	-	0.15	0.15
OC	-	0.03	0.2	0.12
SGOB.PA	-0.66	0.03	0.36	-0.09
ROCKb.CO	0.00	1 0=	1.76	0.07
HO CHO.CO	-2. 36	1.27	-1.76	-0.95
Peer Average	-2.36 8.68	0.48	0.18	-0.95 3.12

12.ESG Ratings

Kingspan scores well on the Standard & Poor's ESG ratings. It is above the industry average on all three categories individually, significantly in the case of Governance and Environmental but marginally for Social.



13.Planet Passionate Progress

Topic	Target	Progress (%)
	Net Zero Carbon Manufacturing (scope 1 & 2 GHG emissions1 - tCO2e)	73
Carbon	50% reduction in product CO2e intensity from primary supply partners	7
	Zero emissions company funded cars - annual replacement	70
	60% Direct Renewable Energy	63
Energy	20% on-site renewable energy generation	50
	Solar PV systems on all wholly owned sites	54
	Zero company waste to landfill	56
Recycling	Recycle 1 billion PET bottles into our manufacturing processes annually	86
•	QuadCoreTM products utilising recycled PET	42
V V-4	Harvest 100 million litres of rainwater annually	56
Water	Support 5 ocean clean-up projects	80

14. Acquisition History

Year	Name	Price	Division	
2023	Caplast	€85m	Roofing +Waterproofing	7
2022	Steico	€251m	Insulation	STETCO LOGSTOR
2022	Ondura Group	€515.6m.	Roofing	
2022	Troldtekt	€220.4m	Insulation	Ondura Troldtekt. —
2021	Derbigum	€95.0m	Waterproofing	
2021	Logstar	€244.5m	Insulation	CaPlast CUE
2020	Colt Group	€51.5m	Light & Air division	Your Pasawal Conting Solution
2019	Bacacier SAS	€122.0m.	Insulation	DERBIGUM® BACACIER®

15. Board of Directors

Executive Directors						
	Name	Position	Age	Year Joined	% share	Compensation (€ thousand)
	Gene M. Murtagh	Group Chief Executive	51	1999	0.59	2901
	Geoff Doherty	Chief Financial Officer	51	2011	0.14	1849
1	Russell Shiels	Divisional President	61	1996	0.12	2017
	Gilbert McCarthy	Managing Director	51	2011	0.15	1692
Non-Executive Directors						
	Name	Position	Age	Year Joined	Resident	Compensation
	Jost Massenberg	Chairperson	66	2018	Germany	350
	Louise Phelan	Board	50	2023	Germany	
	Senan Murphy	Board	51	2022	Ireland	19
E	Éimear Moloney	Board	52	2021	Ireland	75
	Paul Murtagh	Board	50	2021	USA	75
	Anne Heraty	Board	63	2019	Ireland	75
	Linda Hickey	Senior Independent Director	58	2013	Ireland	90