

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Kingspan is a global provider of high performance, sustainable building products and solutions for the international property and construction industry, contributing to major environmental benefits worldwide. Over 62% of Kingspan’s revenue in 2019 was derived from products which directly contribute to improving resource efficiency, through the sale of energy saving building envelope solutions, including building integrated renewable energy systems and through the sale of rainwater and wastewater management systems.

Kingspan has a presence in over 70 countries with 159 manufacturing sites employing over 15,000 globally. Kingspan has five operating divisions: Insulated Panels (65%), Insulation Boards (19%), Light and Air (7%), Data and Flooring (5%), Water and Energy (4%) In 2019, Kingspan’s turnover increased by 7% to €4.7 billion assisted by acquisitions:

Kingspan’s strategic vision is to become the world’s leading provider of low energy building solutions based on a strategy of using a building envelope first approach. As part of this strategy, Kingspan is focusing on innovation in the high-performance building insulation sector as well as the development of market-leading on-site energy generation and water management systems. To support our innovation led strategy and to drive continuous improvement in process and products, Kingspan invests broadly 1% of revenue annually (€31.9m in 2019) in research and development. Kingspan is the only global insulated panel and insulation board manufacturer, which gives us significant scale advantage versus competitors in innovation.

2019 was a landmark year for Kingspan’s commitment to innovation, with the completion of IKON, its new Global Innovation Centre in Ireland. The IKON™ will bridge business divisions and geographic regions and continue to drive Kingspan’s position as market leader in sustainable and energy efficient building solutions. It has been built to LEED Gold Standard and is a showcase for Kingspan products and systems. Significant research activities going on in this state of-the-art facility include the development of a new fibre-free A1 AlphaCore® insulation board, the next generation of our market leading QuadCore™ insulated panels and Kooltherm® insulation boards, and a revolutionary new integrated solar PV panel, all designed to help its customers efficiently reduce energy costs and the environmental footprint of their businesses.

Kingspan recognises the significance of climate change to global society and the central importance of addressing the built environment as part of efforts to mitigate greenhouse gas emissions. Today, the construction and operation of buildings together account for 36% of global energy use and 39% of energy-related CO₂ emissions when upstream power generation is included. As a growing number of countries pass new regulations in favour of more energy efficient buildings, it has encouraged the use of innovative construction solutions for new buildings and increased insulation standards for renovation projects.

Kingspan is committed to providing solutions in both areas, not only for the marketplace but also for its own facilities. In 2019 Kingspan achieved 90% of its Net Zero Energy (NZE) goal across its global manufacturing estate. Kingspan is an active member of the RE100, signatory to the Task Force on Climate-related Financial Disclosures (TCFD) and the WorldGBC’s Net Zero Carbon Buildings Commitment. The commitment challenges industry to achieve net zero operational carbon in all new buildings by 2030, and all buildings by 2050.

As well as being a substantial business opportunity, Kingspan recognises that climate change also represents a significant threat to its own operations and has put metrics in place to inform future mitigation strategies including the commitment to and verification of the company’s science-based targets in 2018. In 2019, Kingspan launched its new 10 –year global sustainability programme - Planet Passionate. This is the second phase of our journey which proactively aims to help impact on three global issues: climate change, circularity and protection of the natural world. The overarching goals of the programme are to significantly reduce the company’s environmental impact, to further enhance the environmental performance of its products and to make a meaningful contribution towards the achievement of the UN SDG’s. Through its NZE Programme, Kingspan had already made great strides in powering its business on renewable energy, and with Planet Passionate it is setting more ambitious goals for the next 10 years. It has committed to hard targets in the areas of energy, carbon, circularity and water.

In summary, the climate change agenda is at the heart of Kingspan’s vision and activities. However, the company recognises that these same measures will also pay dividends for its customer base in terms of cost savings and energy security, thereby underpinning the current business strategy.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2019	December 31 2019	No	<Not Applicable>

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

- Australia
- Belgium
- Brazil
- Canada
- Colombia
- Czechia
- Finland
- France
- Germany
- Hungary
- India
- Iran (Islamic Republic of)
- Ireland
- Latvia
- Mexico
- Netherlands
- Norway
- Panama
- Poland
- Romania
- Russian Federation
- Slovakia
- Spain
- Turkey
- United Arab Emirates
- United Kingdom of Great Britain and Northern Ireland
- United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

EUR

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Financial control

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Chief Executive Officer (CEO)	Kingspan Group Chief Executive Officer is the individual on the board responsible for climate related issues. This responsibility has been embedded at the top of the chain of command to ensure climate related issues are considered when reviewing and guiding strategy, major plans of action, risk management policies, annual budgets, business plans and assessing progress against goals and targets for addressing climate-related issues.
Other C-Suite Officer	The CEO is supported in this role by the PLC Executive Directors who are responsible for ensuring that climate related issues are monitored at divisional level and that any significant issues are reported back to the board at the bi-monthly board meetings. Monitoring is carried out at overall divisional level by the Global Environment, Health and Safety and Planet Passionate committees. The responsibility for climate related issues extends to the PLC Executive Directors (and beyond) to ensure that climate related issues are identified, managed and escalated accordingly.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	<p>Reviewing and guiding strategy</p> <p>Reviewing and guiding major plans of action</p> <p>Reviewing and guiding risk management policies</p> <p>Reviewing and guiding annual budgets</p> <p>Reviewing and guiding business plans</p> <p>Setting performance objectives</p> <p>Monitoring implementation and performance of objectives</p> <p>Overseeing major capital expenditures, acquisitions and divestitures</p> <p>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</p>	<Not Applicable>	<p>Climate related issues can be escalated to board level at any of the bi-monthly meetings, should the need arise. Irrespective of this provision, the subject is presented and discussed at board level several times a year through the governance mechanisms provided in the previous column. Please see three such examples below. Examples of how the chosen governance mechanisms are implemented: Reviewing and guiding business plans: Kingspan hosts a full strategic review of the business annually. This review includes all aspects of the business and long-term strategic decisions are made which include any climate change risks or opportunities. The outcomes of that strategic review are presented to the board for review at the subsequent board meeting. Reviewing and guiding risk management policies: Annually, in the fourth quarter, we ask each business to consider all material business risks and the processes in place to manage those risks. Each risk is assessed for its probability and impact. Environmental and climate change risks are assessed as part of this exercise. These risks are subsequently considered at the November Audit Committee meeting each year with a summary provided to the Kingspan board at its December meeting. Monitoring and overseeing progress against goals and targets for addressing climate-related issues: Through its new Planet Passionate (PP) programme, Kingspan has committed to ambitious energy and carbon targets with the aim of achieving net zero carbon manufacturing by 2030. This programme following on from Kingspan's Net Zero Energy target which aims to match 100% of operational energy with renewable energy generation and the purchase of renewable energy certificates. In 2019, 90% of this goal was achieved, up from 75% in 2018. This agenda is managed by the Group Head of Sustainability and driven by the Global Planet Passionate Team, which has senior operational representatives from each division. The PP Team is responsible for managing our energy needs by improving energy efficiency, generating renewable energy or sourcing renewable energy - thus helping to reduce our overall carbon intensity. The Group Head of Sustainability reports to the board annually.</p>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Other C-Suite Officer, please specify (Managing Directors)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Other, please specify (Kingspan Group Head of Innovation)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Other, please specify (Kingspan Group Head of Sustainability)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

CEO: Ultimately the responsibility of climate related issues falls to Kingspan's CEO. Climate related issues are not considered on a stand-alone basis, they are fully integrated into the business model and strategy of the Group. Over 62% of Kingspan's product set comes from products which are directly related to resource efficiency, predominantly products which contribute significantly to energy and carbon savings in the built environment. The CEO is the most senior person in the organisation and therefore responsible for driving the business to convert opportunities as they relate to climate change but to also be cognisant of any underlying and emerging risks.

Kingspan is presently broken in to seven operating businesses. Each of these operating businesses are reviewed monthly by the senior management teams across each division, with at least two executive directors, including the CEO. These senior teams have representatives including managing directors, finance, technical, operational and commercial directors. Therefore, there is representation from all aspects of the business. At these business reviews, risks and opportunities that are assessed as significant are brought to the attention of the executive directors and are assessed on a division wide, and potentially Group wide basis.

Further, Kingspan senior management team hosts a full, long-term strategic review of the business annually. This review includes all aspects of the business and strategic decisions are made which include any climate-change issues assessed. These are the formal processes by which risks and opportunities which have been identified in the business are notified to the CEO, and where they are assessed and monitored.

Other, C-Suite, Managing Directors: Each of Kingspan's seven operational businesses has its own management team, with the Managing Directors responsible for managing all the opportunities and risks within that business, including those relating to climate-change. Prior to the divisional reviews highlighted above, the Managing Directors conduct a similar review with all the business units within their divisions. All underlying and emerging risks and opportunities are assessed and updated at these meetings, which are then fed back into the executive level monthly divisional review.

The Managing Directors are ideally positioned to consolidate the risks and opportunities across their relative divisions as they can assess the outlook across multiple dimensions including commercial, operational and financial, and across multiple geographies. Managing Directors also have the authority and resource to act where needed. On average, Kingspan Managing Directors have responsibility for approximately 2,000 employees, 22 manufacturing facilities and €650 million of revenue.

Head of Innovation: Kingspan's innovation function is responsible for the continued improvement of the performance of our products over a broad spectrum of outputs, including those which mitigate climate-change. Kingspan is the market leader in high-performance insulation and we invest in R&D to maintain our differentiated offering. Our Head of Innovation is best positioned, through his exposure to the commercial, sustainability and management teams, to drive the innovation agenda as it relates to climate-related risks and opportunities. Our Head of Innovation hosts a quarterly innovation forum with our divisional management teams, where pending innovations are updated, and any new market technologies or technology needs which are identified in the business will be discussed. He also sits on several key teams throughout the Kingspan organisation including the Planet Passionate Team. Kingspan's Head of Innovation formally updates our CEO monthly but is not limited to formal updates, has monthly review sessions with the Head of Sustainability, and formally presents to the whole PLC board annually.

Head of Sustainability: Kingspan Group's sustainability function is responsible for the management and implementation of the Planet Passionate strategy and the wider sustainability agenda. The Planet Passionate strategy consists of 12 targets across four key areas: energy, carbon, circularity and water. The Head of Sustainability is responsible for liaising with multiple functions throughout the Group to understand risks or opportunities as they pertain to sustainability, including risks or opportunities related to climate-change. Our Head of Sustainability hosts a quarterly Planet Passionate meeting with our divisional representatives and members from other functions. The Head of Sustainability formally updates our CEO bi-monthly, but the exchange of information is not limited to formal updates. After each Planet Passionate quarterly meeting, Executive Directors (up to five board members) and all Managing Directors are updated. The Head of Sustainability formally presents to the whole PLC board annually.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Please select	Rewarded on Group Profits arising from the maximisation of the sale of low energy building solutions. Increases in sales of energy saving products, on-site renewables and climate adaptation products all assist profits. Energy saving in operations also reduces cost and contributes to profits.
Other C-Suite Officer	Monetary reward	Please select	Rewarded on Group Profits arising from the maximisation of the sale of low energy building solutions. Increases in sales of energy saving products, on-site renewables and climate adaptation products all assist profits. Energy saving in operations also reduces cost and contributes to profits.
Business unit manager	Monetary reward	Please select	No group level instruction, but most Business Unit Managers are incentivised on sales and/or profits including sales of energy saving products, on-site renewables and climate adaptation products.
Process operation manager	Monetary reward	Please select	Plant managers in one Division receive monetary reward for meeting energy saving targets.
Other, please specify (Environment, H&S Representatives)	Monetary reward	Please select	No group level instruction, but volunteers in some Divisions are rewarded by €280 (£200) /year for participation
Environment/Sustainability manager	Non-monetary reward	Please select	Recognised as a key part of the KPIs of SHE Managers
Facilities manager	Non-monetary reward	Please select	Contribution to Group-wide Planet Passionate targets by 2030 part of KPIs.
Other, please specify (Kingspan Group Head of Sustainability)	Monetary reward	Please select	Rewarded based on achievement of Planet Passionate programme goals and targets.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	5	Kingspan considers a short term (2020 - 2025) horizon for assessing climate-related risks and opportunities to be in line with its science-based target and some Planet Passionate targets.
Medium-term	5	10	Kingspan considers a medium horizon (2026 - 2030) for assessing climate-related risks and opportunities up to 2030. This time horizon was established in line with the EU 2030 Climate and Energy Framework. Considerations of transitional risks such as policies and technology will be considered along with physical risks.
Long-term	10	20	Kingspan considers a long term (2031 - 2050) horizon to 2050 in line with the strategy for the transition to a low-carbon economy recognised in the Paris Agreement and EU Low Carbon Economy Roadmap to 2050.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Financial: Kingspan considers any risk, including climate-related risks, which have the potential to impact group trading profit (EBITA) by 5% or more as substantive. In 2019, for example, that would be any risk that would potentially impact group trading profit (EBITA) by €25 million.

Operational: Kingspan considers any operational risk which has the potential to impact operations of over 5% of the group's trading profit or manufacturing capacity as substantive. In 2019, for example, that would be any risk that would potentially impact trading profit (EBITA) by €25 million.

Strategic: Kingspan considers any strategic risk which has the potential to impact revenues by over 5% as substantive. In 2019, for example, that would be any risk that would potentially impact revenue by over €200m.

Reputational: Kingspan is the market leader in high-performance building envelopes, but we also pride ourselves on our best-in-class service model. Any risk which would significantly impact our ability to deliver against this service level expectation would be considered as substantive. In addition, Kingspan has set itself challenging targets in the areas of energy, carbon, circularity and water, through our Planet Passionate initiatives. Any risk which substantially impacted our ability to deliver against those goals would be considered substantive by Kingspan.

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.**Value chain stage(s) covered**

Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term

Medium-term

Long-term

Description of process

Downstream risks and opportunities, as they relate to climate-change, are managed through a multi-disciplinary, company-wide, risk management process. Kingspan is split in to seven operational divisions. The senior teams in each division meet monthly with at least two executive directors, including the CEO. These senior teams have representatives including management, finance, operational, technical and commercial directors. Therefore, there is representation from all aspects of the business. At these divisional reviews, risks or opportunities that are deemed substantive are brought to the attention of executive directors and are assessed on a divisional basis. This review process is replicated within each division, with each business unit, in advance of the divisional review. Substantive risks or opportunities include those which have the potential financial impact of more than 5% of Group EBITA or 5% of Group revenue, or risks which may have a strategic or reputational impact as deemed by the senior teams. Further, Kingspan hosts a full strategic review of the business annually. This review includes all aspects of the business, it covers short-, medium- and long-term strategic decisions which include any climate change risks assessments or opportunities. There are multiple strands within the business for identifying risks and opportunities as they relate to our downstream value chain. Kingspan employees are represented in trade associations and industry bodies; Kingspan presents and attends major industry tradeshows; its employees are in discussions with Government and regulatory officials to ensure the management team remains fully apprised of emerging regulation. Our commercial teams liaise with customers, building owners, design teams and architects daily and feedback any potential risks or opportunities from market demand changes or new technologies. Risks and opportunities are escalated through the chain on consultation with next level management and the assessment of whether the risks or opportunities are substantive and further escalated to business unit and divisional reviews where relevant. Risks and opportunities, as they relate to climate change, are also identified through our Innovation Team, both through market intelligence and through the monthly formal review with the CEO and quarterly innovation forum with the business divisions. The decision to mitigate, transfer, accept or control the identified risk is determined based on the specific risk or opportunity identified. In all of our identified risks to the downstream value chain in Section 2.3a, we have taken the decision to mitigate the risk through investment in R&D and through supply chain engagement. In all our identified opportunities for the downstream value chain in Section 2.4a we have taken the decision to accept and control the opportunity through investment in R&D, investment in new capacity, investment in a technically educated sales team and ongoing expansion in to new markets. Transition Opportunity Example: There has been an escalation of climate change on government's agendas leading to unprecedented ambitions to address carbon emissions from the built environment including EU emissions targets and the revised Energy Performance of Buildings Directive (EPBD) requirement on long-term renovation strategies to support the decarbonisation of the building stock by 2050. The opportunity for Kingspan is to position itself as a market leader in addressing the European building stock efficiency goals. Kingspan identified this opportunity through general market intelligence, our membership of trade organisations, our relationship with regulators and governments and our climate-change partners. There will be a multi-disciplinary approach to realising this opportunity. Kingspan will work with government and regulatory bodies to help them understand the benefits and constraints of thermal refurbishment and how we can address them. Internally, our operations and finance teams will assess how we are prepared to address potential changes in demand. Management and divisional teams will remain abreast of any specific emerging regulations or incentives to support refurbishing the stock of buildings to reduce energy consumption (such as the recent EU Green Recovery Plan). As an example of how we are accepting and controlling the opportunity - Kingspan has already announced plans for up to 7 new manufacturing lines in Europe over the coming years, to support this renovation wave.

Value chain stage(s) covered

Upstream

Risk management process

A specific climate-related risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term

Medium-term

Long-term

Description of process

Upstream risks and opportunities, as they relate to climate-change, are managed through a specific climate related risk management process. At Group level, we actively engage and monitor our supply chain partners performance in relation to climate change to identify any upstream activities, products and services that are material to our business activities that may pose climate related risks or opportunities. We recognise the need to minimise the carbon used to produce our products, the majority (>80%) of which comes from the raw material stage. Management of upstream risks and opportunities are the responsibility of the Group Sustainability team and Divisional Procurement teams. An annual scope 3 emissions screening and key supplier carbon assessment is undertaken to help identify any new risks and to reassess the impacts of risks that have already been identified. Risks and opportunities can be escalated during the bi-monthly reviews of the Head of Sustainability and Head of Procurement with the CEO. Our CEO also has direct updates with key suppliers on the climate change agenda. To assess whether the risks or opportunities are substantive and further action is required. The decision to mitigate, transfer, accept or control the identified risk is determined based on the specific risk or opportunity identified. Substantive risks or opportunities include those which have the potential financial impact of more than 5% of Group EBITA or 5% of Group revenue, or risks which may have a strategic or reputational impact as deemed by the senior teams. Further, Kingspan hosts a full strategic review of the business annually. This review includes all aspects of the business, it covers short-, medium- and long-term strategic decisions which include any climate change risks assessments or opportunities. Key procurement and sustainability representatives present and attend this forum. On the identified risk in our upstream value chain in Section 2.3a, we have taken the decision to mitigate the risk through committing to company level scope 3 emission targets and through supply chain engagement. Transition Risk Example: Kingspan has made two public commitments to reduce its Scope 3 emissions: - Verified Science Based Scope 3 Target: 10% absolute reduction in scope 3 emissions by 2025 from a 2017 baseline - Planet Passionate target: 50% CO2 intensity reduction in products from primary supply partners by 2030 from a 2019 baseline Supplier engagement is generally prioritised on magnitude of expenditure with focus on critical raw material suppliers. Kingspan's procurement and sustainability teams work closely with our primary suppliers on carbon reduction strategies and new product development. Case Study: Kingspan Supplier Day: In November 2019 we held our annual Supplier Forum with specific focus given to our new sustainability programme. Productive discussions and workshops were held throughout the day with a range of suppliers resulting in some collaborative projects that will support the delivery of our supply chain targets. We will continue to build our supplier relationships and engagement strategy moving forward.

Value chain stage(s) covered

Direct operations

Risk management process

A specific climate-related risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Medium-term

Long-term

None of the above/ Not defined

Description of process

Even though climate change risk and opportunities pertaining to our direct operations are not as significant as those related to either the downstream or upstream parts of our value chain, they are nevertheless managed through a specific climate related risk management process. Kingspan is split in to seven operational divisions. The senior teams in each division meet monthly with at least two executive directors, including the CEO. These senior teams have representatives including management, finance, operational, technical and commercial directors. Therefore, there is representation from all aspects of the business. At these divisional reviews, risks or opportunities that are deemed substantive are brought to the attention of executive directors and are assessed on a divisional basis. This review process is replicated within each division, with each business unit, in advance of the divisional review. Further, Kingspan hosts a full strategic review of the business annually. This review includes all aspects of the business, it covers short-, medium- and long-term strategic decisions which include any climate change risks assessments or opportunities. There are several committees within the business that cover specific risks, for example: the Planet Passionate (PP) Committee, which tries to manage and address Kingspan's own environmental impacts (energy, carbon, water, waste and raw materials); the Environmental Health and Safety Committee (EHS), which deals directly with environmental standards such as ISO; and the circularity committee which monitors changes in demand in relation to circularity and which drives Kingspan's circularity strategy. Risks are escalated through the chain on consultation with next level management. Our Operations leaders and Planet Passionate Team would be the driving force in identifying risks and opportunities as they relate to our direct operations. Risks and opportunities are escalated through the chain on consultation with next level management and the assessment of whether the risks or opportunities are substantive and further escalated to business unit and divisional reviews where relevant. Physical Risk Example: Kingspan's Insulated Panels site in Holywell, UK, is situated on the estuary of the River Dee. Sea level rises resulting from climate-change could impact operations at the site. The risk was identified by site managers and through consultation with local council. On appraisal between the operations team and management it was decided to mitigate the risk through planning. Local management has introduced several flood mitigation factors, senior divisional management will coordinate an effort to transfer supplies or customer orders between sites should an event occurs. Emergency planning procedures are set and reviewed annually. Changes to site level risk are under ongoing review.

C2.2a**(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?**

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Kingspan's operations have been impacted by regulation introducing carbon taxes, thereby incentivising us to improve our energy performance. Even though Kingspan is not included in any emissions trading scheme (e.g. EU ETS) at the time of writing, it nevertheless pays carbon tax (via fossil fuel consumption) in several countries where it operates (e.g. Ireland, France). Energy costs impact the profitability of our business units, therefore any regulation which might lead to higher energy costs in the future are relevant and always included. Example: Kingspan is present in over 70 countries so current regulation related risks are assessed and managed locally by the management teams. The newly formed Sustainability team is also staying up to date with all laws and regulations pertaining to climate change. If any issues or concerns are identified they can be escalated during the divisional monthly management meetings. The actual financial impact by increased carbon taxes or introduction of carbon taxes in more countries where Kingspan operates can only be estimated due to the plethora of unknown variables. Nevertheless, as a way to mitigate this risk, in early 2020, we announced that we arranged a bilateral "Green Loan" of €50million to fund our Planet Passionate Initiatives which include targets to have solar PV systems on all wholly owned facilities by 2030 and to increase our on-site generation of renewable energy to 20% and to achieve Net Zero Carbon Manufacturing by 2030.
Emerging regulation	Relevant, always included	In December 2019, the EU launched The European Green Deal. It is the EU's roadmap for making the EU's economy sustainable. It provides a roadmap with actions to boost the efficient use of resources by moving to a clean, circular economy and to restore biodiversity and cut pollution. One of the EU's objectives is to reduce emissions from the EU's industry, which accounts for 20% of the EU's carbon emissions. It is not clear what mechanisms will be used at a national level to achieve the emissions reduction targets, Kingspan understands its responsibility to address carbon emissions from its operations and is already taking steps with our Planet Passionate agenda. Kingspan is an industry leader in manufacturing products which help to mitigate climate risk in the construction sector. We take this leadership position very seriously and have set ourselves industry leading targets with respect to our own carbon emissions. Kingspan targets net zero carbon manufacturing by 2030. Example: Mitigating potential future carbon taxes within the EU: Kingspan has 120 manufacturing facilities in the EU (including the UK) and therefore a significant number of our sites will be covered by any initiatives introduced in the EU to achieve emissions reduction targets. Kingspan has introduced many initiatives to achieve the target of net zero carbon manufacturing by 2030, including improving the energy efficiency of our processes and increasing on-site renewable energy generation. In early 2020, we announced that we arranged a bilateral "Green Loan" of €50 million to fund our Planet Passionate Initiatives which include targets to have solar PV systems on all wholly owned facilities by 2030 and to increase our on-site generation of renewable energy to 20% by 2030. Significant risks of this nature are assessed at a Group level by the sustainability team and escalated to the senior team where necessary. Emissions reduction activities are embedded within the business strategy, Divisional reviews are conducted monthly with at least two executive directors, including the CEO, and a multi-disciplinary senior team including commercial, operations, finance and general management. Significant risks or opportunities are updated monthly. The Planet Passionate team sits quarterly and updates the CEO bi-monthly and the divisional directors quarterly. Regulation has the potential to impact many aspects of Kingspan's operations and therefore it is relevant and always included.
Technology	Relevant, sometimes included	Kingspan's strategy is to be the global leader in innovative building envelope solutions which reduce the resource consumption of buildings, lowering the building's long-term running costs and environmental impact. Innovation is a key pillar to our strategy. Failure to innovate ahead of our competitors is a risk to our business model. Innovation by nature is not a new risk that is identified on a regular basis and is sometimes included in our risk assessment updates. Substitution risks would be identified through presence at trade shows and industry events; by our dedicated Innovation team; from the investment community through Investor Relations and through our commercial teams from customer interaction. Kingspan's Head of Innovation is responsible for the company's research and development functions. Extensive research is underway with the aim of continually improving the energy and carbon saving performance of the existing product range whilst also developing new innovative solutions. Kingspan established the IKON in 2019, our new global innovation centre. IKON, with its state-of-the-art chemistry lab and prototyping capabilities, is itself a living research project. Kingspan invests broadly 1% of revenue annually on R&D (€32m in 2019), we are the only global insulated panel and insulation board manufacturer which gives us significant scale advantage in the innovation of carbon reducing technologies versus competitors. The Head of Innovation formally updates the CEO at least monthly on technology updates, including risks and opportunities. There is a quarterly Innovation Forum which includes the CEO and the Managing Directors of all seven divisions. EXAMPLE: One of Kingspan's key strategic pillars is to lead the innovation of new technologies which support the transition to a lower-carbon economy. There is a risk that our existing product set is substituted by competitor's products should Kingspan not retain this innovation leadership position. One example of how we have managed this risk to date would be the development of QuadCore, which outperforms the U-value (thermal efficiency) of PUR core insulated panels by almost 20%. In 2019 QuadCore accounted for almost 9% of Kingspan's insulated panel revenue with a targeted revenue of 50% of insulated panel revenue within the next four years. Our R&D is already focussed on the next generation of QuadCore in order to maintain and advance the technological gap between Kingspan and our competitors.

	Relevance & inclusion	Please explain
Legal	Relevant, always included	Kingspan is required to comply with national and international environmental laws and frameworks. If we do not comply with these laws, we could become subject to regulatory actions including monetary damages, fines, penalties or reputational damage. Legal risk is always included as operations must meet environmental compliance and are audited regulatory by industry bodies such as the EPA. Any failure to pass these audits could have a significant impact on Kingspan's reputation as a leader in the climate change agenda. Legal risks would be identified at site level by facilities or operations management and escalated where necessary. Risks are mitigated by adopting standards such as ISO 14001 and ISO 50001. Example: Climate related litigation claims could result in fines and could damage Kingspan's reputation as a leader in the climate change agenda. Many of our sites have their environmental compliance monitored in line with globally recognised standards such as ISO 14001 and ISO 50001. 64 of Kingspan sites are certified to ISO 14001 and 19 sites to ISO 50001. These best practices are shared through the Global Environmental Health and Safety Committee and the Planet Passionate Committee. Risks would be identified through local facilities management and escalated through the Planet Passionate and Environmental Health and Safety committees, divisional management and Kingspan Group's centralised legal team where necessary. Significant risks or opportunities of this nature would be assessed and escalated to divisional reviews where necessary. Divisional reviews are conducted monthly with at least two executive directors, including the CEO, and a multi-disciplinary senior team including commercial, operations, finance and general management. Significant risks or opportunities are updated monthly.
Market	Relevant, always included	Growing demand for low carbon building materials is expected as countries look to construct new low carbon assets and retrofit existing buildings. Understanding any significant changes to customer behaviour is critical to Kingspan's success and therefore is always relevant and included. Insulation materials will play a key role in helping to reduce operational and embodied carbon in buildings. We market our product's impact on resource efficiency, particularly in relation to in use energy and carbon saving benefits. The embodied carbon of our insulation is insignificant relative to the impact of carbon saved in use. However, we recognise the need to minimise the carbon used to manufacture our products, much of which comes from the raw material stage. To be a market leader in carbon efficient solutions, we aim to realise significant carbon reductions in our processes and via our primary raw material supply partners. Failure to address this risk could negatively impact the future demand for our products. EXAMPLE: Kingspan recognises the importance of working with critical suppliers on emissions reduction activities to reduce the embodied carbon. To assess this risk, Kingspan undertook value chain emissions assessment as part of the development of its science-based targets and product level life cycle assessment to understand the embodied carbon impact at both supply chain and product. Kingspan has made two public commitments to reduce scope 3 GHG emissions: a science-based target to reduce absolute emission by 10% by 2025 (2017 baseline) and a Planet Passionate target to reduce CO2 intensity of raw materials from our primary supply partners by 50% by 2030. Any sustained change in trend in customer behaviour would be notified to local commercial directors who would assess the impact and escalate to unit managing directors where appropriate. This would further be notified to divisional management for discussion at Divisional Reviews. Divisional Reviews are conducted monthly with at least two executive directors, including the CEO, and a multi-disciplinary senior team including commercial, operations, finance and general management. Significant risks or opportunities are updated monthly. We manage this risk through continuous engagement with our suppliers and via our innovation team's material science research which is assessing the viability of alternative materials which can still meet the best-in-class thermal performance of our insulation products.
Reputation	Relevant, always included	Kingspan has accumulated significant brand value over time. The Kingspan brand is associated with high quality, innovative, building envelope solutions which help design teams, building owners and architects design buildings which consume less energy and contribute toward the climate change agenda. Anything which detracts from that association is a reputational risk for Kingspan and may impact customer demand over the short- to long-term. Kingspan is seen as a premium brand and many of its products are warranted for thermal performance, therefore reputation is a key facet to customer conversion and therefore reputation is always relevant and included. EXAMPLE: Product performance failure as it relates to thermal performance and therefore energy efficiency. To mitigate risk of product performance failure, all raw materials are tested before being put into production and all product batches are quality tested before they our sites. Most new products go through a certification process which is undertaken by a recognised authority before it is brought to market and our facilities are subject to regular quality audits. To identify risks around product failure-in-use, Kingspan has regular contact with our customers, we follow up on all large projects and we have recently introduced the Net Promoter Score (NPS) metric to measure our customer experience. Significant risks or opportunities relating to product failure would be assessed and escalated to divisional reviews where necessary. Divisional reviews are conducted monthly with at least two executive directors, including the CEO, and a multi-disciplinary senior team including commercial, operations, finance and general management. Significant risks or opportunities are updated monthly. Product batches can be easily traced in the event of a failure as all outputs are recorded in SAP. Further, with our most advanced products, such as QuadCore, we offer up to 40 years of thermal performance warranty. In addition, Kingspan is investing to further enhance our reputation with customers as a leader on the climate change agenda. In December 2019 Kingspan announced the next phase of our internal commitment to tackling climate change, our Planet Passionate Commitments. 12 hard targets aimed at driving energy and carbon out of our business operations and supply chain, as well as increasing our recycling of rainwater and waste, while also accelerating our participation in the circular economy.
Acute physical	Relevant, sometimes included	Kingspan recognises the potential negative impacts represented by increased risk of flooding due to climate change. Its facilities are globally spread but consideration is given to potential acute physical events at local level. Kingspan assesses its exposure to acute physical climate related risks (such as increased flooding) through regular audits and self-assessment questionnaires, updated on an annual basis by the health and safety and operations teams. Acute risks are sometimes included, when a specific acute event occurs or is anticipated. EXAMPLE: Kingspan's Insulated Panels site in Holywell, UK, is situated on the estuary of the River Dee. Storm or flood risk could impact operations at the site. The risk was identified by site managers and through consultation with local council. On further appraisal between the operations team and management it was decided to mitigate the risk through careful planning. Local site management has introduced several flood mitigation factors, senior divisional management will coordinate an effort to transfer supplies or customer orders between sites should an event occur. Emergency planning procedures are set and reviewed annually. Changes to site level risk are under ongoing review. In addition, Kingspan has increased insurance on the site, and has developed regular training and maintenance reviews which include flood risk.
Chronic physical	Relevant, sometimes included	Kingspan's facilities are globally spread but consideration is still given to potential chronic physical events impacting our business activities in the future and therefore is relevant sometimes included. Kingspan's business model is dependent on the availability and quality of its physical infrastructure, its raw material supply chain and its information technology. The safe and continued operation of such systems and infrastructure is threatened by natural and man-made perils and is affected by the level of investment available to improve and protect them. Any significant or prolonged restriction to its physical infrastructure, the necessary raw materials or its IT systems and infrastructure could have an adverse effect on Kingspan's business performance. Kingspan assesses its exposure to chronic physical climate related risks (such drought, heatwaves and sea level rise) through audits and self-assessment questionnaires updated on an annual basis by the Group level sustainability and Divisional health & safety teams. EXAMPLE: At Group level, the sustainability team has undertaken a preliminary analysis to better understand potential chronic physical risks to our manufacturing sites. The preliminary analysis reviewed sites based on the elevation above sea level to determine which sites may be at risk in the future and warrant further investigation. The analysis found we have less than 4% of our sites in potential risk areas. We are currently in dialogue with local management to conduct further analysis and assessment of site level measures that may be required. Risk of disruption due to climate related disruptions (weather driven, regulatory, etc.) could have an impact on our future production capacity and mapping of this risk is currently underway. Kingspan's Group sustainability team is currently working with local teams to assess the level of management required.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Technology	Substitution of existing products and services with lower emissions options
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Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Kingspan's strategy is to be the global leader in innovative building envelope solutions which reduce the resource consumption of buildings, lowering the long-term running costs and the environmental impact of those buildings. Innovation is a key facet to our strategy and Kingspan has market leading products, particularly in the field of building insulation. Kingspan strives to be the market leader with the most advanced solutions. Failure to innovate ahead of our competitors is a risk to our business model. We invest approximately one per cent of revenue annually in research and development and we have significant scale in innovation versus our peers. For example, Kingspan's energy efficient insulation products account over 60% of revenue, should a more energy efficient technology be invented, it would impact revenue in that product range. A company specific example: QuadCore® is Kingspan's most innovative, highest performing insulated panel product with a U-value of 0.018W/mK. QuadCore® was brought to the market by Kingspan in 2015, since then we have been rolling out capacity and it has been taking share from traditional insulation as well as PIR core insulated panels. In 2019, QuadCore® accounted for c.9% of our global insulated panel sales. Should a competitor innovate an insulated panel product with substantially superior carbon saving performance to QuadCore®, it could take share from QuadCore® and PIR core insulated panels. We estimate the financial risk, in the event of significant product substitution, to be in the region of €55-275m of revenue.

Time horizon

Medium-term

Likelihood

Unlikely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

55000000

Potential financial impact figure – maximum (currency)

275000000

Explanation of financial impact figure

If Kingspan does not continue to develop industry leading high performance, low carbon insulation technologies there is a risk that our existing products are substituted by a competitor's products. CALCULATION OF POTENTIAL FINANCIAL IMPACT: Assuming a competitor can innovate a product with substantially superior thermal performance to QuadCore® it would take share in that competitor's local market. Kingspan is the only Global manufacturer of high-performance insulation, so we are only likely to lose share in a local market. We would not expect this share gain to be permanent as Kingspan is already working on its next generation of QuadCore®. We make the following assumptions: - 9% share loss in our largest division (in line with the share gains realised by QuadCore) - Insulated panels - 65% of revenue - at minimum takes 9% share in only one market, assume 20% (largest single market), at maximum assume takes share globally (unlikely) Minimum: - €4.7billion * 65% (Insulated Panel rev) * 20% (geographic market) * 9% (share loss) = 55m Maximum: - €4.7billion * 65% (Insulated Panel Rev) * 9% (share loss) = €275m

Cost of response to risk

32000000

Description of response and explanation of cost calculation

Kingspan conducts a full strategic review of its product portfolio annually, to assess the performance of our current portfolio and to identify product gaps. On an ongoing basis, technology risks are identified through attendance at tradeshow and industry events, liaising with universities and industry experts and talking to our customers. We assess our product portfolio's ability to target current and future opportunities for profitable growth, including opportunities which address climate-change. ACTION TO MITIGATE: Kingspan established IKON in 2019. IKON is Kingspan's new global innovation centre located in Ireland. Both a place of research and a living research project, it asks the big questions that will lead the company to a more sustainable future while delivering enhanced value to its customers. The IKON™ will bridge business divisions and geographic regions and continue to drive Kingspan's position as market leader in sustainable and energy efficient building solutions. COST OF MANAGEMENT: Kingspan invests approximately one per cent of revenue annually in research and development. In 2019 the investment in R&D was €31.9m, in addition to over €10 million of capital expenditure on IKON and our new fire research facility. We view this as a necessary investment to continue to drive Kingspan's position as the market leader in sustainable and energy efficient building solutions. Kingspan's continuing investment in research and development involves over 40 key projects. In 2019 we launched QuadCore™ Roof Board and continued to progress development on the following key projects: - PV solar-integrated PowerPanel® 2.0; - Fibre-free A1 classified AlphaCore® insulation; - QuadCore™ 2.0; - Kooltherm® 200 series; - Unitised facade solutions; - Digitalisation of the construction industry; and - Prismatic daylighting.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Reputation	Shifts in consumer preferences
------------	--------------------------------

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

We market our product's impact on resource efficiency, particularly in relation to in use energy and carbon saving benefits. The embodied carbon in our insulation materials is insignificant relative to the impact of carbon saved through our products' lifetime in use. In 2019, we estimate that Kingspan's insulation products, in use globally in the built environment save 751 million MWh GWh of energy and 172 t/CO2e annually. However, we recognise the need to minimise the carbon used to manufacture our products, much of which comes from the raw material stage. To be a market leader in carbon efficient solutions, we aim to realise significant carbon reductions in both our manufacturing process and via our primary raw material supply partners. Kingspan has made two public commitments to reduce scope 3 GHG emissions: - Verified Science Based Scope 3 Target: 10% absolute reduction in Scope 3 emissions by 2025 from a 2017 baseline. - Planet Passionate target: 50% CO2 intensity reduction in

products from primary supply partners by 2030 from a 2019 baseline. Failure to engage with our suppliers and actively work towards reducing upstream carbon emissions could negatively impact customer preferences. We estimate the financial risk, in the event of shift in consumer preferences, to be in the region of €100-150m of revenue.

Time horizon

Short-term

Likelihood

Unlikely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

100000000

Potential financial impact figure – maximum (currency)

150000000

Explanation of financial impact figure

Kingspan's business strategy is built around the importance of addressing climate change through the built environment. It is therefore imperative that the company continues to demonstrate leadership on the climate change agenda. Kingspan recognises the importance of working with critical suppliers on emissions reduction activities to reduce the embodied carbon of its products. CALCULATION OF POTENTIAL FINANCIAL IMPACT: Growing demand for low carbon building materials is expected as countries look to construct new low carbon assets and retrofit existing buildings. Insulation materials will play a key role in helping to reduce operational and embodied carbon. Failure to reduce upstream carbon emissions could negatively impact customer preferences. Over 60% of Kingspan's revenue is derived from energy efficient products. Assuming Kingspan's revenue in energy efficient products could be impacted by 3-5% through this loss of leadership position, the revenue impact could be negative c.€100 - 150 million. This estimate is a highly speculative. We base this assumption on the fact that only a specific set of customers would look solely at embodied carbon and not the carbon savings of the products in use. However, there is growing industry interest in product level embodied carbon which is expected to continue. We are managing this risk through the achievement of our scope 3 GHG emission targets via continual engagement with our primary supply partners and our innovation agenda.

Cost of response to risk

32100000

Description of response and explanation of cost calculation

Kingspan has made two public commitments to reduce its Scope 3 emissions: - Verified Science Based Scope 3 Target: 10% absolute reduction in scope 3 emissions by 2025 from a 2017 baseline - Planet Passionate target: 50% CO2 intensity reduction in products from primary supply partners by 2030 from a 2019 baseline Supplier engagement is generally prioritised on magnitude of expenditure with focus on critical raw material suppliers. Kingspan's procurement and sustainability teams work closely with our primary suppliers on carbon reduction strategy and new product development. Kingspan also proactively provides customer feedback on the urgent need to rapidly reduce carbon intensity. ACTIONS TO MITIGATE: An example of Kingspan's intent to make meaningful progress towards this goal is active engagement with suppliers on an ongoing basis to obtain carbon data and discuss ongoing projects. Kingspan actively tracks annually carbon emissions performance of its suppliers and maps their progress against Kingspan's supply chain targets. Engagement to date has included site visits, meetings, conference calls, and electronic communications between the procurement and sustainability functions of each company. CASE STUDY: Kingspan Supplier Day In November 2019 we held our annual Supplier Forum with specific focus given to our new sustainability programme. Productive discussions and workshops were held throughout the day with a range of suppliers resulting in some collaborative projects that will support the delivery of our supply chain targets. We will continue to build our supplier relationships and engagement strategy moving forward. CALCULATION OF COST OF MANAGEMENT: Total cost of management: €32,050,000 - €32,100,000 The cost of management is estimated as being between €50,000 - 100,000 based on the cost of internal and external resources required to monitor and implement initiatives to achieve targets This includes internal meetings, research and engagements with external stakeholders; a portion of the ongoing investment in R&D which was €32m in 2019. In addition, there was the capital expenditure on the IKON which was €10m in 2019. R&D cost clearly overlaps with other initiatives.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation	Carbon pricing mechanisms
---------------------	---------------------------

Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

The European Green Deal is the EU's roadmap for making the EU's economy sustainable. It provides a roadmap with actions to boost the efficient use of resources by moving to a clean, circular economy and to restore biodiversity and cut pollution. One of the EU's objectives is to reduce emissions from the EU's industry, which accounts for 20% of the EU's carbon emissions. Legislation being introduced to help reduce emissions includes revising the EU emissions trading system (EU ETS) and having national emissions targets outside of the EU ETS (we're already paying carbon tax in several countries where we operate). While it is not clear what mechanisms will be used at a national level to achieve the emissions reduction targets, Kingspan is already taking steps, in line with our Planet Passionate agenda, to reduce our emissions. Kingspan is an industry leader in manufacturing products which help to mitigate climate risk in the construction sector. We take this leadership position very seriously and have set ourselves industry leading targets with respect to our own carbon emissions. Kingspan has targeted net zero carbon manufacturing, globally, by 2030. This is a commitment which has not only resonated very strongly with our customers but will also improve the resilience of our business for the long-term. Kingspan has 120 manufacturing facilities in the EU (including the UK) and therefore a significant number of our sites will be covered by any initiatives introduced in the EU to achieve emissions reduction targets. Kingspan has introduced many initiatives to achieve the target of net zero carbon manufacturing by 2030, including improving the energy efficiency of our processes and increasing on-site renewable energy generation. In early 2020, we announced that we arranged a bilateral "Green Loan" of €50million to

fund our Planet Passionate Initiatives which include targets to have solar PV systems on all wholly owned facilities by 2030 and to increase our on-site generation of renewable energy to 20% by 2030. We estimate the financial risk, in the event of emerging regulation, to be in the region of €20-40m of revenue.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

20000000

Potential financial impact figure – maximum (currency)

40000000

Explanation of financial impact figure

If Kingspan does not continue to implement carbon emissions reduction initiatives across manufacturing facilities, it may be subject to increased operational costs from any future EU industry emissions reduction initiatives and/or carbon pricing mechanisms, the introduction of carbon tax in more countries where it operates, or the increase of the price of carbon in countries where a carbon tax already exists
CALCULATION OF POTENTIAL FINANCIAL IMPACT: Kingspan has 120 manufacturing sites within the EU, accounting for 75% of our manufacturing portfolio. Even though the impact is expected to mainly manifest in Europe, we also included our operations across the globe for the estimate. We calculated the range, based on the below assumptions: The minimum and maximum carbon prices are those needed to reach the objectives of the Paris Agreement (i.e USD50– 100/tCO2) All countries in which we operate are going to introduce a carbon tax The lower end of the estimate uses a 50\$ average and the higher a 100\$ average Even though not a direct carbon tax, electricity prices are expected to rise, influenced, among other, by increasing carbon prices. Taking this into account, we included in our calculation an increase in electricity prices in line with the percentage increase of fuel prices due to increased carbon tax. Based on the above and our projected consumption and spend in 2030 (which considers an annual growth of 10%), we calculated the potential financial impact.

Cost of response to risk

50200000

Description of response and explanation of cost calculation

In 2019, Kingspan launched its new 10-year global sustainability programme Planet Passionate with the aim of continually reducing the company’s environmental footprint while continuing to grow its global business. **ACTIONS TO MITIGATE:** In early 2020, we announced that we arranged a bilateral “Green Loan” of €50million to fund our Planet Passionate Initiatives which include targets to have solar PV systems on all wholly owned facilities by 2030 and to increase our on-site generation of renewable energy to 20% and to achieve Net Zero Carbon Manufacturing by 2030. **CASE STUDY:** Kingspan Solar PV projects Through its Planet Passionate programme, Kingspan has committed to deploy rooftop solar PV systems on wholly owned manufacturing sites by 2030. Project pipeline from 2020-2021 includes assessment of over 20 potential projects with an estimated cost of over €10million. These projects will generate 9.4 GWh of renewable electricity per annum. **COST OF MANAGEMENT CALCULATION:** In early 2020, we announced that we arranged a bilateral “Green Loan” of €50million to fund our Planet Passionate Initiatives. The Planet Passionate team is responsible for delivering Kingspan’s programme. The company’s Planet Passionate performance is carefully monitored and discussed in a formal meeting involving representatives from every business unit within Kingspan. These meetings are convened quarterly. The cost of management has been estimated to be in the region of €200,000 per annum, based on employee time and travel expenses. Therefore, the overall cost of management of this risk is estimated as €50,200,000.

Comment

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical	Increased severity and frequency of extreme weather events such as cyclones and floods
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Primary potential financial impact

Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Kingspan recognises the potential negative impacts represented by increased risk of flooding due to climate change. Its facilities are globally spread but consideration is given to potential acute physical events at local level. Kingspan assesses its exposure to acute physical climate related risks (such as increased flooding) through regular audits and self-assessment questionnaires. **Increased flooding risk:** Kingspan’s Insulated Panels site in Holywell, UK, is situated on the estuary of the River Dee. Increased flooding events, resulting from climate-change could impact operations at the site. No imminent risk has been identified. We estimate the financial risk, in the event of flooding at Holywell, to be in the region of €10-20m of revenue.

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

10000000

Potential financial impact figure – maximum (currency)

20000000

Explanation of financial impact figure

Kingspan's manufacturing site at Holywell has been assessed to be vulnerable to flooding as a result of climate-change given its coastal location. It is situated on the estuary of the River Dee in Wales. Business interruption caused by flooding would impact the site's production capacity due to potential damage of assets at the site and inability to operate the site. CALCULATION OF POTENTIAL FINANCIAL IMPACT: To assess the impact of flood risk to Holywell, we look at the number of days revenue that would potentially be lost from a full shut-down before a full diversion of business to neighbouring facilities. We estimate this impact to be in the region of negative €10-20 million in revenue. We cannot offer further details as this information is commercially sensitive. Flooding disruption at Holywell, as one of our largest insulated panel sites, has the potential to impact service levels to customers in the short-term, therefore it has the additional aspect of being a reputational risk.

Cost of response to risk

100000

Description of response and explanation of cost calculation

Kingspan's sites are assessed annually for their potential exposure to all risks, including climate-related risks. Significant risks are escalated through the internal risk management processes. CASE STUDY: Holywell site, UK: Flood risk is managed at the site. ACTIONS TO MITIGATE: (i) The site has an annually updated flood emergency plan; (ii) flood protection in several site locations; (iii) connected to flood warning alerts from the UK Environment Agency; (iv) Emergency team which will be activated upon a warning, including IT. (v) server rooms are built at an elevated level; (vi) the most vulnerable area of the site has had flood diversion measures put in place; (vii) contractor on retainer to remove water using road tankers; (viii) banks of the site were raised; (ix) gate valve outlet to the sea has been refitted with new seals (x) neighbouring facilities to be notified to be on alert for order diversion. In 2014 storm water breached the outer sea defences, we observed that our defences were successful. There were no incidents in 2019. Cost of management is estimated as between €60,000 and €100,000 per annum in additional insurance premiums, and increased training and maintenance costs. With 24 plants in the panels division one plant provides cover for another. Risk is further mitigated through consequential loss insurance and business continuity plans which are regularly updated.

Comment**C2.4****(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes

C2.4a**(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.****Identifier**

Opp1

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Markets

Primary climate-related opportunity driver

Use of public-sector incentives

Primary potential financial impact

Other, please specify (New Regulatory Incentives)

Company-specific description

There has been a quantum leap in the energy efficiency and renewable energy requirements from new buildings in Europe as its leaders seek to address the impact of EU buildings on climate change. For example, according with the Energy Performance of Buildings Directive (EPBD), all new buildings must be constructed to the standard of nearly zero-energy buildings (NZEB) from 31 Dec 2020. The EPBD was revised in 2018 to include requirements for Member States to prepare long term national renovation strategies with the aim of upgrading the entire EU building stock to NZEB by 2050. This provides a significant future opportunity for Kingspan. Only 3% of buildings in Europe were classed as highly energy efficient by a recent BPIE study indicating the extensive level of renovation that will be required across Europe. In May 2020, the EU announced details of its Green Recovery Plan, with the "Renovation Wave" being a key priority within this. The Next Generation EU Communication talks of regulatory and financial support to "at least doubling the annual renovation rate of existing building stock". A key facet within the renovation wave is to improve the energy efficiency of the building envelope. Kingspan's world class, ultra-performance insulation products are ideally suited for renovation given the fact that dimension is a key constraint in refurbishment. We have published several reports on how investment in premium insulation can have an immediate and significant return when dimension is taken in to account. Kingspan's advanced insulation offers significant thermal outperformance versus fibre type insulation materials, thereby offering an enhanced dimension solution for the refurbishment market. For example, Kingspan's Optim-R insulation board can obtain the same thermal performance for almost one quarter of the thickness of fibre type insulation. Research carried out by independent consultant AECOM, supported by Kingspan, found that in order to meet the carbon reduction objectives of the Paris Accord, the deep energy renovation of domestic buildings must increase by 4x and of commercial buildings by 2x. We estimate Kingspan's EU impact to be in the range of €650-1,300 million. While this opportunity should start to impact in the short-term (out to 2025), it will support renovation revenue over the long-term, out to 2050. This opportunity is based fully on the assumption that policy will stimulate deep energy refurbishment to the required rate.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

650000000

Potential financial impact figure – maximum (currency)

1300000000

Explanation of financial impact figure

While it is widely acknowledged that the energy efficiency of the building stock (i.e. buildings which have already been constructed) must be addressed to meet the objective of the Paris Accord for its long-term temperature goal to hold global average temperature increase to “well below 2oC above preindustrial levels”, it is not certain how this will be financed. The EU has made a clear commitment to finance green renovation projects but the national mechanisms by which this finance will be committed remains unclear. Research carried out by independent consultant AECOM, supported by Kingspan, found that in order to meet the carbon reduction objectives of the Paris Accord, the deep energy renovation of domestic buildings must increase by 4x and of commercial buildings by 2x. Assuming the rate of renovation will increase, in line with the objective of the Paris Accord to pursue efforts to limit the temperature increase above pre-industrial levels to 1.5oC, this could add up to €1,300m of revenue annually for Kingspan. We have only included EU exposure at this time given the EU is at the forefront of trying to drive energy refurbishment stimuli. Minimum Calculation (assumes 50% of required renovation rate achieved): ((2019 Revenue * Commercial and Industrial Exposure * renovation in C&I*2) plus ((2019 Revenue * Domestic Exposure * renovation domestic*4) * EU exposure * probability = ((€4700m * 70% * 15%) + (€4700m * 18% * 40%)) * 56% * 50% = €650m Maximum Calculation (assumes 100% of required renovation rate achieved): = ((€4700m * 70% * 15%) + (€4700m * 18% * 40%)) * 56% * 100% = €1,300m

Cost to realize opportunity

70000000

Strategy to realize opportunity and explanation of cost calculation

Kingspan, through its development teams and marketing initiatives, helps the market to see the benefits of high-performance insulation as they relate to renovation. Education is a core part of our strategy to convert the market to high-performance insulation. The education strategy involves presenting at trade shows and industry events. Additionally: - we are working on white papers to establish what needs to happen with the European building stock and to explain how Kingspan can contribute to the solution; - we are working on pilot projects with regulatory bodies, to demonstrate the performance benefits of our products and how they can contribute to an efficient solution; - we have established industry alliances such as EU-ASE and EuroACE, enabling us to engage with policy makers, NGOs and other thought leaders. Example: Kingspan is working with the Sustainable Energy Authority of Ireland (SEAI) on a “deep retrofit” pilot scheme. In 2016 SEAI launched the Deep Retrofit multi-annual pilot programme. The programme currently investigates the challenges and opportunities of deep retrofit in Ireland. The learning from this pilot will inform its approach towards a large scale deep retrofit of buildings. Kingspan is a key partner in the pilot scheme. The SEAI estimates that over €35 billion will be required to make the existing housing stock low carbon by 2050. We estimate replicating this scheme across Europe would cost the equivalent of two FTEs, or €100k. More generally, we invest c.10% of revenue in selling and administration expenses. Therefore, we estimate the cost to realise the opportunity as €10 to €20 million. Kingspan is also adding capacity across Europe to address the renovation demand. We expect to invest an additional €100m of development capital expenditure over the next 2 years to add capacity as needed, At least 50% of this is for European capacity. Total cost to manage: Annual op ex €10-20 million Additional cap ex €100m (over 2 years, perhaps more in the future) In the next 2 – 3 years, we expect the annual investment to support this opportunity will be €60-70m

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Primary potential financial impact

Returns on investment in low-emission technology

Company-specific description

Kingspan’s strategy is to be the global leader in innovative building envelope solutions which reduce the resource consumption of buildings, lowering the long-term running costs and the environmental impact of those buildings. Innovation is a key facet to our strategy and Kingspan has market leading products, particularly in the field of building insulation. Kingspan strives to be the market leader with the most advanced solutions. We invest approximately one per cent of revenue annually in research and development and we have significant scale in innovation versus our peers. Kingspan’s innovation effort has led to breakthrough products such as QuadCore and Kooltherm. QuadCore is an insulated panel technology which is almost 20% more thermally efficient than a traditional PUR (polyurethane) core panel. Kooltherm is an insulation board technology which is almost twice as efficient as traditional mineral fibre type insulation. These innovative products and future innovative products will continue to differentiate Kingspan from our competitors and help to drive adoption of advanced materials to bring down the energy consumption of buildings. Kingspan targets each of these products to be 50% of their relative portfolios within the next 4 years. Kingspan continues to invest in R&D to create technologies which combat climate-change, we expect innovation to increment revenue in the future. A company specific example: QuadCore® is Kingspan’s most innovative, highest performing insulated panel product with a U-value of 0.018W/mK. QuadCore® was brought to the market by Kingspan in 2015, since then we have been rolling out capacity and it has been taking share from traditional insulation as well as PIR core insulated panels. In 2019, QuadCore® accounted for c.9% of our global insulated panel sales. Should Kingspan innovate an energy efficient product with substantially superior carbon saving performance to alternates, it could accelerate share gains from traditional insulation. In addition, Kingspan will continue to grow its market share in innovative technologies like QuadCore and Kooltherm. We estimate the contribution from recent innovation could add €200-300m of annual revenue over the short-term.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

200000000

Potential financial impact figure – maximum (currency)

300000000

Explanation of financial impact figure

Kingspan targets QuadCore to be 50% of our insulated panel revenue within the next 4 years. Additionally, Kingspan targets Kooltherm to be 50% of our rigid board revenue within the next 4 years. These are both Kingspan innovations. Each of these technologies can open new revenue opportunities that would not have been possible with traditional technologies. Naturally there will also be an element of upgrading from other insulation materials. Taking both of these elements into consideration, we estimate that the current roll-out plans of Kingspan's innovative technologies could add €200-300m to revenue annually scaling up to 2024. Any additional innovations would be incremental but very difficult to estimate. Revenues from specific product ranges are commercially sensitive so we cannot give detail here. Our assumptions are based on our view of innovative technology share of revenue and potential for new product revenue. Contribution from newly innovated products would be incremental but very difficult to estimate timing or impact.

Cost to realize opportunity

32000000

Strategy to realize opportunity and explanation of cost calculation

Kingspan conducts a full strategic review of its product portfolio annually, to assess the performance of our current portfolio and to identify product gaps. On an ongoing basis, technology opportunities are identified through attendance at tradeshows and industry events, liaising with universities and industry experts and talking to our customers. We assess our product portfolio's ability to target current and future opportunities for profitable growth, including opportunities which address climate-change. Kingspan's Head of Innovation hosts an innovation forum quarterly with the divisional MDs where new innovation opportunities are discussed. During 2019 Kingspan's continuing investment in research and development involved over 40 key projects. Case Study: Kingspan developed first generation QuadCore in 2015. QuadCore® is Kingspan's most innovative, highest performing insulated panel product with a U-value of 0.018W/mK. QuadCore® was brought to the market by Kingspan in 2015, since then we have been rolling out capacity and it has been taking share from traditional insulation as well as PIR core insulated panels. In 2019, QuadCore® accounted for c.9% of our global insulated panel sales. Kingspan targets QuadCore to account for 50% of global insulated panel revenue by 2024. We are already working on the next generation of QuadCore technology. Actions being implemented: In 2019, Kingspan created IKON. IKON is our new Global Innovation Centre, dedicated to advanced material science and the digitalisation of construction. The building itself is a living research project, providing a foundation for future value creating innovation. IKON has state-of-the-art laboratory and prototyping capabilities and will be fundamental to driving the next phase of innovation in climate mitigating technologies for the construction sector. Cost of management: Kingspan invests approximately one per cent of revenue annually in research and development. In 2019 the investment in R&D was €31.9m. We view this as a necessary investment to continue to drive Kingspan's position as the market leader in sustainable and energy efficient building solutions. In 2019, Kingspan invested an additional €10 million in a new innovation centre in Ireland.

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of climate adaptation, resilience and insurance risk solutions

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Kingspan is the market leader in advanced insulation materials as they relate to the building envelope. Our strategy is to convert construction methods from inefficient, traditional technologies to high-performance, energy efficient technologies. We help regulators, building owners, architects and design teams to understand not only the considerable efficiency pay back from an investment in thermal performance, but also the strategic importance of positioning yourself as a responsible business with your stakeholders. Regulation is also a driver with Europe's Energy Performance of Building Directive (EPBD) requiring all new buildings to be nearly zero-energy buildings (NZEB) from 31 December 2020. Over 70% of Kingspan's revenue was generated in Europe in 2019. The conversion to high-performance, energy efficient building envelopes, from traditional construction methods, has been a successful strategy for Kingspan and has resulted in organic growth in our Insulated Panels, Insulation Boards and Light and Air divisions in excess of construction macro. Kingspan's current balance of products and markets, coupled with increasing regulation, offer significant opportunity for this conversion strategy to continue to deliver organic growth above market growth. We estimate conversion to higher performance insulation materials can add ~3-4% organic growth above construction macro, which is approximately €100-130m in revenue.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

100000000

Potential financial impact figure – maximum (currency)

130000000

Explanation of financial impact figure

Kingspan is a global insulated panel and insulation board manufacturer and has exposure to structural growth opportunities in markets which are converting to higher energy performance building materials. As an example, in the UK, over 60% of relevant buildings are being constructed with high-performance insulated panel technology. In the US, less than 15% of buildings, which could be constructed using high-performance insulated panels, are being constructed using insulated panel technology, in Germany it is less than 50%. Based on our market experience and the distribution of our product set and our end markets, we estimate conversion to energy efficient buildings and higher performance insulation materials can add ~3-4% organic growth for Kingspan, above construction macro. Approximately 85% of revenue for Kingspan in 2019 was driven by a demand for energy efficient products and their ancillaries. Approximately 80% of revenue is new build, hence the annual incremental impact could be estimated to be in the range of €100-130m in revenue. Minimum Calculation (assumes 50% of required renovation rate achieved): 2019 Revenue * Energy Efficiency % * new build % * 3% = €4,700m * 85% * 80% * 3% = €100m Maximum Calculation (assumes 100% of required renovation rate achieved): 2019 Revenue * Energy Efficiency % * new build % * 3% = €4,700m * 85% * 80% * 4% = €130m

Cost to realize opportunity

112000000

Strategy to realize opportunity and explanation of cost calculation

Kingspan continuously seeks to educate governments, architects, design teams and building owners, not only to the direct cost benefits of a more energy efficient building, but also to the long-term environmental impact and the perception impact to stakeholders. A specific Kingspan example is our "Value Proposition" marketing brochure. Within this brochure we assess the returns on investment related to investment in insulation. The benefits of a whole building approach to new build is given as follows for a large supermarket building: -Capital cost increase = €19,600 (£14,000) -Internal Rate of Return (IRR) = 16.7% -Return on Investment (ROI) = 223% Thus, demonstrating the incremental returns of investing in additional insulation. Cost of publication and promotion c.€70k. Kingspan invests in the development of markets through a technically educated commercial team. These commercial teams approach architects and building owners directly promoting the benefits of high-performance materials. We have many examples where specifications were converted to Kingspan products through this method. Considering the number of employees in sales, and our estimate of salary premium for technical qualifications, we estimate the investment in a technical team is in the region of €6m. More generally, we invest c.10% of revenue in selling and administration expenses. Therefore, we estimate the cost to realise the opportunity as €8 to €12 million. Kingspan is also adding capacity globally to address the increase in demand from continued conversion to high-performance materials. We expect to invest an additional €100m of development capital expenditure over the next 2 years to add capacity as needed. In the next 2 – 3 years, we expect the annual investment to support this opportunity will be €108-112m. While the investment to support the opportunity will be over the short-term, the benefits will be realised in both the short and medium-term.

Comment

Identifier

Opp4

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Markets

Primary climate-related opportunity driver

Access to new markets

Primary potential financial impact

Increased revenues through access to new and emerging markets

Company-specific description

Kingspan recently invested in new territories including Iberia, Latin America and India. Each of these markets is at a much earlier stage than Kingspan's more developed markets in terms of adoption of high-performance insulation materials. Over time, Kingspan will help to develop these markets and to educate building owners and regulators to the benefits of high-performance insulation and thermally efficient building envelopes. We have announced our organic development plans for an additional 16 sites or operational lines around the world, five of these new facilities are in relatively new geographies for Kingspan and are at an earlier stage of development for high performance materials. Kingspan's short- and medium-term strategic plans would include ambitions to expand to markets in which we are not active today, but the timing and scale of this expansion is difficult to give guidance on. We estimate the contribution from access to new markets could add €100-200m of annual revenue over the short-term.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

100000000

Potential financial impact figure – maximum (currency)

200000000

Explanation of financial impact figure

There is a significant opportunity, over time, to convert developing energy efficiency markets from traditional building methods and to bring premium products through Kingspan's commercial network. Historically, Kingspan has utilised M&A (mergers and acquisitions) as one means of entering new markets. For this reason it is difficult to be very specific about timing or financial impact. If we consider our organic expansion plans, we estimate new markets can add €100 million to €200 million in annual revenue, scaling up, over the next five years. M&A has the potential to increase that range.

Cost to realize opportunity

90000000

Strategy to realize opportunity and explanation of cost calculation

Kingspan continuously seeks to educate governments, architects, design teams and building owners, not only to the direct cost benefits of a more energy efficient building, but also to the long-term environmental impact and the perception impact to customers, investors and employees. Actions being implemented to realise this opportunity, for

example: -Presenting at tradeshow; -Presenting at industry events; -Engaging with trade associations; -Liaising with regulators and government officials; -Engaging with building owners, architects and design teams at the design stage; -Hosting lunch and learns; -Hiring technically qualified commercial teams, and. -Organically or acquisitively expanding in new markets. Entering new markets may have the additional cost of building facilities or investing in businesses to gain capacity to service those markets. Example: Kingspan has announced plans to build 16 new facilities or operational lines over the next three years, including five new facilities in relatively new geographies for Kingspan. Kingspan invests approximately 10% of revenue in general selling and administration expenses. This is likely to be higher in the early stages of developing a market. Therefore, we estimate the cost to realise the opportunity as €10 million to €30 million. Kingspan is also adding capacity to address the demand from new markets. We expect to invest an additional €100m of development capital expenditure over the next 2 years, which includes expansion in new markets. In the next 2 – 3 years, we expect the annual investment to support this opportunity will be €70-90m. While the investment to support the opportunity will be over the short-term, the benefits will be realised in both the short and medium-term.

Comment

Identifier

Opp5

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resilience

Primary climate-related opportunity driver

Participation in renewable energy programs and adoption of energy-efficiency measures

Primary potential financial impact

Reduced direct costs

Company-specific description

At Kingspan we understand that the built environment has an important part to play in combatting climate change, and we pledge to lead by example in both our products and our operations. Through its new 10-year Planet Passionate programme, Kingspan aims to futureproof its operations by significantly reducing the company's carbon footprint by continuing to reduce its energy demand through energy efficiency and rapidly increasing its use (from the grid and via on-site generation) of renewable energy. Kingspan, via its Planet Passionate 2030 energy targets, aims to: · Maintain its Net Zero Energy status · Increase direct renewable energy use to 60% · Generate the equivalent of 20% of total energy demand on-site · Install solar PV systems on all wholly owned sites

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

26240000

Potential financial impact figure – maximum (currency)

46240000

Explanation of financial impact figure

To increase energy resilience, Kingspan has set four energy targets to achieve by 2030 along with a well-established energy efficiency programme embedded with the business. Energy Efficiency: Improving energy efficiency throughout the business is managed via our Planet Passionate programme. To date we have made a significant contribution to reducing energy costs through our Net Zero Energy programme. However, there are still multiple initiatives that be that can be rolled out across the business to further reduce our energy costs. For example: Energy Performance Contracts. We are currently assessing the viability of rolling out energy performance contracts across our sites. Based on successful contracts already in place at sites in the UK and Ireland (approx €40,000 per annum savings per site) we estimate potential annual energy savings of up to €6,240,000. Renewable Energy: In order to increase resilience and reduce potential exposure to increased operational costs from any future EU industry emissions reduction initiatives and/or carbon pricing mechanisms, Kingspan is heavily investing in on-site renewable energy generations across its manufacturing sites. CALCULATION OF PONTENTIAL FINANCIAL IMPACT: Kingspan has 120 manufacturing sites within the EU, accounting for 75% of our manufacturing portfolio. Even though the impact is expected to mainly manifest in Europe, we also included our operations across the globe for the estimate. We calculated the range, based on the below assumptions: The minimum and maximum carbon prices are those needed to reach the objectives of the Paris Agreement (i.e USD50– 100/tCO₂) All counties in which we operate are going to introduce a carbon tax The lower end of the estimate uses a 50\$ average and the higher a 100\$ average Even though not a direct carbon tax, electricity prices are expected to rise, influenced, among other, by increasing carbon prices. Taking this into account, we included in our calculation an increase in electricity prices in line with the percentage increase of fuel prices due to increased carbon tax. Based on the above and our projected consumption and spend in 2030 (which considers an annual growth of 10%), we calculated the potential financial opportunity to be in the region of €20 – 40m. Total potential opportunity: €26,240,000 – €46, 240,000 annually saving.

Cost to realize opportunity

17000000

Strategy to realize opportunity and explanation of cost calculation

To increase energy resilience, Kingspan has four energy targets to achieve by 2030 and has established ongoing energy efficiency programme embedded with the business. ACTIONS TO MITIGATE: Net Zero Energy Programme: By 2020, Kingspan's aims to match 100% of its operational energy use through the use of renewable energy and where this is not possible through the purchase of renewable energy certificates. The NZE programme follows a three-step strategy of - Save more, Generate More and Buy More. In 2019 Kingspan achieved 90% of its NZE goal, up from 75% in 2018. CASE STUDY: On-site renewable energy generation: In 2019, Kingspan generated the equivalent of 5.3% of its total energy use on its own manufacturing sites. Through Planet Passionate, Kingspan aims to increase this to 20% by 2030. In 2019, our 0.9 Mw Wind turbine at the Kingspan Insulated Panels site at Holywell, UK came online. The 75-metre wind turbine is expected to generate 1.6 GWh of electricity. Through our Planet Passionate programme, we are currently review potential renewable energy project opportunities for 2020 – 2022. We are assessing multiple renewable energy solutions from Solar PV, Biomass and Wind. These projects if approved could increase our renewable energy use by 43 GWh which is the equivalent to 6.7% of Kingspan's total energy use. COST TO REALISE OPPORTUNITY: The Planet Passionate team is responsible for delivering Kingspan's energy target. Total cost of management: €17,000,000 The cost of management is estimated at approximately €100,000 based on the cost of internal and external resources required to monitor and implement initiatives to achieve targets including internal meetings, research and engagements with external stakeholders; a portion of the €50m Green loan secured to

support the implementation of Planet Passionate projects. Planet Passionate cost clearly overlapping with other initiatives beyond the energy targets. Based on the assumption that the €50m Green Loan is invested over the next 3 years, the annual investment to realise the opportunity over the next 3 years is approximately €17m.

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization’s strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, qualitative and quantitative

C3.1b

(C3.1b) Provide details of your organization’s use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
IEA Sustainable development scenario	<p>Kingspan, due to the nature of its business model and sector, has an inherent interest in understanding and assessing all plausible impacts from climate change. It is crucial for the company to both design new business strategies and plans; and to assess the resilience of its current plans for a wide range of scenarios and outcomes. Kingspan's business model is built around delivering energy and carbon savings in buildings through ultra-performance insulation and solar generation solutions. Based on this we have selected an energy-based forward-looking scenario from the International Energy Agency (IEA), the IEA Sustainable Development scenario or SDS. After assessing our most material climate change risks (which are presented both below and in more detail in question C2.3a) we identified SDS as the most appropriate for our current exposures and because TCFD recommends including a 2°C scenario in the analysis (The SDS holds the temperature rise to below 1.8 °C with a 66% probability without reliance on global net-negative CO2 emissions). Our climate related risks and opportunities analysis assumes that the world is aligning with a 1.5°C scenario to 2050, which coincides with the SDS horizon. The areas assessed include both our own operations and policy and regulation changes related to the built environment. Results of analysis: most material climate risks and opportunities (as presented in detail in section 2.3a and 2.4a): The most material opportunities for Kingspan derived from our scenario analysis are presented in Section 2.4a: Regulation driving climate mitigating renovation (Opp 1 - €650m-1,300m); and conversion of markets to energy efficient building envelopes (Opp 3 - €100m-130m). The most material risk to Kingspan's operations derived from the scenario analysis is, as presented in Section 2.3a: Carbon pricing mechanisms (Risk3 - €20m-40m). The largest strategic and financial planning decisions to support the opportunities above is the investment in increased capacity through new facilities and new manufacturing lines globally. We are also significantly investing in renewable energy infrastructure across the business to increase our energy resilience. CASE STUDY 1: Carbon Price: According to the scenario analysis, Kingspan used the projected carbon prices outlined in the SDS and calculated, while also considering projected consumption, the potential financial impact on its operating costs. This impact is estimated to be €20m–40m (for more information please see Risk 3 and Opportunity 5). Kingspan has been taking steps to reduce our emissions through our Net Zero Energy programme and has increased its level of ambition through our new Planet Passionate (PP) programme which is one of our key strategic pillars. Through PP, Kingspan has targeted net zero carbon manufacturing, globally, by 2030. This is a commitment which has not only resonated strongly with our customers but will also improve the resilience of our business in the long-term. CASE STUDY 2: According to the SDS, to meet the Paris Agreement objectives, energy related CO2 emissions must decrease to 17.6 GtCO2e in 2040. This represents approx. a 69% reduction between 2020-2040. Kingspan has commissioned (ongoing) analysis of the global building stock which has indicated that energy in buildings must decrease by 30% to help reduce demand on national infrastructure and the renovation rate of buildings must increase from the current rate of approx. 1% to 4% per annum. This has resulted in increased business focus on providing solutions, capacity and technical support to rapidly support the expected increase in the renovation rate.</p>

C3.1d

(C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Risks and opportunities related to the growing demand for even more energy efficient, carbon efficient and more circular products have influenced our product related strategy. A key example of this would be Kingspan's incorporation of 385 million waste PET bottles back in to our high-performing insulation in 2019. The number of waste bottles upcycled grew from 256m in 2018. Kingspan, as part of our Planet Passionate initiatives, is targeting upcycling 1 billion waste plastic bottles by 2030. As our most premium insulated panel product, Kingspan devised a strategy to channel this circular material in to our QuadCore panel. QuadCore will now not only have the most advanced thermal performance in the market but it can also be marketed as upcycling what is a consumer waste product. In addition, we are working with our suppliers (see section on Supply Chain) on reducing embodied carbon within our raw materials, which we believe will resonate well as a product set with customers. Magnitude of Opportunity: This opportunity would sit within our innovation/new technologies opportunity (Opp 2), €200m - 300m. Time horizon is short-, medium- and long-term.
Supply chain and/or value chain	Yes	Risks related to the carbon utilised in the production of our raw materials (as reported in 2.3a Risk 2) have influenced our engagement strategy with our supply chain. Kingspan is the market leader in high-performance insulation, thereby manufacturing a low-carbon technology for climate mitigation. As a market leader, we recognise our role in influencing the climate-change agenda through the supply chain to this industry, where much of product embodied carbon is created. Kingspan developed a strategy to reduce carbon emissions in its primary supply chain. Kingspan has publicly committed to a Science Based 10% emissions absolute reduction by 2025 (base year 2017). In addition, Kingspan launched its Planet Passionate targets in December 2019. Within those targets, we have committed to a 50% reduction in product CO2 intensity from our primary suppliers by 2030. These targets require considerable engagement internally, and externally with our supply chain. Kingspan has invested extensively to meet our Planet Passionate targets, including appointing a Global Head of Sustainability, and a sustainability team, which reports directly to the CEO, arranging a €50 million green loan to finance Planet Passionate initiatives and establishing a global Planet Passionate team to drive change at a divisional and geographic level. In 2019, Kingspan held a Global Supplier Forum at our headquarters in Ireland. Focus was given to our new Planet Passionate programme. Productive discussions and workshops were held throughout the day, with a range of suppliers, resulting in some collaborative projects which will support the delivery of our supply chain targets. Our emissions targets within our supply chain are medium-term in that we expect to realise them by 2030 but they will benefit the business for the long-term. As described in 2.4a Opp 3, a core part of Kingspan's growth strategy is to convert construction methods away from inefficient traditional technologies to high-performance building envelopes. While embodied carbon in our insulation systems is insignificant when compared with the carbon savings in use, any reduction in embodied carbon would offer Kingspan an even more compelling case for our conversion strategy. Magnitude of a) Risk (2.3a Risk 1): €100m–150m; b) Opportunity (2.4a Opp 3): Part driver of conversion strategy, €100m–130m
Investment in R&D	Yes	Climate-related risks and opportunities are core elements of Kingspan's R&D Investment Strategy. Innovation is one of Kingspan's key strategic pillars. As a manufacturer of climate-mitigating low-carbon technologies, our innovation agenda is centred around creating products which reduce the carbon emissions of the built environment. Kingspan's strategy is to be the leader in innovative building envelope solutions which reduce the resource consumption of buildings. We recognise Innovation both as a risk (2.3a Risk 1) and an opportunity (2.4a Opportunity 2) in both the short-term and the long-term. There is a risk that a competitor innovates a building envelope solution with a lower U-Value than Kingspan, which doesn't compromise other performance attributes. The U-Value is the measure of thermal transmittance, lower U-Values equate to better energy and carbon performance. Kingspan invests approximately 1% of revenue annually on R&D which gives us significant scale advantage in innovation versus our peers. To further influence the strategy Kingspan invested approximately €10m in a new innovation hub in Ireland which opened in 2019, IKON. IKON has state-of-the-art laboratory and prototyping capabilities. IKON is itself a living research project, offering a foundation for future low-carbon technology innovation. Kingspan's commitment to innovation has resulted in market leading technologies. Case Study - In 2015, Kingspan created QuadCore through our internal R&D. QuadCore is Kingspan's most innovative, highest performing insulated panel with a U-value of 0.018W/mK. Since 2016 Kingspan has been rolling out capacity to manufacture QuadCore across our global footprint. QuadCore accounted for 9% of insulated panel revenue in 2019. Kingspan targets QuadCore to generate 50% of insulated panel revenue by 2024. Kingspan is already developing the next generation of QuadCore technology. Magnitude of a) Risk (2.3a Risk 1): €55m - €275m; b) Opportunity (2.4a Opp 2): €200 - €300m. Innovation is a risk and opportunity over the short-, medium- and long-term.
Operations	Yes	Many of the countries in which Kingspan operates have already implemented carbon pricing mechanisms, with more countries expected to implement carbon taxes or pricing mechanisms in the future. In addition, in line with meeting the objectives of the Paris Accord, we expect increases to the current carbon taxes or pricing mechanisms. As per section 2.3a Risk 3, we estimate energy costs for Kingspan could increase in a range of €20-40million by 2030, therefore the risk is short-term. These estimates are based on an assumption of a carbon tax in the range of \$50/tonne to \$100/tonne, in line with the carbon prices expected to meet the objectives of the Paris Accord; and a proportionate increase in electricity costs. This impact and ultimately the strategy to mitigate have been influenced by the Sustainable Development Scenario. In 2011, Kingspan initiated a strategy to attain Net Zero Energy status by 2020. In 2019 we updated our strategy to reduce energy consumption and increase our use of renewable energy with the launch of our Planet Passionate initiatives. Within those initiatives we have targets to a) increase our direct use of renewable energy to 60% by 2030; b) increase our on-site generation of renewable energy to 20% by 2030 and c) install solar PV systems on all wholly owned facilities by 2030. This strategy will reduce Kingspan's energy consumption from the grid and reduce the carbon associated with our energy consumption, therefore reducing the risk associated with increased, carbon related, energy costs. Kingspan arranged a €50m Green Loan in 2019 to support these initiatives. As of now, we have a PV solar project pipeline of 20 projects, with an estimated cost of over €10m and potential energy generation of 9.4 GWh of renewable electricity per annum. Magnitude of Impact: Risk (2.3a Risk 3) - €20m-€40m. This is a risk over the medium-term.

C3.1e

(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures Capital allocation Acquisitions and divestments Access to capital Assets Liabilities	<p>Revenues: Kingspan's revenues have been significantly impacted by planning for climate related risks and opportunities. Kingspan's core strategy is to convert end markets from inefficient, traditional methods of construction, to constructing with high-performance building envelopes, which reduce energy consumption and carbon emissions (Opp 3). Kingspan's innovation strategy supports our market leader position by having the most high-performing insulation technologies (Opp 2). Kingspan has expanded the conversion opportunity through investment in new technologies and new geographies (Opp 3). In addition, we expect growth to be supplemented by incentives to renovate the building stock in line with the objectives of the Paris Agreement (Opp 1). Case Study: Opp 1: Renovation wave. The European Energy Performance of Buildings Directive was revised in 2018 to include requirements for Member States to prepare long-term national renovation strategies. Our research indicates that the rate of deep energy renovation in commercial buildings needs to double and domestic buildings needs to increase by 4x to meet the objectives of the Paris Accord. As per Opp 1, Kingspan's potential revenue opportunity is €650-1,300m. Kingspan has significantly increased its development capital expenditure to support this revenue opportunity. Current plans include at least 7 manufacturing lines in Europe. This expansion development also supports expected revenue growth from the ongoing conversion to high-performance building envelopes (Opp 3); it acts as a channel for our ongoing innovation (Opp 2); and it increases our footprint in new markets (Opp 4). Magnitude of Impact: High. Potential revenue growth from climate-related opportunities is in the range of €1,000m - €2,030m. Total revenue at risk from climate-related risks is in the range of €165m - €445m. Time horizon is short.</p> <p>Direct Costs: The key area in which direct costs have been impacted and which will likely be impacted in the future is energy costs. One of Kingspan's strategic objectives is to be the world's leading provider of low energy building envelopes. To complement that strategy, Kingspan set about reducing its own energy consumption. Over the period 2011-2019, Kingspan reduced its energy intensity (kWh per € of turnover) from 0.19 to 0.14, a 26% reduction. Magnitude of Impact: We estimate that increasing energy costs and carbon taxes or carbon pricing mechanisms could add €20-40m of direct costs with no mitigation strategy (Risk 3). Time horizon is medium. Indirect Costs: Kingspan aims to lead the advancement of materials, building systems and digital technologies to address issues such as climate change and circularity. In order to meet these strategic objectives, Kingspan must invest in indirect expenses, such as R&D, a technically educated sales team and the Planet Passionate Team. The largest indirect cost related to climate-change is R&D. We invest c.1% of revenue annually on R&D and digital innovation, €31.9m in 2019. This investment in innovation protects Kingspan from potential substitution risk from a competitor's innovation of a superior low-carbon technology (Risk 1). It also drives Kingspan's own innovation agenda, which will accelerate the conversion of construction markets to high-performance building envelopes which save more energy and carbon (Opp 2, Opp 3). We expect the investment in R&D to increase proportionately in line with revenue. Magnitude of impact: Overall magnitude of impact is high, approximately €40-45m. Time horizon is short. Capital Expenditure: Kingspan has been investing in manufacturing capacity to support our expectation of increased revenues from opportunities such as the conversion to low-carbon building envelope technologies (Opp 3). In addition, Kingspan invested in a new state-of-the-art innovation facility to support ongoing development of low-carbon technologies to further support that conversion strategy (Opp 2). Case study: Kingspan's 2019 €10m investment in our new global innovation centre in Ireland, IKON. IKON will support the global innovation effort to develop new and next generation low-carbon technologies. This investment reduces the risk of a competitor advancing a superior product to Kingspan (Risk 1) and supports our research in advanced materials which may also provide solutions to changing consumer behaviour (Risk 2). Advancing our product portfolio helps the market conversion strategy (Opp 3, Opp 2). We are also investing in new capacity (facilities and manufacturing lines) to support the expected future growth of the business (Opp 1, Opp 2, Opp 3 and Opp 4). Magnitude of impact: High. Total development capital expenditure over the years 2018 to 2022 is expected at close to €400m. Time horizon is short. Acquisitions: Kingspan has historically used mergers and acquisitions (M&A) as a route to execute our strategy. Kingspan acquires businesses for three reasons: i) to consolidate an end market, augmenting our ability to convert that market to high-performance building envelopes which save energy and carbon (Opp 1, Opp 2, Opp3, Opp4); ii) to expand to new geographies which are generally at an earlier stage in their adoption of high-performance building envelopes, a significant long-term growth opportunity (Opp 3); and iii) to acquire new technologies which complement our energy and carbon efficient building envelope solutions (Opp 2). Kingspan maintains a conservative balance sheet with a maximum comfort level of 2x Net Debt to EBITDA. We expect that we have sufficient balance sheet funding to fund future acquisitions. Magnitude of Impact: High. Acquisitions have added over €2,000m of revenue to Kingspan over the past five years. Time horizon is short. Access to Capital: Kingspan announced its new Planet Passionate agenda in December 2019. Through Planet Passionate we aim to make significant advances in the sustainability of both our business operations and our products. To support the Planet Passionate initiatives, Kingspan arranged a Green Loan of €50 million. We have a PV solar project pipeline of 20 projects, with a potential energy generation of 9.4 GWh of renewable electricity per annum, this will be financed through the Green Loan. Magnitude of Impact: To date impact is low, time horizon is short. Assets: To date, impact to assets is low. Investment in assets is a continuation of investment in high-performance building envelope technologies and capacity. Liabilities: One notable change is the inclusion of a €50m Green Loan which we arranged in 2020 to fund our Planet Passionate initiatives (Opp 5), which aim to make significant advances in sustainability along the lines of energy, carbon, circularity and water.</p>

C3.1f

(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Year target was set

2018

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based)

Base year

2017

Covered emissions in base year (metric tons CO2e)

373639

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2025

Targeted reduction from base year (%)

10

Covered emissions in target year (metric tons CO2e) [auto-calculated]

336275.1

Covered emissions in reporting year (metric tons CO2e)

284186

% of target achieved [auto-calculated]

239.410232871836

Target status in reporting year

Achieved

Is this a science-based target?

Yes, this target has been approved as science-based by the Science-Based Targets initiative

Please explain (including target coverage)

Kingspan Group Plc commits to reduce absolute Scopes 1 and 2 GHG emissions 10% by 2025 from a 2017 base-year. This target is based on its commitment to the SBTI. Scope 1 and 2 GHG emissions reduced by 24% from 373,639 tCO2e in 2017 to 284,186 tCO2e in 2019.

Target reference number

Abs 2

Year target was set

2018

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 3 (upstream & downstream)

Base year

2017

Covered emissions in base year (metric tons CO2e)

3197016

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2025

Targeted reduction from base year (%)

10

Covered emissions in target year (metric tons CO2e) [auto-calculated]

2877314.4

Covered emissions in reporting year (metric tons CO2e)

4622294

% of target achieved [auto-calculated]

-445.815097578492

Target status in reporting year

Underway

Is this a science-based target?

Yes, this target has been approved as science-based by the Science-Based Targets initiative

Please explain (including target coverage)

In 2018, Kingspan Group plc committed to reduce absolute Scope 3 GHG emissions from purchased goods and services, business travel, transport and distribution, and end-of-life treatment of sold products 10% by 2025 from a 2017 base-year. Estimated emissions for 2017 are based on an initial screening assessment and are currently being revisited through a detailed inventory analysis and will be adjusted accordingly if required. A screening assessment was also carried out on 2019 data as part of our ongoing efforts to track progress towards this target. The target was set in the reporting year and falls outside of our direct control, we will continue our efforts to make meaningful progress towards its achievement.

Target reference number

Abs 3

Year target was set

2013

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 2 (market-based)

Base year

2013

Covered emissions in base year (metric tons CO2e)

86208

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2020

Targeted reduction from base year (%)

100

Covered emissions in target year (metric tons CO2e) [auto-calculated]

0

Covered emissions in reporting year (metric tons CO2e)

8461

% of target achieved [auto-calculated]

90.18536562732

Target status in reporting year

Underway

Is this a science-based target?

No, but we are reporting another target that is science-based

Please explain (including target coverage)

Kingspan Group has a long term commitment to use 100% renewable electricity by 2020 with an on-going commitment beyond 2020. In the reporting year, a 90.1% reduction in Scope 2 (market based) emissions was achieved from a base year emission level of 86,208 t/CO2e in 2013 to 8,461 t/CO2e in 2019.

Target reference number

Abs 4

Year target was set

2013

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based)

Base year

2013

Covered emissions in base year (metric tons CO2e)

159461

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2050

Targeted reduction from base year (%)

100

Covered emissions in target year (metric tons CO2e) [auto-calculated]

0

Covered emissions in reporting year (metric tons CO2e)

21794

% of target achieved [auto-calculated]

86.3327083111231

Target status in reporting year

Underway

Is this a science-based target?

No, but we are reporting another target that is science-based

Please explain (including target coverage)

Please note that we have a target year of 2020 to achieve net zero CO2 related emissions (this target excludes process emissions) AND a longer term target to retain net zero CO2 related emissions. A 86% reduction was achieved in the reporting year - from a 2013 base year of 159,461 t/CO2e to 21,794 t/CO2e in 2019.

C4.2**(C4.2) Did you have any other climate-related targets that were active in the reporting year?**

Target(s) to increase low-carbon energy consumption or production

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2018

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)

kWh

Target denominator (intensity targets only)

<Not Applicable>

Base year

2013

Figure or percentage in base year

16

Target year

2020

Figure or percentage in target year

100

Figure or percentage in reporting year

94

% of target achieved [auto-calculated]

92.8571428571429

Target status in reporting year

Underway

Is this target part of an emissions target?

This target forms part of the Abs3 target.

Is this target part of an overarching initiative?

RE100

Please explain (including target coverage)

In 2019, 94% of the Kingspan Group's electricity consumption was from renewable sources across its global operations.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	22	
To be implemented*	13	676
Implementation commenced*	8	619
Implemented*	26	157873
Not to be implemented	1	

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in buildings	Other, please specify (General energy efficiency initiatives)
--------------------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

146

Scope(s)

Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

81863

Investment required (unit currency – as specified in C0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

16-20 years

Comment

Initiative category & Initiative type

Low-carbon energy generation	Wind
------------------------------	------

Estimated annual CO2e savings (metric tonnes CO2e)

564

Scope(s)

Scope 1
Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

30000

Investment required (unit currency – as specified in C0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

21-30 years

Comment

Installation and operation of wind turbine

Initiative category & Initiative type

Energy efficiency in buildings	Lighting
--------------------------------	----------

Estimated annual CO2e savings (metric tonnes CO2e)

294

Scope(s)

Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

36000

Investment required (unit currency – as specified in C0.4)

210000

Payback period

4-10 years

Estimated lifetime of the initiative

16-20 years

Comment

Initiative category & Initiative type

Energy efficiency in buildings	Lighting
--------------------------------	----------

Estimated annual CO2e savings (metric tonnes CO2e)

472

Scope(s)

Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

79000

Investment required (unit currency – as specified in C0.4)

245000

Payback period

1-3 years

Estimated lifetime of the initiative

16-20 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization
---	----------------------

Estimated annual CO2e savings (metric tonnes CO2e)

16.5

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

2250

Investment required (unit currency – as specified in C0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

16-20 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization
---	----------------------

Estimated annual CO2e savings (metric tonnes CO2e)

604

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

80950

Investment required (unit currency – as specified in C0.4)

158000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Initiative category & Initiative type

Energy efficiency in buildings	Lighting
--------------------------------	----------

Estimated annual CO2e savings (metric tonnes CO2e)

152

Scope(s)

Scope 2 (location-based)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

24700

Investment required (unit currency – as specified in C0.4)

124800

Payback period

4-10 years

Estimated lifetime of the initiative

11-15 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes	Other, please specify (Kuper heating energy reduction)
---	--

Estimated annual CO2e savings (metric tonnes CO2e)

40

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

11600

Investment required (unit currency – as specified in C0.4)

34000

Payback period

1-3 years

Estimated lifetime of the initiative

11-15 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes	Machine/equipment replacement
---	-------------------------------

Estimated annual CO2e savings (metric tonnes CO2e)

6

Scope(s)

Scope 2 (location-based)

Scope 2 (market-based)

Voluntary/Mandatory

Mandatory

Annual monetary savings (unit currency – as specified in C0.4)

1300

Investment required (unit currency – as specified in C0.4)

39000

Payback period

>25 years

Estimated lifetime of the initiative

6-10 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes	Other, please specify (Equipment repairs)
---	---

Estimated annual CO2e savings (metric tonnes CO2e)

12

Scope(s)

Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

4600

Investment required (unit currency – as specified in C0.4)

3000

Payback period

<1 year

Estimated lifetime of the initiative

11-15 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization
---	----------------------

Estimated annual CO2e savings (metric tonnes CO2e)

5

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

4000

Investment required (unit currency – as specified in C0.4)

12000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization
---	----------------------

Estimated annual CO2e savings (metric tonnes CO2e)

181

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

35000

Investment required (unit currency – as specified in C0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

16-20 years

Comment

Initiative category & Initiative type

Energy efficiency in buildings	Lighting
--------------------------------	----------

Estimated annual CO2e savings (metric tonnes CO2e)

44

Scope(s)

Scope 2 (location-based)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

18000

Investment required (unit currency – as specified in C0.4)

10000

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

Comment

Initiative category & Initiative type

Transportation	Company fleet vehicle replacement
----------------	-----------------------------------

Estimated annual CO2e savings (metric tonnes CO2e)

56

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

35000

Investment required (unit currency – as specified in C0.4)

7500

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

Comment

Initiative category & Initiative type

Energy efficiency in buildings	Lighting
--------------------------------	----------

Estimated annual CO2e savings (metric tonnes CO2e)

100

Scope(s)

Scope 2 (location-based)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

24000

Investment required (unit currency – as specified in C0.4)

73820

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Initiative category & Initiative type

Energy efficiency in buildings	Lighting
--------------------------------	----------

Estimated annual CO2e savings (metric tonnes CO2e)

Scope(s)

Scope 2 (location-based)
 Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

11000

Investment required (unit currency – as specified in C0.4)

73800

Payback period

4-10 years

Estimated lifetime of the initiative

11-15 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes	Machine/equipment replacement
---	-------------------------------

Estimated annual CO2e savings (metric tonnes CO2e)

50

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

11000

Investment required (unit currency – as specified in C0.4)

51700

Payback period

4-10 years

Estimated lifetime of the initiative

Please select

Comment

Initiative category & Initiative type

Energy efficiency in production processes	Machine/equipment replacement
---	-------------------------------

Estimated annual CO2e savings (metric tonnes CO2e)

17

Scope(s)

Scope 1

Voluntary/Mandatory

Please select

Annual monetary savings (unit currency – as specified in C0.4)

3700

Investment required (unit currency – as specified in C0.4)

18000

Payback period

4-10 years

Estimated lifetime of the initiative

Please select

Comment

Initiative category & Initiative type

Transportation	Company fleet vehicle efficiency
----------------	----------------------------------

Estimated annual CO2e savings (metric tonnes CO2e)

3.6

Scope(s)

Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
1500

Investment required (unit currency – as specified in C0.4)
2000

Payback period
1-3 years

Estimated lifetime of the initiative
11-15 years

Comment

Initiative category & Initiative type

Company policy or behavioral change	Other, please specify ("In-house" Production)
-------------------------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)
100

Scope(s)
Scope 3

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
160000

Investment required (unit currency – as specified in C0.4)
10000

Payback period
<1 year

Estimated lifetime of the initiative
16-20 years

Comment

Initiative category & Initiative type

Energy efficiency in buildings	Lighting
--------------------------------	----------

Estimated annual CO2e savings (metric tonnes CO2e)
17

Scope(s)
Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
2000

Investment required (unit currency – as specified in C0.4)
7000

Payback period
1-3 years

Estimated lifetime of the initiative
Please select

Comment

Initiative category & Initiative type

Other, please specify	Other, please specify (Acquisition of renewable heat certs to render a portion of fuel consumption renewable)
-----------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)
58379

Scope(s)
Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

<1 year

Comment

Acquisition of renewable heat certs to render a portion of fuel oil consumption renewable. There is no specific monetary savings associated with the acquisition of the renewable heat certs. Investment required is commercially sensitive information and therefore has been excluded.

Initiative category & Initiative type

Other, please specify	Other, please specify (Acquisition of renewable energy certs (REGO's, GO's, REC's and IREC's) to render a portion of electricity consumption renewable.)
-----------------------	--

Estimated annual CO2e savings (metric tonnes CO2e)

91040

Scope(s)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

<1 year

Comment

Acquisition of renewable energy certs (REGO's, GO's, REC's and IREC's) to render a portion of electricity consumption renewable. There is no specific monetary savings associated with the acquisition of the renewable energy certificates. Investment required is commercially sensitive information and therefore has been excluded.

Initiative category & Initiative type

Other, please specify	Other, please specify (Acquisition of renewable gas certs to render a portion of gas consumption renewable)
-----------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

5579

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

<1 year

Comment

Acquisition of renewable gas certs to render a portion of gas consumption renewable. There is no specific monetary savings associated with the acquisition of the renewable energy certificates. Investment required is commercially sensitive information and therefore has been excluded.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	In some regions of operation, regulatory frameworks require reporting of emissions and the identification of reduction plans. In addition Kingspan's sales teams highlight the benefit of using the Kingspan suite of products in order to meet these regulatory requirements / standards.
Employee engagement	We have employee engagement programmes related to reduction in energy use. Disclosure activities such as that required for CDP provide an important framework for year-on-year performance measurement and the identification of future initiatives.
Dedicated budget for other emissions reduction activities	Kingspan invests widely in measures for emissions reduction. In addition to the growing purchase of energy from renewable sources, the company has invested in a number of on-site renewable energy generation projects - often using its own products. This provides the added benefits of showcasing the potential of integrated renewables.
Dedicated budget for low-carbon product R&D	Kingspan places considerable emphasis on research and development of existing and new products and on the improvement of the production process, focused primarily on extending competitive advantage. In 2019, our research and development expenditure amounted to Euro31.9m (2018: Euro30m). Research and development expenditure is generally expensed in the year in which it was incurred. During 2018 Kingspan's continuing investment in research and development involved over 40 key projects. These key projects included: >> QuadCore; >> Optim-R E; >> Next generation Kooltherm® 100 range; >> Prismatic daylighting development; >> Cleanroom systems product development; >> Integrated solar PowerPanel; and >> New Access Floors datacentre products.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Company-wide

Description of product/Group of products

Kingspan provides a range of insulation, daylighting, natural ventilation and renewable energy products for the purpose of saving energy and mitigating greenhouse gas emissions, including insulated panels, insulation board, rooflights, wall-lights, PV panels and solar thermal solutions

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Evaluating the carbon-reducing impacts of ICT

% revenue from low carbon product(s) in the reporting year

62

% of total portfolio value

<Not Applicable>

Asset classes/ product types

<Not Applicable>

Comment

In 2019, Kingspan invested €31.9M (2018, €30M) in R&D - predominantly focused on the development of resource efficient products - 62% of Kingspan's revenue was generated from low carbon products in 2019.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1 2013

Base year end

December 31 2013

Base year emissions (metric tons CO2e)

410299

Comment

Scope 2 (location-based)

Base year start

January 1 2013

Base year end

December 31 2013

Base year emissions (metric tons CO2e)

87056

Comment

Scope 2 (market-based)

Base year start

January 1 2013

Base year end

December 31 2013

Base year emissions (metric tons CO2e)

86208

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Defra Voluntary 2017 Reporting Guidelines

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

Other, please specify (UK Carbon Trust)

C5.2a

(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

We use a system that draws on information from The Greenhouse Gas Protocol, DEFRA Voluntary reporting Guidelines and the UK Carbon Trust Standard. Emission factors are based on DEFRA Guidelines.

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

275725

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

75935

Scope 2, market-based (if applicable)

8461

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source

Office facilities (where there is no production activity on sites)

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)

Emissions are not relevant

Explain why this source is excluded

The report excludes non-manufacturing sites on the basis that the vast majority of the CO2 emissions are generated from manufacturing sites. The amounts excluded are not believed to be significant. Emissions are estimated at less than 0.5% of overall scope 1 and 2 emissions (market based).

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Metric tonnes CO2e

4302620

Emissions calculation methodology

Input Output analysis based on spend data using DEFRA factors.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Extraction, production, and transportation of goods and services purchased or acquired by the reporting company in the reporting year, not otherwise included in Categories 2 - 8.

Capital goods

Evaluation status

Relevant, calculated

Metric tonnes CO2e

53583

Emissions calculation methodology

Input Output analysis based on spend data using DEFRA factors.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Extraction, production, and transportation of capital goods purchased or acquired by the reporting company in the reporting year.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

10927

Emissions calculation methodology

WRI/Quantis Scope 3 Tool

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Estimation of scope 3 energy related emissions based on actual Scope 1 and Scope 2 emissions.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e

144111

Emissions calculation methodology

Input Output analysis based on spend data using DEFRA factors.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Spending on third -party transport and distribution services (e.g., ocean freight, air freight) during the reporting year. Excluding business travel.

Waste generated in operations

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

3269

Emissions calculation methodology

Process-based analysis using DEFRA emission factors.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Disposal and treatment of waste generated in the reporting company's operations in the reporting year in facilities not owned by the reporting company - based on physical data for tonnages sent to landfill, reuse and incineration.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

42145

Emissions calculation methodology

Input Output analysis based on spend data using DEFRA factors.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Business travel delivered by a third party (e.g. train travel, air travel, hotel accommodation). Spend data was allocated to different IO categories based on estimated breakdown.

Employee commuting

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

19942

Emissions calculation methodology

Hybrid IO/process-based analysis using WRI Scope 3 Tool estimate scaled by country.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Emissions estimated based on employee numbers and typical commuting emissions/spend by country/region.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

This category - Upstream leased assets is not applicable to Kingspan.

Downstream transportation and distribution

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

19671

Emissions calculation methodology

Process-based analysis using DEFRA emission factors.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Transport and distribution (T&D) of the products sold in the reporting year, by the reporting company, to the end consumer.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

This category - Processing of sold products is not applicable to Kingspan.

Use of sold products

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

64

Emissions calculation methodology

Hybrid IO/Process-based analysis using sales revenue and typical product energy use data to estimate lifetime emissions using DEFRA emission factor.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Emissions from the use of goods and services sold by the reporting company in the reporting year.

End of life treatment of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO2e

25963

Emissions calculation methodology

Process-based analysis using DEFRA emission factors.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Estimated based on sold product weights and industry average end-of-life management practices.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

This category - Downstream leased assets is not applicable to Kingspan.

Franchises

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

This category - Franchises is not applicable to Kingspan.

Investments

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

This category - Investments is not applicable to Kingspan.

Other (upstream)

Evaluation status

Not evaluated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

This category - Other (upstream) is not applicable to Kingspan.

Other (downstream)

Evaluation status

Not evaluated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

This category - Other (downstream) is not applicable to Kingspan.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.0000589

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

284186

Metric denominator

unit total revenue

Metric denominator: Unit total

4825887280

Scope 2 figure used

Market-based

% change from previous year

23

Direction of change

Decreased

Reason for change

The decrease is largely due to emission reduction activities and purchase of renewable certification in 2019.

Intensity figure

31.4

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

284186

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

14529

Scope 2 figure used

Market-based

% change from previous year

26

Direction of change

Decreased

Reason for change

The decrease is largely due to emission reduction activities and purchase of renewable certification in 2019.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	13333	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	262392	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
Ireland	162
United Kingdom of Great Britain and Northern Ireland	104
Belgium	97
Australia	442
United Arab Emirates	51
Iran (Islamic Republic of)	69
India	61
France	2709
Czechia	0
Poland	404
Hungary	24
Turkey	0
Germany	33
Finland	20
Norway	477
Romania	316
Russian Federation	526
Slovakia	56
Latvia	17
United States of America	257313
Canada	459
Mexico	81
Colombia	77
Brazil	2292
Panama	2
Spain	7995
Netherlands	1938

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Insulated Panels	30556
Insulation Boards	243558
Water & Energy	521
Light and Air	452
Access Floors	638

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Ireland	3986	0	10533	10533
United Kingdom of Great Britain and Northern Ireland	11308	0	46099	46099
Belgium	2874	105	16857	16300
Australia	1966	1924	2646	56
United Arab Emirates	2454	2454	3728	0
India	296	296	412	0
France	712	112	10324	8214
Czechia	2063	0	4127	4127
Poland	7113	0	10027	10027
Hungary	548	0	2062	2062
Turkey	608	0	1318	1318
Germany	4512	614	10089	9669
Finland	677		6431	6431
Romania	389		1135	1135
Russian Federation	580	39	1655	1543
United States of America	16596	35	39410	39327
Canada	986	0	6947	6947
Mexico	338	0	709	709
Colombia	50	0	377	377
Brazil	1180	0	10124	10124
Netherlands	7197	0	16469	16469
Iran (Islamic Republic of)	189	189	355	0
Norway	11	0	1374	1374
Slovakia	68	0	426	426
Latvia	11	0	156	156
Panama	26	26	139	0
Spain	9197	2667	27403	23801

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Insulated Panels	33966	3930
Insulation Boards	30024	3402
Water & Energy	3017	311
Light and Air	3120	0
Data & Flooring Technology	5808	818

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	25050	Decreased	7.3	In 2019, there was a reduction of 25,050 tCO2e in respect of changes in renewable energy consumption. Scope 1 and 2 emissions in the previous year were 344,844 tCO2e. Therefore the calculation was $-25,050/344,844 = -7.3\%$. The reduction related to the purchase of renewable energy with Guarantees of Origin, IREC's and other appropriate certification in place.
Other emissions reduction activities	51071	Decreased	14.8	In 2019, there was a reduction of 51,071 tCO2e in respect of other emission reduction activities. Scope 1 and 2 emissions in the previous year were 344,844 tCO2e. Therefore the calculation was $-51,071/344,844 = -14.8\%$. The tCO2e saved is as a result of emission reduction projects undertaken.
Divestment	1159	Decreased	0.3	In 2019, there was a reduction of 1,159 tCO2e in respect of divestment. Scope 1 and 2 emissions in the previous year were 344,844 tCO2e. Therefore the calculation was $-1,159/344,844 = -0.3\%$. The tCO2e saved is as a result of sale of several small sites during the year.
Acquisitions	4700	Increased	1.4	Relates to acquired sites during 2019 which added 4,700 tCO2e. Total scope 1 and 2 emissions in the previous year were 344,844 tCO2e. Therefore the calculation was $4,700/344,844 = +1.4\%$.
Mergers	0	No change	0	Not applicable
Change in output	950	Increased	0.3	Increase in demand leading to increased output. This accounted for an increase of 950 tCO2e in 2019. Total scope 1 and 2 emissions in the previous year were 344,844 tCO2e. Therefore the calculation was $+950/344,844 = +0.3\%$.
Change in methodology	3866	Increased	1.1	Relates to the difference in calculating the 2019 emissions using the 2018 carbon factors compared to the 2019 carbon factors. The change in methodology caused an increase of 3,866 tCO2e. Total scope 1 and 2 emissions in the previous year were 344,844 tCO2e. Therefore the calculation was $+3,866/344,844 = +1.1\%$.
Change in boundary	7865	Increased	2.3	The change in boundary is predominantly as a result of the inclusion of process emissions for an additional one site in this year's submission. The change in boundary caused an increase of 7,865 tCO2e. Total scope 1 and 2 emissions in the previous year were 344,844 tCO2e. Therefore the calculation was $+7,865/344,844 = +2.3\%$.
Change in physical operating conditions	226	Decreased	0.1	Change in weather conditions year-on-year added 226 tCO2e. Total scope 1 and 2 emissions in the previous year were 344,844 tCO2e. Therefore the calculation was $226/344,844 = +0.1\%$.
Unidentified	624	Decreased	0.2	Unidentified cause of change increased emissions by 624 tCO2e. Total scope 1 and 2 emissions in the previous year were 344,844 tCO2e. Therefore the calculation was $+624/344,844 = +0.2\%$.
Other	90	Increased	0.02	Other causes of change increased emissions by 90 tCO2e. Total scope 1 and 2 emissions in the previous year were 344,844 tCO2e. Therefore the calculation was $+90/344,844 = 0.02\%$.

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	323016	64777	387793
Consumption of purchased or acquired electricity	<Not Applicable>	217225	14107	231332
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	13087	<Not Applicable>	13087
Total energy consumption	<Not Applicable>	553328	78885	632212

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)

Natural Gas

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

286451

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Emission factor

0.18385

Unit

kg CO2e per kWh

Emissions factor source

UK Government GHG Conversion Factors for Company Reporting

Comment

Fuels (excluding feedstocks)

Gas Oil

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

24478

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Emission factor

2.75821

Unit

kg CO2e per liter

Emissions factor source

UK Government GHG Conversion Factors for Company Reporting

Comment

Fuels (excluding feedstocks)

Burning Oil

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

13290

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Emission factor

2.54042

Unit

kg CO2e per liter

Emissions factor source

UK Government GHG Conversion Factors for Company Reporting

Comment

Fuels (excluding feedstocks)

Fuel Oil Number 1

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

24817

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Emission factor

3.17966

Unit

kg CO2e per liter

Emissions factor source

UK Government GHG Conversion Factors for Company Reporting

Comment

Fuels (excluding feedstocks)

Liquefied Petroleum Gas (LPG)

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

38757

MWh fuel consumed for self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

<Not Applicable>

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Emission factor

1.5226

Unit

kg CO2e per liter

Emissions factor source

UK Government GHG Conversion Factors for Company Reporting

Comment**C8.2d****(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.**

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	20683	13087	20683	13087
Heat	13303	13303	13303	13303
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2e**(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero emission factor in the market-based Scope 2 figure reported in C6.3.****Sourcing method**

Unbundled energy attribute certificates, Guarantees of Origin

Low-carbon technology type

Low-carbon energy mix

Country/region of consumption of low-carbon electricity, heat, steam or cooling

Europe

MWh consumed accounted for at a zero emission factor

127610

Comment**Sourcing method**

Unbundled energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Wind

Country/region of consumption of low-carbon electricity, heat, steam or cooling

North America

MWh consumed accounted for at a zero emission factor

46983

Comment**Sourcing method**

Unbundled energy attribute certificates, International REC Standard (I-RECs)

Low-carbon technology type

Wind

Country/region of consumption of low-carbon electricity, heat, steam or cooling

Latin America (LATAM)

MWh consumed accounted for at a zero emission factor

10501

Comment

Sourcing method

Green electricity products (e.g. green tariffs) from an energy supplier, supported by energy attribute certificates

Low-carbon technology type

Low-carbon energy mix

Country/region of consumption of low-carbon electricity, heat, steam or cooling

Europe

MWh consumed accounted for at a zero emission factor

32131

Comment

Sourcing method

Other, please specify (Hydro Electricity Generated)

Low-carbon technology type

Hydropower

Country/region of consumption of low-carbon electricity, heat, steam or cooling

Europe

MWh consumed accounted for at a zero emission factor

376

Comment

Sourcing method

Other, please specify (Wind Electricity Generated)

Low-carbon technology type

Wind

Country/region of consumption of low-carbon electricity, heat, steam or cooling

Europe

MWh consumed accounted for at a zero emission factor

1221

Comment

Sourcing method

Other, please specify (CHP biogas electricity generated)

Low-carbon technology type

Other, please specify (Biogas)

Country/region of consumption of low-carbon electricity, heat, steam or cooling

Europe

MWh consumed accounted for at a zero emission factor

1420

Comment

Sourcing method

Other, please specify (Biomass)

Low-carbon technology type

Biomass

Country/region of consumption of low-carbon electricity, heat, steam or cooling

Latin America (LATAM)

MWh consumed accounted for at a zero emission factor

28

Comment

Sourcing method

Other, please specify (Anaerobic digestion electricity generated)

Low-carbon technology type

Other, please specify (Plant)

Country/region of consumption of low-carbon electricity, heat, steam or cooling

Europe

MWh consumed accounted for at a zero emission factor

2406

Comment

Sourcing method

Other, please specify (Solar PV installations)

Low-carbon technology type

Solar

Country/region of consumption of low-carbon electricity, heat, steam or cooling

Europe

MWh consumed accounted for at a zero emission factor

6691

Comment

Sourcing method

Other, please specify (Solar PV installations)

Low-carbon technology type

Solar

Country/region of consumption of low-carbon electricity, heat, steam or cooling

North America

MWh consumed accounted for at a zero emission factor

313

Comment

Sourcing method

Other, please specify (Solar PV installations)

Low-carbon technology type

Solar

Country/region of consumption of low-carbon electricity, heat, steam or cooling

Australia

MWh consumed accounted for at a zero emission factor

631

Comment

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description

Other, please specify (Non-HFC process emissions)

Metric value

19774

Metric numerator

tons CO2e

Metric denominator (intensity metric only)

% change from previous year

Direction of change

<Not Applicable>

Please explain

According to the WRI GHG Protocol, non-HFC process emissions (which are non-Kyoto Protocol greenhouse gases), should not be included in Scope 1 emissions and should be reported separately.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

FY19 Kingspan Assurance Statement-ASRauthorized.pdf

Page/ section reference

Page 1 & 2

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

FY19 Kingspan Assurance Statement-ASRauthorized.pdf

Page/ section reference

Page 1 & 2

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3 (upstream & downstream)

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

FY19 Kingspan Assurance Statement-ASRauthorized.pdf

Page/section reference

Page 1 & 2

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

No, but we are actively considering verifying within the next two years

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase

Credit purchase

Project type

N2O

Project identification

For Tate NA total of 2000MT of Carbon Offsets were contracted with Schneider Electric for 2019. The VCUs were from Project # CAR 766 on the Climate Action Reserve (CAR) database as Terra Verdigris #2 Nitrous Oxide Abatement Project. The project had a vintage balance of 198266 MT at the start of 2019 of which 2000 MT was retired after verification by Schneider Electric, on behalf of Tate Access Floors NA, to cover all of Tate's usage of Natural Gas and LPG in 2019

Verified to which standard

CAR (The Climate Action Reserve)

Number of credits (metric tonnes CO2e)

2000

Number of credits (metric tonnes CO2e): Risk adjusted volume

2000

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price

Drive energy efficiency

GHG Scope

Scope 1

Scope 2

Application

An internal carbon pricing is used in decision making processes related to driving energy efficiency improvements throughout the business. An implicit carbon price is used for capital expenditure projects related to energy efficiency measured at manufacturing site level, its use can influence the viability of the project and its ultimate approval based on potential energy and carbon savings to the business.

Actual price(s) used (Currency /metric ton)

30

Variance of price(s) used

A differentiated pricing approach is used owing to the global nature of the business. The pricing may vary depending on the region, business unit or type of decision.

Type of internal carbon price

Implicit price

Impact & implication

An internal carbon pricing is used in decision making processes related to driving energy efficiency improvements throughout the business: When considering investment in energy efficiency projects the full realisable financial benefit to the company is considered in the assessment. The standard payback period of 2 years is extended in some cases when the project provides significant energy and carbon saving opportunities. An example of this is a LED lighting project at our site in Poland. The project had a 3 year payback on investment but achieved an estimated annually savings of 206 t/C02e and over €44,000. Using an internal carbon price helped to influence the viability of the project and its ultimate approval based on the potential annual energy/carbon savings and its contribution towards achieving our Group climate related goal of reach net zero energy by 2020.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers

Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Compliance & onboarding

Details of engagement

Included climate change in supplier selection / management mechanism

% of suppliers by number

30

% total procurement spend (direct and indirect)

89

% of supplier-related Scope 3 emissions as reported in C6.5

93.1

Rationale for the coverage of your engagement

Kingspan believes all suppliers should have greenhouse gas emission (GHG) goals as part of their performance objectives and measure progress against those goals. We believe all suppliers should have greenhouse gas emission goals as part of their performance objectives and measure progress against those goals. Suppliers are a critical partner in Kingspan's value chain and significantly impact our ability to deliver on our value chain carbon reduction targets and climate change mitigation strategies. It is therefore critical that Kingspan addresses climate related issues within its supply chain. Kingspan has made two public commitments to reduce scope 3 GHG emissions: - Verified Science Based Scope 3 Target: 10% absolute reduction in Scope 3 emissions by 2025 from a 2017 baseline. - Planet Passionate target: 50% C02 intensity reduction in products from primary supply partners by 2030 from a 2019 baseline. Failure to engage with our suppliers and actively work towards reducing upstream carbon

emissions could negatively impact customer preferences in the future. Supply chain transparency helps Kingspan to evaluate impact, foresee risks, and identify opportunities to improve environmental, social, and economic performance. All suppliers are evaluated by the same process and includes areas such as quality, environmental management and CSR commitments. All suppliers must adhere by our Ethical Purchasing policy which outlines the expectations on suppliers on environmental protection, labour practises, and human rights.

Impact of engagement, including measures of success

Kingspan prioritises engagement with critical raw material suppliers who represent over 80% of the Group's total spend and 93.1% of its scope 3 emissions and are therefore critical to the successful achievement of its verified science-based scope 3 emissions target. Kingspan's engagement with suppliers involves close cross functional relationships between the procurement and sustainability teams including quarterly meetings, conference calls, electronic communications and site visits. Kingspan works closely with the sustainability departments of its suppliers to better understand their sustainability goals and future plans to reduce their environmental impacts. Kingspan also proactively provides customer feedback on the urgent need to rapidly reduce carbon intensity. Measures of Success: In 2019 Kingspan measures of success are an indication of: - Develop better understanding of the carbon emissions profile of key suppliers across different regions. This has been successfully achieved. - Stronger business relationships across geographical regions have been formed with ongoing bi-monthly dialogue between Procurement and Sustainability teams along with direct discussion at CEO level. Kingspan Supplier Day: In November 2019 we held our annual Supplier Forum with specific focus given to our new sustainability programme. Productive discussions and workshops were held throughout the day with a range of suppliers resulting in some collaborative projects that will support the delivery of our supply chain targets.

Comment

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

30

% total procurement spend (direct and indirect)

89

% of supplier-related Scope 3 emissions as reported in C6.5

93.1

Rationale for the coverage of your engagement

Suppliers are a critical partner in Kingspan's value chain and significantly impact our ability to deliver on our value chain carbon reduction targets and climate change mitigation strategies. It is therefore critical that Kingspan addresses climate related issues within its supply chain. Kingspan has made two public commitments to reduce scope 3 GHG emissions: - Verified Science Based Scope 3 Target: 10% absolute reduction in Scope 3 emissions by 2025 from a 2017 baseline. - Planet Passionate target: 50% CO2 intensity reduction in products from primary supply partners by 2030 from a 2019 baseline. In order to meaningful progress towards our target Kingspan must actively engage with these suppliers on an ongoing basis to obtain company and product level carbon emissions data, obtain updates on each supplier's progress towards their GHG emission goals and monitor progress towards its scope 3 target. Supplier engagement is generally prioritised by magnitude of expenditure. Kingspan's focus is on its critical suppliers who make up over 80% of our total spend and 93.1% of scope 3 emissions. Failure to engage with our suppliers and actively work towards reducing upstream carbon emissions could negatively impact customer preferences in the future. Supply chain transparency helps Kingspan to evaluate impact, foresee risks, and identify opportunities to improve environmental, social, and economic performance. All suppliers are evaluated by the same process and includes areas such as quality, environmental management and CSR commitments. All suppliers must adhere by our Ethical Purchasing policy which outlines the expectations on suppliers on environmental protection, labour practises, and human rights.

Impact of engagement, including measures of success

Kingspan's engagement with suppliers involves close cross functional relationships between the procurement and sustainability teams including quarterly meetings, conference calls, electronic communications and site visits. Data Collection: Measures of Success: In 2019 Kingspan measures of success are an indication of: - Group Level: Supplier Data Requests: Some suppliers are at different stages of their company level carbon reporting journey, Kingspan has actively worked with these suppliers to explain why reporting this information is important for their customers to track their progress towards emissions reduction goals. We believe this has been successful engagement as more suppliers have now committed to developing and providing Kingspan with the data required to track progress against our targets - Divisional Level: Questionnaires are sent to selected suppliers to capture GHG/carbon emission data and to understand their strategy to reduce emissions. In particular, related to the products that they supply to Kingspan. By way of example, Kingspan Panels North America has implemented a programme of supply chain sustainability engagement, while Kingspan Insulation and Kingspan Panels UK have gained BES 6001 accreditation which contains within it a supply chain management module. Understanding Supplier Behaviour: Measures of Success: In 2019 Kingspan measures of success are an indication of: Measure of Success: Better oversight of the GHG emissions profile of different suppliers across different regions. The climate related success of this engagement is that it enables Kingspan to make more informed decisions based on the data we have obtained from our suppliers, this enables us to advocate for lower emissions products based on knowledge of product GHG emissions across different regions and suppliers. Based on the information obtained, we will use product GHG emission reduction as a KPI that will be monitored year on year.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement

Education/information sharing

Details of engagement

Share information about your products and relevant certification schemes (i.e. Energy STAR)

% of customers by number

62

% of customer - related Scope 3 emissions as reported in C6.5

0.6

Portfolio coverage (total or outstanding)

<Not Applicable>

Please explain the rationale for selecting this group of customers and scope of engagement

We aim to educate and inform customers about how our products can help to reduce the overall energy demand of buildings throughout their lifespan, helping to combat climate change through sustainable building design. Our target customer audience for this type of education includes but is not limited to design teams, building owners and developers. The rationale for educating these customers is that they are actively involved in the design, development and procurement of new and existing buildings and therefore can directly impact the sustainable development of the built environment. This should ultimately help to mitigate the impacts of climate change associated to the built environment. The scope of our educational initiatives are delivered by the sales, sustainability and technical teams with different levels of coverage (estimated at 62%) across the 5 global divisions through multiple mediums include continued professional development (CPD) presentations, industry conferences, literature, reporting, website and our CSR commitments.

Impact of engagement, including measures of success

A positive measure of success from our climate related engagement strategy has been the increased use and contribution of our solutions on multiple BREEAM rated projects across Europe including a BREEAM 'Outstanding' rated project at Chatterley Valley, Staffordshire, UK. The project utilised multiple Kingspan products on the distribution centre and office buildings and helps to demonstrate the business case for going beyond building regulations backstop U values. Certified buildings like this help to increase awareness and set precedent for building beyond building code and will help to achieve our collective industry goal of net zero carbon buildings globally by 2050. Another successful outcome has been the creation of differentiation in the marketplace through increased customer awareness related to Kingspan's independently certified BRE environmental profiles developed by Kingspan Insulation in the UK and EN 15804 environmental product declarations (EPD's) across the global business. This information helps to inform customers of the environment impacts of our products and contributes towards points in all major environmental assessment methods and rating systems including BREEAM, LEED, GreenStar, HQE, the WELL Standard and the Living Building Challenge. Lastly, another measure of success from our engagement strategy is through the increased demand for product EPD information year on year which has informed our EPD development programs across the divisions. Energy and carbon emissions are covered in depth in most of these rating systems. Kingspan's engagement with customers helps them to better understand how best to utilise their solutions and achieve enhanced sustainability ratings for their building projects.

Type of engagement

Other, please specify (Ongoing educational updates)

Details of engagement

Other, please specify (Ongoing educational updates)

% of customers by number

62

% of customer - related Scope 3 emissions as reported in C6.5

0.6

Portfolio coverage (total or outstanding)

<Not Applicable>

Please explain the rationale for selecting this group of customers and scope of engagement

We encourage our customers to help reduce the climate change impacts associated with the built environment through use of our products/services. Kingspan provides ongoing educational updates to its customers to ensure they are informed about our latest product innovations and how they can help them to deliver more energy efficient buildings. Its target customer audience for this type of education includes but is not limited to design teams, building owners, developers and contractors. The rationale for providing ongoing educational information to these customers is that they are actively involved in the design, development and construction/refurbishment of new and existing buildings and therefore are in a position to directly impact the sustainable development of the built environment. The scope of our engagement is delivered by the sales, sustainability, field services and technical teams with different levels of coverage (estimated at 62%) across the 5 global divisions through multiple mediums including formal campaigns, industry conferences, product and installation training, technical updates, calls for partnerships and informal opportunities to reduce negative impacts.

Impact of engagement, including measures of success

Kingspan works with selected design teams, building owners, developers and contractors to provide services such as building energy modelling, embodied carbon analysis, product/ installation training and technical updates to help create energy efficient buildings. A successful outcome of our climate related engagement strategy includes the increased levels of product and installation training provided to customers on an annual basis. For example, in the UK product training provided from 2018 to 2019 was increased by approx. 5%. Another positive impact of this engagement has been increased understanding of product installation which will ensure maximum energy saving potential and ongoing relationship development with key customers.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Kingspan's climate related engagement strategy with other partners in the value chain is centred around increasing awareness and action on climate related issues in the built environment. We engage with multiple partners across our value chain including (but are not limited to) architects, engineers, developers, sustainability professionals, climate scientists and end clients. We aim to educate and inform value chain partners about how our products and energy efficiency in general can help to reduce the overall energy demand of buildings throughout their lifespan, helping to combat climate change through sustainable building design. We engage with value chain partners through different mediums including meetings, collaborative projects, and events. We regularly run professional accredited (such as RIBA, RIAI, CIBSE and Engineers Ireland) continued professional development presentation programs to educate our partners on climate related issues and how are solutions can help to create sustainable low carbon buildings. We generally prioritise engagement based on the strength of the business case benefit to Kingspan and our partners

CASE STUDY: An example of our engagement with our value chain partners is through our annual GRI materiality matrix review for the insulated panels business.

We gain feedback from multiple value chain partners that help to identify the aspects that are most material to the business in the short, medium and long term. Management and awareness of climate related issues is central to our product offering, sustainability reporting, marketing and communication strategy. A positive outcome of this engagement is that our partners are engaged in our strategic planning on climate related issues and understand the steps we are taking to address them.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

- Direct engagement with policy makers
- Trade associations
- Funding research organizations

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Carbon tax	Support	Kingspan has been active through its trade association connections in seeking to promote the adoption of an internalised cost of energy/ fuels to compensate for artificially low prices of the last 20 years.	Extension of carbon taxation or other fuel/energy tax based on some relief for high energy intensity processes in order to focus on the lower level wider built environment. Carbon taxation at the asset level might offer better focus, where appropriate benchmarks can be established.
Energy efficiency	Support	Kingspan is active in promoting a Fabric First approach to the built environment in all jurisdictions in which it operates. This is often through direct responses to government consultation on future building regulations. Kingspan bases its responses on the fact that fabric upgrades are the most reliable and long-lasting mitigation measure, particularly in new buildings and deep refurbishments, where they can also be amongst the most cost-effective measures.	Increased recognition within government legislation of the need for fabric upgrades across all areas of the building environment, including public, commercial, industrial and residential sectors. The case for this is set out in terms of lifetime costing principles in order to overcome the short-comings of traditional payback justification methods.
Clean energy generation	Support	Kingspan has first and foremost sought to lead by example. In this regard, further investment has occurred on substantial on-site renewable energy facilities at key sites (e.g. anaerobic digestion at Pembroke, solar PV on a number of sites, and biomass generation at Hull). The company has also invested heavily in the development of roof-mounted solar PV systems for the wider market through Kingspan Energy. These activities provide case studies which are being used to support trade association inputs to governments on the capabilities and practicality of low-carbon solutions.	Kingspan is seeking to build confidence within local and national governments in order to promote further supportive legislation towards the implementation of building-integrated renewables. This may involve the further deployment of Feed-in-Tariffs, ROCs etc.
Climate finance	Support with minor exceptions	As a further exemplar, Kingspan has implemented a major energy efficiency project at Holywell using funds provided by the UK Green Investment Bank and Sustainable Development Capital Ltd. Through its trade association and other links, the company is seeking to reinforce the focus on the need for financial packages to promote the uptake of energy efficiency and integrated renewable solutions in the absence of a fully internalised energy price. This would include the further deployment of FITs and ROCs.	Like others, Kingspan has experienced lack of regulatory consistency leading to gaps between schemes and also abrupt changes in levels of financial support. Kingspan would value a more strategic and integrated approach to climate finance which would better support investment. Kingspan is working with the Environmental Industries Commission amongst others to provide a report to government emphasising the need for such an approach.
Adaptation or resilience	Support	Kingspan Environmental has increased the focus on developing sustainable water solutions through its involvement with the Rainwater Harvesting Association. In parallel, and consistent with its approach provide exemplars, the company continues to manufacture and install rainwater harvesting and storm water attenuation systems.	From a legislative perspective, Kingspan would like to see regulation that seeks to highlight the true societal value of water and the need to actively manage the resource - recognising that this will vary worldwide by region.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

EPIC (UK)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Engineered Panels in Construction (EPIC) supports an integrated approach to achieving building energy efficiency and sees well-engineered fabric as a key component of

this agenda. It is therefore an advocate of the fabric first approach.

How have you influenced, or are you attempting to influence their position?

Yes. Currently acting as director & Chairman.

Trade association

EPFA (Europe)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

European Phenolic Foam Association (EPFA) supports the use of highly efficient fabric insulation in the construction of new buildings and the refurbishment of existing buildings. Particular efforts are made to influence European Building Regulations for both new build and refurbishment.

How have you influenced, or are you attempting to influence their position?

Yes. Acting as an officer at trade association level

Trade association

Insulation Manufacturers Association - IMA (UK)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Insulation Manufacturers Association (IMA) supports the use of highly efficient fabric insulation in the construction of new buildings and the refurbishment of existing buildings. Particular efforts are made to influence UK Building Regulations for both new build and refurbishment.

How have you influenced, or are you attempting to influence their position?

Yes. Acting as an officer at trade association level

Trade association

PU Europe (Europe)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

PU Europe supports the use of highly efficient fabric insulation in the construction of new buildings and the refurbishment of existing buildings. Particular efforts are made to influence European Building Regulations for both new build and refurbishment.

How have you influenced, or are you attempting to influence their position?

Yes. Currently two Kingspan personnel are acting as Managing Board members.

Trade association

EuroACE (Europe)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

EuroACE promotes greater focus on the built environment across the EU as a source of energy and carbon savings for both energy security and climate mitigation purposes. As an organisation, it pays close attention to the comparative performance of Member States in their efforts to reduce carbon emissions related to the built environment.

How have you influenced, or are you attempting to influence their position?

Yes. Membership and active contribution. Acting as board member.

Trade association

EU-ASE (Europe)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

EU-ASE, the European Alliance for Saving Energy supports energy efficiency improvements across Europe and is particularly involved in lobbying in Brussels for energy efficiency targets to be included in the 2030 EU Climate & Energy Policy Framework.

How have you influenced, or are you attempting to influence their position?

Yes. Membership and our CEO is a Board Member.

Trade association

Insulation Australasia

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Insulation Australasia supports energy efficiency improvements.

How have you influenced, or are you attempting to influence their position?

Yes. Membership and acting as President.

Trade association

AFIA (Australia)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Australia Foil Insulation Association Supports energy efficiency improvements.

How have you influenced, or are you attempting to influence their position?

Yes. Membership and active contribution.

Trade association

Pan & Pro Europe (Europe)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

PAN and PRO EUROPE is an international insulated sandwich-panels and steel profiles manufacturers association founded to promote the interest of its members and to contribute to their continuous technical and commercial development. The association contribute to a better co-operation among its members in every respect. Pan & Pro is involved in several initiatives from the European Commission and National Authorities to develop regulation on the issue of sustainability & climate change including Ecodesign directive, ecolabel, energy labelling & Energy Performance of Buildings Directive.

How have you influenced, or are you attempting to influence their position?

Managing Committee member

Trade association

CPA (UK)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Construction Products Association covers a broad range of issues relating to the marketing and use of construction products, but has technical and sustainable construction committees which focus on issues related to climate change impact in the built environment.

How have you influenced, or are you attempting to influence their position?

Yes. Members of both the Technical Committee and the Sustainable Construction Committee.

Trade association

SPRA (UK)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Single Ply Roofing Association is promoting and supporting a particularly energy efficient means of roofing which integrates insulation into the structure.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan hold a Directorship, which facilitates significant influence on the direction of the Association.

Trade association

ACE (UK)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Association for the Conservation of Energy (ACE) is a lobbying organisation seeking to provide data to support energy efficiency measures of all types. It is extremely active, in part through its role as Secretariat to the British Energy Efficiency Federation (BEEF) which has regular meetings with UK Government officials on energy and climate change issues.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is a member of the Governing Council and also sponsors appropriate events.

Trade association

SWIGA (UK)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Solid Wall Insulation Guarantee Agency (SWIGA) is a body which promotes and supports the extension of solid wall insulation as a key strategic renovation strategy within property portfolios which were constructed prior to the advent of cavity construction.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is a Director of SWIGA.

Trade association

INCA (UK)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Insulated Render and Cladding Association (INCA) is specifically engaged in the promotion and support of the external wall insulation (EWI) industry, which is another key strategy for insulating older properties during renovation.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is a Technical, Marketing and Strategy Committee member

Trade association

OFTEC (UK)

Is your position on climate change consistent with theirs?

Mixed

Please explain the trade association's position

Although its history was in oil heating, and particularly the certification of installation staff, the Association has branched successfully into promoting renewable heating technologies.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan are Co-opted Board Members

Trade association

RHA (UK)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Rainwater Harvesting Association is promoting the wider consideration of efficient use of water resources which can be scarce in some areas.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan, as a manufacturer of rainwater management equipment is assisting in developing the growth strategy for this sector.

Trade association

Micropower Council (UK)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Micropower Council has recently re-branded as the Sustainable Energy Association and is responsible for promoting the case for micro-generation in the built environment, often by commissioning landmark studies and reports in the sector.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is an active member.

Trade association

Irish GBC (Ireland)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Irish Green Building Council (GBC) is, like its various sister organisations around the world, seeking to promote excellence in sustainable buildings through LEED and other related initiatives.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is an active member.

Trade association

DWEA (USA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Distributed Wind Energy Association (DWEA) seeks to promote and represent the installation and functioning of independent wind turbines and other non-grid wind energy devices.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is an active member.

Trade association

RenewableUK (UK)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

RenewableUK is the most significant non-for-profit trade association in the country seeking to promote the uptake of renewable energy generation across the country.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is an active member.

Trade association

Scottish Renewables (UK)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The representative body of the Scottish Renewable Energy industry since 1996.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is an active member and seeking to support the growth of the sector in Scotland.

Trade association

USEPA GPLC (USA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The US Environmental Protection Agency Green Power Leadership Club is a partnership program facilitated by the US EPA. Its primary purpose is to promote the attainment of high levels of green power purchasing across organisations. Kingspan is ranked in the Leadership Club within this scheme.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is an active participant.

Trade association

US GBC (USA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The US Green Building Council is the originator of the LEED program and promotes the construction, renovation and operation of sustainable buildings across the USA and beyond.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is a Charter Member and actively participates in the Environmental Product Declaration (EPD) Coalition.

Trade association

Canadian GBC (Canada)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Canadian Green Building Council (GBC) is, like its various sister organisations around the world, seeking to promote excellence in sustainable buildings

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is a Charter Member.

Trade association

CBE (USA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Center for the Built Environment is an active collaboration between Industry and Universities which was launched originally through UCA Berkeley. The mission is to improve environmental quality and energy efficiency of buildings.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is a Founder Member of this collaborative activity.

Trade association

ASHRAE (USA)

Is your position on climate change consistent with theirs?

Mixed

Please explain the trade association's position

American Society of Heat, Refrigeration and Air-conditioning Engineers (ASHRAE) is globally influential in assessing environmental impacts of building services and also setting standards to drive improvements in efficiency.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is an active member.

Trade association

MCA (USA)

Is your position on climate change consistent with theirs?

Mixed

Please explain the trade association's position

Metal Construction Association (MCA) is a fairly broad organisation targeted at promoting the use of metal products in buildings. It covers metal-faced insulating panels manufactured by Kingspan as part of its remit under the Insulated Metal Panel Council.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is an active member.

Trade association

BCSE (USA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Business Council for Sustainable Energy (BCSE) addresses energy efficiency, natural gas and renewable energy initiatives right across the USA.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is an active member and has sponsored the 2015 edition of the Sustainable Energy in America Factbook.

Trade association

HPBCCC (USA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The High Performance Building Congressional Caucus Coalition (HPCCC) was formed to heighten awareness and inform policymakers about the major impact of buildings have on our health, safety and welfare and the opportunities to incorporate solutions.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan has sponsored Caucus meetings as well as engaging in a number of discussions on potential solutions.

Trade association

GBI (USA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Green Buildings Initiative is seeking to bring forward new standards (e.g. GreenGlobes) in the field of sustainable construction in order to augment those being practiced under LEED.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan has been actively involved in the revision of GreenGlobes (an ANSI standard) and engages in other support activities for GBI.

Trade association

TIPSASA (South Africa)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

TIPSASA focuses on the Thermal Insulation Industry with particular emphasis on promotion of energy saving products and systems.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is an active member of the Technical Committee and is a National Executive Council member.

Trade association

XPSA

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

XPXA promotes the benefits of extruded polystyrene in North America. XPS has net positive energy conservation and air emission benefits when used in residential and commercial buildings over their normal life spans (typically between 15 to 50 years).

How have you influenced, or are you attempting to influence their position?

Kingspan is an active member.

Trade association

PUR-Gruppen

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

PUR-Gruppen promotes the energy efficiency benefits of polyurethanes / polyisocyanurate insulation in Sweden. They want to show that PUR can be an important part of a sustainable society and the PUR industry takes responsibility for safe production.

How have you influenced, or are you attempting to influence their position?

Kingspan is an active member and acts as a board member.

Trade association

NVPU

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

NVPU promotes the use of rigid urethane insulation in the Netherlands. The NVPU strives for a healthy business environment, the sustainable use of raw materials and products and focuses on reducing the use of energy.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is a board member.

Trade association

Stybenex

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Stybenex promotes the use of styrene based insulation in the Netherlands as an energy saving product.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is a the Chairman

Trade association

IVPU

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

IVPU promotes the use of rigid urethane insulation in Germany. IVPU states the most important prerequisite for energy-efficient houses is an excellent thermal insulation.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is a board member.

Trade association

Modern Building Alliance (Europe)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Modern Building Alliance is an alliance of trade associations and companies representing the plastics industry in the construction sector. By engaging with policy makers and stakeholders, we are committed to supporting the EU in ensuring safe and sustainable construction for people across Europe.

How have you influenced, or are you attempting to influence their position?

Yes. Kingspan is a board member.

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

No

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

The focus of the Kingspan Group businesses is such that the 'direction of travel' with respect to climate change strategy is critically important to the Group and this is implemented as a key part of the annual strategic planning process at both Group and divisional level. Reporting on progress and plans to deliver net-zero energy targets (and consequential carbon reduction) are a mandatory part of strategic planning on an annual basis. Since the approach to climate change is integrated into the overall business plan, even down to the asset level, the objectives are consistently reviewed by all management teams. Indeed, the strategic alignment of the divisions around a central statement is regularly checked. The company seeks to use its own facilities as exemplars of what can and should be done elsewhere. The culture is to be sure to 'walk the talk'. However, when evaluating solutions, whether for internal use or for the wider market, the company recognises that solutions are situation-specific and therefore seeks to promote a range of solutions, without pre-judging the outcome. That said, the overall view is that efforts to reduce energy demand/intensity (e.g. energy efficiency) should come first, before efforts are made to deliver the remaining energy requirement from low-carbon sources. Specific strategies for the reduction of the carbon footprint of the Group (e.g. the Planet Passionate initiative) are fully coordinated at Group level through quarterly meetings involving representatives from all divisions representing every site across the globe.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

ks-ar19-interactive-lr.pdf

Page/Section reference

Pages 42-51

Content elements

- Governance
- Strategy
- Risks & opportunities
- Emission targets
- Other metrics

Comment

Publication

In voluntary sustainability report

Status

Underway – previous year attached

Attach the document

KIP West Sustainability Report RP 2017.pdf

Page/Section reference

Insulated Panels Divisional Sustainability Report

Content elements

- Governance
- Strategy
- Risks & opportunities
- Emissions figures
- Emission targets
- Other metrics

Comment

Publication

In voluntary communications

Status

Complete

Attach the document

Planet Passionate _Press_Release_ 2019.pdf

Page/Section reference

Planet Passionate Programme Launch Press Release 2019

Content elements

- Strategy
- Emission targets
- Other metrics

Comment

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Executive Officer	Chief Executive Officer (CEO)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission
I am submitting my response	Investors	Public

Please confirm below

I have read and accept the applicable Terms