

# SUSTAINABILITY & RESPONSIBILITY REPORT BASED ON DATA FOR THE CALENDAR YEAR 2015



# Foreword from the Managing Director

Welcome to the Kingspan Insulation Ltd. Sustainability & Responsibility Report for the calendar year 2015. The report covers the UK business of Kingspan Insulation Ltd., which includes its headquarters at Pembridge, Herefordshire, and a manufacturing site at Selby, North Yorkshire. It excludes a third manufacturing site, at Basildon, Essex, which currently falls outside the scope of this report.



This report was published to present an holistic picture of Kingspan Insulation Ltd.'s long-term commitment to sustainability and responsibility in all of the company's guises: as a manufacturer of insulation products; as an employer; as a substantial landholder; and as a key member of its neighbouring communities.

Kingspan Insulation Ltd. has reported annually on its sustainability performance since 2004, and significant progress has been made in improving the company's performance over this time period.

Kingspan Insulation's reporting embraces the Global Reporting Initiative (GRI) G3 Sustainability Reporting Guidelines to ensure a comprehensive approach to reporting. The Sustainability Reporting Guidelines provide a globally recognised framework for reporting on an organisation's economic, social and environmental performance and although the G3 Guidelines have been superseded by G4 guidelines, Kingspan Insulation are continuing to report to G3 Guidelines until there is more clarity over the requirements of G4.

Kingspan Insulation Ltd also undertakes an external assurance process, to ensure the accuracy and robustness of the data upon which this report is based. Further information on the reporting methodology can be found in Appendix A.

The data and commentary in this report summarises Kingspan Insulation Ltd.'s journey since 2004, and highlights key achievements from the calendar year 2015.

Kingspan Insulation made strong gains during 2015, particularly in the first half. Underlying improvement in building activity across virtually all segments created an attractive backdrop in the UK as rigid insulation continued to make inroads against traditional alternatives.

Kingspan Kooltherm<sup>®</sup> maintained its central role with significant R&D underway to deliver its next iteration, focusing on advancing its already market leading thermal properties.

Kingspan Insulation Ltd. maintains a strong commitment to sustainability and responsibility, and as such this report also sets out a plan of action for continued progress in the coming 12 months.

**Richard Burnley** 



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# **Kingspan Insulation**

Kingspan Insulation Ltd. is a privately-held corporation whose liability is limited by shares. Kingspan Insulation is part of the Kingspan Group plc, one of Europe's leading construction product manufacturers. The Kingspan Group was founded in the late 1960s and is a publicly quoted group of companies headquartered in Kingscourt, County Cavan, Ireland. Kingspan Insulation Ltd. operates from three manufacturing facilities located near Pembridge, Herefordshire, at Sherburn-in-Elmet, near Selby, North Yorkshire and in Basildon, Essex. The latter site is excluded from the scope of this report as the metrics required for including the Basildon activities are unlikely to be available from that site in the foreseeable future. Consideration is being given to the development of a more streamlined reporting structure that can then be aggregated alongside this report at a higher organisational level. Kingspan Insulation Ltd. operates out of the United Kingdom and supplies products primarily to the UK market.

## **Product Range**

Kingspan Insulation is a market–leading manufacturer of premium and high performance rigid insulation products and insulated systems for building fabric and building services applications.

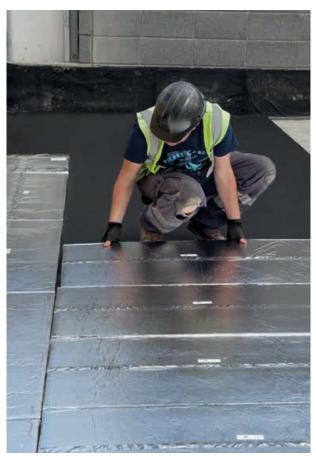
Kingspan Insulation Ltd. products are suitable for both new build and refurbishment in a variety of applications within both domestic and non-domestic buildings.

Products manufactured by Kingspan Insulation at its Pembridge and Selby manufacturing facilities include:

- Kooltherm<sup>®</sup>, premium performance rigid phenolic insulation;
- Therma™, high performance rigid polyisocyanurate insulation;
- Thermabate® and Kooltherm® Cavity Closer, insulated cavity closers for use around window and door openings;
- the Kingspan KoolDuct<sup>®</sup> System of pre-insulated ducting;
- the Kingspan TEK Building System, a structural insulated panel (SIP) building system; and
- Kingspan OPTIM-R<sup>®</sup>, optimum performance rigid vacuum insulation panel;

All Kingspan Insulation products are designed and manufactured to exceed the performance criteria required by the Building Regulations / Standards. Each product has been designed to fulfil a specific need and has been manufactured to precise standards and tolerances. Many of the products hold BBA Agrément approval, further underlining Kingspan Insulation's commitment to quality. They meet the exacting requirements of the construction industry and are manufactured to the highest standards under a management system certified to ISO 9001:2008 (Quality Management Systems, Requirements), ISO 14001: 2004 (Environmental Management Systems, Requirements), BS OHSAS 18001:2007 (Health and Safety Management Systems. Requirements) and ISO 50001:2011 (Energy Management Systems. Requirements).





Kingspan OPTIM-R<sup>®</sup> is an optimum performance next generation insulation solution. With an insulating performance up to five times better than other commonly available insulation materials, Kingspan OPTIM-R<sup>®</sup> is ideally suited for constructions where a lack of construction depth or space is an issue.



Kingspan Kooltherm<sup>®</sup> K15 Rainscreen board is a premium performance insulation solution for Rainscreen systems.

### Governance

The directors endorse and apply the principles of good corporate governance set out in the UK Corporate Governance Code. The Board provides the Company with entrepreneurial leadership and effective controls. It sets the Company's strategic aims and establishes the Company's values and standards.

The Board consists of seven statutory directors, each of whom has a combination of general business skills and experience in the construction materials market. The directors believe that the Board includes an appropriate balance of skills and ability to provide effective leadership and control to the Company. The Board meets formally each month, as well as informally as and when required. The Board reserves a formal schedule of matters on which it takes the ultimate decision. These include adopting the Divisional rolling five-year strategic plan and the annual budget, approving all major capital expenditure and material contracts, acquisitions and disposals of businesses and other assets, appointment of senior executives and succession planning, reviewing management's corporate and financial performance, and overall review of the company's internal controls.

The Managing Director is responsible for the leadership and effective working of the Board. He ensures that all members of the Board have an opportunity to contribute effectively and that there is appropriate and timely communication with shareholders.

As Kingspan Insulation is a wholly–owned subsidiary of Kingspan Group, there is no requirement to appoint non–executive directors to the Board. This function is in effect carried out by Group board members who have experience within the industry and within other Group companies.

All directors are supplied with appropriate and timely information for Board and committee meetings and are given the opportunity to probe and question the executives and to seek such further information as they consider appropriate. The Group's professional advisors are available for consultation with the Board and attend Board meetings as required. All directors have access to the advice and services of the Company Secretary, who is responsible for ensuring that Board procedures are followed. Individual directors may seek independent professional advice at the expense of the Company in furtherance of their duties as a director. The Group has arranged appropriate insurance cover in respect of legal action against its directors.

The Company has procedures whereby directors receive formal induction and familiarisation with the Company's business operations and systems and continuing training relating to the discharge of their duties as directors. Directors are appointed to the board based upon their particular experience and qualifications, together with the company need for specific functional, managerial or technical experience for the control and management of business operations.

## Code of Conduct

Kingspan Group plc. is committed to acting responsibly in its business, and maintaining high standards of ethics and integrity in all its dealings with its stakeholders, be they investors, customers, suppliers, its people or the community in which it operates. A Code of Conduct has been adopted, which sets out the fundamental principles that all directors, officers and employees must adhere to in order to meet those standards.

The principles contained therein include:

- integrity and honesty;
- compliance with the law, including competition, corruption, fraud, inside information;
- avoiding conflicts of interest;
- people and environment, including health and safety, equal opportunities, environment, IT; and
- protection of Group assets, including internal controls, confidentiality.

The Code is intended to encourage and enable employees and others to raise serious concerns within the Group rather than seeking outside resolution. It is the responsibility of all directors, officers and employees to report any breaches of the policy, or any other malpractice or illegal acts. The Code of Conduct is upheld through a number of mechanisms:

- reporting violations;
- accounting and auditing;
- acting in good faith;
- confidentiality;
- no retaliation; and
- appropriate handling of reported violations.

## **Mission Statement and Principles**

Kingspan Insulation operates a mission statement, with the goal that:

Kingspan Insulation will be the premium quality producer and supplier of non-fibrous thermal insulation whilst keeping people, the environment and the future success of the company at the forefront of its activities.

The Group–level principles are supplemented locally by the Kingspan Insulation Employee Handbook and relevant provisions of other policies, covering issues such as Human Rights; Local Supply; Environment; Ethical Purchasing; and Equal Opportunities.

Kingspan Insulation recognises the importance of conducting its business in a responsible manner. This is demonstrated in the way the company deals with its employees, customers and the wider community in which it operates. To this end, Kingspan Insulation has formalised and adopted the following sustainability and responsible sourcing policies.

## Sustainability Policy

Kingspan Insulation Ltd. has a responsibility to strive for sustainability in all of its products and operations.

Kingspan Insulation Ltd. aims to adopt and apply best practice sustainability principles by ensuring environmental, social and economic parameters are considered in an integrated way in product and service delivery.

To this end, Kingspan Insulation Ltd. will:

- incorporate the ethos of sustainability into the vision and values of the organisation;
- continue to invest in research and development in the area of maximising the insulation value of products;
- continually improve operational performance through the setting of long-term objectives and targets related to sustainability, and review progress regularly;
- comply with or exceed applicable legal and policy requirements related to the environmental and social aspects of the organisation;
- optimise energy and raw material usage and prevent or minimise pollution and environmental damage;
- continually monitor sustainability performance and actively communicate progress annually in the form of a published report, using the Global Reporting Initiative (GRI) guidelines;
- communicate and actively promote awareness and acceptance of this policy to everyone working for, or on behalf of, the organisation (including employees, shareholders, suppliers / sub-contractors and customers);
- ensure employees are given adequate training in sustainability issues and are fully involved in helping to deliver this policy; and
- implement a Code of Conduct and support sustainability guidelines for key suppliers, contractors and other interested parties to ensure that they comply with this policy.

Kingspan Insulation Ltd. is dedicated to adopting and implementing this policy.

The responsibility for implementing this policy lies with the Divisional Managing Director.

This policy forms a framework for Kingspan Insulation Ltd.'s activities, product design, services and decision-making, and promotes engagement of the entire organisation. The policy will be reviewed annually.

## Responsible Sourcing Policy

Kingspan Insulation's products improve the quality and sustainability of the built environment. Kingspan Insulation's aim is to ensure that the constituent materials used within the delivery of these products are responsibly sourced in accordance with the guidelines set out under the BRE Environmental and Sustainability Standard 6001: Framework Standard for the Responsible Sourcing of Construction Products.

In order to demonstrate this, Kingspan Insulation will maintain, implement and review:

- an Ethical Trading Policy, a Human Rights Policy and a Code of Conduct;
- procedures to ensure compliance with legislation;
- procedures to record and respond to all complaints and prosecutions;
- a Quality Management System certified to ISO 9001;
- a supply chain management system;
- an Environmental Management System certified to ISO 14001;
- a Health & Safety Management System certified to OHSAS 18001;
- stakeholder engagement and reporting; and
- policies, action plans and targets for:
  - reduction of greenhouse gas emissions;
- reduction of resource use;
- reduction of water extraction;
- reduction of transport impacts;
- reduction of waste;
- life cycle assessment;
- employment and skills; and
- local community engagement.

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This policy forms a framework for Kingspan Insulation Ltd.'s activities, product design, services and decision–making. It promotes engagement of the entire organisation and will be reviewed annually.



The Kingspan TEK® Cladding Panel has helped the new engineering building at the University of Lancaster to achieve a BREEAM interim score of 85.8.



The Kingspan OPTIM-R<sup>®</sup> Balcony & Terrace System has been installed as part of the refurbishment and expansion of a four bedroom villa on the beach front in Bognor Regis.



Premium and high performance insulation products from Kingspan Insulation have helped Coleg Cymunedol Y Dderwen Comprehensive School in Bridgend become the first BREEAM 'Outstanding' rated high school of its kind in the UK.

# **Reporting Principles**

## Sustainability and Responsibility Reporting History

### 2002

In 2002, Kingspan Insulation Ltd. obtained its first certified Life Cycle Assessment from the Building Research Establishment (BRE), awarded for the Therma™ product range, which has been certified continuously since then.

### 2004

Kingspan Insulation Ltd. first commissioned Arup to undertake a sustainability appraisal of its Pembridge facility, near Leominster, Herefordshire, in 2004. The appraisal, which utilised the Arup SPeAR® framework, provided an indication of Kingspan Insulation Ltd.'s baseline sustainability performance at that point in time and enabled the production of an Action Plan for improvement.

### 2005

A second SPeAR® appraisal was conducted in 2005 to provide a re–evaluation of the Pembridge site, to document performance improvements, and to highlight further opportunities for progress based on ongoing weaknesses and evolving industry best practice. Kingspan Insulation revised its Action Plan accordingly.

### 2006

During 2006, a mid-term review was conducted to assess Kingspan Insulation's progress with the Action Plan developed for Pembridge during the previous two years.

### 2007

2007 saw a full SPeAR® re–appraisal of Kingspan Insulation Ltd.'s performance and also the start of data collection for the performance indicators of the GRI G3 Sustainability Reporting Guidelines (see Appendix A). Whilst this data was not externally reported at the time, the database which was established enables the current report to build a comparative picture of progress from 2007 onwards.

#### 2008

The company's commitment to continual performance improvement resulted in a fifth SPeAR® appraisal of the business. Kingspan Insulation's report for the 2008 calendar year was supplemented, for the first time, with GRI indicator data, to ensure a more comprehensive approach to reporting. The report was commensurate with GRI application level B.

### 2009

Kingspan Insulation Ltd. decided to cease the use of the Arup SPeAR® tool, instead, deciding to focus on the use of GRI reporting guidelines, and undergoing an external assurance process, to ensure the accuracy and robustness of the GRI indicator data. As a result, the 2009 report was commensurate with GRI application level B+.

#### 2010

The company's reporting framework remained the same as in 2009, though some minor improvement suggestions, made during the 2009 external assurance process, were adopted. Kingspan Insulation obtained a certified Life Cycle Assessment, from the Building Research Establishment (BRE), for its Kooltherm<sup>®</sup> and KoolDuct<sup>®</sup> product ranges, for the first time.

### 2011

Kingspan Insulation's reporting framework remained the same as in 2010, though a small number of additional metrics were adopted. The company's certified Life Cycle Assessments for the Therma™ range was extended to include those products manufactured at the company's Selby site.

### 2012

Kingspan Insulation's reporting framework remained the same as in 2011.

### 2013

Kingspan Insulation maintained its historical reporting framework. The company achieved BES 6001 certification for its Therma™ and Kooltherm<sup>®</sup> ranges manufactured at the Pembridge and Selby sites.

## 2014

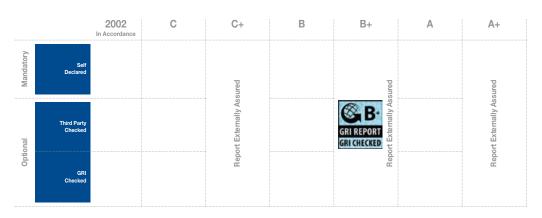
Kingspan Insulation's reporting framework remains the same as in 2013. Two additional metrics were included to meet BES 6001 reporting requirements by separating data for different products. In addition the biannual community consultation was repeated.

### 2015

Kingspan Insulation's reporting framework remained the same, continuing to report to GRI 3. The report included impacts of TEK® and OPTIM-R® for the first time.

## **Current Reporting Procedure**

This review of Kingspan Insulation Ltd.'s sustainability and responsibility, for the calendar year 2015, has followed the same approach as 2014's. It once again incorporates data and disclosures covering the GRI G3 reporting requirements. Although G3 has been superseded by G4, Kingspan Insulation are continuing to report to G3 guidelines until there is more clarity over the requirements of G4 and a better understanding of the metrics required. At that point, Kingspan can also make a better assessment of the resources required to make the transition. At present the resources are not available to collect the information that GRI4 will demand. This year's report achieves a level commensurate with GRI application level B+ (see Appendix A for further explanation). This requires reporting on a minimum of 20 performance indicators across the spectrum of environmental, economic, social and product–related categories, and external assurance. A full register of performance indicators reported, and an explanation of the external assurance process is available in Appendix B.



#### **GRI** Application Level

The data presented in this report have been drawn from Kingspan Insulation Ltd.'s comprehensive internal management systems, which cover Environmental; Quality; and Health and Safety management. Further data have been gathered from Kingspan Insulation Ltd.'s Financial Statements and through discussion with key staff members. Data have been normalised for comparability across a number of years, especially given variations in the size of the estate, volumes of production, and in staff numbers. Methods of normalisation are identifiable in the presentation of the data. In addition, where issues of confidentiality arise, data have been subject to controlled release (as noted throughout the report).

Report content has been defined based on a comprehensive coverage of key sustainability topics. The company's understanding of sustainability and key impact areas is shaped by experience of the SPeAR® framework, and the material issues for reporting have been selected based on the topics identified therein.

Kingspan Insulation Ltd. values the feedback of stakeholders. Care has been taken to report on issues arising through engagement and consultation with customers; communities; suppliers; and external bodies (trade associations and government), to ensure that this report covers all areas considered material to the business.

This report has undergone a process of formal external assurance, carried out by Anthesis-Caleb. In their opinion this Sustainability & Responsibility Report provides a reasonable and balanced presentation of performance, taking into account the data provided as well as the overall selection of content. Based on its review, Anthesis-Caleb concludes that this report meets the GRI requirements at the B+ application level. A copy of Anthesis-Caleb's external assurance report is available at: www.kingspaninsulation.co.uk/sustainabilityandresponsibility.

Kingspan Insulation Ltd. actively encourages stakeholders to engage with this report, and looks forward to receiving comment and feedback to help strengthen the approach to reporting in future years. Any questions should be directed to info@kingspaninsulation.co.uk.

Electronic copies of this (and previous) Sustainability and Responsibility Reports can be downloaded at: www. kingspaninsulation.co.uk/sustainabilityandresponsibility.

## Current Report Structure

The upcoming sections present Kingspan Insulation's sustainability and responsibility performance divided into 14 key themes:

- economic viability;
- stakeholder engagement;
- employment & skills;
- health & wellbeing;
- responsible business;
- product design & material inputs;
- raw material use & manufacturing efficiency;
- waste management;
- water consumption & disposal;
- energy & greenhouse gas emissions;
- transport;
- social and community initiatives;
- biodiversity & natural heritage; and
- land management & premises.

This structure is considered to deliver a comprehensive impression of sustainability and responsibility issues at Kingspan Insulation Ltd.

Each chapter is divided into five sub-sections:

- context, defining the background to the theme and outlining the management approach adopted by Kingspan Insulation;
- historical achievements and ongoing activities, summarising the key actions undertaken by the company to date in relation to the headline theme;
- performance highlights, summarising the progress made by Kingspan Insulation Ltd. during the reporting period;
- GRI performance data, displaying graphs and tables in relation to each of the reported GRI performance indicators. The indicators included in each chapter are outlined in a set of indicator boxes shown beside the text; and
- action plans, providing an updated schedule of work to be undertaken.

Performance improvement targets have also been defined for those areas which lend themselves to quantitative metrics.

# 2015 Highlights and 2016 Key Targets

## 2015 Highlights

In 2015, there were many developments within sustainability performance which have ensured Kingspan Insulation continues to progress, most notably in the area of Energy and Greenhouse Gas Emissions. The following is a summary of key performance highlights for 2015.

#### **Economic Viability**

Kingspan Kooltherm<sup>®</sup> maintained its central role with significant R&D underway to deliver its next iteration, focusing on advancing its already market leading thermal properties. Kingspan OPTIM-R<sup>®</sup>, vacuum insulation panels, had a successful first full year of specification which is expected to convert progressively through 2016 and beyond.

#### **Energy & Greenhouse Gas Emissions**

In 2015 the Selby site joined Pembridge in being accredited to ISO 50001, Energy Management System, resulting in both sites using a best practice framework for integrating energy performance improvement targets into all aspects of management practices.

Moving to green energy for both grid supplied electricity and gas has ensured that UK sites are guaranteed to be supplied with renewable energy.

#### Transport

A change in transport providers has allowed efficiency savings to be made across the all the UK insulation sites, although as the Basildon site is excluded from this report, the full measure of these savings may not be reflected in this report.



Kingspan Kooltherm<sup>®</sup> K15 Rainscreen Board has been installed as part of a new, multi-million pound development in North London, providing 222 new affordable dwellings along with commercial space and a new primary school.



# Kingspan Insulation's structural insulated panel system continues to deliver a high level of fabric performance on all projects.

## 2016 Key Targets

### Sustainability Reporting

During 2016 work is to be carried out on extending the BES 6001 Responsible Sourcing certification to the Kingspan TEK® and Kingspan OPTIM-R® product ranges.

Full recertification of the life cycle analysis for Kooltherm<sup>®</sup> and Therma<sup>™</sup> will take place in 2016. Work will also be carried out on the introduction of life cycle analysis to the EN 15804 standard for Kooltherm<sup>®</sup>, Therma<sup>™</sup> and TEK<sup>®</sup>.

#### Transport

Increasing fuel efficiency is a key target for 2016, with investigation into better monitoring systems and a focus on driver behaviour.

## Product Design & Material Inputs

Continue developing and bring to market thinner insulation products that provide the same or better thermal performance with a thinner insulation board.

## Context

Global pressures on energy consumption, due mainly to the increasing scarcity of natural resources and the climate change impacts of traditional fossil fuel-based energy generation, have elevated the objective of energy efficiency within the scientific and legislative agenda. In their report Housing Energy Fact File (2012) the Department of Energy and Climate Change indicated that the energy used in homes accounts for more than a quarter of energy use and carbon dioxide emissions in the UK.

Through its innovative insulation solutions, Kingspan Insulation makes vital contributions to improve the energy efficiency of buildings, by reducing heat loss from the building envelope and thereby reducing the energy required for heating. As momentum gathers for energy efficient building, Kingspan Insulation finds itself operating within an economically viable and desirable market.

The company operates on a five-year business planning schedule, enabling emerging challenges to be managed on a relatively short timescale as required for business success. Owing to these short horizons, the impacts of climate change for the organisation have not yet been factored into the business plan.

## Historical Achievements & Ongoing Activities

- Pro-active engagement with, and response to, progressively more stringent Government legislation around building energy performance.
- Ongoing research and development have provided innovative and sustainable insulation solutions, which have contributed to the diversification of the market and helped to drive greater sustainability across the sector.
- Annual risk assessment covering all business areas and analysing risks related to a broad range of factors, including financial; legal and regulatory; operational; research and development and quality control; purchasing; sales; and reputation. Corruption and fraud are also covered as important risk factors. The assessment takes into account the probability that each identified risk will occur, in order to prioritise areas for management and control.
- Disaster recovery plans and fire emergency action plans are in place.
- Provision is made for warranties, bad debts, and for potential environmental liability.
- The Pembridge site is a major employer for local people and provides a marginal benefit to the local rural economy.
- The significance of the Selby site is less pronounced as its location is less isolated.
- All vehicles are leased, including forklifts, trucks and company cars. The Marketing department outsources its requirements for design, print and public relations. Photocopiers and coffee machines are also leased.
- A bespoke set of sustainability key performance indicators (KPIs) are used to monitor sustainability performance throughout the year. The KPIs are included in Kingspan Insulation Ltd.'s performance management framework. Kingspan Insulation continues to report on sustainability to the Kingspan Group, including monthly reports of emissions, energy and water use.
- The sustainability agenda continues to be an important part of Kingspan Insulation's business, with sustainability objectives and targets integrated into strategic & business planning, and a focus on energy management, material efficiency and waste reduction.
- A corporate governance structure conforming with the OECD principles of Corporate Guidance is in place.
- SAP is in operation at both UK sites. The benefits of installing SAP have materialised in accounting, purchasing, stock control and delivery functions.
- The acquisition, by Kingspan Group, of a range of insulation manufacturing businesses, from CRH, has led to increased manufacturing volumes and economies of scale due to improved access to new markets.
- An Integrated Management System (IMS) has been developed at Pembridge and Selby, to incorporate Environmental, Quality and Health & Safety Management within a single system and single audit process.

EC1	Direct	economic	value	generated	&	distributed.

- EC2 Financial implications and other risks and opportunities for the organisation's activities due to climate change.
- EN28 Monetary value of significant fines for non-compliance with environmental laws & regulations.
- SO2 Percentage & total number of business units analysed for risks related to corruption.
- SO7 Total number of legal actions for anticompetitive behaviour, anti-trust, & monopoly practices & their outcomes.
- SO8 Monetary value of significant fines for non-compliance with laws & regulations.

NB See Appendix A for background to GRI.

Kingspan Insulation made strong gains during 2015, particularly in the first half of the year. Underlying improvement in building activity across virtually all segments created an attractive backdrop in the UK as rigid insulation continued to make inroads against traditional alternatives.

Kingspan Insulation's regulatory performance remains strong. As in the previous year, no fines or non-monetary sanctions were recorded for failure to comply with laws and regulations, environmental or otherwise. No legal actions have been taken against Kingspan Insulation for anti-competitive behaviour, anti-trust or monopoly practices since at least 2006.

Kooltherm<sup>®</sup> maintained its central role in our conversion strategy with significant R&D underway to deliver its next iteration during 2016, focusing on advancing the already market leading thermal properties of Kooltherm<sup>®</sup>.

OPTIM-R®, a vacuum insulation solution, had a successful first full year of specification which is expected to convert progressively through 2016 and beyond.

During 2015, investment in research and development activity was approximately £1.8 million.

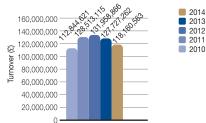
Both Pembridge and Selby sites continue to make a valuable contribution to their respective local economies, employing approximately 437 and 68 employees respectively, and supporting local businesses where possible, through procurement of local goods and services.

## **Action Plan**

- The process of ensuring that sustainability thinking is embedded within the organisation is ongoing. Kingspan Insulation aims to continuously improve its approach, with new initiatives tested. Personal preferences sometimes prohibit adoption of sustainability initiatives, such as the staff car–sharing scheme.
- Undertake an assessment of future climate change risks for both facilities, e.g. managing weather extremes, flood risks, high temperatures, water resources, energy security.

### **GRI** Indicator Data

#### Turnover



2015 Turnover will be published in Issue 2 of this report, following the publication of the statuary accounts later this year. The full financial statements of Kingspan Insulation Ltd for the financial year 2015 will be publicly available from Companies House later this year. The construction industry still faces difficult conditions, reflecting the continuing uncertainties in the wider economy. Turnover in 2014 was lower than 2013, as a result of a reduction in the selling price of PIR insulation in a commoditized market.



The community of Shobdon have been shaping up and socialising with new badminton equipment, purchased with a grant from the Kingspan Insulation Community Trust.

After the village identified to the parish council that they were in need of new badminton facilities, a new court was marked up in Shobdon Village Hall, but they were still in need of equipment. One successful application to the Kingspan Insulation Community Trust later and the club received £300 in funding to purchase nets and posts, rackets and shuttlecocks they needed to get the hall echoing with the satisfying sound of smashes and rallies.

John Garbutt, Chairman of the Trust added 'Improving the health and fitness of the local community is very important to us at the Trust, and we were delighted to be able to fund the purchase of this equipment to assist with this objective.'

# Stakeholder Engagement

## Context

Kingspan Insulation Ltd. actively engages staff, customers and local communities in consultation in order to identify material issues for attention or management. These three groups are considered the most valuable stakeholders impacting on, and impacted by, the business, and their views are sought to reduce business risks and understand customer needs. Kingspan Insulation Ltd. also cultivates close working relationships with statutory authorities to achieve compliance with all regulatory and legal requirements. Please also refer to the section of this document titled "Social & Community Initiatives".

## **Relevant GRI Indicators**

PR5 Practices related to customer satisfaction. NB See Appendix A for background to GRI.

## Historical Achievements & Ongoing Activities

#### **External Organisations**

- Close relationships forged with national and international trade associations including PU Europe the European Trade Association for Polyurethane (PUR) and Polyisocyanurate (PIR), the European Phenolic Foam Association, the British Rigid Urethane Foam Manufacturers' Association (BRUFMA), and the Construction Product Association (CPA).
- Kingspan Insulation Ltd. takes an active role in consultations for the approval of amendments to the Building Regulations, plus other Regulations and legislation, e.g. the Carbon Reduction Commitment.
- Kingspan Insulation Ltd. also takes an active role in consultations on industry initiatives such as BREEAM and BES 6001: Framework Standard for the Responsible Sourcing of Construction Products.
- Annual Financial Statements are released and made publicly available via Companies House and the Kingspan Group annual report.

#### Employees

- Employee surveys have been undertaken, covering issues such as building comfort, training programmes and employee satisfaction. As a result of the 2011 survey, Kingspan Insulation Ltd. created an Employee Forum to improve staff engagement across operations.
- A Works Committee is in operation, and staff are represented by a Trade Union.
- Health and safety, housekeeping and production statistics are communicated to shop floor staff via notice boards, in order to involve
  employees in improving team performance and to ensure knowledge of company performance and trends.
- A central point of contact has been put in place for employees within HR, along with a more robust complaints system.
- A newsletter is produced at the Selby site which includes coverage of sustainability issues relevant to staff.

#### Suppliers

- Supplier surveys and reviews are conducted with individual suppliers as issues arise. A Quality Assessment Questionnaire is sent to suppliers on a three-yearly basis.
- A Supplier 'Sustainability' consultation and feedback exercise has identified that Kingspan Insulation's suppliers are largely disinterested in the Company's sustainability reporting. There is no plan to repeat this consultation in the immediate future.

#### Customers

- Customer satisfaction metrics are employed to drive business performance. The Customer Satisfaction team monitors and records Kingspan Insulation Ltd.'s On–Time / In–Full (OTIF) performance. Results are reported to senior management.
- Frequent and proactive consultation is undertaken with customers, aiming to deal with issues as they arise and a biannual Customer Satisfaction survey is carried out.
- Regular telephone surveys focus on packaging quality; logistics performance; technical services; and customer support.
- One-to-one service review meetings are undertaken with key customers on a monthly basis (fortnightly for new customers).
- All calls received from customers are monitored and logged within a complaints database, along with details of responses made to the customer. Feedback is provided to the complainant regarding corrective actions taken.
- Complaints are monitored by product type and problem type, to identify trends and ensure that complaints reduce.
- In-depth surveys are undertaken intermittently, such as the 2006 End User survey, which targeted the end users of products rather than the intermediate customer, and the comprehensive Packaging Survey which was undertaken in 2007.
- Significant improvements in customer service have been seen year-on-year since 2005.
- Since 2009 a Customer Service Charter has been provided to all customers as part of an Introduction to Kingspan Insulation Ltd. pack. The Charter is actively promoted as integral to securing new business and strengthening existing customer relationships.
- Service-level agreements were instituted in 2008 as a feature of all customer relationships to manage expectations.

Kingspan Insulation Ltd. continues to publicly report on its annual sustainability and responsibility performance, this report is for 2015. The report has been prepared using the feedback of employees, the local community, customers and suppliers to ensure the coverage of all material issues. GRI reporting indicators have been imbedded into the reporting methodology in key areas.

The re-introduction of a staff newsletter was considered at the Pembridge site during 2015, however given the effectiveness of the TV screens in the factory, it was decided that the use of these in conjunction with other, already existing, TV screens in the offices would provide a method of sharing information with staff. It is also shared with the Selby site for including on their screens and in their regular newsletter.



### Action Plan

- Undertake customer 'Sustainability' consultation and feedback exercise to identify expectations and important issues on a biannual basis, during 2016, 2018, 2020 and so on.
- Undertake staff 'Sustainability' consultation and feedback exercise to identify expectations and important issues on a biannual basis, during 2016, 2018, 2020 and so on.
- Use occupant feedback to proactively inform the design of new buildings or refurbishment of existing buildings.
- Consider implementing a proactive system to measure supplier satisfaction as part of quality management.
- Work towards expanding the range of GRI performance indicators reported, with the aim to achieve Level 4.
- Work towards embedding sustainability reporting (including reporting on GRI performance indicators) within the Kingspan Group annual report.



Leominster Town Minors Football Club are set for success with new kits, goal posts and goal keeper training, all provided thanks to a grant from the Kingspan Insulation Community Trust.

The club, formed after the merger of Leominster Town and Leominster Minors, provides opportunities for over 200 girls and boys from across the region to play the beautiful game.

The team successfully applied for funding from the Kingspan Insulation Community Trust, receiving over £2,100. The money has been used to purchase full kits for both the youth and junior sides, along with three new sets of 7–aside goal posts to be used in matches and training.

## Context

The company values its staff and strives to provide excellent working conditions and career development prospects for all. Annual investments are made in staff training and development to ensure individuals' continual learning and diversification of skills. Kingspan Insulation recognises its influence in local employment markets and seeks to bolster the economic welfare of surrounding communities through the recruitment of local people.

## **Relevant GRI Indicators**

- LA1 Total workforce by employment type, employment contract and region.
- LA2 Total number & rate of employee turnover by age group, gender & region.
- NB See Appendix A for background to GRI.

## Historical Achievements & Ongoing Activities

#### Scale & Type of Employment

- Kingspan Insulation Ltd. is a major employer in the area surrounding the Pembridge site.
- A range of employment types are offered at Pembridge, including office-based disciplines such as finance, marketing, and customer services, as well as maintenance, engineering and manufacturing roles.
- The Selby facility is much smaller than Pembridge and the majority of its approx. 68 employees work in production.

#### **Recruitment & Retention**

- Kingspan Insulation Ltd. recruits its staff through on line advertising, targeting specific job boards dependent on role.
- Each year, Kingspan Insulation Ltd. recruits an apprentice to the Pembridge site from a local technical college.
- Like many other companies Kingspan put its Graduate Recruitment Programme on hold during the recession, but it restarted during 2011 when 2 graduates joined the business.
- Kingspan Insulation Ltd.'s commitment to sustainability is promoted to job applicants.
- In 2009 a new web page was introduced to the Kingspan Insulation Ltd. website featuring the Sustainability & Responsibility Report. This has been very successful at highlighting the depth and breadth of the company's commitments to sustainability not only to customers of Kingspan Insulation Ltd., but also to many current and potential employees.
- A formal one-day induction process is undertaken with shop floor staff, which includes environmental management training.

#### Equality

- An Equal Opportunities Policy and an Anti-Discrimination Policy have been implemented.
- Middle management includes female employees, although there are none at senior management (Director) level.
- At Pembridge, some staff are employed on part-time contracts, generally in response to lifestyle needs. At Selby, all staff are full-time.
- The Pembridge site is compliant with the Equalities Act 2010.
- Provision is in place to ensure inclusion of physically impaired employees.
- The workforce represents the social demographics of the local areas.
- Hourly paid employees' wages are benchmarked against local area averages, to help ensure low employee turnover.

#### **Training & Development**

- The company's performance management framework provides staff with a structured approach to training and personal development, and ensures that all staff understand the opportunities available. Following its introduction, approximately 80% of staff now receive an annual appraisal.
- A comprehensive training programme is available to all staff, including shop-floor. Training programmes feature succession planning, time management, team building (including bush craft skills), first aid, and report-writing amongst others.
- External courses are approved where deemed important to career success: e.g. members of the Accounts team attend Association of Accounting Technicians' (AAT) courses, whilst those in Marketing may follow the Chartered Institute of Marketing (CIM) programme.
- There is structured career path training for some departments, with a policy for promotion.
- Proactive training plans are in place for all shop floor staff.

At the close of 2014, Kingspan Insulation Ltd. employed 505 members of staff across the Pembridge and Selby sites, with 437 at Pembridge and 68 at Selby.

The graduate recruitment programme continues to be successful, with graduates continuing onto the Developing Talent programme.

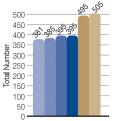
Both the Developing Talent programme, for graduates and early career non graduates, and the 'People Matter' training programme for managers, continued in 2015. The 'People Matter' programme was extended to include production team leaders, and the positive feedback from this has resulted in the development of a further programme, 'People Matter Two' due to start in 2016.

# Action Plan

- Work has been undertaken to improve disabled access at the Selby site. However, further work is still required across the site to ensure the site is compliant with the Equality Act 2010.
- Introduce environmental awareness training into the graduate development programme and provide refresher training for all staff at appropriate intervals.
- Invite specialists from external organisations to hold lunchtime talks / awareness events to engage staff in sustainability issues.
- Improve rate of annual staff appraisal. While improvements have been made in this area, Kingspan Insulation Ltd. still aims for 100% of staff to receive at least one appraisal per year to facilitate staff development.
- Further develop the 'People Matter' programme to provide managers training in appraisals and other areas identified by the feedback from People Matter.
- Develop a formal and consistent approach to measure the value of training provided to staff.
- Provide basic computer training for employees in the factory at Selby.

## **GRI Indicator Data**

# Total Number of Employees at End of Calendar Year



The 2014 increase in staff numbers is primarily due to the introduction of a second production line in the Selby manufacturing site. and an increase in IT staff numbers.

This has continued in 2015.

### Total Number of Employees by Employment Type at End of Calendar Year

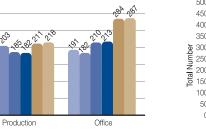
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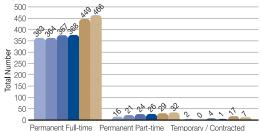
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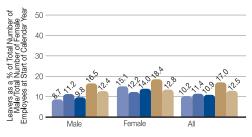
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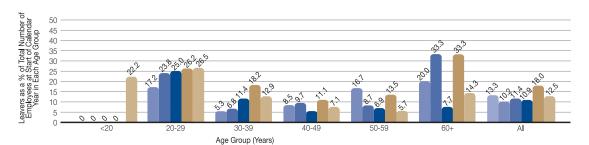
#### Total Number of Employees by Contract Type at End of Calendar Year



#### Employee Turnover by Gender



**Employee Turnover by Age Group** 



In 2010, turnover remained low. This was most likely caused by a combination of factors including the impact of the recession on the UK economy which discouraged people from leaving their jobs and seek employment elsewhere, particularly in the age bracket that makes up two thirds of the working population at Kingspan i.e. 30–49. It remained so from 2011 to 2013. In 2012 and 2014 the high turnover in the over 60's was due to retirements. In 2014 the turnover of staff increased due to the greater staff numbers, which led to more recruitment, and highlighted issues with the recruitment process where the right candidate was not always employed first time. A number of these issues were resolved in 2015.



Higher levels of investment in 2013 were a result of the 'Developing Talent' program which restarted that year, and investment has continued since.

## Context

Kingspan Insulation Ltd. has a strong reputation for health and safety in the workplace and takes seriously its responsibility for staff welfare. IiP reviews have noted the company's approach to occupational health and wellbeing as a particular strength, and investments continue to be made to ensure these high standards are maintained. Provision of a high quality working environment is viewed as fundamental to maintaining healthy and motivated staff, and to retaining staff for the long-term.

## **Relevant GRI Indicators**

LA7 Rates of injury, occupational diseases, lost days, & absenteeism, & total number of work-related fatalities by region.

NB See Appendix A for background to GRI

## Historical Achievements & Ongoing Activities

#### Health & Safety Management

- A Health and Safety Management System is in operation, which has been certified to OHSAS 18001 at the Pembridge site since 2005 and the Selby site since 2009.
- Accident reporting is in accordance with OHSAS 18001 guidance. All work-related injuries are recorded. A detailed log of each event is maintained, and accidents are followed up by a full risk assessment and corrective action. The welfare of affected staff is monitored.
- "Near miss" events and safety concerns are reported to ensure that action is taken to avoid any potential for future injury. This proactive management of accidents has substantially reduced the occurrence of actual injuries at the site (see figures to the right).
- Q-Pulse, new H&S and occupational disease trend monitoring software, has been introduced at both sites.
- No fatalities have been recorded in the company's history.
- A visitor health & safety procedure has been implemented along IHSEP 028 guidelines.
- Safe & efficient fork lift truck operation training and incentives have been introduced at Selby.
- A Pedestrian Scale Policy is in place at Pembridge including demarcated pedestrian pathways and crossings.
- HSE alerts are used to benchmark the rate of injury and sickness with wider industry performance, in order to set targets.

#### **Employee Health & Wellbeing**

- A Human Rights Policy, a Handling Stress at Work Policy and a Discrimination & Bullying Policy have been implemented.
- Annual health assessments are provided for all, plus a pre-employment check for new employees and periodic health assessments relevant to job function, with the opportunity to upgrade to a more extensive assessment at a subsidised cost.
- Directors are offered a 'Gold' level health check every two years.
- Occupational diseases are monitored in an Occupational Health Monitoring Programme.
- The health benefits of cycling to work have been promoted to employees.
- Free PSA tests are made available to all male employees over 40 on a regular cycle.
- A company doctor and occupational health practitioner are on hand to support the physical health of staff at both sites.

#### **Employee Benefits**

- A money purchase pension scheme is available to all staff, matched by the company at a rate of 5%, and a profit share is provided.
- Discounted membership of a local leisure centre has been arranged for all employees.
- A Cycle to Work Scheme was provided to all employees for the first time in 2009 and was introduced at Selby in 2011. This enables the purchase of tax deductible cycles.
- Childcare vouchers and an Employee Assistance Programme are available to all employees.

#### **Employee Facilities**

- A manned staff cafeteria is in place at the Pembridge site, which provides a range of healthy meal options.
- Showers, lockers and kitchen facilities are provided to shop floor staff at both sites.
- There is minimal green space on-site at Pembridge due to former industrial land uses. At Selby there is a large area of grassland. Staff at both sites have access to any available green spaces, and indoor / outdoor breakout spaces are available at both sites.

#### Working Environment

- The working environment of the shop floor has been substantially improved since 2004 and now demonstrates exemplary practice.
- Almost all sources of dust have dust extraction at source and production areas are subject to a weekly housekeeping and inspection regime. Indoor air quality and plant extraction are regularly monitored, and this confirms very low levels of dust.
- An air cooling system has been installed to improve comfort for employees on the shop floor.
- Offices use a mixture of mechanical ventilation and air conditioning and most have opening external windows.

A number of employee well-being initiatives took place in 2015 including repeating the cycle to work scheme, allowing employees to purchase tax deductible bicycles, as well as a stress awareness course. Following a project investigating methods of improving health amongst sedentary office staff, trials of stand up desks were carried out in the Pembridge office.

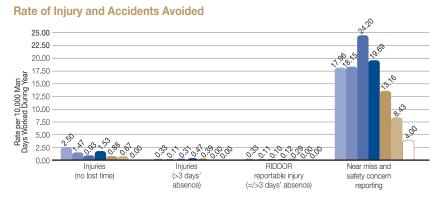
Research was carried out in 2015 to identify the best methods of assessing health and well being in employees, with the assessment planned for 2016.

In both Pembridge and Selby, for 2015, zero days were lost to accidents.

## Action Plan

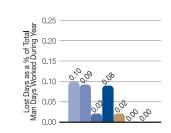
- Ensure that the benefits of healthy eating are publicised.
- Explore & program initiatives to involve staff in on-site conservation / landscaping work, both to raise awareness of biodiversity objectives & as a health & wellbeing / staff engagement initiative.
- Investigate options for payroll giving or Give As You Earn schemes.
- Consider the provision of stand up desks for office staff.
- Give all staff the opportunity to undertake a health and well being questionnaire in 2016
- Encourage staff to make the most of benefits of Pembridge site by promoting lunchtime walking.

## **GRI Indicator Data**

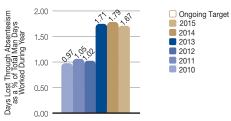


The high level of safety concern reporting and near miss reporting reflects a working environment that has become safer in recent years, this is also shown in a general reduction in injuries.

#### **Days Lost Due to Accidents**



Accidents and absenteeism rates at Kingspan Insulation Ltd. remain significantly better than the national average. Absenteeism Rate



The increase in absenteeism rates in 2013 & 2014 were due to a number of employees who subsequently moved to long term absence.

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## Context

Kingspan Insulation is committed to conducting its business in an ethical, transparent and responsible manner, both through internal operations and external relationships with the supply chain and other stakeholders. The company endeavours to use local suppliers, contractors and materials wherever possible, although this is limited by the specific raw materials required for products, especially for chemicals. When appropriate local suppliers, contractors or materials are unavailable, the company is committed to using fair trade or otherwise responsibly sourced goods and services wherever possible.

## **Relevant GRI Indicators**

HR1 Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.

NB See Appendix A for background to GRI.

## Historical Achievements & Ongoing Activities

#### Awards

- Kingspan Insulation Ltd. has been the proud recipient of the following awards:
  - Herefordshire Diamond County Awards Winner, Best Large Company May 2014 (Award for Contribution to the Community in Herefordshire).
  - Herefordshire & Worcestershire Chamber of Commerce Awards Winner, Manufacturer of the Year July 2014.
- West Midlands Chamber of Commerce Awards Winner, Manufacturer of the Year Sept 2014.
- West Midlands Chamber of Commerce Awards Winner, The Sustainability Award Sept 2014. The Herefordshire & Worcestershire Chamber of Commerce CSR in the Community: Herefordshire (2013).
- The National Insulation Association Award (2011);
- The Excellence in Recycling and Waste Management Award (2011);
- The Sustain Magazine Business & Society Award for Governance (2010);
- The Herefordshire & Worcestershire Chamber of Commerce Environmental Award: Herefordshire (2010);
- The Sustain Magazine Property and Built Environment Award for Refurbishment (2009).

#### Policies

- A detailed Ethical Purchasing Policy and a Local Supply Policy have been implemented.
- Kingspan Insulation Ltd. operates a Payment Policy and has a good reputation for prompt payment.
- A Whistleblower Policy and a Code of Conduct have been implemented and an external whistleblowing helpline is available. In line with the Anti-Bribery Policy all Managers & Directors within the UK receive training on the Bribery Act 2010 and all Directors receive refresher training on the Companies Act 2006. A risk mentor is available to the company.

#### **Supply Chain & Procurement**

- The purchasing department maintains a list of approved suppliers of the company's main raw materials. Criteria for supplier approval include certification to ISO 9001, evidence of robust Environmental Management and Health and Safety Management Systems, and strong corporate responsibility commitments.
- Kingspan engages with key first tier materials suppliers to raise awareness of sustainability issues down the supply chain and to encourage high standards of environmental, quality, and health and safety performance.
- Following concerted pressure from Kingspan Insulation, in 2009 the last of the manufacturing facilities, that supply the principle polymer components for the Kooltherm<sup>®</sup> and Therma<sup>™</sup> ranges, achieved certification to ISO 14001 for its Environmental Management System.
- Purchasing decisions are made on the basis of whole life costing.
- The company purchases the majority of its raw materials from the EU or OECD, which are assumed to be low risk in relation to Human Rights violations.
- The company has switched to fair trade or Rainforest Alliance tea and coffee for staff kitchens and vending machines.
- Small and Medium Sized Enterprises (SMEs) are included in the supplier list. Collaborative research is undertaken with innovative SMEs around the UK.
- Kingspan Insulation Ltd. engages local suppliers, notably for haulage, fork lift truck lease and maintenance, and procurement of pallets for packaging.
- Five food suppliers are engaged at the Pembridge site, which are located locally in Shobdon, Hereford and Ludlow.
- Key services are also contracted to small local suppliers. For example, Leeds based SME suppliers used at the Selby site include Dalesman Fabrications Ltd who provide Metal Fabrications, JP plant hire who lease plants and Aquaven who provide filtered water.
- Customer gifts, e.g. hampers, are locally sourced around Pembridge and, where possible, organic.

#### Investment

 Historically, the company has sought to invest at least 10% of capital expenditure in improvements to its environmental and social performance.

Expenditure on environmental and social performance has remained high; in 2015 31% of the company's capital expenditure was on projects designed to improve environmental and / or social performance.

During 2015, Kingspan Insulation became the first insulation manufacturer to achieve 'Excellent' for the demanding BES 6001 certification for responsible sourcing for all Kooltherm<sup>®</sup>, KoolDuct<sup>®</sup> and Therma<sup>™</sup> insulation products and cavity closers manufactured at Kingspan Insulation Ltd.'s British manufacturing facilities, as well as maintaining Chain of Custody certification with the Forestry Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC).

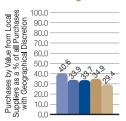
In 2015 Kingspan Group made the prestigious CDP 2015 'A' list which identifies the company as a global leader in tackling climate change.

## Action Plan

- Increase use of locally sourced materials wherever possible (i.e. local to Selby and Pembridge respectively).
- Achieve certification to BRE BES 6001, for both sites and all product lines, including the Kingspan TEK Building System and OPTIM-R.

### **GRI Indicator Data**

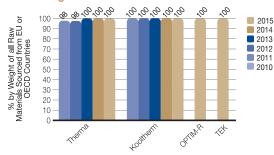
#### Local Sourcing



For the purposes of this metric, local is defined as being within a 1 hour drive of either the Pembridge or Selby sites. The raw materials used to make Kingspan's products are not included in this metric, because no local sources of supply are available. Packaging and all other purchases are included.

In addition, the company leases its cars from a non-local leasing company, however, although for that reason it is not reflected in the new metric, over 50% of the cars it leases are physically supplied by car dealerships local to the Pembridge site. The decrease in local sourcing in 2015 is due to a change in the transport firm used.

#### **Human Rights**



Wigmore baby and toddler group have been busy proving that you are never too young to start encouraging physical activity now that they have been able to purchase new outdoor and road safety equipment following funding from the Kingspan Insulation Community Trust.

The group which is self-funded, charge £1.50 per family per session. This money covers rent of the room, insurance and snacks/refreshments for all who attend. Kelly Bowen, who runs the group, commented "The charge we make per family is only small and doesn't really leave anything left over, so we decided to apply to the Kingspan Insulation Community Trust to fund the purchase of new equipment."

"We were really pleased when we found out our application had been successful. We received funding of £250 which has been used to purchase a range of equipment to encourage the youngsters to get active and also help them understand how to keep safe on the roads."



# Product Design & Material Inputs

(What raw materials are used)

## Context

Kingspan Insulation's products consist of two material components: chemicals used to form the insulating material, plus facings used to cover the surface of the material. Information concerning the precise nature and quantity of inputs is confidential, however the table below outlines the nature of materials used for the two categories of insulation board manufactured.

In recognition of the environmental impacts associated with the chemicals industry, the company's Environmental Purchasing Policy and Resource Use Policy state that every effort will be made to replace all or part of the base chemical inputs with materials derived from waste streams from other chemical or production processes, by utilising other recyclable waste, or from sources with an otherwise lower environmental impact.

The company is continually looking for opportunities to utilise re-used or recycled materials in the production process, where they will not compromise product quality.

The extent of environmental impacts mitigated through product innovation has not been quantified, but Kingspan Insulation is proud of the achievements made to date and remains committed to minimising negative impacts and optimising the lifetime performance of products and production processes.

	Product type			
	Therma™	Kooltherm®		
Chemical Inputs	Methylene diphenyl diisocyanate (MDI); Polyol; Catalyst; Surfactant; Blowing agent; Other proprietary ingredients	Phenolic resin; Blowing agent; Catalyst; Other proprietary ingredients		
Facings Various facing materials, incl. aluminium, paper, gla fibres, cork, fibreboard, etc.				

Materials used in the manufacture of Kingspan Insulation's products

## **Relevant GRI Indicators**

- EN2 Percentage of materials used that are recycled input materials.
- EN26 Initiatives to mitigate environmental impacts of products & services.

NB See Appendix A for background to GRI.

## Historical Achievements & Ongoing Activities

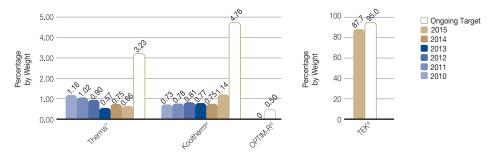
- The company's products have a long life cycle and minimal maintenance requirements.
- In 2002, Kingspan Insulation became the first insulation manufacturer, and the third manufacturer from any sector, to undertake a BRE certified Life Cycle Assessment (LCA). Kingspan Insulation has maintained continuous certification of its Therma™ range since then.
- LCAs, certified by BRE Certification to the 2008 BRE Environmental Profiling Methodology, have been completed for the vast majority of the company's Kooltherm, KoolDuct and Therma<sup>™</sup> insulation products, manufactured at Pembridge and Selby. All products profiled received a certified BRE 2008 Green Guide Summary Rating of A+ or A.
- The company has been successful in persuading some of its suppliers to produce independent LCA data for its raw materials. Information about the impacts of manufacture and product safety datasheets are available to customers on request.
- Use of recycled aluminium facings for boards has been explored but proved unviable as the performance was of insufficient quality.
- Research and testing has been carried out to increase the proportion of renewable materials in products. The use of a polyol derived from cashew nut oil was investigated. However, a Life Cycle Assessment of the polyol showed it to have higher environmental impact than that which it would replace, so it was not progressed. A by-product from paper manufacturing was also investigated as a replacement raw material. Whilst it held promise, the supplier was not willing / able to commit the capital to manufacture in sufficient scale.
- Trials of waste insertion technology to feed production waste back into the production cycle have proved successful.
- Clear targets have been adopted for the downcycled / recycled / renewable content of products.
- Use of solvent-based adhesives in manufacturing has been abolished, replaced by hot melt glue and moisture-cured urethane adhesives.
- Both Pembridge and Selby have achieved Chain of Custody (CoC) Certification for the Programme for the Endorsement of Forest Certification (PEFC) and the Forest Stewardship Council (FSC). All timber and timber products procured are PEFC or FSC Certified.
- All office paper has been switched to 100% recycled paper, and marketing print uses paper that is FSC certified from mixed sources.
- Lifecycle environmental impacts of marketing materials are taken into account.
- Supplier engagement is completed to gather relevant data for product life cycle assessment (LCA).

## 2015 Performance Highlights

Research and testing has continued to investigate increasing the proportion of renewable materials in products.

During 2015 work has progressed into developing thinner insulation products that provide the same or better thermal performance with a thinner insulation board.

#### Percentage of Downcycled, Recycled or Renewable Input Materials (incl. Chemicals and Facings)



Recycled / renewable content of products is predominantly dictated by the source of input chemicals. Currently there are very few sources of usable chemicals high in recycled / renewable content. Kingspan Insulation Ltd. is working hard to increase this resource and also find further alternative solutions to increasing recycled / renewable content. The data for Therma™ are variable because of the varying use of 2 particular alternative chemical raw materials.

For TEK® the majority of the weight of the system is OS Board which is PEFC, ensuring that it is from a renewable source.

## Action Plan

- Continue a program of product innovation to examine a more 'sustainable' product, e.g. in terms of its source of raw materials (i.e. increases in recycled, renewable or downcycled content), design for recycling / downcycling, etc. This could be through use of life cycle analysis.
- Continue research & development activity to enhance resource efficiency & thermal performance of all products.



Kingspan Insulation has reached another milestone in its journey of continuous improvement after its manufacturing facility in Pembridge, Herefordshire was awarded World Class Operation Management (WCOM) Gold.

This latest award reflects the hard work of Kingspan Insulation staff at all levels within the firm. The WCOM program covers nine different areas including engagement, quality, maintenance, and production; each with its own road map to success. Companies are then given an overall level based on the weighted average of the scores for each area.

As these areas are heavily interlinked, improvements in one section can have positive effects in others. For example, better engagement amongst staff may lead to a reduction in lost time on the production lines.

Most of the work at Kingspan Insulation's Pembridge site has focused on improvements in manufacturing processes and this area has already seen significant progress. One of the biggest success stories has been on the production line for the firm's premium performance Kooltherm<sup>®</sup> insulation range, with waste cut by 70% in the last 8 years alone.

As part of the WCOM process, the core facilities around the division are externally audited and scored every year. This will help to support Kingspan Insulation's programme of continuous improvement, with a particular emphasis being placed on further improvements in quality, staff training and engagement.

# Raw Material Use & Manufacturing Efficiency

(How much raw materials is used and how much waste is made)

## Context

Kingspan Insulation Ltd. recognises the need to reduce consumption of virgin materials in light of increasing pressures on natural resources.

The Environmental Purchasing Policy ensures that focus remains on waste elimination. The purchasing department actively pursues materials and technologies which reduce overall waste.

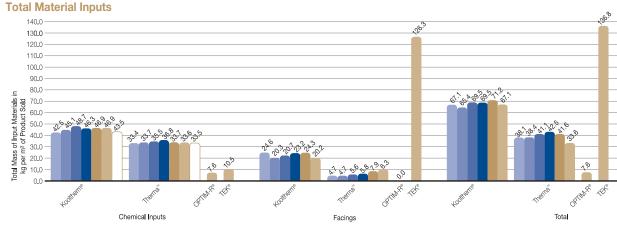
## Historical Achievements & Ongoing Activities

- Quality and Environmental Management Systems, certified to ISO 9001 and 14001 respectively, are in place at both sites.
- Lean manufacturing techniques, Six Sigma, statistical process control (SPC) and supervisory control and data acquisition (SCADA) have increased the conversion efficiency of manufacturing.
- The manufacturing facility at Pembridge has undergone a 'World Class" manufacturing status review, which identified "World Class" practices in 17 out of 19 areas. The two areas where "World Class" practices are not in place have been addressed.
- Since 2008, Kingspan Insulation has undertaken a number of initiatives to address the accuracy and consistency of data collection systems at both manufacturing sites. The introduction of SAP has significantly improved matters and provides real time monitoring of the manufacturing process.
- A performance cockpit tool has been developed to monitor trends and benchmark performance at each site. The software also enables manufacturing to be monitored and a traffic light system is used to communicate deficiencies in the process.
- Factory hardware consists of best practice and most appropriate technology.
- Cost savings have been realised through reducing the length of long-cut boards with associated savings in materials consumed.
- The efficiency of the manufacturing process at Pembridge has been improved by ceasing production of a scrap-intensive product.
- Material inputs are closely monitored. Exact amounts of constituent materials are known and measured against product output.
- Refinements to the manufacturing process have significantly reduced the density of Therma<sup>™</sup> products without compromising performance. The density of Kooltherm<sup>®</sup> products has also been significantly reduced. Both actions have decreased the use of raw materials.
- In 2009, advances to the manufacturing process allowed Kingspan Insulation to reduce the thermal conductivity of all products manufactured at Pembridge and Selby, and, as a result, Kingspan Insulation can offer thinner insulation products with lower material inputs. Kingspan Insulation continues to look at ways to reduce the thermal conductivity of all products.
- The newer manufacturing line at Pembridge and the line installed at Selby have the facility to 'flush-back' left over chemical input still in the pipes prior to a new product run. This avoids wasting chemical input and production of potential scrap product.
- Packaging materials have been substantially reduced. Scrap insulation boards are cut to form skids, thereby removing the need for wooden pallets in storage and transit of most products.
- The use of wooden pallets to store and transport products has been further reduced by the introduction of EPS skids for most heavy products.
- Wood pallets have been eliminated from virtually all incoming deliveries.
- Adjustments to the packaging process have reduced the amount of plastic shrinkwrap and tightwrap used for each pack of insulation boards by approximately 25%.
- All printers default to double sided printing if able to, and individual personal printers are only in place where absolutely necessary.
- Production of promotional materials is determined against the anticipated number needed for distribution.

Kingspan Insulation continues to implement a model of excellence for WCOM for both the Pembridge and Selby plants, achieving WCOM Gold for the Pembridge site during 2015.

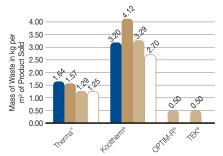
Kingspan Insulation has a program of continuous improvement which has been ongoing throughout 2015.

### **GRI Indicator Data**



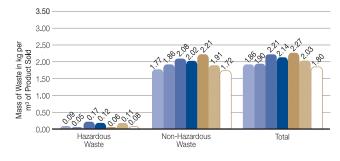
The slight increase in chemical inputs and facings during 2014 is due to the different product sales mix. For facing materials there are no targets, because the figures are heavily dependent on product sales mix, which is largely beyond the company's control. For TEK, the OSB has been included as a facer, rather than a chemical input, although it is an integral part of the panel.

#### Mass of Waste Generated by Product

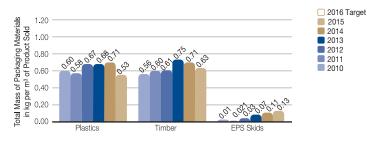


As this is a new metric, added to show data broken down by product, there is limited historical data available. Currently there are no targets set for TEK and OPTIM-R as meaningful targets have yet to be established.

#### Mass of Hazardous / Non-Hazardous Waste Generated



#### **Total Packaging Materials**



Scrap PIR and bought-in EPS skids continue to replace timber pallets as packaging material wherever possible. This is dependant on product, resulting in an increase in the use of timber pallets in 2013.

For packaging materials there are no targets, because (a) the number of skids and pallets used is heavily dependent on product sales mix, which is largely beyond the company's control, and (b) there is little or no scope to reduce the quantity of polythene used without compromising the efficacy of the packaging.

## **Action Plan**

#### Product

- Continue to review initiatives for reducing waste from the manufacturing process, to ensure that real reductions are secured for overall production waste volumes.
- Continue product research and development exercises to achieve decreases in total materials consumption and density and increases in recycled, renewable or downcycled content.
- Maintain WCOM Gold for the Pembridge site and achieve Gold at Selby.

#### Office

- Monitor paper usage: a good practice office uses seven reams of paper per person per year.
- Raise awareness about user controls to printers to reduce unwanted printing left at printer points.

(What is done with waste)

## Context

Kingspan Insulation Ltd. is committed to the principles of the waste hierarchy: avoid, reduce, re-use, recycle, and dispose responsibly. The Environmental Purchasing Policy ensures that waste is disposed of by the most environmentally sustainable means. The company applies the Best Practical Environmental Option (BPEO) principle to all waste streams. Kingspan Insulation Ltd. is also committed to reducing the levels of waste generated by products when they reach construction sites, and ultimately to providing an end-of-life solution for the disposal of all non-reusable products.

## **Relevant GRI Indicators**

**EN22** Total weight of waste by type & disposal method. NB See Appendix A for background to GRI.

## Historical Achievements & Ongoing Activities

#### Waste Management Process

- Kingspan Insulation Ltd. has set up a Waste Working Group to find the best disposal routes for waste materials from manufacturing and that collected via the Site Waste Take-Back Scheme.
- An audited Waste Management Procedure has been established as part of Kingspan Insulation Ltd.'s Environmental Management System. The procedure covers correct definition and labelling of waste streams, waste management flows for all waste streams generated on–site, and processes for disposal of plant equipment and Waste Electrical and Electronic Equipment (WEEE).
- Waste management is sub-contracted, but the disposal route of each material is tracked and volumes reported. The sub-contracted waste company is routinely audited.

#### Waste from Inbound Materials

• A waste sorting and reclaim area is in operation within both factories, where metal, paper, cardboard, roll cores, polythene and wood wastes are separated and measured. Plastics and cardboard are baled and sold to external companies for recycling or downcycling.

#### Manufacturing Waste

- Manufacturing staff have been trained in waste segregation. Waste Management Industry Training & Advisory Board training has been provided to all main operators responsible for managing waste. Waste champions have been appointed.
- Special waste represents a small proportion of total waste. It is sorted, labelled and transferred for treatment or incineration.
- The recycling area at Pembridge has been expanded and, as a result, less material is now being sent for sale as second quality.
- Second quality boards are sold to a specialist second quality board distributor, damaged boards are cut to create packaging skids.
- Kingspan collaborated with the National Industrial Symbiosis Project (NISP) to identify potential recycling and recovery outlets.
- The company has continued to explore potential disposal routes for recycling and downcycling of waste products.

#### **Office Waste**

- Segregation facilities are provided within offices for paper, cardboard, and printer cartridges. Cooking oil is collected and recycled.
- Waste office electrical equipment is donated to charities and schools where possible.

#### **Other Waste Materials**

- General waste is collected by a waste management contractor and is recovered in a Materials Recycling Facility. The logistics supplier recycles engine oil and engine filters, whilst the tyre servicing contractor recycles over 90% of waste tyre products.
- Waste concrete or hardstanding generated from on-site construction works is retained for future use as hardcore.
- Garden waste is composted.

#### **Construction Site Waste**

- Pre-mitred boards have been designed to reduce waste generated through cutting boards to fit flat roofs on construction sites.
- Although the product tends to be landfilled, the company can advise the customer on alternative methods of disposal or on re-use.
- Kingspan Insulation became signatories to the WRAP Halving Waste to Landfill initiative.
- An award-winning Site Waste Take-Back Scheme collects waste insulation off-cuts from construction sites. These off-cuts use the same disposal routes as manufacturing waste.

Both the Pembridge and Selby manufacturing facilities are continuing to implement improvements throughout the manufacturing process, working towards a 95% target for landfill avoidance, using the principles of reduce, reuse, recycle.

A key improvement in 2015 is the introduction of a machine to enable the recycling of the EPS skids used in the factory. This allows all damaged EPS skids to be crushed and formed into blocks for recycling.

## **Action Plan**

#### Manufacturing Waste

- Continue research and development activity to identify suitable, non-landfill, disposal routes for manufacturing waste.
- Fulfil target for 95% (pbw) of waste leaving the manufacturing sites to be destined for suitable, non-landfill, disposal routes.

#### **Construction Site Waste**

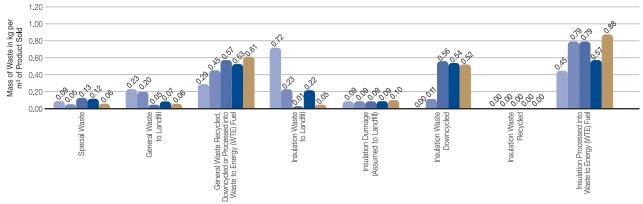
- Install a new muncher to enable larger volumes of construction site waste take-back to be handled.
- Continue research and development activity to identify suitable, non-landfill, disposal routes for waste collected via the Site Waste Take-Back Scheme.

#### **Demolition Waste**

 Contribute, via Trade Associations, to finding a solution for the safe disposal of older product containing CFCs and HCFCs (as blowing agent).

## **GRI Indicator Data**

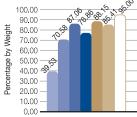
#### Mass of Total Waste by Type and Disposal Method



In 2012, significant progress was made in reducing the amount of insulation waste to landfill. The decrease in waste to energy and subsequent increase in waste to landfill, for both insulation and general waste in 2013 was due to the collapse of a 'waste to energy' route.

## Percentage of Waste

#### Not to Landfill



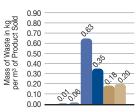
insulation waste, resulted in a decrease in the

amount of waste not to landfill. The decrease in 2015 is due to the inclusion of TEK and

OPTIM-R to this graph.

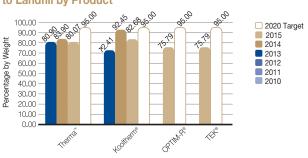
The collapse, in 2013, of one of Kingspan's The "waste to energy" disposal routes, for phenolic refle

#### Site Waste Take-Back



The reduction in site waste takeback reflects the downturn in the External Wall Insulation (EWI) market during this period.

# Percentage of Waste Not to Landfill by Product



The decrease in percentage not to landfill in 2013 was due to a collapse in a 'waste to energy' route. As this is a new metric, added to show data broken down by product, there is limited historical data available.

# Water Consumption & Disposal

## Context

Kingspan Insulation Ltd. recognises the necessity to minimise consumption of water resources on-site, particularly from municipal supplies. The company aims to act responsibly and comply with all relevant legislation in conserving water, managing water supplies to site, and monitoring water that escapes from site from point sources. Kingspan Insulation Ltd. aspires to best practice water management and aims for continual improvement in water use. The company seeks to develop policies and investigate technologies that will reduce the volume of water consumed.

## **Relevant GRI Indicators**

**EN8** Total water withdrawal by source. NB See Appendix A for background to GRI.

## Historical Achievements & Ongoing Activities

#### Source

- Operations across both sites are 100% dependent on municipal water supplies.
- Water abstracted from a licensed borehole on-site at Pembridge is supplied to a local farmer.
- Options to develop a rainwater harvesting system to collect water from the warehouse roof at Pembridge have been explored, but their poor investment return proved prohibitive.
- The potential for greywater harvesting on existing buildings at both sites has been explored but is not financially viable.
- The Building Development Policy dictates that all future building works should consider rainwater and greywater harvesting where practicable.

#### Use

- The manufacturing process requires relatively little water.
- Testing and maintenance of the sprinkler system has been identified as the main user of water on both sites. As a result, at Selby, the sprinkler system was updated.
- All water piping at Pembridge has been mapped and checked for leaks. At Selby, a leaking pipe has been replaced.
- Water-efficient appliances have been installed where possible at both Selby and Pembridge, although low water pressure in the main offices at Pembridge prohibited the use of push taps and other water saving devices.
- The Building Development Policy dictates that, where practicable, water-saving devices are incorporated into all future water consuming plant installations.
- A policy, action plan and targets have been developed for ongoing improvements in water management.
- Five water sub-meters have been installed across the Pembridge site to monitor water consumption more precisely and identify potential savings. Readings are taken on a weekly basis. A new water meter has been installed at Selby enabling the site to monitor its water consumption more accurately.
- Action has been taken to increase staff awareness of the importance of water conservation.

#### Disposal

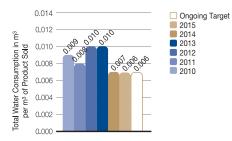
- The Pembridge site has no foul drainage. Septic tanks, biodigesters and a reed bed are used to store and treat waste water. Water emitted from the reed bed is regularly tested for quality by the Environment Agency.
- The potential to install a biodigester waste treatment plant and / or reed beds to purify waste water at Selby has been investigated, but were considered uneconomical. The site produces a limited amount of foul drainage and already has effective mains drainage in place.

## 2015 Performance Highlights

Water data continues to be reported to the Kingspan Group on a monthly basis. Waterless urinals were fitted to the Pembridge office to reduce water use.

## **GRI Indicator Data**

#### **Total Water Consumption**



The reduction in water consumption was due to the identification and rectification of several leaks in old water systems as well as water saving measures. Having reduced the water consumption to the targeted level the intention is now to maintain this level of water use.

## Action Plan

- As part of future site development / biodiversity management works, consider the introduction of a Sustainable Urban Drainage System (SUDS) for hard–standing areas, to more effectively manage water runoff. This could be done by incorporating more vegetation on the site and / or replacing asphalt with permeable and semi–permeable alternatives.
- Consider initiating an in-house programme to regularly monitor levels of pollution in all water courses local to the site.
- Investigate the potential to map all water piping at Selby and check for leaks.
- Explore the potential for recapturing water drained during testing and servicing of the sprinkler system for re–use.
- Install water sub–meters at Selby to monitor water consumption more precisely and identify potential savings.



Pupils at Almeley Primary School have been busy making a natural haven for the local wildlife in their new pond and conservation area, created with the help of funding from the Kingspan Insulation Community Trust.

Having established itself as a Forest School in 2013, Almeley Primary School was keen to offer the children more opportunities for environmental study within their grounds. The school successfully applied for funding from the Kingspan Insulation Community Trust, receiving  $\pounds$ 6,630 which has been used to install a pond, dipping deck and study shelter, along with habitat boxes to encourage a diversity of creatures to visit.

# Energy & Greenhouse Gas Emissions

## Context

Kingspan Insulation Ltd. recognises that greenhouse gas emissions reduction represents one of the major challenges facing business and governments in the 21st century. The company provides products to the construction industry that reduce energy consumption and the emission of greenhouse gases. Kingspan Insulation Ltd. is committed to minimising the greenhouse gas emissions from its manufacturing processes.

The company has already introduced measures to reduce the emissions from current business activities, and continues to approach all new business ventures with greenhouse gas emissions reduction firmly at the forefront of decision-making. Kingspan Insulation seeks to continuously improve its performance in all areas of business and maintain its reputation within the construction industry as a company actively addressing greenhouse gas emissions reduction.

## **Relevant GRI Indicators**

EN3	Direct energy consumption by primary energy source.
EN4	Indirect energy consumption by primary energy

- source. EN16 Total direct & indirect greenhouse gas emissions
- by weight.
- EN18 Initiatives to reduce greenhouse gas emissions & reductions achieved.

NB See Appendix A for background to GRI.

## Historical Achievements & Ongoing Activities

#### **Management Systems**

- There is a company policy on Greenhouse Gas Emissions, containing objectives for energy use and decarbonisation.
- Energy use is monitored by means of energy meters for gas and electricity, with increased sub-metering.
- Energy consumption reporting, on both sites, uses an online tool which is able to display half-hourly gas and electric use in real time. This resource has helped monitor energy use, react to anomalies more quickly, and formulate strategies to reduce energy use. Energy consumption and associated greenhouse gas emissions are measured and reported annually.

#### Decarbonisation

- In 2008 a CHP plant was commissioned at Pembridge with the aim to reduce the emissions associated with energy supplies for the site. Waste heat is used in the production process and to heat the warehouses and factory. In 2010, the CHP plant was upgraded to improve heat recovery.
- Investigations into installing a wind turbine at Pembridge revealed a "wind availability factor" too low to justify the investment. In 2011 Kingspan installed one of the largest photovoltaic (PV) arrays in the UK on the roof of its Pembridge manufacturing facility. This covers 5,583 m<sup>2</sup> and has a design capacity of 800kW, providing approximately 10% of the site's electricity demand. In 2014, a bespoke 15,000 m2 Rooftop Solar PV system was installed at Selby which is expected to generate 2.14 GW.h of electricity per year.
- Kingspan has registered for the UK Carbon Reduction Commitment Energy Efficiency Scheme. In 2011, Kingspan Group introduced a target to achieve Zero Net Energy by 2020. As an interim step, each Division of the Group must achieve a minimum of 8% energy consumption reduction and replace 50% of all grid based energy with self generated renewable energy by 2016.

#### **Manufacturing Energy Use**

- Increased conversion efficiency of raw materials has resulted in significant reductions in energy consumption per unit of production.
- A number of measures have been implemented wherever practical on both sites to increase energy efficiency, such as:
   energy efficient compressors; improved controls for extraction and compressed air systems;
  - a compressed air survey was undertaken at Pembridge to identify leakages at the site and all leaks were fixed;
  - temperature control of curing ovens was improved, with an estimated energy saving of 20%;
  - soft starters and load demand sensing on all large motors to reduce power use on start-up;
  - rapid roll doors on warehouses to reduce opening time and thereby space heating requirements;
  - the introduction of load demand control on large extraction fans;
  - variable speed motors on production lines;
  - skylights to increase daylighting and energy efficiency; and
  - replacement of halogen lighting systems with highly energy-efficient holophane lighting systems.
- All fork lift trucks are Liquid Petroleum Gas (LPG) powered at the Selby and Pembridge sites.
- In 2011 an energy efficiency review of the Pembridge site was undertaken by Johnson Controls, with improvement opportunities suggested.
- A Liquid Petroleum Gas (LPG) tank has been installed at Pembridge to store fuel for LPG powered fork lift trucks.
- Trials have taken place into replacing shrink wrap product packaging with less energy-intensive tight wrapping. Whilst energy saving was possible, the quality of packaging decreased to an unacceptable level so further trials have been abandoned.

#### Office Energy Use

- Occupancy sensors, energy saving bulbs and thermostats have been installed in office blocks.
- Heating, lighting and printer equipment are switched off when not in use, specifically at night.

#### **Other Climate Change Issues**

- Air-conditioning or refrigeration equipment is CFC / HCFC-free. The use of HFC refrigerants is managed. Their acceptability is assessed on the basis of total equivalent warming impact (TEWI) and the lowest impact equipment is purchased where viable.
- Kingspan Insulation's products are CFC / HCFC free.
- New video-conferencing equipment has been installed at both Pembridge and Selby sites.

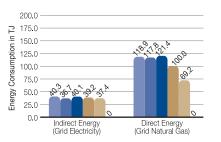
During 2015 significant progress was made in reducing the energy demand and developing new renewable energy infrastructure at both the Pembridge and Selby sites using the principles of "Save More", "Generate More" and "Buy More" renewable energy. In 2015 Kingspan Insulation contracted both green electricity and green gas contracts for all UK sites, including Pembridge and Selby, ensuring that all grid supplied electricity and gas comes from renewable sources.

At the Pembridge facility the hot water required is supplied via an adjacent 500kw AD/CHP plant resulting in 8GWh less consumption of natural gas in 2015 calendar year, a 56% reduction since 2013. In December 2015 work started on a biomass boiler at the Pembridge site which will reduce the amount of grid gas used and the heat from this is expected to make the Kooltherm line in Pembridge run on 100% renewable energy by 2017.

During 2015 the Selby site was accredited with the ISO 5001 Energy Management System and as part of this a number of energy efficiency measures were carried out, including the continuation of the implementation of LED lighting for external and internal areas, shut down of manufacturing equipment and an initial phase of sub–metering for electricity / gas with associated energy management software.

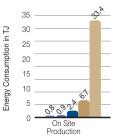
## **GRI Indicator Data**

#### **Grid Supplied Energy Consumption**



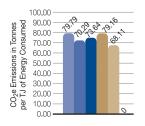
The reduction in direct energy is due to the commissioning of the anaerobic digestion plant which produces both heat and electricity at the Pembridge site.

#### **Energy Consumption from On Site Production**

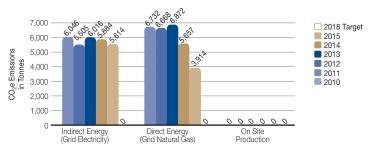


The increase in consumption from on site production is due to the introduction of the PV array at Selby.

#### CO<sub>2</sub> Equivalent Emissions per Unit of Energy Consumed



#### CO<sub>2</sub> Equivalent Emissions by Energy Source



Emissions from direct and indirect energy consumption were calculated using conversion factors obtained from the Department of Environment, Food and Rural Affairs (Defra), by way of the UK Greenhouse Gas Inventory for 2009.

This proposed an emissions level of 0.20374kg  $CO_2$  per kWh of natural gas consumed, and a conversion factor of 0.54055g  $CO_2$  per kWh of grid electricity consumed (5–year rolling average).

### **Action Plan**

- Install gas and electricity sub-metering in all warehouse areas, individual production lines and ancillary machinery, to enable targeting of areas for energy savings. Install centralised energy monitoring software that feeds from the sub-metering data.
- Utilise centralised energy consumption monitoring data to enable management to understand consumption demands, trends and opportunities for future energy savings.
- Install LED lighting, where practicable, throughout the business.
- Install daylight detection sensors to factory lighting to ensure that electric lights are only used when daylight levels are below a practical minimum.
- Install proximity detection shut-off to lighting, where practicable and not already in place, throughout the business.
- Install on-site low or zero carbon energy sources for both Pembridge and Selby production plants, in order to meet the Kingspan Group Zero Net Energy Target.
- Ensure teleconference facilities are used by staff.
- Reproduce the success of the manufacturing energy awareness scheme through an office education programme for all staff to increase energy efficiency and reduce consumption.

## Context

Kingspan Insulation Ltd.'s rural location has historically made transport a challenging area to manage, but one in which the company strives for best practice both for staff travel and haulage.

Due to the limitations of rail and water transport for accessing the sites, all freight transported to and from Kingspan Insulation Ltd. is delivered by road vehicle. The company recognises that transportation of constituent materials and products to and from its manufacturing sites presents significant impacts to the environment at large, and specifically to local communities. The company is committed to minimising these impacts. Please also refer to the section of this report titled "Social and Community Initiatives". The main logistics supplier has an environmental policy and is working with Kingspan Insulation Ltd. to improve environmental performance. The company endeavours to rationalise and centralise product deliveries so that fewer trips are made, and to pursue continual performance improvements.

## Historical Achievements & Ongoing Activities

#### Inbound Logistics

- The vast majority of constituent materials sourced from overseas are imported by ship and road.
- Policies are in place to rationalise material deliveries wherever possible and the majority of materials are delivered in large articulated vehicles or tankers to reduce vehicle movements.
- Companies delivering materials are advised of the most efficient routes, with minimum disruption to the local community.

#### **Outbound Logistics**

- A Transportation Policy and Action Plan has been developed to establish a systematic approach to 'greening' freight transport.
- Outbound logistics are managed by an external haulage contractor, in liaison with Kingspan Insulation Ltd.
- Overall fuel efficiency of the transport fleet has increased through measures such as:
  - bonuses are paid to haulage drivers, based on fuel consumption;
  - a miles per gallon (MPG) tracker has been introduced and MPG targets set for all haulage vehicles;
  - a company 'fuel champion' has been appointed and MPG has also been adopted as a KPI; and
  - aerodynamic styling has been introduced to haulage units and engine efficiency is upgraded as new units are introduced. In 2011 the company upgraded vehicles to EURO V engines.
- Further measures to reduce mileage and maximise container and fleet utilisation have been introduced such as:
  - more efficient routing systems to reduce mileage and maximise 'back haul' opportunities;
  - HGVs with a capacity of 63 m<sup>3</sup> have been replaced by demountable vehicles with a potential capacity of 92 m<sup>3</sup>; and
  - the introduction of the Selby site has dramatically increased transport efficiency due to its location in the north of the UK.
- During 2011, Kingspan Insulation Ltd. employed a logistics consultant to benchmark its performance and that of haulage providers. New software to improve logistics performance further was introduced in 2011. Driver behaviour has been targeted through SAFED, resulting in an 8-10% reduction in transport miles. Alternative fuels, such as biodiesel, have been investigated. Moving to 95% biodiesel was rejected on sustainability and economic grounds. Outbound haulage vehicles currently utilise a 5% biodiesel mix.
- Rail freight has been explored but was considered impractical from a financial and logistical perspective.

#### Staff Travel

- The rural location of the Pembridge site and its distance from local towns means that the site is dependent on road transport and there are few viable alternatives to the private car for employee travel.
- The Selby site is in closer proximity to local communities than Pembridge and is well served by public transport (bus and rail). Secure cycle facilities have been provided at Selby
- A staff travel survey was undertaken across both sites to understand patterns of transport use and reasons for poor uptake of more sustainable travel options. Feedback was used to guide a Green Travel Plan which was launched in 2008 and incorporates incentives for car sharing, which is done by a significant proportion of employees.
- Negotiations have been undertaken with local bus service providers with the aim to improve public transport links to the Pembridge site, although a financially agreeable solution for both parties could not be reached.
- A small number of employees cycle to work at both sites, secure and covered bike storage areas have been provided at Pembridge and showering and changing facilities are available in the factories at both sites.
- The financial and environmental benefits of more sustainable commuting methods have been promoted to employees and a "Guaranteed Lift Home" scheme with local taxi firm is in place for both Pembridge and Selby.

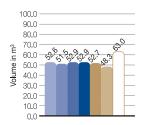
In 2015 the supplier for logistics fleet was changed to consolidate all the transport requirements for the business under one supplier to increase efficiency in this area. This has also included an open book agreement, giving full access to fuel and tracking data, allowing performance to be more accurately measured.

The increase in site deliveries has continued over past few years, to being almost 80% of all deliveries. This has resulted in a number of challenges which ongoing work is addressing, especially by raising customer awareness of the issues.

Changing the outbound logistics fleet from square sectioned trailers aero-dynamically shaped trailers was investigated however this reduced the carrying capacity of the vehicles to such an extent that any efficiency savings were negated by the extra deliveries required from smaller loads.

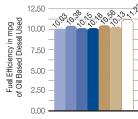
## **GRI Indicator Data**

Volume Delivered per Vehicle Dispatch



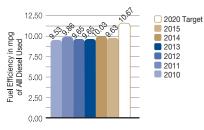
This figure has reduced as it includes customer collection and carrier where Kingspan has no control over the volume per vehicle, which reduced the average volume per vehicle.

Fuel Efficiency of Oil Based Diesel



Fuel efficiency data are calculated from mileage figures recorded by tachographs and gallons of fuel consumed from fuel provider. Fuel is 95 per cent oil-based.

Fuel Efficiency of All Diesel Used



The reduction in the efficiency of diesel is due to better accuracy and visibility of the fuel usage than was historically available.

## Action Plan

- Promote car sharing by providing "car share only" parking spaces.
- Aim to improve fuel efficiency by 10% by targeting driving practices and behaviour such as harsh braking, speed, vehicle idling etc.
- Investigate using technology to better track logistics fleet performance to include live data of vehicle location and performance to identify areas for efficiency savings and provide more timely information to customers on deliveries.
- Achieve Gold Accreditation with the Fleet Operator Recognition Scheme (FORS) by end of 2017.
- Upgrade the fleet to EURO 6 Engines

# Social and Community Initiatives

## Context

Kingspan Insulation resolves to be a considerate neighbour to local communities. It recognises the need to communicate directly with neighbours, to be transparent about activities which might affect the surrounding area, and to take a responsible attitude towards potential impacts. A proactive approach is taken to consult with neighbouring communities and ensure that they share in the benefits of the company's successes. Local groups are actively engaged in sustainability initiatives led by Kingspan Insulation.

## **Relevant GRI Indicators**

EC1 Donations & other community investments.

SO1 Programs & practices to assess impacts of operations on communities.

NB See Appendix A for background to GRI.

## Historical Achievements & Ongoing Activities

#### **Charitable Initiatives**

- The company aims to achieve a target of investing 0.25% of pre-tax profits into community and charitable initiatives.
- The Kingspan Insulation Community Trust was established in 2006 as a registered charity, through which the company donates to community initiatives. Grants are made annually at the discretion of a Board of Trustees. Funding is awarded for projects supporting ecology and biodiversity, healthy recreation for young people, or road safety. Details of projects funded by the Kingspan Insulation Community Trust can be found at www.KingspanInsulationCommunityTrust.org.
- In order to support Local Agenda 21, the grant giving of the Kingspan Insulation Community Trust favours Parish Plan initiatives.
- Funding was provided to support the development of an "Ecoclassroom" at Lady Hawkins' School. For more information visit: www. kingspaninsulation.co.uk/About-Us/Community/Schools/Specialist-School-Sponsorship.aspx
- Funding was provided for the design and delivery of a theatre production engaging schoolchildren in sustainability themes during 2007 and 2008. For more information visit: www.kingspaninsulation.co.uk/About-Us/Community/Schools/Sustainability-Education.aspx
- Donations have been made to support the achievement of specialist school status at Tenbury High School, Lady Hawkins' School and Wigmore High School, located in proximity to the Pembridge facility.
- Kingspan Insulation Ltd. provides match funding of up to £100 per employee undertaking fundraising activities on behalf of registered local charities, and up to £50 for national charities.
- Old IT equipment is offered to local schools and charities free of charge.

#### **Community Engagement**

- The company sponsors, and contributes articles to, four local village newsletters, to inform stakeholders about business activities and projects in areas of environmental impact, social engagement, resource use and economic viability.
- Community–facing websites are maintained, detailing ongoing initiatives and the work of the Community Trust. For more information, visit: www.kingspaninsulation.co.uk/About-Us/Community.aspx and www.KingspanInsulationCommunityTrust.org
- Since 2008, the company has conducted a biannual community consultation exercise to refine and improve community engagement initiatives.
- The company hosts a number of industry experience days each year at Pembridge. These are activity packed days covering various area of the business i.e. design, marketing and manufacturing. It is also involved in various careers education schemes at local secondary schools. This includes mock interviews, school enterprise days, careers conventions and work experience. For more information visit: www.kingspaninsulation.co.uk/About-Us/Community/Schools/Careers-Education.aspx

#### **Mitigating Community Impacts**

- Noise assessments have been undertaken around both sites, and noise levels found to be below statutory minimums.
- The locations and setting of both sites mean that there is minimal conflict with surrounding land uses.
- 24-hour manned security is in place, in addition to CCTV and perimeter protection to maintain both safety and security.
- Lighting at Pembridge has been re-angled to mitigate its impact on surrounding residents, and meets with local council approval.
- A 'Geofence' system has been implemented in 12 villages local to the Pembridge site, to monitor haulage vehicle speeds.
- The company provides maps, in eleven languages, to help correct routing of inbound haulage. In 2011, route maps for inbound haulers were adjusted to help mitigate a problem with traffic in the village of Marston, local to the Pembridge site.
- Community consultations have resulted in initiatives such as increased night-time haulage and specific local routing to manage noise impacts from haulage and road safety concerns.
- During 2009 a system was introduced to log formal complaints from the local community, for which there is a target of zero.
- In 2009, Kingspan Insulation Ltd. ran a Road Safety event for local schools to teach the children about the dangers of large vehicles on rural roads. For more information visit: www.kingspaninsulation.co.uk/About-Us/Community/Schools/Sustainability-Education. aspx.
- There are no significant local air pollution sources and monitoring of emissions to air is undertaken regularly, as required by legislation.

The majority of charitable activity continues to be co-ordinated through the Kingspan Insulation Community Trust. In addition to this staff have been involved with raising money for various charities through the year. In 2015, Kingspan Insulation's donations to local community and charitable initiatives equated to 0.20% of pre–tax profits. As part of a Sales Team initiative, just over £5400 was raised in 2015 for the Cystic Fibrosis Trust with sponsored canoeing, cycling and climbing activities.

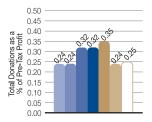
Collaborative work has continued with schools in the area local to the manufacturing sites. Activities included supporting the Institute of Physics 'Lab in a Lorry' visits to local schools.

## Action Plan

- Consider collaborating with other businesses on the Selby industrial site to engage with local community.
- Repeat the community consultation exercise biannually i.e. in 2016, 2018, 2020.....
- Consider installing speed indicator devices (SIDs) in villages local to Pembridge through which outbound hauliers travel.

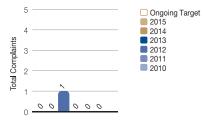
### **GRI Indicator Data**

#### Local Community and Charitable Donations



The economic climate forced Kingspan Insulation Ltd. to concentrate on investment in business activities, and as a result, in 2010, the company reduced its target level of local community and charitable donations to 0.25%. Although the target for charitable donations remained at 0.25%, the opportunities for supporting local initiatives did not arise as in previous years.

#### Non–Product Related Formal Complaints from Local Communities



# Biodiversity & Natural Heritage

## Context

Given the rural location of its facilities, biodiversity is an area in which Kingspan Insulation Ltd. has felt able to make significant contributions to environmental sustainability.

Neither site is located in proximity to areas designated for high biodiversity or conservation value, although ecological appraisals of the Pembridge and Selby sites have identified potential for ecological value due to agricultural usage of the surrounding area. Kingspan Insulation Ltd. has sought to build on this underlying potential through a robust management approach to biodiversity.

## **Relevant GRI Indicators**

- EN11 Location & size of land owned, leased, managed in or near to protected areas & areas of high biodiversity value.
- EN14 Strategies, actions & plans for managing biodiversity impacts.
- NB See Appendix A for background to GRI.

## Historical Achievements & Ongoing Activities

#### Actions Taken on Manufacturing Sites

- During 2006 an appraisal of the biodiversity of the Pembridge site was commissioned. This included a biodiversity-sensitive site maintenance plan, which is being followed, and an action plan to encourage and improve the biodiversity of the site.
- During 2008, most of this action plan was implemented via a community initiative bringing together university students with local school children. New habitats were created, including bee banks, a bug hotel, plus native tree planting. Measures were taken to provide natural habitat for nesting birds and encourage the development of meadow-type habitat. Bat and bird boxes have also been installed. Notices were installed at points around the site to inform staff about this biodiversity work. For more information visit: www. kingspaninsulation.co.uk/About-Us/Community/Schools/Sustainability-Education.aspx
- A company Landscaping Policy has been prepared to mitigate biodiversity risks by ensuring full consideration is given to biodiversity objectives during decisions about all site activities. The Policy stipulates that:
  - a sympathetic approach will be taken to protecting existing trees and shrubs wherever possible;
  - wherever possible only native trees and shrubs of British Isles origin will be planted;
  - all areas which have been planted with trees, lawns, shrubs etc. will be maintained to high standards;
  - a drawing register will be kept to identify the location on site of different species of plants, shrubs and trees; and
  - any grounds maintenance work that is undertaken will not place at harm or risk protected fauna or flora, and will instead encourage the biodiversity of the site.
- Grounds maintenance staff are familiar with initiatives for the site and have been involved in habitat management work throughout such as using bark chippings to reduce the need for conventional spraying techniques.
- The Environmental Purchasing Policy commits to the use of the most environmentally–friendly pesticides and weed treatment systems and defines which systems will comply.
- The Building Development Policy includes a clause to consider the viability of installing green roofs as part of every planned building development, as a means to enhance biodiversity on-site, reduce run-off, and enhance thermal performance of buildings.
   The potential to retrofit existing roofs has been explored but current building structures are not considered suitable.
- In 2010, a site biodiversity review was carried out at the Pembridge site, to investigate the impact of the enhancements carried out in 2008.
- In 2010, an appraisal of the biodiversity of the Selby site was commissioned. The appraisal revealed habitats for invertebrates (including cinnabar moth, peacock butterfly and crane-flies) amphibians (common toad, common frog and common newt) and birds (including whitethroat, lesser whitethroat, wren and dunnock).
- In 2011, the company took part in a project, led by the Herefordshire Biodiversity Partnership, to reverse the decline of lesser spotted woodpeckers and green woodpeckers within Herefordshire. The company supplied insulation for a large number of woodpecker boxes and installed and monitored two woodpecker boxes on its Pembridge site.

#### Actions Taken in the Local Community

- Areas of ecological value off-site have been enhanced through the Kingspan Insulation Community Trust. An 'Ecological Trustee' sits on the Trust's Board to assist with the project management and development of appropriate biodiversity-related schemes.
- Details of projects funded by the Kingspan Insulation Community Trust can be found at www.KingspanInsulationCommunityTrust.org.

The biodiversity survey of the Pembridge site was repeated in 2015, monitoring the progress of the biodiversity improvements at the Pembridge site and recommendations for further work. Highlights of the report included the presence of a nest of red-tailed bees and a diverse range of bird species.

## Action Plan

- Following implementation of the Pembridge Biodiversity Action Plan, monitor biannually (2017, 2019, 2021...) to check whether increases in biodiversity can be identified.
- Repeat the 2013 biodiversity work at Pembridge and Selby involving local schools.
- Program initiatives to involve staff in on-site or off-site conservation / landscaping work, both to raise awareness of biodiversity objectives & as a health & wellbeing / staff engagement initiative.
- Roll out Landscaping Policy to Selby site.
- Implement an action plan for site improvement at Selby, as has taken place at Pembridge.
- Develop the biodiversity web page to promote awareness of local biodiversity in the vicinity of both sites and to detail the results of the biodiversity surveys on the sites.



The children of Eardisley Primary School have been exploring their new natural play area, developed with help from the Kingspan Insulation Community Trust.

The project originally came about in 2012 when the children were asked what they would like to see in their play area at school. Far from the typical brightly coloured modern play equipment, the majority of the children favoured more naturalistic schemes, and particularly liked the notion of having their own wildlife garden. And so, the idea of Eardisley Primary's Nature Area and Club was born.

The school successfully applied for funding from the Kingspan Insulation Community Trust, receiving over £860. The majority of the grant has been used to purchase suitable tools and protective clothing for the children. As Sharon Hatchwell, part of The Friends of Eardisley CE Primary School, explains:

"Previous experience has taught us that the children don't hold back, no matter how wet and muddy it is! The new protective gear means they get really hands-on with the creation of the play area and its upkeep, and the parents are much happier!"

The rest of grant has been used to buy a variety of beautiful and insect-attracting plants and flowers, selected by the children with help from a parent gardener, to increase the diversity of the wildlife. They have also purchased a number of reference books so the children can identify and learn more about the plants and wildlife they experience, thus combining both outdoor and indoor learning to further instil a sense of understanding and responsibility for the world around them.

# Land Management & Premises

### Context

Both Kingspan Insulation's facilities are located predominantly on land used as airfields prior to their adoption for industrial use. Whilst the Pembridge facility is surrounded by agricultural land, the Selby site is situated on an industrial estate which houses other industrial users. The company operates pollution management practices in compliance with regulatory requirements and seeks a best practice approach to pollution control. It has a strong history of compliance with regulatory water quality requirements. Both sites are located on flood plains and have previously been subjected to flooding. Kingspan Insulation's accommodation at Selby is currently under-utilised, providing capacity for future expansion.

## **Relevant GRI Indicators**

**EN23 Total number & volume of significant spills.** NB See Appendix A for background to GRI.

## Historical Achievements & Ongoing Activities

#### Land

- The majority of both sites is either built on or covered in hard standing
- At least 90 per cent of the total site at Pembridge, and 100 per cent of the site at Selby, consists of previously used land, which had industrial uses. The sites have development capacity.
- The sites have been assessed for archaeological remains and nothing of importance has been detected.
- In terms of cultural heritage, the re-clad aircraft hangars at Pembridge are the only notable features on either site.
- A best practice Landscaping Policy has been adopted at both sites. This policy is particularly important at Pembridge due to the rural location, where boundaries and external views of the site are to be in keeping with the local area and wherever possible, where large buildings are situated close to the boundary, they will be screened effectively using native tree species.
- It is unlikely that much of the indigenous soil profile remains on either site, due to their history of industrial uses. Topsoil from the redevelopment of the Pembridge site has been taken to a local quarry for use as topsoil fill.

#### Contamination

- Neither site is located in a Groundwater Source Protection Zone.
- Site ground analysis tests have been completed to identify any land contamination at Pembridge.
- A new septic tank was installed at Pembridge in 2008 to strengthen facilities to separate rainwater and foul water, thereby improving the management of contamination risks.
- As part of the Kingspan Insulation Ltd. ISO 14001 accredited Environmental Management System and the OHSAS 18001 accredited Health and Safety Management System, there is a robust reporting procedure in place to record all chemical spills.
- Contamination is mitigated at both sites through provisions for effective management of chemical spills. Designated spill teams are always available on–site to deal with spills. Teams are trained and tested annually. Spill kits are distributed around the site.
- There have been no spills during recent years which were substantial enough to be reported under regulatory requirements.
- Fuel interceptors are checked monthly for signs of contamination.

#### Surface Water Management

- Effective drainage systems are in place to remove excess surface water.
- A pond on the Selby premises is used to assist in the effective drainage of water from hard standing areas. Water is pumped to the pond prior to removal from site.
- Flood defence systems have been strengthened at Pembridge with the provisions of additional soakaways, excavation and extension of neighbouring culverts and the installation of an underground sump with infiltration drainage underneath one of the large warehouses.
- A robust maintenance programme has been implemented at both sites to regularly monitor drainage infrastructure to prevent blockages and consequent flooding.

#### Buildings

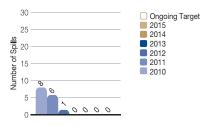
- Buildings have in-built flexibility to extend their life, especially the high-bay warehouse at Pembridge.
- Buildings are refurbished rather than replaced wherever possible: at Pembridge, office buildings have been refurbished and the old aircraft hangars re-clad for use as warehouses. Materials from the old runways located at Pembridge have been re-used for building foundations.
- A Building Development Policy is in place, and the company aspires to achieve BREEAM 'Excellent' for new buildings on the company estate. A retrospective and indicative BREEAM assessment was conducted on the most recent warehouse at Pembridge, as a benchmark.
- Prior to the introduction of the policy, elements of BREEAM had already been used in site development works, including re-use of demolition materials on-site as aggregate, and installation of an underground sump with infiltration drainage.

## 2015 Performance Highlights

No significant impacts of spills have been recorded during 2015. No significant spills have been recorded in Kingspan Insulation Ltd.'s financial statement during the last 6 years. A significant spill can be defined as a spill of over 25kg in mass.

## **GRI Indicator Data**

Total Number of Spills >10kg in Mass





## **Action Plan**

• Consider improvements to site defences against localised flooding, especially in relation to changing land use on site associated with new building footprints.

The pupils of Sherburn Hungate Primary School have been getting excited about ecosystems with the refurbishment of their old pond area, thanks to the funding from the Kingspan Insulation Community Trust.

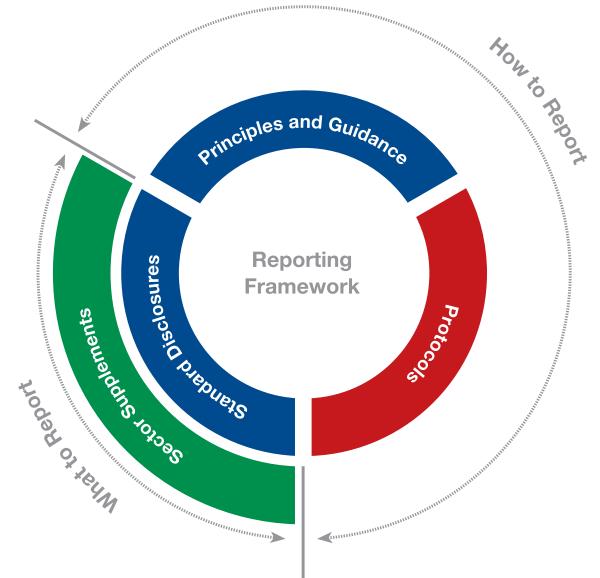
The £1,130 grant from the Community Trust was used to replace the school's previous pond, which had become damaged over time, with a more rigid structure. Paving was then added around the edge to make it safer for the children to get up close to the water and easier for staff to maintain. The grant was also used to purchase a variety of pond and water plants to increase the biodiversity of the area and to provide a home for the school's colony of frogs.

Julia Weights, the school's science coordinator, commented: "As well as being a fun, physical activity for the children, our new pond has become an exciting educational resource. We have incorporated it into the geography and science curriculum to allow the children to learn directly from the natural world around them. We were also thrilled to be able to provide a Willow Whale structure to be used as an outdoor classroom for all the year groups."

# Appendix A Background to GRI G3 Guidelines

The GRI (Global Reporting Initiative) Reporting Framework is intended to serve as a generally accepted framework for reporting on an organisation's economic, environmental, and social performance. It is designed for use by organisations of any size, sector, or location, and takes into account the practical considerations faced by a diverse range of organisations. The Framework contains general and sector–specific content that has been agreed by a wide range of stakeholders around the world to be generally applicable for reporting an organisation's sustainability performance.

The Sustainability Reporting Guidelines consist of Principles for defining report content and ensuring the quality of reported information. It also includes Standard Disclosures made up of Performance Indicators and other disclosure items, as well as guidance on specific technical topics in reporting.



The Standard Disclosures to be included in sustainability reports comprise information that is relevant and material to most organisations and of interest to stakeholders. These include:

- Strategy and Profile: disclosures that set the overall context for understanding organisational performance, e.g. its strategy, profile, and governance;
- Management Approach: disclosures that cover how an organisation addresses a given set of topics, to provide context for understanding performance in a specific area; and
- Performance Indicators: indicators that elicit comparable information on the economic, environmental, and social performance of the organisation.

An Application Level is declared for each report prepared under the GRI Reporting Guidelines. The Application Level communicates which elements of the Reporting Framework have been applied in the preparation of the report. There are three levels in the system, titled C, B and A. The reporting criteria found in each level reflect an increasing application or coverage of the GRI Reporting Framework.

An organisation self-declares a reporting level based on its own assessment of its report content against the criteria in the GRI Application Levels. In addition to the self declaration, reporting organisations can ask an external assurance provider to provide an assessment of the report content, following which process a "plus" can be declared at each level (i.e. C+, B+, A+). The GRI may also be approached to check the Application Level, thereby enabling a "GRI Checked" stamp to appear in the report.

The table in Figure C2 summarises the requirements of a report declared at each Application Level. This report for Kingspan Insulation Ltd. has been provided external assurance as an Application Level B+ report and covers all of the requirements associated with this Level (as outlined in the Report Content Index found in Appendix B). External Assurance has been provided Anthesis-Caleb.

Fig. C1: GRI Reporting Framework

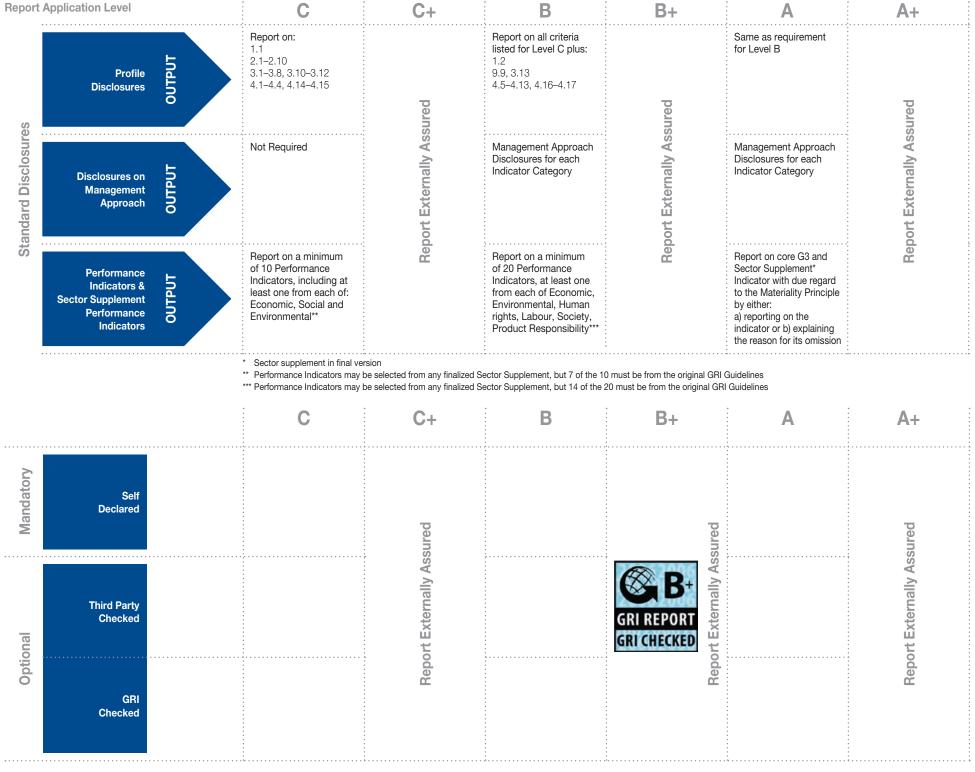


Fig. C2: Application Level Table

(source: GRI G3 Sustainability Reporting Guidelines, available at www.globalreporting.org)

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Indicat	tors	Page Extent of reporting		
Econo	mic Performance Indicators			
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments	12–13 & 3	34–35	Full
EC2	Financial implications and other risks and opportunities for the organisation's activities due to climate change	12–13		Full
Enviro	onmental Performance Indicators			
EN2	Percentage of materials used that are recycled input materials	22–23		Full
EN3	Direct energy consumption by primary energy source	30–31		Full
EN4	Indirect energy consumption by primary source	30–31		Full
EN8	Total water withdrawal by source	28–29		Full
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	36–37		Full
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity	36–37		Full
EN16	Total direct and indirect greenhouse gas emissions by weight	30–31		Full
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	30–31		Full
EN22	Total weight of waste by type and disposal method	26–27		Full
EN23	Total number and volume of significant spills	38–39		Full
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	22–23		Full
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	12–13		Full

t of reporting	Indica	tors	Page	Extent of reporting
	Labo	ur Practices and Decent Work Performance Indicators		
Full	LA1	Total workforce by employment type, employment contract, and region, broken down by gender	16–17	Full
	LA2	Total number and rate of new employee hires and employee turnover by age group, gender and region	16–17	Full
Full	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities by region and by gender	18–19	Partial
	Huma	an Rights Performance Indicators		
Full	HR1	Percentage and total number of significant investment agreements	20–21	Full
Full		and contracts that include clauses incorporating human rights		
Full		concerns, or that have undergone human rights screening		
Full	Socie	ty Performance Indicators		
Full	SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	34–35	Full
	SO2	Percentage and total number of business units analysed for risks related to corruption	12–13	Full
Full Full	SO7	Total number of legal actions for anti-competitive behaviour, anti-trust and monopoly practices and their outcomes	12–13	Full
Full	SO8	Monetary value of significant fines and total number of non-monetary		
Full		sanctions for non-compliances with environmental laws and regulations	12–13	Full
Full	Produ	uct Responsibility Performance Indicators		
Full	PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	14–15	Full



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