

Kingspan Panels

# Sustain**ability** Report

**to provide a  
sustainable future**



*Low Energy -  
Low Carbon Buildings*



**Kingspan**<sup>®</sup>

Insulated Panels





Welcome to

# Kingspan Insulated Panels

Welcome to Kingspan Insulated Panels' third sustainability report. The aim of this document is to tell you more about the division's progress since last year's report as well as providing detailed performance data relating to Kingspan's operations for the calendar year 2008.

[www.kingspanpanels.com/Responsibility/Sustainability/Reporting.aspx](http://www.kingspanpanels.com/Responsibility/Sustainability/Reporting.aspx)

Kingspan Insulated Panels is one of five divisions of Kingspan Group plc. This report describes the social, economic and environmental sustainability measures taken within an increased number of operations in the Insulated Panels division only. This year's report covers the Kingspan Insulated Panels Division Head Office and manufacturing site in Holywell, and its manufacturing sites at Sherburn and Kingscourt, Ireland. For the first time it also covers Kingspan's Door

Components business in Belgium, the manufacturing facility in Sydney, Australia and the insulated panel sales offices in New Zealand, France, Belgium and the Netherlands. Kingspan Insulated Panels intend to expand the scope of its reporting year on year to cover its full global operations in the future, and to incorporate further key performance indicators to highlight its sustainability performance.

## The Global Reporting Initiative

The Global Reporting Initiative (GRI) has pioneered the development of the world's most widely used sustainability reporting framework, from its conception in 1997. This framework sets out the principles and indicators that organisations can use to measure and report their economic, environmental and social performance. There are three levels of reporting within the GRI Sustainability Reporting Framework; they are titled C, B, and A (A being the highest). The criteria found in each level reflect an increasing application or coverage of the GRI Reporting Framework.

Last year Kingspan Insulated Panels achieved level C. For the year 2008 a level C report was achieved and this has been checked by GRI to ensure it complies with the GRI Reporting Framework. The company will continue to build on its success by reporting on further aspects of its sustainability performance and incrementally expanding the application of the GRI Reporting Framework over time. In this year's report it has increased the number of indicators that it reports fully on by 31%, giving a total of 21. It has also reported on 4 indicators for the first time.





We have the  
**Sustainability**  
to be leaders  
within our industry

**About Us**

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# An introduction

## from our Divisional Managing Director



I am pleased to announce that this year Kingspan Insulated Panels is extending its reporting of sustainability impacts to cover its Door Component Business in Belgium, its manufacturing site in Sydney, Australia and its sales offices in Belgium, France, New Zealand & the Netherlands.

The report also continues to cover its Divisional Head Office and manufacturing site in Holywell, and its manufacturing sites at Sherburn and Kingscourt. Kingspan is extending the indicators it fully reports on from 16 to 21, of which three are new. This is a GRI level 'C' report and Kingspan maintains its commitment to increase the number of aspects of sustainability performance it reports on over time.

Kingspan Insulated Panels is delighted that its Architectural Wall Panel and Trapezoidal Roof and Wall product range have all been reassessed under the revamped Green Guide to Specification and achieved 'A+' ratings. The benefits of BRE's Environmental Profiling Certification include: Independent, verified and audited performance according to internationally recognised methodology, Provision of data for achieving additional credits in BREEAM schemes, Provision of input data for Invest 2 (design tool for optimising

building environmental impact and whole life costs) and Identification of areas for further improvement.

Kingspan Insulated Panels has been highly instrumental in the development of a Disposal Guide for the trade association Engineered Panels in Construction (EPIC), which is primarily aimed at offering guidance to demolition contractors dealing with panels at end-of-life. The Guide was developed during 2008, published in early 2009 and continues to be well received by demolition contractors. Kingspan continues to lead research into the end-of-life options for insulated panels. The knowledge and experience it has acquired over the last years enables the company to effectively offer its perspective to the on-going process of reformulating the EU ODS regulation.

2008 also saw Kingspan sponsoring a report on the benefits associated with accelerating the refurbishment of non-domestic buildings in the UK.

1 Louis Eperjesi,  
Divisional Managing  
Director, Kingspan  
Insulated Panels

The report, 'The UK's approach to the thermal refurbishment of non-domestic buildings: A missed opportunity for bigger carbon emission reductions?' was launched at the Houses of Parliament with a keynote address by the Secretary of State for Energy & Climate Change.

It attracted over 70 policy and political delegates, as well as considerable media interest. The report concluded inter alia that carbon savings equivalent to 2% of the UK's non-traded emissions could be achieved by 2022, creating up to 75,000 long-term jobs, £40 billion in cost savings, and avoiding 1.25% of the UK's total primary energy requirement.

Kingspan Insulated Panels was also active in reducing carbon emissions and energy consumption across the division.

The combined cost savings of these projects are in the region of €147,000 per year and the combined carbon dioxide savings are in the region of 700 tonnes per year. These savings were achieved from lighting and production heat efficiencies.

Kingspan Insulated Panels completed a high profile installation of its EnergiPanel system at the Jai Xing Wal-Mart site in China. The system was successfully installed and commissioned to meet a tight deadline and I am very pleased with the results from this installation, with a saving of 20% of the building's energy requirement, or about 13 tonnes of CO<sub>2</sub> per year.

Kingspan's continued efforts to be at the forefront of sustainability practices in its industry were once again rewarded with the company's retention of the Manufacturer of the Year Award at the 2008 Building Awards. In 2008, Kingspan Insulated Panels also entered the Sunday Times Best Green Companies Award. The application involved a rigorous assessment of all operations at its Divisional Head Office in Holywell. Kingspan Insulated Panels finished 1st in Wales. The Holywell site also entered the Royal Society for the Prevention of Accidents (ROSPA) award. There are three levels bronze silver and gold, and Kingspan Insulated Panels won the gold award.

The aim of this report is to illustrate some of Kingspan's successes and also where it intends to improve. Kingspan Insulated Panels would greatly value your comments relating to any aspect of the report and its approach to sustainability. Kingspan has provided a feedback form on its website

**[www.kingspanpanels.com/GRIreport](http://www.kingspanpanels.com/GRIreport)**



**Louis Eperjesi**

The  
**sustainability**  
to be accountable for our actions

## Kingspan Insulated Panels

The operations covered by this report form part of the Kingspan Group plc, which was founded as a small family business in Ireland in 1972. Kingspan Group, which became a public company in 1989, was initially involved in the manufacture of metal cladding and roll formed structural sections. Kingspan Group's turnover was €1,672.7m in 2008. In 1977, the company introduced its first insulated panel and by 2008, the manufacture of insulated panels and doors as a whole made up 43.3% of the Group's total turnover.



## Awards

Kingspan Insulated Panels has been recognised over the past number of years for its achievement in sustainability, picking numerous prestigious awards including retaining the Manufacturer of the Year Award at the 2008 Building Awards. In 2008, Kingspan Insulated Panels entered the Sunday Times Best Green Companies Award. The application involved a rigorous assessment of all operations at the Divisional Head Office in Holywell, North Wales and a staff survey completed by over 40% of all employees.

Kingspan Insulated Panels finished 20th overall and 1st in Wales. It intends to apply again in 2009.

Kingspan Insulated Panels also entered the Royal Society for the Prevention of Accidents (ROSPA) award. There are three levels bronze silver and gold, and Kingspan Insulated Panels Holywell site won the gold award.

"Kingspan Panels has shown a commitment to protecting the health and well being of its employees and others. We hope other businesses and organisations will follow its lead and strive for continuous improvement in Health and safety management."

David Rawlings, ROSPA awards manager

Kingspan Insulated Panels has established a leading global position in design and manufacture of high quality **FIREsafe** Insulated Roof, Wall and Façade Systems for the construction industry. Kingspan's range of insulated panels has been successfully used across the globe on retail, distribution, commercial, industrial, leisure, hospital and education projects. The performance advantages of Kingspan Insulated Panel Systems are well recognised by property investors, building owners, designers and contractors.



- 3 Overall winner Wales, Sunday Times Best Green Companies award
- 4 Gold ROSPA award
- 5 Building Manufacturer of the Year Award for 2007 & 2008 and Best Sustainable Business Practice Award

## Our Approach to Sustainability

At Kingspan Insulated Panels the impetus created by engaging in GRI Sustainability Reporting over the last two years has been driving change throughout 2008. The company has reviewed its sustainability strategy to see how this remains applicable to the business and continues to expand on its achievements within the last year to deliver best practice in the areas where it operates.

### Sustainability Policy

Kingspan Insulated Panels is the most highly recognised brand in the markets which it serves across the world. Striving for sustainability in all its business products and operations is its corporate and personal responsibility. Kingspan Insulated Panels 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 Insulated Panels will:

- Incorporate the ethos of sustainability into the vision and values of the organisation; 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 Sustainability 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 deliver the Sustainability Vision & Policy.
- Implement a Code of Conduct and support sustainability guidelines for key suppliers, contractors and other interested parties to ensure they comply with the Kingspan Insulated Panels Sustainability Policy.
- Kingspan Insulated Panels is dedicated to adopting and becoming fully involved in supporting the implementation of the Sustainability Policy.
- The responsibility for implementing this vision and strategy lies with the Divisional Managing Director.
- This policy forms a framework for its activities, product design, services and decision-making and promotes engagement of the entire organisation and will be reviewed annually.



## Vision

“To be a global leader in sustainable business and establish a leading position in providing sustainable, renewable and affordable best practice solutions for the construction sector”



## Management Systems & Governance

Kingspan Insulated Panels reports to the Kingspan Group Board, which consists of 14 Directors - six of whom are Executives. The non-executive Chairman is responsible for the efficient and effective working of the Board, including timely communication with shareholders. For more information about the Kingspan Group Board and corporate governance, please refer to the Kingspan Group plc Annual Report and Financial Statements 2008, available at [www.kingspan.com](http://www.kingspan.com).

Kingspan's most significant risks in terms of product quality, health and safety and environment are managed primarily through formal management systems certified by the International Organization for Standardization (ISO) [www.iso.org](http://www.iso.org).

All its manufacturing sites have achieved ISO 9001 (quality management). Manufacturing sites at Kingscourt, Holywell, Sherburn and Leuze-en-Hainaut have achieved ISO 14001 (environmental management). In addition Kingscourt, Holywell & Sherburn sites have achieved OHSAS / ISO 18001 (health & safety). All these management systems are third party certified and audited and regularly audited.

7 A range of Kingspan products were used on the Blue Planet, Chatterley Valley project developed by Gazeley and designed by Chetwoods Architects

## Management of Key Environmental Risks & Opportunities

Kingspan's governance of environmental and social issues, particularly with regard to research and development is well established. The company has also developed a clear reporting structure for its priority environmental issues. For each issue there is a team at each manufacturing site, who feed information to the divisional environment team, headed by our Divisional Operations Director. Ultimately it feeds into the Divisional Sustainability Team, which is headed by Kingspan's Managing Director. Refer to Figure 1.

Kingspan is committed to training and updating all employees on environmental and sustainable initiatives across the Insulated Panels division.

The company recognises that there is more to do in formalising its approach to the management of the socio-economic aspects of sustainability and its wider sustainability impacts in terms of engagement with stakeholders throughout the supply chain.

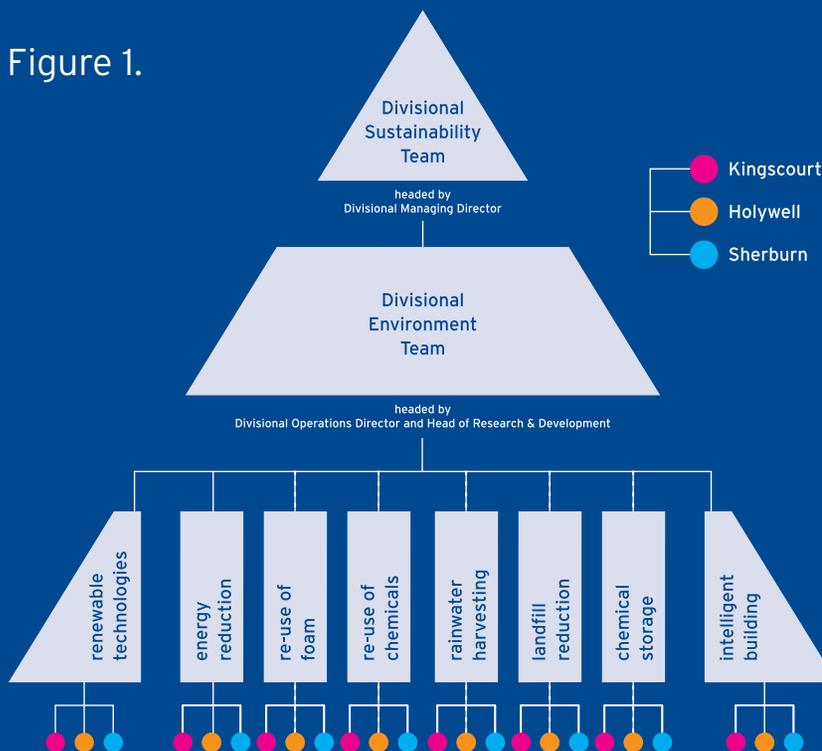
This report serves to highlight Kingspan's successes in managing its sustainability impacts in terms of health and safety, the environment and customer service. It also demonstrates sustainability impacts where performance needs to be improved and highlights what Kingspan intends to do in this regard.

During 2008 Kingspan did not receive any fines or non-monetary sanctions for non-compliance with environmental laws and regulations.

### [GRI EN28]

Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.

Figure 1.



## The sustainability

to reduce the impact of our products

### Sustainable Product Stewardship

Kingspan Insulated Panels is fully focused on developing products that are sustainable in their manufacture, use and disposal. In order to quantify the environmental impact of its product portfolio, Kingspan Insulated Panels has been working with the BRE and leading waste management companies over the last three years.

1 Our objective is to ensure sustainability is considered in the design and manufacture, and promoted in the installation, use and disposal of Kingspan Insulated Panel's products and services.



- 8 Recycling of Kingspan panel at shredder plant
- 9 Recycling of blue crown protectors
- 10 Pallet return scheme
- 11 Recycling of plastic packaging materials

### Building Research Establishment

Kingspan Insulated Panels has adopted the BRE's Environmental Profiles Assessment Methodology to quantify the environmental impact of its panels. To this end the BRE analysed data across a range of environmental issues, from cradle (inception and raw materials) to grave (disposal) of some of Kingspan Insulated Panels's key products. This is known as lifecycle assessment (LCA) and is becoming increasingly important given the pressures being placed upon the global environment. Following on from the successful certification of its Holywell manufactured **ECOsafe** insulated roof and wall systems last year, Kingspan Insulated Panels has now extended certification to cover its ThermoTile and ThermoStone range of products.

A revamped Green Guide to Specification, which underpins the Environmental Profiles awarded by BRE, was released in 2008. Last updated in 1999, the guide gives details of the points required for the materials section of the Code for

Sustainable Homes and environmental assessment method BREEAM. The new version contains 1,300 generic specifications compared to the previous 300. BRE issued new ratings for Kingspan's products under the new scheme.

### Green Guide and 'A+' Rating

Kingspan Insulated Panels is delighted that its Architectural Wall Panel and Trapezoidal Roof and Wall product range have all been reassessed under the revamped Green Guide to Specification and achieved 'A+' ratings. The benefits of BRE's Environmental Profiling Certification include: Independent, verified and audited performance according to internationally recognised methodology, Provision of data for achieving additional credits in BREEAM schemes, Provision of input data for Envest 2 (design tool for optimising building environmental impact and whole life costs) and Identification of areas for further improvement.

### [GRI EN26]

Initiatives to mitigate environmental impacts of products and services and extent of impact mitigation.

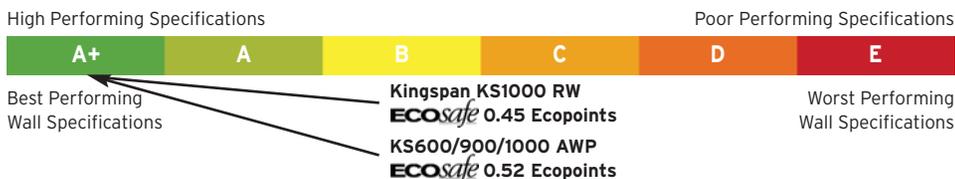


### Commercial Cradle to Grave Diagrams

#### Roof Specification\*



#### Wall Specification†



\* Low Pitched Roof: KS1000 RW Panel with **ECOSafe** insulation core manufactured at Holywell. Supported on cold rolled steel purlins and structural sections. Steel facings; generic organic coatings. Insulation 120mm core thickness.  
 † External Wall: KS1000 RW Panel with **ECOSafe** insulation core manufactured at Holywell vertically laid. Supported on cold rolled steel rails. Steel facings; generic organic coatings. Insulation 70mm core thickness. KS600/900/1000 AWP Panel with **ECOSafe** insulation core manufactured at Holywell horizontally laid. Supported on cold rolled steel rails and structural frame. Steel facings; generic organic coatings. Insulation 80mm core thickness.



### End-of-Life of Kingspan Insulated Panels

To ensure high quality, independent research, Kingspan Insulated Panels commissioned the Steel Construction Institute to prepare a report on the review of the current end-of-life disposal options for steel-based building envelope systems. This report originally completed in 2006 was updated in November 2007. One of the key outcomes of the report is that the recycling of insulation core from all types of metal cladding systems is problematic.

The research found that current demolition practice is thought to result in the insulation going to landfill - whether it be PUR, PIR, rock fibre or glass fibre. In the light of this conclusion, Kingspan Insulated Panels has been actively exploring ways of stimulating the end-of-life management of its panels, including an on-going reduction in the environmental footprint of new products to reduce the future legacy.



12 Topdek used on Porsche showroom in Bolton

13 Updated SCI End-of-life disposal options report 2007

### **Closed Loop Recycling**

In current production, waste PIR is now being recycled back into the manufacturing process at our Kingscourt site in Ireland. This process allows for all production waste to be fully recycled and has opened the door to allow Kingspan insulated panels to be fully recycled at the end of their life.

### **Managing Ozone-Depleting Substances**

Since January 2004, all Kingspan insulated panels have been manufactured without any Ozone Depleting Substances (ODS). However some panels were manufactured with ODS before 2004 and current legislation governing the recovery of ODS - EC Regulation 2037 / 2000 - requires recovery of ODS to be carried out 'if practicable'. A commercial service for dealing responsibly with the legacy of ODS containing insulated panels at their end-of-life is now available. Kingspan Insulated Panels is aware of a number of projects where panels have been re-processed successfully using refrigerator recycling plants. Kingspan has also been highly instrumental in the development of a Disposal Guide by the trade association Engineered Panels in Construction (EPIC), which is primarily aimed at offering guidance to demolition contractors dealing with panels at end-of-life. The Guide was commissioned during 2008 and published in 2009.

With the current EU ODS regulation under review, Kingspan's contribution is being seen as particularly helpful in identifying the technical and economic feasibility of disposal options. Indeed, the development of strong relationships with the recycling community has enabled detailed analysis to be achieved in support of the

European Commission's research in this area. The potential for voluntary carbon finance to be harnessed in this field is a particularly exciting prospect, since it may well stimulate the management of ODS-containing products well beyond the scope of insulated panels themselves.

### **Current Production & Cost Neutral Disposal**

Re-use is always the preferred option for panels but, if this is not possible, panels produced since 2004 are often suitable for processing through conventional shredder plants once they have reached the end of their useful life. The cost of processing panels through shredder plants is approximately cost neutral with the transport costs from site being covered by the scrap value of the steel. Economics for specific buildings will be dependent on transport distances and the prevailing price of scrap steel.

### **Recycling on Site**

Kingspan Insulated Panels is continuously looking at new and innovative ways to reduce waste on site through reuse and recycling. In line with Kingspan's policy to reduce, reuse and recycle, Kingspan Insulated Panels in the UK now offers several options to its customers to participate and reduce waste on site in a sustainable way. There are currently five options, free of charge or for a small fee, on offer to Kingspan customers to help reduce the impact on the environment and to manage the use of available resources: pallet return, plastic packaging recycling, a recycling service for panel off-cuts and spare panels, return of Blue crown protectors for KS1000 RW panel and return service for Polystyrene blocks for packs of Kingzip® Standing Seam panels.



### Importance of Installation & Training

Training is critical in reducing error and, therefore, waste in the construction process. Correct installation improves the air-tightness of the completed building and improves the life expectancy of the product. Therefore, Kingspan Insulated Panels offers a comprehensive Field Service's Engineering Support Package assisting our customers with contractor training on the installation of products - both theoretical and practical workshops along with a training scheme - issuing identification cards certifying training undertaken.

## Training

A wide range of stake holders, including architects, designers, contractors, legislators, insurers & suppliers visited the Kingspan energi centre in Holywell, North Wales in 2008 including 200 at specific 'Customer Days' and over 650 who attended specific product training and installation courses.

Across the Kingspan Insulated Panels division, training is fundamental and Kingspan employees are committed to ensuring that a wide range of stakeholders are educated on a range of issues concerning insulated panels and doors. In March 2008, 31 Belgian fire fighters from the branch organisation Bepobel came across to Holywell, Kingspan Insulated Panels Divisional Head Office for two full days of training and education on fire performance of panels which involved presentations from industry experts and a visit to Bodycote Warrington Fire's Laboratory.

## Total Panel Guarantee

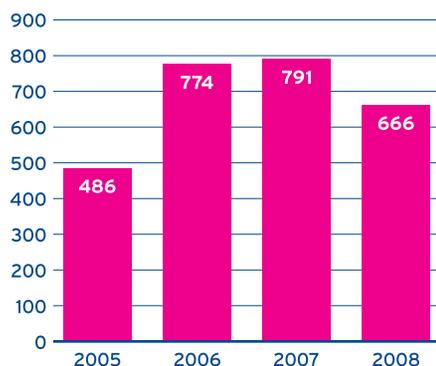
Kingspan Insulated Panels' Total Panel Guarantee offers: 25 year panel structural performance guarantee, 25 year panel thermal performance guarantee and up to 30 years coating guarantee.

The Kingspan Total Panel Guarantee provides assurance for all the key performance areas of an insulated roof, wall and façade system and ensures Kingspan insulated panels systems are designed for excellent airtight performance, which will optimise performance under the Energy Performance of Buildings Directive (EPBD).



## Contractor Training

(Total number of contractors trained)



## Site Visits

(Total number of site visits)

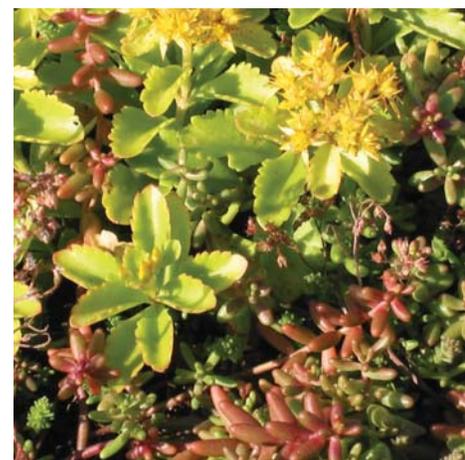


The  
**sustainability**  
to reduce our carbon footprint

## Carbon Management

The international climate change regime is gradually gearing up to replace the Kyoto Protocol with a framework designed to respond to ever increasing evidence of climate impact. Australia's Building Code comprehensively regulates energy efficiency, and requirements apply to new and existing buildings there. All buildings that are refurbished, altered or extended on the basis of a development application are covered by the Code.

**2** Our objective is to measure and actively reduce Kingspan Insulated Panels' carbon footprint, not only of our own operations, but also of our clients' buildings. We aim to go beyond carbon neutrality.



To stimulate additional energy efficiency efforts, a new dispensation is likely to require businesses to disclose the energy performance of commercial office buildings over 2,000m<sup>2</sup> from 2010. This could result in increased demand for insulation products. Meanwhile, a new cap & trade scheme (the Carbon Pollution Reduction Scheme) has also been proposed for heavy emitters. Kingspan's Australian Operations are not directly affected by this. There may, however, be a potential increase in demand for insulation products that could arise from enhanced efforts to reduce carbon emissions via this mechanism after 2010.

In Europe, the EPBD (from 2007), the Energy Services Directive (from 2009) and the National Action Plans on Energy Efficiency (from 2010) are driving improvements in buildings energy performance. Building Codes have been

strengthened in Belgium (Flanders), France and the Netherlands. The typical uplift associated with EPBD implementation there has been 15-20%, with further improvements expected after 2010.

Energy Efficiency requirements were introduced in Belgium in the 1990s, and the Brussels Capital Region has had a thermal regulation for new or renovated buildings since 2000. In France, a commitment was made following the 2007 'Grenelle de l'environnement' (Roundtable discussion) that all new buildings should comply with 'low consumption' standards from 2012 and be 'energy positive' by 2020. Refurbishment of existing buildings is being accelerated to 400,000 per year, with initial priority given to 800,000 public housing units that are in poor condition.

**[GRI EC2]**

Financial implications and other risks and opportunities for the organisation's activities due to climate change.

**[GRI EN3]**

Direct energy consumption by primary energy source.

**[GRI EN4]**

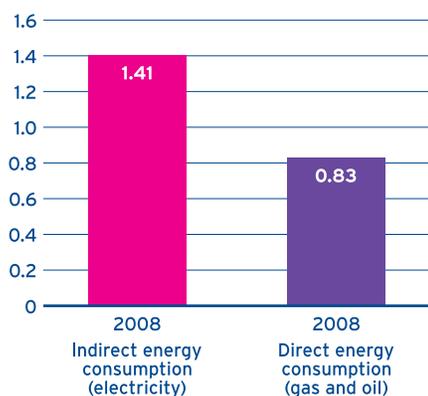
Indirect energy consumption by primary source.

**[GRI EN16]**

Total direct and indirect greenhouse gas emissions by weight.

**[GRI EN18]**

Initiatives to reduce greenhouse gas emissions



Our energy consumption for 2008 at the sites covered by this report are provided in the table below:

| Greenhouse Gas Emissions  | Performance in 2008                          |
|---|--|
| Total direct and indirect energy related greenhouse gas emissions | 13,229 Tonnes CO <sub>2</sub> e <sup>1</sup> |

**1 Summary of Conversion Factor Sources**

| Country                       | Source  |
|-------------------------------|---|
| Ireland                       | <a href="http://www.sei.ie/Publications/Statistics_Publications/Emission_Factors">http://www.sei.ie/Publications/Statistics_Publications/Emission_Factors</a> . |
| UK                            | Fact sheet CTL018: Energy and carbon conversions 2008 update Carbon Trust 2008.   |
| Netherlands - Gas             | The Netherlands: list of fuels and standard CO <sub>2</sub> emission factors SenterNovem Vreuls 2006.   |
| Netherlands - Electricity     | CO <sub>2</sub> & Energy: France & Worldwide 2009 edition Ministère de l'Écologie, de l'Énergie, du Développement durable et de l'Aménagement du territoire.    |
| Belgium - Electricity         | CO <sub>2</sub> & Energy: France & Worldwide 2009 edition Ministère de l'Écologie, de l'Énergie, du Développement durable et de l'Aménagement du territoire.    |
| Belgium - Oil (default value) | The GHG Indicator: UNEP Guidelines for Calculating GHG Emissions 2001.  |
| France                        | CO <sub>2</sub> & Energy: France & Worldwide 2009 edition Ministère de l'Écologie, de l'Énergie, du Développement durable et de l'Aménagement du territoire.    |
| Australia                     | National Greenhouse Accounts (NGA) factors Department of Climate Change Australian Government 2008 (Electricity factor is for New South Wales territory).       |
| New Zealand                   | All energy used by our office in New Zealand was supplied from 100% renewable sources.  |

The Netherlands is already very experienced in low-energy-building. Due to its adoption of certification methods that pre-date the EPBD, there are few problems issuing Energy Certificates for new buildings. The Directive is more difficult to implement for the existing building stock (built before 1997), which represents 93% of the total building stock in the Netherlands.

In the UK, the issuance of energy performance certificates and display energy certificates is leading to a better understanding of building energy performance and the results clearly point to the urgent need for more action. Again in the UK, the Climate Change Act was ratified. It imposes ever tighter and binding carbon budgets on the government.

The 2050 budget will involve an 80% reduction in emissions from their 1990 levels. There will be a variety of policies to make this happen, both in terms of energy supply and the management of energy demand. One policy - the Carbon Reduction Commitment is due to take effect from 2010 and will expand the areas of the economy covered by a cap & trade market mechanism. We can only hope that this will stimulate energy efficiency in non-domestic buildings. While there are now a variety of policies to tackle the carbon impact of new buildings, the real challenge is the reduction of impacts from the existing building stock - as these account for 45 - 50% of the UK's carbon emissions.

Kingspan Insulated Panels sponsored a major report on the opportunities for carbon reduction, energy security and employment growth available from an accelerated refurbishment programme for non-domestic buildings in the UK. The report was published in 2009 and identified the key benefits of such a programme as follows: -

- Annualised saving of 4.74 Mtons CO<sub>2</sub>-eq by 2022 equivalent to 2% of the reduction needed to achieve the 2022 non-traded carbon budget set by the Climate Change Committee set up under the Climate Change Act
- Depending on the scheduling of work between 50,000 and 75,000 long-term jobs could be created or retained within the construction sector
- Energy Cost Savings of £5.65 billion per year could be achieved in 2022 with typical payback of less than 5 years (total energy cost saving of over £40 billion between 2010 and 2022)
- Energy Security could be enhanced - with primary energy savings of 24,000 GWh per annum - equivalent to 1.25% of total UK primary energy requirements in 2022.

To view the full report visit [www.kingspanpanels.com/Research\\_Centre/Research.aspx](http://www.kingspanpanels.com/Research_Centre/Research.aspx).



Kingspan Insulated Panels was also active in reducing carbon emissions and energy consumption across the division. The combined cost savings of these projects are in the region of €147,000 per year and the combined carbon dioxide savings are in the region of 700 tonnes per year. These savings have been achieved from the following measures: -

- Switching lighting from 400W metal halide to 4x54W fluorescent
- Conversion of laminator heating burner from oil to natural gas and the elimination of electric heating
- Whole site lighting, involving 364 fittings, changed from 400W SON to 240W fluorescent
- In 2008 the solar photovoltaic panels and wind turbine at the Kingspan energy centre at Holywell delivered 4333 kWh electricity.

Other Projects were undertaken at the Holywell and Sherburn sites to improve energy and environmental performance more generally:-

- Installation of sub metering
- Installation of improved laminator ducting insulation
- Water harvesting to provide grey water to production lines during the blending stage
- Installation of low energy light fittings
- All factory heaters linked to Building Management Systems to control temperature and reduce fuel use
- Timers fitted to HP air compressors to turn them off out of hours or at weekends.

## Renewable Energy

At Holywell, Kingspan has been measuring wind speed on a meteorology mast for the past 12 months which will help the company determine the financial feasibility of installing a large scale wind turbine at the Holywell site. The division is committed to running all of its European manufacturing plants by means of renewable energy and is investigating renewable technologies for both its Kingscourt and Sherburn sites.

## Carbon Management Solutions - dcarbon8

In 2006, Kingspan Insulated Panels was the first UK manufacturer to sign up to membership of dcarbon8. dcarbon8 is a carbon solutions company, that works with companies to manage the carbon footprint associated with their business operations or product manufacture. Kingspan continues to be a member of dcarbon8 and is constantly looking at innovative and constructive ways of reducing its carbon footprint.



### [GRI EN7]

Initiatives to reduce indirect energy consumption and reductions achieved.

# The sustainability

to make the most of what we've got

## Optimise use of resources

There are resource implications during the whole lifecycle of our product. However, it is at its manufacturing sites where Kingspan has the greatest opportunity to control and thus optimise its use of resources and it has continued to test and implement ways to minimise waste and harmful emissions.

- 3** Our objective is to minimise waste, harmful emissions and water usage associated with the manufacture, distribution and, where possible, the end-of-life management of Kingspan Insulated Panel's products and services.



## Pollution

Any spills over 20kg are considered significant. In 2008 there was one significant spill which occurred at the Holywell site. The spill took place as a result of a faulty gauge on a raw material tank. The spill was contained within the tank bund and there were no releases into the environment. The tank has now been modified to ensure that this type of fault cannot happen again.

## Water

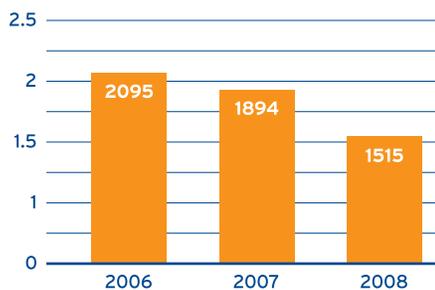
As a proportion of inputs into the manufacturing process, water is relatively small compared to other resources. However, Kingspan does use water for general catering and sanitary purposes at all of its sites. At Kingscourt it is now connected to a new water main and the utilities company put a water meter in during 2008. The total water usage for all sites for 2008 was 10,828 cubic metres.

Kingspan is committed to maximising our use of harvested rain water. In 2008 we harvested 139.6 cubic metres of rainwater which amounted to 1.3% of our total water use. We aim to increase the amount of water harvested and reused in 2009.

## Waste

Waste is a significant issue in the manufacturing sector, both for its growing cost implications and environmental impact. Waste is considered as part of our ISO 14001 management system and Kingspan is continually looking for new ways to reduce the generation of waste and where it is generated, to reuse and recycle wherever possible. Kingspan currently recycle steel, paper, cardboard, wood and plastic at all manufacturing sites. In 2008 a total of 1,553 tonnes of these materials were recycled. Kingspan Insulated Panels now offers a full pallet return service from its UK sites and it also launched services for recycling all Kingspan insulated panels packaging from construction sites. It also re-used approximately four tonnes of chemicals per month which would otherwise have been incinerated.

### Total Weight of Waste in Tonnes (landfill)



An ambitious waste to landfill reduction target of 20.0% was set for 2008. Kingspan did achieve this target with an overall reduction of waste to landfill of 20.0%. An ambitious target of a 20.0% reduction has again been set for 2009.

### [GRI EN8]

Total water withdrawal by source.

### [GRI EN22]

Total weight of waste by type and disposal method.

### [GRI EN23]

Total number and volume of significant spills.

### [GRI EN10]

Percentage and total volume of water recycled and reused.

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## Sustainable Building Design

With the introduction of the European Performance of Buildings Directive last year, pressure is growing to create the most sustainable buildings with the lowest energy usage. Kingspan Insulated Panels is well placed to meet this need as all of its products are designed to maximise performance of the buildings they are used in.

**4** Our objective is to consider best practice building design when constructing and refurbishing Kingspan Insulated Panels manufacturing facilities and ensure the sustainable management of all sites used by Kingspan Insulated Panels.

**19** A range of Kingspan products were used on the Blue Planet, Chatterley Valley project developed by Gazeley and designed by Chetwoods Architects



Image courtesy of Gazeley and Central Photography



There has been an increasing demand for Kingspan's **envirocare**® Technical Services during 2008. The advisory service was introduced in 2006 to meet the demand for sustainability advice from developers, designers, specifiers and construction engineers. Kingspan's **envirocare**® Technical Services offer a range of important services including:

- Provide whole building energy / CO<sub>2</sub> modelling for Part L2 and Section 6 compliance
- EnergiPanel and Solar air heating calculation service
- Provide project specific model specifications - either NBS or Kingspan format
- Attend design meetings
- Generate construction / junction details in line with current Building Regulations
- Provide thermal calculations for junctions ( $\Psi$  & f min values)
- Provide design wind load and snow load calculations
- Provide condensation risk and thermal performance calculations
- Provide roof drainage calculations
- Advise on general building physics issues
- Construction details approval service prior to installation
- Support of fire / insurance related issues
- Full technical product information support.

In 2008 the **envirocare**® team at Holywell alone received 36,101 incoming calls with technical queries and sent out 22,437 emails in response to enquiries and as technical updates.

#### [GRI EN6]

Initiatives to provide energy-efficient or renewable energy-based products and services and reductions in energy requirements as a result of these initiatives.



### Kingspan *ECOsafe* Insulated Panels

Kingspan now offers an improved *ECOsafe* insulation core for all its key panels. Kingspan *ECOsafe* insulated panels use an environmentally sustainable PIR insulation core and is the result of extensive research and development work to provide an optimised and sustainable solution for Kingspan's customers. All Kingspan *ECOsafe* insulated panels have a low GWP (Global Warming Potential) and help to deliver optimum performance in environmental assessment methods such as BREEAM. There is an active plan in place to have all panels produced by Kingspan *ECOsafe* in the near future.

### Building Research Establishment Environmental Assessment Methodology (BREEAM)

The Building Research Establishment (BRE) has developed an environmental assessment tool (BREEAM) which helps construction professionals calculate the environmental impacts of their building developments. A record number of buildings have been assessed under BREEAM this year, which is now estimated to have reduced the CO<sub>2</sub> emissions of the UK building stock by 4.5 million tonnes, equivalent to the emissions of 40,000 homes. Over 2,000 buildings have been assessed in 2008, a 40% increase on 2007 and the highest number in any one year since BREEAM's inception.

The BREEAM 2008 update came into force in August 2008. The changes suggest that BREEAM is getting more stringent and early indications are that the highest ratings are going to be significantly more difficult to achieve. While the areas of assessment under BREEAM 2008 will remain almost the same as under the previous regime, the environmental weightings in BREEAM 2008 will differ quite considerably from before, with the main changes to be found in the assessment of energy, transport, materials and waste plus the introduction of mandatory post-construction reviews. Greater importance will be given to energy, transport, material and waste in the weighting system with the aim of making it more difficult to achieve the points needed to achieve BREEAM Excellent and the new BREEAM Outstanding. Kingspan Insulated Panels is well placed to deliver against the new BREEAM points criteria.

The BRE launched a new scheme in spring 2009 to help industry reach a higher standard of sustainability in its existing buildings. 'BREEAM In-Use' is a self-assessment tool that allows data input from a variety of pre-existing sources, including Energy Performance Certificates or Display Energy Certificates. Buildings are evaluated according to their asset performance, building management performance, and organisational effectiveness. The assessment can be formalised either with a declaration of commitment to achieving an improved BREEAM In-Use rating, or with a full 3rd party certification and BREEAM In-Use rating for a building. The scheme should help building managers to reduce their running costs and improve the environmental performance of their existing buildings. It is designed to provide a route to Corporate Social Responsibility commitment and compliance with environmental legislation and standards.

The following credits are available if Kingspan insulated roof and wall panels are used for industrial buildings:

| Credit Ref | Credit Requirement   | Credits Available     | Justification   | Total Credits            |
|------------|--|-----------------------|---|--------------------------|
| Mat 1      | The credit assesses the Green Guide rating for the major building elements | 2 credits             | 2 credits available if panel used for both roof and walls as Kingspan <b>ECOSafe</b> panels have A+ rating under the Green Guide to Specification as per Mat 1 calculation tool | <b>2</b>                 |
|            |  | 1 exemplary credit    | 1 exemplary credit available as Kingspan panels score more than the minimum 4 required points as per the Mat 1 calculation tool (panels used on roof and wall)                  |                          |
|            |  | <b>3 total</b>        |   |                          |
| Mat 5      | Where 80% of the roof and wall are responsibly sourced                     | 3                     | Kingspan can offer ISO 14001 certificates from suppliers  | <b>3</b>                 |
| Mat 6      | Insulating materials have a low embodied energy                            | 1                     | 1 credit available if Kingspan <b>ECOSafe</b> panels used for both roof and wall as panels have A+ rating   | <b>1</b>                 |
|            | Insulation in the building has been responsibly sourced                    | 1                     | 1 credit available as Kingspan can offer ISO 14001 certificates from suppliers  | <b>1</b>                 |
|            |  | <b>2 total</b>        |   |                          |
| WST 1      | Diverting site waste to landfill   | 1 (contribution only) | Kingspan provides site services to manage waste such as pallets, packaging and panel off-cuts   | <b>Contribution only</b> |



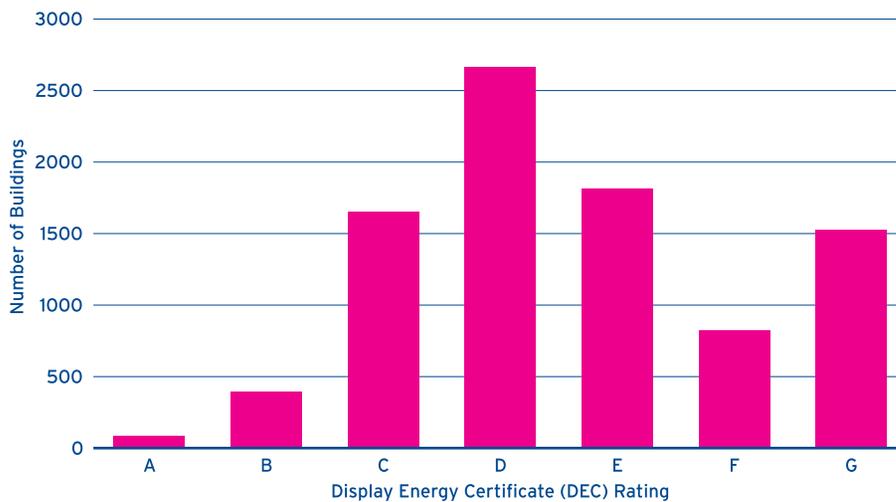
21

### Energy Performance of Buildings Directive (EPBD)

The EPBD has introduced measures across Europe to improve the energy performance of our buildings. Since October 2008, in England & Wales, all properties - homes and commercial - when bought, sold, built or rented need an Energy Performance Certificate (EPC). Public buildings will also need a Display Energy Certificate (DEC). The Energy Performance of Buildings Directive -

which all member states must adopt is part of European legislation. Early results from the UK show that one in six of public buildings that have been through an energy audit to obtain display energy certificates received the lowest possible energy efficiency rating.

The energy performance breakdown is summarised below: -



Source: The UK's approach to the thermal refurbishment of non-domestic buildings: A missed opportunity for bigger carbon emission reductions? Caleb Group & Kingspan Insulated Panels; 2009.

To view the full report visit [www.kingspanpanels.com/Research\\_Centre/Research.aspx](http://www.kingspanpanels.com/Research_Centre/Research.aspx).

There is an urgent need to introduce policies that will stimulate a large scale improvement of the energy performance of such buildings, and Kingspan Insulated Panels is well placed to contribute to such improvements.

The European Commission has now issued a 'recast' Energy Performance of Buildings Directive that will introduce more

challenging energy performance requirements from 2011. The new requirements should ensure that a larger proportion of buildings will be assessed for their energy performance, and to stimulate improvements between and within Member States through the sharing of energy performance benchmark data.



22

22 Kingspan Door Components in Leuze, Belgium manufactures panels for the production of insulated doors for domestic and non domestic applications

**[GRI EN6]**

Initiatives to provide energy-efficient or renewable energy-based products and service, and reductions in energy requirements as a result of these initiatives.

**Product Development**

Kingspan Insulated Panels is at the forefront of innovative design and product development. 2007 saw the introduction of Kingspan EnergiPanel and the development of our new Green Roof system, Kingspan Envirodek™. These products were used on different projects across the globe in 2008 with excellent results.



The Research and Development centre in Kingscourt, Ireland, is focused on creating innovative and sustainable product solutions to meet the demands of today's marketplace. The use of green roof technologies is continually growing as architects see the value in terms of biodiversity, storm water management, improved life expectancy and thermal performance of the roof as well as the enhancement of air quality by lowering CO<sub>2</sub> levels. Kingspan Envirodek™ is a structural green roof system that is demonstrated at our Kingspan energi centre and is now providing a sustainable solution to architects and developers across Europe.



## Kingspan EnergiPanel

Kingspan EnergiPanel is generally installed on the most southerly facing roof and / or wall elevations for optimum efficiency. The external profile of Kingspan EnergiPanel absorbs solar radiation and increases in temperature. The darker the external colour of the panel the greater the solar absorption. Low energy fans facilitate air flow up through hollow crowns and over the internal (collector) surface of the profile. As the air travels upwards through the voids it continues to

absorb heat energy before exiting the collector at the top of the elevation. The rate of airflow up through the panel is determined by the temperature of incoming air. Temperature sensors constantly monitor the external air temperature and vary the fan speed to ensure the supply air temperature is above the required internal temperature of the building.

### Kingspan EnergiPanel Case Study - Jai Xing Wal-Mart

Kingspan and FK Roofing Services were approached by Gazeley in early 2008 to design and supply a Solar Air Heating (SAH) system to provide renewable energy to contribute to the heating of the canteen building on the Jai Xing site of Wal-Mart. The system, based on Kingspan EnergiPanel, was designed by Kingspan and FKRS, in close co-operation with Gazeley personnel in China. A joint Kingspan / FK Roofing Services team visited Jai Xing, China to install and commission the system between 15th & 26th September 2008.

The system was successfully installed and fully commissioned to meet the deadline for handover to Wal-Mart. Post installation energy modeling calculations predict that the renewable energy generated from the EnergiPanel system will provide 20% of the building's energy requirements -

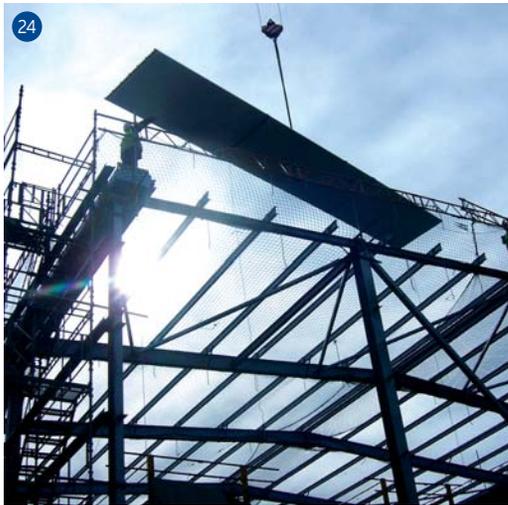
- Equivalent to 14.47 Mega Watt Hours of electricity per annum
- Saving 12,765kg CO<sub>2</sub> emissions per year
- Equivalent to the CO<sub>2</sub> absorbed by 10.8 acres or 43,832m<sup>2</sup> of forestry.

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## Ethical Procurement and Supply Chain Management

Given the large environmental impacts of Kingspan's raw materials, it is important to manage this process in the most sustainable way. Kingspan is engaging with its supply chain to achieve this, using its purchasing power to bring about lasting and positive change.

**5** Our objective is to develop an ethical procurement strategy for procuring materials and services. Engage with prioritised suppliers and contractors to ensure that they align to similar sustainability standards and seek to build long-term relationships with key suppliers and contractors.



## Suppliers

Kingspan aims to have all of its suppliers accredited to BS EN ISO 9001 / 14001 and OHSAS 18001, which cover quality, health and safety and environmental management. Although this is not currently compulsory for its suppliers, Kingspan has many long-standing relationships with them, and as such they are either working towards this accreditation, or have already achieved it.

Throughout 2008 Kingspan has worked closely with its customers on important issues such as the better management of site waste. It has introduced methods to dispose and recycle packaging more

effectively, and it has also launched a pallet return service. Kingspan has worked closely with many of its key customers and clients on mechanical handling solutions. The use of mechanical handling plant and equipment can reduce the time spent working at height and the need to manually handle panels, dramatically accelerating build times and reducing health and safety risks posed on-site. Also in 2008 work began on drafting an official Kingspan Ethical Procurement Strategy which the company hopes to launch in 2009.

## Sustainable Procurement of Materials

Steel is a major component of Kingspan's insulated panels and up to a maximum of 23% of the steel is recycled which means up to a maximum of 15% of the panel is recycled content.

Kingspan's work with the BRE on environmental profiles means that it continues to identify environmental impacts in its supply chain. It is using this to identify priorities for engagement with key suppliers to find ways to reduce this impact.

## Internal Procurement

All Kingspan literature is printed on paper sourced from 80% post consumer waste with the remaining 20% fibre Totally Chlorine Free (TCF). In recognition, the range has been awarded both the NAPM and Eugropa recycled marks, two of the most prestigious certificates available. The entire process strictly follows the Forest Stewardship Council (FSC) chain of custody and the printing process is free of Volatile Organic Compounds (VOCs). All inks used are vegetable based, allowing documents to be recycled.



## [GRI EN2]

Percentage of materials that are recycled input materials.



25 Kingspan Insulated Panels' provide product & installation training and CPDs

# The sustainability

to get everyone involved

## Stakeholder Engagement

Kingspan insulated panels are supplied directly to its customers who are primarily contractors, who fit its panels onsite. However, it also considers the architects, developers and end users who design and occupy its buildings to be key stakeholders and it is essential to the success of its business that it remains responsive to their needs. Kingspan maintains a variety of formal and informal networks through which it keeps abreast of stakeholder needs.

The diagram below shows our key stakeholder groups and how we engage with them:

**6** Our objective is to engage with key stakeholders in Kingspan Insulated Panels Sustainability Strategy and ensure our employees are fully involved in helping deliver the sustainability policy.



### Employee Awareness

Kingspan continues to train its employees at Holywell, Kingscourt and Sherburn in ISO 14001 and the wider sustainable development agenda. Employees at all its sites have been issued with Environmental Awareness and Energy Awareness booklets. Kingspan is in the process of drafting a Waste Awareness booklet for all employees also. Employees at its Australian manufacturing facility, its Belgian Door Components business and at its sales offices in Belgium, France and the Netherlands will also receive basic sustainability training in 2009.

### Kingspan Insulated Panels Market Communications

Kingspan ensures that this sustainability report is sent to a large stakeholder base mainly through an e-bulletin with a link to its website. Also in 2008 it used three light-hearted animations on Renewables, End of life Management and an Introduction to Sustainability to reach out to stakeholders on important issues in relation to sustainability.

Every month in 2008 Kingspan sent a personalised e-bulletin to all its contacts. These included architects and contractors and each e-bulletin was tailored to suit its audience. Internal staff also received a copy. This ensured that all stakeholders were updated on various issues within the industry with a large focus on environmental and sustainable topics. Further to the GRI report, it published literature on introducing the Energy Performance of Buildings Directive (EPBD) and its implications for the countries in which it operates.

### Source Out of 10



### Customer Engagement

A customer survey was carried out during the spring of 2008 in the UK by Kingspan Insulated Panels, questioning key stakeholders on a range of key issues. The overall customer satisfaction score achieved was 8.6 out of a possible 10.



### [GRI PR5]

Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.

# The sustainability

to consider the interests of others

## Social Responsibility

Kingspan's employees and contractors are essential to its success. Therefore, it is the company's responsibility to ensure that employees' health, safety and well-being is considered at all times. It is committed to communicating with its employees. Some formal methods of union consultation and a works council are used, however Kingspan is also keen to promote direct communication with its employees through a variety of methods.

**7** Our objective is to support Kingspan Insulated Panels' employees and uphold our corporate social responsibility to the communities in which we do business.



**27** The Kingspan team and local volunteers taking part in "The Big Dee Day" September 2008

## Our Employees

| Site      | Full-Time Permanent | Part-Time Permanent | Temporary | Management Positions<br>(including directors) | Turnover |
|-----------|---------------------|---------------------|-----------|---|----------|
| All Sites | 1141                | 38                  | 21        | 133   | 7.1%     |

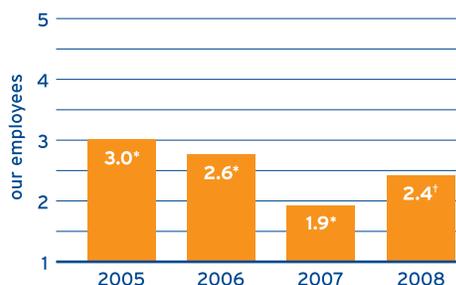
Note: All figures are based upon December 2008.

In 2008 all employees received a formal performance appraisal which included an assessment of training needs.

391 of our employees are covered by collective bargain arrangements which amounts to 33% of all employees.

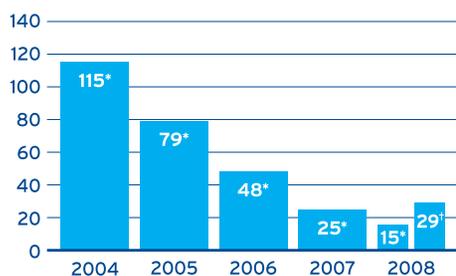
By 2006 Kingspan had achieved OHSAS 18001 at all of its manufacturing sites. OHSAS 18001, in conjunction with increased resources applied to the management of health and safety, has helped to deliver significant improvement in its performance. There were no fatalities in 2008.

## Absenteeism Rates



## Total Accidents

(1-3 days absence)

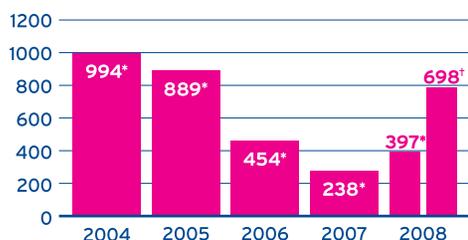


## Total Reportable Accidents

(Greater than 3 days absence)

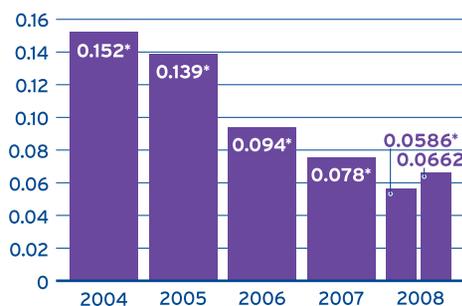


## Days Lost Due to Accidents



## Accident Rate

(per 1000 hours worked)



\* Rates for our Holywell, Kingscourt & Sherburn facilities.

† Whole division.

## [GRI LA1]

Total workforce by employment type, employment contract and region.

## [GRI LA7]

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

## [GRI LA12]

Percentage of employees receiving regular performance and career development reviews.

## [GRI LA4]

Percentage of employees covered by collective bargaining agreements.

## [LA2] Partial

Total number & rate of employee turnover by age group, gender & region.



### [GRI EC1] Partial

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.

### Community Investment

As a large and successful international company, Kingspan recognises its role in contributing to the communities in which it operates. In 2008 Kingspan donated money to community investment projects including matched sponsorship to employees taking part in charitable events. Kingspan Insulated Panels is also supporting the Welsh Assembly's "All Wales Coastal Path Project" for 2012. Across the Insulated Panels division it endeavours to work closely with the communities in which it operates to ensure it brings as much benefit to the regions as possible.

### Big Dee Day - Estuary Clean-Up

Kingspan Insulated Panels once again hosted the breakfast launch for "The Big Dee Day" on behalf of Flintshire Countryside Services, supporting the clean-up of the Dee Estuary, which is adjacent to its site in Holywell, North Wales. Local businesses, community groups, schools and local authorities including many from Kingspan Insulated Panels turned up in force again this year to clean the Dee Estuary.

The environmental campaigner Pip Berry MBE officially launched the event at the Kingspan energi centre. In 2007 Kingspan Insulated Panels also donated £10,000 towards the refurbishment of Greenfield Dock, the benefits of this can now be seen with a complete re-tarmacking of the dock currently been undertaken.

### Brussels 20 km

A team of 15 employees from Kingspan Door Components in Belgium ran the Brussels 20 km race on May 25th 2008 to raise money for a Belgian cancer charity named Televie. It was a glorious day, all the team finished the race with the best time being 1 hour and 40 minutes. €4,000+ was raised for Televie and after the success of the event this year, the team has already started training for the 2009 20 km Brussels run.

### [GRI EN11]

Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.

### [GRI EN14]

Strategies, current actions, and future plans for managing impacts on biodiversity.

## Business in the Community

"BITC is an organisation dedicated to mobilising business for good and recognises Kingspan's record as a responsible business. Kingspan Insulated Panels is a company with a strong and proud record in both its local community and particularly in its efforts to tackle climate change. As a major employer in the area it has demonstrated clear support for community engagement amongst its staff. Employees have engaged with its local community through a direct involvement in the local Community First Partnership and its employees have also assisted in local environmental projects such as major beach clean programmes in the local area.

Kingspan has shown considerable innovation in its desire to ensure that its product portfolio promotes and supports better environmental performance across the construction industry. Non-domestic buildings contribute around 18% of the UK's CO<sub>2</sub> emissions annually. Kingspan, in addition to producing products designed to maximise the ecological performance of non-domestic buildings, has been improving the profile of the construction process through innovative waste minimisation. For example Kingspan has sought to maximise the recyclability of its insulated panels by providing recycling bins on construction sites deploying its products. Such activities have shown a considerable regard to the impact that their own products and use of, have on the environment and have been highlighted as best practice by bodies such as the Welsh Assembly Government."

### Owen Evans

Director, Business in the Community

# 2008 Targets Update

| Objectives   | 2008 Targets   | Achievement   |
|--|--|---|
| <b>Sustainable Product Stewardship</b>                   | To maintain the number of contractors being trained and site visits being made.  | The number of contractors trained fell by 15.8% primarily due to training achieved in prior years. Site visits increased slightly.  |
|  | Extend certified Environmental Profiles to a wider range of panel products.  | Environmental profile certification was successfully extended to ThermoTile and Woodtherm™.   |
|  | Commit to further investigation and work on recycling insulation foam.   | Good progress was made on recycling. See Page 15.   |
| <b>Carbon Management</b>                                 | Continue to work with dcarbon8 to assess and reduce our carbon footprint.  | We continued to work with dcarbon8 in 2008 and maintained our membership.   |
|  | Continue the process towards maximising use of renewable energy and other energy sources to reduce energy requirements at all our sites.                       | Achieved - see page 17.   |
|  | To monitor the wind speed at Holywell with a view to making an investment decision on the viability of a wind turbine to provide renewable energy to the site. | A 45m mast to measure wind speed at Holywell was installed in April 2008. Monitoring is ongoing.  |
| <b>Optimise Use of Resources</b>                         | To report on water usage in 2008.  | Achieved - see page 25.   |
|  | Consider investment in schemes to reduce further the risk of pollution.  | Achieved - see page 25.   |
|  | To reduce waste to landfill by 20% compared to 2007.   | Achieved - see page 25.   |
| <b>Sustainable Building Design</b>                       | Publish a minimum of two new brochures / white papers on subjects associated with sustainable building design.   | Achieved. Kingspan published a brochure on the Energy Performance of Building Directive and a brochure, aimed at contractors, detailing the services provided by Kingspan for dealing with site waste.  |
|  | Launch a minimum of one new product with the aim of enhancing the environmental sustainability of buildings.   | Kingspan launched Wall-Lite in 2008 - an extruded high performance, fully recyclable, polycarbonate panel to provide enhanced daylighting in buildings. Use of the panel helps to minimise the use of electrical lighting and thereby reduce electricity use. |
| <b>Ethical Procurement &amp; Supply Chain Management</b> | To further the development of a Kingspan Insulated Panels responsible procurement policy to cover ethical and environmental issues in all procurement.         | Ongoing.  |
|  | Use environmental profile data to target suppliers to reduce overall environmental impact.   | Ongoing - discussions with suppliers are targeting at increasing recycled content (with consequent improvement in environmental profile).   |
| <b>Stakeholder Engagement</b>                            | Set in place more formal measures for monitoring and assessing employee training.  | Ongoing.  |
|  | A minimum of 1,000 customers to attend Kingspan energi centre in 2008.   | Achieved through targeted customer days and product training.   |
|  | Issue a Waste Awareness Booklet to all employees.  | Delayed in 2008 owing to restructuring. Target for 2009.  |
| <b>Social Responsibility</b>                             | Work with Flintshire Countryside Services to help protect and develop the Dee Estuary coastline.   | Achieved - Hosted a successful Big Dee Day launch at Holywell. Improvements to Greenfield dock, paid for partly by a £10,000 donation from Kingspan were started in 2008.   |
|  | Continue to develop our Community Investment Strategy.   | Ongoing discussion in our Divisional Sustainability Team.   |

| Objectives   | 2009 Targets   |
|--|--|
| <b>Sustainable Product Stewardship</b>                   | To train a minimum of 500 contractors at the Holywell visitor centre, and conduct a minimum of 400 site visits.                                      |
|  | Extend certified Environmental Profiles to a wider range of panel products.  |
|  | Promote knowledge of the recycling options for Kingspan panels - both current and historical production.   |
| <b>Carbon Management</b>                                 | Continue to work with dcarbon8 to assess and reduce our carbon footprint.  |
|  | Continue the process towards achieving onsite renewable energy production at all our sites.  |
|  | Issue waste awareness booklet to all employees.  |
|  | Reduce Divisional carbon footprint by 667 tonnes CO <sub>2</sub> .   |
| <b>Optimise Use of Resources</b>                         | To double our use of harvested rainwater.  |
|  | To reduce waste to landfill by 20% compared to 2008.   |
|  | To promote the return of packaging from construction sites.  |
|  | To reduce primary energy consumption by 5%.  |
| <b>Sustainable Building Design</b>                       | Publish a minimum of 2 new brochures / white papers on subjects associated with sustainable building design.   |
|  | Launch a minimum of one new product with the aim of enhancing the environmental sustainability of buildings.   |
| <b>Ethical Procurement &amp; Supply Chain Management</b> | To further develop a specific Kingspan Insulated Panels responsible procurement policy to cover ethical and environmental issues in all procurement. |
|  | Use environmental profile data to target suppliers to reduce overall environmental impact.   |
| <b>Stakeholder Engagement</b>                            | Further develop a strategy for measurement of employee training across the Division.   |
|  | Develop our relationships with key stakeholders including trade associations and Government bodies to help promote sustainable construction.         |
| <b>Social Responsibility</b>                             | To increase matched giving for employee fundraising.   |
|  | To review and disseminate our community investment strategy.   |

## 2009 Targets

# GRI Content Index

| Profile Indicators | Description   | Page Number  |
|--------------------|---|--|
| 1.1                | Statement from the most senior decision-maker of the organisation about the relevance of sustainability to the organisation and its strategy. | 6-7  |
| 2.1                | Name of the Organisation.   | ISFC   |
| 2.2                | Primary brands, products and / or services.   | 8-9  |
| 2.3                | Operational structure of the organisation, including main divisions, operating companies, subsidiaries and joint ventures.                    | ISFC   |
| 2.4                | Location of the organisation's headquarters.  | ISFC   |
| 2.5                | Number of countries where the organisation operates.  | 3  |
| 2.6                | Nature of ownership and legal form.   | ISFC   |
| 2.7                | Markets served.   | 3  |
| 2.8                | Scale of the reporting organisation.  | 8  |
| 2.9                | Significant changes during the reporting period.  | ISFC   |
| 2.10               | Awards received in the reporting period.  | 9  |
| 3.1                | Reporting period.   | ISFC   |
| 3.2                | Date of most recent report.   | ISFC   |
| 3.3                | Reporting cycle.  | ISFC   |
| 3.4                | Contact point for questions regarding the report or its contents.   | BC   |
| 3.5                | Process for defining report content.  | 10   |
| 3.6                | Boundary of the report.   | ISFC   |
| 3.7                | Limitations on the scope or boundary of the report.   | ISFC   |
| 3.8                | Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations and other entities.                             | Kingspan Insulated Panels Division does not have joint ventures, subsidiaries, leased facilities or outsourced operations. |
| 3.10               | Explanation of the effect of any re-statements of information provided in earlier reports.  | Not Applicable.  |
| 3.11               | Significant changes from previous reporting periods in the scope, boundary or measurement methods applied.                                    | The report has been expanded to cover our operations in Belgium, Holland, France, Australia & New Zealand.                 |
| 3.12               | GRI content index.  | 44-45  |
| 4.1                | Governance structure of the organisation.   | 12-13  |
| 4.2                | Indicate whether the chair of the highest governance body is also an executive officer.   | 12   |
| 4.3                | Number of members of the highest governance body that are non-executive members.  | 12   |
| 4.4                | Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.                             | 12   |
| 4.14               | List of stakeholder groups engaged by the organisation.   | 36   |
| 4.15               | Basis for identification and selection of stakeholders with whom to engage.   | 36   |

ISFC = Inside Front Cover, BC = Back Cover

| Economic Performance Indicators | Description   | Page Number | Extent of Reporting |
|---------------------------------|---|-------------|---------------------|
| 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. | 40          | Partial             |
| EC2                             | Financial implications and other risks and opportunities for the organisation's activities due to climate change.   | 21          | Fully               |

| Environmental Performance Indicators | Description  | Page Number | Extent of Reporting |
|--------------------------------------|--|-------------|---------------------|
| EN2                                  | Percentage of materials used that are recycled input materials.  | 35          | Fully               |
| EN3                                  | Direct energy consumption by primary energy source.  | 21          | Fully               |
| EN4                                  | Indirect energy consumption by primary source.   | 21          | Fully               |
| EN6                                  | Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives. | 27          | Fully               |
| EN7                                  | Initiatives to reduce indirect energy consumption and reductions achieved.   | 23          | Fully               |
| EN8                                  | Total water withdrawal by source.  | 25          | Fully               |
| EN10                                 | Percentage and total volume of water recycled and reused.  | 25          | Fully               |
| EN11                                 | Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.               | 41          | Fully               |
| EN14                                 | Strategies, current actions, and future plans for managing impacts on biodiversity.  | 41          | Fully               |
| EN16                                 | Total direct and indirect greenhouse gas emissions by weight.  | 21          | Fully               |
| EN18                                 | Initiatives to reduce greenhouse gas emissions and reductions achieved.  | 21          | Fully               |
| EN22                                 | Total weight of waste by type and disposal method.   | 25          | Fully               |
| EN23                                 | Total number and volume of significant spills.   | 25          | Fully               |
| EN26                                 | Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.   | 15          | Fully               |
| EN28                                 | Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.                       | 13          | Fully               |

| Labour Practice Indicators | Description  | Page Number | Extent of Reporting |
|----------------------------|--|-------------|---------------------|
| LA1                        | Total workforce by employment type, employment contract, and region.   | 39          | Fully               |
| LA2                        | Total number and rate of employee turnover by age group, gender, and region.   | 39          | Partial             |
| LA4                        | Percentage of employees covered by collective bargaining agreements.   | 39          | Fully               |
| LA7                        | Rates of injury, occupational diseases, lost days, and absenteeism, and number of work related fatalities by region. | 39          | Fully               |
| LA12                       | Percentage of employees receiving regular performance and career development reviews.                                | 39          | Fully               |

| Product Performance Responsibility Indicators | Description   | Page Number | Extent of Reporting |
|---|---|-------------|---------------------|
| PR5   | Practices related to customer satisfaction, including results of surveys measuring customer satisfaction. | 37          | Fully               |

## Acknowledgements

- **Caleb Management Services Ltd**

Caleb Management Services is a leading UK consultancy in the field of building efficiency, sustainable construction, climate change and the wider sustainability agenda. Much of this work is as a policy adviser to Government and its agencies.

The Old Dairy, Woodend Farm, Cromhall, Wotton-under-Edge,  
South Gloucestershire, GL12 8AA

Tel: +44 (0) 1454 269 330 [www.calebgroup.net](http://www.calebgroup.net)





For more information and to provide feedback on this report please visit:  
[www.kingspanpanels.com/responsibility](http://www.kingspanpanels.com/responsibility)

For direct enquiries please contact:

**Head Office, Kingspan Insulated Panels, Greenfield Business Park No. 2, Holywell, Flintshire CH8 7GJ**  
Tel: **+44 (0) 1352 716100** Fax: **+44 (0) 1352 710161** [info@kingspanpanels.com](mailto:info@kingspanpanels.com)

Insulated Panels Division Sites:

**Carrickmacross Rd, Kingscourt, Co. Cavan, Ireland**

**Sherburn, Malton, North Yorkshire YO17 8PQ, UK**

**Voorenswei 1, Postbus 13, 6669 ZG Dodewaard, Netherlands**

**Bouwelven 17, Industriepark Klein Gent, 2280 Grobbendonk, Belgium**

**3 rue Claude Chappe, Bâtiment 3, Parc d'affaires de Crécy, 69370 Saint Didier au Mont d'Or, France**

**38-52 Dunheved Circuit, St Marys, NSW 2760, Australia**

**15 Ron Guthrey Road, Harewood, Christchurch, New Zealand**

**Kingspan Door Components, Zone Industrielle de l'Europe 1A, 7900 Leuze-en-Hainaut, Belgium**