

## Corporate Social Responsibility Report 2008

Sustainable Performance and Growth



## CRH, as an international leader in the building materials sector, is committed to ethically and responsibly managing all aspects of its operations relating to employees, customers, neighbours and local communities, shareholders and other stakeholders.

CRH is committed to embedding Corporate Social Responsibility (CSR) as an integral component of its performance and growth strategy and to reporting annually on CSR performance.

This is CRH's sixth Corporate Social Responsibility (CSR) Report and relates to activities in 2008. Data from 100% of Group subsidiaries is included in this Report. Data from joint ventures and/or associates is noted as appropriate on a percentage shareholding basis where relevant.



Sunflowers bloom in the claypit operated by Big River Industries Inc., in Erwinville, Louisiana, USA. Brian Dowden, Plant Manager (right) and Ray Henry, Plant Supervisor (left) compare notes in fields which have been specifically planted to assist with erosion control and soil stabilisation in this active site. Clay is extracted by Big River Industries (part of CRH's Oldcastle Products and Distribution Group) for use in the production of lightweight aggregates used in a wide range of applications across more than twenty States.

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## A Message from the CEO



Myles Lee

#### Welcome

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Welcome to this, our sixth annual Corporate Social Responsibility Report. It describes our continued progress in the four key CSR areas: corporate governance, environment and climate change, health & safety and social.

2008 saw major changes in the financial, economic and business climate worldwide. These events necessitated a significant shift in CRH's short-term focus and a significant curtailment of development activity as the economic environment deteriorated. Despite this, we have continued to pursue our CSR mission with enthusiasm and persistence and will do so into the future. We firmly believe that excellence in CSR performance is entirely consistent with and enhances our strong overall corporate performance.

#### **Corporate Governance**

Corporate Governance at CRH is recognised to be amongst the best in class. At Board level, we comply fully with the requirements of IFRS reporting as well as those of the Combined Code on Corporate Governance and also with the provisions of the Sarbanes-Oxley Act in so far as they apply to CRH. At an operational level, in recognition of "Our positive commitment to CSR is a defining characteristic of CRH. Much progress has been made, and more remains to be achieved, as we strive to meet the ever-increasing expectations of all our stakeholders. We believe that achieving these expectations will be positive for our business and will enhance our strong corporate performance. During 2008 we maintained our distinguished record of being ranked among sector leaders by leading Socially Responsible Investment (SRI) rating agencies."

our increasingly global reach and increasing stakeholder expectations, we produced and rolled out an updated Code of Business Conduct during 2008.

#### **Environment and Climate Change**

We acknowledge the challenges that climate change presents to humanity and to our businesses and we are committed to playing our part in developing pragmatic solutions. We continue to play a central role in the Cement Sustainability Initiative (CSI) of the World Business Council for Sustainable Development (WBCSD), and we actively support its pioneering work in developing and promoting industry solutions.

We have made a commitment to achieve a 15% reduction in the specific  $CO_2$  emissions from the portfolio of cement plants under operational control in 2007 by 2015 (base year 1990). We continue to invest to ensure we will deliver on this commitment.

In all our activities, increasing energy efficiency and reducing  $CO_2$ emissions remains a major focus. We see climate change and high energy costs as twin innovative driving forces of the future and

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we recognise that the challenges of today can quickly become the opportunities of tomorrow. In addition, many of our core products can contribute to climate change mitigation and adaptation.

On the broad environmental front we continue, through ongoing systematic plant upgrading, to make progress in increasing energy efficiency, reducing waste, optimising water usage and recycling more secondary materials and fuels. We believe all of these initiatives are not only environmentally-positive but also business-positive.

#### Health & Safety

We are pleased to report that we achieved a further 20% reduction in our accident frequency rate in 2008 versus 2007. Through relentless focus and commitment of safety resources, we expect further significant improvement in 2009 and beyond.

In practice, we require safety to be the top agenda item at operational meetings, reflecting our strong daily commitment to working safely. Our key safety management indicators are improving and, in parallel, we continue to strengthen our safety management of contractors who historically have had poorer safety records.

We are very disappointed, and deeply regret, that there were 8 fatalities (7 employee and 1 contractor) in our subsidiaries in 2008. Though below sector average, every fatality is a tragedy too many. We are now implementing a Groupwide strategic plan for the elimination of fatalities. This plan will concentrate on the identified causes of fatalities and top-down management attention will be given to appropriate communication and training throughout the organisation.

#### Social

A defining characteristic of CRH is our decentralized structure which fosters vibrant local entrepreneurship and gives our people the opportunity to develop and excel in their careers. We aim to be the employer of choice in all our operating regions and to optimally match our resources to the demands of our seasonal and cyclical industry. We see ongoing good employee relations as a testament to the entrepreneurial CRH culture and to the positive working environment that we strive to foster across the Group.

We have a very diverse customer base across all our activities and we continually seek to be the supplier of choice. In highly competitive markets, particularly in the current challenging economic environment,

excellence in customer service is always our priority. We also value our commercial relationships with our wide supplier base, insisting always on good quality, fair prices and ethical business practices.

#### Communications

We continue our open-door policy with key stakeholder groups. At Group level, we discuss our CSR performance openly with the investor community, third-party rating agencies and other interested parties. At company level we are in regular dialogue with our employees, local communities, national and local authorities and permitting agencies, thus underlining our commitment to operate as a good neighbour.

This CSR Report is posted on our website and made available to all stakeholders.

#### Verification/Recognitions

In 2005, CRH set a precedent by being the first in its sector to achieve full external verification of its CSR reporting. Our 2008 Report has been verified in its entirety by Det Norske Veritas (DNV). This is a very positive process, both internally and externally and we will continue to work to improve the quality and accuracy of our CSR reporting.

During 2008 CRH was once again distinguished in its ranking among the sector leaders by the leading Socially Responsible Investment (SRI) rating agencies. We continued as a constituent member of the FTSE4Good Index and the Dow Jones World and STOXX Sustainability Indexes. We also received the additional accolades of "Gold Class" and "Sector Mover" from Sustainability Asset Management (SAM). We were particularly pleased to have been very highly rated by GovernanceMetrics International, which specialises in corporate governance rating.

#### Conclusion

CRH continues to achieve considerable CSR progress, as we pursue our ongoing mission of Sustainable Performance and Growth. Each year marks progress on that mission and I would like to assure all our stakeholders that we are solidly committed to meeting their expectations in the years ahead, despite the challenging economic backdrop. We will continue to keep you regularly informed on our CSR progress and we welcome your feedback on our performance throughout the year.

www.crh.com

## CSR in CRH

This flowchart outlines how CRH applies CSR concepts in the daily management of corporate governance, environment and climate change, health & safety and social activities through the Group. These four areas encompass all that is material to the scope of the Group's CSR performance and reporting, and reflect the interests of all stakeholders.



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Corporate Governance		
Key Area	Progress to 2008	Future Objectives
Compliance with Statutory Requirements	Reporting continued to meet all requirements (IFRS, Combined Code, Sarbanes-Oxley, US GAAP)	Ensure ongoing highest standards of corporate governance
Risk Management	2008 Risk Review found that all risks are managed appropriately	Continue to proactively manage all risks, including new risks
Code of Conduct & Employee Hotline	Revised Code of Business Conduct rolled out Groupwide in 2008	Continue to refine & roll out to acquisitions as soon as practicable

Environment & Climate Change		
Key Area	Progress to 2008	Future Objectives
Policy Implementation	Implementation throughout the Group remained a priority	Continue to refine & roll out to acquisitions as soon as practicable
Review Process	Annual review carried out and results reported to Board for 2008	Continue to refine process, further increase accuracy of data
Climate Change	On target to reduce specific cement emissions by 15% (2015 v 1990) for plants under operational control in 2007	Continue progress towards achieving target through optimisation of plant operations & major capital expenditure projects
Air Emissions	On target to reduce cement dust emissions by 50% & NOx by 10% (2015 v 2006) while maintaining low SO <sub>X</sub>	Proceed with investments that will ensure these targets are met
Energy, Water, Waste, Recycling	Progressive improvements being achieved on all parameters	Continue to reduce specific energy consumption, specific emissions & increase recycling
Quarry & Pit Reinstatement & Biodiversity	92% of sites now have reinstatement plans while biodiversity plans continue to be developed	Continue to develop reinstatement plans for all quarries & pits, with biodiversity plans where appropriate
Environmental Innovations & Awards	Continued high number of awards, successes in innovations	Continue to drive innovation & promote awards

Health & Safety		
Key Area	Progress to 2008	Future Objectives
Policy Implementation	Implementation throughout the Group remained a priority	Continue to refine & roll out to acquisitions as soon as practicable
Review Process	Annual review carried out and results reported to Board for 2008	Continue to refine process, further increase accuracy of data
Safety Management	Achieved 20% reduction in accident frequency rate compared to 2007	Aim for zero fatalities & ultimately zero accidents
Safety Innovations & Awards	Continued high number of awards, successes in innovations	Continue to drive innovation & promote awards

Social		
Key Area	Progress to 2008	Future Objectives
Policy Implementation	Implementation throughout the Group remained a priority	Continue to refine & roll out to acquisitions as soon as practicable
Review Process	Annual review carried out and results reported to Board for 2008	Continue to refine process, aim to further increase accuracy of data collection
Employee Development & Communications	Programmes rolled out throughout the Group at regional & local levels	Continue to be an employer of choice & motivate employees to deliver to their full potential
Management Development	Management development programmes continued to provide future world-class leaders	Extend the development programmes to continue to supply the depth & breadth of skills for a rapidly growing organisation
Knowledge Transfer	Best practice activities continued in all key activities	Continue to drive horizontal knowledge-sharing so that all activities are operated at world-class efficiencies
Suppliers & Customers	Extensive supplier & customer relationship management continued at regional & local level	Continue to be the supplier & customer of choice, insisting on ethical standards

Stakeholder Dialogue		
Key Area	Progress to 2008	Future Objectives
Stakeholder Communications	Extensive communication programmes continued with employees, investors, local NGOs & other interested parties	Continue to communicate openly with stakeholders & implement their feedback
Community Liaison	Extensive programmes continued at local & community levels	Continue to grow these programmes in all regions of operation
SRI Rating Agencies	Positive reviews received from leading Agencies	Aim for sector leadership
GRI Guidelines	Adopted the GRI G3 guidelines, achieved the "A+" level	Continue to achieve "A+" application level
External Verification	2004,2005,2006,2007 & 2008 reports verified by DNV	Maintain CSR external verification, improving annual reporting

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## CRH – Profile International Leader in Building Materials

This section provides context to this Report by profiling CRH's history, range of activities, unique geographic, segmental and market balance, distinctive culture and unrivalled record of performance and growth.

A more comprehensive record of the Group's activities and performance is available in the 2008 CRH Annual Report, Annual Report on Form 20-F and on www.crh.com.



## Introduction

CRH plc, the international building materials group ("the Group"), was founded in 1970 following the merger of two leading Irish companies, Cement Limited and Roadstone Limited. The Group was originally called "Cement Roadstone Holdings", later abbreviated to CRH. Today, CRH is one of the five largest international groups in its sector and has its headquarters at Belgard Castle in Dublin, Ireland.

CRH's strategic vision is clear and consistent – be a responsible international leader in building materials delivering superior performance and growth. In performance, CRH has achieved an enviable record of creating shareholder value. A shareholder who invested the equivalent of  $\in$ 100 in 1970 and re-invested gross dividends would hold shares valued at  $\in$ 39,054 based on a share price of  $\in$ 17.85 on 31st December 2008. This represents a 17% compound annual return. With the deteriorating economic environment in 2008, acquisition and development capital expenditure was curtailed as the year progressed. However, the development focus remains on seeking new geographic platforms in core businesses and taking

Corporate Culture

#### **Global yet local**

There is strong management commitment to both the local company and to the CRH Group, supported by best practice teams that share experience and know-how across products and regions. This dual citizenship motivates local entrepreneurship, while maintaining and benefiting from Group synergies. CRH's management philosophy could be described as global yet local.

#### Local autonomy

Experienced operational management is given a high degree of individual autonomy and responsibility to accommodate national and cultural needs and to leverage local market knowledge, all in accordance with key centrally defined governance, financial and CSR policy guidelines and operating requirements.

#### Mix of skills

CRH's market-driven approach attracts, retains and motivates exceptional management including internally developed operational managers, highly qualified business professionals and ownerentrepreneurs who join on acquisition. This provides a healthy advantage of complementary product opportunities. In delivering this strategy, CRH has established multiple platforms from which to replicate its twin imperatives of sustainable performance and growth. CRH achieves this responsibly through its commitment to CSR principles.

CRH contributes positively in many ways to the economies and societies in which it operates. For example, in 2008, CRH purchased over  $\in$ 10 billion worth of goods and paid  $\in$ 3 billion in wages and salaries to employees. CRH also paid total dividends of  $\in$ 369m (including  $\in$ 22m scrip) to shareholders, together with taxes of  $\in$ 322m and interest of  $\in$ 371m. (Figures relate to subsidiaries and joint ventures on a percentage shareholding basis).

CRH's shares are listed on the Dublin (CRH.I), London (CRH.L), and New York (CRH) Stock Exchanges. At year-end 2008, CRH's market capitalisation of €9.5 billion placed it among the top three building materials companies worldwide.

mix and depth of skills with many managers having experience of previous economic cycles. CRH's succession planning focuses on sharing this wealth of experience with the next generation of CRH management.

#### Lean Group centre

Guidance, support, functional expertise and control are provided as appropriate by lean Group headquarter Teams in the areas of governance, performance measurement, financial reporting, cash management, strategic planning, business development, human resources, environment, health & safety and CSR.

#### Perpetuating the CRH culture

As the Group grows, CRH makes considerable efforts to ensure that the unique CRH culture is propagated into new acquisitions, while simultaneously preserving their identity. This ensures that the Group culture thrives from generation to generation. These efforts include training programmes, seminars, newsletters, best practice meetings, the CSR Report and many other activities.

## Sustainability across the Breadth of Construction Demand

Sustainability is a core value for CRH in all its businesses from materials extraction through the production of value-added building materials and products to final delivery to the customer. CRH's CSR strategy is embedded through all its activities.

#### 1. Materials: The Fundamentals

CRH operates vertically integrated primary materials businesses with strategically located long-term reserves in all its major markets. With an emphasis on servicing infrastructure and new construction demand, operations include cement, aggregates, asphalt and readymixed concrete. CRH has permitted aggregates reserves totalling approximately 13 billion tonnes worldwide: circa 10 billion tonnes in the Americas and circa 3 billion tonnes in Europe.

#### 3. Products: Completing the Envelope

CRH produces a range of complementary value-added building products to complete the building envelope and to optimise the climate control and energy efficiency of buildings. Products include architectural glass, clay brick and block, insulation materials, entrance control and climate control products, each of which serves to provide a balanced exposure to demand drivers.

#### 2. Products: Constructing the Frame

CRH manufactures architectural and structural concrete products for use in residential, non-residential and infrastructure applications. These include building systems and engineered concrete solutions for use in the electrical, transportation, drainage and communications industries; construction accessories and components to assist in the construction process; and architectural products to enhance the facade and surroundings of buildings.

#### 4. Distribution: Fit-out and Renewal

CRH distributes building materials to general building contractors and Do-It-Yourself (DIY) customers in Europe and to professional roofing/siding and interior products contractors in the United States. With a network of 717 branches in Europe and 202 branches in the United States, CRH is now a leading international player in building materials distribution.



www.crh.com

## Key Numbers

CRH is an international group with strong regional, national and international leadership positions. With operations in 35 countries, CRH employed approximately 90,000 people at close to 4,000 locations in 2008. From a strong base in the developed world, CRH is growing its presence in emerging economic regions.

Annualised production volumes for subsidiaries and joint ventures (percentage shareholding basis) are set out below.

Annualised production volumes	
Aggregates	225.9 million tonnes
Cement	16.5 million tonnes
Asphalt	49.6 million tonnes
Readymixed Concrete	20.9 million cubic metres

#### Annualised production volumes

Structural/Precast Concrete Architectural Concrete 10.6 million tonnes 29.3 million tonnes

Annualised production volumes	
Clay	3.7 million tonnes
Glass/Rooflights	12.4 million square metres
Insulation	6.0 million cubic metres
Fencing & Security	11.5 million lineal metres
Insulation	6.0 million cubic metres

#### Outlets

Builders Merchants673 storesDIY246 stores

#### The figures below illustrate key data relating to subsidiaries.

#### Number of Locations



#### Locations by Activity 2008



### Numbers Employed



#### Employees by Activity 2008



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## CRH – Organization Structure

CRH plc is the holding company for an international group of businesses which are organised into six reporting segments; Europe Materials, Europe Products, Europe Distribution, Americas Materials, Americas Products and Americas Distribution, as illustrated in the organisation chart below. CSR policies are defined at Group level and implemented systematically in each of the six segments by line management, assisted by safety officers, environmental liaison officers and human resource managers in the operating companies. Group CSR performance is monitored and reported centrally by the Group Technical Advisor and a small support team.



Notes

\* Recent acquisitions in India and China report through Europe Materials.

\*\* CRH operates in North America under the name Oldcastle Inc.

## Strategic Balance

Building materials is an inherently cyclical business linked primarily to GDP growth in local economies. Recognising the variability that cyclicality brings, CRH strategy is to build and sustain a balanced business with exposure to multiple demand drivers. Geographic and product balance serves to smooth-out the effects of changing economic conditions and to provide multiple opportunities for growth. Sectoral and end-use balance reduces the effects of varying demand patterns across building and construction activity by maintaining a balanced portfolio of products, serving a broad customer base.

In 2008, CRH was evenly balanced between the geographies of North America and Western Europe with a growing component of activity in the emerging regions of Central and Eastern Europe, the Mediterranean, North Africa, South and Central America and Asia. While product balance remains weighted towards the heavyside with 75% in materials and concrete products and 25% in lightside products and distribution, each of these businesses delivers strong returns on capital through the cycle.

CRH's balance across the construction sectors remained stable in 2008. Residential demand accounted for approximately 35% of annualised Group EBITDA, non-residential for 35% and infrastructure for 30%.

End-use demand within the three construction sectors is further divided between new-build and repair, maintenance and improvement (RMI). End-use balance, which is more heavily weighted towards RMI in developed economies, is counter-balanced by significant new build demand in developing economies.

#### Geographic Balance



North America45%Western Europe40%Emerging Regions15%

#### Product Balance



#### Product End-Use Balance



#### Product End-Use Balance



Note: Breakdown is by annualised EBITDA (includes joint ventures on a percentage shareholding basis)

## CRH in Europe

- · · · · · · · · · · · · · · · · · · ·	sitions at end 2008
No. 3 Poland, UkraineClay ProductsNo. 1 Facing bri No. 2 Facing bri & blocks, EuropAggregatesNo. 1 Finland, IrelandConstruction AccessoriesNo. 1 Western PAsphaltNo. 1 Finland, Ireland, Poland No. 2 Portugal, SwitzerlandBuilding Envelope Products and perimeterNo. 1 security fr and perimeter	Europe
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No. 2 Portugal, Switzerland and perimeter	Europe
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No 1 (loint) gla	protection: Europe
	ass structures,
	nts, natural ventilation
No. 2 Poland and smoke exh	naust systems: Europe
Blocks & Roof Tiles No. 1 Ireland Insulation Products No. 1 EPS: Ireland	nd, Netherlands,
Poland, Nordic	0
Paving No. 1 Poland No. 1 (Joint) XPS	
(50:50 joint ve	
No. 1 XPE Germ	<i>,</i>
No. 1 PUR/PIR:	Netherlands
Professional Builders Merchants No. 1 Austria, N	letherlands, Switzerland
Regional No. 1	positions
in France and C	Germany
DIY Stores Leading Dutch	fuendaise
No. 2 Portugal	Tranchise

Europe Materials



Note: CRH operations in China and India report through Europe Materials.

#### Europe Products & Distribution



## CRH in the Americas

Americas Materials	Leadership Positions at end 2008	
Aggregates	No. 3 United States	
Asphalt	No. 1 United States	
Readymixed Concrete	Top 5 United States	
Leading market positions throughout operations		
Strong regional aggregates reserves		

Americas Products & distribution	Leadership Positions at end 2008
Concrete Products	No. 1 Masonry, paving and patio United States No. 1 Paving and patio Canada
Concrete Mixes	No. 2 United States
Clay Bricks, Pavers and Tiles	No. 1 Brick producer Northeast, Midwest United States No. 1 Rooftiles Argentina No. 2 Wall and floor tiles Argentina
Glass Fabrication	No. 1 Architectural glass fabrication United States No. 1 Engineered aluminium glazing system United States
Construction Accessories	No. 2 United States
Roofing/Siding	No. 4 roofing/siding distributor United States
Interior Products	No. 3 interior products distributor United States
Welded wire reinforcement	No. 1 United States
Fencing products	No. 2 United States

#### Americas Materials



#### Americas Products & Distribution



## Performance - 2008

2008 was a very challenging year for CRH's operations across the world. Trading conditions were more difficult than in recent years and the unprecedented developments in financial markets had a severe impact on business sentiment in all areas of operations. Despite this the Group delivered a robust performance with profit before tax of €1.6 billion and earnings per share of 233.1 cent. While below the record levels achieved in 2007, these results demonstrate the benefits of CRH's balanced spread of operations and management focus on the business essentials. CRH operates a progressive dividend policy and the dividend increased by 1.5% in 2008, the 25th consecutive year of dividend increase.

Complementing a strong emphasis on maximising performance in existing operations, the Group's organic growth strategy is focused on investing to improve capacity, product quality and energy efficiency. In parallel, developing new and innovative products and services, expanding the customer base through new channels and leveraging brands locally, regionally and nationally have been priorities. CSR is a core component of this strategy and is, in itself, a driving force for product and process innovation.

CRH is recognised for its competence and track record in sourcing,



Earnings Per Share



negotiating and integrating value-creating acquisition opportunities. The Group typically completes 50-75 small to medium-sized transactions each year augmented by periodic larger acquisitions. Since 1999, CRH has averaged a development spend of  $\in$ 1.6 billion per year. With the deteriorating economic environment, value-creating acquisition and development capital expenditure was curtailed as 2008 progressed. Total spend amounted to  $\in$ 1.4 billion following record investments of over  $\in$ 2.0 billion in 2007 and 2006.

An important element of acquisition strategy has been the due diligence process. All potential acquisitions are examined carefully for material CSR issues and matters that may affect both the value of the purchase and the reputation of the Group. For acquisitions in developing economies due diligence also covers human rights and other ethical issues. Once companies join the Group as subsidiaries it is a requirement that they adopt CRH governance systems, Code of Conduct and CRH environmental, health & safety and social reporting systems.

In acquisitions where CRH does not have management control, the Group encourages the companies to similarly comply and in most cases they actively embrace and report to CRH requirements.



#### Profit Before Tax

#### Dividend Per Share



## Recent Development Activity

#### 1. Ferrobeton

The acquisition of Ferrobeton in April 2008 saw CRH enter Hungary for the first time. Ferrobeton is a leading precast concrete elements producer operating four facilities in Hungary and one in Slovakia. The acquisition expands and strengthens CRH's Concrete Products business in eastern Europe and serves as a platform for future growth in the region.

#### 2. Ancon

CRH announced the acquisition of Ancon Building Products in April 2008. Ancon, which is headquartered in Sheffield and also has operations in continental Europe, the Middle East and Australia, designs and manufactures a range of stainless steel fixing systems and other accessories for the construction industry. Ancon supplies a variety of sectors including housing, commercial and infrastructure.

#### 3. My Home Industries

In May 2008, CRH acquired 50% of My Home Industries Limited (MHIL), one of the most modern cement producers in India, with strong market positions and excellent reserves in the Andhra Pradesh region of southeast India. It is CRH's first acquisition in India. MHIL operates three dry process kilns and has an annual production capacity of approximately 3 million tonnes. MHIL is one of the most efficient and low cost producers in India.

#### 4. Yatai Cement

CRH announced completion of its acquisition of a 26% shareholding in the Jilin Yatai Group's cement operations (Yatai Cement) in January 2009. Yatai Cement's operations comprise 4 integrated cement plants and 4 separate grinding stations in Jilin and Heilongjiang provinces in north eastern China, with a current cement capacity of 14 million tonnes per annum. The group's major investment programme is well advanced and is expected to be completed in late 2009 when cement capacity will increase to 18 million tonnes per annum. Yatai Cement is the leading player in the north eastern provinces and is a top-10 cement supplier in China.



## Corporate Governance Committed to excellence

CRH is committed to the highest standards of corporate governance. This section describes the Group's governance structures at Board and at operating level and explains how the Group ensures that its principles in the area of governance are implemented in an appropriate manner. It also records compliance with the relevant statutory and regulatory guidelines concerning corporate governance matters. Further detailed information may be found in the 2008 CRH Annual Report, Annual Report on Form 20-F and on the CRH website www.crh.com.



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## Protecting our integrity

#### APPLICABILITY & COMPLIANCE

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#### ACQUISITIONS

Code of Business Conduct

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## Board of Directors



"The Board of Directors of CRH is committed to maintaining the highest standards of corporate governance"

#### Role of the Board

The Board is responsible for the leadership and control of the company. There is a formal schedule of matters reserved to the Board for consideration and

Kieran McGowan (Chairman)

decision. This includes Board appointments, approval of strategic plans for the Group, approval of financial statements, the annual budget, major acquisitions and significant capital expenditure, and review of the Group's system of internal controls. There were nine full Board meetings in 2008. The non-executive Directors met twice during 2008 without executives being present. The Board has delegated responsibility for the management of the Group, through the Chief Executive, to executive management.

#### **Membership and Remuneration**

It is the practice of CRH that a majority of the Board comprises nonexecutive Directors and that the Chairman be non-executive. At present, there are four executive and nine non-executive Directors. Directors are appointed for specified terms and subject to the Memorandum and Articles of Association of the company.

#### Chairman

Mr. Kieran McGowan has been Chairman of the CRH Board since May 2007. On his appointment as Chairman, Mr. McGowan met the independence criteria set out in the Combined Code. He is responsible for the efficient and effective working of the Board and ensures that Board agendas cover key strategic issues confronting the Group.

#### Senior Independent Director

The Board has appointed Mr. Nicky Hartery as the Senior Independent Director. Mr. Hartery is available to shareholders who have concerns that cannot be addressed through the Chairman, Chief Executive or Finance Director.

#### **Company Secretary**

The appointment and removal of the Company Secretary is a matter for the Board. All Directors have access to the advice and services of the Company Secretary, who is responsible to the Board for ensuring that Board procedures are complied with.

#### Induction and development

New Directors are provided with extensive briefing materials on the Group and its operations. Directors meet with key executives and, in the course of twice-yearly visits by the Board to Group locations, see CRH businesses at first hand and meet with local management.

#### Performance appraisal

The Senior Independent Director conducts an annual review of corporate governance, the operation and performance of the Board and its Committees and the performance of the Chairman. This is achieved through discussion with each Director. A review of individual Directors' performance is conducted by the Chairman and each Director is provided with feedback gathered from other members of the Board.

#### Compliance

In 2008, CRH complied with the provisions set out in section 1 of the Combined Code. The company also complied with the rules issued by the United States Securities and Exchange Commission to implement the Sarbanes-Oxley Act 2002, in so far as they apply to the Group.

#### **CSR** Governance

Corporate Social Responsibility is embedded in all CRH operations and activities. Excellence in environmental, health and safety and social performance is a daily key priority of management. The Group Chief Executive is responsible for ensuring the Group's CSR policies are continuously implemented and reports on CSR performance are regularly provided to the Board.

#### Committees

The Board has established five permanent Committees to assist in the execution of its responsibilities. These are the Acquisitions Committee, the Audit Committee, the Finance Committee, the Nomination Committee and the Remuneration Committee. Ad hoc committees are formed from time to time to deal with specific matters.

## **Board Committees**

Each of the permanent Committees has terms of reference, under which authority is delegated to them by the Board. The current memberships and terms of reference are available on the Group's website, with the attendance at meetings held in 2008 set out in a table on page 47 of the Annual Report. Chairmen of the Committees attend the Annual General Meeting and are available to answer questions from shareholders. During the year each of the relevant Committees reviewed its performance and terms of reference.

#### **Acquisitions Committee**

The role of the Acquisitions Committee is to approve acquisitions and capital expenditure projects within limits agreed by the Board. In 2008, it consisted of two executive Directors and three non-executive Directors.

#### Audit Committee

The Audit Committee consisted in 2008 of five non-executive Directors, considered by the Board to be independent. The external auditors attend as required and have direct access to the Committee Chairman. During the year, the Committee met with the Head of Internal Audit and with the external auditors in the absence of management. The main role and responsibilities are set out in written terms of reference and include: monitoring the integrity of the Group's financial statements and reviewing significant financial reporting.

#### **Finance Committee**

The Finance Committee advises the Board on the financial requirements of the Group and on appropriate funding arrangements. In 2008, it consisted of two executive Directors and three non-executive Directors.

#### **Nomination Committee**

The Nomination Committee assists the Board in ensuring that the composition of the Board and its Committees is appropriate to the needs of the Group by: assessing the skills, knowledge, experience and diversity required on the Board and the extent to which each are represented; establishing processes for the identification of suitable candidates for appointment to the Board; and overseeing succession planning for the Board and senior management. The Committee consisted in 2008 of four non-executive Directors and the Chief Executive.

#### **Remuneration Committee**

The Remuneration Committee, which consists solely of non-executive Directors considered by the Board to be independent, determines the Group's policy on executive remuneration; determines the remuneration of the executive Directors, monitors the level and structure of remuneration for senior management and reviews and approves the design of all share incentive plans.

Members of the CRH Board during a visit to Halfen, Lagenfeld, Germany in June 2008. From Left to Right: W.P. Egan (Non-executive), J.M. de Jong (Nonexecutive), W.I. O'Mahony (CEO to Dec 2008, now Non-executive), M. Lee (Finance Director to Dec 2008, now CEO), J.M.C. O'Connor (Non-executive), U-H. Felcht (Non-executive), D.N. O'Connor (Non-executive), K. McGowan (Chairman), N. Hartery (Non-executive), T. V. Neill (Non-executive). Inset: A. Manifold (COO), G.A. Culpepper (Finance Director), M. S. Towe (CEO, Oldcastle Inc.). Not pictured: J.W. Kennedy (Non-executive, co-opted June 2009).



## Code of Business Conduct



Since 2003, CRH has implemented a Code of Business Conduct throughout the Group. This Code was updated in 2008. The CRH Code of Business Conduct is applicable to all relevant Group employees and is supplemented by local codes throughout the Group's operations. It is available in 18 languages to facilitate its full implementation, and is also available on the Group's website. Compliance was monitored in 2008 by Group Internal Audit,

and no serious breaches were recorded or reported on the hotline facility (see below). Consequently there were no serious matters relating to implementation of the Code to be reported to the Audit Committee in 2008.

## **Employee Hotline**

The Sarbanes-Oxley Act, paralleled by a provision in the UK Combined Code, requires the Group to put in place procedures which facilitate employee complaints, or confidential submission of information or concerns regarding governance, personnel, accounting or auditing matters anywhere in Group companies. Provision of this hotline facility is detailed in the Code of Business Conduct. CRH has been rolling out these confidential hotlines since 2004; implementation was delayed through legal concerns in some European countries, which are now being resolved. Implementation is also rolled out into new countries as acquisitions are completed. Calls can be made in the local language. There are procedures to ensure that all calls are systematically dealt with and appropriate actions taken. In 2008, there were a total of 309 hotline calls, mostly from North America. The increase on 2007 calls is believed to be due to increased awareness following roll-out of the updated Code of Business Conduct. The breakdown by type is shown in the graph. All of the issues raised in the calls have either been resolved or are being appropriately managed. None were of sufficient gravity to report to the Audit Committee. The Group website lists contact details of persons to whom any complaints can be made verbally or by e-mail.

#### Number of Hotline Calls 2008



#### Hotline Calls by Type 2008



The Code addresses the following areas systematically:

- Protecting integrity, defining its applicability and compliance reporting requirements.
- Doing business in a responsible way, covering conflicts of interest, competition (anti-trust) law, prevention of bribery, corruption and fraud.
- Dealing with customers, suppliers and the community, including requirements on ethical purchasing, giving and receipt of gifts or political or charitable donations.
- Treating people with honesty and respect, also covering human rights, employment policies, etc.
- Managing health, safety and the environment, including policies on drugs and alcohol.

## **Risk Management**

The Directors have overall responsibility for the Group's system of internal control and for reviewing its effectiveness. The system is designed to manage rather than eliminate the risk of failure to achieve business objectives and can provide only reasonable and not absolute assurance against material misstatement or loss.

The Directors confirmed in the 2008 Annual Report that the Group's ongoing process for identifying, evaluating and managing its significant risks is in accordance with the updated Turnbull guidance (Internal Control: Revised Guidance for Directors on the Combined Code) published in October 2005.

Group management has responsibility for major strategic development and financing decisions. Responsibility for operational issues is devolved, subject to limits of authority, to product group and operating company management. Management at all levels is responsible for internal control over the respective business functions that have been delegated. This embedding of the system of internal control throughout the Group's operations ensures that the organisation is capable of responding quickly to evolving business risks, and that significant internal control issues, should they arise, are reported promptly to appropriate levels of management.

The Board receives, on a regular basis, reports on the key risks to the business and the steps being taken to manage such risks. It considers whether the significant risks faced by the Group are being identified, evaluated and appropriately managed, having regard to the balance of risk, cost and opportunity. In addition, the Audit Committee meets with internal auditors on a regular basis and satisfies itself as to the adequacy of the Group's internal control system. The Audit Committee also meets with and receives reports from the external auditors. The Chairman of the Audit Committee reports to the Board on all significant issues considered by the Committee and the minutes of its meetings are circulated to all Directors. The Directors confirmed in the Annual Report that they have conducted an annual review of the effectiveness of the system of internal control. This had regard to the material risks that could affect the Group's business (as outlined in the Directors' Report in the Annual Report on pages 48 to 50), the methods of managing those risks, the controls that are in place to contain them and the procedures to monitor them.

The main risks to which CRH is exposed are summarised on Page 20, and the key elements of CRH's risk management strategy are set out below.

#### Managing the Risks:

- CRH has a history of strong financial performance coupled with appropriate accounting practices, robust and rigorous monitoring systems and comprehensive and effective control processes.
- CRH's unique regional spread, product diversification and end-use balance mitigates the potential effects of varying economic and financial conditions.
- Net worth, net debt and net interest are spread across the currencies in which the Group operates.
- CRH has an ongoing commitment to full compliance with all regulations and standards and to communicating best practices across the Group
- CRH's acquisition strategy is aimed at delivering a string of acquisitions comprising many small deals complemented by selected larger acquisitions.
- CRH is focused on being the competitive low cost producer in all its markets.
- Group companies continually focus on product and process innovation.
- Diversity of operations and activities and continual upgrading investments combined with product development ensures all regulations including those relating to climate change are proactively managed and minimised.
- CRH's diversification strategy minimises the possibility that an isolated instance or single point of failure could have a material impact on the Group.

#### Corporate Governance / Corporate Social Responsibility 7



## Environment & Climate Change Environmental Protection is a CRH priority in all operations

CRH is committed to proactively addressing the challenges of climate change and to the highest standards of environmental management in all its activities. This section describes the Group's Environmental Policy and how it is implemented, followed by a description of how environmental performance is systematically reviewed and reported each year. CRH's responses to the challenges of climate change in cement and other activities are addressed and environmental performance data is reviewed.



## **Environmental Policy**

#### Policy

The CRH Environmental Policy, originally formulated in 1991, since then further developed, and now applied across all Group companies, is to:

- Comply, at a minimum, with all applicable environmental legislation and continually improve our environmental stewardship towards industry best practice.
- Ensure that our employees and contractors respect their environmental responsibilities.
- Proactively address the challenges and opportunities of climate change.
- Optimise our use of energy and resources through efficiency gains and recycling.
- Promote environmentally-driven product and process innovation and new business opportunities.
- Be good neighbours in the many communities in which we operate.

#### Implementation

Company and plant managers throughout CRH are responsible for implementing the environmental policy and achieving its objectives. This line responsibility continues right up to Divisional Managing Directors, the Chief Executive and ultimately to the CRH Board. Line managers in each Group company are assisted by a designated Environmental Liaison Officer (ELO). The ELOs (289 in CRH in 2008) are required to be familiar with all relevant environmental legislation, and to advise line managers how to achieve or exceed compliance and excellence in environmental management. In each region, the ELOs network with each other and the Group Technical Advisor and his team in the sharing of environmental best practice. Acquisitions are systematically integrated into the ELO network as soon as is practicable, generally within 6 months.

Companies are required to have an appropriate environmental management system, the scope depending on the type of activity concerned and the specific demands of the local permitting regime. In its higher potential impact activities, 70% of CRH's subsidiary cement plants are now certified to ISO 14001, while the total number of Group locations with this certification is now 440. It should be noted that ISO Environmental Certification is not common in industrial operations in the USA.



#### Number of ELOs in the Group

#### Number of Locations with ISO 14001



← An osprey in flight at the Shelly Company Dresden Wildlife site in Ohio, USA.

## Annual Review Process

At each year-end, the ELOs assist the Group Technical Advisor and his team in carrying out a detailed assessment of environmental performance in all Group companies. Every Group company is required to complete and submit a detailed environmental questionnaire by mid-January, and by mid-March a comprehensive report is submitted to and reviewed by the CRH Board.

The information from this Group Environmental Review has been used to provide the environmental performance information in this report. The pages that follow summarise the key 2008 data and compare performance with that in previous years.

The year-end review encompasses the following key areas:

- Compliance with Group environmental policy, local regulations and national legislation.
- Environmental training, audits and certification.
- Environmental upgrades and improvements.
- Mitigating climate change aspects, minimising energy and fuel usage.
- Improving air quality.
- Water and waste management.
- Recycling activities.
- Biodiversity and quarry reinstatement activities.
- Environmentally-driven product development and opportunities.
- Local stakeholder and community engagement.

As part of this process, it is required that any compliance deficiencies are actively addressed and resolved. Fines from regulatory authorities in

2008 amounted to €58k, reflecting a number of minor incidents, none of which caused significant environmental damage. In addition, 120 Group companies were satisfactorily externally audited during 2008.

The environmental review process ensures environmental risks are being managed and CRH continues to monitor potential risks from bulk fuel storage and storage of potentially hazardous substances. In 2008, there were no significant fuel spills and underground fuel tanks continued to be phased out. The small numbers of locations with electrical equipment found to contain polychlorinated biphenyls (PCBs), locations with potential for legionnaire's disease and those where asbestos-containing material is present were specifically reviewed to ensure that any potential risks are being systematically managed and eliminated.

The review process also annually updates CRH's database of all Group  $CO_2$  emissions and energy usage, as well as air, water, noise, waste and any other environmental impacts. Acquisitions are systematically introduced to the process to ensure that all subsidiaries are covered each year. Most joint venture partners and associates also actively participate in the review process.

During the year, environmental best practice meetings are held in the various regions providing full feedback and ongoing support to the ELOs. This entire process is hallmarked by positive environmental awareness and dedication throughout the Group.

An overview of the various environmental impacts associated with CRH activities is provided in the Table below. Each of these impact areas is addressed in the sections which follow.

Environmental Impacts by Activity	Climate Change/CO <sub>2</sub>	Other Air Emissions	Water	Waste	Reinstatement	Biodiversity	Transport
Cement	•	•	•	•	•	•	•
Other Process	•	•	•	•	•	•	•
Materials	•	•	•	•	•	•	•
Concrete Products	•		•	•			•
Clay Products	•	•	•	•	•	•	•
<b>Building Products</b>	•			•			•
Distribution	٠			•			•

## Environmental Investment

As part of its continuous environmental improvement process, CRH regularly invests in processes which improve its performance or that offer innovation opportunities. In 2008, CRH invested €56m in a wide range of environmental projects and upgrades that encompassed all the Group's activities and countries of operation. This figure includes investment in specific environmental projects and an appropriate proportion of expenditure on other major investment projects. Major cement plant capital expenditure is not included.

Significant areas of expenditure (with the associated % of the 2008 spend) were:

- Reduction in air and dust emissions (37% of the total for 2008).
- Restoration, landscaping, paving and other location upgrades (23%).
- Reduction of water usage and discharges (6%).
- Improved waste reduction and management (7%).
- Energy reduction and process optimisation (12%).
- Increased use of alternative materials and fuels (6%).
- Monitoring and licensing (9%).

This level of expenditure has been sustained over recent years and will continue into the future to keep ahead of increasingly challenging legislative requirements and to maintain industry best practice, despite the economic downturn.

The total environmental expenditure in 2008 for CRH subsidiary companies and joint ventures and associates, when included on an equity share basis, was  $\in 63$ m.

- 1. A new energy-efficient production line at Prefabet Reda in Poland for the production of eco-friendly aerated concrete blocks.
- 2. At Arkhola Sand and Gravel's Preston asphalt plant in Arkansas, USA, a baghouse is used for emissions control and a new energy-efficient burner ensures lower emissions and reduced fuel consumption.
- 3. A Selective Non-Catalytic Reduction (SNCR) system installed during 2008 at Cementownia Rejowiec in Poland has reduced NO<sub>x</sub> emissions from an average of 732 mg/Nm<sup>3</sup> in 2007 to 525 mg/Nm<sup>3</sup> in 2008.







## Climate Change: A key Challenge for CRH

CRH recognises that climate change is a major challenge facing humanity and is committed to playing its part in developing practical solutions.

CRH, like other responsible players in the building material sector, is very actively addressing the challenges of climate change through specific CO<sub>2</sub> reduction programmes.

The majority of CRH Group  $CO_2$  emissions arise from cement and lime production. In these processes,  $CO_2$  arises both from the high temperature chemical decarbonation of the limestone raw material, and also from fuel combustion. Other Group  $CO_2$  emissions arise from the firing at high temperatures of clay and ceramic products, as well as lightweight aggregate production. Some process  $CO_2$  emissions also arise from the burning out of carbon elements in associated raw materials. Some  $CO_2$  emissions arise from the heating of raw materials in asphalt mixing plants. Minor  $CO_2$  emissions arise from fuel use and transport in other activities.

Climate change also presents opportunities for CRH. Group products are ideally suited to make a meaningful contribution to climate change mitigation (e.g. insulation, lightweight aggregates, concrete thermal mass) and adaptation (e.g. flood defence and stormwater systems) and are actively being promoted in this context.

The Table below summarises some of CRH's many approaches towards reducing specific  $CO_2$  emissions ( $CO_2$  per tonne of product) in all of its activities.

#### Addressing the Challenges of Climate Change

Cement	Concrete Products			
Optimally operating cement plants	Optimising mix design in all products			
Reducing clinker factor by producing blended cements	Using vapour energy curing where possible			
("low carbon" cement)	Using recycled materials where practicable			
Using alternative fuels particularly biomass where available and permitted	In precast products, pioneering the use of carbon-fibre reinforcement can reduce concrete rebar cover, achieving performance with thinner, lighter sections			
Reducing power consumption				
Investing in new and replacement state-of-the-art plants				
Well-focused research into new cement/concrete technologies	Clay Products			
Other Process	Optimising plant operation and fuel usage			
Lime – optimising existing plants and investing in new state-	Using alternative fuels (such as landfill gas or sawdust) where available			
of-the-art plants	Insulation of brick kilns to minimise heat loss			
Lightweight aggregates and periclase – optimising plant operation	Progressively upgrading plants to latest technology			
	Introducing unfired bricks for certain indoor applications			
Materials	Puilding Droducts			
Optimising quarrying and aggregates crushing and recycling activities	Building Products			
Optimising mix design in readymixed concrete	Insulation- developing higher-performance insulation materials applications			
Using cementitious by-products where commercially available	Construction Accessories – developing innovative energy-saving			
Optimising asphalt mixing plant operations	solutions			
Using recycled asphalt pavement (RAP) and alternative fuels	Daylight and Ventilation – developing energy-saving solutions			
Pioneering warm mix asphalt technology				
Transport	Optimising product distribution logistics			
Optimising logistics and modes of transport	Promoting environmentally-positive products			

## Climate Change: Emissions

Total CRH direct  $CO_2$  emissions (designated as Scope 1 under the Greenhouse Gas Protocol) from all wholly-owned subsidiaries amounted to 13m tonnes in 2008, down slightly from 13.2m tonnes in 2007. Energy efficiencies introduced and production volume decreases accounted for the reduction.

The breakdown of  $CO_2$  emissions by activity was broadly similar to the previous year, as was the breakdown of  $CO_2$  emissions by source. Cement activities account for 68% of direct Group emissions, which is reflected in the fact that decarbonation is the largest single source of direct  $CO_2$  emissions in the Group. Specific  $CO_2$  emissions (per tonne of product) are given for 2008 and previous years on Page 75, where WBCSD CSI KPIs are reported for cement activities (including joint ventures and associates on a percentage shareholding basis).

CRH is confident, that due to the many current plant upgrade investments

and ongoing focus on energy management, specific CO<sub>2</sub> emissions in all activities will decline in the years ahead.

Scope 2 2008  $CO_2$  emissions, calculated on a total electrical energy usage of approximately 3.4TWh, are estimated to be in the order of 1.5m tonnes.

Scope 3 emissions for contracted transport are estimated to be 0.66m tonnes.

As indicated above, this data relates to wholly-owned subsidiaries. If joint ventures and associates were included on a basis proportionate to CRH's shareholding, the combined Scope 1 emissions would amount to 18m tonnes. The combined Scope 2 and 3 emissions would correspondingly be estimated to be in the order of 1.7m tonnes and 0.7om tonnes respectively.



#### CO<sub>2</sub> Emissions by Source (Scope 1)



## $CO_2$ Emissions by year (Scope 1)



#### CO<sub>2</sub> Emissions by Activity (Scope 1)



## Climate Change: Cement Commitment

In 2007, CRH committed to a 15% reduction in specific  $CO_2$  cement plant emissions by 2015 compared with the 1990 specific emissions for the portfolio of plants under management control on 1st January 2007. This commitment covers CRH's plants in Ireland, Finland, Poland, Switzerland and Ukraine, and those of its joint venture partner in Portugal and Tunisia (the latter two with  $CO_2$  data taken at 100%).

These reductions in specific emissions are being achieved through three parallel approaches:

- A constant drive towards optimal operational efficiency in Group cement plants, such as minimising unplanned kiln stops and optimizing energy consumption.
- Progressively reducing the clinker: cement ratio, through moving production towards blended ("low carbon") cements by using alternative materials where available.
- Increasing the use of alternative fuels of all types, which have a lower or zero carbon rating compared to primary fuels.

These approaches are implemented through CRH's operational Best Practice programmes where line management is specifically charged with achieving best possible performance from all cement plants.

The preheater tower under construction at Podilsky Cement, Ukraine.



CRH is pleased to report that it is on-track with its reduction commitment. The 2008 specific emissions (0.729t  $CO_2/t$  cementitious product) were almost 3% lower than 1990 emissions (0.750t  $CO_2/t$  cementitious product). This is on-track for the 2015 target (0.638t  $CO_2/t$  cementitious product). The coming on-stream of current cement plant investments in late 2009/2010 will make a significant contribution to sharply reducing specific  $CO_2$  emissions, as will the ongoing clinker: cement ratio reduction programme.

Within the European Union, the European Emissions Trading Scheme Phase 2 (2008-2012) National Allocation Plans (NAPs) prepared by Member States and approved by the European Commission dictate the emission caps that will apply. At the time of writing, some uncertainty remains in relation to final plant allocations in Ireland and Poland. CRH will be striving to work optimally within the Phase 2 NAPS.

CRH achieved the world's first Joint Implementation (JI) project at Podilsky Cement in Ukraine and a Clean Development Mechanism (CDM) Project with its associate Mashav through a new high-efficiency cement milling installation at Nesher's Ramla cement plant in Israel. Further opportunities in the area will be researched.



The new kiln at Finnsementti's Lappeenranta plant, Finland.

#### Working with Peers

Since 2005, CRH has been a core member of the Cement Sustainability Initiative (CSI) within the World Business Council for Sustainable Development (WBCSD). The CSI is a voluntary initiative by 18 major global cement players to address the sustainability challenges of the industry in consultation with a wide range of stakeholders. CRH has been and is actively involved in all of the CSI Task Forces and reports the agreed key performance indicators (KPIs) as shown in the appendices to this report. CRH is now actively addressing the post-Kyoto period, in cooperation with the CSI at global level and with CEMBUREAU at European level.

In relation to operation of the EU ETS in the 2013-2020 period CRH has actively supported work by the EU industry through CEMBUREAU to agree an appropriate 'benchmark' for the industry that will be acceptable to all stakeholders. Longer-term, cement industry-wide strategic options are being discussed including a global sectoral approach. All of these activities underline CRH's strong commitment on climate change action.

#### **Alternative Materials and Fuels**

Key to achieving CRH's climate change commitment is the use of alternative materials and fuels in its cement activities.

There are also associated direct societal and economic benefits from maximising the use of alternative fuels.

For example, initiatives progressively being adopted in Group cement plants include:

- Use of alternative materials (such as ground limestone, fly-ash (PFA) and slag) in so far as permitted by technical standards, thus reducing the amount of clinker that is used in cement (thereby proportionately reducing the CO<sub>2</sub> per tonne of cement).
- Use of biomass alternative fuels (such as waste water treatment plant (WWTP) outputs and meat and bone meal (MBM)) which are carbon neutral.
- Use of other alternative fuels (such as solid recovered fuels (SRF), tyres and solvents), making beneficial use of waste materials that would otherwise go to landfill or incineration.

In 2008, the alternative materials used in Group cement plants totalled 1.4m tonnes, an increase on previous years. In 2008, alternative fuels used in Group cement plants amounted to 113k tonnes, a reduction on the 188k tonnes used in 2007 due to local operating and market conditions. However, it is CRH's strategy to increase the use of alternative materials and fuels as far as practicable in the years ahead.

In the broader context of all Group activities, the total usage of alternative materials amounted to 17m tonnes. The total usage of alternative fuels in 2008 was 331k tonnes.

#### Alternative Materials used in CRH Cement Plants





#### Alternative Fuels used in CRH Cement Plants





www.crh.com

## Climate Change: Investments

During 2008, CRH continued to progress its capital expenditure programme to modernize and expand three cement plants in Ireland, Poland and Ukraine. The new Kiln 3 at Irish Cement's Platin plant was commissioned in December 2008 and provides an ultra-modern, energy-efficient plant meeting world best practice emissions standards which will generate increased fuel and energy savings in 2009. The investment in Ukraine is progressing well and will deliver significant efficiency savings and reduced  $CO_2$  emissions when commissioned in 2010. Upgrading of the Ozarów cement plant in Poland will also deliver significant efficiencies and reduced emissions.

These projects, combined with ongoing construction of CRH's joint venture state-of-the-art cement plant in Florida, represent a total investment

The new kiln 3 preheater tower and new limestone store at Irish Cement, Platin, Ireland.

of approximately €0.7 billion.

These investments are targeted at achieving CRH's climate change commitment as well as modernising and optimising lower carbon cement production in three key European markets and providing CRH's first investment in cement in the US. These investments complement significant upgrading projects in recent years at many of CRH's other cement plants, most notable being the new clinker line at the Lappeenranta cement plant in Finland, commissioned during the first half of 2007.

These major cement investments will bring CRH's portfolio of plants towards world-class standards in terms of specific  $CO_2$  emissions and will underpin the attainment of its climate change commitment.

The new American Cement Company plant in Florida, USA.



## Climate Change: Investments

Reducing specific CO<sub>2</sub> emissions and increasing energy efficiency are twin imperatives in all CRH's activities, not just in cement operations.

In lime operations, the company is progressively investing in high-efficiency lime kilns which are over 20% more efficient than older kilns. In the production of asphalt mixes, CRH is pioneering "warm mix" technology which can potentially reduce energy usage and  $CO_2$  emissions by 30% compared to conventional "hot-mix" technology. In the production of clay bricks and ceramic tiles, CRH is progressively modernising kilns, each investment yielding significant energy efficiency improvements and  $CO_2$  emission reductions. In addition, through transport optimisation CO<sub>2</sub> emissions are also being reduced.

Several innovations are also coming through in the production of concrete products and readymixed concrete, all leading to greater efficiency in use of cement, hence reducing the carbon footprint of concrete operations.

Energy efficiency and climate change mitigation is a driving force in process and product development in all CRH's activities. Examples of environmentally-driven products are illustrated later in this report.

- 1. CRH Bouwmaterialenhandel Netherlands, as part of its sustainable transport programme, participated in a test barge transport trial in conjunction with the Water Board of the Province of North Holland.
- 2. Warm-mix asphalt, which requires 20-30% less energy than hot mix asphalt in its production, being placed by Egge & Eugene S&G, Oregon, USA.
- 3. A new glass laminating plant, with the highest standards of energy efficiency, at Dell Orto's plant in Chile.







## Climate Change: Energy Efficiency

Total Group energy usage (electricity plus all fuels) in all subsidiaries was 30.5TWh in 2008, a slight decrease from 31.5TWh in 2007. This favourable outcome reflected the major focus on energy efficiency across all Group operations and also reduced activity. The breakdown of energy usage by fuel type was similar to previous years, with a small increase in coal usage.

Cement operations accounted for 50% of energy use across the Group. Specific energy efficiency data (per tonne of product) is given for 2008 and previous years on Page 75, where WBCSD CSI KPIs are reported for cement activities (including joint ventures and associates on a percentage shareholding basis).

CRH is focusing on optimising transport to reduce fuel usage and correspondingly its overall carbon footprint. Transport optimisation also has the benefit of reducing other air emissions. Transport by truck is the most common mode, driven by the imperatives of timely delivery to a diverse local customer base.

Most CRH Group companies have initiatives in place to optimise transport through, for example, use of GPS in route planning, ensuring full loads and maximizing back-loading. These initiatives, not only reduce emissions, but also contribute towards improved customer service and reduce delivery costs. Where possible, Group companies use fuel-efficient train, boat or barge transport. These modes are ideal for larger bulk consignments over generally longer distances to fixed destinations.

CRH estimates that in 2008, 15% of its transport by tonnage is carried out directly by Group companies:  $CO_2$  from own transport is included in the Scope 1  $CO_2$  emissions. The 85% of transport that is carried out by contractors is included in estimated Scope 3 emissions of approximately 0.66m tonnes of  $CO_2$ .



#### Energy Use

Energy Use by Activity



## Van Neerbos Bouwmarkten in the Netherlands installed energy efficient lighting, delivering energy savings of up to 10%.



#### Energy Use by Source



## Air Quality Improvements

For the building materials sector, the most relevant air emissions are Particulates (dust), Nitrogen Oxides ( $NO_x$ ) and Sulphur Oxides ( $SO_x$ ). There is an ongoing focus on minimising the impact of these on air quality. Data is presented below.

In absolute terms, Particulate,  $NO_x$  and  $SO_x$  emissions in 2008 all decreased compared to 2007. This is due to a combination of reduced production and the coming on-stream of investments in air pollution equipment.

In 2008, CRH committed to the following air emission reduction commitments in cement activities:

- By 2015, a reduction to at least 50% of the mean specific particulate emissions of 2006 for participating facilities.
- By 2015, a reduction of 10% of the mean specific NOx emissions of 2006 for the same facilities.

• As CRH is already at a very low SO<sub>x</sub> level, it is not technically practicable to attain further decreases; accordingly a reduction commitment is not appropriate.

These commitments cover Group and joint venture cement plants in Finland, Ireland, Poland, Portugal, Switzerland, Tunisia, and Ukraine. This plan will be reviewed in 2010 and 2013 with specific reference to new acquisitions.

Emissions will be reduced by a combination of plant modernisation, installation at more plants of Selective Non-Catalytic Reduction (SNCR) systems for NO<sub>x</sub> abatement, filter upgrades and other performance improvements.

# Air Emissions - Particulates, NO<sub>X</sub>, SO<sub>X</sub>

Particulates

2008

2004 2005 2006 NO<sub>x</sub> Emissions by Activity

10

0



2007

#### Particulate Emissions by Activity



#### SO<sub>x</sub> Emissions by Activity



## Materials Recycling

CRH's environmental policy requires the optimising of the use of resources through application of recycled materials. Where practical and technically feasible, CRH recycles used inert materials in its production processes, using materials that would otherwise go to landfill. This has both environmental and financial benefits. The percentage of recycled materials used in finished products depends on the product and process and averages 5% overall.

The components of the 17.4m tonnes of recycled materials used by Group companies in 2008 were:

6.5m tonnes of Construction & Demolition (C&D) materials: these arise from construction and demolition activities and can replace virgin aggregates or be reused as aggregates for fill applications, most commonly in road construction.

- 7.5m tonnes of Recycled Asphalt Pavement (RAP) materials: these arise when existing road or runway surfaces are milled, crushed and reused as a raw material for new asphalt mixes; this has the added advantage of reducing virgin bitumen in new mixes.
- 3.4m tonnes of fly-ash, slag and other materials with cementitious properties which are by-product materials sourced mainly from external power generation and steel production respectively; these are used as raw materials for cement, or as cement substitutes in concrete products.

CRH strives to maximise the quantities used according to local market availability. C&D materials recycled fell by over 2 million tonnes as a result of a decline in those markets. The quantity of fly-ash and other materials used declined very slightly. However, the quantities of RAP recycled increased slightly.

Central Pre-Mix Concrete Company of Spokane, Washington, USA promotes eco-friendly readymixed concrete, which features recycled materials and environmentally-sound additives.





#### Alternative Raw Materials - RAP



#### Alternative Raw Materials - Other



#### Alternative Raw Materials - C & D
# Waste Management

CRH's environmental policy is to minimise and recycle waste by all means possible. Hence CRH companies operate to the following principles: In production processes, any by-product is internally recycled back into the process where possible, thereby reducing raw material usage and enhancing process efficiency. Remaining waste is minimised and recycled externally where possible. This is mostly inert waste and predominantly comprises concrete from readymixed and concrete products production.

Most locations make every effort to ensure waste going off-site is recycled. When not possible, waste is sent for final disposal.

As the data below illustrates, the total amount of waste generated and required to be recycled or disposed off site reduced to 1.7m tonnes in 2008, indicating solid progress in better waste management. Of this, 1.4m tonnes were externally recycled (consisting of 1.3m tonnes of inert waste – mainly concrete rubble, and 76k tonnes of non-inert waste) and



## Percentage of Waste Recycled



the remainder sent for disposal. Hazardous waste disposed amounted to 4,046 tonnes in 2008, higher than the previous year. The portion of waste being recycled is maximised as a matter of policy, but will vary from year to year depending on local conditions. The portion recycled in 2008 remained at over 80%, reflecting the focus on diversion of waste from landfill.

The total number of companies in European national packaging waste recycling schemes has increased further to 89, reflecting a growing commitment in this area. Such schemes do not generally exist in the USA.

A small number of Group companies are permitted to landfill waste onsite and in these cases it is carried out strictly to the permit requirements. All Group companies are now taking extensive precautions to prevent any incidents of unauthorised waste disposal.

## Waste by Activity



## Companies in Packaging Recycling Schemes



# Water Management

Water is a precious resource and an important aspect of CRH's policy is to minimise its use of natural resources. Process water can often be abstracted from several sources all of which may not be metered; hence precise determination of intake quantities is sometimes difficult, though this is the Group's objective.

As a best estimate, CRH water usage in 2008 was 43m m<sup>3</sup>, similar to the previous year. The biggest usage is in Materials activities, where water is used for processing, washing and dust suppression. Some 75% of water is sourced as surface water including rainwater, while well water accounts for 22% and mains supply for 3%.

CRH emphasises reduction in process water usage through water recycling, and there has been a steady increase in the number of Group locations

recycling water each year, with 910 Group locations (which together represent 91% of Group total water usage) now carrying out at least some recycling. Additionally, 498 locations (together representing 64% of water usage) use rainwater in their operations.

As with water intake, water discharge can also be difficult to quantify, not only because it is often not metered but also because of the contribution of stormwater. As a result of the nature of CRH's activities, water discharges can occasionally contain suspended solids or be high in pH. Locations employ settling ponds and other solutions to reduce suspended solids to within good practice limits, while pH can be brought to acceptable levels if the natural neutralisation process is insufficient. Oil-water separators are used if there is a risk of oil spillage from a plant.



## Locations Recycling Water



Oldcastle Surfaces has installed closed-loop wastewater recycling systems at several of its plants. The photograph shows an inspection in progress at the filter press in the Savannah-Hilton Head Island plant in South Carolina, USA.



## Water Intake by Activity

Water Usage



# Quarry and Pit Restoration

Much of the raw materials used by CRH Group companies are extracted from quarries, sand & gravel pits and clay pits, typically over a long operating lifetime. Therefore when these raw materials are fully extracted, good environmental stewardship demands that CRH reinstates these areas or finds another appropriate after-use, in consultation with the local permitting authorities, neighbours, and other stakeholders.

Each year, Group companies continue to reinstate and landscape workedout quarries and pits. In 2008, a total of 658 hectares (1,645 acres) were reinstated. The reinstated areas average out at about 1.5% per annum of total quarry and pit area, corresponding to a 60-year working life. A significant 92% of all Group quarries and pits now have formal reinstatement plans, up from previous years. The remaining quarries and pits will have complete plans within a few years. The actual amount of reinstatement achieved in any one year depends on the closure of specific quarries or pits as reinstatement and landscaping can typically only be carried out close to completion of excavation activities.

Reinstatement often includes tree planting and a further 363,000 trees were planted in 2008 bringing the total number of trees planted in the last five years to almost 1 million across the Group.

1. Restoration project at Cessford Nelson Quarry, Iowa, USA.

Restoration project at the Rudus Skogsgård gravel pit in Finland. A significant number of trees were planted as part of this project.
The worked-out portion of Roadstone Cahir sand pit in Ireland has been restored with the creation of a lake, providing a habitat for wildlife.







# Biodiversity

Many CRH Group quarries and pits, even during normal operations, are favoured by wildlife as a safe and natural habitat, becoming even more enriched after final reinstatement takes place.

Such positive impacts are often noted, with biodiversity management striving to enhance these while mitigating potential negative impacts such as loss of habitats, fragmentation of biodiversity corridors, impacts on water quality and disturbance to birds or animals. While almost every quarry and pit has some form of associated biodiversity, several quarries and pits are noted for special biodiversity such as particular species of flora and fauna.

All environmental impact assessments associated with permit applications require investigation of site biodiversity and that appropriate management plans are put in place.

Specific biodiversity is currently being actively managed at 85 locations across the CRH Group in Argentina, Belgium, Ireland, Netherlands, Northern Ireland, Poland, Switzerland, UK, Ukraine and USA. A further four locations in Portugal and Israel are noted for special biodiversity species.

Particularly noteworthy biodiversity programmes include the Rumendingen Sand Pit Biodiversity Project being implemented by Jura Aggregates and Concrete in Switzerland and the Wildlife Habitat Council Project being developed by Shelly Company in Ohio, USA. Both companies have received public recognition for their outstanding contributions to biodiversity enhancement.







 Martin Sollberger is awarded the "Natur und Wirtschaft" certificate by Reto Locher of the Stiftung Natur & Wirtschaft. Jura Aggregates and Concrete has done extensive work at the Rumendingen sand pit creating new habitats for flora and fauna in the worked out portion of the pit, where many species now thrive.

2. 3. 4. Flora and Fauna at the Rumendingen sand pit.



### Wildlife Habitat Council

Since 2005, CRH's subsidiary in the USA, Oldcastle Materials, has been designating property for the conservation of wildlife habitat. Working with the Wildlife Habitat Council (WHC) through a corporate initiative, Oldcastle Materials has now designated sites in Arkansas, Colorado, Connecticut, Idaho, Iowa, Maine, New Jersey, New York, Ohio and Vermont. Habitat projects vary in nature and scope, but all are corporate-driven efforts between management, employees, community members, volunteers, local conservation groups and local, state and federal agencies.

At the WHC's 20th Annual Symposium Awards Banquet in November 2008, the Shelly Company was the first CRH Group company to receive recognition for achieving a certified WHC Corporate Lands for Learning<sup>SM</sup> site. This international recognition was for its commitment to increasing native biodiversity at the Dresden Wildlife Habitat Site in Ohio, and enabling an educational resource for the local community.

The Dresden Wildlife site is a 96-acre former aggregate mining facility adjacent to the Muskingum River in southeastern Ohio. Previous mining practices resulted in the creation of several lakes and ponds that are interspersed with riparian flood plain forest and seasonally wet meadows. To achieve greater biodiversity at the site, the wildlife team identified goals for each habitat. This included the creation of native prairie habitat, maintenance and enhancement of temporal wetlands and permanent water features and protection and restoration of portions of riparian forest. Riparian zones, forests and grasslands provide habitat for many species, including great blue herons, kingfishers, osprey, bald eagles, beaver, river otters and white-tailed deer. Typical flora includes species common in southeast Ohio, such as cottonwood, sycamore, willow and silver maple. The Dresden Corporate Lands for Learning<sup>sM</sup> site provides environmental-based education to schools, scouts, and organizations for all ages to raise awareness and encourage responsible behaviour towards natural resources and wildlife.

1. A view of the 50-acre lake at the Dresden Wildlife Site. 2. Scott Kilkenny, WHC Board of Directors, Ashley DeVault and Kevin Cooperrider, The Shelly Company, at the presentation of the WHC Corporate Lands for Learning<sup>™</sup> certificate. 3. 4. A green heron and a wood duck at the Dresden Wildlife Site. 5. Wildlife educational event at the Dresden Wildlife site.



# CRH Products and the Environment

In tandem with CRH's commitment to act as a socially responsible corporate citizen, the Group views the development of products that specifically benefit the environment as a significant business opportunity.

A small number of the many examples from across the CRH Group are provided here. They all illustrate real-life win-win situations, with

- "Warm mix" asphalt being placed by The Shelly Company in the USA. This product requires 20-30 percent less energy than "Hot mix" asphalt in its production, and also leads to an improved working environment when being placed.
- 2. CRH Fencing Ltd. in the UK has developed a range of new products that are both environmentally friendly and fully recyclable. Ecohoard, a new

significant commercial as well as environmental benefits. CRH products are ideally suited to mitigation and adaptation to climate change. As regards mitigation, CRH is the largest producer of foam insulation in Europe, and it is estimated that the application of the Insulation Group's annual output of these products saves over 1 million tonnes of CO<sub>2</sub> each year.

range of temporary fencing systems, is made with materials from sustainable sources, and is fully recyclable.

3. The Brookhaven National Labs, Centre for Nanomaterials, in Upton, NY, a LEED (Leadership in Energy and Environmental Design) certified building, is outfitted with a glazing system by Oldcastle Glass. In 2008, Oldcastle Glass completed 504 LEED applications, up from 110 in 2007.







# CRH Products and the Environment

When concrete is used as a building material, the energy savings made possible by the thermal mass in concrete can reduce heating and cooling requirements of buildings. In addition, as a heavyweight material, concrete has the effect of smoothing out temperature peaks and troughs. As regards adaptation to climate change, concrete construction is a well-established solution to reduce the impact of flooding through flood defence systems and stormwater management systems.

- Underground stormwater detention systems, manufactured by Oldcastle Precast in the USA, capture and store stormwater runoff in large subsurface structures before releasing the water in a controlled manner.
- 3. APG Canada has launched a new energy-efficient masonry system, SureTouch<sup>™</sup>. It comprises modular stones or bricks that are inserted into a pre-moulded polystyrene panel that is screwed to the structure of the building using stainless steel anchors.



- 2. EcoTherm manufactures PIR Rigid Thermal Insulation at its production plants in Netherlands and the UK and markets its products throughout Europe.
- 4. In Ireland, CRH companies are involved in an industry initiative to construct a 'zero carbon' concrete home, which will achieve zero carbon emissions over its lifetime. The thermal mass properties of concrete are being fully utilized in the design of the house, in which Group insulation products are also used.







# Cultural Heritage

Protecting and preserving cultural heritage for future generations is essential, as the heritage that survives from the past and is discovered through quarrying and development operations is often unique and non-renewable. CRH considers this a key aspect of being a responsible company.

Within the CRH Group, there are 17 Group companies protecting particular cultural heritage features in Ireland, Northern Ireland, Poland, Netherlands, Switzerland, the UK and the USA. Within joint ventures and associate companies, partners in Israel and Portugal are preserving cultural heritage aspects at three locations.

Occasionally during normal operations, palaeontological finds are encountered, as profiled below.

Some quarries are noted for geological heritage, as it is often noticed only when rock faces are exposed and the underlying geology can be viewed. Group companies work with local stakeholders to ensure that these features are protected appropriately, for example by leaving some rock faces visible during restoration activities. All new quarries and pit areas are surveyed where appropriate by archaeologists to check if there is potential for any archaeological interest on the site.

- 1. Examining fossils during an educational trip to Walworth quarry in New York, USA.
- 2. Tyrone Brick, Northern Ireland hosted a visit from the Ulster Amateur Geological Society in June 2008 to its Coalisland clay pits, where plant fossils are commonly found.
- 3. In April 2008, a mammoth tusk was discovered at the Jura Materials Däniker gravel pit in Switzerland. The 50cm long, 24 kg tusk is of considerable archaeological value, and is estimated to be over 20,000 years old. The picture shows Peter Flückiger, Curator of Olten Natural History Museum holding the tusk. The tusk will be preserved as part of the Olten Natural History Museum collection.









# Awards

CRH companies won 233 environmental awards in 2008, demonstrating CRH's ongoing solid commitment to environmental excellence.

## Awards won by CRH companies in the Americas include:

- Oldcastle Materials won 34 awards from the National Stone, Sand and Gravel Association, 173 awards from the National Asphalt Pavement Association as well as awards from the National Readymix Concrete Association and other bodies.
- APG West was awarded an energy conservation award.
- Glen-Gery was honoured by the Brick Industry Association.
- In Chile, Dell Orto received an excellent rating in the national Empresa Competiva programme.
- George Robinson of Glen-Gery Brick, USA, accepts an award for the company's Water Conservation Programme from Richard Jennison, Brick Industry Association.



### Awards won by CRH companies in Europe include:

- In Northern Ireland, Farrans and Ulster Industrial Explosives were both honoured by Business in the Community, while Northstone won awards from the QPANI and an Energy and Environmental Innovation Award.
- In Ireland, Roadstone won "3 star" and "4 star" awards from the Irish Concrete Federation.
- In the UK, Forticrete received an Innovation award from the BSI.
- In Germany, Jackon Insulation was honoured by the Saxony-Anhalt Environmental Alliance.
- 2. Brian Watt of Northstone Concrete receives an award at the Sustainable Ireland Energy, Environmental & Waste Management Awards 2008.
- 3. Jack B. Parson Companies, USA, won two NRMCA awards for commitment to environmental excellence.





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# Health & Safety The Health and Safety of those who work for CRH is our No.1 priority

This section describes CRH's Health & Safety Policy and how it is implemented throughout the Group. The annual review process is described and the results for 2008 are then summarised. The section concludes with an overview on recent safety innovations and the many awards won by Group companies in 2008.



# Safety Policy

## Policy

CRH's Health & Safety Policy, formalised since 1997, and applied rigorously across all Group companies, is to:

- Comply, at a minimum, with all applicable legislation and continually improve our health & safety stewardship towards industry best practice.
- Ensure that our employees and contractors respect the Group's health & safety imperatives.
- Ensure that our companies provide a healthy and safe work place for our employees and contractors and take due care of customers and visitors at our locations.
- Require all our employees and contractors to work in a safe manner as mandated by law and industry best practice.

## Implementation

Health & safety management is a daily priority of line management in every company and location. This line responsibility continues right up to Divisional Managing Director, the Chief Executive Officer and ultimately to CRH Board level. Line managers are supported at operating company level by a network of Safety Officers. Safety Officers assist line managers in working towards industry best practice, and work closely with other Safety Officers in each country or product group, as well as the Group Technical Advisor and his team.

Line management is responsible for ensuring that the company Health & Safety Policy is adhered to and that site managers and employees are trained in health & safety risk analysis and accident prevention. Where

accidents or near misses occur, these are investigated and corrective action is taken to avoid a recurrence. Contractor management also receives high priority. CRH's experience indicates that contractors have a higher risk of fatalities than employees. Contractor safety performance evaluations and management procedures are therefore being steadily strengthened.

While the accident statistics continue to improve year on year the number of fatalities recorded on an annual basis remains a cause of concern. CRH is now launching a specific top down Fatality Elimination Programme in addition to continuing its proactive management of safety at all levels.

Demonstration of the exceptional safety performance of Superglass safety glass in Buenos Aires, Argentina. Superglass is deeply involved in developing the use of safety glass in public buildings including schools and hospitals.



← The winning slogan in the Tilcon New Jersey, USA, safety slogan contest.

New dust extraction system fitted over a sorting table to reduce dust from the product tumbling process at Oldcastle Sheffield, Ohio, USA. The extraction system ensures compliance with OSHA limits.



## Annual Review Process

At each year-end, Safety Officers assist the Group Technical Advisor and his team in carrying out a detailed assessment of health & safety performance across all Group companies. A report is prepared as part of this exercise which is submitted to and reviewed by the CRH Board every March. This information has been used to supply the key health & safety performance indicators, and the main trends up to and including 2008 are outlined in this Report.

The year-end review addresses the following key areas:

- Implementation of CRH's safety policy and effectiveness of the safety officer network.
- Detailed analysis of every situation which resulted in a fatality or serious injury.
- Analysis of all lost time injuries focusing on trends in root cause, injury type and employed person's profile.
- Improvements in safety management, including proper use of personal protective equipment, recording of near misses, frequency of safety meetings, hours of safety training, use of disciplinary measures and incentives to reduce injuries.
- Number and results of internal and external safety audits carried out.
- Workplace hygiene and employee health management.
- Review of any occupational illness claims.

The review process covers all of the Group subsidiaries and almost all joint ventures and associates. Data from new acquisitions is included from the date of acquisition.

74% of CRH locations were formally audited in 2008.

Results of the health & safety review are analysed in detail and statistical information is correlated to identify any higher risk aspects of CRH activities. This data is then used to better focus training programmes. This information is fed back to operating companies through the network of safety officers and safety best practice groups throughout the year. This process ensures a culture of continuous improvement of safety in all Group companies. Safety best practice is also actively shared on an industry-wide basis through the WBCSD CSI Health & Safety Task Force. All CSI Members are strongly committed to improving the safety performance of the industry.

The data below demonstrates the continued progress being achieved on several employee and contractor safety management indicators, noting that each year the annual review includes data from acquisitions made during that year.



## Employee Safety Management

## Contractor Safety Management



### www.crh.com

# Safety Record

### Accidents

The 2008 annual review demonstrated further improvement in safety across the Group. The 2008 Accident Frequency Rate (combining both employees and contractors) improved to 5.1 lost time accidents per million manhours, down a significant 20% on the 2007 figure. The Accident Severity Rate also improved to 95 lost working days per million manhours, down 27% on the 2007 figure. These positive results were reflected across all four Divisions, all activities, all product groups and most countries, reflecting the continued huge dedication to safety management right across the Group.

Over the last ten years, Group Accident Frequency and Severity Rates have been reduced by an average of 11% per annum, significant in the context of continued organic and acquisition-led growth, which more than doubled the workforce over the same timescale. There is a particular focus on bringing acquisitions up to Group safety standards, and most of the 2008 acquisitions already have good safety performance.

Some 82% of CRH locations were accident-free in 2008. CRH continuously strives to improve this figure through ongoing intensive safety management, training and sharing of safety best practice across all 4,000 locations. Locations and countries with poorer safety performance continue to be subject to intense management focus for improvement.

For joint ventures and associates (if counted on a 100% basis), Accident Frequency Rate was 10.1, and Severity Rate was 290, reflecting a generally poorer performance than for subsidiaries, though all partners are now strongly committed to safety improvement and participate actively in the safety review and best practice processes.



## Frequency Rate by Activity

Group Frequency Rate



## Group Severity Rate



## Severity Rate by Activity



Note: All Frequency and Severity Rates quoted here are on a million manhour basis, in accordance with CSI definitions. Internally, CRH continues to use a 100,000 manhour basis, the corresponding rates being of lower magnitude by a factor of ten.

# Safety Record

## **Accident Causes**

Each year, CRH extensively analyses all accidents by direct cause, root cause, type of injury, age, length of service and job category of those injured, in order to better pinpoint training and accident avoidance programmes.

The data from 2008 indicates that the three main accident causes continue to be slips, trips and falls, falling and moving objects and lifting or overload. The most frequent injuries are to the arms, hands, legs and feet. This knowledge has led to well-focused programmes for accident prevention. CRH has identified that the leading safety management actions that improve safety performance are regular safety meetings, toolbox talks, more hours of training, circulation of safety alerts, and learning from near misses and incidents.

## Fatalities

Despite the very considerable focus on safety, CRH deeply regrets that there were 8 fatalities (7 employee and 1 contractor) in 2008 across subsidiaries in Finland, Ukraine, Denmark, Hungary and the USA. Every fatality is a tragedy too many, and CRH continues to do its utmost to avoid recurrences. These fatalities correspond to Fatality Rates (number of Fatalities per 10,000 employed) of 0.79 (0.76 in 2007) for employees and 0.88 (3.42 in 2007) for contractors, equivalent to 0.80 (1.06 in 2007) on a combined basis. When compared with peer data these figures are below WBCSD CSI average, though that is little consolation, as zero is the only acceptable figure.

There were 2 third-party fatalities, which occurred in the Netherlands and Romania. In addition to the figures reported for subsidiary companies there were also 7 fatalities (1 employee, 6 contractor) in joint ventures in India, Portugal, Tunisia and Lebanon.

CRH strives to ensure that those responsible in joint venture operations adopt the Group's strong commitment to good safety management.

Serious injuries and fatalities are thoroughly reviewed. The three main causes of serious injuries and fatalities have been identified as mobile plant movements, failures by individuals to abide by established plant isolation (Lock Out/Tag Out) procedures and falls from heights. These observations are regularly and strongly reinforced in specific programmes for fatality avoidance and in all safety training programmes.

## Accidents by Injury Type 2008



Arms, Hands	35%	
Legs, Feet	29%	
Back	13%	
Upper Body, Shoulder	9%	
Other Head, Neck	6%	
Eye	3%	٠
Multiple Body Part	3%	٠
Unspecified or Unknown	2%	

## Accidents by Cause 2008



The disconnection between the causes of accidents and fatalities is not unique to CRH and the building materials industry. An examination of data from many other industries has shown a similar disconnection. While significant improvements have been made in reducing the accident frequency and severity rates it is considered that further specific initiatives are required to attain the goal of zero fatalities.

CRH is now launching a Group led Strategic Plan for Fatality Elimination. This initiative will focus on reducing fatalities through top-down management attention to the specific causes of fatalities and targeted communications and training throughout the organisation.

### **Eliminating Fatalities - a practical initiative**

In the UK, Ibstock and Forticrete, sister companies within the CRH Group, identified the potential for fatalities to occur during the operation of forklift trucks. This risk was targeted for elimination.

Working with forklift suppliers, a prototype system was designed. The system automatically applies the brakes of the reversing forklift if a sensor indicates potential for collision with an object or person. The main challenge was to link the braking system with the well-established technology for object detection. In addition, the reverse speed had to be limited to approximately 5 km per hour to enable the brakes to stop a laden forklift within 0.5m. The prototype is currently being evaluated.

Ibstock and Forticrete, UK: prototype forklift with sensors interlocked with the braking system under test.



## Fatalities by Cause 2001-2008



Lack of Isolation	26%	
Falls from Heights	20%	
Mobile Plant Offsite	20%	
Mobile Plant Onsite	12%	
Fire/Explosion	5%	
Crushed/Struck by fixed plant	5%	
Engulfment	4%	
Crushed by Product	3%	
Electrocution	3%	
Falling Objects	2%	

# Managing Safety

Safety has always been important in CRH companies and in recent years this imperative has been strongly reinforced from the top down, right across all activities and at all locations in the Group. It is a daily priority for all levels of management.

Each company is required to appoint a full or part-time Safety Officer (depending on the size of the company): in 2008, the number of Safety Officers Groupwide increased to 340, reflecting the universal focus on safety. Each company is also required to have safety induction programmes for new employees, hold safety meetings, follow up on any accidents, circulate safety alerts and monitor near misses.

The number of hours spent on safety training has been found to be a key parameter in reducing the accident frequency rate. Incentives for good safety performance are used by many companies, while any negligence is subject to disciplinary action.

There is a strong focus on integration of safety management of acquisitions and associated contractors as rapidly as is practicable and this can present extra challenges in countries and regions that traditionally have a poor safety culture. While CRH at Group level does not have formal agreements with trade unions on safety matters, safety improvement forms an integral part of discussions with trade unions at local company level.

Innovation is a key feature in the implementation of CRH Health & Safety Policy. There have been a remarkable number of innovations, two of which are illustrated below.

Many of these were created through ideas from employees, reflecting their positive attitude and dedication toward continuously improving safety in the workplace. In the USA employees at the Oldcastle Materials Mid-Atlantic Division designed a flatbed trailer with a life line and harness system to allow employees to pick or place traffic cones on the highway. Such innovation continues to move safety to an instinctive behaviour helping to achieve the goal of zero fatalities and ultimately zero accidents.

Zoontjens in Tilburg, Netherlands has reduced the need for excessive manual handling of large concrete slabs by the use of a dedicated range of equipment which fully mechanise each stage of the installation process. The picture shows a number of slabs being moved using a large-wheeled hand pallet truck on pneumatic tyres.

Safety innovation at Oldcastle Materials, Mid-Atlantic, USA: harness for placing traffic cones.

Safety innovation at Zoontjens, Netherlands: reducing manual handling.



# Managing Safety

Driver and Contractor training also receive high priority. Many CRH companies have already moved ahead in requiring "passport" schemes which ensure that contractors have appropriate safety training and experience before they come on-site. Most companies have prequalification for vetting the safety record of contractors before selection. Contractor safety inductions and formalised evaluation and disciplinary procedures are being steadily increased.

In most joint venture and associate companies CRH does not have direct responsibility for safety management, but partners are actively encouraged to foster CRH dedication to safety performance. In most cases CRH partners actively embrace Group safety policy, report safety data and willingly participate in CRH best practice activities.

This continues to drive steady improvement in safety performance in joint ventures and associates.

In 2008, CRH incurred several minor fines totalling €239k mostly resulting from OSHA/MSHA inspections in the USA; all deficiencies notified have been rectified.

On the positive side, CRH has invested upwards of €85 million over the last four years on upgrades, on all aspects of safety across the Group. The level of spending underlines a dedication to improvements in safety, ergonomics, and general workplace conditions. Training is an essential part of managing safety, and extensive training is ongoing within CRH.

The promotion of Health & Safety is encouraged throughout the Group and all companies are encouraged to enter external award schemes. In addition, many internal company award schemes are in place.

During 2008, CRH's dedicated safety website was further enhanced to continue rapid dissemination of alerts and good safety procedures and practices. An increasing number of these are now available in many languages.





Europe Materials runs an award scheme to incentivise safety improvements. Henry Morris (M.D.) presents a 2008 award to Lauri Kivekas and Teppo Lainio of Rudus, Finland .



# Employee Health

The annual review process also captures extensive data on employee health and well-being, vital to both employees themselves and to the Group.

In the 2008 review, most companies confirmed that they were already compliant with current national regulations on workplace hygiene monitoring. In the EU, relevant companies also participate in the European Social Dialogue Agreement (ESDA) on respirable crystalline silica exposure. Where necessary, CRH companies have also actively planned upgrades to comply with developing legislative requirements.

Most companies confirmed that employee health monitoring was carried out, depending on job functions, according to national requirements; the remaining companies completing their programmes as appropriate. Furthermore, 73% of Group companies provide well-being programmes for their employees. These typically include smoking cessation, weight control, vaccinations and drug and alcohol rehabilitation programmes. Also 76% of Group companies offer assistance on employee health insurance.

There was a very low incidence of occupational illness claims in Group companies, indicating a positive picture in occupational health across the Group.

Examples of employee health initiatives are illustrated below.

Farrans (Construction) Ltd. in Northern Ireland organised a Men's Health Week in 2008. Employees were offered free health checks for blood pressure, cholesterol level, weight, body fat percentage and advice on back pain, healthy eating and cancer awareness. Northwest Division's Central Pre-Mix Prestress Company in the United States implemented a "7 Minute Stretch & Flex" programme. This stretch programme is completed by crews early in the morning before they commence work. Worker feed back from this initiative has been very positive. Since its commencement there have been no soft tissue recordable injuries. Employee lung function tests in progress at My Home Industries (MHI), CRH's joint venture in India. MHI has a comprehensive employee health programme that offers routine health checks to employees. This programme includes health checks, free health camps and general advice on health issues.







# Awards

A significant 213 health & safety external awards and recognitions were achieved by Group companies in 2008.

### Awards won by the Americas companies included:

- America Materials won over 100 safety awards from various awarding bodies including: Holmes Safety Awards, Associated General Contractors, MSHA Sentinels of Safety Awards, MSHA Safest mine achievement award, Morgison Safety Awards, NAPA Diamond Achievement Awards, and National Stone, Sand & Gravel Association.
- Americas P&D won over 60 safety awards from various awarding bodies including: OSHA, NCMA (National Concrete Masonry Association), ICPI, (Interlocking Concrete Paving Institute) MSHA, ESCSI (Expanded Shale, Clay and Slate Institute), OSHA VPP Star recertification, NCDOL (NC Department of Labour), and NPCA (National Precast Concrete Association).

### Awards won by the European companies included:

- In Ireland, three companies achieved "Safe-t-cert" accreditation for their contracts activities.
- In Great Britain, companies achieved a Gold star merit award from the British Precast Federation, and numerous awards under the Ceramic Industry Safety Pledge.
- In Germany companies achieved AMS and SMS certification.
- In Poland companies achieved a National award for "Employer – Organiser of safe work environment". The competition was organized by the National Labour Inspectorate.
- Dycore in the Netherlands won a European Agency for Health and Safety at work award.
- 1. Hans Kuijvenhoven, CRH Europe Concrete Products Safety Director with Hans-Josef Münch, Peter Laschke, Ewald Kausler and Andreas Schlemmer of Ehl receiving the prestigious safety commendation from the German Safety Authority.
- 2. Scott Rauhauser, Doyle Hurst and Kelly Kuhn of Oldcastle Industrial Minerals, Pennsylvania, USA, proudly display their MSHA-DEP Mine Rescue Award.
- 3. Janet Froetscher, President and CEO National Safety Council presents Bev Hurt and Dom Imhoff, Glen-Gery Brick, Redfield Plant, Iowa, USA with an OSHA Safety Award.
- 4. The Ibstock UK team proudly display their Ceramic Industry Health and Safety Awards.









# Social

# CRH's objective is to remain the employer of choice for all employees and to exceed the expectations of all our stakeholders

This section focuses on CRH Social Policy relating to employees, customers, suppliers, investors and neighbours. The Group's social policy is outlined in the CRH Code of Conduct and is applicable in all subsidiaries. Implementation and monitoring of performance is the responsibility of operating company management reporting through the divisional structure to Group headquarters.



# Social Policy

## Policy

CRH's Social Policy, applied across all Group companies, is to:

- Comply, at a minimum, with all applicable legislation and to ensure that our social stewardship is consistent with industry best practice.
- Manage our businesses in a fair and equitable manner, meeting all our social responsibilities as both a direct and indirect employer.
- Apply the principle of equal opportunity, valuing diversity regardless of age, gender, disability, creed, ethnic origin or sexual orientation, while insisting that merit is the ultimate basis for recruitment and selection decisions.
- Ensure that we deal responsibly with our suppliers and customers in accordance with our Code of Business Conduct and proper business practice.

## Implementation

CRH believes that continued business success is rooted in good employee, customer and supplier relations. This is particularly true in a decentralised organisation, where management responsibility is delegated as far as possible to the local level.

Company Managing Directors/Presidents are responsible for the implementation of CRH employment policies, guidelines and objectives in their areas of responsibility. They are supported in this role and in reporting at Group level by their Human Resources (HR) teams. Human Resource has a functional reporting line through Product Group and Divisional HR Directors to the Group Human Resources Director. Data is provided below on the geographic employee footprint of the Group emphasising the increasingly global reach of CRH.

## Number of employees by country at end-2008



# A breakdown is also given of the number of employees in each employment category.

Operating company management is responsible for customer and supplier relations in the markets in which they trade.

Their work is often supported by national, regional or product group contracts with large customers and for critical supplies such as cement and energy.

The updated CRH Code of Conduct outlines key management responsibilities in relation to employment, purchasing, competition and customer relationships.

## Employees by Category 2008



← Employees of Harbin Sanling Cement Company, China taking part in a game of volleyball during a community sports day.

# **Employment Features**

In 2008, the CRH Group employed approximately 90,000 people directly and a further 11,000 as contractors. An overview of employment data by length of service, gender, and age is set out below.

The traditional nature of the building materials industry is reflected in the high proportion of males employed, particularly in operations, while women represent 43% of people employed in clerical and administrative roles. The overall male/female ratio is 81:19. The overall age profile of the Group is well balanced.

At all locations, the majority of CRH employees come from the local population, typically reflecting its ethnic diversity; this inherently enhances bonds with local communities. A number of key industry characteristics should be noted when analysing employment data:

- Many jobs in CRH companies are physically demanding, often outdoors.
- As CRH continues to develop, there is an ongoing need to acquire new skills to operate more specialised, complex equipment and to continually improve quality, safety and environmental performance.
- The seasonal and cyclical nature of the industry places particular demands on management and workforce to deal with peaks and troughs in demand.

## Length of Service 2008



## Employees by Age 2008



As a result, Group companies focus on:

- Training and creating opportunities for career development.
- Continuously improving employee welfare in line with best industry standards.
- Steadily improving workplace ergonomics and automation of repetitive and strenuous operations.
- Implementing all aspects of safety management throughout operations.
- Implementing specific policies to assist management and employees with retirement planning and with downsizing when necessary. For major operational changes appropriate notice periods are implemented.

While the nature of the industry makes it difficult to employ people with physical disabilities, CRH takes its responsibilities in this area seriously. In 2008, 54 companies employed a total of 446 disabled or disadvantaged people, an increase on the previous year.

It is noteworthy that in 2008, the overall employee absenteeism level was reported at under 3%, which is very low by industry norms, and therefore can be regarded as a good overall indicator of employee satisfaction.



## Absenteeism by Type 2008



# **Employee Development**

Many employees enjoy long-term careers with CRH, and that is a distinctive feature of the Group. CRH is regarded by many in the wider industry as a highly desirable employer, and many job applications are received each year. The sustained Group expansion regularly creates opportunities for talented, ambitious people, particularly those willing to relocate.

The Group offers competitive pay, social and pension benefits at least in line with industry and local or national practice, often with bonuses linked to company and individual performance targets. In some cases, equity (share) based incentives are also provided in accordance with regulatory and industry practices in particular jurisdictions. Some 90% of Group companies, covering 76% of all employees, carry out regular employee briefings. While only 13% of employees take part in formal employee satisfaction reviews, most companies do this on an informal basis, as there are on average only 23 employees at each location. The flat organisational structure, together with small locallymanaged operating units, ensures that there is always close linkage between management and employees.

Pike Industries, Vermont, USA, participates in a "Road to Leadership" training programme with Vermont Technical College. Pictured recently at a press conference to announce federal funding for training workers in Vermont are members of the Pike Industries team together with Senator Patrick Leahy of Vermont.



# Employee Development

CRH continues to commit significant resources to training and developing employees throughout the organisation. In 2008, 77% of companies assisted employees on career development. There was an average of almost 23.7 hours of training per employee, up from 22 hours in 2007, this training focused mainly on safety but also included environmental, technical, leadership and other skills.

The major focus of the operating companies is on skills training with an emphasis on performance improvement in the business. The Product Group, Divisional and CRH Group focus is longer term and emphasises management development, core skills enhancement and the building of an international leadership pipeline for the future. and other support to 3,346 people to undertake professional training in technical, administrative, language, first aid/medical and supervisor/ management areas.

CRH also runs educational support programmes for employees across

the Group to pursue further studies. In 2008, CRH provided financial

Excluding seasonal employees, Group employee turnover rate is about 17%, and this is typically higher in the first few years of employment. Fair and flexible hiring and lay-off practices apply, particularly in seasonal businesses: in these seasonal situations, some employees return year after year, in itself a good indicator of employee satisfaction.

- 1. Safety briefing at the Wernink plant in Vlaardingen, Netherlands.
- 2. Salmor employees proudly display their certificate on completion of their leadership training programme. Salmor is part of Northstone's Utility Chambers Division in Northern Ireland.
- 3. A communication meeting in progress at Oldcastle Glass, Denver, Colorado, USA, during the rollout of the company Performance Management System which includes significant safety modules.







## Hours of training per employee





www.crh.com

# **Employee Development**

Each year, a number of employees are particularly worthy of recognition for outstanding services to the company or community.

It is also worth noting that in 2008,58% of Group companies had employee suggestion schemes, which further enhance employee creativity and recognition for innovative ideas. The CRH culture is to foster employee entrepreneurship at a local level.

The Group is also distinguished by a very low number of days lost due to industrial disputes: in 2008, less than 1,000 mandays were lost in the whole Group, equivalent to only 0.005% of all mandays, another positive indicator of good employee relations.

### **Trade unions**

Trade union membership varies by country. In 2008, overall trade union membership was 23%. Wage negotiation is carried out at a variety of levels, depending on local industry practice. Overall in 2008, 32% of wage reviews were carried out on an individual basis, 33% collectively, 16% on a union basis, 7% on a national pay deal, with 12% on other bases.

Over 85% of CRH companies have retirement benefits tied in with national schemes, while 61% of companies provide additional retirement benefits.

### Human rights

CRH fully subscribes to the principles of the United Nations Declaration on Human Rights in all activities, particularly as they relate to employees, contractors and local communities. The Code of Business Conduct requires that Group companies, both in setting out policies and in practice, conform with the principles of the United Nations Declaration on Human Rights in so far as they apply to Group operations.

CRH also considers human rights implications, where applicable in investment decisions. For example, as mentioned on page 13, acquisition due diligence in developing countries covers human rights and other issues. As mentioned on page 62, CRH pays special attention to the purchase, directly or indirectly, of products in or from developing economies, and requires that its principal suppliers meet good standards in respect of local law concerning human rights.

In May 2008 a group of union and company representatives on the Cooperation Committee in Finnsementti, Finland, visited a Rudus Betonituote plant. The Committee members were taken on a plant tour to explain the processes, equipment and safety aspects involved in the production of concrete products.



# **Best Practice Groups**

The CRH Group is highly diversified geographically, culturally and by activity. Therefore, it is essential to have a very effective and rapid means of horizontally sharing knowledge in each product group across borders and cultures. This is achieved through best practice groups, first pioneered in asphalt products in 1990 and now extended to all CRH activities. The best practice groups meet regularly as regional or national, and occasionally, as international groupings of experts in the product sectors listed below.

These best practice groups also focus on CSR issues, particularly safety and environmental performance, in the context of each product group, and the best practice activities are, therefore, in themselves a powerful conduit for continuous improvement in CSR performance. In addition to the product-specific best practice groups, cross-divisional and crossproduct groups also meet specifically on environmental and health and safety issues.

Originally these groups were developed and centrally co-ordinated by the Group Technical Advisor, though now these are increasingly delegated to line management on a regional basis, ensuring effective implementation of best practice. Very significant operational improvements and savings accrue year-on-year, as well as fostering and enhancing intellectual capital throughout the Group.

Primary Materials	Products & Distribution
Aggregates	Clay Products
Readymixed Concrete	Architectural Products
Asphalt	Pipe Products
Cement and Lime	Precast Systems
Purchasing	Insulation
Energy	Paving and Home Centre

Americas Divisions Health and Safety Best Practice Team.



CRH Paving and Home Centre Best Practice Team



# Management Development

CRH management comprises a powerful blend of people from three distinct streams:

- Employees at operational, administrative, professional and management levels whose career opportunities grow as CRH grows.
- Highly skilled finance and development professionals who, on proving themselves, can then move into senior management roles.
- Owner-entrepreneurs, who choose to stay on post-acquisition, bringing a strong "can do" attitude to the businesses they run and grow.

CRH's decentralised structure gives local, but disciplined, autonomy, which balances entrepreneurial drive with prudent operating practices consistent with Group guidelines. This continually fuels the Group's performance and growth imperatives. CRH commits significant resources to training and developing high-potential employees throughout the organisation to meet the leadership challenges of performance and growth. All Divisions run management and leadership development programmes in conjunction with Group Human Resources, complementing the initiatives at company, regional and product group levels.

These programmes combine inputs from faculty members of leading international business schools with contributions from senior CRH management.

The Group makes wide use of succession planning tools, on-the-job development, performance management, coaching and mentoring as well as formal training to ensure a plentiful availability of leadership talent to meet the Group's strategic objectives.

Selected senior managers from around the Group are regularly brought together to focus on corporate and business strategy, organisational culture and the latest developments in management science. The annual Group Management Seminar is a highlight of this process.

Participants in the March 2009 CRH Management Seminar: reviewing 2008, planning for 2009 and beyond.



# Customer Service

The Group's broad customer base reflects its product and geographical diversity. Sales across the Group totalled almost  $\in$  21 billion in 2008. Individual businesses serve a wide range of customers on a regional and local basis. Customers range from government agencies to contractors, distributors and private individuals, with no individual customer accounting for more than 1% of the total Group sales.

Products are sold in highly competitive markets. CRH companies focus on excellence in customer care, product quality, value and service to distinguish CRH from competitors. Many products are certified to the highest quality.

Customer satisfaction is monitored formally and informally throughout the Group. In 2008, 69% of companies carried out formal customer satisfaction surveys, with smaller companies monitoring their progress through informal daily contacts with their customers. CRH strongly believes that continued success in business is only achieved by continually exceeding customers expectations in highly competitive markets.

The CRH Code of Business Conduct specifically addresses customer relationships and has been distributed to company and sales

managers throughout the Group. The dissemination of the Code of Business Conduct was supported by a series of seminars and training events which explained compliance with its provisions. The updated Code further strengthens CRH rules in relation to competition law (Anti Trust). Division and Product Group management is responsible for the implementation of the Code which is monitored by the Internal Audit function.

## **Product Responsibility**

The products delivered by CRH companies, when properly used, present negligible health risks throughout their life cycles. CRH products are accompanied by Material Safety Data Sheets containing appropriate advice on use and application.

The Group Technical Advisor and internal health & safety specialists regularly liaise with the relevant industry associations and regulatory bodies to ensure that Group companies are aware of and comply with their obligations in this area. In particular, Group companies in the EU are preparing for the implementation of REACH, the incoming European Regulation on chemicals and their safe use.

Brakel Atmos Fire Safety organised an open day for customers and clients from eleven countries. Several events were organised including a smoke test and a demonstration of a new prototype of an energy efficient Green Eura Ventilator. The photograph below shows a smoke test in progress at a test centre in Belgium. Management of Rudus, Finland at the presentation of ISO 9001 and 14001 certificates, awarded to eight Rudus Betonituote plants, thus providing an extra guarantee to customers on product integrity.





# Supply Chain Management

Individual operating companies source raw materials and supplies both externally and also internally from other CRH companies. Internal sourcing arises from vertical integration and includes cement and aggregates supplied, for example, to readymixed concrete or concrete products producers within the Group. Competition in downstream markets ensures that internal sourcing remains competitive compared to alternatives.

The majority of external purchasing contracts are negotiated by individual operating companies. These are supplemented by centrally negotiated supplier agreements at national, regional or product group level for products such as cement, bitumen and float glass, energy-related inputs such as natural gas, electricity and pet-coke, and significant consumables such as grinding media, paper sacks and safety equipment.

Major external purchasing contracts are awarded following a rigorous competitive tendering process. Decision criteria include price, quality, supplier reputation and CSR performance, including human rights. CRH is committed to responsible and cost-effective procurement from its

diverse supplier base. None of the Group's major suppliers provide more than 5% of total purchases and most are below 1%.

The CRH Code of Business Conduct contains several provisions aimed at ensuring that the Group conducts its business activities with its supply chain in a responsible manner. These relate to legal compliance, use of confidential or inside information, conflicts of interest, provision or acceptance of gifts and prohibition of any form of bribe or similar inducement.

Due to the local nature of CRH company business, most suppliers are based in Europe or North America. Currently only a very small percentage of purchases are sourced from developing economies such as China, India or Latin America.

Procurement standards are applied on a global basis with special attention being paid to Human Rights issues for purchases from developing regions.

In the manufacture of construction accessories, Ancon Sheffield, part of the EU P&D Group, uses wire sourced from India. The system of supply chain management in place at Ancon ensures that all aspects of the production and distribution of the product are ethically sound, and representatives from the company visited the supplier in India to audit performance.



## Communications CRH encourages open communication with all stakeholders

CRH attaches great importance to openness in its communications with all stakeholders. CRH welcomes enquiries from individuals, rating agencies and other groups interested in increasing their knowledge of CRH and its activities. A few of the many communication examples are described in this section. Further information is available on www.crh.com, on individual company websites, or can be obtained by contacting CRH either locally or at Group level.



# Internal and External Communications

CRH communicates regularly with all its key stakeholder groups on a range of issues, including its CSR performance and commitments. These stakeholders include employees, shareholders, the investment community, rating agencies, legislative and regulatory authorities, contractors, customers and suppliers, as well as neighbours, local NGOs and community groups.

At Group level, CRH engages with shareholders and the investment community, third-party survey and assessment organizations and other interested parties. In 2008 key topics discussed were: CRH's performance in the context of the global economic environment, acquisition and cost reduction programmes and CSR policy implementation.

At company level, CRH is in regular dialogue with local customers, suppliers, neighbours and local communities. Communications with legislative and regulatory authorities are either handled at company level, or at product group or regional level as appropriate. In addition company representatives maintain a range of contacts with colleges and universities throughout the countries in which CRH does business.

### **Employees**

Internal communications make a valuable contribution to CRH's success in the competitive environment of the building materials industry. Each Division, region and product group has strong traditions of regular and open communication. The employee voice within CRH is heard directly through a variety of representative structures depending on the business or country concerned. Mechanisms exist

### Company publications.



← Children of employees enjoying one of the open days held in May 2008 at Polbruk locations in Poland.

throughout the Group for informing and consulting employees on matters impacting on them and the businesses in which they work.

In the European Union, the CRH Euroforum (in compliance with the European Works Council Directive) provides a regular opportunity for employee representatives to discuss a wide range of business and social issues, including CSR strategy, with company management.

In 2008, approximately 90% of all Group companies held regular employee briefings. In addition, smaller companies tend to do this on a more informal basis. This reflects the ongoing open dialogue across the organisation.

The CRH internal newsletter "Contact" is produced annually in ten languages from articles submitted by individuals and companies throughout the Group. Additionally, 42% of companies have their own newsletters, and this trend is increasing each year, many opting for electronic newsletters, which can be disseminated more rapidly and efficiently.

## **Investment Community**

Communications with shareholders and the investment community are promoted through the Investor Relations (IR) team, based at Group headquarters at Belgard Castle. The quality and openness of CRH's IR activities has been highly acclaimed and CRH has won many awards for the quality of its IR. All IR data is downloadable from the CRH website, which also offers an automatic alert facility.



## CRH Contact Magazine.

# **Communications - Local Communities**

CRH companies form an integral part of the many communities in which they operate. CRH is committed to ensuring that the genuine needs, views and interests of the local community are taken into consideration and is sensitive to the impact its operations may have on neighbours, particularly those in the immediate vicinity of operating locations. A key feature of many local engagements is now advance discussions with neighbours on development plans. Several Group companies are now formalizing their neighbour relations programmes.

In 2008, 86 Group companies supported significant local initiatives, which included the provision of materials for churches, schools and homes, and support for local sporting, charity, nature conservation and educational events.

Group companies held a total of 356 open days in 2008. Neighbours of all ages including schoolchildren, students, employees, community

representatives, customers, local and regional officials were invited to these events.

CRH supports a wide variety of worthy charitable initiatives both at a central and local level. In 2008, CRH contributed approximately  $\in$ 5m to civic and community causes, community development initiatives, education and research projects, local arts and culture initiatives, as well as other local causes such as job creation.

Approximately 50% of the annual donation budget is administrated at local level where the focus is on supporting civic and community initiatives. Group-led initiatives tend to focus on education and research, environment and a range of other causes - many of which are international in nature. In many companies, individual employees also contribute generously of their own time in supporting good local causes; their contributions are often matched by their company.

### 1. In 2008, Unidek, Netherlands, hosted the local annual traffic safety event, which highlights the dangers to children from heavy trucks. Children from the local school were taught what a truck driver can and cannot see while in traffic and it was highlighted how children in certain places around these large vehicles are not always visible to the driver.

2. My Home Industries runs a programme of community support focussed at making a positive contribution to local underprivileged communities by supporting a wide range of socio-economic, educational and health initiatives. An awards ceremony at a community sports event, sponsored by My Home Industries, is pictured below.



## CRH Donations 2008





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## **Communications - Local Communities**

1. Tilcon held several open days across its locations in New York and New Jersey, USA. These open days provide an opportunity for Tilcon to educate the public and its neighbours about its operations. The team from Mount Hope, New Jersey, welcomed about 2,200 local residents to the fifth annual open house, helping out as tour guides, traffic control and manning the welcome, children's activities and arts and crafts tables.

3. The Mayor of Charlotte, North Carolina, USA, presented the 2008 Mayor's International Community Award (MICA) for outstanding community involvement and philanthropy to Bonsal American. Bonsal American is involved in several local charities to help the community, the most prominent being HomeAid, a leading national non-profit provider of housing for the homeless. 2. Irish Cement held an open day for neighbours just before lighting the flame on its new kiln three project. Pictured is chemical engineer, Elaine Higgins in the control room with a young visitor.

4. To celebrate obtaining certification of its environmental, quality and health and safety systems, OKSM in Poland hosted an excursion for local children from the school in Grzybiny. As well as a memorable day out in Warsaw, the children visited the OKSM pit in Grzybiny and had the unique opportunity to view the operations of the pit.









# **Communications - Local Communities**

1. Cerro Negro, Argentina, helped with the rebuilding of the facilities for the Cross Foundation of Patagonia after a fire. The foundation educates young people from rural areas, who have to travel long distances to attend the school. The foundation provides lodging facilities for the students.

3. Ormonde Brick, Ireland, has sponsored the silver trowel award since 1997. It encourages apprentice bricklayers to develop skills of the highest standards. Mary Hanafin TD, the Irish Minister for Education and Science, who presented the award, is pictured with Aidan McDonald of Ormonde Brick and award winner Kris Egan of the Dublin Institute of Technology. 2. The Heras companies in the Netherlands, part of the CRH Fencing and Security Group, participated in the 2008 Bizworld, which gives local primary school children an introduction to the world of business and entrepreneurship.

4. Trzuskawica Lime, Poland, holds an annual competition on the "Knowledge of Lime" in conjunction with the Technical College in Kielce. The 2008 competition attracted over 130 participants. Each entrant attends lectures on lime usage in the construction and road sectors, and sits a 2-hour exam. The three best students receive a scholarship.



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## **Communications - Local Communities**

1. Employees from Povoa do Varzim Maxmat store in Portugal helped to refurbish a play room at a local shelter using building materials supplied by Maxmat. The shelter provides a home for children at risk that have been taken into care, and is one of many local charities that Maxmat supports.

3. Farrans Construction, Northern Ireland, received three Considerate Constructors awards. The Considerate Constructors Scheme is a voluntary Code of Practice which aims to improve the image of the industry by minimising any disturbance or negative impact caused by construction sites. Farrans received a Gold Award for the Belfast Sewers Project, a Silver Award for the City centre Belfast Streets Ahead Project, and a Silver Award for the private residential development at Thaxton Mill Gardens, Lisburn. 2. Employees at Helena Sand & Gravel, Montana, USA, with the support of management, formed a group to craft blankets for children at the Christ Hope Orphanage in Arusha, Tanzania. Each child received fleece and flannel blankets with a hand drawn label and their name. The company provides the material for the blankets, while employees volunteer their own time to produce the blankets.

4. County Concrete, Massachusetts, USA, supports the Kid's Place, a charity which helps children suffering from abuse. At a recent fund raising event, promoted by the logo on the readymix concrete truck, participants collected over \$25,000 for the Kid's Place.









# **Communications - Local Communities**

## Shelter

As CRH is a building materials company, several recent community and charitable initiatives across the Group centered on the theme of "Shelter".

Many companies in the USA support Habitat for Humanity through the donation of building materials to build houses for low income families. In addition, many employees donate time to this worthy cause and help with the construction work.

- 1. Some of the 40 people from The Shelly Company's Findlay Division, who donated their time and expertise to help with the construction of a house for Habitat for Humanity in Ohio, USA.
- 3. In September 2008 employees of Allied Distribution, USA, took part in a build-day on behalf of Habitat for Humanity.

CRH businesses in Ireland have joined together in an initiative to support the Simon Communities of Ireland, an organisation dedicated to helping homeless people. This initiative involved the entire workforce, and linked donations to the local Simon Community to safety performance at each location. The scheme started in mid-2007 and was continued in 2008. Up to the end of 2008, this innovative approach yielded over €1.1 million for the Simon Community.

- 2. More than 35 employees from LS Jensen Construction in Montana, USA, participated in a Habitat for Humanity build in May 2008.
- 4. At the presentation of the results for the Simon Safety Challenge 2008 were Carol O'Byrne, CEO Simon Northern Ireland, Donal Dempsey, Regional Director CRH Ireland & Benelux, Mary Harney T.D. Minister for Health & Children and Patrick Burke, CEO Simon Communities of Ireland.








### **External Endorsements**

### Dow Jones Sustainability Indexes Dow Jones Sustainability Indexes (Zürich) In September 2008, CRH was again included in the Dow Jones World and STOXX indexes. The rating was carried out on behalf of DJSI by SAM (Sustainability Asset Management), based on a very Sam 2009 Sector mover detailed evaluation of CRH's governance, economic, environmental and social performance. In January 2009, CRH was ranked by SAM Sam 2009 gold class as "Gold Class" and "Sector Mover". FTSE4GOOD (London) CRH was again included in the FTSE4GOOD Index in September 2008 and March 2009. The FTSE4GOOD review process now includes strict criteria on addressing climate change. FTSE4Good ECPI (Italy) **S**ECPI In its December 2008 review, EPCI included CRH as a constituent of the ECPI Ethical Index Euro. GovernanceMetrics International (GMI) (New York) GMI focuses on corporate governance. In its January 2009 review, it rated CRH as among its most highly rated companies. Business in the Community Ireland. "Over the past five years CRH has committed to transparency and Business in the accountability with the publication of externally verified corporate responsibility reports on an annual basis, now issued in accordance Community to the G3 GRI Guidelines, and has received several awards and recognitions. CRH continues to show a consistent approach to Ireland reporting and this makes the company one of the leaders in Ireland on reporting on responsible business practices." **Ethisphere Institute (USA)** CRH was been chosen in early 2009 by the Ethisphere Institute as one of the World's Most Ethical Companies.

# CRH CSR Report 2008

### Relationship to GRI Guidelines

GRI G3	Description	2008 CSR Report	2008 Disclosure
		Page Number	
Strategy	& Profile		
Profile			
1.1	CEO Statement on relevance of sustainability to the organisation & strategy	1-2	Full Disclosure
1.2	Description of key impacts, risks, and opportunities	1-4, 19-20	Full Disclosure
Organisa	tional Profile		
2.1	Name of the organization	6	Full Disclosure
2.2	Primary brands, products, and/or services	7-8, 11-12	Full Disclosure
2.3	Operational structure of the organization	9	Full Disclosure
2.4	Location of organization's headquarters	6	Full Disclosure
2.5	Countries where the organization operates	11-12	Full Disclosure
2.6	Nature of ownership and legal form	6	Full Disclosure
2.7	Markets served	7-8, 10-12	Full Disclosure
2.8	Scale of the reporting organization	6-13	Full Disclosure
2.9	Significant changes during the reporting period in size, structure, ownership	14, 80-81	Full Disclosure
2.10	Awards received in the reporting period	42,52,70	Full Disclosure
Report Pa	rameters		
3.1	Reporting period (e.g., fiscal/calendar year) for information provided	80-81	Full Disclosure
3.2	Date of most recent previous report (if any)	80-81	Full Disclosure
3.3	Reporting cycle (annual, biennial, etc.)	80-81	Full Disclosure
3.4	Contact point for questions regarding the report or its contents	back cover	Full Disclosure
3.5	Process for defining report content	1-4, 80-81	Full Disclosure
3.6	Boundary of the report	80-81	Full Disclosure
3.7	Any specific limitations on the scope or boundary of the report	80-81	Full Disclosure
3.8	Basis for reporting on joint ventures, subsidiaries, etc.	80-81	Full Disclosure
3.9	Data measurement techniques and the bases of calculations	80-81	Full Disclosure
3.10	Explanation of effect of re-statements of information provided previously	no restatements	Full Disclosure
3.11	Significant changes in scope, boundary, or measurement methods	80-81	Full Disclosure
3.12	Table identifying the location of the Standard Disclosures in the report	71-74	Full Disclosure
3.13	Policy and current practice on seeking external assurance for the report	2, 80-81	Full Disclosure
Governar	ice, Commitments, and Engagement		
4.1	Governance structure of the organization	16-17	Full Disclosure
4.2	Indicate if Chair of the board is also an executive officer	16	Full Disclosure
4.3	The board members that are independent and/or non-executive members	17	Full Disclosure
4.4	Ways for shareholders & employees to provide recommendations or direction	17-18, 58, 64	Full Disclosure
4.5	Link between compensation of board and management with performance	16-17 & Annual Report p. 44, 45, 51-53	Full Disclosure
4.6	Processes in place for the board to ensure conflicts of interest are avoided	16, 19-20, Annual Report p. 44-57	Full Disclosure
4.7	Process for determining the qualifications and expertise of the board	16-17 & Annual Report p. 44-57	Full Disclosure
4.8	Internally developed statements of mission or values, codes of conduct, & principles	1-2,16, 18, 22, 44, 54	Full Disclosure
4.9	Procedures of the board for overseeing identification and management of performance	15-20, 23, 45, 54	Full Disclosure
4.10	Processes for evaluating the boards own CSR performance	16-18, Annual Report p. 44-57	Full Disclosure
4.11	Explanation of whether and how the precautionary approach or principle is addressed	1-2, 15-20	Full Disclosure
4.12	Externally developed economic, environmental, and social charters, principles	1-4, 22, 28, 44, 54, 58	Full Disclosure
4.13	Memberships in associations	1-2, 28, 70	Full Disclosure
4.14	List of stakeholder groups engaged by the organization	2, 17, 63-70	Full Disclosure
4.15	Basis for identification and selection of stakeholders with whom to engage	1-2, 17, 53,-70, 80-81	Full Disclosure
4.16	Approaches to stakeholder engagements.	63-70, 80-81	Full Disclosure
4.17	Key topics and concerns that have been raised through stakeholder engagement	63-70, 80-81	Full Disclosure

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2008 Disclosure

#### Page Number Management Approach and Performance Indicators Economic Full Disclosure Disclosure on Management Approach 1-2, 5-13, 15-20 6, 13, 65, Annual Report p. 74, 130-131 EC1 Direct economic value generated and distributed Full Disclosure FC<sub>2</sub> Financial implications and other risks and opportunities for the organization's activities Full Disclosure 19-20, 21, 25-31, 39-40 due to climate change EC3 Coverage of the organization's defined benefit plan obligations 16-17, 58, Annual Report p. 102-106 Full Disclosure Significant financial assistance received from government Full Disclosure EC4 no significant assistance Additional: Range of ratios of standard entry level wage compared to local minimum wage Partial Disclosure\* EC5 56 Policy, practices, and proportion of spending on locally-based suppliers 62 Partial Disclosure\* EC6 EC7 Local hiring and proportion of senior management hired from the local community Partial Disclosure\* 54,55 FC8 Development and impact of infrastructure provided primarily for public benefit 6-12, 63-69 Full Disclosure ECo Additional: Understanding and describing significant indirect economic impacts 6 Full Disclosure Environmental Full Disclosure Disclosure on Management Approach 1-4, 21-23 FN1 Materials used by weight or volume 8 Partial Disclosure\* Note: Production quantitles relate closely to material use - many products EN2 Percentage of materials used that are recycled input materials Full Disclosure 28.33.75 Full Disclosure FN<sub>2</sub> Direct energy consumption by primary energy source 31 Full Disclosure EN4 Indirect energy consumption by primary source Note: Electricity is CRH's only significant indirect energy source Additional: Energy saved due to conservation and efficiency improvements Full Disclosure EN5 31 FN6 Additional: Energy-efficient or renewable energy products and services **Full Disclosure** 25-31,39-40 EN7 Additional: Indirect energy consumption reduction initiatives and results 25-31 **Full Disclosure** Full Disclosure EN8 Total water withdrawal by source 35 Additional: Water sources significantly affected by withdrawal of water Full Disclosure ENg none significantly affected Additional: Percentage and total volume of water recycled and reused 35 (number of locations recycling water) Full Disclosure Location and size of land by protected areas and areas of high biodiversity value 36-38 Full Disclosure Description of significant impacts of activities, products & services on biodiversity 36-38 Full Disclosure Additional: Habitats protected or restored Full Disclosure 36-38 Additional: Managing impacts on biodiversity 36-38 **Full Disclosure** Additional: IUCN Red List species and other list species with habitats affected by operations Partial Disclosure\* 37-38 Total direct and indirect greenhouse gas emissions by weight Full Disclosure 26 Other relevant indirect greenhouse gas emissions by weight CO₂ is only relevant GHG Full Disclosure Additional: Initiatives to reduce greenhouse gas emissions and reductions achieved Full Disclosure 25-31 Emissions of ozone-depleting substances by weight Not material in the sector EN20 $NO_x$ , $SO_x$ , and other significant air emissions by type and weight Full Disclosure 32 Partial Disclosure\* FN<sub>21</sub> Total water discharge by quality and destination 35 Note: destination varies Full Disclosure Total weight of waste by type and disposal method 34 FN23 Total number and volume of significant spills Full Disclosure 23 EN24 Additional: Weight of waste deemed hazardous Full Disclosure 34 Additional: Details of water & habitats significantly affected by discharges of water and runoff Full Disclosure EN25 37 Note: No significant impacts to water bodies or habitats from water discharges Initiatives and extent of environmental impacts of products and services mitigation Full Disclosure 25-31, 39-40, 61 Percentage of products sold and their packaging materials reclaimed by category Partial Disclosure\* 34 Full Disclosure 23

- FN10
- EN11
- FN12
- FN12

GRI G3

Description

- EN14
- EN15
- EN16
- FN17
- EN18
- EN19

- FN22

- EN26
- EN27
- EN28 Significant fines and non-monetary sanctions for non-compliance with environmental law

 $73 \quad {}^{\rm Appendices/\,Corporate\,\,Social\,\,Responsibility}$ 

GRI G3	Description	2008 CSR Report	2008 Disclosure
		Page Number	
EN29	Additional: Significant environmental impacts of transporting products etc. and workforce	30-31	Full Disclosure
EN30	Additional: Total environmental protection expenditures and investments by type	24	Full Disclosure
Social : Lab	our Practices and Decent Work		
	Disclosure on Management Approach	53-62	Full Disclosure
LA1	Total workforce by employment type, employment contract, and region	54-55	Full Disclosure
LA2	Total number and rate of employee turnover by age group, gender, and region	57	Partial Disclosure*
LA3	Additional: Benefits for full-time employees not provided to temporary or part-time	56-58	Partial Disclosure*
LA4	Percentage of employees covered by collective bargaining agreements	58	Full Disclosure
LA5	Minimum notice period(s) regarding significant operational changes	55, 58	Partial Disclosure*
LA6	Additional:% workforce in formal management-worker health and safety committees	43-50, 58	Partial Disclosure*
LA7	Rates of injury, occupational diseases, lost days & absenteeism, & number of work-related fatalities by region	43-52	Full Disclosure
LA8	Education, training, counselling, prevention, and risk-control programs in place to assist	51	Full Disclosure
	workforce members, their families, or community members regarding serious diseases	Note: CRH does not have a significant presence in countrie with endemic diseases such as HIV/AIDS	15
LA9	Additional: Health and safety topics covered in formal agreements with trade unions	49-51	Full Disclosure
LA10	Average hours of training per year per employee by employee category	57	Full Disclosure
LA11	Additional: Programs for skills management and lifelong learning that support the continued employability	53-60	Full Disclosure
	of employees and assist them in managing career endings		
LA12	Additional:% employees with regular performance & career development reviews	53-58	Full Disclosure
LA13	Composition of governance bodies and breakdown of employees per category according to gender,	16-17, 54-55	Full Disclosure
	age group, minority group membership, and other indicators of diversity		
LA14	Ratio of basic salary of men to women by employee category	same job same pay	Full Disclosure
Social : Hu	man Rights		
	Disclosure on Management Approach	58	Full Disclosure
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	13, 58	Partial Disclosure*
HR2	Percentage of significant suppliers and contractors that have undergone screening	18, 62	Full Disclosure
	on human rights and actions taken		
HR <sub>3</sub>	Additional: Hours and % of employee training on policies and procedures in human rights	18, 62	Partial Disclosure*
HR4	Total number of incidents of discrimination and actions taken	18	Full Disclosure -
			none known
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining	58	Full Disclosure -
	may be at significant risk, and actions taken to support these rights		none known
HR6	Operations with significant risk for incidents of child labour, and measures taken to eliminate	58	Full Disclosure -
			none known
HR7	Operations with significant risk of forced or compulsory labour, and measures to eliminate	58	Full Disclosure -
			none known
HR8	Additional: Percentage of security personnel trained in the organization's policies	not material	not material
	or procedures concerning aspects of human rights that are relevant to operations		
HR9	Additional: Incidents of violations involving rights of indigenous people & actions taken	not applicable	not in countries
			of concern

GRI G3	Description	2008 CSR Report	2008 Disclosure
		Page Number	
Social : So			
	Disclosure on Management Approach Disclosure	53-54, 63-69	Full Disclosure
SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of	36, 53-62, 63-69	Full Disclosure
	operations on communities, including entering, operating, and exiting		
SO2	Percentage and total number of business units analyzed for risks related to corruption	13, 19-20, Annual Report p. 44-47	Partial Disclosure*
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures	13, 19-20	Partial Disclosure*
SO4	Actions taken in response to incidents of corruption	no significant incidents	Full Disclosure
SO5	Public policy positions and participation in public policy development and lobbying	28	Full Disclosure
SO6	Additional: Total value of financial and in-kind contributions to political parties, politicians,	no significant donations	Full Disclosure
	and related institutions by country	to political parties	
SO7	Additional: Total number of legal actions for anti-competitive behaviour, anti-trust,	no significant issues - page 44-49	Full Disclosure
	and monopoly practices and their outcomes	Annual Report	
SO8	Monetary value of significant fines and total number of non-monetary sanctions	no significant issues - page 44-49	Full Disclosure
	for non-compliance with laws and regulations	Annual Report	
Social : P	oduct Responsibility		
	Disclosure on Management Approach	39-40, 61-62	Full Disclosure
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for	36, 61	Full Disclosure
	improvement, and percentage of significant products and services categories subject to such procedures	5	
PR2	Additional: Incidents of non-compliance with regulations and voluntary codes on health and	none known	Full Disclosure
	safety impacts of products and services during their life cycle, by type of outcomes		
PR <sub>3</sub>	Type of product and service information required by procedures, and percentage of significant products	61-62	Full Disclosure
	and services subject to such information requirements		
PR4	Additional: Total number of incidents of non-compliance with regulations and voluntary codes concerning	none known	Full Disclosure
	product and service information and labelling, by type of outcomes		
PR5	Additional: Practices related to customer satisfaction, including results of surveys measuring	61	Full Disclosure
-	customer satisfaction		
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications,	Not material for Building Products due to	o the nature
	including advertising, promotion, and sponsorship	of these products.	
PR7	Additional: Total number of incidents of non-compliance with regulations and voluntary codes	Not material for Building Products due to	o the nature
,	on marketing communications, including advertising, promotion, and sponsorship by type of outcomes		
PR8	Additional: Total number of substantiated complaints regarding breaches of customer	none known	Full Disclosure
	privacy and losses of customer data		Distrosure
PR9	Additional: Monetary value of significant fines for non-compliance with laws and regulations concerning	no significant fines	Full Disclosure
	the provision and use of products and services		. an Disclosure
	the provision and use of produces and services		

Note: \* CRH is a federal Group and consequently company-level data for some GRI indicators is not collated centrally although overall performance is monitored. For these indicators CRH has therefore reported a Partial Disclosure. CRH reviews annually the scope of the CSR data collection and where appropriate and practicable in the future will report a Full Disclosure on relevant indicators.

### Key Performance Indicators for Cement Activities Cement Sustainability Initiative

Key Performance Indicator	2005	2006	2007	2008
Climate Change				
 Total CO₂ emissions (Gross), million tonnes	9.83	10.11	12.06	13.31
Total CO₂ emissions (Net), million tonnes	9.73	9.86	11.78	13.12
CO₂ emissions (kg) per tonne of cementitious product (Gross)	751	751	741	749
CO₂ emissions (kg) per tonne of cementitious product (Net)	744	733	724	738
Alternative Fuels & Materials				
Energy efficiency (kcal/kg clinker)	954	973	964	955
% Fuel substitution for virgin fuels	7.48%	8.57%	7.17%	6.16%
% Biomass in kiln fuel	1.45%	1.63%	1.52%	1.40%
% alternative materials (clinker and cement)	5.97%	6.13%	10.05%	8.90%
clinker : cement ratio	85.23%	85.03%	83.60%	81.77%
Health/Safety				
No of fatalities (directly employed)	1	0	0	0
Fatality rate per 10000 (directly employed)	3.5	0	0	0
No of fatalities (indirectly employed)	1	1	1	0
No of fatalities (involving 3rd parties)	0	0	0	0
Number of lost time injuries (directly employed)	19	19	22	18
Number of lost days (directly employed)	577	346	850	646
LTI rate per 1m man hours (directly employed)	3.64	3.64	3.36	2.63
Severity rate per 1m man hours (directly employed)	111	66	130	94
Number of lost time injuries (indirectly employed)	1	8	7	12
Emissions				
Particulates, specific (g/tonne of clinker)	349	375	412	405
Particulates, total (tonnes per year)	4,060	4,332	5,631	5,924
NO <sub>x</sub> , specific (g/tonne of clinker)	1,684	1,554	1,929	1,646
NO <sub>x</sub> , total (tonnes per year)	19,568	17,932	26,383	24,051
SO <sub>x</sub> , specific (g/tonne of clinker)	144	154	257	200
SO <sub>x</sub> , total (tonnes per year)	1,671	1,778	3,513	2,917
% Clinker Produced with monitoring of major and minor emissions	79.5%	79.9%	65.6%	74.7%
% Clinker Produced using continuous monitoring of major emissions	67.6%	79.4%	78.8%	74.7%
Local Impacts				
% of active sites with guidelines and plans for biodiversity in place	78.6%	78.6%	85.0%	80.0%
% of sites with community engagement plans in place	78.6%	85.7%	85.7%	80.0%
% of active sites with quarry rehabilitation plans	92.9%	92.9%	92.9%	86.7%
Non active sites with quarty renabilitation plans	92.970	92.910	92.970	00.770

Note 1: For definitions of these KPIs, refer to the CSI Interim Report, June 2005 on www.wbcsdcement.org

Note 2: The figures above follow the convention of taking all companies, including joint ventures and associates, on an equity share basis, except Health and Safety KPIs which refer only to fully owned companies. Note 3: In accordance with CSI conventions, the 2008 figures include the joint venture in India, My Home Industries Ltd.

# Glossary

Abbreviation	Explanation	
Aggregates	Crushed stone, sand and gravel	
Asphalt	A mixture of bitumen and aggregates: used for road and highway surfaces	
Building Products	In the CRH context, this includes insulation, fencing and security systems, daylight and ventilation systems, roller shutters and awnings and construction accessories	
C&D	Construction and Demolition	
Cement	The primary binding agent used in building, made by grinding clinker and other materials to a fine powder, which can be mixed with water, sand and aggregates to set as concrete	
Clay	A naturally occurring plastic material composed primarily of fine-grained minerals which can be mixed with other ingredients, shaped and fired to create clay bricks, rooftiles, pavers etc.	
Clinker	A black nodular material which is the output of a cement kiln following decarbonation of limestone and reaction with other materials	
Concrete	A building material consisting of sand, gravel or aggregates in a mortar or cement matrix, cast or moulded into blocks, pipes, tiles and other products	
CO <sub>2</sub>	Carbon Dioxide, generated by fuel combustion and decarbonation and/or oxidation of carbon in raw materials	
CSI	Cement Sustainability Initiative	
CSR	Corporate Social Responsibility	
Decarbonation	The dissociation of calcium carbonate to calcium oxide with the evolution of carbon dioxide	
Distribution	In the CRH context, distribution includes DIY stores, specialist building materials suppliers and builders' merchants	
DJSI	Dow Jones Sustainability Index	
EIA/EIS	Environmental Impact Assessment/Statement	
ELO	Environmental Liaison Officer (designated person in each company with functional responsibility for environmental compliance)	
EMS	Environmental Management System	
EPA	Environmental Protection Agency (of the country concerned)	
G	Giga (10° units)	
GHG	Green House Gas	
GWh	Gigawatt hours	
На	Hectares (of land restored or landscaped), where 1 ha~ 2.5 acres	
IPC, IPPC	Integrated Pollution (Prevention and) Control, i.e. permitting which integrates emissions to air, water, land etc into a single licence	
ISO 9001	The International Standards Organisation model for management and external certification of quality	
ISO 14001	The International Standards Organisation model for management and external certification of environmental performance	
k	One thousand units	
km	Kilometre	
KPI	Key Performance Indicator	
L	Litre	
Leadership Position	Leadership positions quoted are on a volume basis	
Lime	Calcium oxide, created by decarbonation of limestone, and Calcium Hydroxide	
m	One million units	
Materials	In the CRH context, this includes aggregates, asphalt, readymixed concrete	
mg	Milligram	
MSHA	Mine Safety and Health Administration (US)	
NAP	National Allocation Plan (for CO <sub>2</sub> emissions)	
NAPA	National Asphalt Pavement Association (US)	
NGO	Non-Governmental Organisation	
NO <sub>x</sub>	Nitrogen Oxides	
OHSAS 18001	Occupational Health & Safety Assessment Series certification of occupational health & safety management systems	
OSHA	Occupational Safety and Health Administration (US)	
Other Process	In the CRH context, this includes lime, periclase and lightweight aggregates production	
Periclase	Magnesium oxide, used in the manufacture of refractory linings for the steel, cement, glass and non-ferrous metal industries	
NSSGA	National Stone, Sand & Gravel Association (US)	
RAP	Recycled Asphalt Pavement	
Readymixed Concrete	A mix of aggregates, sand and cement that can be poured into forms and sets as a solid mass	
SAM	Sustainability Asset Management (Zürich-based Rating Agency for DJSI)	
	Sulphur Oxides	
SO <sub>X</sub>		
SRI	Socially Responsible Investment	
Specific	A term defining emissions on a per tonne of product basis	
T	Tera (10 <sup>12</sup> units)	
TWh	Terawatt hour	
Tonnes	Metric tonnes	
WBCSD	World Business Council for Sustainable Development	

### DNV Assurance Statement

### CRH Corporate Social Responsibility Report 2008

### Introduction

Det Norske Veritas Ltd. (hereafter 'DNV') has been commissioned by the management of CRH plc (hereafter 'CRH') to carry out an independent third party assurance engagement on CRH's 2008 Corporate Social Responsibility Report (hereafter 'the Report') in its printed and downloadable pdf formats.

CRH is responsible for the collection, analysis, aggregation and presentation of all information and assertions made within the Report. DNV's responsibility in performing this work is to the management of CRH only, in accordance with terms of reference agreed. The intended user of this statement is the reader of the CRH CSR Report.

#### Scope of Assurance

The scope of DNV's assurance engagement, as agreed with CRH included the verification of:

- CSR policies, goals, initiatives, practices and performance for calendar year 2008, described in the Report. These were verified at Group level as well as in site visits to 10 CRH operating companies and joint ventures. The companies visited were: Irish Cement (Platin Works) and Clogrennane Lime (Carlow) in Ireland; Ecotherm (Winterswijk) in the Netherlands; Ibstock (Throckley) and Ancon (Sheffield) in the United Kingdom; Plakabeton (Ternat) in Belgium; L'Industrielle du Beton (Boran Sur Oise) and LDP (Gonfreville) in France; Finnsementti (Lappeenranta) in Finland; and Nesher Cement (Ramla) in Israel.
- The extent to which the CSR management approach and initiatives described in the Report are displayed in the operations at the sites visited.
- The Health & Safety, Social and Environmental data management systems, and associated processes and tools for collecting, analysing, aggregating and reporting quantitative and qualitative information provided in the Report.
- Processes for defining the boundaries, focus and content of the Report.
- The extent to which the principles and requirements of the Global Reporting Initiative (GRI) Guidelines for Sustainability Reporting (2006) (hereafter 'GRI G3') are reflected in the Report and the corresponding application level declared by CRH.
- The extent to which the principles of Materiality, Inclusivity and Responsiveness are adopted, in line with the requirements of the AccountAbility1000 Assurance Standard (2008) (hereafter 'AA1000AS (2008)') for a High Level Type 2 assurance engagement. The reliability of the information within the Report for calendar year 2008, was verified to a high level of assurance, with particular attention paid to the following specific performance information in accordance with the requirements of AA1000AS (2008):
  - Corporate Governance: communication of the code of conduct and hotline to employees and management at sites visited during the assurance engagement, and mechanisms for communication on these matters to the Board of Directors;
  - Environment: energy use, alternative materials and fuels, recycling, and waste management;
  - Health & Safety: safety management, frequency rate, severity rate, fatalities;
  - Social: number of employees, gender balance and absenteeism rates.

The verification of CRH's compliance with the Cement Sustainability Initiative (CSI) reporting requirements for  $CO_2$ ,  $SO_x$ ,  $NO_x$  and Particulates is documented in a separate assurance statement on page 79.

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CRH's reporting boundaries include all operating companies over which CRH management exercises significant control. Where data and information from joint ventures and associated companies is included, it is noted within the Report.

The primary purpose of this assurance engagement was to verify the quality of data, information and assertions made in the Report. By undertaking this process, DNV also gained insight into CRH's approach to CSR management, in accordance with the above described scope of assurance. The engagement excluded the CSR management, performance and reporting practices of CRH's suppliers, contractors and any third-parties mentioned in the Report. DNV did not interview any external stakeholders as part of this assurance engagement. The verification covered data from calendar year 2008.

#### Statement of Independence

DNV was not involved in the preparation of any information presented in the Report, aside from the CSI Assurance Statement and this Assurance Statement. DNV did not provide any services to CRH or its stakeholders during 2008-2009 that could conflict with the independence of our work. DNV expressly disclaims any liability or responsibility for any decision a person or entity might make based on this Assurance Statement.

#### Verification Methodology

This assurance engagement was conducted between April and July 2009. It was planned and carried out in accordance with the DNV Protocol for Verification of Sustainability Reporting, which is based on the GRI G3 and AA1000AS (2008).

In reaching our conclusions, we have undertaken the following work:

- Interviewed a selection of CRH executives and management representatives from different Divisions and functions of the Group;
- Visited CRH's Head Office at Belgard Castle and CRH Europe Materials' Head Office in Ireland and conducted site visits to the 10 companies listed above. These were selected with due regard to achieving a balanced range of products, geographies, length of time within Group, and level of CSR maturity. DNV observations from visits to more than 50 CRH sites, during prior assurance engagements, were also taken into account;
- Reviewed the mechanisms implemented by CRH to promote and oversee its CSR-related policies across the Group, as described in the Report;
- Analysed corporate CSR data management systems at Group, Divisional, company and site level, assessing specified data and information reported by CRH (in accordance with the requirements of AA1000AS 2008). The assessment of reliability of data and information was based on explicit assertions regarding CSR performance on material issues and included a review of their completeness and accuracy. It included a review of the methods, practices and tools used in the collection, aggregation, analysis, internal quality control and reporting of the data and information, as



it is transferred and managed at different levels in the organisation. DNV's assessment also included: high-level trend analysis; the identification and analysis of causes of significant changes in performance in comparison to 2007; a review of data traceability; and record checks at different stages in the data flows, from source to Group level;

- Examined and reviewed documents, data and other information made available to DNV by CRH;
- Reviewed a selection of internal communication and external media reports relating to CRH's CSR management approach, performance and adherence to its policies;
- Challenged the CSR related claims and assertions made in the Report and reviewed supporting information.

#### Conclusions

In DNV's opinion, and based on the scope of this assurance engagement, the Report provides a reliable and fair representation of CRH's CSR-related policies, goals, initiatives, practices and performance in 2008.

We commend CRH for the increased awareness of the Group CSR programme and continual commitment to improved CSR performance, reflected by the management and employees at sites visited within this assurance engagement, including joint ventures.

The commitment to Health & Safety was found to be high across the sites visited as part of this assurance engagement and is reflected in the significant improvements made in the Group frequency and severity rates reported in comparison with 2007. Furthermore, we commend CRH for embarking on the fatality elimination programme described in the Report.

The level of commitment to environmental sustainability across sites visited appears to vary between different Divisions and product-types, ranging from 'compliance with the law' at sites with low environmental impact, to 'continuous improvement', to 'world class performance'.

Based on the work undertaken as part of this assurance engagement, DNV believes that the Report generally meets the principles, content and quality requirements of GRI G3 and AA1000AS (2008) for a Type 2 High Level of Assurance. We endorse the GRI application level of A+ declared by CRH. Further conclusions and observations on the adoption of reporting principles and specified performance information are made below:

Inclusivity and Responsiveness: Overall, CRH has a good understanding of its stakeholders and their information needs and has used this knowledge to inform the content and structure of the Report. At Group level CRH engages regularly with SRI rating agencies, investors and shareholders, best practice groups, CSI and other industry associations. Engagement with local stakeholders is delegated to local operating companies, some of which have robust stakeholder engagement programmes, while others are beginning to implement more structured programmes.

<u>Materiality</u>: While the Group does not have a formal structured materiality assessment process, it maintains a range of internal processes which are effective in bringing out CSR issues of relevance and importance for the Group and its stakeholders. Furthermore, through the above-described stakeholder engagement processes, CRH is able to continue to identify and understand the CSR issues which are material to the company and able to stay informed of trends and changes in CSR over time. These processes informed the content of the Report.

<u>Reliability</u>: The data measurement techniques and basis for calculations have been well-described to DNV and can be replicated with similar results. No systematic errors have been detected for data and information verified in accordance with the above-described scope of assurance. Furthermore, we have not found any material inaccuracies or gaps that would significantly affect the way performance is perceived by stakeholders.

The Report includes all entities that meet the criteria of being subject to control or significant influence of the reporting organisation, and does not omit relevant information that would influence stakeholders' decisions or that reflect significant Environmental or Health & Safety or Social issues.

<u>Neutrality</u>: The Report provides a fair and balanced representation of CRH's approach to CSR management. Furthermore, CRH has adopted a new reporting format for 2008 which presents information in a more transparent and accessible format.

<u>Comparability</u>: The Report presents information in a clear manner which facilitates the comparison of performance over a five year period through newly developed charts and graphs. For a number of environmental indicators CRH is now focused on reporting absolute data. For cement, which accounts for a significant share of the company's environmental impact, CRH reports specific (per tonne of product) values in line with the CSI KPIs. CRH is committed to continually developing appropriate metrics which demonstrate specific environmental performance over time.

#### **Opportunities for Improvement**

The following is an excerpt from the observations and opportunities reported back to the management of CRH to encourage continual improvement. However, these do not affect our conclusions on the Report.

- Continue to develop a more structured approach to stakeholder engagement at local site level and consider implementing a formalised materiality assessment process that would assist in informing the content and prioritisation of information reported.
- Continue to progress the development of KPIs for environmental performance which are enduring and applicable to the diversity of CRH's product range, in order to facilitate the assessment of performance as CRH's composition / equity, production volumes and product characteristics change over time.
- Continue to enhance the CSR-related data collection tools by implementing version controls or adopting processes that would further facilitate reporting and internal quality control. Consider tailoring data collection more specifically to the different types of operating companies and product lines.
- Continue the robust focus on improving Health & Safety performance, while also encouraging CRH companies, where appropriate, to expand their focus on environmental management and reporting initiatives.



Lead Verifier



Antonio Ribeiro Assurance Engagement Reviewer

Det Norske Veritas Ltd, London, July 2009

## DNV Assurance Statement CRH plc CSI KPIs for Calendar year 2008: CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>x</sub> and Particulates



### Introduction

CRH plc (hereafter 'CRH') has commissioned Det Norske Veritas (hereafter 'DNV') to perform a limited verification of CRH's reported World Business Council for Sustainable Development – Cement Sustainable Initiative (WBCSD-CSI) Key Performance Indicators (KPIs) for  $CO_2$ ,  $SO_x$ ,  $NO_x$  and Particulates, for the calendar year 2008, as presented in CRH's CSR Report 2008 on page 75.

CRH was responsible for reporting the CO<sub>2</sub> emissions in accordance with the WBCSD-CSI Protocol "CO<sub>2</sub> Accounting and Reporting Standard for the Cement Industry", June 2005. SO<sub>x</sub>, NO<sub>x</sub> and Particulates were reported in line with the WBCSD-CSI Protocol "Guidelines for Emissions Monitoring and Reporting in the Cement Industry", March 2005.

Our responsibility in performing this work is to the management of CRH only and in accordance with terms of reference agreed with them. Our independence is defined by legal and regulatory texts as well as by our professional code of ethics. DNV expressly disclaims any liability or responsibility for any decisions, whether investment or otherwise, based upon this assurance statement.

### Scope of Work

Our verification scope included the reported greenhouse gas emissions (specific and total direct  $CO_2$  emissions, gross and net), as well as the  $NO_x$ ,  $SO_x$  and Particulates specific and total emissions, generated within cement production facilities wholly and partially owned (on a percentage shareholding basis) by CRH, for the calendar year 2008.

### Assessment Methodology

Our risk-based verification approach draws from the criteria set out in ISO14064 (part 3), the verification protocol developed by the International Emissions Trading Association, and the International Standard on Assurance Engagements, ISAE 3000, developed by the International Federation of Accountants (IFAC). This review was conducted during April-July 2009.

As a part of the verification process, DNV:

- Obtained an in-depth understanding of the systems, policies, management and structures in place to generate, aggregate and report the selected indicator data at the reporting unit, regional and Group level;
- Conducted interviews with persons responsible for data gathering, aggregation and consolidation processes at Group and relevant entity levels;
- Assessed the implementation of, and compliance with, the WBCSD-CSI Protocols referenced above;

- Assessed the existence and implementation of internal reporting procedures;
- Had access to specific documents, data and information (e.g. internal reporting procedures, production/sales records) made available by CRH plc and reporting units;
- Performed tests, on a sample basis, of selected CO<sub>2</sub> emissions-related data (e.g. fuel consumption, fuel net calorific values, CO<sub>2</sub> emission factors, clinker production volume, calcination/emissions factors, bypass dust and CKD, clinker produced/bought/sold and clinker/ cement substitutes);
- In addition to discussions at CRH's head office, conducted site visits to 3 cement production facilities: Irish Cement (Platin), Nesher (Ramla) and Finnsementti (Lappeenranta), to assess the completeness of the sources covered, the activity data, the data gathering and management process and data quality at site level;
- Assessed the data consolidation process of CO<sub>2</sub>, SO<sub>x</sub>, NO<sub>x</sub> and Particulates emissions data at CRH Group level.

For reporting purposes CRH made use of the latest reporting tool recommended by the WBCSD-CSI. Validation of the WBCSD-CSI reporting tool was not part of the assurance scope.

### Conclusion

Based upon the performed assurance activities we can conclude:

- The indicators reported on page 75 and included within the scope of this assurance engagement have been gathered in compliance with the WBCSD-CSI Protocols referenced above;
- CRH's internal policies, reporting procedures and systems provide a solid basis for reporting on the parameters listed in the scope of this assurance engagement.

Based upon the above, in our opinion, nothing has come to our attention that causes us to believe that: the reported greenhouse gas emissions and  $NO_x$ ,  $SO_x$  and Particulates specific and total emissions, as set out in CRH 2008 CSR report page 75 and included within the above scope are, in all material respects, not fairly stated.



Sven J.P. Starckx GHG Verifier

Det Norske Veritas Ltd. London, July 2009



Luc Larmuseau Management Representative

### CRH CSR Reporting - History, Scope and Structural Aspects

### **Reporting history**

CRH produced its first Corporate Social Responsibility (CSR) Report in October 2004. The content and level of transparency was expanded in the second Report in August 2005. Following stakeholder consultation, CRH's third, fourth and fifth CSR Reports, which saw further advances in content and disclosure, were published in August 2006, July 2007 and July 2008 respectively. Based on stakeholder feedback, CRH has adopted a new format for this, its sixth CSR Report, published in July 2009, covering the calendar year 2008. This new format is designed to make information more readily available for the reader.

### Independent Verification

CRH was among the first companies in its sector to achieve full independent verification of its CSR Report in August 2005, repeated in August 2006, July 2007 and July 2008. This Report has also been verified by Det Norske Veritas (DNV): the detailed verification statements are included in the Report.

### Scope of CSR Reporting

CSR data from 100% of Group subsidiaries forms the basis of this Report. The scope of the Report addresses the full range of material economic, environmental and social impacts of the organisation. Details of CRH's principal subsidiaries are recorded on pages 124-128 of the CRH 2008 Annual Report. Compared with 2007, the 2008 CSR Report includes data from acquisitions made in that year, principally Ancon and Ferrobeton. In common with other large companies, CRH also owns shareholdings in several joint ventures and associates, with a listing of the principal investments provided on page 129 of the CRH 2008 Annual Report. Most of these companies supply CSR data to the Group and actively participate in CSR Programmes. Their key data is included on an appropriate % shareholding basis at appropriate points in the Report. While it is CRH's aspiration that all joint ventures and associates should adopt its CSR policies in full (or their own equivalent policies), this is clearly not always practicable where CRH does not have management control.



"Sector supplement in final version

### Structure of the Report

This Report follows a similar structure to previous Reports. It opens with an introduction by the CEO, followed by a section outlining some background information about CRH. The next sections detail CRH's main CSR focus areas grouped under four headings; corporate governance, environment and climate change, health & safety and social. Each section records CRH's associated policy, gives details of how it is implemented, and describes material topics in that area. The final section details CRH's stakeholder communications and community activities and the various SRI ratings that have been awarded to the Group's performance in CSR. The appendices also cross-reference the content of the Report to the requirements of the GRI guidelines and include a glossary of terms.

#### Intended audiences

The key audiences for this report are CRH stakeholders - employees, customers and suppliers, as well as current and potential investors, rating agencies, government and regulatory bodies, non-governmental organizations (NGOs) as well as neighbours and local communities. CRH hopes that this Report fulfils the expectations of all stakeholders and welcomes feedback.

### Adoption of the Global Reporting Initiative (GRI)

As with the previous Report, CRH has voluntarily adopted the "G<sub>3</sub>" Sustainability Reporting Guidelines developed by the GRI, including the guidance on defining Report content and materiality. As many stakeholders will be aware, GRI is an independent institution whose mission is to provide a trusted and credible framework for Sustainability Reporting.

Data is provided under all indicators but in some cases only partial disclosure can currently be met. CRH declares that its 2008 Reporting qualifies for the GRI scope "A+" application level requirements, in accordance with the criteria table on the previous page, and this has also been verified by DNV.

### Data accuracy

Every effort has been made to provide consistent physical data in this Report, a significant challenge when collating the 2008 data from a diverse range of activities from almost 4,000 locations in 35 countries. It is CRH's experience that the data accuracy and quality improves each year, enabling more confident trending of results and setting of future objectives. Metric units are used throughout. For the most part, data is based on measured or metered physical quantities, or best estimates based on industry knowledge and established calculation factors and representative samples, if actual data is not available. CO<sub>2</sub> emissions are calculated according to the Cement Sustainability Initiative (CSI) of the World Business Council for Sustainable Development (WBCSD) GHG (Green House Gas) Protocol for cement plants, while those from other activities are estimated from established fuel and activity air emission factors. No universally-accepted methodology yet exists for calculating CO<sub>2</sub>/tonne for other activities, for example clay brick or asphalt production. For cement activities, CRH Reports according to the agreed CSI KPIs, which are directly comparable across that sector. Specific emissions are reported for cement activities in accordance with the WBCSD CSI conventions. CRH is progressing the development of indicators for specific emissions in other key activities.



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CRH welcomes feedback and comments from stakeholders on its CSR reporting.

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