



**ENABLING THE FUTURE**

**THE MORGAN CRUCIBLE COMPANY PLC**  
EHS REPORT 2007

## THE GROUP AT A GLANCE

### CARBON

Dedicated to providing engineering solutions built on advanced materials technology, our Carbon Division utilises its unparalleled expertise in carbon, graphite, silicon carbide and related materials to serve a global customer base. Carbon's leading edge technology solutions are applied to a wide range of products including; body armour, petrochemical processing plants, synthetic diamonds, windmills, cars, computers, photovoltaics and railway networks, among many others.

**£216.6m**  
Revenues

Carbon represents  
38.0% of Group  
operating profit\*

### TECHNICAL CERAMICS

Innovative design and application engineering, underpinned by customer focused research and development, are the drivers that have kept Technical Ceramics at the forefront of so many rapidly developing markets. From scratch-resistant coatings for MP3 players to the latest advances in pioneering medical technology, we work closely with our customers to provide engineered, manufacturing solutions that add-value to the end product. Our base materials include ceramic, glass, precious metals, piezoelectric and dielectric materials.

**£152.6m**  
Revenues

Technical Ceramics  
represents 21.8% of Group  
operating profit\*

### INSULATING CERAMICS

If your business involves materials heated to very high temperatures, there is a strong chance that Insulating Ceramics products or solutions are involved. We are a world leader in the production of insulating materials such as fibres and firebricks, as well as heating vessels such as crucibles and furnaces. Our continuously developing expertise ensures close, long-term relationships with customers across a range of global markets from automotive, to iron and steel making, the chemical processing industries, to power generation and fire protection.

**£324.0m**  
Revenues

Insulating Ceramics  
represents 40.2% of Group  
operating profit\*

#### GROWTH MARKETS

We provide solutions for fluid handling in chemical and other processing industries



We manufacture the protective plates for bullet proof vests



Our carbon and graphite components are used in many thermal management applications



#### GROWTH MARKETS

Our power tube components are used in security scanning devices



Our braze alloys are used for engine build and repair and our ceramic components and sub-assemblies are used in engine monitoring and control equipment



Our high quality ceramics are favoured by medical device manufacturers and the medical professions



#### GROWTH MARKETS

Our leading Superwool™ range is extensively used for fire protection in several markets



Our heat management solutions are crucial for steel manufacturing



Our materials are used in the chemical processing industry for heat management applications at temperatures up to 1400°C



\* Operating profit before unallocated costs and one-off items.

**OUR STRATEGY**

**OUR VISION IS TO BE ONE OF THE WORLD'S VERY  
BEST ADVANCED MATERIALS COMPANIES**

**OUR AIM IS TO CREATE LONG-TERM  
SUPERIOR SHAREHOLDER VALUE**

**OUR STRATEGIC PRIORITIES ARE TO:**

**1:**  
FOCUS ON HIGHER GROWTH, HIGHER MARGIN,  
NON-ECONOMICALLY CYCLICAL MARKETS

**2:**  
BE HIGH VALUE-ADDED  
TO OUR CUSTOMERS

**3:**  
BE NUMBER 1 OR 2 IN OUR  
CHOSEN MARKET SEGMENTS

**4:**  
HAVE A CULTURE OF OPERATIONAL  
EXCELLENCE AND COST EFFICIENCY

**5:**  
FIND, KEEP AND DEVELOP  
THE RIGHT PEOPLE

OVER THE FOLLOWING PAGES WE TAKE  
A LOOK AT HOW OUR EHS PROGRAMMES  
SUPPORT OUR STRATEGY

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Our vision for Morgan Crucible is to be one of the world's best advanced materials companies with the aim of creating long-term superior shareholder value. Achieving this means we work towards excellence in all areas of our business and in our 2007 Annual Report we reported on our progress against the strategic priorities we have set and highlighted the contribution of our corporate responsibility programmes and performance to this progress.

Excellence in environmental, health and safety (EHS) performance through ongoing and continuous improvement makes sound business sense and is in the interests of all our stakeholders. This report helps illustrate our approach and some of the key developments the Group has made, including our progress towards the targets and objectives outlined in last year's report.

In 2007 we made significant strides towards addressing two of the key EHS-related challenges which we outlined in our 2006 EHS report:

- To address the challenge of the shift in our manufacturing footprint to lower cost/ higher growth countries, we launched a major EHS training programme in China during the year. This Board approved programme is helping to ensure that the culture of these operations emphasises the importance of EHS, and the need for transparency and openness in all corporate responsibility matters, as strongly as in our businesses in Europe and North America.

- Another key challenge is climate change. During the year we worked with organisations such as the Carbon Trust to explore ways we can reduce our carbon footprint in absolute and relative terms. The impact of this is starting to be seen in our reported numbers with CO<sub>2</sub> emissions intensity down in the year.

We are also addressing related business opportunities. For example our bio-soluble Superwool™ insulating fibre helps enhance energy efficiency in industry and the home. Further examples of the Group's products which make a positive contribution to environmental sustainability are included on page 10.

In addition we have aligned our EHS performance reporting with our financial reporting systems which enables the Executive Committee to receive regular updates on EHS performance. The Board also reviews EHS risks and opportunities at least annually.

We will be building on these achievements in 2008 and will continue our on-going dialogue with our stakeholders, including our employees, customers, investors and regulators as we find this a valuable source of information and feedback to help us identify and respond to specific issues and evolving requirements.

We look forward to reporting on our further progress next year, but in the meantime, if you have any comments or suggestions, please let us know.

**Mark Robertshaw**  
Chief Executive Officer

**Kevin Dangerfield**  
Chief Financial Officer

April 2008



**MARK ROBERTSHAW**  
Chief Executive Officer  
**KEVIN DANGERFIELD**  
Chief Financial Officer



FTSE4Good

This is our fourth annual EHS Report. It summarises Morgan Crucible's environmental, health and safety performance in the year to 4 January 2008 covering the available data for the whole Group. It also details our policies and management systems.

We are committed to improving our EHS performance as part of our corporate responsibility programme. Our statement of core values also commits us to incorporating environmental sustainability in our product development programmes and to strive to minimise the impact of our operations on the environment. We are also committed to ensuring that the working environment is safe and that all individuals take responsibility for achieving this.

Our Core Value Statement can be downloaded from the "Our responsibilities" section of our website.

The health and safety data in this report covers 99% of our employees and the environmental data covers 98% of our production capacity, up from 98% and 94% respectively in 2006. During 2007 we acquired a 49% stake in NP Aerospace and in December we announced the acquisition of Certech and Carpenter Advanced Ceramics. We plan to cover these businesses in our reporting from the first full year after they join the Group and in the case of NP Aerospace after we have a majority shareholding in the company in 2011.

Many of Morgan Crucible's products and services help to improve the environmental and health and safety performance of our customer's products. Although we have not sought to quantify this benefit, a key part of our contribution to sustainability is the development and supply of new and improved products.

Morgan Crucible is a global specialist materials engineering company and has a wide portfolio of products serving the needs of customers in selected markets such as electrical components, transportation, fire protection, medical and alternative energy. Morgan Crucible was founded in 1856 and during 2007 employed some 9,600 people in 35 countries around the globe. Listed on the London Stock Exchange, and a member of the FTSE4Good index, in 2007 our turnover was £693million.

Morgan Crucible's strengths in applications engineering and superior materials technology, coupled with global process and management capabilities put us at the forefront of materials science. This breadth enables Morgan Crucible to respond quickly to market changes and provide customers with high value added tailored solutions. By understanding the global demands for a variety of high technology markets, Morgan Crucible has established an outstanding reputation for providing value-added solutions through world-class research and development and innovative design.

	2007	2006
Sales (\$m)	<b>693.2</b>	677.8
Operating profit margin# (%)	<b>12.5%</b>	10.9%
R&D spend* (\$m)	<b>8.7</b>	8.2
Dividends (\$m)	<b>18.7</b>	13.2
Charitable donations (£k)	<b>193</b>	146

#Operating profit margin before one-off items  
\* Excludes the amount working with customers by way of product development and enhancement

Further information about Morgan Crucible is available on our website at [www.morgancrucible.com](http://www.morgancrucible.com)

Morgan Crucible's EHS policy applies to the whole Company. Its purpose is to:

- Govern the environmental and health & safety performance of the Group worldwide
- Maintain open communication on environmental and health & safety performance with all Morgan Crucible's stakeholders
- Integrate environmental, health & safety management into Morgan Crucible's business strategies to enhance competitive advantage.

The key features of the Group's EHS policy are to:

- Comply with environmental and health & safety legislation, regulations and other applicable requirements
- Minimise the environmental impact of historic, current and future operations
- Conduct operations in such a manner as to avoid unacceptable risk to human health and safety
- Supply products that will not present an unacceptable risk to human health and safety when used in compliance with product safety communications and common safety practices

- Establish measurement tools for, and continuously monitor environmental and health & safety performance
- Set objectives for the continuous improvement of environmental and health & safety performance
- Train our people in relevant environmental and health & safety matters
- Encourage our business partners to adopt this same accountability.

Where appropriate, the Group EHS policy is supplemented by Divisional, business unit and site policies which reflect local legislation and the particular risks and opportunities of each operation.

### **Risk Management**

Morgan Crucible operates a consistent and systematic risk management process. This includes EHS related risks and helps to ensure that risks which could impact the Group's long and short term performance and value are identified, managed and mitigated. The process also helps to identify business and performance opportunities.

The management of EHS is aligned with the operation of our day-to-day business. The Chief Executive Officer has overall accountability for corporate responsibility matters, supported by the Chief Financial Officer who has specific responsibility for EHS policy and performance. Operational responsibility is delegated to the Chief Executive of each Division and to the manager of each operation. This structure is supplemented by EHS professionals within each business and in practice, all employees are responsible for ensuring that our EHS policies are implemented and for identifying opportunities for development and improvement.

Morgan Crucible's EHS management processes also include the EHS Compliance Audit Programme. This programme provides assurance and helps ensure compliance with national and other regulatory requirements and with recognised good management practice as set out in the Morgan Crucible Environmental, Health and Safety Good Management Practice Manual which is issued to all sites world-wide. The audits also identify how sites can anticipate and respond to developing and impending regulations.

Where necessary, sites are required to develop a corrective action plan following the audit, and these actions are regularly tracked, by the auditors, to monitor progress.

During 2007 24 sites were audited, meeting our target for the number of audits conducted during the year. Audits were conducted at sites in the USA, Mexico, Brazil, Venezuela, the UK, France, Germany, Luxembourg, Korea, India, Hong Kong, Taiwan and Australia. A total of 127 audits have been carried out in the past seven years. Our 2008 objective is to undertake a further 31 site audits, including audits of the 9 sites acquired with the Technical Ceramics businesses of Carpenter Technology Corporation.

In Europe and Asia-Pacific, the programme is conducted by external auditors, whilst in the Americas it is conducted by internal experts and reviewed by external consultants.



### EHS MANAGEMENT AND TRAINING IN CHINA

Morgan Crucible has had a long-term presence in China and we have invested in developing our operations in the country to serve both local and international markets. With some 1,500 employees and 9 locations, including the MMS site under construction at Suzhou, each of our Divisions has at least one site in China.

Over the past year we have been investing to ensure that our facilities in China are managed to the same EHS standards as our sites in other parts of the world. A key part of this of this has been a Board approved programme which will be ongoing in the coming year. This programme uses external specialists and includes EHS training for general managers and senior staff covering EHS management, risk and commercial implications, regulatory responsibilities and relevant policy frameworks. This is complemented by intensive EHS training and workshops for the EHS leaders from each site and is to be followed up by onsite training.

We are working to develop an EHS management system for our Chinese businesses. This will complement the existing systems of those sites that are already certified to ISO 14001 and will provide a sound basis for the EHS management for non-certified sites. Once developed, the programme will be individually tailored to meet the requirements of the different sites and each site will be instructed in its establishment and use. This will help to develop and reinforce a culture of continuous EHS improvement at all our Chinese operations.

These initiatives and ongoing performance will be monitored and supported by our EHS audit programme and by regular monthly reporting.

**CARBON MANAGEMENT PROGRAMME**

Morgan Crucible has been working with the Carbon Trust in the UK over the past two years to develop and implement a programme to proactively manage energy usage and carbon emissions. The first stage was a study to scope the overall potential for energy reduction at production sites and to identify where the main opportunities lie. These include:

1. Heat recovery from kilns
2. Space heating (air change analysis/zoned heating control)
3. Base load reviews
4. Electric motor reviews

Five sites were included and, including the effect of existing improvement plans and reductions in electricity use, their combined CO<sub>2</sub> emissions due to energy use were cut by over 1,350 tonnes in 2007 compared with 2006.

The second phase of the programme includes the development of detailed energy policy and improvement plans to cut energy use and carbon emissions at key production facilities. Following this it is expected that the company will further develop its carbon reduction methodology so that it can be rolled out to Morgan Crucible sites world-wide.

In addition to Morgan Crucible's corporate EHS policy, outlined on page 5, our operations have specific environmental policies, key performance indicators and targets according to the environmental impacts, nature and need of the particular business.

**Environmental Management Systems**

Morgan Crucible's environmental management systems, including the EHS Compliance Auditing Programme, provide the framework for the implementation of our environmental policies. The essential objectives of our systems across the Group are to identify legal and other requirements and to monitor and continuously improve performance.

Formal environmental management systems are in place at 61 (2006: 57) major sites, representing some 84% (77%) of production capacity, including 27 (23) sites covering 48% (39%) of capacity which are certified to ISO14001.

The planned certification of a number of sites was deferred from 2007 to 2008 and as a result, we have not yet achieved our target of doubling the number of ISO14001 certified sites from 16 in 2005. However, with a further 10 certification planned for 2009, this target should be achieved in the coming year. These additional certifications are in addition to the rolling programme of re-certifications.

**Key Environmental Impacts**

Morgan Crucible's key environmental impacts include the emissions due to the use of energy in our processes and facilities, raw materials usage, water consumption, the re-use, recycling, discharge and disposal of waste and the impact of our products on our customers' environmental performance.

In a number of areas, Morgan Crucible has direct control of its environmental impacts, whilst in others although we have influence, our suppliers have direct control. Where possible we report on both of these.

During 2007 we aligned our environmental data collection with our financial systems and extended our environmental reporting to cover 100% of our production sites and the majority of our sales and technical offices. The data in this report covers the 98% of production site sales (2006: 94%) for which comparative data for 2006 is also available. The environmental data collected is focussed on that relevant for benchmarking and driving performance internally.



Making business sense of climate change



## Energy Use and Emissions Intensity

Much of the Group's production involves the use of high temperature processes. We report the environmental impact of the energy used in these process and elsewhere in our facilities as equivalent CO<sub>2</sub> emissions, indexed to turnover. This takes into account the use of all sources of energy. We assess site, Divisional and Group performance on the basis of energy and emissions "intensity" i.e. energy use indexed to turnover.

Our target is to reduce our CO<sub>2</sub> emissions intensity due to energy use by 5% over the two years 2007-8. Our 2007 performance was on track to achieve this with a 2.5% reduction. Underlying energy intensity was down by 3.6% but the full impact of this did not flow through to reduced emissions intensity due to changes in the mix of energy sources and the fall in the proportion of our electricity from 100% renewable sources. Our plan was to increase this to 4% over two years but we are now behind plan due to uneconomic pricing in the market for renewable electricity. We will continue to target increases in our use of renewable energy where this is economically viable.

## Energy & Emissions KPIs

	2007	2006	increase/ (decrease)
CO <sub>2</sub> intensity (tonnes per £m revenue*)	<b>611</b>	627	(2.5)%
Energy intensity (kWh per £k revenue*)	<b>1,942</b>	2,015	(3.6)%
% electricity from renewable sources	<b>1.9%</b>	2.6%	(70)bps
Total CO <sub>2</sub> due to energy use* (ktonnes)	<b>428</b>	427	n/a*

\* takes no account of business growth  
# allows for inter-company sales

In addition to improving energy consumption and emissions performance through increased efficiency, changes in our business and product mix influence our energy and emissions when indexed to turnover.

## INTELLIGENT LIGHTING AT TECHNICAL CERAMICS RUGBY

The Technical Ceramics team at the Rugby, UK plant continued to look for innovative ways to reduce energy use. During 2007 they trialed an intelligent lighting system in one key area of the plant. The system constantly monitors the level of natural light and automatically adjusts the intensity of the lights to maintain a constant light level within the building. The system also includes movement sensors so that the lights only operate when required. The new lights demonstrated a 71% energy saving, contributing to the plant's 105 tonne reduction in CO<sub>2</sub> emissions in the year. The Rugby team plans to phase in the new lights across the rest of the factory and to share the success of the trail with other plants.

## MMS INDIA REDUCES CO<sub>2</sub> EMISSIONS

During 2007 the team at the Molten Metal Systems plant in Aurangabad, India reduced their CO<sub>2</sub> intensity due to energy use by 25% in 2007. Key to this was a project to investigate the use of LPG used to fire the site's main kiln. By optimizing the firing cycle the team achieved a 30% cut in LPG use, reducing the site's CO<sub>2</sub> emissions by 312 tonnes. This benefit was complemented by cost savings and an improved working environment around the kiln area due to reduced smoke generation.



## ENVIRONMENTAL PERFORMANCE CONTINUED

### Waste and Recycling

Waste management is a key area of focus for the Group with opportunities to reduce our use of raw materials, packaging and other consumables. As well as saving money by recycling certain waste streams we can turn costs into revenue. We monitor hazardous and non-hazardous waste at a site, Divisional and Group level according to waste stream and disposal route. We assess performance on the basis of waste intensity (i.e. waste amounts indexed to turnover) and the proportion of total waste which is recycled.

Our target is to cut our waste intensity by 5% over the two years 2007-8 and to increase the proportion of our total waste which is recycled to 35%. Our 2007 waste intensity was down by 1% but this is less than the amount needed to be on track to achieve the target and the proportion of total waste which is recycled fell by 100 basis points during the year.

A number of major sites achieved double digit decreases in waste intensity during the year and recycled over 50% of their waste. The impact of these sites on the overall Group performance was held back by increased reporting at a number of sites in emerging markets and as a result Group level performance was behind plan. We regard this as a positive opportunity as consistent global attention to waste management has brought increased site-level awareness and we will focus this on re-use, waste minimisation and recycling opportunities.

Some 22,000 tonnes of waste material was recycled during the year, around 29% of total waste. This included 828 tonnes of paper and cardboard, 477 tonnes of wood and 768 tonnes of metal.

#### Waste Management KPIs

	2007	2006	increase/ (decrease)
Waste intensity (tonnes per £m revenue*)	<b>110</b>	112	(1)%
Recycled waste as % of total waste	<b>29%</b>	30%	(100)bps
Total waste recorded (tonnes)	<b>77,147</b>	76,029	n/a*

\* takes no account of business growth  
# allows for inter-company sales

#### TURNING WASTE COSTS INTO REVENUE AT THERMAL CERAMICS CANADA

An environmental action team comprising marketing, engineering and production specialists at the Thermal Ceramics plant in Ontario, has been investigating ways to increase recycling and to convert waste streams into usable products.

The plant's most significant waste stream is ceramic fiber waste from dust collection, product finishing and scrap. Ceramic fiber waste is not easily recycled and the team devised a process to grind the waste into dust. This is sold to customers as filler, or used within the plant in the fiber board and shape manufacturing process. As a result the team generated additional revenues and cut waste disposal costs. Overall, the plant's waste intensity was 46% per unit of sales or by some 300 tonnes in 2007.



#### TECHNICAL CERAMICS HAYWARD CUTS WASTE AND SAVES WATER

The Ceramics business unit at Hayward, CA produces premium ceramic components for the semiconductor, laser and medical industries. A specialist wax is used to hold the ceramic parts during machining operations. This wax needs to be removed prior to finishing of the parts. Historically a solvent based cleaning solution was used to remove it, creating over 8 tonnes of waste solvent each year. During 2007 the solvent process was replaced with an aqueous-based soap alternative. The waste solvent was classified as hazardous waste where as the used aqueous solution can be processed through the site's evaporator system and the water is reclaimed and re-used, cutting waste and saving water.

## Water Use and Intensity

We include information on all water used for potable, sanitary and process purposes from both on-site extraction and from local authority and similar sources. A significant proportion of the Group's water usage is in production processes, much of which is subsequently discharged. We monitor use of water from all sources and assess performance on the basis of water intensity.

Our target is to reduce our water intensity by 10% over the two years 2007-8. 2007 performance was ahead of this with a 19% reduction reflecting increased awareness of the use of water and a variety of reduction initiatives at sites around the world. Our 2006 water use included the impact of a leak at one of our major US facilities. Excluding the impact of that facility from both years our water intensity improved by 12%.

We will continue to target opportunities to reduce and control our use of water in 2008.

### Water Use KPIs

	2007	2006	Increase/ (decrease)
Water intensity (m <sup>3</sup> water per £m revenue*)	4,299	5,301	(19)%
Total Water Use (m <sup>3</sup> x 1000)	3,011	3,612	n/a*

\* takes no account of business growth

# allows for inter-company sales

## Products

Many of the Group's products make a positive contribution to the environment. Examples include:

- In the wind-power market, our Carbon Division is using its expertise in materials science to improve the performance of the power transfer slip ring systems used in wind generators. The improved products can withstand the high humidity and salt corrosive atmospheres of offshore wind farms.
- Carbon also supplies vital components for many of the world's suburban rail systems and has helped one customer achieve a 60% improvement in the reliability of their electric motors.
- The latest electric resistance melting and holding furnaces supplied by Morgan Molten Metal Systems use 30-50% less energy and offer higher productivity and enable higher scrap recovery rates
- Insulating Ceramics' Superwool™ range of high temperature insulating products help reduce energy consumption in a wide range of industries contributing to significant reductions in greenhouse gas emissions
- Our Technical Ceramics Division supplies ceramic components and sub-assemblies for aero-engine control and monitoring which help optimise engine efficiency

## Environmental Regulatory Compliance

During the year one of our US facilities received a notice of violation following an inspection in July 2007. This resulted in a fine of \$4,500. In the UK one of our sites is working with the environmental authorities to ensure their water sampling is appropriate as samples have picked up traces of materials which are not used at the site.

The Group also has a small number of ongoing remediation programmes to address historical soil and groundwater contamination issues.



### CARBON SWANSEA CUTS WATER USE

The Carbon Swansea site uses water to cool high temperature furnaces and hydraulic presses used to manufacture various grades of carbon material.

Regular environmental reporting helped identify that water consumption increased dramatically in 2006. The Swansea engineering team seized the initiative with a programme to improve the management and use of cooling water across the plant.

By integrating equipment, installing closed re-circulatory cooling systems and through real-time monitoring and control they were able to reduce the plant's water intensity (i.e. water use per unit of sales) by 51% – a saving of over 20,000m<sup>3</sup>. The investment necessary to achieve this was paid back within the year through savings in clean water cost and reductions in water discharge.

In addition to Morgan Crucible's corporate EHS policy, outlined on page 4, our operations have specific health and safety policies according to the operations, risks and needs of each business.

**Health and Safety Management**

Morgan Crucible's health and safety management is integrated with the Group's risk management and other governance processes and is covered in the EHS Compliance Audit Programme, in addition to national, legal and other regulatory requirements. A number of the Group's sites are working towards OSHAS18001 and our Carbon Division achieved certification for its facility in Johannesburg during the year. Five further certifications are planned over the period 2008-9.

**Health and Safety Key Performance**

Morgan Crucible's health and safety performance data includes lost working time incidents arising from work-related injuries and ill-health. Performance is monitored on a monthly basis and our reporting systems are aligned with our financial systems covering 100% of our production sites and the majority of our sales and technical offices. In total 99% of employees are covered by this report.

Our long term goal is to have no accidents and as a result of ongoing pro-active preventative programmes and training, the frequency of lost time accidents (major + minor) was reduced by 20% in the year, exceeding our targeted 10% reduction. However, lost time as a percentage of total time worked was up 3%. This was caused by a 28% reported increase in the average time lost per lost time accident. This was largely due to the improved reporting of lost time to include long term cases which were not consistently covered by the 2006 data.

**Health and Safety KPIs**

	2007	2006	increase/ (decrease)
Lost working time % of total time worked	0.079%	0.077%	+3%
Major* incidents per 100,000 hours	0.39	0.48	(18)%
Minor** incidents per 100,000 hours	0.17	0.21	(23)%
Days lost per lost time incident	17.6	13.8	+28%

\*Major = work related injuries resulting in four or more days lost time  
 \*\*Minor = work related injuries resulting in one, two or three days lost time

We continue to collect accident causal data on a consistent basis world-wide to support risk management and preventative programmes. Some 30% of accidents are manual handling cuts and abrasions and a further 16% are musculoskeletal related.

**Health and Safety Regulatory Compliance**

The Group received 12 enforcement or improvement notices in relation to health and safety issues. Corrective actions are underway to comply with these notices at the relevant facilities. There were no reported prosecutions relating to health and safety matters during the year.

**MORGAN TECHNICAL CERAMICS TARGETS OHSAS18001 IN EUROPE**

All six of the Technical Ceramics sites in Europe are certified to ISO9001 and ISO14001. Over the next two years, four sites are committed to implement OHSAS18001 as this is complementary to their existing management systems and will help to drive further and continuous performance improvements. The first certification was achieved in February 2008 and the others are planned to follow later in 2008 and through 2009.



## GROUP EHS TARGETS

In addition to Group targets, our businesses set targets and undertake initiatives appropriate to their specific opportunities for improvement, as is highlighted in a number of the case studies in this report.

Area	2007 Target/Objective	2007 Progress	Future objective
EHS Compliance Audit Programme	Undertake 24 EHS audits during 2007	<b>Achieved:</b> 24 EHS audits completed during the year.	Undertake a total of 31 EHS audits, including the 9 sites acquired from Carpenter.
Environmental Management Systems	Continue to extend EMS coverage. Progress ISO14001 coverage with 7 new certificates to achieve target of doubling the number of sites with ISO14001 from 16 at end 2005 to 32 by end 2007.	<b>Achieved/ in progress:</b> 84% of capacity across 61 major sites now covered by an EMS. However, only 4 further sites were certified to ISO14001 during the year, total now 27 sites covering 48% of capacity.	Continue to extend EMS coverage. 10 further ISO14001 certifications are planned for 2008 which will exceed our 2007 target.
Environmental data reporting	Continue to extend reporting to cover all production locations and select* non production locations and to further integrate our management and environmental information management systems.	<b>Achieved:</b> Environmental data is now collected through our management information systems from all production sites worldwide. Data in this report covers the 98% of production site sales for which comparative data for 2006 is available.	To include 100% of production and select* non production sites which have been part of the Group for the full year.
Reduction in emissions intensity	5% reduction in emissions intensity due to energy use over two years (2007-2008).	<b>On track:</b> Emissions intensity due to energy use improved by 2.5%	Continue to work towards targeted reduction by end 2008.
Increase use of electricity from renewable sources	Electricity from renewable sources: >4% by end 2008.**	<b>Behind plan:</b> The % of electricity from renewable sources fell from 2.6% to 1.9% due to uneconomic pricing in the market for renewable electricity.	Continue to target increases in our use of renewable energy where economically viable.
Reduction in waste intensity	Waste intensity: 5% reduction over two years (haz & non haz); % recycling: increase to 35% over two years.	<b>Behind plan:</b> Waste intensity was down 1% in the year and recycling was down. The behind plan performance was largely due to improved waste management reporting at a number of sites.	Continue to work towards targeted reduction.
Reduction in water use intensity	Water intensity: 10% down over two years.	<b>Ahead of plan:</b> Water intensity was reduced by 19%. Increased awareness, improved measurement and a number of reduction programmes have driven this ahead of plan.	Continue to progress further reductions/ savings in water use.
Health and Safety data Reporting	Extend coverage to include non-production locations and to further integrate our management and health and safety information management systems.	<b>Achieved:</b> 99% of headcount now covered. H&S reporting integrated with financial reporting.	Extend coverage to 100% of employees and to include newly acquired companies/ sites.
Reduction in lost time accident frequency	10% reduction in lost time accident frequencies (major+minor) by end 2007.	<b>Achieved:</b> Lost time accident frequencies (major+minor) were down by 20% in the year.	Continue to make progress towards our long term goal of zero accidents.
Reduction in lost time	10% reduction in lost time per lost time accident by end 2007.	<b>Not achieved:</b> Average lost time per lost time accident was up by 28% to 16.7 days per LTA.	Increase focus on underperforming sites and on reducing the average time lost per LTA.

\* i.e. generally non production sites where the utilities are not included in the lease costs

\*\* In addition to renewables included in the standard generation capacity

1. **Data gathering and comparisons.** Historically, across Morgan Crucible, EHS performance data was gathered in different ways and to differing extents.  
  
In the past year we have focussed our EHS reporting processes on data that is of EHS and commercial value and have integrated these processes with our financial reporting systems. Our reporting processes are increasingly accurate and improvements in environmental and health & safety performance measurement and reporting may increase some reported figures. Where possible, we will ensure meaningful comparisons between annual performance indicators are available. Where necessary, 2006 figures have been restated accordingly.
2. **Verification.** All Morgan Crucible businesses are regularly reviewed under the Group's Compliance Audit Programme and those sites certified to ISO9001, ISO14001, OHSAS18001 and other standards have regular external audits. In addition, the head of internal audit works with external independent consultants to review and where appropriate verify our environmental and health and safety related non-financial key performance indicators. The Group also uses external professional advisers in relation to specific health and safety and environmental matters as required.  
  
The Board considers that these procedures provide a reasonable level of assurance that the Group's ESG disclosures are free from material misstatement whether caused by fraud or other irregularity or error.
3. **Guidelines.** A variety of guidelines, reports, standards and other authorities have been consulted and utilised in the compilation of this report. These include the UK Government's Department for Environment, Food and Rural Affairs environmental reporting guidelines, the Global Reporting Initiative's Sustainability Reporting Guidelines 2006, the International Organization for Standardization's ISO14001 standards, and the FTSE4Good Environmental Criteria.
4. **External Assistance.** Morgan Crucible utilised the assistance of CSR Consulting Ltd. in the compilation and production of this report.
5. **Feedback**  
We welcome your feedback on this EHS report and your comments on ways we could further develop reporting at Morgan Crucible. You can contact us by e-mail at [ehs@morganplc.com](mailto:ehs@morganplc.com) or write to The Morgan Crucible Company plc, Quadrant, 55-57 High Street, Windsor, Berkshire SL4 1LP, United Kingdom.  
  
Employees who have concerns which cannot be satisfactorily resolved locally may also use the Morgan Crucible Ethics and Compliance Helpline, details of which are on the Companies Website and on the intranet.