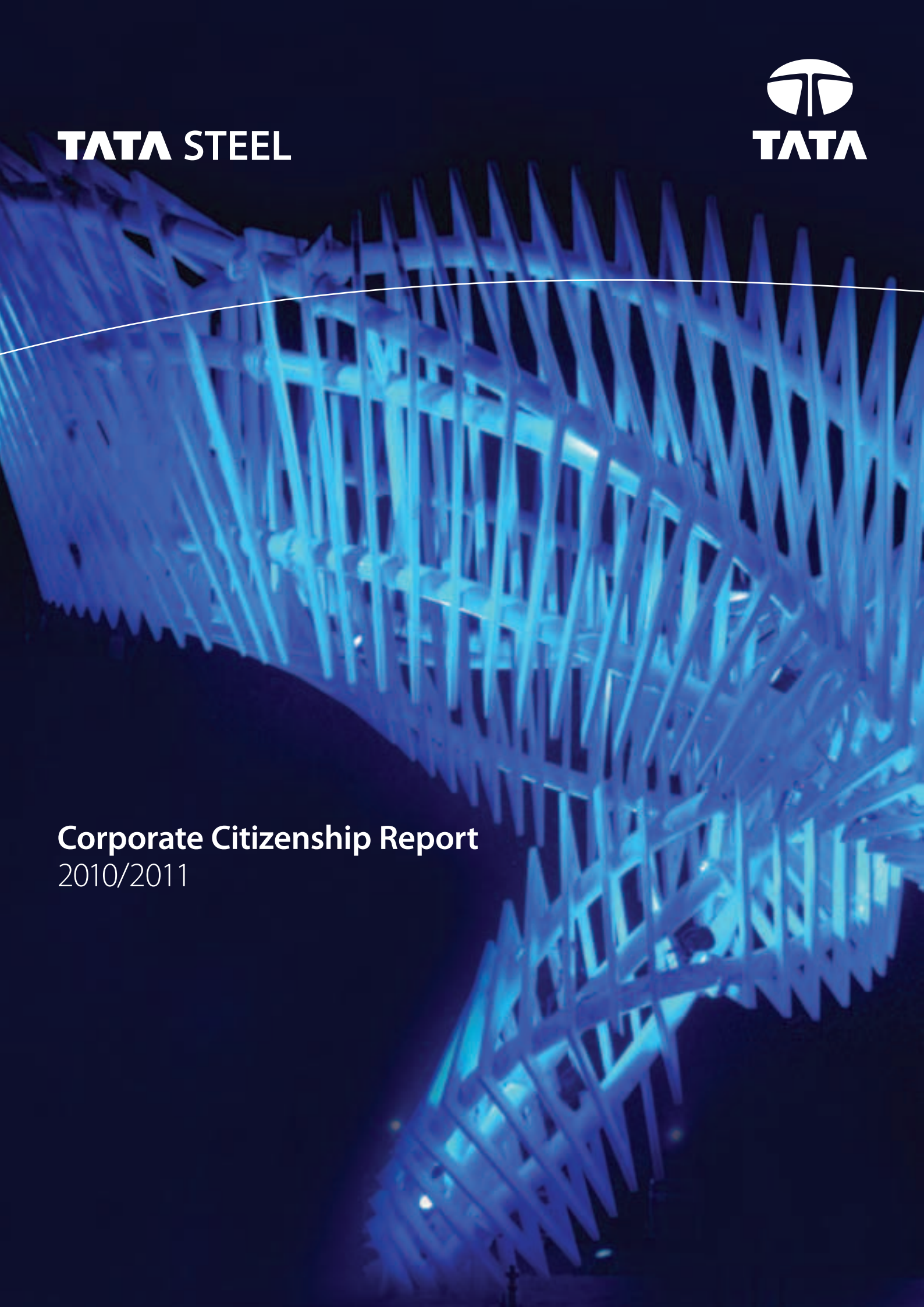
TATA STEEL

TATA



Corporate Citizenship Report
2010/2011

About this report

This Corporate Citizenship Report covers the activities of the Tata Steel Group from April 2010 to March 2011.

The report highlights actions taken during this period to help create a sustainable future while pursuing our vision to be the global steel industry leader in value creation and corporate citizenship.

In this report we set out our approach and our efforts to set and meet targets on sustainability and corporate citizenship. We describe our actions during this period and how they have affected the environment, our employees, our business, and the community, as well as how we believe they benefit stakeholders both in the short and long term. Much of the activity described is work in progress as we continue our efforts to make an increasingly positive contribution to the world around us.

Reporting and assurance

This is the third consecutive annual Corporate Citizenship Report for the whole of the Tata Steel Group.

A core editorial committee with representatives from different functions across the Group has worked together to collect the information for this year's report.

It has been prepared with Global Reporting Initiatives (GRI) G3 Guidelines in mind. Next year we intend to achieve compliance to GRI Application level C as a minimum. Selected data in the report has been independently assured by Environmental Resources Management Ltd (ERM) (see page 34).

While care has been taken to ensure that the information gathered in this report is accurate, neither Tata Steel nor its subsidiaries accept responsibility or liability for errors or information which is found to be inaccurate.

For further information and other Tata Steel reports:
www.tatasteel.com/investors/performance/annual-report.asp
www.tatasteelindia.com/corporate-citizen/corporate-sustainability/sustainability-report.asp
www.jaarverslagtatasteel.nl

Please e-mail your comments or questions to corporatecitizenship@tatasteel.com

Above: A Möbius ring used to symbolise the continuous relationship between people, planet and profit, as well as steel's never-ending recycling loop.

The Tata Steel Group Corporate Citizenship Report 2010/11 was produced on behalf of the Tata Steel Group by Group Communications and superscript.uk.com.

On the cover: The Charkha, a 30ft-high steel symbol of peace and freedom created in Jamshedpur, India. Fabricated from Tata Steel structural hollow sections, the sculpture's spiralling shape represents the movement of a spinning wheel which for Mahatma Gandhi symbolised nonviolence and the spirit of liberation.

Designed by architect Nuru Karim, it was the winning design in the 'Notions of India' competition and has been described as the symbolic identity of contemporary India. It can be seen by thousands of commuters each day.

Left to right: Charkha designer Nuru Karim, Tata Steel managing director HM Nerurkar, Tata Sons director RK Krishna Kumar and Tata Steel vice chairman B Muthuraman at the inauguration.

At a glance

Established in 1907, Tata Steel Group is among the top ten global steel companies with a crude steel capacity of over 28 million tonnes per annum. It is now one of the world's most geographically-diversified steel producers, with operations in 26 countries and a commercial presence in over 50. With a turnover of US$26.6 billion in financial year 2010/11, the Tata Steel Group has over 80,000 employees across five continents and is a Fortune 500 company.

In India, the Group's main facilities are located around the city of Jamshedpur, with current crude steel production capacity of 6.8 million tonne a year and a variety of finishing plants. The Indian operations also include iron ore and coking coal mines.

Tata Steel in Europe, formerly Corus, has major steelmaking operations in the UK and the Netherlands with a combined capacity of over 18 million tonnes per annum. It supplies an extensive range of steel products and related services to aerospace, automotive, construction, energy and power, packaging and other demanding markets worldwide.

In South East Asia, NatSteel Holdings, headquartered in Singapore, supplies around two million tonnes per annum of premium steel products for the construction industry. Tata Steel Thailand is the country's largest producer of long steel products with a manufacturing capacity of 1.7 million tonnes per annum.

The Group has a number of joint ventures around the globe. For a full list and information: www.tatasteel.com/global-network/international operations.asp

1. Jamshedpur, India
2. Scunthorpe, UK
3. NatSteel, Singapore
4. IJmuiden, Netherlands
5. Port Talbot, UK
6. Chonburi, Thailand


1


2

3

4

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What does sustainability mean to us?

Tata Steel's specially-commissioned steel stand in Hyde Park, location for the London 2012 Olympic Games triathlon competition.

Throughout its long history, the Tata Group has been recognised as an organisation committed to good corporate citizenship – long before the term was invented. This philosophy was encapsulated by its founder, Jamsetji Tata (1839-1904), who viewed the creation of wealth not as an end in itself, but as the means by which his company could make a positive contribution to the communities it served.

In the modern world, a good corporate citizen recognises that it has important social and environmental, as well as financial, responsibilities. To help ensure a good quality of life, for all, both now and for generations to come, we need to balance economic prosperity and social progress with care for our planet.

Climate change, energy security, the management of finite, non-renewable resources, safe drinking water, repairing the damage that human activity is having on eco-systems, poverty and inequality – these are just some of the many challenges facing our world.

At Tata Steel, we understand that we can and must play an important part in addressing these challenges, both through the products we make and the way we manage all our operations.

Steel is at the heart of modern society. It transforms communities by enabling infrastructure, such as bridges, buildings, railways and energy generation. It touches everyday lives around the world, through a myriad of consumer goods. Even if something is not made out of steel, the probability is that it is made using steel.

Steel can rightly claim to be a sustainable material because of its unique recyclability. Of all major man-made materials, only steel is fully recycled through an efficient closed-loop system. Steel made today will be used and reused for generations to come. Making steel is an investment that will be repaid many times over by minimising consumption of precious mineral resources, preserving them for future generations.

Many new, advanced forms of steel are already contributing to a more sustainable future. Stronger grades of steel are allowing lighter weight designs of everything from cars and food packaging to buildings and cranes. Harder, more wear-resistant steel makes machinery last longer and specialist vehicles safer. Steel is continually being used

in innovative ways such as renewable energy generation and ultra-efficient buildings.

We believe that steel brings many benefits to society, but as with any industrial process, there is an environmental price to be paid for making steel.

The manufacture of steel creates significant emissions of carbon dioxide and other gases, and consumes substantial amounts of mineral resources and water. We closely monitor all these aspects of our operations and work hard to mitigate their impact. And at the same time, we aim to make a positive contribution through the economic value we generate and the usefulness of our products, and by investing in our communities and improving environments where we operate. We are investing substantially and continuously in energy efficiency programmes at our plants and in schemes to reduce dust, noise and emissions from our processes. We are also investing for the long term in new steelmaking technologies with less environmental impact, in product development and in technology to help our customers create more sustainable products.

Value creation through sustainability

In this report, we aim to demonstrate the progress we made during the financial year 2010/11 in contributing to a sustainable future. The report also sets out where further improvements are to be made in meeting the targets we have set ourselves.

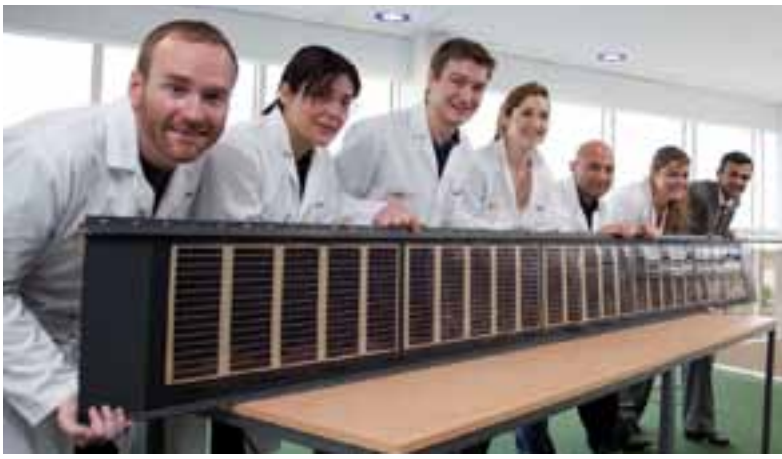
Company strategy

The Tata Steel Group's vision is to be the world steel industry's benchmark in value creation and in corporate citizenship.

Our strategies for achieving this vision are to continue to grow and improve the quality of our earnings by:

- Expanding our capacity in India through both brownfield and greenfield projects and increasing capital allocation to our European and other businesses to enhance their profitability
- Investing in downstream businesses to add value and enhance our product portfolio
- Enhancing our competitive position in Europe's challenging market environment and creating sustainable value through a focus on differentiated products, enhanced customer relationships and cost reduction; this will be enabled by a new 'One Company' operating model involving a single sales and marketing team, consolidated supply chain organisation with three steelmaking hubs, speciality businesses and pan-European support functions
- Leveraging the global presence of the wider Tata Group
- Focusing on reducing the consumption of natural resources per tonne of steel, while also achieving greater raw material security for our operations worldwide
- Ensuring inclusive growth to the benefit of all our stakeholders
- Achieving world benchmark levels in safety
- Being an employer of choice
- Maintaining the highest ethical standards with our suppliers and contractors in all our business dealings.

Karl-Ulrich Köhler, managing director and CEO, Tata Steel Europe Ltd, and Hemant Nerurkar, managing director, Tata Steel Ltd.



The world's largest dye sensitised photovoltaic module, a big step in the development of micro energy generation within buildings, achieved through a development partnership between Tata Steel and Dyesol.

Our progress in 2010/11 – highlights

Profitability

- $2.5 billion increase in Group profits for financial year 2010/11
- Tata Steel India remains one of the most profitable steel operations in the world
- Successful completion of sale of Teesside Cast Products to Sahaviriya Steel Industries UK Limited (SSI UK).

Efficiency

- Twenty-one Performance Improvement Teams (PITs) are now operating across the Group to improve manufacturing effectiveness and operational efficiency (four more than in the previous financial year)
- The Tata Business Excellence Model (TBEM), adopted by Tata Group companies, and designed to help improve organisational performance practice, capabilities and results, is being put in place in all our European operations.

Expansion/investment

- The brownfield expansion project at Jamshedpur, due to be completed in 2011/12, will take the site's capacity to 9.7 million tonnes (mtpa), helping to meet the high demand in the region
- Construction is under way on the new six mtpa capacity greenfield project in Kalinganagar, Odisha. This will produce premium grades such as API, Dual Phase, TRIP steel, and advanced high strength steel (AHSS). Phase one is due to be completed in early 2014
- Interests in raw materials include joint ventures in Mozambique, Canada, and Australia.

Leveraging global presence
- Rebranding Corus to Tata Steel in Europe began in September 2010.

Reduction in use of natural resources
- Average CO_2 emissions from our steelmaking sites are in the top quartile for the global steel industry*
- Leading the ULCOS HIsarna pilot plant project at our IJmuiden steelworks in the Netherland. This revolutionary iron-making process technology could reduce CO_2 emissions by a further 20 per cent
- Energy efficiency improvements of four per cent compared to 2008 in the Netherlands during 2010
- Achievement of throughput-adjusted energy reduction target under our Climate Change throughput-adjusted agreement with the UK Government
- Jamshedpur expansion carried out to the latest environmental standards includes zero water discharge, dry quenching of coke and waste heat recovery
- Creation of advanced products such as AHSS and MagiZinc to make stronger, lighter and more fuel-efficient vehicles.

* source: worldsteel

Safety
- Tata Steel Group health and safety policy implemented in January 2011
- Priority focus on safe behaviour and on the areas of key risk to improve safety
- New initiatives introduced at all locations aimed at Zero Harm
- 17 per cent improvement from previous year in lost time injury frequency rate (LTIFR) – 0.79 for employees and contractors combined.

These achievements are overshadowed by the fact that 10 people lost their lives working for the Group during 2010/11. We are redoubling our efforts to ensure such tragic accidents are never repeated.

Community
- Launch of Sustainable Livelihoods programme in India, aiming to impact one million lives, reaching out with initiatives to aid literacy, boost immunisation, provide medical assistance, supply safe drinking water to more communities, and improve agricultural productivity
- Our continued support for triathlon in the UK has enabled more than 35,000 children from almost 400 schools to participate in the sport since 2007
- Our European fundraising efforts now focus on leading cancer charities
- In Thailand, children in over 60 schools have greater access to books thanks to the 'Grow Smart with Tata Steel' campaign.

Employment
- Development of the Tata Steel Academy
- Creation of the Regeneration Fund for those affected by mothballing of Teesside Cast Products and 'Transfercentre' for those affected by economic downturn in the Netherlands
- Continued recruitment of apprentices.

Ethical standards
- The Tata Code of Conduct remains a guiding force for employees
- Families displaced by the greenfield project in Kalinganagar, India, given fair compensation and assistance to build new lives as members of Tata Steel Parivar ('Family')
- Group-wide responsible procurement policy developed.

Our future intentions

In early 2011, a cross-functional team began developing a sustainability policy for the whole of the Tata Steel Group. The policy will include five key principles:

1. We will conduct all our business with responsibility, integrity and respect, and maintain the highest ethical standards
2. We will provide a safe, healthy and fair workplace
3. We will generate economic value through enhancing our value proposition to our customers
4. We will respect the environment, and work closely with our customers and our suppliers to improve the environmental profile of our products over their full life cycle
5. We will have a positive impact on the communities where we operate.

Teams from each region have since been undertaking stakeholder mapping exercises and in 2011/12 will be implementing regional sustainability policy frameworks to deliver these five principles, in the context of each region's specific requirements.

Major components of the HIsarna pilot plant arrive at IJmuiden , the Netherlands.

Performance summary

This report covers Tata Steel Group activities from 1 April 2010 to 31 March 2011, which is the financial year-end. The scope of reporting includes all wholly owned subsidiaries of the Tata Steel Group operating within the ferrous metal and mining sector.

Health and safety data reported for nearly 100 per cent of all sites. Environmental data is collected from 51 sites, covering all main manufacturing locations, including all four operational integrated steelworks, five electric arc furnaces and 42 downstream sites. Performance data from our Indian mines is not included. The detailed scope of reporting for the health and safety and environment data, including instances where data has not been reported, is shown in the performance summary table below.

Environmental Resources Management (ERM) has provided independent assurance as to whether key selected safety and environmental performance data is appropriately reported.

The Tata Steel Group also reports to the World Steel Association on 11 sustainability indicators and to the independent Carbon Disclosure Project on climate change data.

	2010/11	2009/10	2008/09	SCOPE & REPORTING THRESHOLD
HEALTH & SAFETY DATA				
Fatalities (employees and contractors)	10	5	8	[1]
Lost time injury frequency rate (LTIF) [A]				
Number of lost time incidents per million hours worked				[1]
Employees and contractors	0.79	0.95	1.38	
ENVIRONMENT DATA				
Carbon dioxide emissions World Steel Association scope in million tonnes CO_2 [B]				
Direct (Scope 1) emissions	35.8	37.3	38.4	[2]
Total (Scope 1 + 2+ 3) emissions	44.5	44.0	43.7	
Carbon intensity in tonnes of CO_2 per tonne of crude steel produced	2.15	2.14	2.11	
Energy intensity World Steel Association scope in GJ per tonne of crude steel [B]				
Blast furnace route	23.68	23.85	23.74	[3]
Electric arc furnace route [C]	10.47	10.94	10.10	
NTS Thailand [D]	17.01	–	–	
Mass emissions to air thousand tonnes [E]				[4]
Total particulates	23	23	21	10 tonnes
Oxides of nitrogen (NO and NO_2 as NO_2)	26	25	27	100 tonnes
Sulphur dioxide (SO_2)	30	33	35	100 tonnes
Mass emissions to water thousand tonnes [E]				[4]
Hydrocarbons [F]	0.112	0.133	0.283	0.1 tonnes
Suspended solids	2.2	1.9	2.6	1 tonne
Material reused through our processes thousand tonnes	5,578	7,062	5,421	[4] 10 tonnes
Waste thousand tonnes [E] [G] [H]				[4]
Material reused, recycled or recovered by third parties	548	527	472	10 tonnes
Material disposed of to landfill	653	815	910	10 tonnes
Material disposed via other routes	57	62	77	10 tonnes
By-products of our processes used by other sectors thousand tonnes [G]				
Blast furnace slag	5,262	5,254	5,370	[4]
Steelmaking slag	1,939	2,134	2,316	
Electric arc furnace slag	398	306	361	
Tar and benzole	336	297	364	
Other	153	184	119	
TOTAL STEEL PRODUCTION, GROUP				
Crude steel production (million tonnes) [J]	20.7	20.6	20.7	

[A] NatSteel Holdings re-defined its systems to measure LTIF across all its operations in 2009/10. Data for 2008/09 was retrospectively corrected to include its downstream non-steelmaking operations in Australia, China, Thailand and Vietnam.

[B] World Steel Association scope developed in line with Greenhouse Gas Reporting Protocol and reports only CO_2 Scope 1, Scope 2 and Scope 3 emissions. Full definitions and calculation methodology available at www.worldsteel.org

[C] Excludes NTS Thailand for 2010/11

[D] NTS Thailand operates a mini blast furnace and EAF

[E] Calculation methodology is based on the UK Environment Agency's Pollution Inventory Reporting Guidance for Ferrous & Non-Ferrous Metals Activities.

[F] Data for 2008/09 and 2007/08 has been retrospectively corrected in this report to remove a calculation error.

[G] Material efficiency is reported based on its route to remove national differences in the definitions of waste and by-product.

[H] 47 out of 51 sites have reported. The four sites that have not reported the tonnage of material sent for disposal are downstream non-steelmaking facilities and are not material.

[J] Blast furnace route only

[1] Tata Steel Group employees and contractors.

[2] Tata Steel Group integrated steelmaking facilities only

[3] Tata Steel Group integrated and electric arc furnace steelmaking facilities only

[4] Tata Steel Group steelmaking facilities and downstream non-steelmaking facilities

Sustainable products

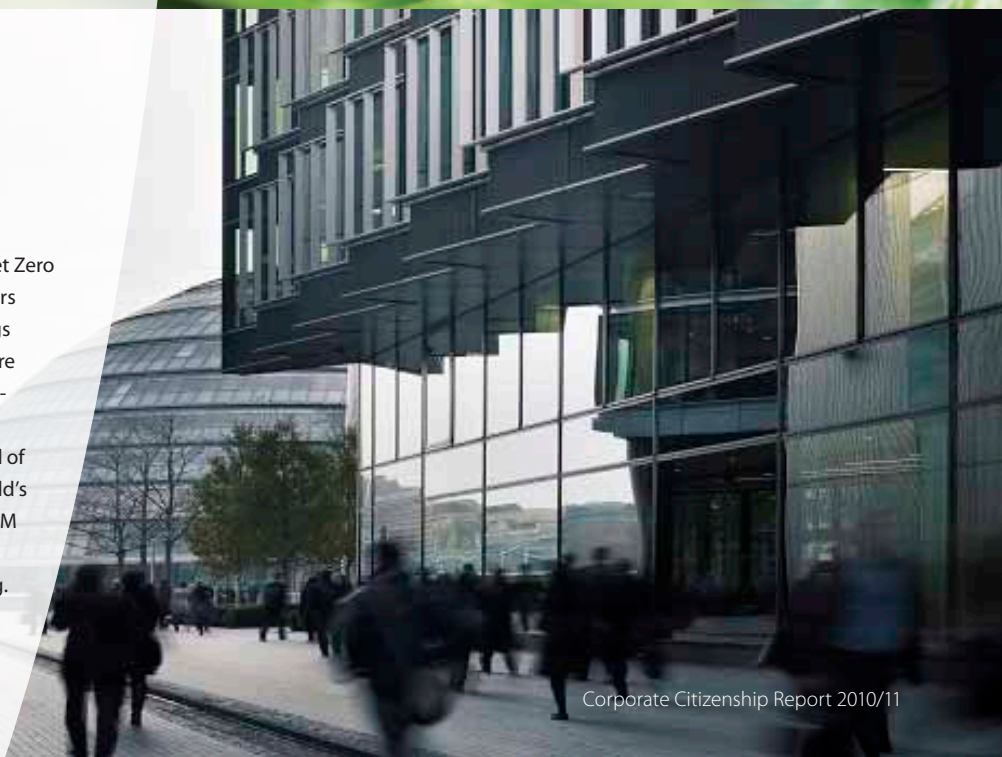
Lighter, stronger, cleaner, safer, more durable. We work constantly to enhance steel's contribution to the world we live in.

Rail

Our innovative HPRail product makes rail an extremely energy-efficient way of transporting people and goods. Tests show that HPRail, an as-rolled rather than heat-treated product, makes track last longer, with lower maintenance. In addition to the safety, cost and environmental benefits of reduced maintenance and longer replacement intervals, using HPRail means less down-time and so better service on the network.

Automotive

We have been at the forefront of the Future Steel Vehicle project, led by worldautosteel. Its concept car, based on a battery electric vehicle platform, uses the latest steel technology and has a body that is 35 per cent lighter than conventional steel grades, plus a five-star safety rating. These results were achieved at no additional overall cost and with no increase in the environmental impact of its production, compared to using materials other than steel to achieve the same standards. This concept car demonstrates the use of products including DP800Hyperform – an ultra-high strength and formable steel grade developed by Tata Steel and already being used by manufacturers such as Lancia in their lowest-emission vehicles.



Construction

The British Constructional Steelwork Association's Target Zero project, funded by Tata Steel, shows architects, engineers and potential building owners that sustainable buildings are not only possible in steel, but that they are even more efficient and can cost less. This project provides leading-edge design guidance for low energy and sustainable buildings. Meanwhile, steel is proving to be the material of choice in the construction of more and more of the world's most sustainable buildings, including many with BREEAM assessments (the world's leading environmental rating system for buildings) of Excellent and even Outstanding.

Packaging

We continue to produce the most recyclable and most recycled* packaging material in Europe. We are proactively involved in recycling initiatives in the UK and Netherlands to make sure steel recycling rates stay ahead of government targets. We work closely with our customers to minimise the environmental impact of packaging, actively pursuing opportunities to make our packaging steel thinner, lighter and more sustainable wherever possible.

*source: PlasticsEurope, ACE (Alliance for Beverage Cartons and the environment), FEVE (European Container Glass Federation), APEAL (the Association of European Producers of Steel for Packaging).

Energy & Power

Investment in various forms of renewable energy continues to grow and one of the most promising technologies is wind power. A typical onshore wind turbine uses over 140 tonnes of steel, while offshore turbines can use over 1,000 tonnes. Tata Steel is ensuring an efficient and reliable supply chain for the growing wind turbine market by investing in the steel and services required to support this industry.

Lifting & Excavating

Reducing energy consumption and resource usage contributes to sustainability. Our major customers in the Lifting & Excavating sector are keen to prolong the life of machinery, while making it safer, more cost-effective and more energy efficient. This is another area where innovative steel technology is making an important contribution. Our range of Abrazo® wear-resistant steels is being employed in mining equipment to extend the service life of critical components, reducing maintenance, saving energy and resources and cutting down-time.

Ethical behaviour

Behaving ethically is intrinsic to the way we conduct our business and is part of our legacy from the founder of the Tata Group. Jamsetji Tata insisted that business must operate in a way that respects the rights of all its stakeholders and creates an overall benefit for society.

Tata Steel Limited is a public limited company with 969,987 shareholders as at 31 March 2011. The vast majority – 99 per cent – are individuals and this number rose by 159,227 during the year. Tata Sons Limited is the largest single shareholder, with a shareholding of 28.5 per cent, and two-thirds of the equity of Tata Sons is held by philanthropic trusts. The combined development-related expenditure of the Tata trusts and companies on social initiatives around the world amounts to approximately four per cent of the total annual net profits of all the Tata companies.

Corporate governance

Tata Steel believes in adopting the best available practices in terms of corporate governance. It conducts all aspects of its business with full transparency and accountability. *See the Tata Steel Group Annual Report 2010/11, page 71, for more details.* The Group's website, www.tatasteel.com, also provides a comprehensive summary of Tata Steel's operations, management, vision, mission, corporate policies, investor relations information and news.

Risk management

Our risk management process is assured through the Group's corporate assurance and risk management function, which reports to the Group chief financial officer and submits reports and recommendations to the audit committee of the board of directors. A detailed analysis of how we have managed risk in the areas of growth, industry cyclicality, raw materials security, health, safety and environment, technology, financing, pensions, and regulation and compliance, can be found in the *Tata Steel Group Annual Report 2010/11, pages 96-98.*

Business ethics and our code of conduct

Our ethical principles are clearly and unambiguously articulated in the Tata Code of Conduct, to which all Tata Group companies subscribe. Originally written in 1998, the Code was updated in 2008.

The Tata Code of Conduct serves as the ethical roadmap for all Tata employees and companies, and provides the guidelines by which the group conducts its businesses. Twenty-five separate subjects are covered by the Code, including: financial reporting and records; competition; equal opportunities; gifts and donations; government agencies; political non-alignment; health, safety and environment; quality of products and services; corporate citizenship; public representation of the company and the group; group policies; shareholders; ethical conduct; regulatory compliance; conflict of interest. In summary, we do not tolerate corrupt or fraudulent practices. We expect honesty, integrity and transparency in all aspects of our business from our employees, contractors and other business counterparts. An ethics and compliance committee was constituted in 2002, and met during the year under review. The Code can be accessed in full at www.tata.com.

Confidential reporting system

A confidential reporting system is in place to encourage employees to raise any concerns they may have in the knowledge that they are safe to do so and will have guaranteed anonymity. All concerns raised are promptly and thoroughly investigated and appropriate actions taken. The availability of confidential reporting lines is being continuously reviewed and extended throughout our operations. Regular reports on all confidential reporting cases and any other fraud and corruption cases being investigated are submitted to the audit committee of the board.

Human rights

Tata Steel is proud of its longstanding reputation as a fair and caring employer, and respects all human rights both within and outside the workplace. It is enshrined within the Tata Code of Conduct thus: 'Every employee of a Tata company shall preserve the human

Resettlement and rehabilitation

The families displaced by the creation of the six mtpa greenfield integrated steel plant at Kalinganagar, Odisha, India are viewed as being adopted into the company's own 'family' – the Tata Steel Parivar. The Resettlement and Rehabilitation scheme has been designed to provide fair compensation. The company has established three relocation settlements. Displaced families are provided with practical and emotional support overseen, by a dedicated communications team that includes members of the local tribal community, to monitor and ensure their wellbeing.

rights of every individual and the community, and shall strive to honour commitments.'

In India, we have integrated human rights into our workplaces, for both employees and contractors, in partnership with Social Accountability International, the human rights organisation and the guardian of the SA8000 standard. We achieved SA8000 certification for the Jamshedpur steelworks in 2005 and were last recertified in 2008. Our chrome mining operation in Sukinda is the first mine worldwide to be SA8000 certified. We do not permit any forced, compulsory or child labour. No violations with respect to rights of indigenous people were reported or grievances related to human rights filed against the company, nor was Tata Steel subject to human rights reviews and/or impact assessments in 2010/11.

All employees in India and Thailand must be aged at least 18, and we comply with minimum age laws in all other countries of operation. We also respect the right to freedom of association and collective bargaining, and work closely with trade unions to ensure a fair deal for our employees.

We respect and protect the rights of indigenous communities wherever we operate, including when we establish new operations in developing countries. In addition to respecting legal rights, we also give careful consideration to social, cultural and economic rights. In keeping with our policy of inclusive growth, we work proactively to help indigenous communities reach the standards set out in the Human Development Index (the summary measure of human development published by the United Nations Development Programme).

Responsible procurement

Interest in the responsible procurement of raw materials has risen greatly in recent years, and Tata Steel is at the forefront of steel industry efforts to formulate best practice in this area. We have been developing a comprehensive responsible procurement policy which will be launched in 2011/12. This will have five key principles: health and safety, fair business practices, environmental protection, human rights, and local community development. It will be rolled out to our suppliers, beginning with major raw materials suppliers, in early 2012.

In the meantime, we have confirmed that all of our major external iron ore suppliers have management systems certified to ISO 14001. We have also ensured that these suppliers have in place systems for managing resources effectively, restoring areas affected by mines and safeguarding biodiversity. All of our iron ore suppliers have implemented health and safety management systems.

For our business in India, we source 100 per cent of our iron ore and approximately 60 per cent of our coal from captive supplies owned by Tata Steel. Direct ownership of raw materials mines provides us with even greater control in aiming to maintain the highest standards of environmental protection, health and safety.

In summer 2010, Tata Steel became the first steel sector operation to achieve certification to the UK Building Research Establishment sustainability standard, BES6001. This certifies that it is a responsible supplier according to detailed criteria applying both to the management of the facilities in North Wales and to the way sustainability is extended back through the supply chain, starting with the mines where the iron ore is originally sourced. Recertification was secured in 2011.

We have implemented a purchasing policy for tin.

In the Netherlands, we are involved in a number of responsible procurement initiatives:

- We have implemented a policy to not knowingly purchase tin from the Democratic Republic of Congo (DRC). At the same time, we provide financial support to the International Tin Research Institute's Tin Supply Chain Initiative, a project to stimulate economic growth and stability in the DRC and to monitor and certify tin ore. Legal developments in the US (the Dodd-Frank Act) have slowed down progress but we continue to support the initiative.
- In response to television broadcasts accusing Dutch electricity companies of irresponsible coal procurement practices, a Dutch stakeholder dialogue has been set up between electricity companies, mining companies, labour unions and NGOs, chaired by a Government representative. We have joined the dialogue in order to demonstrate responsible behaviour and to stay informed about best practices.

Producer responsibility and product stewardship

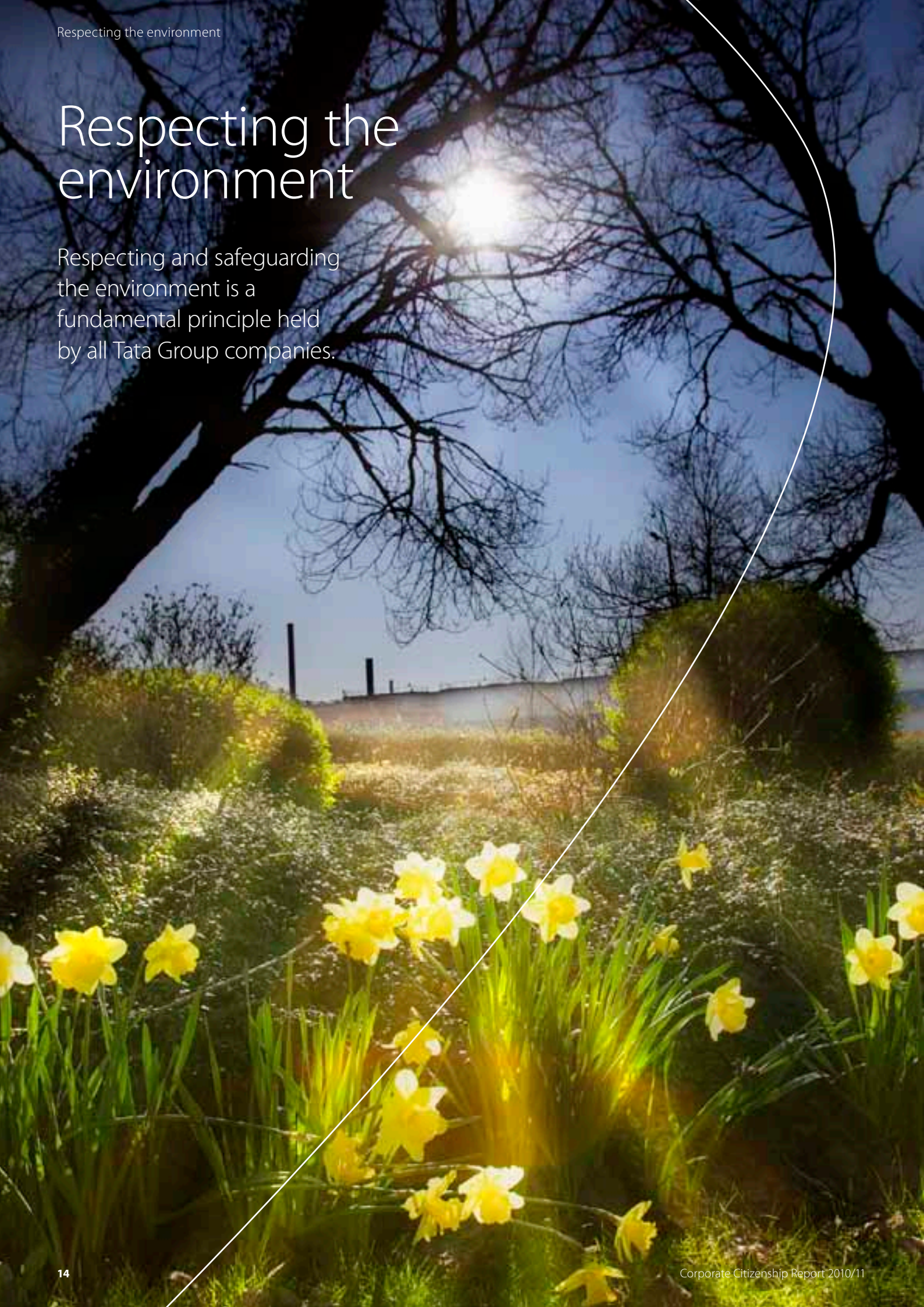
In Europe, we are working on an updated range of safety data sheets for all of our main products and by-products. While these are not required by law for most of our products, we believe it is a responsible approach to provide our customers, and indeed anyone who uses our products, with information and guidance on their safe use.

We recognise that the characteristics of our products and the information we provide to customers can have a profound effect on the environmental performance of those products throughout their use and end-of-life phases. In Europe, our researchers are recognised as leading experts in the field of whole life-cycle assessment, in 2010 winning a worldsteel award for life cycle analysis leadership. They have developed CLEAR, a tool capable of analysing the environmental impact of our products in use within the construction sector. Life-cycle inventory data is available for 88 per cent of the products manufactured in Europe by Tata Steel.

In partnership with our customers, we have also published over 50 environmental product declarations (EPDs) covering the whole life of construction products. Additionally, we publish a series of guidance documents to advise the market on best practice for end-of-life solutions.

Respecting the environment

Respecting and safeguarding the environment is a fundamental principle held by all Tata Group companies.



Port Talbot, Wales, in spring.

At all of Tata Steel's manufacturing sites, we have implemented environmental management systems that have been certified as meeting the requirements of international standard ISO 14001. These systems provide us with a framework for managing compliance and achieving continuous improvement. Our overall performance is also subject to continuous and detailed scrutiny by the Tata Steel Group board of directors, and Group-wide leadership in environmental matters is provided by the board's safety, health and environment committee.

Climate change strategy

We recognise that climate change is a major concern for our planet, and like every responsible corporation, our aim is to play an active role in helping to address this global concern effectively and fairly.

As explained in our *Corporate Citizenship Report 2009/10*, we revised our emissions performance targets during 2009/10 to be consistent with the World Steel Association (worldsteel) scope for reporting and also to take into account some delays in our investment programme as a result of the economic crisis. Our present targets, which are under review pending potential regulatory developments in Europe (EU ETS Phase III) & India (Perform, Achieve & Trade), are to reduce our CO_2 emissions to less than 1.9 tonnes per tonne of crude steel by 2015 and to less than 1.7 tonnes per tonne of crude steel by 2020 (both targets based on the World Steel Association methodology – see 'Carbon reporting' below for more details).

Despite the constraints imposed by the protracted economic downturn, we continued throughout the year to invest substantial effort and resources in relation to the five priorities that underpin our climate change strategy. These priorities remain:

- To continue to achieve emission reductions in the short and medium term (up to 2020)
- To continue to invest in longer-term (post 2020) breakthrough technologies capable of significantly reducing the carbon intensity of our steel production
- To develop new products and services that generate lower CO_2 emissions through their life cycle
- To actively engage our entire workforce in this challenge, and
- To lead by example within the global steel industry.

Regulatory framework

Tata Steel, along with the rest of the European steel industry, is required to participate in the EU Emissions Trading Scheme (EU ETS). Phase II of the scheme began on 1 January 2008, and during 2010 we emitted fewer tonnes of CO_2 than our total allocation of emission allowances. This was partly as a result of emissions reduction schemes undertaken at our sites and partly due to reduced production in response to the global economic downturn. At normal production levels, we would expect to be slightly short of allowances overall.

Major industries in Europe, including steel, face further tightening of emission allowance allocations from 2013, when the EU ETS enters its third phase (Phase III). However, the European Commission has identified the iron and steel sector as an energy-intensive sector that is exposed to international competition. As such, it is recognised that without substantial free allocation of emission allowances to steel

companies in the EU, there is a risk of a shift in global production trends towards countries applying a lower level of carbon constraint – something often referred to as 'carbon leakage'.

Through the European Confederation of Iron and Steel Industries (Eurofer), now the European Steel Association, we were actively engaged throughout the year in a technical dialogue with the Commission over the benchmark level upon which allocations will be based. Following publication of the benchmarks for Phase III, the process of establishing allowances for 2013 onwards is now under way. This involves verification of baseline (2005-08) production and emissions data, which will then be ratified by the regulatory authorities. The process is due to be completed in the UK and the Netherlands by the end of 2011.

Carbon reporting

The World Steel Association represents 180 major steel producers, steel industry associations and steel research institutes from across the globe. In 2007, worldsteel formulated a climate change policy that introduced a structured framework for the collection and reporting of CO_2 emission data.

The framework provides a globally consistent methodology designed to ensure that steel plants around the world report emissions on a comparable basis – something that had not been possible previously. More information about the reporting methodology can be found at www.worldsteel.org/climatechange.

Table 1 on page 22 shows the total combined CO_2 emissions from our integrated steelworks at Jamshedpur in India, IJmuiden in the Netherlands, and Port Talbot and Scunthorpe in the UK. It also shows direct CO_2 emissions and CO_2 intensity. Within the worldsteel framework, all CO_2 emission data is reported based on crude steel production. Our Teesside plant in the north east of England was mothballed in 2010 and subsequently sold to SSI in March 2011. For this reason, the site is not included in the 2010/11 data. The historic data has not been adjusted to remove the effect of Teesside. This change in our operations contributed to a very small increase in CO_2 intensity in 2010/11 compared to the previous year, even though the actual CO_2 intensity of the other integrated steelworks improved compared to 2009/10, for example, through the commissioning of the BOS gas recovery plant at Port Talbot in early 2010. The data presented in the table also reveals that indirect emissions increased slightly in 2010/11 compared to the previous two years, whereas direct emissions decreased slightly in 2010/11 compared to the previous two years. These effects are also explained by the cessation of steelmaking at Teesside in 2010/11. Steelmaking at Teesside was characterised by relatively low indirect emissions, as the site had little downstream processing of steel and was able to produce a large proportion of its own electricity. In contrast, IJmuiden, which made a greater contribution to the Group's total crude steel production in 2010/11 than in the previous years, is characterised by relatively high indirect emissions, because the power plant where the blast furnace gas is converted into electricity is owned by a third party and so according worldsteel definitions this is regarded as indirect emissions.

New filter technology at IJmuiden, the Netherlands.

There is a close correlation between energy consumption and CO_2 emissions performance. Table 2 on page 22 shows the energy intensity from our steelmaking operations. The data is split to show the respective intensities of our blast furnace (BF) route and electric arc furnace (EAF) route of steelmaking. We also show separately the energy intensity of our combined mini-blast furnace/EAF operation in Thailand. We operate four integrated steelworks with blast furnaces worldwide – in the UK, the Netherlands and India – and five EAF steelworks in the UK, Singapore and Thailand.

In the UK, we achieved the throughput-adjusted energy reduction target under our Climate Change Agreement with the Government in 2010. In fact, our absolute energy consumption during the year was some 46 per cent lower than during 1997, the reference period against which improvements under the agreement were judged. In the Netherlands, we have signed a voluntary agreement with the Dutch government to achieve a year-on-year improvement in energy efficiency of two per cent, including downstream product life cycle benefits, at our facility in IJmuiden, through both our processes and products. In 2010, we improved our energy efficiency at IJmuiden by four per cent compared to 2008.

Monitoring and benchmarking

We have established a company-wide monitoring and benchmarking system for CO_2 emissions and energy consumption that is unique in the steel industry.

The system uses an in-house developed software tool, MoniCA, and is based on common definitions, boundaries and best practices to enable benchmarking of facilities. Currently, 24 of our manufacturing sites in Europe and North America participate, plus our Jamshedpur site in India. The CO_2 emission performance of each site is benchmarked annually, and this has indicated that the average CO_2 emission performance of Tata Steel's steelmaking sites is in the top 25 per cent of the steel industry globally, according to the most recent worldsteel data (2009).

Energy optimisation and reducing emissions

Our integrated steelworks are already very efficient and, although the opportunities for further emissions reductions are becoming progressively smaller, we continue to pursue them in a systematic manner. Each of our steelmaking sites has established a dedicated energy optimisation resource, and a central team supports the experts at each of our sites worldwide. A number of energy efficiency and emissions reduction projects have recently been commissioned and numerous other schemes are in progress, for example:

- In April 2010 we commissioned a £60m (US$91 million) energy efficiency scheme at our Port Talbot site in the UK, involving the capture and reuse of gas from the BOS plant

The 95-tonne HIsarna furnace being lowered into place in IJmuiden.

- A comprehensive energy efficiency programme was introduced at our IJmuiden site in the Netherlands with the assistance of specialist consultants. The intensive programme has already identified €35 million (US$47 million) of energy savings per year (achievable by 2014/15) and work will continue to cover the entire site
- We have undertaken numerous energy saving projects at NatSteel in Singapore, including installation of variable speed drives on major equipment and arc furnace optimisation.

We have also implemented systems to share energy efficiency good practice Group-wide, for example:

- Following the early success of our Energy Optimisation Platform – a sharing and learning forum established for our steelmaking sites in 2008 – the programme has now been rolled out to all businesses worldwide
- Energy optimisation assessments have been carried out at NatSteel Singapore, Tata Steel Thailand's SCSC, NTS and SISCO, Warren and Apollo in the USA, Scunthorpe's rod mill and Shotton in the UK. These have identified process improvements and engaged the workforce in energy management principles.

Employee engagement

Encouraged by internal climate change awareness campaigns and highly motivated climate champions, our employees around the world continue to show a great deal of personal commitment to reducing their own carbon footprint, at work and at home. Employees at several sites have established their own very active energy and environment committees – such as 'Clean, Green and Safe' in Singapore, 'Green Team' in Canada and the 'YmGreen' initiative in the Netherlands.

During the year we continued to add to our online resource for employees in Europe, which provides useful information about the steps that can be taken to save energy and cut emissions at home and in the workplace. We provided free energy monitors to UK employees to help them measure energy efficiency in the home.

In the Netherlands, we joined the Dutch Consortium for the Tender of Electric Cars (DC-TEC) in December 2010. This is a European initiative to introduce electric vehicles on a large scale. We intend to buy 24 electric cars, for use by employees around the site, with the first due to be supplied before the end of 2011. We have already introduced an electric car to the IJmuiden car fleet for transport around our site.

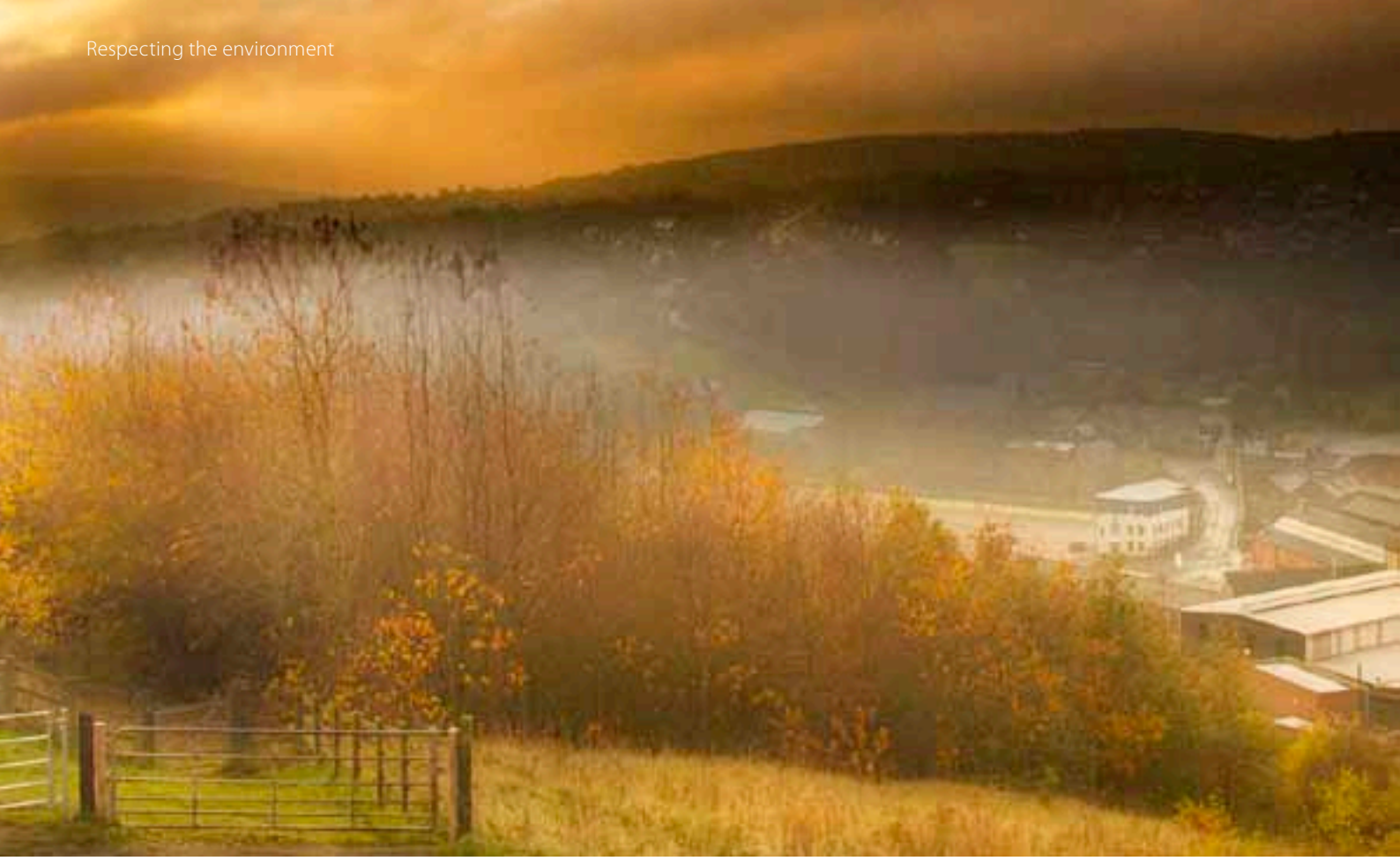
In February 2010, 50 technical staff and engineers attended a workshop in the UK to identify energy-saving opportunities in drive trains (drive controls, motors, couplings and prime movers) which resulted in significant savings back in the workplace. Teesside Beam Mill employees were able immediately to make substantial energy savings at zero cost and identify further system improvements to save over £500,000 (US$780,000) per year. At our Shotton site, efficient lighting technologies with intelligent controls have reduced electricity consumption in some areas by two-thirds.

Looking to the future

The laws of thermodynamics dictate that the scope for achieving further substantial CO_2 emission reductions in conventional iron-making processes is limited. The production of hot metal via the blast furnace route must therefore be placed on a completely new technological path if a step change in emissions is to be achieved.

Tata Steel is a leading member of ULCOS (Ultra-Low CO_2 Steelmaking) – a pioneering partnership of 48 companies and organisations from 15 European countries that recently completed the first phase of a cooperative research initiative to achieve such a step change. The ultimate and ambitious aim of the ULCOS project, which began in 2004 and is supported by the European Commission, is to reduce CO_2 emissions per tonne of steel produced by at least 50 per cent by 2050.

Phase I of the project, in which approximately €70 million was invested, identified several potential breakthrough technologies. Among the most promising were the top gas recycling blast furnace, HIsarna (a direct smelting technique), and advanced direct reduction – all of which would need to be combined with carbon capture and storage to achieve their full emissions reduction potential.



The site at Stocksbridge, UK, which in November 2010 received a £6.5 million investment to increase production of aerospace steels.

Phase II of the project (2011-2015) further explores the breakthrough technologies identified and aims to demonstrate their feasibility under large-scale, industrial production conditions. If successful, the technologies could potentially be in use in 15-20 years.

Tata Steel is playing a leading role in ULCOS. In 2010, we built a €20 million HIsarna pilot plant at our IJmuiden steelworks in the Netherlands. HIsarna is a revolutionary cyclone converter-based iron-making process, directly converting iron ore and coal into iron, without any pre-treatment of the ore and coal. The new technology could reduce CO_2 emissions by 20 per cent compared to conventional ironmaking. In combination with carbon capture and storage techniques, CO_2 reductions of up to 70 per cent should be possible. For more information, visit www.ulcos.org.

We are also continuing to pursue other long-term projects that have the potential to dramatically reduce CO_2 emissions. In the UK, our integrated steelworks at Scunthorpe is particularly well located for CO_2 sequestration and we are a member of the Carbon Capture and Storage Partnership for Yorkshire and the Humber. The partnership consists of companies interested in establishing a CO_2 network in the region to exploit the carbon storage potential of depleted North Sea oil and gas fields. We are also continuing to investigate similar options in the Netherlands, where it may be possible to safely and cost-effectively concentrate and capture large volumes of CO_2 deep inside disused oil and gas fields off the Dutch coast.

Management control and compliance

Our first priority is to remain compliant at all times with the conditions of our environmental permits and with any other legal requirements that apply within the jurisdictions in which we operate. When a breach does occur, we investigate it rigorously and transparently in order to establish the root cause and identify corrective actions to ensure it is not repeated.

We aim to minimise our environmental impact wherever practicable and cost-effective to do so, and a substantial proportion of our capital investment in recent years has been on initiatives to improve our energy efficiency, reduce our emissions of carbon dioxide, and achieve other environmental benefits.

On 6 May 2010, we were fined £8,000 (US$12,000) in relation to a spillage of fuel oil into the River Tees in September 2008 and the Court also required us to pay Environment Agency costs of £10,762 (US$16,000). In arriving at this sanction, the magistrates took into account our early admission of liability, our prompt and effective response to the original incident, the high level of cooperation between Tata Steel and the Environment Agency, and our previous good record.

In early 2010, we notified the authorities in the Netherlands of internal measurement results indicating we had exceeded our permitted limit for dioxin emissions from the sinter plant at IJmuiden. We have since carried out detailed investigations and plant trials aimed at bringing emissions back into full compliance and we continue to work closely with the authorities to ensure a satisfactory conclusion to this issue.

Pennsylvania Department of Environment Protection issued a fine of US$22,500 in respect of violations of waste management legislation at Apollo Works, our strip plating facility in Bethlehem. The violations were observed during an audit in February 2009, after which the issues were promptly resolved to the satisfaction of the regulator.

Expanding Jamshedpur without environmental impact
We made a commitment from the outset that the expansion of Jamshedpur steelworks – from 6.8 million tonnes per annum (mtpa) in 2008 to 9.7mtpa by 2012 – would have minimal impact on the environment. The expansion involves the construction and commissioning of numerous state-of-the-art operating units, including Blast Furnace I with a capacity of 3.05mtpa, a new six mtpa pellet plant, two 0.7mtpa coke oven batteries, a 2.4mtpa steelmaking plant, a 120MW power station and two new lime kilns.

To meet our environmental commitment, all new plants are being equipped with process integrated and end-of-pipe emissions control systems. The coke ovens, for example, will have high-pressure liquor aspiration systems, leak-proof oven doors and charging and pushing emission control devices, and the pellet plant will be fitted with electrostatic precipitators and bag filters to control particulate emissions to air. All 29 new stacks associated with the expansion and upgrading are being fitted with pollution control devices designed to achieve stringent emission levels based on steel industry best practice.

We are also implementing advanced continuous monitoring facilities across the entire Jamshedpur steelworks to give us a better understanding of emissions and enable us to respond more rapidly in the event of a loss of environmental control.

Air quality

Our most significant emissions to air besides CO_2 are particulate material (including fine particulates such as PM10s), sulphur dioxide (SO_2) and oxides of nitrogen (NOx). Measurement and modelling around our steelmaking facilities helps us to understand our contribution to airborne levels of these pollutants. Air quality limits for SO_2 and NOx are currently being met in the areas around all of our major facilities. In the case of PM10s, point-source (for example, emissions from stacks) and diffuse releases from our integrated steelworks can make a significant contribution to airborne concentrations. Air quality management areas have been declared in the vicinity of our operations at Port Talbot and Scunthorpe in the UK. Although the air quality standard has not been exceeded at Port Talbot since 2008 and is exceeded in Scunthorpe only within a very small geographical area, we have developed investment plans aimed at reducing diffuse PM10 emissions from both sites. The schemes, which are being phased in, include extensive site greening, segregation of clean and dusty activities, installation of dust suppression systems and road infrastructure modifications. Air quality management is also a priority at our IJmuiden steelworks in the Netherlands where we have begun construction of an advanced bag filtration and gas reactor system for improved emissions control at the sinter plant. This €98 million (US$132 million) investment will achieve further reductions in PM10s, in addition to reductions in dioxin and heavy metals emissions from the plant. The system will be fully operational in 2015.

In 2010, the number of complaints at our site in IJmuiden more than doubled compared to 2009. Most of these related to odour. It is often difficult to identify sources of odour, so we have installed 'electronic noses' at several locations around the site and in its vicinity. These will provide data to enable us to target our improvement more precisely during 2011/12.

In parallel with these substantial developments, we continue to work closely with the environmental authorities at all our main sites to better understand and minimise the impact of our operations on local air quality.

At our integrated steelworks in Jamshedpur, India, we have established a programme to ensure that particulate emissions do not increase as a result of the major expansion project there. To this end, we are going beyond the requirements of Indian norms for stack emissions at all new emission points. We have also substantially stepped up our emissions measurement arrangements and our measurement of air quality around our site and at locations within the local community.

Table 3 shows our total mass emissions to air for particulates, NOx, and SO_2 from steelmaking and downstream non-steelmaking facilities. The data relates only to those manufacturing facilities where emissions to air exceed our internal reporting threshold.

Water quality

Table 4 on page 22 shows total mass emissions to water for suspended solids and hydrocarbons from steelmaking and downstream non-steelmaking facilities across the Tata Steel Group. The data relates only to those manufacturing facilities where the emissions to water exceed our internal reporting threshold.

Relatively large volumes of water are used in making steel, but most of this is for non-contact cooling and returned to the source with no loss of quality. The precise volume of fresh water consumed is difficult to quantify because our sites often cover large land areas and capture substantial amounts of rainwater. We are very conscious, however, that fresh water is a finite and increasingly valuable resource, and we are developing a tool that will provide a more accurate measure of fresh water consumed per tonne of steel produced. This will enable us to target additional water efficiency schemes where they are most needed.

Material efficiency

Integrated steelmaking requires large amounts of raw materials such as iron ore and coal. It is vital that we continue to optimise our consumption of these raw materials by minimising waste and ensuring that our by-products meet tight quality control requirements so that they can be used in other industry sectors.

Dhamra Port project

Tata Steel has been involved in a project to construct a port on the eastern coast of India since 2004. The site, located to the north of the mouth of the river Dhamra in the Bhadrak district of Orissa, is being developed by the Dhamra Port Company Limited (DPCL), a joint venture between Tata Steel and Larsen & Toubro (L&T). Dhamra Port is India's deepest port, capable of handling super capesize vessels. Its close proximity to India's mineral heartland will benefit the country's steel, power and mining industries.

Since the project began, a number of environmental groups, including Greenpeace, have voiced concerns about its potential impact on the olive ridley turtle. This rare and endangered species has nesting grounds at Gahirmatha, about 15km from the port development site. From the start of our involvement in the project, we have sought to engage with conservationists, scientific organisations and other environmental groups to hear their views and to address their concerns.

We are taking all reasonable steps to ensure the turtles suffer no adverse effects from the port development. This has included the appointment of the International Union for Conservation of Nature (IUCN) – one of the world's most respected environmental advisory groups – as environmental advisers to the port development. The IUCN has reviewed and assessed the potential impacts of the development on the turtles. We have committed to adopt all its recommendations without exception, including the use of protective deflectors on dredgers and lighting techniques to minimise sky glow that could disorientate newborn turtles as they make their way from the beach to the sea.

For further information on the measures recommended, visit www.iucn.org

Tata Steel Thailand donated 100 artificial reefs made from steel products to help preserve the marine environment.

Our most significant by-product, in terms of volume, is blast furnace slag. This has now become a valuable raw material for the concrete industry, where it is used as a clinker substitute, thus reducing mineral extraction and CO_2 emissions at the same time. Steelmaking slag is used extensively in civil engineering and agricultural applications, and tar and benzole from our coke-making processes are used within the chemicals industry. Data on the useful consumption of these by-products is presented on page 22.

We have found many productive uses for the by-products of our coal mining operations in India. Mined material is processed to produce clean coal suitable for coke making at our Jamshedpur integrated steelworks. The fraction known as middlings is used for power generation, both at the steelworks power plant and also at a Tata Power installation in Jojobera. The coarse washeries rejects are used in fluidised bed boilers at the West Bokaro power station, while tailings are sold for use in the manufacture of building bricks.

We already apply advanced techniques at all our integrated steelworks to extract valuable components such as iron and carbon, by reusing most of our residual materials through sinter plants, BOS plants and coke ovens. During the year under review, over five million tonnes of residual materials were internally reused through our processes, replacing primary raw materials and reducing our overall CO_2 emissions *(see table 5 on page 22)*. This was a reduction in internal reuse compared to the previous year, when we focused on consuming materials already stockpiled at our UK sites.

Some waste from our operations is unavoidable, but our aim is to ensure that as much as possible can be reused, recycled or recovered. Table 5 on page 22 provides a breakdown of materials internally recirculated, those reused, recycled and recovered by third parties, and those sent for disposal from all Tata Steel Group facilities. The year under review saw the lowest amount of landfilling and the highest amount of reuse, recovery and recycling through third parties since Group-wide reporting began. These encouraging trends reflect the improvements made as a result of a focus on material efficiency, especially at our integrated steelmaking sites.

Biodiversity

Our sites contain a rich variety of wildlife species, many of which are afforded the highest level of legal protection. We respect the habitats both within and around our facilities and look for opportunities to progressively enhance these where we can in harmony with business operations.

Creating a nature reserve

At Shotton in the UK, efforts to co-exist with the natural world without compromising biodiversity have focused on a series of man-made lagoons used for circulating clean factory water from the works to the River Dee. Regular clearance and maintenance has enhanced the lagoons' potential as a habitat for flora and fauna, attracting a variety of bird and other species. The area is now designated a Site of Special Scientific Interest (SSSI), recognising its reed bed habitats and its use as a nesting site for common terns.

In June 2011, we opened a nature reserve within the conservation area. School groups have free access to the reserve and a new nature trail comprising a mile-long circular walking route allows children to see a variety of wildlife and wildfowl on the lagoons and reed beds. Employees created an indoor classroom during the year-long project and worked with local schools to produce educational material covering a range of themes including ecology, bird migration, local history and industrial water usage.

In the UK, we became a founder member of the Humber branch of the Industry and Nature Conservation Association (INCA) more than 20 years ago. Since then, we have worked closely with other industries, volunteers and INCA to improve our understanding of the biodiversity in and around our Scunthorpe site.

Under the Group's reclamation and afforestation policy, mine and quarry sites are thoroughly and sensitively restored to create sustainable habitats. Restoration of our mines has resulted in 2,000 hectares of forests and hundreds of hectares of reclaimed land.

Why is carbon dioxide (CO_2) produced during steelmaking?

CO_2 is formed during the production of iron, the main component of steel. The predominant method of making iron is the blast furnace process, where carbon, mainly in the form of coke, coal and oil, is used as a chemical reductant. The carbon removes the bound oxygen from the ore, resulting in the formation of liquid iron, carbon monoxide (CO) and CO_2. The CO is then converted to CO_2 when gas produced in the blast furnace is combusted elsewhere in the steelworks, for example, to generate electricity. CO_2 is also formed elsewhere during steelmaking, but in much smaller amounts than in the blast furnace.

TABLE 1: **CO_2 emissions from integrated steelmaking**

	2010/11	2009/10	2008/09
Direct CO_2 emissions (Scope 1) Million tonnes	35.8	37.3	38.4
Total CO_2 emissions (Scope 1, 2 and 3) Million tonnes	44.5	44.0	43.7
CO_2 intensity Tonnes CO_2 per tonne of crude steel	2.15	2.14	2.11
Crude steel production* Million tonnes	20.7	20.6	20.7

*Blast furnace route only. KPIs are as per the World Steel Association methodology.

TABLE 2: **Energy intensity in the steelmaking process (gigajoules per tonne of crude steel)**

	2010/11	2009/10	2008/09
Blast furnace (BF) route	23.68	23.85	23.74
Electric arc furnace (EAF) route*	10.47	10.94	10.10
NTS Thailand**	17.01	–	–
Crude steel production Million tonnes			
BF route	20.7	20.6	20.7
EAF route*	2.1	2.6	2.6
NTS Thailand**	0.5	–	–

* Excl. NTS Thailand for 2010/11
**NTS Thailand operates a mini blast furnace and EAF.

TABLE 3: **Emissions to air from steelmaking and downstream non-steelmaking facilities (thousand tonnes per year)**

	2010/11	2009/10	2008/09
Particulates	23	23	21
Oxides of nitrogen (NO and NO_2 as NO_2)	26	25	27
Sulphur dioxide (SO_2)	30	33	35

TABLE 4: **Emissions to water from steelmaking and downstream non-steelmaking downstream facilities (thousand tonnes per year)**

	2010/11	2009/10	2008/09
Hydrocarbons*	0.112	0.133	0.283
Suspended solids	2.2	1.9	2.6

*Data for 2009/10 and 2008/09 has been retrospectively corrected in this report for the unit used.

TABLE 5: **Waste materials management (thousand tonnes per year) by steelmaking and downstream non-steelmaking facilities**

	2010/11	2009/10	2008/09
Material reused through our processes Thousand tonnes	5,578	7,062	5,421
Re-used, recycled or recovered by third parties	548	527	472
Disposed of to landfill	653	815	910
Disposed of through other routes	57	62	77

TABLE 6: **By-product utilisation (thousand tonnes per year) by steelmaking and downstream non-steelmaking facilities**

	2010/11	2009/10	2008/09
Blast furnace slag	5,262	5,254	5,370
Steelmaking slag	1,939	2,134	2,316
Electric arc furnace slag	398	306	361
Tar and benzole	336	297	364
Other	153	184	119

Tables 3 to 6 inclusive include data for all reporting sites where respective reporting thresholds are exceeded. These are provided in the Performance Summary on Page 9.

On Teesside, UK, Tata Steel donated £35,000 (US$54,000) to build a new seal viewing area for the local community.

People

Tata Steel is committed to its goal of ensuring zero harm to its employees, its contractors and the communities in which it operates.

Testing air quality at Port Talbot, UK.

Safe walkways at IJmuiden, the Netherlands.

Health and Safety

Tata Steel is committed to its goal of ensuring zero harm to its employees, its contractors and the communities in which it operates.

This goal is laid down in the company's health and safety policies, standards and working procedures. Health and safety is a key performance indicator and one of the prime drivers of our corporate vision. The Group's goal is to achieve a lost time injury frequency rate of 0.4, with zero fatalities, by 2012.

Health and safety is reviewed at all board meetings of the company. A health, safety and environment committee, incorporating senior executives and non-executives from the board, has been established to carry out more detailed reviews.

In January 2011, a Tata Steel Group-wide health and safety policy was implemented.

Its guiding belief is that the safety and health of all the people who work in and with the Tata Steel Group is our number one priority.

Its principles are:

- All injuries and work-related illness can and must be prevented
- All employees and contractors are responsible for their own health and safety and that of their colleagues, with management accountable
- Employee engagement and training is essential
- Working safely is a condition of employment for all employees and contractors
- Excellence in health and safety drives excellence in business results
- Safety and health are integrated into all our business management systems and processes.

Performance – occupational safety

Ten people – five employees and five contractors – lost their lives while working at Tata Steel during the reporting period: eight in India and two in Europe. As any death is unacceptable, rigorous investigations have followed these fatal accidents. In some cases these have identified engineering improvements that could help prevent incidents from reoccurring, but in most we have learned that behavioural safety is a primary issue, and we must ensure our leaders are fully able to exercise their role as the primary influence on behaviour.

Four of the fatalities occurred in underground mines, revealing weaknesses in our safety management system within the raw material division. Two fatalities were at stockyards maintained by consignment agents, calling for an urgent implementation of the Safety Excellence Journey in these more remote locations. A Corporate Safety function has now been formed in India to reinforce our safety management systems within the raw material divisions and remote locations. Corporate Safety will also be responsible for strengthening safety management systems at greenfield projects, stockyards and suppliers as well as at Tata Steel Thailand and NatSteel.

The lost time injury frequency rate for the Group (employees and contractors combined) for the year was 0.79. This showed an improvement of 17 per cent from the previous year, although we failed to meet our Group target of 0.68 for 2010/11.

Improvement initiatives

A two-day symposium on safety behaviour, including sharing best practice within the Group, was held in Jamshedpur in July 2010.

In August 2010, Tata Steel Thailand launched its Safety Excellence Journey by inviting experts from around the Tata Steel Group to provide consultancy and share best practice.

Process improvement teams for health and safety were established across the Group to accelerate sharing and learning.

Care has been taken to ensure safety during construction of the Jamshedpur expansion.

The Indian steelmaking operations have a goal of 'Injury-free steel'. Around 17,000 employees have received training and completed a personal safety action plan to help achieve this. A number of departments recorded zero lost time injuries including the hot strip mill and blast furnaces.

A fatality risk control programme, launched in 2008, identifies unsafe conditions with fatality potential and eliminates them systematically through engineering solutions. In 2010/11 more than 4,000 unsafe conditions were corrected using engineering solutions, including 895 in barricading, 345 in conveyor belts and 697 in working at height.

A campaign to identify and eliminate commonly accepted unsafe practices has helped departments to eradicate a significant number of these.

Fourteen safety awareness mass meetings, held jointly by Tata Steel and the Tata Workers Union and focusing on key hazards, were held during 2010/11 in different departments throughout Jamshedpur.

In striving to improve our systems for managing the significant safety risks associated with the extraction of raw materials, we have adopted the best mine rescue procedures at all mining units. The Tata Steel safety excellence management and review process is proactively assessing risks and hazards and has instituted multi-level safety action plans, conducting detailed analyses of root causes of unsafe conditions and implementing corrective measures.

A fire safety audit and associated training was carried out at the Tata Centre in Mumbai and other key sales offices. Further opportunities for sharing and learning on this hazard are being explored in 2011 to apply best practices across the Group.

Tata Steel in Europe stepped up its efforts to eradicate lost time injuries with the Zero Harm initiative. This health and safety awareness campaign highlighted some of the most serious risks faced, focusing on six hazards, which together account for over 60 per cent of lost time injuries incurred in the previous year. The campaign continues into its second year.

Incidents in our European operations, including the two fatalities, have shown the increased need for an improvement in machine isolation and immobilisation, with the focus on behavioural safety and leadership. A specialist group is currently working on an isolation and immobilisation code of practice. Managers at all levels from sites across Europe attend felt leadership training, which emphasises the need to do, and be seen doing, the right things at all levels, as well as being willing to challenge and be challenged. This training programme won a UK National Training Award in 2009/10.

An initiative to improve safety in loading and unloading introduced originally in the UK Distribution business in 2008 has been continuously extended throughout the company, with standards in place and best practice shared. IJmuiden's exclusion zone programme ensures the safety of drivers and those involved with loading and unloading. Our industry-leading work on load restraint has received wide support from the truck haulage industry.

The company's safety journey has seen substantial improvements both in processes and in the work environment, contributing to six months of zero lost time injury frequency cases in Singapore during 2010/11 through the creation of a positive safety culture. The Safety Training and Observation Programme (STOP) identifies and challenges unsafe behaviours, while reinforcing positive elements. Employees from all levels including the CEO have been trained as STOP observers.

At work at NatSteel, Singapore.

Safe loading at NatSteel, Singapore.

A Safety Excellence Journey has set out standards and procedures and resulted in many improvements to processes, visual management and communications – all helping to raise awareness and foster a culture of safety. A 100-day Safety Excellence Journey campaign included safety training for senior leaders, and a 'train the trainer' programme for 24 plant managers. Safety training has been held on specific topics such as working in confined spaces, fire and gas, with a special focus on contractor safety management.

Process Safety

A comprehensive safety review process was conducted at Jamshedpur in readiness for the start-up of the new hot strip mill, blast furnace and a number of other key installations, helping to assess risks on new or modified facilities before the handover from project to operations teams.

Nine high-hazard installations were modelled for toxic releases and explosions using specially-created 'Phast Risk' software. Tata Steel is the first steel company in India and one of the first in the world to use this advanced software.

Process safety has been a constant focus since 2008 when a dedicated team was put in place. They have identified high hazard facilities (HHF) across the European operations, and are now carrying out process hazard reviews. Work is going on to determine the required safety integrity level with respect to identified safety critical systems.

To aid with management of change, a tool has been created for managing changes to plant, process and people and a training package developed. Loss of containment reporting – recording and reporting any spill of (listed) hazardous substances above a threshold amount – has been extended to all Seveso II (COMAH and BRZO) sites and from mid-2010 sites have been required to report all spills of hazardous substances, including molten metal, and rank each event in terms of potential impact. These reports are being used to measure and improve process safety performance in the same way that the lost time injury frequency rate is used to monitor occupational performance.

Performance – occupational health

A 'Wellness @ work place' initiative was launched at Jamshedpur in November 2010 to improve workforce health by controlling lifestyle-related diseases and minimising workplace hazards. The programme was also rolled out to other divisions, including the West Bokaro and Jharia mines and the Tubes division, in the first quarter of 2011. Industrial hygiene studies have been initiated at the Jamshedpur works to improve understanding of health hazards in the working environment.

An annual medical check-up is provided to all employees for both work-related and non-work related illnesses.

As part of the campaign to reduce health exposures across Tata Steel in Europe, IJmuiden has been investing in structural measures to reduce and prevent exposure to emissions of diesel engines in enclosed areas. Diesel-driven equipment has been replaced where possible, and exhaust gases extracted. Some vehicles have been equipped with filters.

A comprehensive workplace health programme is in place in NatSteel. The percentage of staff with high total cholesterol decreased to 23.8 per cent in 2010/11, from 34.4 per cent the year before. Over the same period, the percentage of staff exercising regularly (three times a week, 30 minutes per session) increased to 39.5 per cent from 36.4 per cent.

Tata Steel won the worldsteel 'Safety and Health Excellence Recognition Award' for the second consecutive year. The award recognises excellence in a company's commitment and innovation in the pursuit of an injury and illness-free healthy workplace.

Employment

From its foundation over a century ago, the Tata Steel Group's employment philosophy and practices have been based on the recognition that the people within it are the primary source of its competitiveness.

The company's human resources policy, which was formally put into writing in 2001, is applied consistently across its worldwide operations. The principles enshrined in that policy are: equality of opportunity, continuing personal development, fairness, mutual trust and teamwork. These principles are, in turn, underpinned by the five Tata Group core values of integrity, understanding, excellence, unity and responsibility.

Health at work – daily exercises (left) and a health check-up at NatSteel, Singapore.

We also believe as a matter of principle that diversity within our workforce greatly enhances our overall capabilities. In all our operating locations globally, we are an equal opportunity employer. We do not discriminate on the basis of race, caste, religion, colour, ancestry, gender, marital status, sexual orientation, age, nationality, ethnic origin or disability. All decisions relating to promotion, compensation and any other forms of reward and recognition are based entirely on performance.

Recruitment and retention

We recognise that the key to recruiting and retaining the best employees is to be the best possible employer.

As at 31 March 2011, the Group had some 80,000 employees around the world. Despite the difficult conditions still being experienced in some of our markets, we consider it crucial to our long-term vision that we continue to attract new talent and to develop our existing talent.

The Tata Steel management trainee programme in India, the Tata Steel graduate programme in Europe, and the NatSteel scholarship and study award programme have all been designed to offer exciting and rewarding career opportunities to engineers and future business leaders from the world's best universities and colleges. In addition to its annual graduate intake, the Group continued to recruit apprentices as well as experienced middle and senior managers to meet its current needs and enhance our capabilities for the future.

Another fundamental principle of our human resources policy is that all employees are compensated fairly, and have the opportunity to develop their skills and progress within the organisation. Benchmarking surveys are conducted annually in all our major operating locations to ensure that our pay and benefits packages remain among the most attractive and competitive.

In India, we provide free medical care through our own hospital in Jamshedpur and support educational programmes for employees and their families. The range of benefits provided extends far beyond the legal requirement and includes subsidised housing, utilities and other allowances.

In the Netherlands, Tata Steel has consistently scored highly in the Dutch magazine *Intermediair*'s annual survey of the best companies to work for. Tata Steel in IJmuiden was named number two in the industry sector for 2010, having been voted to the top position in the previous four years.

Talent development

As our business continues to grow, we encourage and enable our employees to keep growing too. The Group invests heavily in internal development and training programmes to enhance its managerial and technical capabilities globally.

Shortly after the end of the financial year, in April 2011, the Tata Steel Academy was launched in Europe to further strengthen the organisation's competitive advantage through its people by enabling them to achieve the highest standards of technical and professional expertise.

The Tata Steel graduate programme offers exciting career opportunities to future business leaders.

The academy uses an approach known as 'blended learning' – a mix of practical, computer-based and classroom training. The majority of the training will remain 'on the job', but will be structured through the creation of 12 distinct faculties: leadership; health and safety; sales and marketing; manufacturing; engineering; technical; supply chain; finance; HR; IT; procurement; and total quality management.

The key feature of the Tata Steel Academy is to create a real passion for continuous learning, driven by people themselves. This enables everyone in the organisation to assess and pursue their own professional development needs and career goals in the most effective way.

In India, we have introduced a similar scheme called 'Directed Learning Initiatives' in order to bridge functional skill gaps as business expands and adapts to the ever-changing business environment. The scheme also promotes leadership skills by incorporating a series of training modules developed in conjunction with leading management institutes.

Redundancy

In February 2010, Tata Steel in Europe was forced to partially mothball Teesside Cast Products (TCP) after a consortium of four international customers terminated their binding contract to buy most of the plant's output. This unavoidable action put at risk some 1,600 jobs, but the company continued to do everything possible to find a viable long-term solution for the plant.

As part of the response to the Teesside job losses, Tata Steel's subsidiary, UK Steel Enterprise, announced an £8.3 million support package for the region. This included a new Regeneration Fund to assist start-up and fledgling businesses along with a £4.7 million expansion of its Innovation Centre in Hartlepool and increased levels of investment finance available to new and growing businesses. While we recognise that economic regeneration is a long-term responsibility, this support package had significant immediate impact, providing assistance to over 140 businesses and helping to create over 600 jobs in Teesside during the year.

Creating a passion for continuous learning through the Tata Steel Academy.

UK Steel Enterprise was formed 35 years ago to help improve the economies of areas most affected by changes in the UK steel industry. During that time it has helped to create nearly 70,000 jobs and supported more than 4,650 small businesses. UK Steel Enterprise provides support to steel communities through the provision of investment finance and managed work space for businesses. In the last year it has given almost £1 million of financial assistance to community support projects within steel communities.

Just over a year after the plant was mothballed, Tata Steel successfully completed the sale of TCP to Sahaviriya Steel Industries UK Limited (SSI UK), a subsidiary of Thailand's largest steel producer. SSI UK is expected to restart production at the plant in early 2012, creating at least 800 new jobs in the UK.

Extensive support was also given to employees in IJmuiden whose existing roles became redundant as a result of the severe economic downturn in Europe. A 'Transfercentre' was established, with 35 job coaches dedicated to helping the affected employees find and prepare themselves for new positions, either elsewhere in Tata Steel or outside the company.

The Transfercentre itself became redundant at the end of 2010, after successfully completing its mission. A number of other companies in the Netherlands have adopted IJmuiden's proactive approach, and Tata Steel has been happy to share its learnings with them.

Education

Tata Steel has been actively sponsoring education at all levels for over a century. In India, we provide financial support to a number of primary schools near our operating sites, and to families who would not otherwise be able to afford the school fees for their children.

Forty schools benefit from the Tata Steel Education Excellence Programme. This unique initiative aimed at promoting excellence in education in Jamshedpur was conceived seven years ago by B. Muthuraman, the company's vice chairman, and is based on Tata's business excellence (TBEM) method. Teachers and principals are trained to assess other participating schools. The benchmarked programme trains teachers as assessors for other schools and encourages performance excellence in teaching, learning methods and in school management systems and processes.

Each year, we award scholarships to promote the talent and knowledge of students from Scheduled Castes and Scheduled Tribes in India by encouraging and assisting them to study beyond elementary level. The Jyoti Fellowship was originally initiated in 1974, and this year scholarships to the value of Rs.16 million (US$32,000) were awarded to 308 students. The Moodie Endowment, which encourages youths in various districts of Jharkhand and West Bengal to pursue science studies, awards more than 100 grants annually worth a total of Rs.1.2 million (US$26,000). Through the Tribal Cultural Society, we also provide coaching to help students prepare for a wide variety of vocational examinations.

NatSteel, together with the NatSteel Employees' Union, holds a joint bursary and merit awards presentation. Some 600,000 Singapore dollars (US$460,000) have been granted to approximately 1,000 students since the programme was introduced 20 years ago.

The NatSteel Scholarship and Study Awards are given to outstanding students in local universities, helping to attract candidates with excellent academic results and leadership potential. NatSteel Scholars are bonded to work for the company for the equivalent duration of their course sponsorship. All scholars change their job at least twice in the first four years of their career to broaden their work experience and develop their knowledge of NatSteel's business.

NatSteel Vietnam has an extensive scholarship and awards programme, with a particular focus on assisting students from poorer communities and those with physical disabilities.

In South Africa, we have pledged R50,000 (US$5,275) for a period of three years to Brackenham primary school, close to our plant in Richards Bay, to help towards the cost of schooling for children whose parents are unable to pay the full cost on their own. Additional funds have been provided to renovate and maintain nearby schools, and to supply them with much-needed equipment.

Tata Steel Thailand is continuing its 'Grow Smart with Tata Steel' initiative, which aims to promote learning and self-development among young people living in remote areas by nurturing their interest in reading, expanding their knowledge and capabilities, and thereby ultimately helping their families and communities. The scheme began in 2009 in schools close to our plants and now extends to 128 schools in remote areas throughout the country. During 2010/2011 we created new book corners for 61 schools in 13 provinces. Our target is to set up book corners in 400 schools covering all regions of Thailand.

We support and encourage the next generation's interest in science and technology, and many of our employees volunteer to help schools with their science, technology and engineering learning programmes. In the UK, 120 employees have run initiatives in 11 schools in Wales. Student teams from South Yorkshire responded with ingenuity to a challenge set by Tata Steel to design and build street lights powered by renewable energy.

'Grow Smart with Tata Steel' in Thailand.

In the Netherlands, Tata Steel is a lead sponsor of the Techno Challenge, designed to promote interest in technology among schoolchildren. The scheme was extended in September 2010 with the launch of the first Electro League, in which schools compete in designing and constructing electric vehicles. Also in September, Tata Steel in IJmuiden received the 2010 Company Award from VHTO, a Dutch non-profit organisation whose aim is to encourage women to pursue careers in science and technology.

Tata Steel also supports the study of metallurgy and science in general, both to advance steel technology and to encourage the development of qualified people for our industry in the future.

The first Tata Steel Professor of Metallurgy, Dr Harry Bhadeshia, is a world-renowned expert on the physical metallurgy of steels. The endowment of this Chair at Cambridge University was inaugurated in November 2008, and is a mark of the shared commitment of the University and the Tata Steel Group to world-leading research in the field of metallurgy.

Tata Steel-promoted rural enterprise development helps women to find new employment opportunities.

Health programmes in India focus on HIV/AIDS interventions.

Line dancing for fun and fitness - employees from NatSteel, Singapore.

Caring for the community

Enhancing the quality of life for people in the areas surrounding our plants has been an integral part of our business philosophy for over a hundred years. Throughout that time, our responsible business practices have brought inclusive growth. The company's business success enables it to extend opportunities and offer better living standards to many thousands of people.

Initiatives span education, health, sports and vocational training. These have encouraged personal development, extended competencies and brought real empowerment in developing countries.

India

In India, a new corporate social responsibility objective for this year was to 'impact a million lives'. This has set in motion a wide range of initiatives in a number of important areas. All the commitments to the community have been made irrespective of our short-term financial performance, in order to ensure consistency in delivery of these services in years to come.

The Sustainable Livelihoods programme focuses on agriculture, vocational training, self-help groups and entrepreneurship. Tata Steel-enabled assistance has improved the productivity of more than 4,000 acres of agricultural land, and over 3,000 acres of wasteland have been converted into productive land.

Job-oriented training for young people in India.

In the vital area of health we are concerned with a large number of preventive and curative health services, with the emphasis on maternal and infant survival projects and HIV/AIDS interventions. During the year, more than 213,000 people benefited under outreach programmes through our mobile medical vans, clinics and health camps in and around Jamshedpur and other locations. Nearly 9,900 babies were immunised and 8,700 family planning operations carried out. In 2010/11, Tata Steel hosted the Life Line Express hospital train for the 16th time at Jajpur, Odisha. Through this project, more than 525 procedures were carried out including orthopaedics, ENT, eye, reconstructive and dental work.

Safe drinking water was provided to thousands of people through the installation of more than 160 new tube wells and 47 deep bore wells. Nearly 400 existing wells were repaired and reinstated.

Our adult literacy programmes helped 2,555 adults across 95 centres to become literate. Two hundred girls who had dropped out of the education system completed a nine-month bridge course through camp schools at Pipla and Noamundi and all are now back in mainstream education.

Another major part of our commitment to communities is the preservation and promotion of tribal culture. Two artisans' hubs have been established at Gadra and Dongagaral villages and we are helping to revitalise the traditional sport of Kati. Almost 200 young people have enrolled in three language centres established to preserve and promote the indigenous Santali language.

In sport, a cycling team representing Jharkhand and supported by Tata Steel won a bronze medal at the 34th Indian National Games in the 500m team event.

Encouraging triathlon in the UK.

Singapore
NatSteel stays actively involved in the community through its 'Building Beyond Borders' programme. This focuses on supporting elderly people as well as educating disadvantaged young people. In Singapore, regular engagement with the company's three adopted charities has encouraged staff volunteerism rates to rise to over 30 per cent, up from 22 per cent in the previous year. Activities in NatSteel's Australian, Chinese and Vietnamese subsidiaries include bursary awards and active engagement with local schools, as well as disaster relief support.

Thailand
As well as the 'Grow Smart with Tata Steel' project (see earlier section on education) we provide scholarships, school supplies and sports equipment to schools near our plants. We run a 'Tata Steel English on Tour' English language project, as well as giving guidance on basic computer skills and even soccer skills with an eight-week football academy run by Tata Steel staff. Children are encouraged to learn about and help protect the environment through our conservation camp and through planting trees around our sites and communities.

Our health and safety initiatives within the community include the provision of mobile clinics, influenza prevention campaigns and motorcycle safety training. During the year, we also contributed to disaster relief programmes, distributing relief bags to flood victims in Saraburi, Ayutthaya and Lopburi provinces. Staff donated 30,000THB (US$980) for the earthquake and tsunami victims in Japan.

As in previous years, we donated products and construction materials to temples, schools, and local government agencies. Our employees continue to support a number of non-profit organisations caring for the elderly and orphans. They also supported a community initiative by students from the Faculty of Engineering, Chulalongkorn University to build bridges in remote villages, and helped to construct a dam at Ang Rue Nai Wildlife Sanctuary.

We have also lent our support to the Buddhist community in a variety of ways, including cleaning and painting the Pan Saded Nai temple.


The Tata Steel Chess Tournament in the Netherlands.

Europe
Our European plants and their employees are involved in a huge number of initiatives, both large and small, helping support the immediate community and wider population.

Tata Steel has been a corporate partner for British Triathlon since 2006. An important aspect of this support is encouraging active participation in the sport. Adults and children alike have had their first taste of triathlon, one of the UK's fastest-growing sports, under this initiative. The Tata Kids of Steel series is run over the summer months at locations all around the country, enabling children to experience – some for the first time – the three sports of swimming, cycling and running in a fun and supportive atmosphere. We provide bikes and helmets and much more, with employee volunteers helping to organise and marshal the events near our plants. In 2010, 11 out of 15 events were held near our facilities. Since 2007, more than 35,000 children from almost 400 schools have had the opportunity to experience triathlon.

In July 2010 we became a presenting partner in the International Triathlon Union World Championship in London, held at the venue for the 2012 Olympics. Tata Steel has supported the British Paratriathlon Championships since the inaugural event in 2008, and helped it gain international recognition. Paratriathlon will now be included in the 2016 Paralympics in Rio for the first time.

Another major and long-running sponsorship which involves the local community as well as making a mark on the global stage is the Tata Steel Chess Tournament. This has become an important event for the economy of host town Wijk aan Zee close to our IJmuiden plant in the Netherlands. The annual tournament – 2011 was its 73rd year – attracts thousands of international visitors, including chess grandmasters, as well as giving local people and employees the chance to participate.

Community projects at home and in Kenya supported by employees from IJmuiden.

We support a number of sports clubs in the Netherlands and the UK to encourage participation and help employees maintain and improve their health. These include 'Start to Run' workshops organised by the Tata Steel Runners Club. There are also active rowing and Dragonboat racing clubs. In Wales the annual 'Beast of Bryn' endurance running event is sponsored by the Port Talbot plant.

Through voluntary work, our employees apply their skills in practical ways for the community. Our safety and research teams from IJmuiden got together to refurbish buildings and gardens at Hartekamp Groep, a local institute for people with learning difficulties, and to adapt a mini golf course for wheelchair users. Meanwhile our engineering, contracting and consultancy services arm assisted in the construction of an orphanage in Kenya. In Wales our apprentices regenerated a wild fowl breeding site that is located on our land but open to the public.

In the Netherlands we support the anti-litter organisation Nederland Schoon, and this year we worked with students to come up with innovative ideas to prevent litter from steel cans. In the UK an initiative run by our packaging steel recycling arm helped educate children in 19 primary schools about recycling. On Teesside, we donated £35,000 (US$54,000) to build a new seal viewing area for the local community.

There have always been many individual fundraising activities at our sites in Europe, and in 2011 we decided to harness these efforts to increase their impact.

Cancer care is close to the hearts of people within the Tata Group, which has a long history of supporting research into cancer and leukaemia. The Lady Tata Memorial Trust, set up by Sir Dorabji Tata in 1932 in memory of his wife who died from cancer in 1930, has for the past 78 years allocated up to £500,000 (US$780,000) per year towards blood cancer research. The Lady Tata Memorial Trust is currently supporting a project at ICR (Institute of Cancer Research) to help develop a genetic test to identify treatments for incurable Myeloma cancer.

Leading cancer charities Macmillan and Marie Curie have also benefited, with awareness-raising campaigns being held at our main UK sites. Macmillan mobile information units and Macmillan cancer information nurses are due to visit ten Tata Steel sites in 2011, bringing cancer information to Tata Steel employees and to our local communities. The campaign line 'Today is a good day' was promoted on a Tata Steel truck to spread the word further. Our Distribution centres committed to raise £100,000 (US$156,000) for Marie Curie during 2011, and are well on the way to achieving this impressive goal.

In all three of our main European plants at Port Talbot, Scunthorpe and IJmuiden, we keep residents up to date with company activities and developments of mutual interest with regular newsletters. In March 2011, Strip Products UK took a step further in maintaining close communications with the local community when it went live on Twitter.

Business contribution

Making a growing economic contribution for the benefit of all our stakeholders

The Tata Steel Group's business approach combines disciplined financial planning and operational management with a constant focus on the long term. We believe this is the best way of ensuring that our economic performance is continuously optimised in varying market conditions and in the interests of all our stakeholders.

Economic performance

Our primary measure of the economic value we create is return on invested capital (ROIC). In order to maximise our ROIC, we seek to operate our assets as safely and efficiently as possible, and invest in initiatives to create additional economic value through growth in capacity, technological innovation and ongoing improvements in everything we do.

While recovery from the global meltdown of 2008 has remained very fragile in the US, UK and Western Europe, high levels of growth and robust economic activity have continued to be registered in China, India and other developing countries during 2010/11.

Within all our markets, inflation has now emerged as a major challenge, driven by a substantial rise in the prices of almost all commodities, mineral resources and energy. The global steel industry is facing an unprecedented increase in the cost of iron ore and coking coal, accentuated by short-term supply disruptions.

The Group has always attached great strategic importance to securing dependable supplies of its raw materials. Major initiatives are currently under way to achieve partial raw material security for Tata Steel in Europe, and to secure additional iron ore and coal resources to supply our new steelmaking facilities in India.

Despite the still-difficult market conditions, particularly in Western Europe, the Group continued to deliver a strong economic performance to the benefit of all its stakeholders during the 2010/11 financial year:

- Our global steel deliveries totalled 23.5 million tonnes (2009/10: 23.6 million tonnes)
- Our turnover was US$26,635 million (2009/10: US$22,796 million)
- Our earnings before interest, taxes, depreciation and amortisation (EBITDA) totalled US$3,836 million (2009/10: US$2,095 million)
- Our return on invested capital (ROIC) was 17 per cent (2009/10: seven per cent)

Quality and business excellence

Quality is vital to the success of our business. Our products and services must consistently be of the highest quality in order to create value for our stakeholders and to uphold our reputation. ISO 9001, the world's most comprehensive quality management frame work, has been applied throughout our business.

All Tata companies also apply the Tata Business Excellence Model (TBEM). This unique methodology helps our organisations to systematically focus on and manage the effectiveness of their processes. The aim is to create strategic direction and drive continuous improvement, ensuring all our businesses keep pace with the very best global business practices.

Based on a model created in the US, TBEM was developed by Tata Steel almost 20 years ago. It has now been adopted by all the 96 Tata companies. Each company is rigorously assessed by experts from other organisations within the global Tata Group, and the collective learning is shared.

The new Range Rover Evoque at our Zodiac line in Wales. Tata Steel in Europe is a strategic supplier to Jaguar Land Rover.

Independent assurance report to Tata Steel Group

Tata Steel appointed Environmental Resources Management Limited (ERM) to provide independent assurance on selected safety and environmental performance data presented in its Corporate Citizenship Report (the Report).

Our brief

We were asked to provide independent assurance as to whether the following safety and environmental performance data is appropriately reported:

Safety

- Total number of fatal incidents (employees and contractors)
- Total lost time injury frequency rate (employees and contractors) per million hours worked

Environment

- Direct and total CO_2 emissions (tonnes)
- Carbon intensity (tonnes per tonne of crude steel)
- Energy intensity (GJ per tonne of crude steel)
- Mass emissions to air for particulates, sulphur dioxide (SO_2) and oxides of nitrogen (as NO_2) (tonnes/yr)
- Mass emissions to water for hydrocarbons and suspended solids (tonnes/yr)
- Total waste materials disposed of to landfill (tonnes)
- Total waste materials disposed via other routes (tonnes)
- Total materials reused, recycled or recovered by third parties (tonnes)
- Total material reused through Tata Steel processes (tonnes)

Our approach

Standards and criteria used

We delivered our work in accordance with ERM's assurance methodology which is based on the following international assurance and audit standards: ISAE 3000, ISO 14064:3, and ISO 19011.

We planned and performed our work to obtain all the information and explanations that we believe were necessary to provide a basis for our assurance conclusions as to whether the reported information and data set out in 'Our brief' was appropriately reported i.e. that nothing has come to our attention through the course of our work that the data is materially mis-reported (limited assurance).

We used Tata Steel's own definition of the selected HSE KPIs as assessment criteria when undertaking our data systems review work. These are presented in more detail in the Report.

If we had been asked to conclude on whether the selected disclosures are materially accurate, we would have needed to conduct more work at corporate and site levels and to gather further evidence to support our assurance opinion.

The reliability of the reported information and data is subject to inherent uncertainties, given the available methods for determining, calculating or estimating the underlying information. It is important to understand our assurance conclusions in this context.

Our work

A multi-disciplinary team of environment, health and safety and assurance specialists performed work at group level as well as at four selected operational sites as set out below. Our assurance activities included:

- Interviews with representatives from Group safety and environmental Functions to understand and test the reporting processes and underlying data management systems for the selected data;
- Site visits at three operational sites (Scunthorpe Integrated Steel Works (ISW) and the Colors site at Shotton, both in the UK, and Jamshedpur ISW in India) to interview data owners to understand the data collection, aggregation and reporting processes in place for each of the selected data; and review of relevant supporting documentation;
- Discussion of our assurance findings with management as they arose to provide them with the opportunity to address them prior to finalisation of our work; and
- Review of the presentation of the selected data in the Report related to 'Our brief' to ensure consistency with our findings.

Respective responsibilities and ERM's independence

Tata Steel management is responsible for preparing the Report and for the information in it. ERM's responsibility is to express our assurance conclusions on the agreed brief.

During 2010/11, ERM has not worked with Tata Steel on other consulting engagements. ERM conducts strict conflict checks and has confirmed its independence to Tata Steel for this assurance engagement.

Our assurance conclusions

Based on our work undertaken as described above, we conclude that in all material respects Tata Steel has appropriately reported within the various sections of the Report the selected Safety and Environmental performance data presented above in the 'Our brief' section.

Our key observations and recommendations

Based on our work set out above, and without affecting our conclusions, here are our key comments and recommendations for improvement.

Observations:

- Tata Steel has continued to improve environmental performance in a number of areas, in particular reductions in material disposed of to landfill and sulphur dioxide emissions.
- Whilst there has been a continued improvement in Lost Time Injury Frequency, the tragic deaths of 10 persons in the reporting year emphasises the need to continue to focus attention on addressing fatal risks and striving toward a goal of zero harm.

Recommendations for improvement:

- Tata Steel should expand the CCR reporting scope and boundary to encompass a wider range of sustainability topics reflective of their activities at facilities in the raw materials division, joint venture operations and major project sites.
- Acknowledging Tata Steel's commitment to expand and evolve its reporting to Global Reporting Initiative's (GRI) G3.1 Guidelines, further alignment to the GRI principles of stakeholder inclusiveness and materiality should be sought alongside presenting further performance data from across all GRI dimensions (economic, environmental and social).

Environmental Resources Management Limited (ERM)
London, UK, 23 December 2011

ERM

ERM is an independent global provider of environmental, social and corporate responsibility consulting and assurance services. Over the past four years we have worked with over half of the world's 500 largest companies, in addition to numerous governments, international organisations and NGOs.

Awards

World Steel Association Excellence Recognition in Safety and Health Award 2010 (Tata Steel India)

World Steel Association Excellence Recognition in Safety and Health Award 2011 (NatSteel and Tata Steel in Europe)

ASSOCHAM (Associated Chambers of Commerce & Industry of India), CSR Excellence Award 2010

CII Eastern Region SHE Award 2011 (Tata Steel India)

Procurement Leaders Forum, Corporate Social Responsibility Award (Tata Steel India)

Finance Asia Corporate Social Responsibility Award (Tata Steel India)

Singapore Environmental Council, Singapore Environmental Achievement Award (NatSteel)

Singapore Green Label Certification (NatSteel)

Singapore Ministry of Manpower Work-Life Excellence Award (NatSteel)

Thai Department of Industrial Works, Corporate Social Responsibility certification, industrial sector (Tata Steel Thailand)

Thai Department of Primary Industries and Mines (DPIM), Transparency and Corporate Social Responsibility certification (Tata Steel Thailand)

Enterprise Assessment Center of Fujian Province, Outstanding Contributions to Economy & Society (NatSteel Xiamen)

FIMI Award for Sustainable Mining, 2009/10 (Noamundi Mine, Tata Steel India)

3rd Annual Intellectual Property Award for highest number of patents granted to an Indian-owned private company in the last five years (Tata Steel India)

VTHO Company Award 2010 for commitment to creating interest in technology among girls (IJmuiden, Tata Steel in Europe)

Intermediair magazine, second-best Dutch industrial employer (IJmuiden, Tata Steel in Europe)

World Steel Association International LCA Leadership Award 2010 – a 'Steelie' (Tata Steel in Europe)

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