GlaxoSmithKline

SUSTAINABILITY IN ENVIRONMENT, HEALTH AND SAFETY

REPORT 2004

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In 2004, for the 5th year, we report our environment, health and safety (EHS) performance to the public on the GSK website. The legacy companies (Glaxo Wellcome and SmithKline Beecham) individually published EHS reports for a number of years prior to the formation of GSK in 2000. Copies of these reports are available on the Corporate Register website.

In previous years, we published a separate EHS report alongside our Corporate Responsibility Report, but this year we have fully integrated the two. This document contains the Caring for the Environment section of the Corporate Responsibility report with all of its background material covering environmental issues and performance. It also contains the Health and Safety information from the Employment Practices section of the Corporate Responsibility report covering health and safety issues and performance.

Caring for the Environment

CORPORATE RESPONSIBILITY PRINCIPLE

We will operate in an environmentally responsible manner through systematic management of our environmental impacts, measurement of our performance and setting challenging performance targets. We will improve the efficiency of all our activities to minimise material and energy use and waste generated. We aim to find opportunities to use renewable materials and to recycle our waste.

Caring for the environment is a key element of our approach to Corporate Responsibility at GSK. Our Environment, Health and Safety (EHS) Plan for Excellence sets out a strategy to improve our performance over the ten-year period to 2010, from a 2001 baseline. This includes interim targets to be reached by the end of 2005.

We are on track to meet seven of our ten targets. These cover some of our most important environmental issues, including energy and water consumption, ozone depleting potential, global warming potential, wastewater quality, volatile organic compound emissions and non-hazardous waste. We may not achieve the three targets on hazardous waste, recycling and ozone depletion potential of ancillary equipment by the end of 2005. A fuller explanation of our performance is provided on the relevant pages of this report. Next year we will set new targets for 2010.

About the Environment Section of This Report

This is the 5th year that we have reported on our environmental performance. The legacy companies (Glaxo Wellcome and SmithKline Beecham) individually published EHS reports for a number of years prior to the formation of GSK in 2000. Copies of these reports are available on the Corporate Register website.

In previous years, we have published a separate EHS report alongside our Corporate Responsibility Report, but this year we have fully integrated the two.

Further background information on our approach to managing environmental issues is available in the Environment, Health and Safety section of our website. There are also more details about our corporate responsibility reporting in the section About This Report on our website.

Scope of Data

The environmental data covers the calendar year 2004. It is collected from 83 of our 84 pharmaceutical and consumer manufacturing sites, 4 of our 8 biologicals manufacturing sites and 20 of 24 R&D sites as well as 5 of 6 distribution centres, 4 of the 6 major office locations and 6 of the smaller office and sales locations. We include data for sites that were in operation for all or part of the year.

We plan to collect energy, water and waste data from our smaller offices, sales and distribution centres in a phased approach over the next few years. However, the overall environmental impact from these sites is relatively small and we therefore do not plan to collect other environmental data.

Caring for the Environment (cont.)

Notes attached to the charts explain the scope and data collection process for each parameter in more detail.

Verification

The environment, health and safety sections of this report are externally verified by ERM (Environmental Resources Management). Web pages to which the verification applies are indicated by this symbol. See ERM's verification statement on page 149.

CASE STUDY

Raising Children's Awareness of Environment, Health and Safety

In 1996, GSK's manufacturing site in Evreux, France, set up a community partnership project for schools. The project was an environment, health and safety (EHS) award scheme that encouraged children to learn about the EHS issues that are important to their future.

The winning team in Evreux's 2004 EHS School Challenge

In its first year, five schools and 100 children took part. Thanks in part to the continued help of local offices of the French Education Ministry, the French Social and Health Insurance Ministry Office and a local association dedicated to science, 14 schools and 300 children entered the competition in 2003.

Each year has its own EHS theme. For 2003 the theme was Waste Recycling. The first prize - 200 euros towards a school project and a trip to the Science and Industry Hall in Paris - went to a team that created a papier mache educational booklet about waste and recycling. Other prize-winning entries included a game about recycling and a play about waste. An educational film on recycling was shown at the awards ceremony. The theme for 2004 was health and hygiene.

The awards scheme has helped to build and enhance GSK's reputation in the local community. The project won first place in the community partnership category of our internal awards scheme - the Chief Executive Officer's EHS Excellence Awards.

Letter From the Vice President, EHS

This year, for the first time, GSK's Environment, Health and Safety (EHS) report is fully integrated into the company's Corporate Responsibility Report on GSK.com.

We cover the same issues in the same detail as before, but have made it simpler to understand our overall approach to corporate responsibility and to see the connections between the many subject areas covered.

Consultation with stakeholders has helped us identify the prime sustainability challenges we face. These are: climate change, the impact of pharmaceuticals in the environment, and more sustainable materials consumption. We have begun work developing strategies to tackle these issues and will publish our plans in 2006.

We have developed a rigorous approach to EHS and sustainability, with a long-term 'Plan for Excellence' and five-year improvement targets applying throughout our operations. The first five-year phase of the programme will be complete in 2005 so we will set new five-year targets during this year to help drive the business towards sustainability. From the end of 2005 we will expand traditional EHS programmes to include a focus on sustainability.

We have continued to make progress - for example, in 2004, four additional sites were certified to the EHS management system standards ISO 14001 and OHSAS 18001.

We are on track to meet seven of our ten quantified environmental targets by the end of 2005. The targets cover some of our most important issues, including energy and water consumption, ozone depleting potential, global warming potential, volatile organic compound emissions, wastewater quality and waste.

We may not achieve the three targets on hazardous waste, recycling and ozone depletion potential of ancillary equipment by the end of 2005. A fuller explanation of our performance is provided on the relevant pages of this report.

Our long-term plan for excellence charts a journey which begins with improving our systems, progresses to leadership in EHS performance, and ultimately brings us closer towards sustainability. The 10-year programme envisages continuous improvement as well as identifying specific actions. As good EHS management and performance are achieved, we will set ourselves more challenging sustainability objectives on materials efficiency, energy efficiency and use of renewable resources. We also need to look more closely at the inter-relations between the social, economic and environmental impacts of our business.

I hope that this report meets your needs as a stakeholder and I welcome your comments or suggestions.

James Hagan

James Hagan Ph.D., P.E.
Vice President, Corporate Environment, Health and Safety

James Hagan Ph.D., P.E.
Vice President, Corporate Environment, Health and Safety

EHS Management

Environment, health and safety (EHS) issues are managed through an integrated system that aims to ensure issues and risks are identified, standards are established, training is provided, targets set and audits conducted.

We have a clearly defined EHS management structure. Overall responsibility for EHS issues rests with the Corporate Executive Team and the Board. The Board champion for EHS is JP Garnier, the Chief Executive Officer. We also have a Corporate Responsibility Committee and Corporate EHS department. See more on our EHS Management Organisation on page 11.

Our EHS Policy, EHS Vision and 64 Global EHS Standards set the overall framework for managing EHS issues. Our EHS Plan for Excellence sets out our strategy for improving our environmental performance up to 2010. See more on our EHS Management System on page 18.

In 2004, four sites achieved dual certification to the international environmental management standard ISO 14001 and the international health and safety standard OHSAS 18001 for the first time. One site did not renew its certification in 2004 and one site certified only the utilities area. This means that 14 out of 84 pharmaceutical and consumer manufacturing sites are now certified to both ISO 14001 and OHSAS 18001, and seven sites are certified to ISO 14001 only. We are working to increase site certification and expect to have around a third of our sites certified by the end of 2005, which would put us in a position to move towards global certification.

EHS Management (cont.)

CASE STUDY

Eliminating Waste from our Chemical Production Processes

Studying alternative processes to reduce waste

In Verona, Italy, we have developed a process which reduces the environmental impact of producing a chemical which is being tested to help treat chemotherapy-induced nausea and vomiting.

Originally, the method for synthesising the chemical required very low temperatures and produced significant quantities of waste by-products. It also required the use of triphosgene - a toxic reagent which must be specially transported, managed and handled. The original process was designed for producing small quantities of the chemical. It was scaled up several times to produce larger quantities for clinical trials, but the process remained unchanged.

In 2003, researchers set out to create a more efficient process suitable for commercial production if the clinical trials were successful. The innovative new process eliminated the need for extremely low temperatures, saving energy.

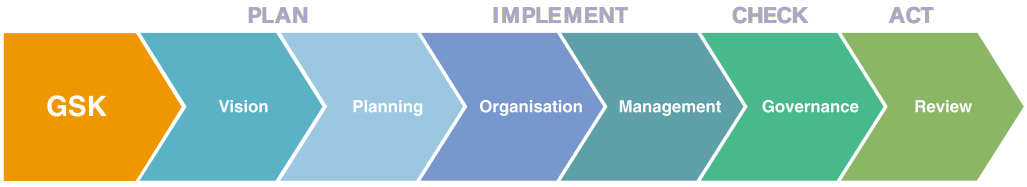
A number of hazardous substances were removed from the process, including triphosgene, chlorinated solvents and silica treatments. This helped to reduce waste by 75% and the cost of raw materials by over 50%.

This innovative development won first place in the green chemistry/technology category of our internal awards scheme - the Chief Executive Officer's Environment, Health and Safety Excellence Awards.

Management Framework

The GlaxoSmithKline EHS Framework is the EHS management system for GlaxoSmithKline. It includes policies, standards, guidance materials, tools and activities that support and assist the network of EHS professionals who manage environment, health and safety at their sites and throughout key business operations.

FRAMEWORK FOR SUSTAINABILITY IN EHS



EHS ACTIVITIES AND RESPONSIBILITIES INTEGRAL TO BUSINESS

Global	Vision Policies Aspirations	EHS Strategy EHS Objectives EHS Targets	Board, CET, ROCC CEHS EHM	Standards Guidelines Tools	Performance Monitoring, Auditing and Reporting	Public Report, Internal and External Dialogue and Recognition
Business Unit		EHS in Business Plan	Business Executives Teams and Compliance Boards	EHS in Business Processes	Business Performance Monitoring and Reporting	Business Review and Recognition
Operations		EHS in Operational Plan	Operations Executive Teams and EHS/EH	Operations Management Systems	Performance Monitoring and Self Audit	Operational Review and Recognition
External Supply		Contract Requirements/EHS in Supply Plan	GSK Sourcing and Contract Management	External Supplier Management System	Performance Monitoring and Reporting	Annual Performance Review

Vision

GlaxoSmithKline's Environment, Health and Safety (EHS) and Employee Health Management (EHM) Visions align with GSK's strategic intent: to become the indisputable leader in our industry by helping people do more, feel better and live longer.

The EHS Vision embraces the concept of sustainable development focused on environmental sustainability. It recognises that sustainable business advantage starts when we understand and address EHS issues. From the development of products to their delivery, GSK has embarked on a journey to identify and understand its relationship to society and the environment. That is why in our EHS vision we strive for excellence in EHS.

Environment Health and Safety Vision

Our EHS Vision

Our vision is to achieve sustainable competitive business advantage through leadership and excellence in environment, health and safety.

Employee Health Management Vision

Our EHM Vision

GSK is a recognised leader in protecting and enhancing the health of its employees globally, enabling sustainable business success.

Policy

The GSK Environment, Health and Safety policy was one of the first policies the Corporate Executive Team approved for the new company. The policy outlines the broad principles that GSK expects all operations to live by to achieve the EHS vision. The EHS policy and EH policy cover complementary aspects of the principles underlying responsible treatment of the environment and of our employees.

Environment, Health and Safety Policy

Purpose

To achieve the GlaxoSmithKline Environment, Health and Safety vision.

Scope

This policy applies to all GSK employees worldwide.

Policy

Reflecting its commitment to global leadership and excellence in Environment, Health and Safety, GSK requires all operations to:

- protect the health and safety of our fellow employees, contractors, visitors and others affected by our operations;
- operate our business in an environmentally and socially responsible manner;
- commit to continuous improvement of Environment, Health and Safety performance;
- comply with legal requirements and global GSK Environment, Health and Safety Standards;
- make Environment, Health, Safety and Loss Prevention integral to all GSK business processes, planning and decision making;
- establish business practices and Environment, Health, Safety and Loss Prevention strategies that optimally utilise resources and prevent pollution to ensure the long-term sustainability of GSK and the global environment;
- adopt a comprehensive approach to product stewardship, which includes key suppliers and contract manufacturers;
- interact and cooperate actively with key stakeholders in resolving issues and improving performance.

GSK will use effective systems metrics and goals in the management of all of our Environment, Health and Safety activities.

Responsibilities

The Corporate Executive Team is responsible for ensuring the health and safety of GSK's employees and the protection of the environment and the communities in which GSK operates. The primary responsibility for implementation of this policy rests with local executives for each business unit. Employees are encouraged to participate actively in, and accept individual responsibility for environment, health and safety matters and work in partnership with management to assure compliance and support continuous improvement.

Employee Health Policy

Purpose

To establish a policy to protect and enhance the health of GlaxoSmithKline employees, thereby making a positive impact on productivity and reflecting the value we place on all our employees.

Scope

This policy applies to all GSK employees and facilities worldwide.

Policy

GSK is committed to global leadership in protecting and promoting the health, well-being and resilience of its employees. Integrating health principles and practices into Human Resources strategy and business processes will contribute to GSK's sustainable business success.

The company will:

- protect the health of its employees and others affected by its operations, aiming to eliminate all work-related injuries and illnesses;
- assess health-related risks to employee individual and organisational productivity and proactively manage those risks;
- ensure GSK's competitive advantage by optimising the mental and physical well-being of its employees;
- make health considerations integral to its Human Resource strategy and business processes;
- develop a culture where employees feel valued and are not discriminated against because of disability;
- promote awareness of health issues and their impact on all employees;
- comply with legal and ethical requirements and GSK Health standards.

GSK will use effective systems, metrics and goals to drive continual improvement in the health of GSK employees.

Responsibilities

The Corporate Executive Team is responsible for fostering and supporting a culture of health, productivity and resilience and ensuring the health, safety and well-being of employees at work. Managers are responsible for implementing the principles and practices embedded in this policy. Employees are responsible for workplace health within the scope of their jobs and are encouraged to take responsibility for their own health and well-being.

Employee Health Management and Corporate Environment, Health and Safety will work in partnership to support managers in the implementation of this policy.

EHS Management Organisation

We have a clearly defined EHS management structure. Overall responsibility for EHS issues rests with the Corporate Executive Team and the Board of Directors. The Board champion for EHS is JP Garnier, the Chief Executive Officer.

There are organisational groups that focus on governance issues and a Corporate Environment, Health and Safety department that provides overall direction for company-wide EHS programmes and issues. There are many other organisations within GSK that work with the EHS department to manage and improve EHS at GSK.

Governance Organisation

GlaxoSmithKline has several groups that identify governance and ethical issues, recommend ways to manage them and periodically review the management of the issues. Environment, Health and Safety (EHS) issues are among those reviewed and addressed by these groups.

The **Risk Oversight and Compliance Council** (ROCC) is responsible for co-ordinating the internal control and risk management activities of the company. EHS is identified as one of the areas of the business that has the potential for serious adverse consequences if not managed properly.

The **Corporate Executive Team** (CET) actively manages EHS issues. JP Garnier has identified himself as the champion of environment, health and safety for both the CET and the Board. He ensures that EHS issues are regularly debated to verify that we are pursuing responsible programmes for all operations. The Vice President, Corporate Environment, Health and Safety reports at least annually to the CET on EHS issues

The **Board of Directors** has two committees that evaluate the management and effectiveness of our EHS programme. These mechanisms for review and oversight provide opportunities for environment, health and safety issues to be considered at the highest level of the organisation.

The **Audit Committee of the Board** reviews EHS performance to confirm that issues are properly managed and controlled. The Vice President, Corporate Environment, Health and Safety makes annual presentations to the Audit Committee so that they can review measures of environment, health and safety performance and track our progress toward meeting EHS targets. They also review the results of EHS audits of GlaxoSmithKline operations, contract manufacturers and key suppliers. The level of scrutiny of the Audit Committee is in line with requirements of Sarbanes-Oxley.

The **Corporate Responsibility Committee** advises the Board on social, ethical and environmental issues that have the potential to seriously impact GlaxoSmithKline's business and reputation. The Vice President, Corporate Environment, Health and Safety provides reports to this committee on aspects of EHS, such as sustainability, that have social implications above strict regulatory compliance.

Corporate Environment, Health and Safety Organisation

The **Corporate Environment, Health and Safety** department reports directly to GlaxoSmithKline's General Counsel, Rupert Bondy, and has a dotted line reporting relationship to the President of Global Manufacturing and Supply, the GSK manufacturing organisation. This places the Vice President, Corporate Environment, Health and Safety on both the Legal Management Team and the Global Manufacturing and Supply Executive Team illustrating the emphasis placed on EHS in GlaxoSmithKline.

CEHS Vision

To be the undisputed leader in EHS in the pharmaceutical industry, contributing to sustainable, competitive business advantage for GlaxoSmithKline.

CEHS Mission

In order to achieve its vision, CEHS will provide:

- leadership for the integrated, global effort within GlaxoSmithKline on key EHS issues
- governance of EHS performance
- support for GlaxoSmithKline businesses with tools, technology, information and knowledge
- innovation and continuous improvement for unified EHS systems and approaches

The **Strategic Planning, Programmes and External Relations** team co-ordinates the EHS Plan for Excellence, the strategic approach to environment, health and safety that will enable GlaxoSmithKline to achieve its EHS aspirations. This includes overseeing stakeholder engagement and working with external partner organisations on EHS. The team also identifies emerging issues and works with government and regulatory bodies to influence the development of regulations.

The **EHS Product Stewardship** team promotes the ethical management of environment, health and safety throughout the life-cycles of GlaxoSmithKline products. This group develops, implements and supports key programmes in occupational hygiene, process safety and environmental controls to ensure adequate protection of people, property

Corporate Environment, Health and Safety Organisation (cont.)

and the environment. It also champions sustainable EHS practices and works with research and development and the New Product Supply organisation to identify potential EHS life-cycle issues early in the development process. Once the team assesses EHS issues, it recommends measures to mitigate, control and manage EHS risks. The team provides technical information and guidance and recommends strategies to research and development for developing manufacturing processes that use resources efficiently and that minimise emissions. And it helps by developing and promoting innovative tools, systems and methodologies.

The **Hazard Assessment and Communication** team develops and communicates environment, health and safety information for GlaxoSmithKline materials and products. The information serves as the foundation to protect the environment and the health and safety of everyone involved in developing, manufacturing, distributing, dispensing or disposing of our products. In 2004, this team had a major focus on materials in research and development, in the Pharmaceuticals, Biologicals and Consumer Healthcare businesses, to ensure availability of adequate information as these materials are developed and transferred throughout the manufacturing network. There was also a focus on ready availability of accurate information on other chemicals used in research, development and manufacture of GSK products in order to implement safe and effective controls for protecting employees and the environment.

The **EHS Commercial Support** team extends the traditional work of CEHS beyond research and development and manufacturing into GlaxoSmithKline's Commercial businesses. The mission of the team is to add value to Commercial operations by improving their effectiveness through reducing EHS risks. The team is committed to building and strengthening relationships and understanding the business and EHS needs of the Commercial groups. The team's aim is to become a strategic business partner through providing appropriate and relevant programmes and services and thereby assist this business sector in improving EHS performance. A good example of this partnership is the training provided to the US Pharmaceuticals business on new requirements regarding company provision of information to health professionals on the safe handling, storage and use of cytotoxic medicines.

The **EHS Global Audit** team delivers an internal audit programme, in collaboration with Employee Health Management, for all manufacturing, research and development and key office and warehouse locations. It also performs risk-based assessments of key contract manufacturers and suppliers and EHS due diligence assessments for acquisitions and divestitures. In all cases the aim is to ensure that EHS risks and impacts are managed effectively and to identify opportunities to reduce risks and contribute to continuous improvement.

The **EHS Reporting** team collects and analyses data from all operations for reporting to internal and external stakeholders. It evaluates data contributed by all operations and uses the information

Corporate Environment, Health and Safety Organisation (cont.)

to assess the effectiveness of EHS programmes and drive continuous improvement. The team also supports EHS information management software that can be used to manage EHS programmes and measure improvement and progress to targets. In addition, it manages EHS reward, recognition and awareness programmes that are the parts of the overall GlaxoSmithKline EHS Framework devoted to motivating employees, raising awareness and driving continuous improvement.

New in 2004, is the assignment of a person to focus specifically on **Sustainable Development**. She will provide the business with information on current and emerging environmental issues so GSK can take these into consideration in new product development with the aim of preventing approval delays that could be caused by environmental concerns. She will also concentrate on the issue of pharmaceuticals in the environment and make information available to the public through publication of scientific papers.

The **Research and Development EHS Group** reports with a dotted line to the Corporate Environment, Health and Safety group. This group facilitates integration of EHS into the agenda of the research and development sector of the business and supports a unified and consistent approach to EHS across the company.

Employee Health Management Organisation

Employee Health Management (EHM) reports to the Senior Vice President, Human Resources who is a member of the Corporate Executive Team. There is a close working relationship with Corporate Environment, Health and Safety (CEHS) and the two groups are connected organisationally; the EHM Global Operations group within EHM reports on a dotted line to the Vice President of CEHS. The two groups collaborate extensively in many areas including audits; management of health risks such as ergonomics and chemical agent exposures; product stewardship; injury and illness reporting; and EHS and employee health competency building.

Employee Health Management is structured as a shared service within the US and UK and as an above site, global function.

There are three key teams:

The **EHM Global Operations** team develops employee health-related policies, standards, guidance and tools and reviews their implementation through audits conducted in collaboration with CEHS. The team supports GlaxoSmithKline sites around the world to achieve company standards, protect the health of employees and optimise health-related productivity. It recruits, coaches and trains a global network of employee health professionals; it develops and implements best practice programmes and initiatives. In partnership with CEHS, the team collects, validates, analyses and reports employee health data from all operations to facilitate evidence-based decision-making. Additional global support is provided on an as needed basis.

The two **EHM Shared Service** teams (one in the US and one in the UK) work with management, with corporate and site environment, health and safety professionals and with human resources professionals to manage health risks associated with business activities in the US and UK. They maximise employee productivity by protecting and restoring health and by minimising health-related absence from work. They work in partnership with the Benefits department to offer programmes and benefits to enhance health and with the Organisational Development department to support organisational productivity by promoting resilience and advising managers when health has impacts on employee performance.

Partner Organisations

GlaxoSmithKline has established functional and reporting relationships for Corporate Environment, Health and Safety (CEHS) and Employee Health Management (EHM) to encourage the integration of EHS throughout its business.

R&D Chemical Development

By using more focused and data-driven development, GlaxoSmithKline can significantly improve efficiency of new processes. This will make the transfer of processes to manufacturing more streamlined and give GlaxoSmithKline a competitive advantage. CEHS supports the Strategic Technologies group within Chemical Development by providing supporting documentation and tools.

New Product Supply

To promote the use of safer and more environmentally benign processes, the CEHS Product Stewardship team identifies occupational hazards and risks and environmental aspects of specific chemicals and processes so that research and development scientists and engineers can use this information when selecting materials and processes for producing active pharmaceutical ingredients.

Engineering, Technology and Capital Management (ETCM)

ETCM ensures that our ethical and legal requirements are incorporated into new production systems and that capital projects are efficiently designed with EHS considerations built in. The alliance between ETCM and CEHS facilitates development of effective and efficient processes that reduce resource consumption, minimise waste and protect employees.

Quality

The Quality organisation is a natural partner for CEHS because improved quality reduces the amount of rejected product, which means less waste, and therefore, reduced environmental impact. By sharing information from their audits of manufacturing operations, the EHS and Quality groups enhance the opportunities to improve the quality of our products and reduce the environmental impact.

Operational Excellence

The lean sigma (a combination of lean manufacturing and six sigma) approach to operational excellence that eliminates unnecessary steps and reduces variability is at the heart of the GlaxoSmithKline culture. Aligning EHS with Operational Excellence principles helps GlaxoSmithKline reduce waste and protect employees.

Topics in This Section

Partner Organisations (cont.)

Global Manufacturing and Supply

EHS is integral to all manufacturing operations. To ensure that EHS issues are integrated into manufacturing decisions, the Vice President of CEHS has a dotted line reporting relationship to the President of Global Manufacturing & Supply.

Human Resources

To support GlaxoSmithKline employees and ensure EHS is integrated into employee management, CEHS has a close working relationship with EHM, part of the Corporate Human Resources organisation.

Sales and Marketing

To integrate EHS into sales and marketing activities, the CEHS Commercial Support team works to expand EHS programmes, such as driver safety and office safety, into this area of the business.

Corporate Communications

CEHS integrates EHS messages with corporate messages to build environment, health and safety into the GlaxoSmithKline culture and contributes to policy statements on environment, health and safety issues. The Corporate Responsibility report now integrates EHS information.

EHS Management System

EHS management at GSK is based on a comprehensive structure of documents, processes and programmes that is aligned with recognised management system standards, such as ISO 14001 and OHSAS 18001.

Systematic audits assess sites' adoption of a management systems approach.

Leadership and Management

Leadership and Excellence | Management System Elements | Product Stewardship | Sustainable Development

General EHS Programmes

Employee Health and EHS Services | EHS Risk Assessment and Management | Employee and External Stakeholder Involvement and Communication | Emergency Planning and Response | Employee Information and Training | Operational Control | Performance Monitoring and Reporting | Investigation and Reporting of EHS Adverse Events | Audit

Business Processes

New Product Development and Supply | Facility, Engineering and Process Change | Procurement | Contract Manufacturers | Key Suppliers | Loss Prevention of Business-critical Assets | Business Continuity Planning | Business, Product and Property Transactions

Employee Health

- Food Services and Drinking Water
- Ergonomics and the Workplace Environment
- Health Surveillance
- Health and Safety Enhancement
- Resilience and Mental Well-being
- Reproductive Health
- Absence and Rehabilitation
- Workplace Smoking
- Drugs and Alcohol in the Workplace

Environmental Risks

- Waste Minimisation and Recycling
- Energy Efficiency
- Packaging of Products and Environmental Claims
- Product Returns
- Waste Management
- Water Management
- Management of Emissions to Air
- Ozone-depleting Substances
- Biodiversity
- Soil and Groundwater Quality

Hazardous Activities

- Process Risk Management
- Transportation of Materials and Products
- Occupational Travel
- Use of Work Equipment
- Use of Personal Protective Equipment
- Permit-to-work Systems
- Working at Height and Fall Protection
- Storage of Materials
- Contractors and Visitors
- Workplace Transport
- Off-site Working
- Construction and Demolition

Hazardous Agents

- Material Hazard Identification and Communication
- Occupational and Environmental Exposure Limits
- Chemical Agents
- Sensitising Agents
- Biological Agents
- Fire
- Flammable Liquids and Gases and Combustible Dusts
- Electricity
- Noise
- Ionising Radiation
- Non-ionising Radiation
- Asbestos and Polychlorinated Biphenyls

Structure

Global EHS Standards

Supporting GlaxoSmithKline's Environment, Health and Safety and Employee Health policies is a comprehensive set of 64 Global EHS Standards that establish specific requirements for the company worldwide. The Standards establish a management system approach to legal compliance, continuous improvement and the management of key EHS-related business risks. They are consistent with internationally recognised management system standards, such as ISO 14001 and OHSAS 18001. The Standards were developed in consultation with internal stakeholders, and approved by JP Garnier, in 2001 and came into effect on 1st January 2002.

EHS Guidelines

EHS Guidelines are key components of GlaxoSmithKline's EHS Framework. They support the Global EHS Standards by providing further information on the requirements of the Standards and by setting out an approach for achieving compliance that has been approved by EHS and Employee Health functions. They incorporate existing good practice, from both within and outside GlaxoSmithKline. Guidelines for all Standards were completed during 2003.

Supporting Technical Information

A wide range of information is available on the intranet to supplement the EHS Guidelines. This includes technical information, training materials and EHS guides to business processes.

Business Processes

Capital and Procurement

The Capital Project Technical Review process was successfully launched in 2003. The process ensures that GlaxoSmithKline considers environment, health, safety, security and loss prevention in the design of new facilities and processes. By identifying environment, health and safety (EHS) issues early in a project, we can engineer facilities and processes that are efficient and safe for workers and the environment while still being cost effective.

The Procurement department uses the Sourcing Group Management (SGM) Process to manage their activities. This process provides a series of tools to help procurement professionals ensure that our business requirements are understood by vendors, so they can be met or exceeded whilst ensuring GSK obtains best value and continuity of supply for goods and services.

A tool called a SGM Action Pack was launched in 2004 to help Procurement identify EHS business requirements. The Action Pack is designed to be used by non-EHS specialists to help them identify the EHS risks associated with procurement activities, to determine significance and to decide if they can help eliminate, minimise or better manage the EHS risk(s). The outcome of this process determines whether they should take action themselves or seek the support of EHS specialists. This is particularly critical in areas such as containment, noise control, ergonomics, machine guarding and energy management.

New Product Development and Supply

A business process called the EHS Milestone Aligned Process (EHS MAP) was created in 2002 to help scientists identify and pro-actively address EHS issues during routine new product development and supply activities. It was extensively reviewed and revised in 2003 by corporate, research and development and manufacturing EHS professionals, and the key business stakeholders who are primarily responsible for carrying out EHS MAP activities. EHS MAP was approved and implementation was begun in 2004.

EHS MAP is helping to ensure that:

- there is a better understanding and appreciation of EHS activities that should be conducted throughout a product's life-cycle;
- new products and processes are developed that do not harm people, property or the environment;
- best practice is implemented throughout the GlaxoSmithKline network;
- staff are engaged and committed to making EHS integral to new product development and supply.

As GlaxoSmithKline translates its high potential research and development pipeline into new products, we believe EHS MAP will help identify opportunities, such as improvements in process efficiencies and elimination of waste, that will ultimately facilitate and speed up the new product development and supply process.

Topics in This Section

Business Processes (cont.)

Suppliers

Our supply chain is complex. It includes contract manufacturers that manufacture drugs for us and key suppliers that supply bulk chemicals. GlaxoSmithKline uses contract manufacturers in a number of countries to supply certain products for local markets, some intermediates and active pharmaceutical ingredients and, in a few cases, for specialist processes or technology. Initial agreements for new contract manufacturers include EHS requirements based on the applicable standards. As existing contract manufacturers renew their agreements, GlaxoSmithKline's EHS requirements are included.

To ensure that contract manufacturers are managing EHS risks and impacts responsibly, the internal EHS audit team conducts audits to assess conformance with GlaxoSmithKline requirements and with legislation. They also conduct assessments of identified key suppliers. Areas for improvement are highlighted to the contract manufacturer or key supplier and progress is monitored.

In audits and assessments of existing contract manufacturers, EHS performance was found to be above 30% and as high as 92%. A few audits of prospective contract manufacturers turned up scores under 30%, which are considered unacceptable, and therefore we will not source from these unless substantive improvements are made.

The overall EHS Third Party Management Process was further developed in 2004 to reflect changes in the business management of third parties. The process covers all EHS aspects related to selection through to the ongoing management of contract manufacturers and key suppliers. We also collect and report EHS data from selected suppliers. We aim to increase the number of suppliers that provide EHS data but this is proving difficult and will take several years.

Emergency Response and Crisis Management

The discovery, development and manufacture of pharmaceutical and consumer products involve the use of hazardous materials and processes. GlaxoSmithKline manages the risks associated with these materials and processes using sound engineering principles and robust EHS programmes. All sites also incorporate emergency response and crisis management programmes into their management plans. These programmes ensure that accidents would be effectively managed and that any impact on the site, community, environment, or business would be minimised. Each site does an annual review of its internal emergency response programmes as well as the technical capabilities of the community emergency response organisations and develops action plans to address any areas needing improvement.

Business Processes (cont.)

Acquisitions and Divestitures

As part of business due diligence, GlaxoSmithKline employs an EHS due diligence business process to ensure that EHS aspects are fully assessed and integrated into decision making and the resulting provisions of contracts for transactions. A number of assessments for acquisitions as well as divestitures were conducted during 2004. Acquisitions and divestitures were all within core business areas and would not be expected to materially change GSK's EHS footprint.

Programmes

Hazard Assessment and Communication

GlaxoSmithKline assesses environment, health and safety (EHS) hazards associated with the research, development and manufacture of our products in order to meet ethical, producer responsibility and regulatory requirements and to ensure the workplace is safe and the environment is unharmed. In 2004, we focused on new pharmaceuticals in research and development and continued to refine and use an innovative, tiered approach to assess environment, health and safety hazards for GlaxoSmithKline materials. This approach has been integrated into the research and development process in order to identify EHS hazards for chemicals at early stages of product development according to the potential risk of environmental or worker exposure. We also systematically assess flammability and possible adverse health or environmental effects.

Flammability, Dust Explosivity and Electrostatics Behaviour

Our in-house hazard determination laboratory (HDL) conducts tests for flammability and dust explosivity properties of materials handled within research and development and manufacturing facilities. Following the significant efforts during 2003 to identify core flammability and dust explosivity gaps in materials used in existing processes, a large number of materials were tested in 2004. Together with increasing support for R&D development projects and manufacturing processes the number of tests conducted during 2004 was equal to that achieved during 2003 in spite of a reduction in resource available.

Implementation of the EU regulations applicable to explosive atmospheres (Directive 99/92/EC, ATEX 137) took on increasing importance within GlaxoSmithKline as sites became more aware of their responsibilities to undertake appropriate risk assessments focused on explosive atmospheres. This requirement placed more demand upon the HDL to provide focused testing support, which was extensively utilised by a number of facilities demonstrating large cost savings to the business.

Work during 2005 will focus on ensuring that GlaxoSmithKline facilities operating within the EU all have ready access to appropriate fire and explosion data ahead of full implementation of Directive 99/92/EC (ATEX 137) in 2006 for existing GlaxoSmithKline processes.

Environmental Testing

In addition to characterising the safety hazards of materials used and produced throughout the corporation, GlaxoSmithKline's hazard assessment strategy includes characterising environmental hazards of these materials. The testing programmes that support environmental hazard assessment must meet ethical and regulatory requirements and are used to assess and minimize potential environmental impacts of GlaxoSmithKline products and processes. Material testing involves a tiered approach that utilizes a core set of tests initially, and then progresses based on the results. The tests are designed to assess fate, which identifies potential

Topics in This Section

Programmes (cont.)

environmental distribution and degradation processes, and ecotoxicity, which characterizes concentration levels that may adversely affect aquatic and terrestrial organisms.

Following assessment of data gaps in 2003, we generated more than 500 environmental test results on 125 materials. The data from these tests were used to generate environmental hazard assessment concentrations that facilitate design and selection of appropriate waste control systems to minimize environmental impacts. The data are also used to refine testing approaches, support the development of improved environmental fate and effects models used for early assessment and improve the quality of our environmental risk assessment strategies.

In an effort to better reflect and communicate results of GlaxoSmithKline's environmental testing, all available environmental test results for pharmaceutically active components of GSK marketed products are now being embedded in Safety Data Sheets (SDS). This information as well as other EHS hazard information is available through the internet on gsk.com.

Occupational and Environmental Exposure Limits

GlaxoSmithKline develops occupational and environmental exposure limits for our materials in order to guide the design and selection of chemical control systems to protect our employees' health and the environment. During 2004, our experts established new occupational exposure limits for more than 40 materials and environmental limits for more than 300 materials. These limits are established based on data from extensive testing of the materials.

EHS Information for Formulated Products

GlaxoSmithKline has developed Safety Data Sheets (SDSs) for more than 1,200 of its pharmaceutical, biological and consumer healthcare products that are either in R&D or are sold in many major global markets. These SDSs are available throughout the company. In addition, approximately 300 of these SDSs for US marketed products and 350 for UK marketed products are available externally on gsk.com for direct access by external customers.

In order to support new product development, triggers are built into R&D procedures to ensure SDSs are created for new products as they progress through the development process. The objective is to make SDSs available to provide EHS information in support of clinical and consumer studies and follow through to product launch.

EHS Hazard Information on GlaxoSmithKline Materials

GlaxoSmithKline uses a global intranet system called MSDS@gsk to provide EHS hazard information in a unified format to all operations. This system provides safety data sheets (SDS) and related information for GlaxoSmithKline materials and products and for key manufacturing and process chemicals. The information for GlaxoSmithKline materials and products, available in English, French, German, Italian, Portuguese and Spanish, is updated regularly with new information available to the company worldwide by the day after the update.

Tachi Yamada
Chairman,
Research
& Development

Minimising the risks from hazardous materials to protect our employees and the environment must be an essential part of delivering "the Wall" of new products.

Programmes (cont.)

In 2004, extensive resource was dedicated to materials in research and development to ensure adequate information is available to support new products. Additional tools were developed to better manage the overwhelming amount of EHS information. For example, an email notification tool was added, enabling employees to be kept up-to-date with SDS changes automatically.

Safe Transport of Materials

Research and manufacture of pharmaceuticals involves transporting various chemical, biological and radioactive materials and products around the world. To ensure compliance with national and international transportation laws and conventions and to safeguard employees, the public and the environment, GlaxoSmithKline employs site-based transport safety advisors and specialists in business units that transport materials and products. Over 250 advisors in 40 countries participate in a global network that supports continuous improvement by sharing technical and regulatory information, best practices and lessons learned.

In May 2004, CEHS launched the HazClass™ System. This is a centralized material hazard information and classification system that provides hazard information, classification support, transportation guidance, tracking and emergency information for hazardous materials shipments worldwide. It currently has more than 600 users at 57 sites, and supports transportation of more than 10,000 shipments of materials per month. In September 2004, the annual Dangerous Goods Advisor Safety Forum was held in Hamburg, Germany. The two-day forum provided an opportunity for dangerous goods experts from throughout Europe to share best practices and lessons learned

Environmental Controls

Air

GlaxoSmithKline identifies, characterises and assesses emissions to the air from our operations so that we can minimise or manage them in a way that eliminates adverse impact to the public or the environment. As part of our programme to reduce air emissions, especially greenhouse gases, wind turbines were installed at one of our manufacturing sites and are planned for another. In addition to reducing greenhouse gas, these turbines will have the benefit of generating renewable energy for our operations. We have achieved significant reductions in solvent releases through reformulation of final dosage forms using water-based technologies.

Wastewater

GlaxoSmithKline is committed to ensuring that discharges to the environment are kept to levels that avoid adverse impact and conserve resources. We have developed detailed guidance to support the EHS Standard that addresses wastewater management and have a target to reduce chemical oxygen demand, a measure of water pollution.

Waste

GlaxoSmithKline has targets to reduce the impact of waste from our operation on the environment. Technical guidance had been developed for our EHS standards on Waste Minimisation and

Programmes (cont.)

Recycling and on Waste Management. Sites identify and assess waste arising from site activities and then minimise or manage waste through the following measures:

- eliminate or reduce waste generation whenever feasible;
- substitute with sustainable materials whenever feasible to minimise overall impacts on air, water and land;
- reuse waste whenever feasible;
- recycle wastes in a manner consistent with local regulatory requirements;
- use treatment and disposal options that minimise the overall EHS risks and impacts on air, water and land.

Natural Resources

GlaxoSmithKline strives to reduce natural resource consumption by our operations to minimise impact on the environment. We have adopted global standards on Sustainable Development, Energy Efficiency, Water Management and Biodiversity to ensure the sustainability of our operations. The Corporate Environment, Health and Safety department works with Procurement, Engineering Technology and Capital Management and other corporate functions as well as the operational sites to identify and implement natural resource conservation projects.

Programmes (cont.)

EHS Programmes in GlaxoSmithKline Commercial

Although sales and marketing and office-based activities are perceived as having fewer EHS hazards and risks than research and development or manufacturing, lost time injury and illness on page 131 is a major concern in our commercial organisation. The key health and safety risks that must be managed in a commercial setting are driver safety, emergency planning (especially fire and first aid), ergonomics, mental well-being and resilience and accident investigation and reporting. The environmental issues most relevant to Commercial are the proper management of energy and waste and the design and labelling of products and packaging. Programmes are being developed to help the commercial businesses implement EHS programmes that address their particular risks and issues. Through collaboration with the Group Internal Audit and Corporate Ethics and Compliance departments, a detailed picture of how EHS is being addressed in Commercial is being compiled. The key areas being examined are:

- environment, health and safety policies;
- documented responsibilities for implementing EHS policies and procedures
- identification and assessment of EHS risks and issues;
- waste management, recycling and product returns;
- ergonomics (in particular, computer workstation use);
- occupational travel (including driving on company business);
- fire and first aid;
- emergency response planning;
- adverse events investigation and reporting.

Driver Safety

Sales representatives can be at risk especially from road traffic accidents and ergonomic stressors such as manual handling. Motor vehicle accidents are one of the main causes of lost time injuries in the company on page 137. Therefore, reducing the number of motor vehicle accidents in commercial operations is one of our key priorities and the aim of GlaxoSmithKline's driver safety programme is to reduce fatalities, injuries and illnesses to drivers driving on company business. Our Driver Safety programme focuses on three key elements: the **driver**, the **vehicle** and the **management processes** in place to manage the driver and vehicles.

In GlaxoSmithKline the **driver** is expected to help reduce the risk of road traffic accidents by avoiding, where possible, the need to drive by using alternative options such as video or teleconferencing. In addition, the driver and passengers must wear seat belts and the driver must not drive if under the influence of alcohol, drugs or medication, nor when fatigued. The driver must not use a mobile phone while driving.

GlaxoSmithKline's **vehicles** must be selected to avoid back, posture or other ergonomic injury or illness and must be in safe working order.

We expect **management processes** to be implemented to ensure that anyone driving on company business has been approved to do so and is medically fit to drive. For instance, pre-employment

David Stout
President,
Pharmaceutical
Operations

Environment, Health and safety hazards may be different in Commercial, but they can affect our people just as much as those in manufacturing or R&D. Completing Core EHS Programmes protects our people and supports our business aims.

ERM

Programmes (cont.)

screening includes a review of motor vehicle driving license and penalty points or violations (driver history). All accidents must be reported, documented, appropriately investigated and corrective actions implemented. Performance is monitored and feedback is given to drivers.

A number of businesses across GlaxoSmithKline have successfully implemented safe driving programmes. For example, in the Philippines, we require all sales representatives to attend defensive driving courses and undertake both written safe driving and practical driving examinations. These examinations are in addition to national requirements. Employees may have their vehicle benefits suspended if they demonstrate unsafe or discourteous driving behaviours or have poor accident records. GlaxoSmithKline in Poland and the United States operate driver incentive schemes whereby employees with good accident records receive a range of awards and drivers with poor accident records are penalised. A number of other countries; e.g., Australia, Canada, France, Italy, Romania, Spain and the UK have established programmes in place with many more countries like Hungary and the Czech Republic having introduced new driver safety programmes in 2004.

Motorbike Rider Safety

In a small number of countries like Bangladesh, India, Indonesia and Vietnam, pharmaceutical companies normally provide their sales employees with motorbikes instead of cars. GlaxoSmithKline requires all motorbike riders to be provided with crash helmets and additional training in the area of defensive riding. GlaxoSmithKline in India is the pilot for this programme and are using as a basis of the programme the GlaxoSmithKline Motorbike Rider Handbook which has been translated into a number of languages. In Bangladesh, Indonesia and Vietnam the motorbike safety programme has been launched with the materials translated into local languages. In 2005 and future years we will encourage full implementation of the programme for all motorbike riders and will follow up to determine the level of implementation.

Driving and the Environment

It is estimated that GlaxoSmithKline has over 32,000 vehicles across the globe and each year spends over £165 million on purchasing, replacing, repairing, insuring, maintaining, leasing, renting and fuelling vehicles. Over 5,000 tyres per year are replaced by employees in the UK who select a car through a leasing arrangement set up by GlaxoSmithKline. This equates to about 50,000 tyres per year across GlaxoSmithKline as a whole. Our estimated annual fuel bill for vehicles is about £30 million and we use over 20 million litres of fuel in Europe, which means our European drivers drive over 140 million miles or 5,600 times around the world in a year. In addition, conservative estimates are that GlaxoSmithKline spends about £10 million repairing our own vehicles and paying for third party repairs each year.

Programmes (cont.)

Ergonomics

Reducing ergonomic illness and injury continues to be a key area of focus through Operational Excellence initiatives, business objectives, local consultation, site audits and global training.

The Office Ergonomics Self-Assessment web-based tool, which is now active in multiple languages, is well established in Corporate Headquarters locations and is being used in several facilities across the globe. The concept and value of Participatory Ergonomic Improvement teams has been demonstrated at pilot sites and has been built into the company ergonomic risk reduction strategy. Regional focus groups composed of EHM and EHS professionals have worked to create and share good ergonomic practices and solutions.

A musculoskeletal gap analysis tool has been developed and will be used extensively in 2005 to facilitate management of the impact of musculoskeletal injury and illness on employees and the business, from both occupational and non-occupational factors. An initiative is underway to identify employee musculoskeletal risk factors from our general Health Risk Appraisal (HRA) tool and link employees to risk reduction programmes and web-based educational materials. To ensure the Employee Health Management group have the right expertise, a full-time professional ergonomist has been recruited to lead development of the ergonomic strategy and a significant number of occupational health advisers have enrolled in training courses in ergonomics. These efforts have and will continue to reduce the impact of ergonomic illness and injury and will form the focus of our continued programmes.

In alignment with our workplace ergonomics programmes, we are addressing the management of non-occupational illness and promoting fitness in our workforce. This effort includes wellness programmes, standardised approaches to case management of employees with ergonomic illness or injury, proactive rehabilitation including access to physiotherapy, workplace adaptation and changing behaviours and beliefs of employees and their medical providers. Tools and educational material to assist sites with managing these issues are contained in the GSK musculoskeletal gap analysis tool and will be promoted and used throughout 2005.

Ergonomic Improvement Teams

In 2001, EHM first identified the need for and implemented its first Ergonomic Improvement Team (EIT) at Barnard Castle to look at the increasing numbers of lost time illnesses and injuries related to musculoskeletal disorders and the risk associated with ergonomic issues in the workplace. The work on ergonomics at Barnard Castle was recognised by a Chief Executive Officer's EHS Excellence Award first place in 2004. This has been recognised as the a gold standard ergonomics programme for other sites to emulate.

Occupational Hygiene and Control of Chemical Exposures

GlaxoSmithKline's current portfolio of pharmaceutical and consumer healthcare products is extensive and requires sites to control many chemicals used in synthesis and final products to ensure that employees are protected. In addition to existing

Programmes (cont.)

products, GSK has a strong pipeline of new products some of which bring challenges due to high potency with low occupational exposure levels (OELs) and increased manufacturing complexity. To manage these potential exposure issues, GSK has been focussing on chemical agent exposure for several years and will continue to do so in 2005.

GSK has a strategy for addressing the challenge of chemical exposures and for meeting our 2010 aspiration to achieve a 'shirt sleeve' workplace. This is a workplace where containment of chemicals during manufacture replaces the need for personal protective equipment. There are many examples of areas where we have already achieved this goal. These include many contained powder transfer systems and extensive use of glove-box technology in our new pilot plant facility in Cork, Ireland.

There are several elements to the occupational hygiene strategy, which include:

- understanding our current capabilities to prioritise interventions;
- ensuring current controls are adequate, including the appropriate selection and use of respiratory protective equipment (RPE), when needed;
- where RPE is currently required, planning to improve containment to reduce the reliance on RPE;
- designing containment of chemicals into new facilities and into upgrades of existing facilities to eliminate the need for RPE;
- considering containment issues in the development of new pharmaceutical compounds so that manufacturing processes and formulations are easier to contain;
- sharing good practices and successful equipment designs via the internal web;
- improving resource levels and competency in occupational hygiene (the scientific discipline of assessing and controlling chemical exposures).

Resilience and Mental Well-being

Resilience is the set of skills and behaviours needed to be successful in the midst of a fast-paced and continuously changing work environment. It is the same set of skills that helps prevent work related mental illness. GlaxoSmithKline proactively identifies and manages challenges to employee resilience and mental well-being to ensure business success through our people. We will continue to protect and enhance the mental health of employees by fully implementing the requirements of the Global Resilience and Mental Well-being Standard.

This includes:

- ongoing identification and assessment of job-related risks to mental well-being through such tools as the Global Leadership and Organisational survey, numerous business initiatives, and an internet-based team assessment tool;
- reductions in risks and promotion of the general mental well-being of employees through such programmes as wellness initiatives and mental health care support systems;
- early recognition and treatment of illness, confidential investigation,

Programmes (cont.)

reporting and corrective actions to prevent recurrences.

GSK was identified as a 'Beacon of Excellence' by the UK Health & Safety Executive (HSE) for our personal and team resilience programmes. Since July 2003, 150 teams have been through our on-line and team assessment and review process. Analysis of the data shows a clear relationship between workplace pressure and individual health and performance. Compared to the standards set by the UK HSE, which were based on two longitudinal studies, GSK teams perform significantly better in all four key areas (relationships; demands; change; control). The GSK findings are cause for celebration but individual teams' profiles do vary.

Human Immunodeficiency Virus (HIV)

GlaxoSmithKline provides HIV/AIDS education and healthcare programmes for employees and ensures non-discrimination. While arrangements differ depending on local circumstances, all the programmes are based upon a set of principles that reflect current best practice and draw upon Guidelines agreed jointly by the International Organisation of Employers and UNAIDS. Included in the principles are the following:

- we do not discriminate against any employee based on HIV status;
- we do not require HIV testing as a prerequisite for employment;
- we provide information and training to staff on HIV and AIDS prevention appropriate to their needs;
- we ensure appropriate provision for the care of HIV positive regular employees, their long-term partners and immediate families, including access to voluntary testing with counselling, and provision of anti-retroviral medicines;
- we maintain medical confidentiality at all times.

Process Safety and Safety Engineering

Process Safety

Controlling process hazards is a continuing programme in GlaxoSmithKline with a goal of minimising risk through the use of expert engineering design and good manufacturing processes. Many products begin with the formulation and processing of hazardous materials such as flammable solvents and combustible powders. Through Green Chemistry and Green Technology programmes scientists look for opportunities to eliminate the use of these hazardous materials.

Where this substitution is not feasible our Process Safety Programme ensures that safety is built into the process. GlaxoSmithKline EHS Standards require all hazardous operations to complete Process Hazard Analysis (PHA) studies that include the identification of hazards, the evaluation of risk and the development and implementation of corrective action where needed. The Process Safety Programme is a continuing management system that is in-place for the life-cycle of every process ensuring that the highest level of safety is maintained as the process is operated, refined and finally decommissioned.

Programmes (cont.)

Operations use a Process Hazard Analysis System in their routine operations. This web-based system has standardised the Hazard and Operability (HAZOP) methodology across GlaxoSmithKline and allows database access for the sharing of hazard information and control strategies. In 2004, we developed and launched a new Failure Mode and Effects Criticality Analysis (FMECA) system. This system is assisting engineers with the development of safer processes and ideal maintenance strategies for these operations.

Safety Engineering

GlaxoSmithKline's safety engineering programme focuses on construction, plant safety and emergency response activities to ensure that our employees, contractors, visitors and the community are protected from the operational hazards within our facilities. Through innovative programmes such as the Risk Assessment and Control Processes, Construction Contractor Safety Programme, Capital Project EHS Review Process and our Emergency Response Programmes, we ensure that safety is built into and maintained at our sites worldwide.

A continuing process within our Safety Engineering Programme is the development and distribution of safety engineering guides and safety alerts. These intranet-based tools provide engineered solutions to fire, explosion, electrical, machine guarding and other operational risks. These guides provide a standardised global approach to difficult safety risks.

EHS Plan for Excellence

Our EHS Plan for Excellence sets out a strategy to improve our EHS performance over the ten-year period to 2010. Each year we focus on a different theme. The priority for 2004 was to develop policies in response to external challenges such as climate change.

In September 2003, we held a meeting of an external stakeholder panel (which represented government, customers, suppliers, environmental groups and others) to help us identify external challenges. Three key issues for GSK were identified - pharmaceuticals in the environment, the use of chemicals and climate change. In response, we developed the following specific objectives for 2004:

- work with external stakeholders to review emerging issues;
- draft a position statement on pharmaceuticals in the environment;
- draft a position statement on the use of chemicals;
- draft a position statement on the future use of energy;
- implement a regulatory tracking system for EHS.

In 2004, we made good progress against these objectives. We worked with the Environment Council to get feedback from external stakeholders on the issues relating to pharmaceuticals in the environment, the use of chemicals and the future use of energy. Following this consultation, we prepared discussion documents in each of these three areas and began to get feedback on them from employees. We will complete position statements in these areas in 2005.

We also established a regulatory tracking process to alert us to emerging EHS issues in the USA and the EU. A network of EHS specialists tracks regulations which are made available on a database to employees with EHS responsibilities.

In 2005 we will focus on ensuring that core programmes are in place throughout the business. Our specific objectives are to:

- complete the implementation of our EHS management system, which is aligned with ISO 14001 and OHSAS 18001, at all operations;
- achieve acceptable audit scores at all operations. Our aim is to achieve an average score of at least 75% in each business unit, with no site achieving less than 50%;
- achieve the published 2005 EHS global targets;
- analyse how close we have come to meeting the strategic objectives originally published in 2001 in the EHS Plan for Excellence;
- formalise our external stakeholder engagement process;
- review and revise as necessary the EHS Plan for Excellence for 2006-2010.

We are also working to develop a road map for sustainable development, which outlines the key steps that we will need to take to become an environmentally sustainable business. In 2004, we commissioned a study by Forum for the Future into the role of a pharmaceutical company in a sustainable society. We then used the findings to develop a draft road map, which will be finalised in 2005.

James Hagan Ph.D., P.E.
Vice President,
Corporate Environment,
Health and Safety

Our long-term plan for excellence charts a journey which begins with improving our systems, progresses to leadership in EHS performance, and ultimately brings us closer towards sustainability.

View **letter from the VP, EHS** on page 4.

EHS Plan for Excellence (cont.)

The EHS Plan for Excellence is GlaxoSmithKline's strategic approach to environment, health and safety. It shows how GlaxoSmithKline's environment, health and safety framework aligns with the company's vision, strategic intent and key business drivers; and it shows how GlaxoSmithKline intends to progress through management systems to leadership and excellence.

In the EHS Plan for Excellence we enunciate our long-term aspirations for environment, health and safety. Though we recognise that it may be difficult to deliver these aspirations quickly, they will guide the global organisation through the implementation of environment, health and safety management systems to leadership and towards sustainability during the period up to 2010.

To help focus global environment, health and safety efforts on key strategic issues and draw attention to a progressive evolution from managing our key risks to advancing our sustainability, the plan calls for a yearly theme to be set. We have projected themes for the years until 2010, but these recommendations will adjust year by year to take into account current business circumstances, long-term business direction and emerging issues.

EHS Plan for Excellence (cont.)

In 2004, our main focus was on responding to external EHS challenges. Recognising the societal concerns about the possible long-term impacts of industry on the environment and the trend towards greater environmental regulation, we reviewed the issues and began to develop formal statements of GlaxoSmithKline's position on some key topics. In particular, we considered:

- concerns about the possible effects of pharmaceuticals in the environment;
- developments in chemicals policy which could affect the use of some materials in the long-term;
- the future use of energy and its implications for greenhouse gas emissions leading to climate change.

Further information about this work is given in our position statements.

We also implemented an EHS regulatory tracking process for the USA, EU and UK. This will enable us to ensure that GlaxoSmithKline management stays alert to emerging environment, health and safety issues that could affect the business.

In the EHS Plan for Excellence, the end of 2005 marks a transition where we will expand upon traditional EHS programmes to include a focus on sustainability issues. Therefore, in 2005, we will be concentrating on ensuring that core EHS programmes are in place and effective at all GSK operations worldwide. Core programmes are those that are essential to prevent injury, illness or harm to the environment and to ensure the continuity of GlaxoSmithKline's business. These include the global systems that provide governance, allow for an efficient approach to EHS and promote transfer of learning around the organisation. They also include local programmes that may differ depending on the type of operation. For example, control of chemical exposures will be a core programme in a pharmaceutical manufacturing site but may not be relevant to a field sales force operation where driver safety is core. View further information about the EHS action plan for 2005 on our website.

Strategy

GlaxoSmithKline's EHS strategy of continuous improvement supports corporate responsibility and encourages a sustainable business culture. It is based on the principles of the GlaxoSmithKline Spirit:

- **Passion**: GlaxoSmithKline works to protect people and the environment in a company dedicated to improving the quality of human life.
- **Sense of Urgency**: The absence of EHS programmes could endanger the lives and health of GlaxoSmithKline employees and the quality of the environment.
- **Entrepreneurial**: We look for new ways of working throughout the organisation - from research and development to manufacturing and sales - in order to improve our efficiency.
- **Innovation**: We want to be a leader in the way we manage our EHS responsibilities by adopting new approaches to chemistry, manufacturing processes, waste treatment, safe working, transparent reporting and everything we do.
- **Integrity**: GlaxoSmithKline includes responsibility for good environment, health and safety management in our definition of integrity. It is fundamentally the right thing to do.

The EHS strategy also aligns with GlaxoSmithKline's five business drivers:

People

The single greatest source of competitive advantage is GlaxoSmithKline's **people**. It is vital that we protect the health and safety of employees, contractors, visitors and others affected by our operations. We will design our facilities and processes, conduct assessments and provide training in order to eliminate work-related risks to safety and health. We will focus on employee health enhancement, mental well-being, causes of absence and methods of rehabilitation in order to have a productive and resilient work force.

New Product Portfolio

Our **new products** are carefully designed to help millions of people around the world live longer, healthier and happier lives. To treat disease, the products must have biological activity and as a result have potential EHS risks and impacts throughout their life-cycle (i.e. from raw material acquisition to research and development and manufacturing through to patient use and disposal). We will apply the principles of product stewardship throughout our organisation to deliver positive EHS benefits and minimise risks to our business, people and the environment. Product stewardship encompasses the assessment of the health, safety (excluding patient safety, which is assessed separately), and environmental risks created during all stages of the product's life-cycle and in particular at the key decision stages in research and development. We will also apply product stewardship principles to our contract manufacturers and key suppliers.

Product Commercialisation

Environment, health and safety play an important role in **commercialising products**. By integrating environment, health and safety planning into decision-making on manufacturing processes, packaging design and product labelling,

Strategy (cont.)

we help differentiate our products and protect and extend product life-cycles. By embracing health and safety principles, we can minimise motor vehicle accidents and so enhance the productivity of our sales organisation. By considering environmental principles, we can minimise the energy consumption of the sales operations and therefore their impact on the environment.

Global Competitor

As a **global competitor**, GlaxoSmithKline seeks to be a leader in EHS within the pharmaceutical and consumer health sectors by applying best business processes globally and fostering a culture of continuous improvement. As a global corporate citizen, we will demonstrate our commitment to corporate responsibility by implementing global standards, guidelines, targets and management systems and by auditing our programmes and reporting publicly and openly on performance. We will seek dialogue with external stakeholders and consider their views when developing our approaches to EHS management.

Operational Excellence

GlaxoSmithKline's operations must achieve legal compliance with EHS regulations. In the spirit of **operational excellence** they must also continuously improve performance particularly in the areas of accident and occupational illness prevention, waste minimisation and emissions reductions. We seek to integrate EHS aspects into business processes, such as capital planning, decision-making, purchasing, training and communications.

Themes

Since the formation of GSK we have had annual themes and objectives. This list demonstrates progress we have made and where we want to go.

EHS Theme for 2001: Laying the Foundations

Specific Objectives:

- Implement a new GlaxoSmithKline EHS organisation
- Define the GlaxoSmithKline EHS strategy
- Integrate EHS management systems from the heritage companies
- Establish EHS improvement targets;
- Involve internal stakeholders

EHS Theme for 2002: Building the Framework

Specific Objectives:

- Develop programme implementation plans and schedules
- Develop GlaxoSmithKline EHS guidelines and the audit programme
- Launch an intranet system to support EHS programmes
- Measure improvements against EHS targets
- Launch the CEO's EHS Excellence Awards
- Establish a dialogue with external stakeholders

Themes (cont.)

EHS Theme for 2003: Reducing Key EHS Risks

Specific Objectives:

- Initiate a driver safety programme
- Assess occupational chemical exposures
- Develop tools to manage stress and ergonomics
- Enhance process safety focus and tools
- Ensure site emergency plans are in place
- Provide tools for new product development

EHS Theme for 2004: Responding to External EHS Challenges

Specific Objectives:

- Work with external stakeholders to review emerging issues
- Draft a policy on pharmaceuticals in the environment
- Draft a policy on the use of chemicals
- Draft a policy on the future use of energy
- Implement a regulatory tracking system for EHS

EHS Theme for 2005: Completing Core EHS Programmes

Specific Objectives:

- Complete the implementation of EHS management systems at all operations
- Achieve acceptable audit scores at all operations
- Deliver on the published 2005 EHS global targets
- Analyse gaps against the strategic objectives published in the EHS Plan for Excellence.
- Formalise the external stakeholder engagement process
- Review and revise as necessary the EHS Plan for Excellence for 2006-2010

Targets

GlaxoSmithKline has set targets for improving environment, health and safety performance to be reached by the end of 2005, starting from a baseline set in 2001. These improvement targets are an integral part of the EHS Plan for Excellence.

We base GlaxoSmithKline's overall EHS improvement targets on information about practical improvement plans and forecasts from all manufacturing operations. We compare proposals for company targets with benchmarking information and our environment, health and safety professionals, senior managers and management teams throughout the business closely review them.

In addition to company targets, each operation has improvement targets based on its own unique EHS profile, which includes local EHS related projects. This means sites can focus their resources on areas of greatest potential impact to environment, health and safety. Sites with the greatest potential impact set the most aggressive reduction targets, while sites with less potential impact set continuous improvement targets. In this way each operation has improvement targets that should result in GlaxoSmithKline's achieving the overall company targets.

In 2003, GlaxoSmithKline implemented a process to annually reconfirm site commitment to the 2005 targets they set in 2001. We also conducted workshops in which sites shared projects and practices they had implemented to reduce their impacts on the environment. This sharing of best practices will help maintain our progress toward achieving our 2005 targets. See our progress to targets on page 125.

David Pulman
President,
Global Manufacturing
& Supply

Meeting these 2005 EHS commitments globally will place us in a great position in our quest for leadership and sustainability.

Stakeholder Engagement

We engage with a range of stakeholders to help us understand external perspectives and identify emerging issues. Here we report our engagement with stakeholders on environmental issues. See Engagement with Stakeholders on our website for details of how we engage with stakeholders on other corporate responsibility issues.

In the past, we have held ad hoc stakeholder meetings to obtain feedback on our EHS performance and plans. In September 2003 we held a major workshop of external stakeholders to help us identify emerging challenges. We plan to establish a more permanent stakeholder panel in 2005 to provide ongoing advice to GSK on EHS issues.

The 2003 stakeholder workshop identified three key external challenges - pharmaceuticals in the environment, the use of chemicals and the future use of energy. In 2004, we worked with the Environment Council to interview around 20 stakeholder organisations (including NGOs, policy makers, regulators, customers, suppliers and trade associations) to help us develop position statements on these issues. See EHS Plan for Excellence on page 33 for more about the position statements which will be published in 2005.

We also partner with a number of environmental organisations in specific areas. For example, in 2004 we commissioned a study by Forum for the Future into the role of a pharmaceutical company in a sustainable society, and this is being used to help us develop a road map for sustainable development. Another partnership is with the environmental organisation Earthwatch Institute (Europe). GSK is a member of Earthwatch's Corporate Environmental Responsibility Group and also funds Earthwatch to develop its field research and conservation projects in the UK and send schoolteachers on these projects as part of its educational programme. For the first time in 2004, we ran a competition to select a GSK employee to participate in a two-week Earthwatch expedition overseas.

Many of our sites also engage with stakeholders locally, for example, through open days, newsletters and community projects.

Benchmarks

We participate in many surveys of our EHS practices and performance for investment management companies and rating organisations. In 2003, The Business in the Environment survey rated GlaxoSmithKline first in the pharmaceutical sector for the third year, rating us in the Premier League of companies with a score of over 96%. We are included in the Dow Jones Sustainability Index and in the UK FTSE 4 Good and we work closely with major socially responsible investment groups in the UK.

In addition to the stakeholder dialogue conducted by Corporate Environment, Health and Safety on behalf of the corporation, many of our operations have continuing dialogue with their neighbours and communities through newsletters, open days and outreach projects. There are regular contacts with regulators and local authorities with a number of GlaxoSmithKline's EHS specialists serving on official committees and working groups to help develop better regulations for the future.

Audits and Certification

EHS Audits

We carry out Environment, Health and Safety (EHS) audits to assess implementation of our EHS management system and standards. The audits also assess sites' compliance with key legislation. They are carried out by internal auditors who are certified as lead auditors against the international environmental management standard ISO 14001.

We aim to conduct EHS audits at each operational site at least once every four years. We carry out more frequent visits at selected sites, depending on an assessment of risk and the issues raised by previous audits.

In 2004, 33 sites were audited including three key office locations. Two thirds of sites achieved acceptable scores (which we define as over 70%). The average score across all sites audited was 71%. Ten sites in Belgium, Germany, Ireland, Japan, Turkey, UK and the US achieved high scores of over 80%. One site in the UK achieved a leadership score of over 90%. See more on Audit Achievement on page 57.

The highest scores were on environmental issues. We identified a number of health and safety issues which require attention. See how we manage Health and Safety on page 126 for details of the issues identified.

All sites are required to develop plans to address any weaknesses and opportunities to improve identified in the audit. Auditors monitor sites' progress in implementing the plans. In 2004, the EHS audit process and scoring system were further refined based on experience and feedback. We are testing EHS auditing software on our intranet site to help the auditors track progress and aim to have a fully functional version ready in 2005.

EHS Certification

In 2004, four sites achieved dual certification to the international environmental management standard ISO 14001 and the international health and safety standard OHSAS 18001 for the first time. One site did not renew its certification in 2004 and one site certified only the utilities area. This means that 21 out of 84 pharmaceutical and consumer manufacturing sites are now certified (14 sites are certified to both ISO 14001 and OHSAS 18001, and seven sites are certified to ISO 14001 only) and one site's utility area is certified to both. The certified sites are in China, Egypt, France, Germany, India, Italy, Mexico, Poland, Spain, Turkey and the UK.

We are working to increase site certification and expect to have around a third certified by the end of 2005. We will then be in a position to move towards global certification.

Audits

An EHS audit is a key element of the continuous improvement process and assesses implementation and conformance with the Global EHS Standards and with key legislation. In 2004, the EHS Audit process and scoring system was further refined based on experience and feedback. All auditors have broad EHS experience and knowledge and as a minimum are certified as lead auditors against the international ISO 14001 Environmental Management standard.

In 2004, auditors assessed 33 sites including three key office locations. The level of performance against many of our environmental standards was better than performance against some of the health and safety standards. Specifically, aspects related to employee health and handling of chemical agents were identified for improvement. As part of the continuous improvement process, auditors monitor progress on actions arising from audit findings. The development of the myEHS web-based tool to assist with auditing continued in 2004 and a version was tested at two audits. The myEHS audit software will be used for all audits and associated action tracking in 2005.

Certification of EHS Management Systems

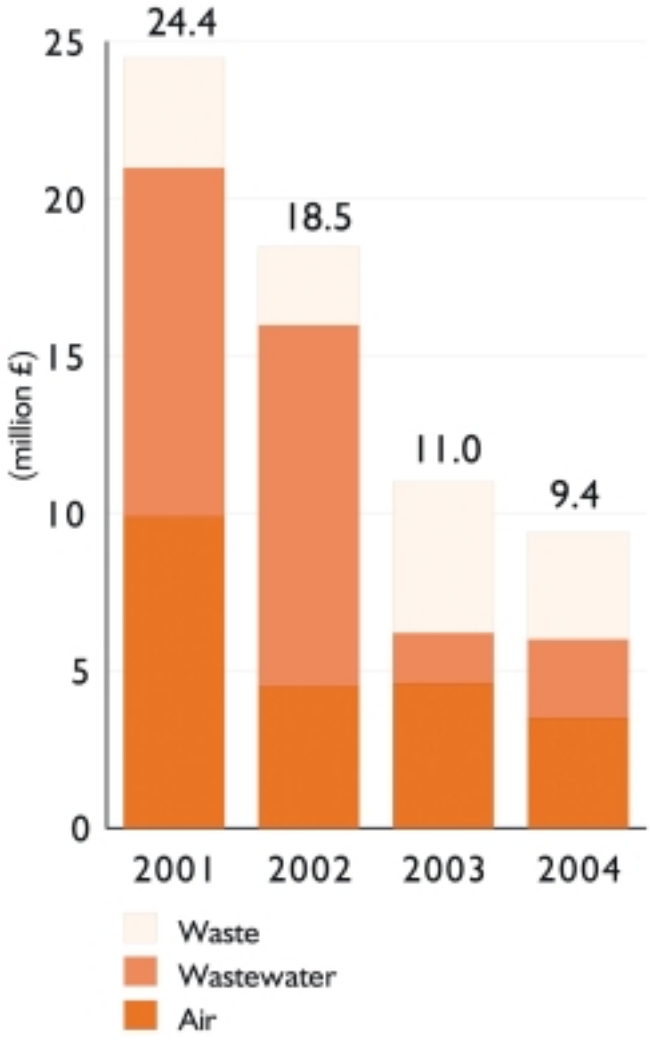
During 2002 and 2003, CEHS conducted a pilot certification programme with our manufacturing operations to determine the feasibility of obtaining company-wide certification to the international standards on environmental management systems (ISO 14001) and health and safety management systems (OHSAS 18001). Under the pilot programme, six manufacturing sites achieved certification to international standards ISO 14001 and OHSAS 18001. In 2004, five additional sites successfully completed the process and one site failed to renew its certification. In total, there are now 22 manufacturing sites (one only certified its utilities area) within GlaxoSmithKline with management system certification with more expected in 2005.

Environment Costs

In 2004, our capital investment in environmental projects was £9.4 million and our operating and maintenance costs were £43 million. This expenditure relates to wastewater treatment, waste management and air pollution control.

Performance

Capital Investment



Data Charts

- Capital Investment
- Operations and Maintenance Costs

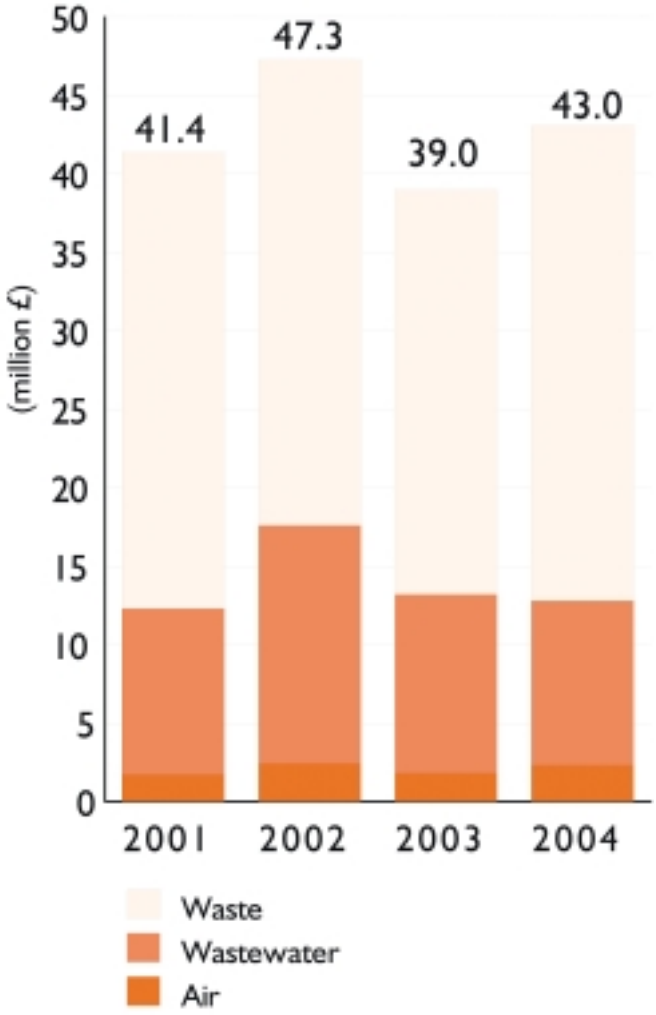
ERM

Capital Investment

	Waste	Wastewater	Air
		(million £)	
2001	3.5	11.1	9.9
2002	2.5	11.5	4.5
2003	4.8	1.6	4.6
2004	3.4	2.5	3.5

Environment Costs (cont.)

Operations and Maintenance Costs



Operations and Maintenance Costs	Waste	Wastewater	Air
		(million £)	
2001	29.1	10.6	1.7
2002	29.7	15.2	2.4
2003	25.8	11.4	1.8
2004	30.3	10.5	2.3

In 2004, there was a decrease in capital investment of 14.5% and an increase in operations and maintenance costs of 10.3%. Capital investment has decreased since 2001 due to cost control measures and rationalisation of manufacturing sites. Operation and maintenance costs are cyclical and therefore vary year on year.

Training and Awareness

We have a wide range of awareness-raising and training initiatives on EHS, supported by a detailed EHS section on our intranet (called myEHS) which includes policies, standards, guidelines, tools, examples of best practice and news. See more on myEHS on page 61.

Our Chief Executive Officers' EHS Excellence Awards scheme recognises outstanding efforts in EHS and helps raise the profile of EHS issues around the business.

We prepare regular EHS bulletins which are distributed to all sites for posting on bulletin boards. Three bulletins were circulated in 2004. We also include articles on EHS in our internal magazine (GSK Spirit), our manufacturing magazine and site newsletters.

GSK has two key awareness raising events - an Environment Week held every June (to coincide with the World Environment Day) and an annual Health and Safety Week held every October (to coincide with the European Health and Safety week and Fire Safety Awareness Month in the United States). Information kits are sent to all sites to help them develop ideas and plan activities. In 2004, over 7,600 employees from 65 sites in 27 countries took part in the Environmental Week. Examples of activities included tree planting, computer recycling, a no car day, and pledges to reduce energy use. We also ran a competition during Earth Week for the best environmental initiative, and funded the winner on a two-week conservation expedition run by Earthwatch.

In the summer of 2004, we held our annual regional meetings for EHS professionals in manufacturing to share information and best practice. These events were attended by more than 100 EHS professionals.

Each year EHS professionals get together in a series of regional meetings to share experiences and good practices with their peers. These EHS Network meetings provide a forum for GSK EHS professionals to meet with their Corporate EHS liaisons and their regional peers. Participants are informed and consulted about improvements in Corporate EHS programmes and progress toward GSK EHS performance goals. The forum is also an opportunity for problem solving and exchange of best practice.

While training for employees takes place at site level, technical information to support training is provided centrally by a variety of mechanisms, including myEHS, to back-up training in areas covered by the Standards.

See more on EHS Communication on page 59.

Jack Ziegler
President,
Consumer Healthcare

The success of our brands is driven by our products and our people. Core EHS Programmes support both and help to maintain our business reputation.

CEO's EHS Excellence Awards

Our Chief Executive Officer's Environment, Health and Safety (EHS) Excellence Awards Programme - run for the third year in 2004 - recognises and rewards GSK sites for innovation in EHS. The winners are chosen by a panel that includes experts from academia, government and NGOs.

There are three categories of awards - Community Partnership, Green Chemistry/Green Technology and the EHS Initiative Award (including separate awards for environment and safety). Each winner receives a trophy and selects a charity to receive a donation.

In 2004, there were 120 entries from 64 GSK sites in 32 countries - 27% more entries than the previous year. The 2004 awards recognise achievements in the calendar year 2003. The winners were:

EHS Community Partnership

1st Place: Evreux, France for "EHS School Challenge"

GSK business division - Global Manufacturing and Supply, New Product and Global Supply

The EHS School Challenge aims to raise awareness of EHS issues among local school children. In 2003, over fourteen schools took part in the initiative. See case study on page 3.

2nd Place: Xochimilco, Mexico for "Working with our neighbours"

GSK business division - Pharmaceuticals International and Global Manufacturing and Supply, Regional Pharma Supply

The site supports a range of projects to help Mixteca ethnic communities. Examples include: training for over four thousand "health promoters", supporting a clinic for cervical-uterine cancer and assisting local women to establish a chicken farm for food and income.

3rd Place: Sonepat, India for "Project Pragati"

GSK business division - Global Manufacturing and Supply, Consumer Healthcare Supply

Project Pragati (pragati means development) provides support to local communities, including an eye clinic (to address the high incidence of eye problems in the area), training of village women as seamstresses, traffic and pedestrian safety education sessions and helping to fund a fire engine.

Green Chemistry/Technology

1st Place: Verona, Italy for "Environmentally Friendly Synthesis of GW597599B"

GSK business division - Research and Development

Novel techniques have been used to remove several hazardous substances, including triphosgene, from the production process of GW597599B (which is being tested to prevent chemotherapy-induced nausea and vomiting). See case study on page 6.

2nd Place: Cork, Eire for "GW572016 Solvent Usage Reduction Project"

GSK business division - Global Manufacturing and Supply, Primary Supply and Antibiotics and Research and Development

CEO's EHS Excellence Awards (cont.)

A 35% reduction in solvent use and energy savings have been achieved by re-designing the process for making GW572016 (used to treat solid tumours).

3rd Place: Stevenage, United Kingdom, for "Development of GW273629 Route of Manufacture"

GSK business division - Research and Development

A new process has been developed to produce GW273629 (used in the treatment of migraines). This avoids the use of dioxane, a carcinogenic chemical, and eliminates the use of DMF, a solvent listed as a reproductive hazard under the Solvent Emissions Directive. It also saves energy and reduces waste. Overall, improvements to the process have reduced costs by £1,000 per kg, an annual saving of £30 million based on projected peak production of 30 tonnes per year.

EHS Initiative - Environment

1st Place: Bogotá, Colombia for "Pharmaceutical Waste Bioremediation"

GSK business division - Global Manufacturing and Supply, Consumer Healthcare Supply

The pioneering use of reed bed technology for the treatment of pharmaceutical waste in Colombia has led to a 60% reduction in the cost of final waste treatment. See case study on page 82.

2nd Place: Cairo, Egypt for "Waste Re-use and Reduced Resource Consumption"

GSK business division - Global Manufacturing and Supply, Regional Pharma Supply

A new process was designed to re-use waste gelatine in the encapsulation process - reducing waste and resource consumption.

3rd Place: Barnard Castle, United Kingdom for "Increased Mass Conversion Efficiency of Cephalosporin Oral Products"

GSK business division - Global Manufacturing and Supply, New Product and Global Supply

Improvements to the process of producing cephalosporin (an antibiotic) have significantly reduced the amount of waste - helping to divert over 1 tonne per year of active pharmaceutical ingredient from incineration.

EHS Initiative - Safety

1st Place: Barnard Castle, United Kingdom for "Ergonomic Improvements"

GSK business division - Global Manufacturing and Supply, New Product and Global Supply

The site has successfully raised employee awareness of ergonomic risks. Teams have identified and completed 59 ergonomic improvement projects and ergonomic experts are consulted on the design of new equipment. See case study on page 145.

CEO's EHS Excellence Awards (cont.)

2nd Place: Nabha, India for "EHS Strategy and Mechanical Scraping Machine"

GSK business division - Global Manufacturing and Supply, Consumer Healthcare Supply

The site, which produces malted food, implemented a new EHS Strategy. This resulted in the development of a new mechanised scraping machine (used in the tray drying process) which has reduced workers' exposure to moving parts and the risk of repetitive strain injury.

3rd Place: Mayenne, France for "Control of Driving Risks"

GSK business division - Global Manufacturing and Supply, Primary Supply and Antibiotics

The site has organised driving safety courses for employees for five years. Each year about 50 employees complete a one-day training session, including classroom presentations and practical workshops where drivers learn to control their cars in emergencies.

See the following pages for more about the awards programme and winners from previous years.

CEO's EHS Excellence Awards (cont.)

The Chief Executive Officer's Environment, Health and Safety (EHS) Excellence Awards Programme promotes improvements in GlaxoSmithKline's use of human, environmental and economic resources. It rewards innovation, effective over the long-term, that can be shared within the company. Nominations of projects to be considered in the programme may come from any part of the organisation. A panel of experts recommends award winners from a list of finalist projects prepared for them by a review committee internal to GlaxoSmithKline. The expert panel is drawn from academia, government and non-government organisations, and includes a member of the Board of Directors. Sir Christopher Hogg, Chairman of the Board in 2004, participated on the panel.

The programme makes awards in three categories. Initiatives that foster responsible use of human, environmental and economic resources with the local community may be awarded an EHS Community Partnership Award. Projects that benefit environment, health and safety through new and efficient chemistry or technology may win a Green Chemistry/Green Technology Award. Programmes that demonstrate improvements in environment or health and safety management and performance may win an EHS Initiative Award. In 2004, because of the large number of entries in this category, awards were made in two subgroups: EHS Initiative - Environment and EHS Initiative - Safety. Each winning site is recognised with a specially designed trophy and the opportunity to make a donation to a charitable organisation selected by the winning team.

In 2004, winning project teams (see page 50) nominated the following charitable organisations to receive donations:

- **Abbasia Chest Hospital, Egypt** is a specialist, teaching hospital in Cairo.
- **AIL Verona Onlus, Italy**, researches leukemia and other related illnesses and provides aid and assistance to patients and their relatives.
- **Cancer Research UK, United Kingdom**, researches into the nature, causes, diagnosis, prevention, treatment and cure of all forms of cancer.
- **Cartoon Art Trust, United Kingdom** is dedicated to preserving the best of British cartoons, caricatures, comics and animation.
- **Charities Aid Foundation, India** creates a sustainable voluntary sector with resources contributed by relationships built on trust between NGOs and donors. CAF India has pioneered corporate community initiatives with several companies in India.
- **Fundacion Mexicana Para La Salud, Mexico** provides students in the countryside of Mexico with educational materials about the prevention of AIDS, other sexually transmitted diseases and unwanted pregnancies.
- **Irish Cancer Society, Ireland**, is the largest funder of cancer research in Ireland.
- **La Prevention Routière, France** campaigns for safe driving in France and Europe.

CEO's EHS Excellence Awards (cont.)

- **Maison de l'Enfant et des Découvertes, France** provide young people with educational and leisure activities to promote interest in and understanding of science and technology.
- **Millview Resource Centre, Northern Ireland** responds to community needs through a range of initiatives and support services, with local participation and in partnership with others.
- **National Children's Home, United Kingdom** runs more than 500 projects for the UK's most vulnerable children, young people and their families and in doing so, supports over 140,000 people.
- **Northumberland Wildlife Trust, United Kingdom** advances the principles and practice of sustainable development and biodiversity conservation.
- **Teesdale Opportunities for Disabled Youngsters, United Kingdom** provides advocacy recreation and leisure activities for the relief of young people with disabilities.
- **World Wildlife Fund, United Kingdom** works to protect endangered species and their habitats and addresses global threats to nature.

Awards 2003

In 2003, the second year of the awards programme, 94 projects were nominated to the programme, over a third more than in 2002. Over a third more sites (53) in 20 countries participated. The research and development organisation entered projects for the first time.

In 2003, 11 projects received top honours. The winners were:

EHS Community Partnership

First Place:
"Good Corporate Citizenship", Global Manufacturing & Supply, Consumer Healthcare Supply, Rajahmundry, India.

Second Place:
"Managing the Marshes", Global Manufacturing & Supply, Primary Supply Dartford, United Kingdom.

Third Place:
"Leadership on Reduction of Mercury Contributions to Area Surface Waters", US Pharmaceuticals, Research Triangle Park, United States.

Green Chemistry / Technology

First Place:
"Discovery and Development of a Green Process", Research and Development, Tonbridge, United Kingdom.

Second Place:
"Tranilast: Improved Production Process", Research and Development, Upper Merion, United States.

CEO's EHS Excellence Awards (cont.)

Third Place (2):
"Nano Filtration Curbs Production Losses", Global Manufacturing and Supply, Primary Supply Ulverston, United Kingdom
tied with
"Photochemistry - A Brighter Future", Research and Development, Upper Merion, United States.

EHS Initiative

First Place:
"Resource Reduction: Water Conservation, Effluent Reduction and Turbo Generator", Global Manufacturing and Supply, Consumer Healthcare Supply, Rajahmundry, India.

Second Place:
"Bio-composting of Solid Wastes", Global Manufacturing and Supply, Consumer Healthcare Supply, Nabha and Rajahmundry, India.

Third Place (2):
"Observations in the Workplace Leading to Safety -OWLS" Global Manufacturing and Supply, Primary Supply, Cork, Ireland
tied with
"EHS Risk Mitigation Initiatives", Global Manufacturing and Supply, International Supply, Thane, India.

in 2003, winning project teams nominated the following charitable organisations to receive donations:

- **Brigham and Women's Hospital, United States** is a teaching hospital of Harvard Medical School, a pioneer in women's health and in many other areas of medicine.
- **Charities Aid Foundation, India** creates a sustainable voluntary sector with resources contributed by relationships built on trust between NGOs and donors. CAF India has pioneered corporate community initiatives with several companies in India.
- **Cystic Fibrosis Trust, United Kingdom** funds medical and scientific research aimed towards understanding, treating and curing cystic fibrosis. It also aims to ensure that people with cystic fibrosis receive the best possible care and support in all aspects of their lives.
- **The Hospice in the Weald, United Kingdom** provides inpatient and community nursing as well as family support and bereavement counselling in Kent and Sussex.
- **Leukaemia Research Fund, United Kingdom** improves treatments, finds cures and investigates the causes and prevention of cancers of the blood and related conditions, in children and adults.
- **Maharogi Sewa Samiti Warora, India** treats, trains and rehabilitates the leprosy afflicted and other handicapped people. It also trains school dropouts in rural areas of India.
- **Millview Resource Centre, Northern Ireland** responds to community needs through a range of initiatives and support services, with local participation and in partnership with others.
- **National MS Society, United States** promotes research, educates, advocates on critical issues, and organises a wide range of programmes including support for the newly diagnosed and

CEO's EHS Excellence Awards (cont.)

those living with multiple sclerosis over time.

- **Otter Valley Association, United Kingdom** works with local government and environmental organisations to interest residents and visitors in the history, geography, natural history, architecture and future of the Otter Valley in Devon.
- **SANE, United Kingdom** is one of the UK's leading charities concerned with improving the lives of everyone affected by mental illness.
- **Shelter, United Kingdom** prevents and alleviates homelessness by providing information, advice and advocacy for people with housing problems.
- **The Tammy Lynn Center** for Developmental Disabilities, United States, offers educational, residential and family support services to children and adults with special needs.

Awards 2002

In 2002, the first year of the awards programme, 67 applications were received from 40 sites in 20 countries. The winners in the first year were:

Community Partnership:

First Place:
"Helping Hands To Small Businesses" Ulverston, GMS Primary Supply.

EHS Initiative

First Place:
"Innovative Health & Safety Concepts and Approach for Construction of New Horlicks Facility" Sonepat, India. GMS Consumer Healthcare.

Second Place:
"Waste Management Projects at Ankleshwar" Ankleshwar, India. GMS Primary Supply.

Third Place:
"Leave Work The Way You Came – A Total Approach to Safety in a Manufacturing Organisation" Aiken, USA. GMS Consumer Healthcare.

Special Commendation:

"Integral Waste Management System" Bogota, Colombia. GMS Consumer Healthcare.

Special Commendation:

"Safety And Environmental Achievements in Demolition And Construction Activities For Augmentin XR Tablet" Quality Road, Singapore. GMS Primary. There were no Green Chemistry/Green Technology awards made in 2002.

In 2002, winning project teams nominated the following charitable organisations to receive donations:

- American Cancer Society, USA;
- Charities Aid Foundation, India;
- Missionaries of Charity, India;
- Ulverston Life Education Support Group, UK.

Members of the external selection panel who helped in the adjudication of the awards selected the following organisations to receive donations from GSK on their behalf:

- Brigham and Women's Hospital, USA;
- Fairlynch Art Centre & Museum, UK;
- Millview Resource Centre, Ireland;
- Otter Valley Association, UK;
- Oxfam, UK.

Reward and Recognition

Reward and recognition are tools to share best practices and to recognise and encourage individuals and teams to do their best work and to find innovative solutions to problems and challenges. Our reward and recognition programme includes the Chief Executive Officer's Environment, Health and Safety (EHS) Excellence Awards Programme for innovation and initiative in several categories, a milestone certificate programme that recognises sites for working without lost time injuries or illnesses and an audit achievement certificate programme that recognises sites for attaining high audit scores.

Injury and Illness Milestones

At GSK, all operations strive to work without experiencing any lost time injuries or illnesses. In order to share the good practices that help achieve this level of safe working and to recognise sites that achieve it, certificates are issued for each level of 1 or more million hours worked without a lost time injury or illness. Sites apply for these certificates when they reach the million hour milestones and those with 1 million hours receive certificates signed by their business heads. For sites with 2 million or more hours worked without a lost time injury or illness, the certificates are signed by the Chief Executive Officer in recognition of the achievement. The recognised sites often celebrate their achievements, and they are recognised within their business units thus creating opportunities for sites with these achievements to share with other sites their strategies for achieving this level of safe working.

In 2004, a category of achievement was added to recognise sites that work 3 or more years without a lost time injury or illness. The sites that apply for these certificates are generally small sites that do not attain the level of 1 million hours worked in a 3 year period.

Milestones Achieved in 2004

3 years worked without a lost time injury or illness:

- Suzhou, China.

1 million hours worked without a lost time injury or illness:

- Aranda, Spain
- Barnard Castle, UK
- Karachi F268, Pakistan
- Nabha, India
- Poznan, Poland
- Sonepat, India
- Tianjin, China
- Ulverston, UK
- Upper Merion, US
- Upper Providence, US

2 million hours worked without a lost time injury or illness:

- Jeddah, Saudi Arabia
- Rajahmundry, India
- Zebulon, US

Injury and Illness Milestones (cont.)

3 million hours worked without a lost time injury or illness:
- Chittagong, Bangladesh
- Jurong, Singapore
- West Wharf, Pakistan

4 million hours worked without a lost time injury or illness:
- Cidra, Puerto Rico

5 million hours worked without a lost time injury or illness:
- Mississauga, Canada
- Xochimilco, Mexico

Milestones Achieved in 2003

1 million hours worked without a lost time injury or illness:
- Boronia, Australia
- Cairo, Egypt
- Capetown, South Africa
- Clifton, US
- Karachi Landhi, Pakistan
- Worthing, UK

2 million hours worked without a lost time injury or illness:
- Bad Oldesloe, Germany
- Cidra, Puerto Rico
- Jurong, Singapore
- Karachi B63, Pakistan
- Kuala Lumpur, Malaysia
- Mississauga, Canada
- Nabha, India
- Thane, India
- Ware, UK
- West Wharf, Pakistan

3 million hours worked without a lost time injury or illness:
- Barnard Castle, UK
- Karachi F268, Pakistan
- Lahore, Pakistan
- Mysore, India
- Xochimilco, Mexico

4 million hours worked without a lost time injury or illness:
- Bangalore, India
- Dartford Primary, UK
- Zebulon, US

Audit Achievement

High audit scores indicate good management systems and good practices in place at sites. In 2004, a programme was initiated to give special recognition to sites that have particularly good systems and practices in place. Sites that achieve audit scores of 90% or higher are considered to be in a leadership category and receive certificates signed by the Chief Executive Officer. Sites that achieve 80% to 89% receive certificates signed by their business heads.

2004 Audit Achievement Certificates

Barnard Castle, UK	Global Manufacturing and Supply	94
Beckenham, UK	Pharma R&D	85
Cork, Ireland	Global Manufacturing and Supply, Pharma R&D	85
Dresden, Germany	Biologicals	84
Gebze, Turkey	Global Manufacturing and Supply	83
Irvine, UK	Global Manufacturing and Supply	83
Tres Cantos, Spain	Pharma R&D and Commercial	83
Imaichi, Japan	Global Manufacturing and Supply	83
St Louis, US	Global Manufacturing and Supply	81
Rixensart, Wavre, Gembloux, Belgium	Biologicals	80

Audit Achievement (cont.)

2003 Audit Achievement Certificates		
Research Triangle Park, US	Pharma R&D	95
Jurong, Singapore	Global Manufacturing and Supply	90
Upper Merion, US	Pharma R&D	89
Dartford, UK	Global Manufacturing and Supply	86
Ulverston, UK	Global Manufacturing and Supply	86
Stevenage, UK	Pharma R&D	85
Mississauga, Canada	Global Manufacturing and Supply	83
Panama City, Panama	Global Manufacturing and Supply	81
Verona, Italy	Global Manufacturing and Supply	81
Jacareqagua, Brazil	Global Manufacturing and Supply	80
Buenos Aires, Argentina	Global Manufacturing and Supply	80

EHS Communication

Our EHS communications follow an internal communication plan that includes as goals: raising general awareness, educating, informing and inspiring, influencing a culture change within GSK about EHS and supporting achievement of sustainable development. Our audiences range from senior management and business leaders to all employees.

The main way we communicate is electronic with email and information posted on myEHS (our EHS website) but we also provide some documents in printed forms. Our communications include presentations by the VP CEHS to the Board of Directors Audit Committee and the Corporate Executive Team as well as to the management teams of various organisations.

Messages include technical information for EHS professionals, general awareness for all employees and EHS management information for higher level management.

Awareness

To raise awareness of strategic environment, health and safety issues and to encourage a more proactive EHS culture, GSK sites participate in two annual, voluntary programmes. The first, EarthWeek, held in June to coincide with the World Environment Day, encourages employees to think about their impact on the environment. The second, Health & Safety Week, held in October to coincide with the European Health and Safety week, encourages them to address potential risks at work and at home. Communication kits for both events provide publicity and activity ideas. Sites report their programmes each year and the level of participation and range of activities is publicised throughout GSK. In 2004, over 7,600 employees from 65 sites in 27 countries took part in EarthWeek and over 13,800 employees from 67 sites in 29 countries took part in the Health & Safety Week activities.

There are five EHS publications that are available electronically and in print.

- The EHS Plan for Excellence, GSK's 10-year strategy for EHS and its yearly action plan are published primarily for GSK senior management and EHS professionals within GSK, but they are also made available for external stakeholder consultation.
- The EHS Report, provides a printed version of the EHS information on this website. It is primarily for external stakeholders who specifically request printed information.
- The annual CEO's EHS Excellence Award Yearbook, primarily for EHS site-based management, is a vehicle for sharing the innovative EHS practices of sites that win the year's awards.
- The graphic and copy-light "EHS Bulletin", is designed for posting on bulletin boards and is published three times a year. It targets employees who do not use e-mail or the intranet as a part of their daily work and is written to inform about the relationship of Corporate EHS programmes to site EHS activities.
- A wall calendar featuring EHS activities and achievements of GSK sites worldwide is distributed annually to GSK's EHS professionals. The photographs and captions highlight GSK people whose activities have advanced GSK's long-term EHS Plan for Excellence.

myEHS

Underpinning all of the EHS Management framework, providing support for all programmes and enabling collection and analysis of the data found on this website is a state of the art intranet system, the myEHS Community website. It has four main functions.

- It is a communication vehicle for regular news on EHS related programmes
- It is a comprehensive EHS information management system that provides sites with tools for managing all of their EHS responsibilities and measuring their progress
- It is the repository for EHS Standards, Guidelines, Tools and other EHS information as well as the central point for EHS-related announcements, news and listing of events as well as a place to share good EHS practices and ideas
- It is the central collection point for EHS data provided on this website and used by GSK and its business units to monitor progress and drive continuous improvement

Some of the tools on myEHS include:

- creation and distribution of MSDS;
- eco-design, occupational hygiene, hazard assessment and other tools;
- for sites that are currently ISO certified or that are in the process of ISO certification, myEHS provides all of the support functionality needed for the required documentation and EHS management.

Structurally, myEHS is a combination of two commercial software packages, several collaborative working tools used within GSK and other information technologies.

Energy and Climate Impact

An increase in greenhouse gases in the atmosphere is widely thought by climate scientists to be causing a rise in the earth's temperature, leading to climate change.

Burning fossil fuels for heat and power releases carbon dioxide (CO_2) - the most significant greenhouse gas.

GSK's climate impact comes from energy use from our facilities, transport and compounds we use that contribute to global warming. The biggest source is energy use from our facilities (two thirds). We have a target to reduce global warming potential from energy per unit sales by 8% by 2005 (from a 2001 baseline), and we are on track to meet this target (see energy on page 66).

Compounds that contribute to global warming are used in the production of metered dose inhalers and in some ancillary equipment. They include CFCs and HCFCs (which also deplete the ozone layer) and HFCs (which do not deplete the ozone layer). Emissions of ozone depleting compounds are also reported in the ozone depletion section on page 93. See product stewardship on page 104 for more about the use of ozone depleting compounds in our products.

Carbon dioxide and methane from waste treatment and fermentation also contribute to our global warming impact. We report our performance in the waste section on page 81.

Note to Global Warming Charts

Our global warming impact from energy is calculated using conversion factors from the World Business Council For Sustainable Development (WBCSD)/World Resources Initiative (WRI) Greenhouse Gas Protocol Initiative, September 2001, its Stationary and Mobile Combustion Workbooks, and the Intergovernmental Panel on Climate Change (1996).

We use conversion factors from the UK Department for Environment Food and Rural Affairs to calculate CO_2 from business air travel and air freight.

Energy Use from our Facilities includes all energy consumed at GSK facilities in the form of electricity imported and steam imported and fuels burned in fixed combustion equipment on site, including emergency generators. Figures include fuels used to generate steam and electricity on-site but not fuel for on-site transport. The energy consumption section of this report includes a breakdown of energy data.

Transport includes business travel by air (including transatlantic flights between the US and UK, flights within the EU and US for routine business activities, and flights originating in the UK to large group events such as sales conventions), business travel by road (including company-owned vehicle fleets, primarily our global sales fleet), and product freight by air. The increase in global warming potential from transport since 2001 is mainly because we have improved our reporting systems to more comprehensively collect transport data. For example, the 2001 data did not include business air travel within the EU and US and did not include UK and international sales fleet miles.

The data do not include employee travel to work. We do not collect data for other modes of business travel including rail and bus. We do not calculate CO_2 emissions from road, rail or sea freight transport because our central data collection system is not as robust in these areas and the impacts are small when compared to those of air freight transport. The transport section of this report includes a breakdown of transport data.

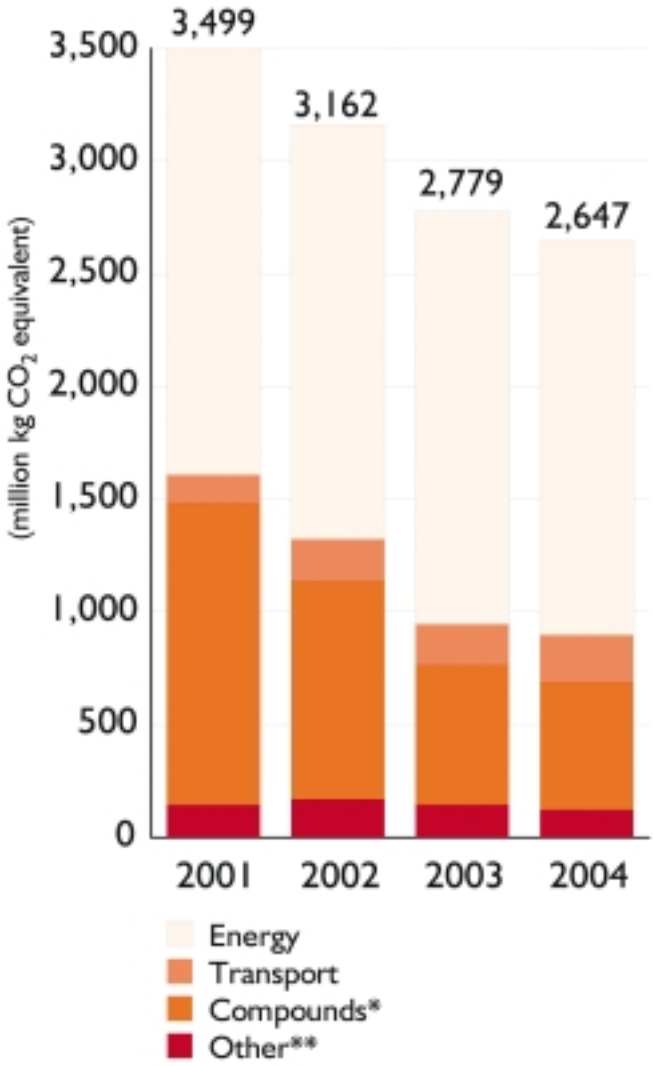
Energy and Climate Impact (cont.)

Performance

Compounds that contribute to global warming are used in the production of metered dose inhalers and in some ancillary equipment. They include CFCs and HCFCs (which also deplete the ozone layer) and HFCs (which do not deplete the ozone layer). The ozone depletion section of this report contains a breakdown of ozone depleting gases. The data does not include CFCs released from patient use of metered dose inhalers.

Other is CO_2 equivalents from waste treatment and fermentation.

Global Warming Potential



Global warming potential decreased by 4.7% since 2003.

Global Warming Potential

	Energy	Transport	Compound*	Other**
	(million kg CO_2 equivalent)			
2001	1,892	124	1,339	145
2002	1,839	185	968	170
2003	1,833	181	619	146
2004	1,750	210	566	123

* compound that contribute to global warming
** includes waste treatment and fermentation

Energy and Climate Change

Evidence continues to grow that the planet is warming. Temperature records are considered sufficiently reliable to demonstrate that global temperatures are now significantly warmer than the historical average. Indicators such as tree rings, coral layering and glacier records provide further evidence. If the current trend continues the United Nations expects that numerous plant and animal species will become extinct and that the frequency of extreme weather events such as severe storms, floods and droughts will increase.

Although our understanding is still incomplete there is international consensus that action should be taken to tackle global warming and climate change. The United Nations Framework Convention on Climate Change entered into force in 1994 and this Convention recognises that the climate system is a shared resource, which can be affected by industrial and other emissions of carbon dioxide and other heat-trapping gases. The Kyoto Protocol was adopted in 1997 and established the mechanisms that governments can use to limit or reduce their greenhouse gas emissions. Russia was the last country to ratify the treaty and it will enter into force 16 February 2005. The protocol contains legally binding emissions targets for 36 industrialised countries. These countries must reduce their collective emissions of six key greenhouse gases by at least 5% by 2008 -2012 compared to 1990 levels.

Emission targets can be achieved by using:

- international "emissions trading" which enables industrialised countries to buy and sell emission trading credits amongst themselves;
- clean Development Mechanism (CDM) projects that enable industrialised countries to finance emission reduction projects in developing countries in return for credits against their Kyoto targets;
- cooperation projects under the Joint Implementation scheme which allows developed countries to fund emission reduction projects in other developed countries.

Although the US and Australia have stated that they will not ratify the protocol, ratification will provide GSK with opportunities to reduce its emission of greenhouse gases using these mechanisms.

In advance of international agreement on Kyoto, the UK established its own emissions trading scheme in 2002. A number of UK facilities joined this scheme and have gained experience of carbon trading. To date more than 50,000 carbon credits have been banked to ensure compliance against future milestones under this scheme. The European Union (EU) has also taken unilateral action to control greenhouse gases and an EU Emissions Trading Scheme (ETS) will start in 2005. This scheme will cap the emission of carbon dioxide from several of GSK's European facilities. Based on 2003 data, more than 50% of GSK's global release of carbon dioxide from non-transport sources will be regulated under this scheme.

Energy and Climate Change (cont.)

In 2004, GSK continued its efforts to reduce its emission of carbon dioxide. This work is coordinated by the Global Utilities Team, which consists of representatives from all manufacturing divisions and Research and Development. This group meets several times per year to share best practice and to coordinate improvement initiatives.

Example 1:

GSK has partnered with the Carbon Trust in the UK to reduce energy consumption. Funding has been provided to help sites in the UK produce publicity materials, undertake energy audits and to prepare for emissions trading. The Carbon Trust is an independent company, funded by the UK Government, which aims to move the UK towards a low carbon economy.

Example 2:

In 2004, GSK installed its first wind turbines at its Barnard Castle facility. The two 250 KW turbines provide around 10% of the site's electricity and will avoid production of approximately 550 tonnes of carbon dioxide.

Example 3:

GSK has signed on to the US Energy Star programme. This programme is sponsored by the US Environmental Protection Agency and the US Department of Energy and was developed to help business and individuals protect the environment through superior energy efficiency. By joining this scheme GSK is demonstrating its commitment to energy efficiency and will be able to share best practice with other like-minded organisations.

Energy Consumption

Energy use from our facilities accounts for 66% of GSK's global warming impact. In 2004, we used 19 million gigajoules of energy - equivalent to the energy consumed in one year by approximately 236,000 UK households. This produced emissions of 1,750 million kg CO_2. We bought 41% of our energy as electricity and a small amount (1%) as municipal steam or hot water. The rest was generated from fuel combustion on-site.

In 2004, we developed a draft position statement on our future use of energy, which will be finalised in 2005. This was in response to feedback showing that energy use is a key area of concern among our stakeholders. The draft position sets out a strategy for reducing greenhouse gas emissions through energy efficiency, renewable energy and emissions trading. It also acknowledges that climate change may affect disease patterns and proposes that GSK should support research to help society plan for the consequences of climate change.

In 2004, we continued to work on a number of energy efficiency initiatives. For example, in the UK, GSK partnered with the Carbon Trust to reduce energy consumption through energy audits and raising employees' awareness. In the US we joined the Energy Star programme which encourages businesses to increase their energy efficiency and share best practice.

In the UK, we installed two wind turbines at our Barnard Castle facility.

A number of our UK sites are participating in the government's emissions trading scheme (ETS) - helping us to gain experience in carbon trading. The UK ETS is a voluntary scheme which rewards companies that improve energy efficiency with reductions in the tax they pay on energy consumption. Sites that keep emissions below an agreed target can bank the spare credits to help with compliance in subsequent years or can sell the credits to other participants in the scheme. By the end of 2004, GSK had banked more than 50,000 carbon credits which can be used to help us keep within targets in the future. We plan to participate in the EU Emissions Trading Scheme which began at the start of 2005. We estimate that more than 50% of our carbon dioxide emissions from energy worldwide will be regulated under the EU Scheme.

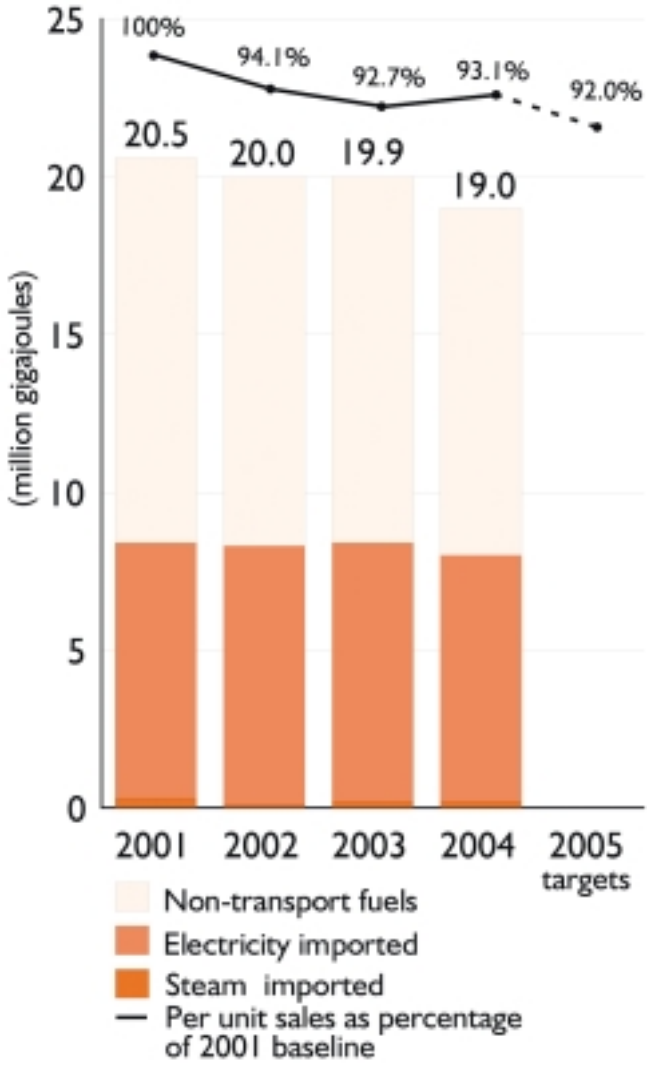
Data Charts

- Energy Consumption
- Energy Consumption by Business
- Global Warming Potential From Energy
- Global Warming Potential From Energy by Business

Energy Consumption (cont.)

Performance

Energy Consumption (Excluding Transport)



Note to Energy Charts

Energy consumption at our facilities is defined as all energy consumed in the form of electricity imported and steam imported and fuels burned in fixed combustion equipment on site, including emergency generators. Figures include fuels used to generate steam and electricity on-site but not fuel for on-site transport.

The global warming potential from energy use at our facilities is calculated using conversion factors from the World Business Council For Sustainable Development (WBCSD)/World Resources Initiative (WRI) Greenhouse Gas Protocol Initiative, September 2001, its Stationary and Mobile Combustion Workbooks, and the Intergovernmental Panel on Climate Change (1996).

The NO_X and SO_2 are calculated from the coal used at some GSK facilities, primarily in India for energy purposes, using conversion factors from the National Atmospheric Emissions Inventory (UK national methodology).

Energy Consumption (Excluding Transport)

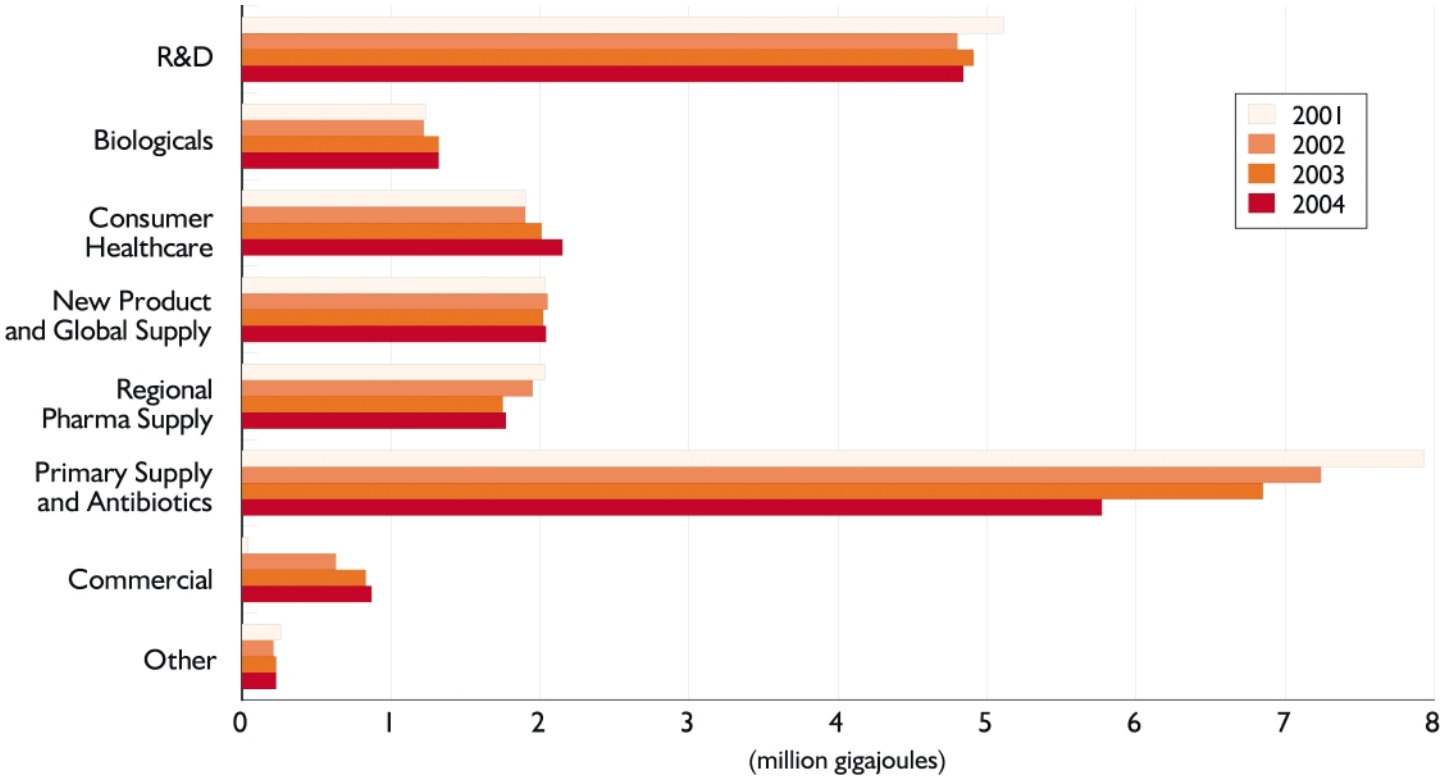
	Steam Imported	Electricity Imported	Non-transport Fuels
		(million gigajoules)	
2001	0.3	8.1	12.2
2002	0.1	8.2	11.7
2003	0.2	8.2	11.6
2004	0.2	7.8	11.0

Per Unit Sales as Percentage of 2001 Baseline

2001	2002	2003	2004	2005
100%	94.1%	92.7%	93.1%	92.0%

Energy Consumption (cont.)

Energy Consumption by Business (Excluding Transport)



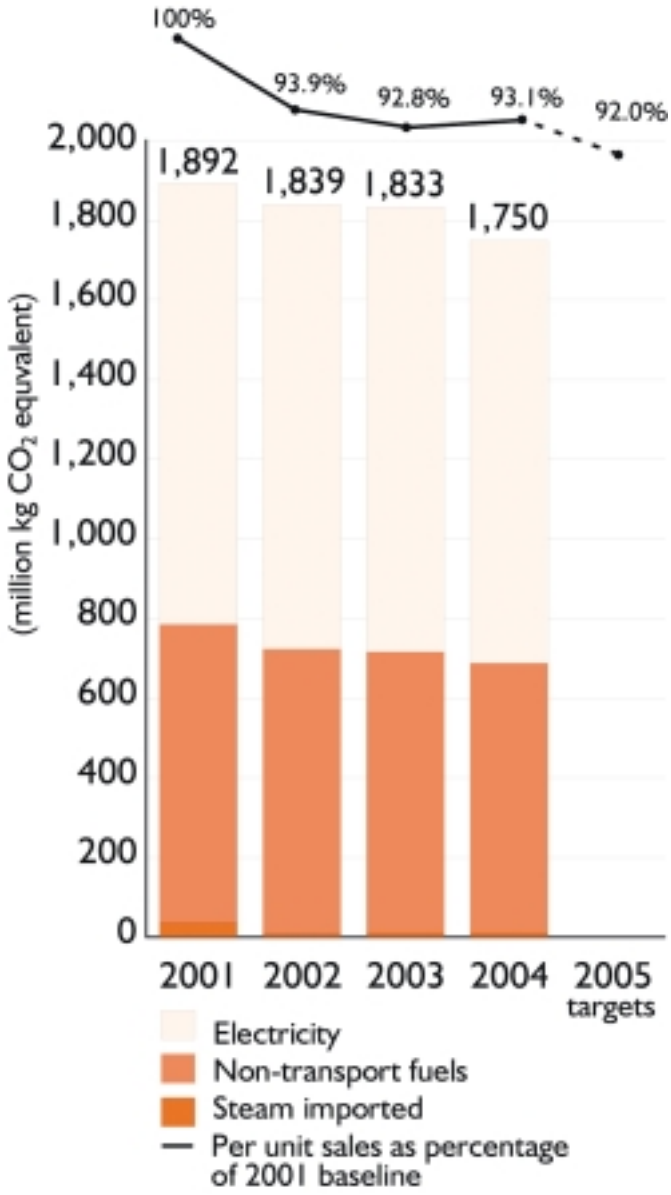
Energy Consumption by Business (Excluding Transport)

	2001	2002	2003	2004
	(million gigajoules)			
R&D	5.11	4.80	4.91	4.84
Biologicals	1.23	1.22	1.32	1.32
Consumer Healthcare	1.90	1.90	2.01	2.15
New Product and Global Supply	2.03	2.05	2.02	2.04
Regional Pharma Supply	2.03	1.95	1.75	1.77
Primary Supply & Antibiotics	7.93	7.24	6.85	5.77
Commercial	0.04	0.63	0.83	0.87
Other	0.26	0.21	0.23	0.23

Total energy consumption decreased by 4.5% since 2003 (7.3% since 2001). Energy consumption per unit sales increased by 0.4% since 2003. However, it decreased by 6.9% since 2001, so we expect to meet our 2005 target of an 8% reduction per unit sales since 2001.

Energy Consumption (cont.)

Global Warming Potential from Energy (Excluding Transport)



Global Warming Potential From Energy (Excluding Transport)

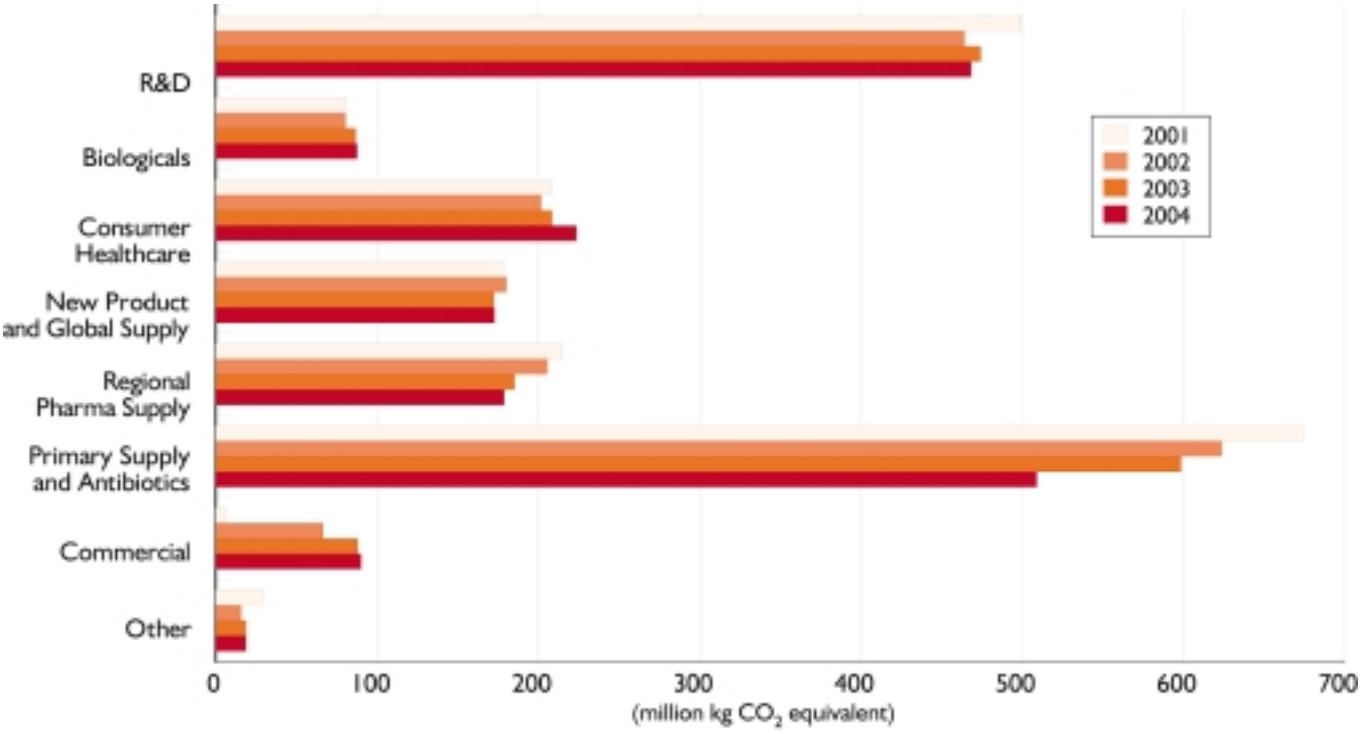
	Steam Imported	Non-transport Fuels	Electricity
	(million kg CO_2 equivalent)		
2001	37	748	1,107
2002	9	714	1,116
2003	11	705	1,117
2004	11	677	1,061

Per Unit Sales as Percentage of 2001 Baseline

2001	2002	2003	2004	2005
100%	93.9%	92.8%	93.1%	92.0%

Energy Consumption (cont.)

Global Warming Potential From Energy by Business (Excluding Transport)



Global Warming Potential from Energy by Business (Excluding Transport)

	2001	2002	2003	2004
	(million kg CO_2 equivalent)			
R&D	499.71	464.5	474.54	468.49
Biologicals	80.75	80.62	86.92	87.61
Consumer Healthcare	208.27	201.73	208.58	223.73
New Product and Global Supply	178.90	180.30	172.51	172.86
Regional Pharma Supply	214.69	205.83	185.29	178.87
Primary Supply & Antibiotics	674.28	623.87	598.57	509.17
Commercial	5.99	66.52	88.08	90.16
Other	29.37	15.78	18.74	18.77

Total global warming potential from energy use at our facilities decreased by 4.5% since 2003 (7.5% since 2001). Global warming potential per unit sales increased by 0.3% since 2003 (a decrease of 6.9% since 2001) – meaning we are on track to meet our 2005 target of an 8% reduction per unit sales since 2001.

Sulphur dioxide and nitrogen oxides

In 2004, 109,905 kilograms of NOx and 408,897 kilograms of SO_2 were emitted. These figures have been calculated from the coal that is used at some GSK manufacturing plants as an energy source.

Transport

We estimate that transport accounts for 7.9% of our total global warming impact. In 2004, we emitted approximately 209 million kilograms of CO_2 from transport.

Business air travel accounts for over half (54%) of our travel-related CO_2 emissions. In 2004, employees travelled a total of 771 million kilometres by plane - resulting in 114 million kg of CO_2 emissions. This includes transatlantic flights between the US and UK, and flights within the EU and US for routine business activities, as well as travel originating in the UK related to large group events such as sales conventions.

In 2004, our global sales fleet (excluding the UK) drove a total of 656 million kilometres on business travel - resulting in 82 million kg of CO_2.

In addition to business travel, we also transport products from our manufacturing plants to distributors. In 2004, GSK products were transported a total of 152 million kilometres - the majority (81%) by air freight. We estimate that the air freight resulted in 13.9 million kg of CO_2. We do not calculate CO_2 emissions from road, rail or sea freight transport because our central data collection system is not as robust in these areas and the impacts are small when compared to those of air freight transport.

We have "green travel plans" at a number of sites which encourage employees to reduce the environmental impact of their travel to work. For example, at GSK House in Brentford, UK, privileged parking spaces are given to car-sharers and drivers of fuel efficient cars; buses run to and from the local train station, while changing rooms and showers are provided for cyclists as well as discounts for bicycle equipment and repairs.

We encourage employees to use video and teleconferencing where possible to reduce air travel. Virtual meeting software is available to employees for making presentations. Email and our internal messaging system are widely used, although it is difficult to quantify the impact of these on reducing business travel.

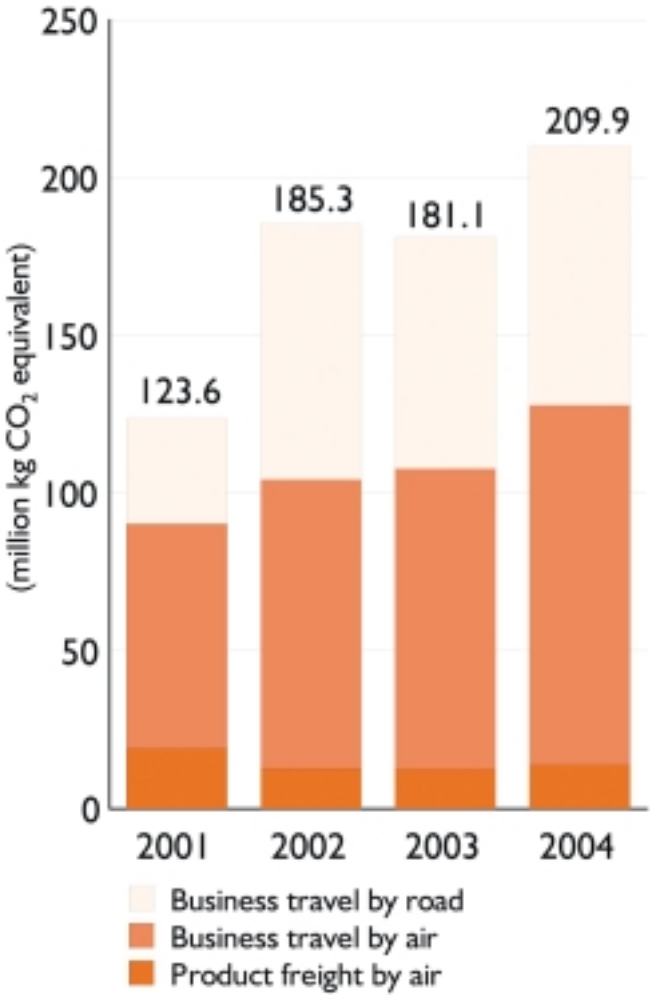
Data Charts

- Global Warming Potential from Transport

Transport (cont.)

Performance

Global Warming Potential from Transport



Note to Transport Chart

Data for business air travel includes transatlantic flights between the US and UK, flights within the EU and US for routine business activities, and flights originating in the UK to large group events such as sales conventions.

Data for business travel by road is for our global sales fleet except the UK sales fleet. We do not collect data for other modes of business travel including rail and bus.

The CO_2 from air freight covers all global routes. We do not calculate CO_2 emissions from road, rail or sea freight transport because our central data collection system is not as robust in these areas and the impacts are small when compared to those of air freight transport.

We use conversion factors from the UK Department for Environment Food and Rural Affairs to calculate CO_2 from business air travel and air freight.

Global Warming Potential from Transport

	Business travel by road	Business travel by air	Product freight by air
	(million kg CO_2 equivalent)		
2001	33.3	71.2	19.1
2002	81.0	91.5	12.8
2003	73.3	95.2	12.6
2004	82.0	114.0	13.9

Total global warming potential from transport increased by 15.9% since 2003 (69.8% since 2001). The increase since 2001 is mainly because we have improved our reporting systems to more comprehensively collect transport data. For example, the 2001 data did not include business air travel within the EU and US and it did not include the UK and international sales fleet miles. We estimate we are still underestimating our global warming potential from transport because we do not have a robust system to collect the UK sales fleet travel or group air travel not originating in the UK.

Water

Water is a valuable natural resource that needs to be conserved and protected from pollution. Water conservation is particularly important in areas where water shortages are common.

GSK uses water in manufacturing (e.g., for processes, products, cooling and cleaning) and for general site uses including food services and sanitation. We operate in several areas of the world that are classified as water-stressed. We have 47 sites in water stressed areas, of which 31 are in areas classified as highly stressed by the World Resources Institute.

In 2004, we used 20.5 million cubic metres of water - a decrease of 10.9% since 2003 (23.8% since 2001). Water consumption per unit sales decreased by 6.3% since 2003 (23.3% since 2001) - meaning we have exceeded our 2005 target of a 10% reduction per unit sales since 2001.

In 2004, we generated 13.9 million cubic metres of wastewater. 15% of this was reused, recovered or recycled.

We assess the quality of our wastewater by measuring the chemical oxygen demand (COD) - the oxygen required to chemically oxidise organic and inorganic compounds present in the water. Total COD decreased by 15.0% since 2003 (24.5% since 2001). COD per unit sales decreased by 10.8% since 2003 (24.2% since 2001) - meaning we are on track to meet our 2005 target of a 30% reduction per unit sales since 2001.

Water Use

In 2004, we used 20.5 million cubic metres of water - equivalent to the water used in one year by approximately 80,000 UK households. This was sourced from municipal water supplies (60.5%), wells/boreholes (39.0%), and other sources (0.5%).

All five of our sites in India use processed wastewater for watering plants and trees, which help provide shade, improve the appearance of the site, and also a source of food for employees. They do not discharge any wastewater to water bodies or to municipal sewers. Our site in Xochimilco, Mexico uses processed wastewater for watering gardens around the site, washing vehicles, windows and other uses not requiring drinking water. Our sites in Turkey and the Philippines also reuse all wastewater.

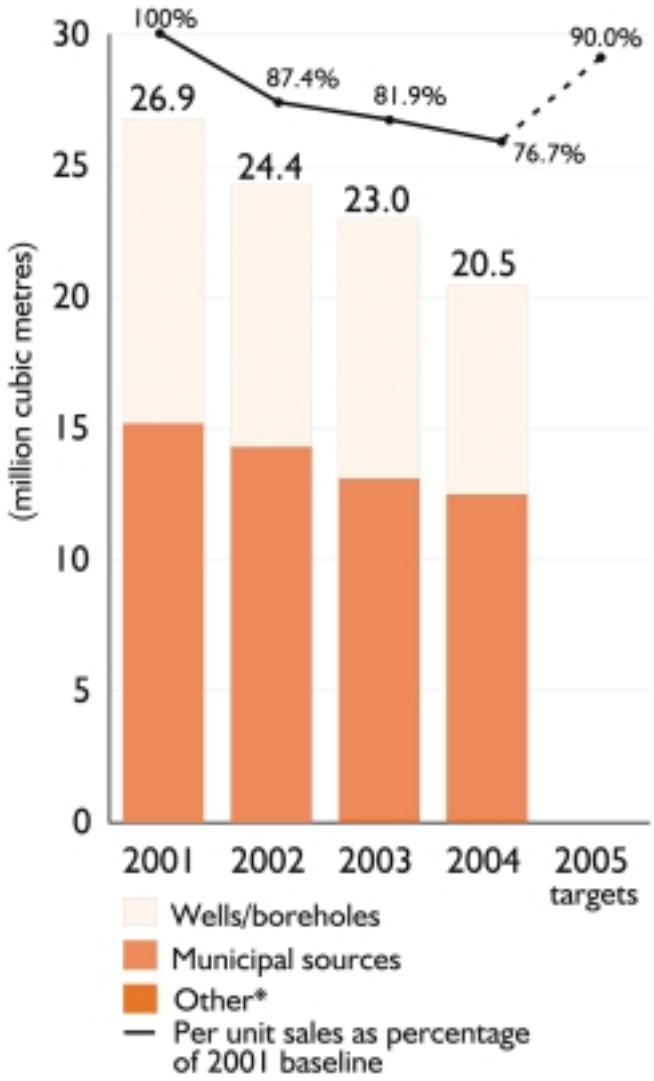
Data Charts

- Water Consumption
- Water Consumption by Business (Excluding Transport)

Water Use (cont.)

Performance

Water Consumption



Note to Water Use Charts

Water use includes water sourced from wells/boreholes, municipal and other sources (mainly wastewater from external industrial sources).

The data include water used in manufacturing processes and for general sites uses, as well as water incorporated into products.

Water Consumption

	Other*	Municipal sources (million cubic metres)	Wells/ boreholes
2001	0.0	15.2	11.6
2002	0.0	14.3	10.0
2003	0.1	13.0	9.9
2004	0.1	12.4	8.0

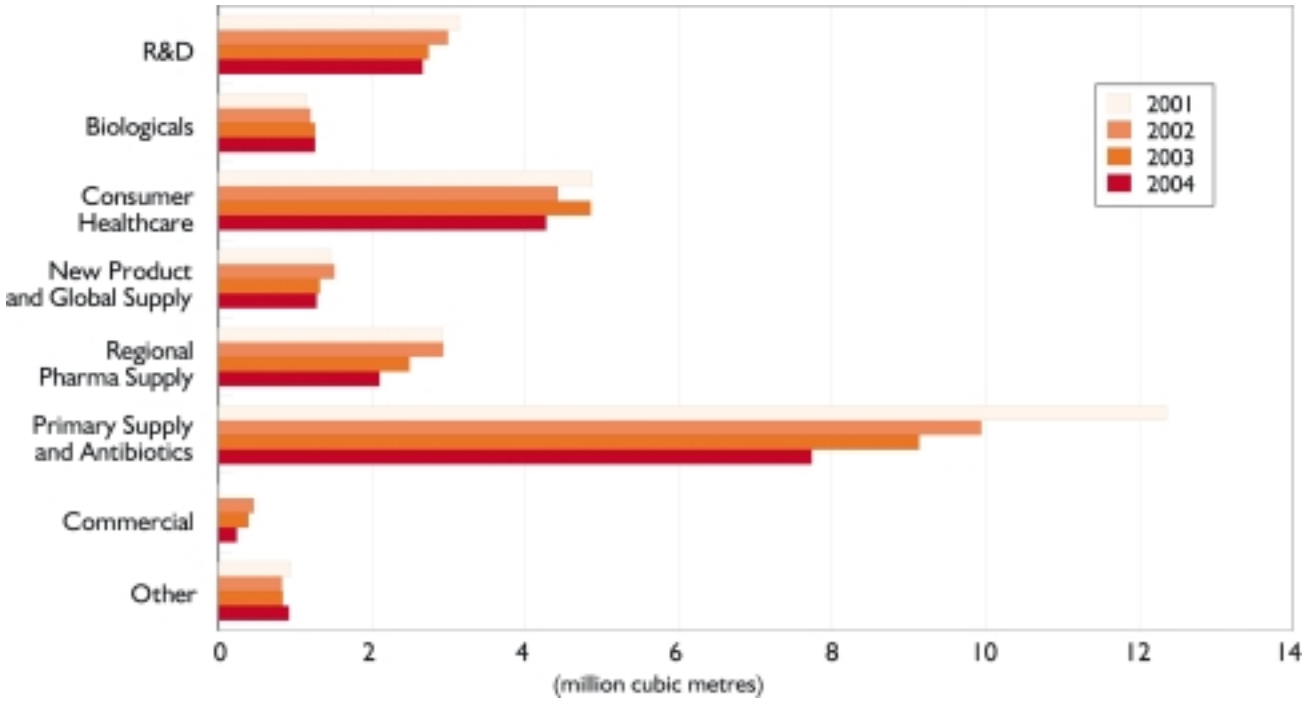
* mainly wastewater from external industrial sources

Per Unit Sales as Percentage of 2001 Baseline

2001	2002	2003	2004	2005
100%	87.4%	81.9%	76.7%	90.0%

Water Use (cont.)

Water Consumption by Business



Water Consumption by Business

	2001	2002	2003	2004
	(million cubic metres)			
R&D	3.14	2.99	2.74	2.66
Biologicals	1.15	1.20	1.26	1.26
Consumer Healthcare	4.87	4.42	4.85	4.27
New Product and Global Supply	1.47	1.51	1.32	1.28
Regional Pharma Supply	2.92	2.93	2.49	2.10
Primary Supply & Antibiotics	12.35	9.94	9.13	7.73
Commercial	0.01	0.46	0.39	0.24
Other	0.94	0.83	0.84	0.92

Total water consumption decreased by 10.9% since 2003 (23.8% since 2001). Water consumption per unit sales decreased by 6.3% since 2003 (23.3% since 2001) - meaning we have exceeded our 2005 target of a 10% reduction per unit sales since 2001.

Wastewater

In 2004, we generated 13.9 million cubic metres of wastewater from our manufacturing processes and various site operations.

Fifteen percent (15%) of total wastewater was reused, recovered or recycled. All of our five sites in India have implemented "zero wastewater" discharge programmes - reusing and recycling all wastewater. Another three sites (in Mexico, the Philippines and Turkey) also reuse all wastewater.

We assess the quality of our wastewater by measuring the chemical oxygen demand (COD) - the oxygen required to chemically oxidise organic and inorganic compounds present in the water.

One site in Brasov, Romania was fined 24,333,400 ROL (£409) by the local water company for exceeding the COD limit.

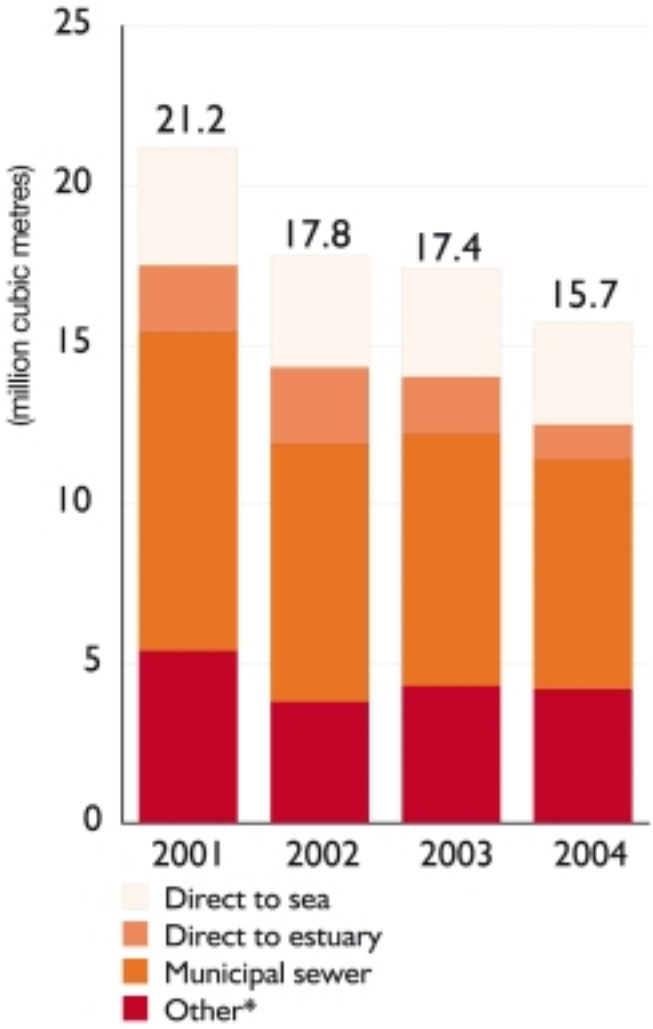
Data Charts

- Wastewater Volume
- Wastewater Volume by Business
- Wastewater Chemical Oxygen Demand
- Wastewater Chemical Oxygen Demand by Business

Wastewater (cont.)

Performance

Wastewater Volume



Note to Wastewater and COD Charts

Wastewater volume includes all manufacturing and site process wastewater as well as sanitary and food service wastewater.

Wastewater quality is measured by Chemical Oxygen Demand (COD) which is a measure of the oxygen required to chemically oxidise organic and inorganic compounds present in the water.

The COD is measured when wastewater leaves our sites, following any on-site treatment.

In 2002, we began to ask our sites to submit COD data following municipal treatment. This takes into account final treatment occurring at municipal or publicly-owned wastewater treatment works and therefore gives a better indication of the impact of our operations on the final receiving waterways. However, many of our sites have not submitted this data which means that the 2004 data still primarily reflects the COD after only onsite treatment. We will revisit this parameter and its scope as we develop our new EHS metrics and targets in 2005.

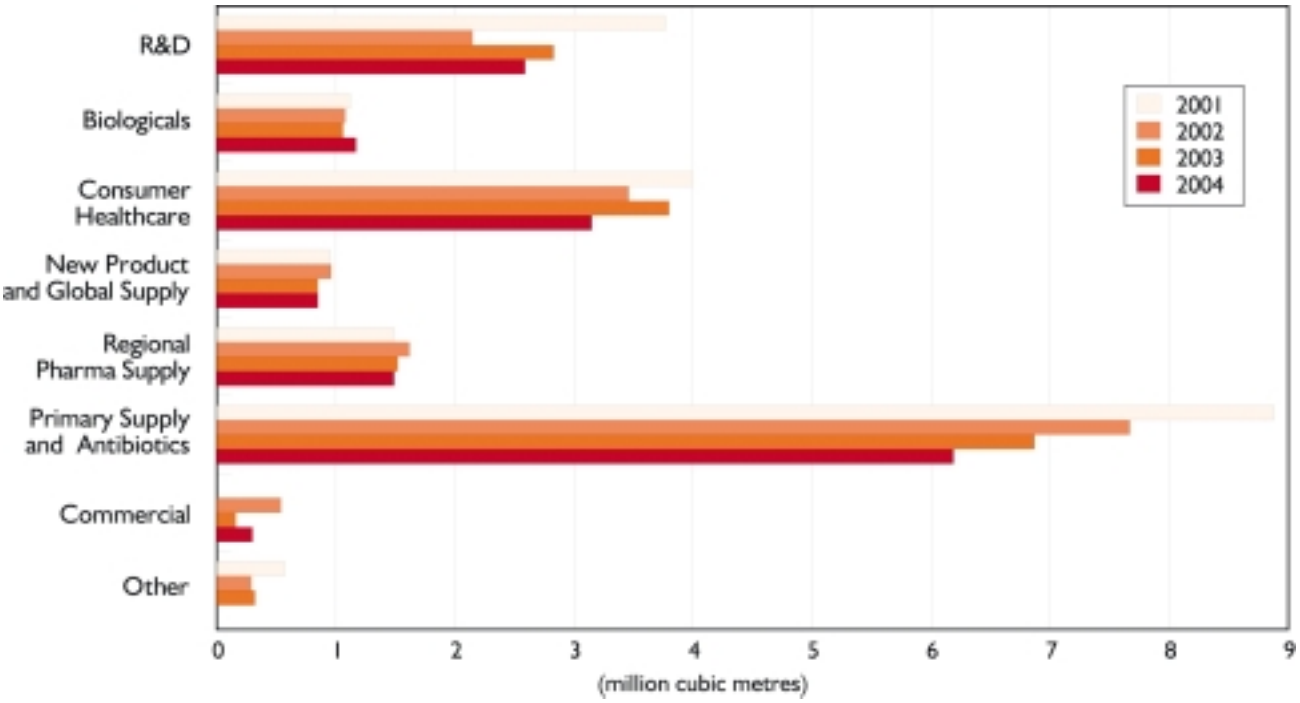
Wastewater Volume

	Direct to sea	Direct to estuary	Municipal sewer	Other*
	(million cubic metres)			
2001	5.4	2.1	10.0	3.5
2002	3.8	2.4	8.1	2.0
2003	4.3	1.8	7.9	2.2
2004	4.2	1.1	7.2	2.4

* 2.1 million cubic metres to river

Wastewater (cont.)

Wastewater Volume by Business



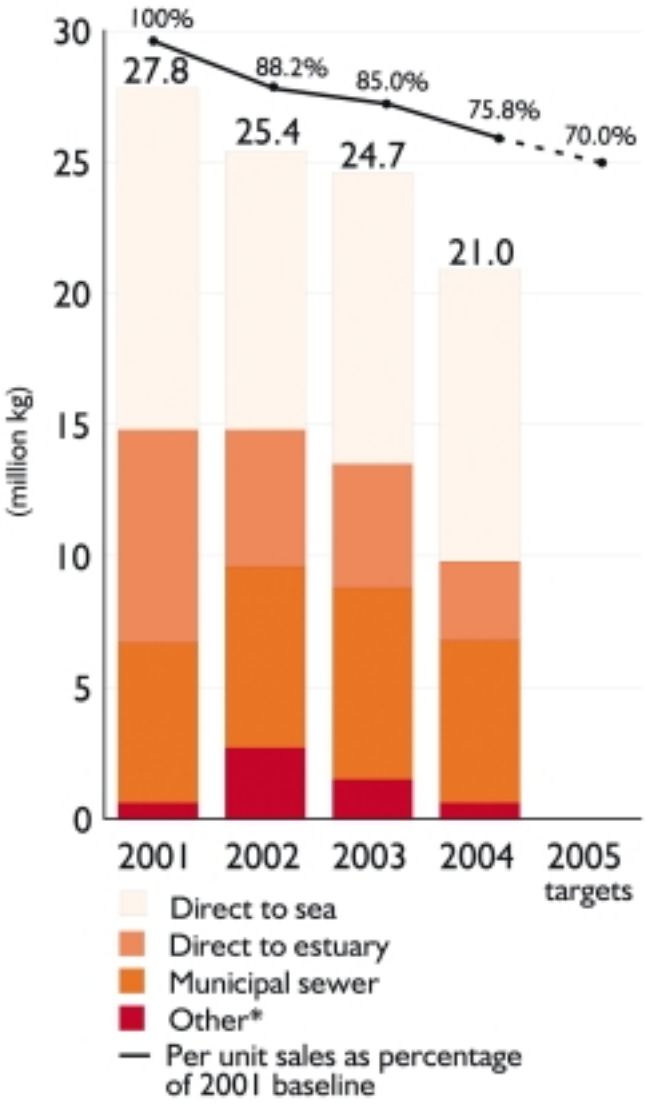
Wastewater Volume by Business

	2001	2002	2003	2004
	(million cubic metres)			
R&D	3.77	2.15	2.83	2.59
Biologicals	1.12	1.08	1.06	1.17
Consumer Healthcare	4.00	3.46	3.80	3.15
New Product and Global Supply	.95	0.96	0.85	0.85
Regional Pharma Supply	1.49	1.62	1.52	1.49
Primary Supply & Antibiotics	8.88	7.67	6.87	6.19
Commercial	0.00	0.54	0.16	0.30
Other	0.57	0.29	0.32	0.00

Total wastewater volume decreased by 9.8% since 2003 (25.9% since 2001).

Wastewater (cont.)

Wastewater Chemical Oxygen Demand



Wastewater Chemical Oxygen Demand

	Direct to sea	Direct to estuary	Municipal sewer	Other*
	(million kg)			
2001	13.0	8.1	6.1	0.6
2002	10.6	5.2	6.9	2.7
2003	11.1	4.7	7.3	1.5
2004	11.1	3.0	6.2	0.6

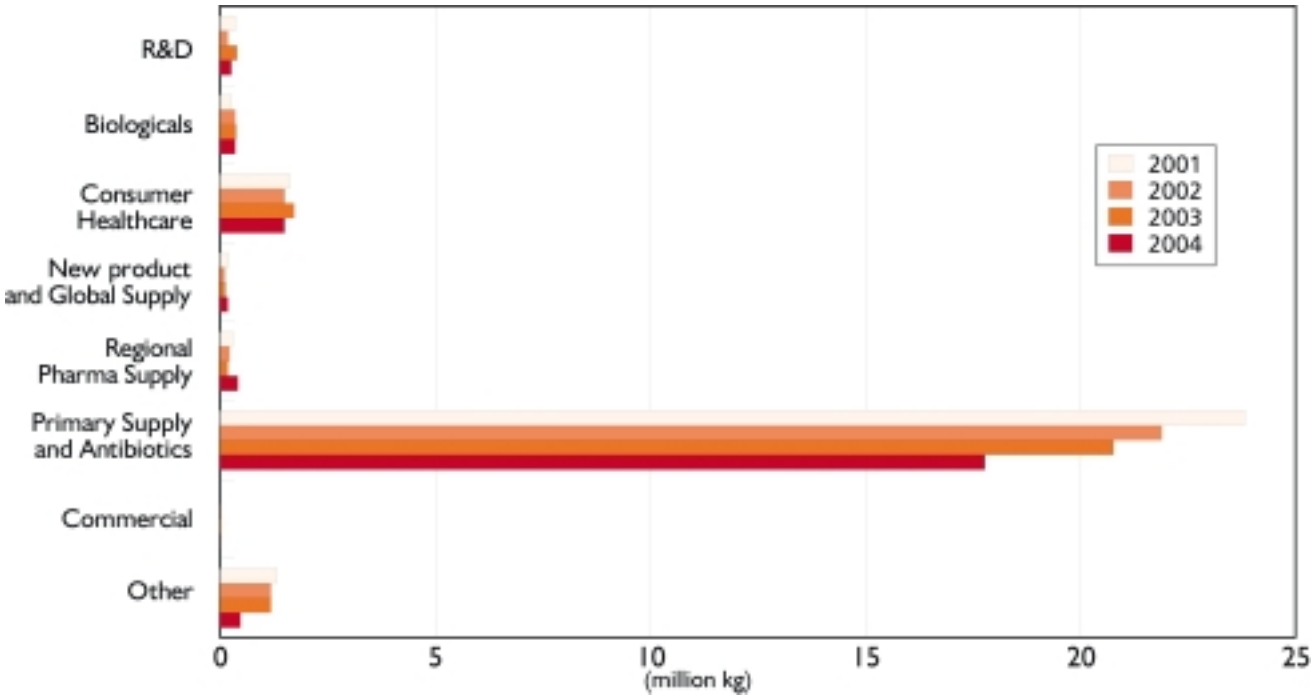
* includes reused/recovered/recycled, on-site irrigation and incineration

Per Unit Sales as Percentage of 2001 Baseline

2001	2002	2003	2004	2005
100%	88.2%	85.0%	75.8%	70.0%

Wastewater (cont.)

Wastewater Chemical Oxygen Demand by Business



Wastewater Chemical Oxygen Demand by Business

	2001	2002	2003	2004
	(million kg)			
R&D	0.35	0.18	0.39	0.26
Biologicals	0.25	0.35	0.37	0.35
Consumer Healthcare	1.61	1.50	1.72	1.50
New Product and Global Supply	0.19	0.11	0.12	0.18
Regional Pharma Supply	0.29	0.22	0.18	0.41
Primary Supply & Antibiotics	23.82	21.89	20.77	17.78
Commercial	0.00	0.01	0.02	0.01
Other	1.32	1.18	1.18	0.47

Total COD decreased by 15.0% since 2003 (24.5% since 2001). Most of the decrease in 2004 was because our site at Ulverston, UK, outsourced a fermentation process. COD per unit sales decreased by 10.8% since 2003 (24.2% since 2001) - meaning we are on track to meet our 2005 target of a 30% reduction per unit sales since 2001.

Waste

Our waste includes hazardous waste (mostly waste solvents) and non-hazardous waste (mostly general site waste). We report non-routine waste (mostly construction and demolition waste) separately because this fluctuates depending on building works and remediation projects.

Most of the active ingredients in our pharmaceutical products are manufactured using synthetic chemistry processes. This means that a significant proportion of our waste contains solvents and chemicals used in these processes and is classified as hazardous.

In 2004, we disposed of 43.1 million kg of non-hazardous waste and 73.7 million kg of hazardous waste.

Non-hazardous waste disposed per unit sales increased by 2.8% since 2003 (but decreased by 18.8% since 2001) - meaning we have exceeded our 2005 target of an 8% reduction per unit sales since 2001.

Hazardous waste disposed per unit sales increased by 27.5% since 2003 (17.3% since 2001) - meaning we are not on track to meet our 2005 target of a 15% reduction per unit sales since 2001. This is due to a combination of factors which are described in the hazardous waste section.

Many of our sites have introduced waste minimisation and recycling initiatives. In 2004, we recycled 239.2 million kg of waste (67.2% of the total waste generated). The proportion of waste recycled decreased by 11.1% since 2003 (11.5% since 2001) - meaning we are not on track to meet our 2005 target of a 10% increase in the proportion of waste recycled since 2001. Production changes during 2004 led to a greater proportion of solvent waste being blended as a fuel or incinerated and less recycled.

In 2004, a large number of projects related to waste issues – 20 in total – were submitted for the GSK CEO EHS Excellence Awards. Our site in Bogotá, Colombia, was awarded 1st place in the environment category of the awards for its pharmaceutical waste bioremediation project (see case study on next page).

Note to Hazardous Waste Charts

Although the external definition of what constitutes a waste varies, for GSK reporting purposes a material is considered a waste if it is no longer fit for its originally intended purpose.

Hazardous waste disposed includes disposal to landfill and incineration either on or off GSK property. Incineration with energy recovery includes processes that result in beneficial energy or resource recovery and includes a small amount of composting. Incineration without energy recovery includes processes that do not result in beneficial energy or resource recovery. Hazardous waste disposed does NOT include recycling on-site or off-site or non-routine waste.

For consistent reporting, GSK considers a waste to be hazardous if it exhibits any of a number of properties as defined by the Basel Convention in 1989 of the United Nations Environment Programme (UNEP). Included in these properties are flammability, explosivity, water or air reactivity, corrosivity, oxidising potential, acute or chronic toxicity, ecotoxicity or infection. In addition, because of their nature and potential impact on research and development activities, radioactive wastes are defined as hazardous. Bioengineered and biohazardous waste is included in hazardous waste. A waste is considered to be non-hazardous if it does not exhibit any of the hazardous properties noted above.

Waste (cont.)

CASE STUDY

Developing Environmentally Friendly Ways of Disposing of Unused Pharmaceutical Products

Our consumer healthcare site in Bogotá, Colombia, has developed a system to reduce the environmental impact of disposing of unused liquid pharmaceutical products, including product returns or rejects.

The liquid waste is treated in reed beds. Although reed beds are becoming increasingly popular to treat domestic and industrial wastewater, the Colombia team are pioneers in using them to treat pharmaceutical waste.

Reeds (usually phragmites australis) planted in specially designed soil beds provide an ideal environment for bacteria and fungi to break down hazardous chemicals naturally into harmless components. The reeds themselves absorb some chemicals in the waste as nutrients. In our initial trial, treating a mixture of waste syrup and used oil, levels of chemicals in the residual water from the reed beds fell below legal limits after 35 days.

The system replaces high temperature incineration, which is energy intensive and does not dispose of certain wastes such as syrups effectively. Using reed beds has reduced the cost of final disposal per kilogram of product by 60%.

Reed beds used to treat pharmaceutical waste in Colombia

Building our own reed bed treatment plant at the Bogotá site was not feasible because there was not enough space, so the team promoted the idea of a joint initiative with other companies. In June 2003, the waste treatment company Transform Ecoskandia Ltda and other financial partners founded Transform Biolodos Ltda to build the first large reed bed plant in Colombia for industrial and public use.

The Bogotá site won first place in the environment category of our internal awards scheme - the Chief Executive Officer's Environment, Health and Safety Excellence Awards. The site closed in 2004, but the reed bed treatment plant is now used by several other major companies.

Hazardous Waste

In 2004, we disposed of 73.7 million kg of hazardous waste (excluding demolition and construction waste). This is mostly solvents (82.6%), the rest being general site waste (15.3%) and chemical, biological or radioactive waste (2.0%).

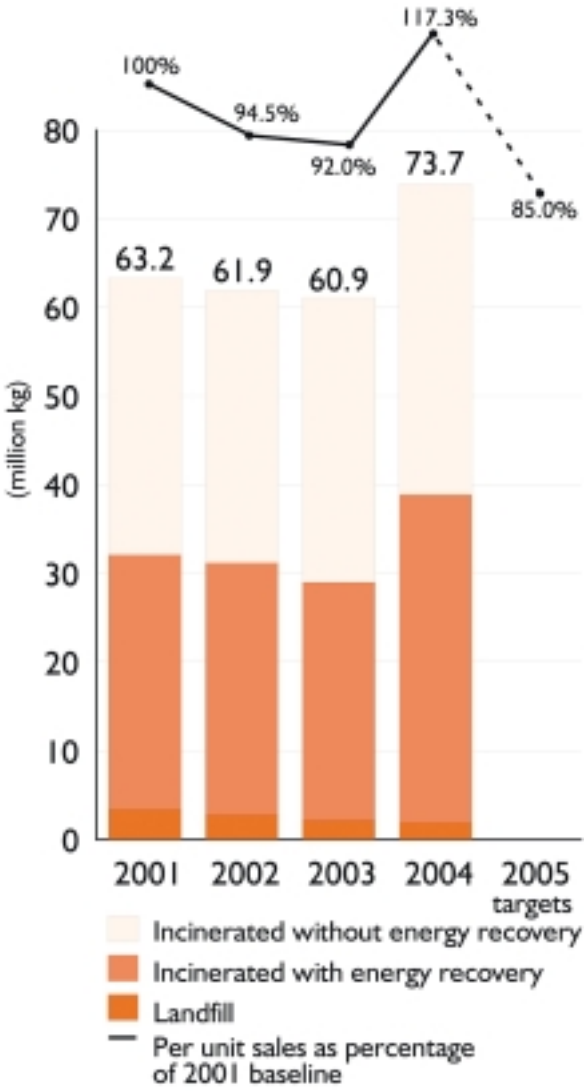
In 2004, 50.2% of hazardous waste disposed was incinerated for energy recovery, 47.5% was incinerated without energy recovery. The remaining waste was disposed to licensed landfill sites.

Data Charts

- Hazardous Waste Disposed
- Hazardous Waste Source
- Hazardous Waste Disposed by Business

Performance

Hazardous Waste Disposed



Hazardous Waste Disposed

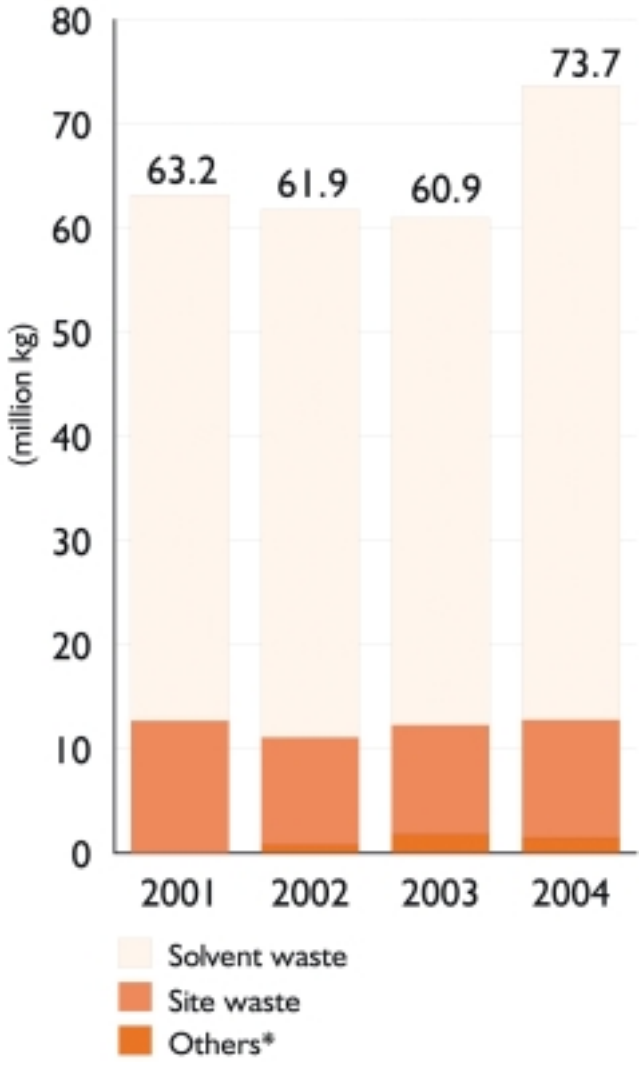
	Incinerated without energy recovery	Incinerated with energy recovery	Landfill
	(million kg)		
2001	31.2	28.7	3.4
2002	30.7	28.4	2.8
2003	32.1	26.8	2.2
2004	35.0	37.0	1.9

Per Unit Sales as Percentage of 2001 Baseline

2001	2002	2003	2004	2005
100%	94.5%	92.0%	117.3%	85.0%

Hazardous Waste (cont.)

Hazardous Waste Source



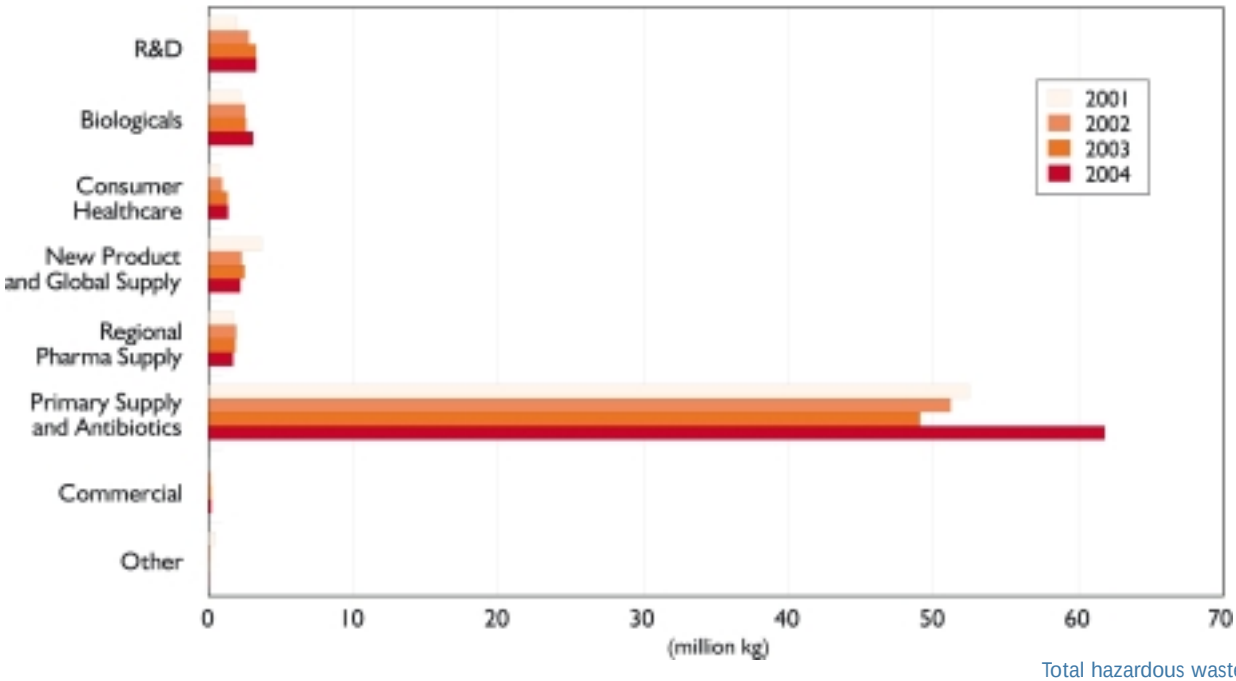
Hazardous Waste Source

	Solvent waste	Site waste	Others*
		(million kg)	
2001	50.5	12.7	0.0
2002	50.7	10.3	0.8
2003	48.7	10.5	1.8
2004	60.9	11.3	1.5

* includes chemical/biological/radioactive/pharmaceutical waste

Hazardous Waste (cont.)

Hazardous Waste Disposed by Business



Hazardous Waste Disposed by Business

	2001	2002	2003	2004
	(million kg)			
R&D	1.98	2.78	3.29	3.30
Biologicals	2.22	2.53	2.59	3.09
Consumer Healthcare	0.74	0.95	1.33	1.35
New Product and Global Supply	3.65	2.29	2.48	2.20
Regional Pharma Supply	1.71	1.91	1.86	1.70
Primary Supply & Antibiotics	52.46	51.19	49.09	61.83
Commercial	0.02	0.14	0.17	0.18
Other	0.44	0.07	0.04	0.04

Total hazardous waste disposed increased by 21.0% since 2003 (16.6% since 2001). Hazardous waste disposed per unit sales increased by 27.5% since 2003 (17.3% since 2001) - meaning we are not on track to meet our 2005 target of a 15% reduction per unit sales since 2001.

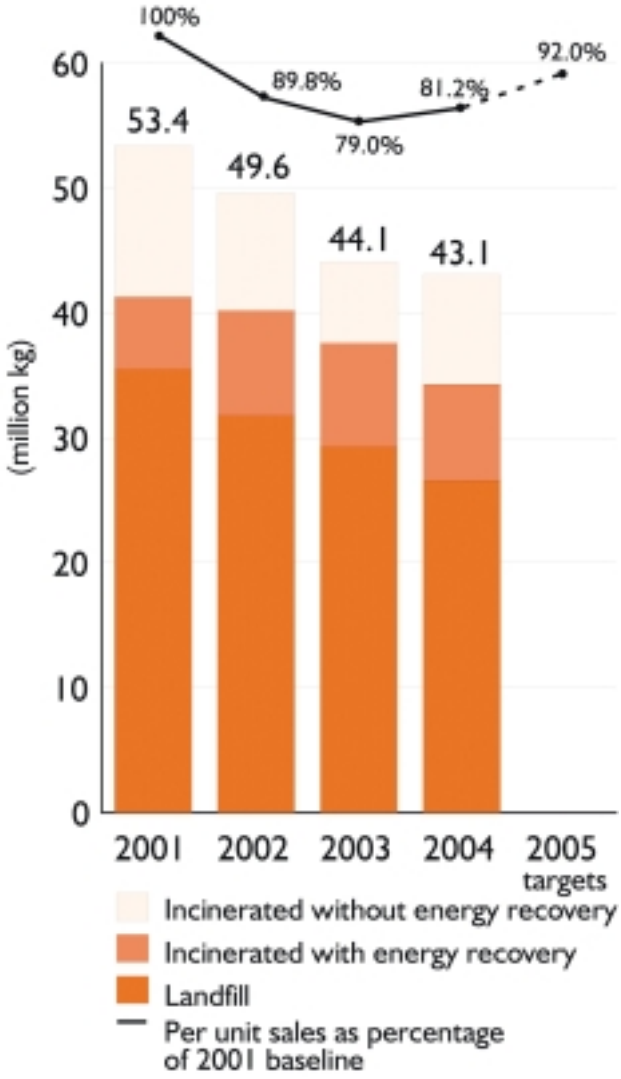
Our previous trend of reducing hazardous waste per unit sales was reversed in 2004 by a combination of factors. GSK's hazardous waste is mostly solvents and one plant scheduled for closure had to dispose of redundant solvent stocks. This had a one off impact on our data. In addition, changes to production at other plants included bringing in-house processes that were previously undertaken by contract manufacturers. Our engineers will be assessing how to optimise the new processes to reduce solvent use and increase recycling.

Non-hazardous Waste

In 2004, we disposed of 43.1 million kg of non-hazardous waste (excluding non-routine waste). This is equivalent to the waste produced by approximately 34,800 UK households. Most non-hazardous waste is general site waste such as office waste paper, kitchen waste and non-hazardous substances used in manufacturing. Many sites continue to look for ways to reduce waste and have undertaken waste management reviews.

Performance

Non-hazardous Waste Disposed



Data Charts

- Non-hazardous Waste Disposed
- Non-hazardous Source
- Non-hazardous Waste Disposed by Business

Note to Non-hazardous Waste Charts

Although the external definition of what constitutes a waste varies, for GSK reporting purposes a material is considered a waste if it is no longer fit for its originally intended purpose.

Non-hazardous waste disposal includes disposal to landfill and incineration either on or off GSK property. Incineration with energy recovery includes processes that result in beneficial energy or resource recovery and includes a small amount of composting. Incineration without energy recovery includes processes that do not result in beneficial energy or resource recovery. Non-hazardous waste disposed does NOT include recycling on-site or off-site or non-routine waste.

Biological waste rendered non-hazardous after treatment is considered a non-hazardous waste.

Non-hazardous Waste Disposed

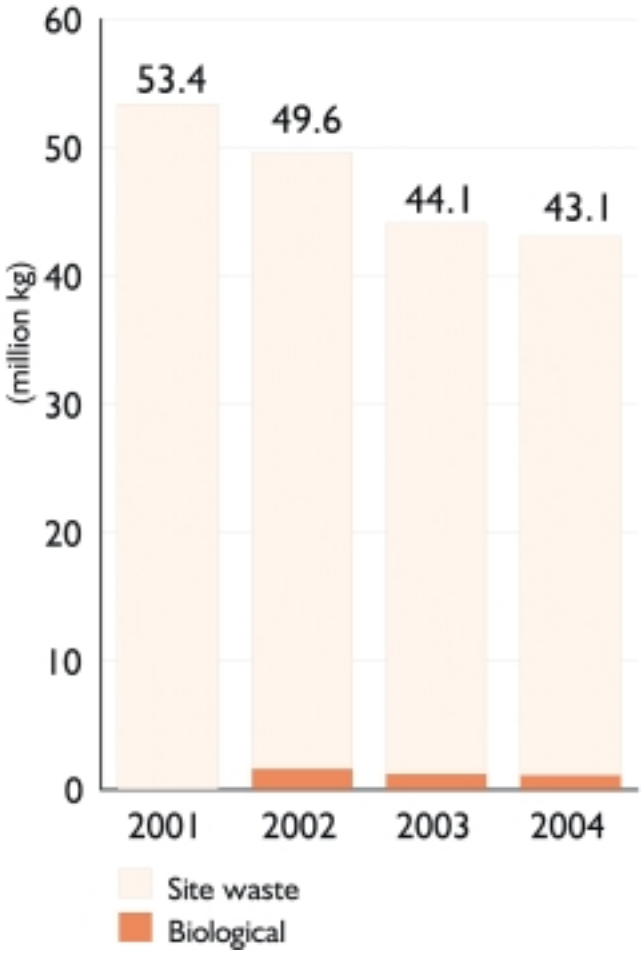
	Incinerated without energy recovery	Incinerated with energy recovery	Landfill
	(million kg)		
2001	12.1	5.8	35.3
2002	9.4	8.4	31.8
2003	6.5	8.3	29.3
2004	8.8	7.7	26.6

Per Unit Sales as Percentage of 2001 Baseline

2001	2002	2003	2004	2005
100%	89.8%	79.0%	81.2%	92.0%

Non-hazardous Waste (cont.)

Non-hazardous Waste Source

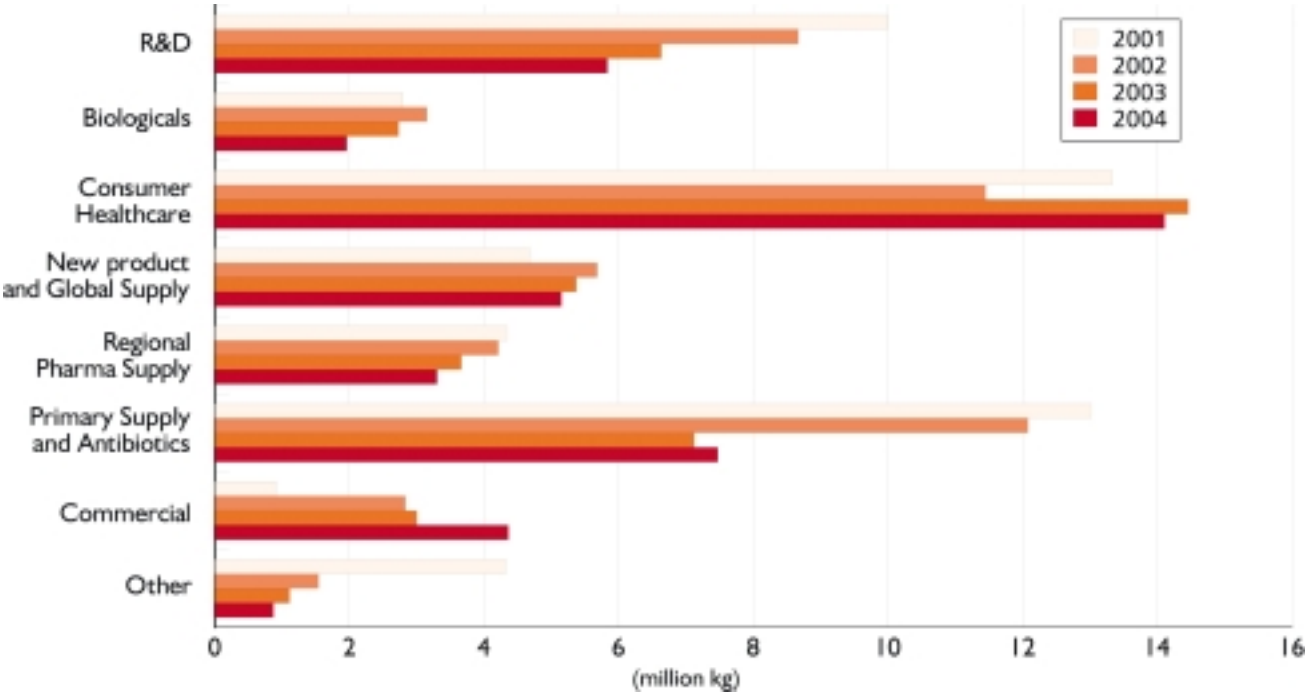


Non-hazardous Waste Source

	Site waste	Biological
	(million kg)	
2001	53.4	0.0
2002	48.0	1.6
2003	42.9	1.2
2004	42.0	1.1

Non-hazardous Waste (cont.)

Non-hazardous Waste Disposed by Business



Non-hazardous Waste Disposed by Business

	2001	2002	2003	2004
	(million kg)			
R&D	9.99	8.67	6.63	5.83
Biologicals	2.79	3.15	2.73	1.96
Consumer Healthcare	13.33	11.45	14.46	14.11
New Product and Global Supply	4.68	5.68	5.37	5.15
Regional Pharma Supply	4.34	4.21	3.66	3.30
Primary Supply & Antibiotics	13.02	12.08	7.12	7.47
Commercial	0.91	2.83	3.00	4.36
Other	4.32	1.54	1.11	0.87

Total non-hazardous waste disposed decreased by 2.3% since 2003 (19.3% since 2001). Non-hazardous waste disposed per unit sales increased by 2.8% since 2003 (but decreased by 18.8% since 2001) - meaning we have exceeded our 2005 target of an 8% reduction per unit sales since 2001.

Recycling

In 2004, we recycled 239.2 million kg of waste (67% of the 356 million kg of waste generated).

Over 77% of the total waste recycled was hazardous waste, primarily solvents.

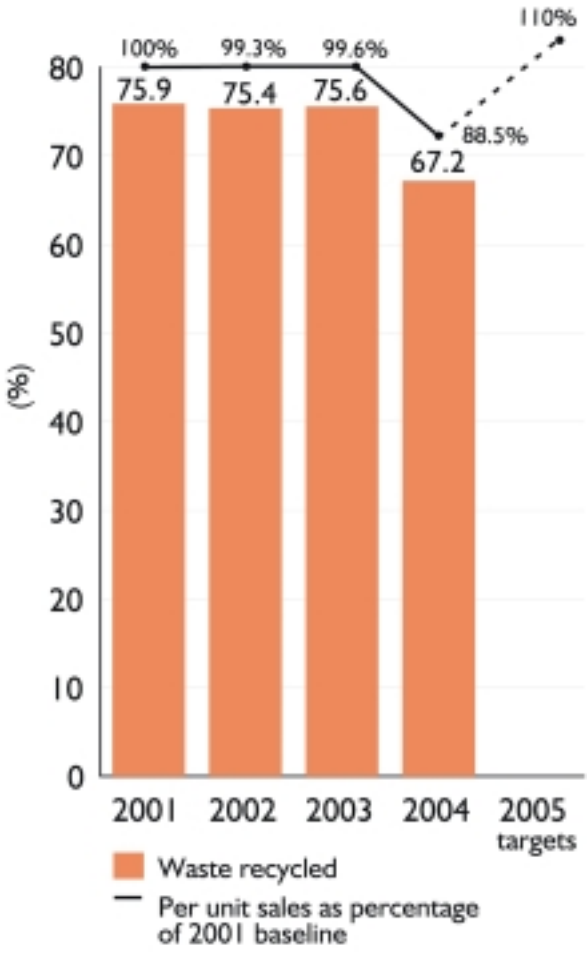
New recycling programmes have led to significant reductions in waste at several sites. For example, in Cidra, Puerto Rico, recycling a range of materials has reduced non-hazardous waste disposed to landfill by 30-40% per year. In Clifton, New Jersey, US, recycling of plastic packaging materials has saved over 70 metric tonnes of waste per year.

Data Charts

- Proportion of Total Waste Recycled
- Total Waste Recycled
- Proportion of Total Waste Recycled by Business

Performance

Proportion of Total Waste Recycled



Note to Recycling Charts

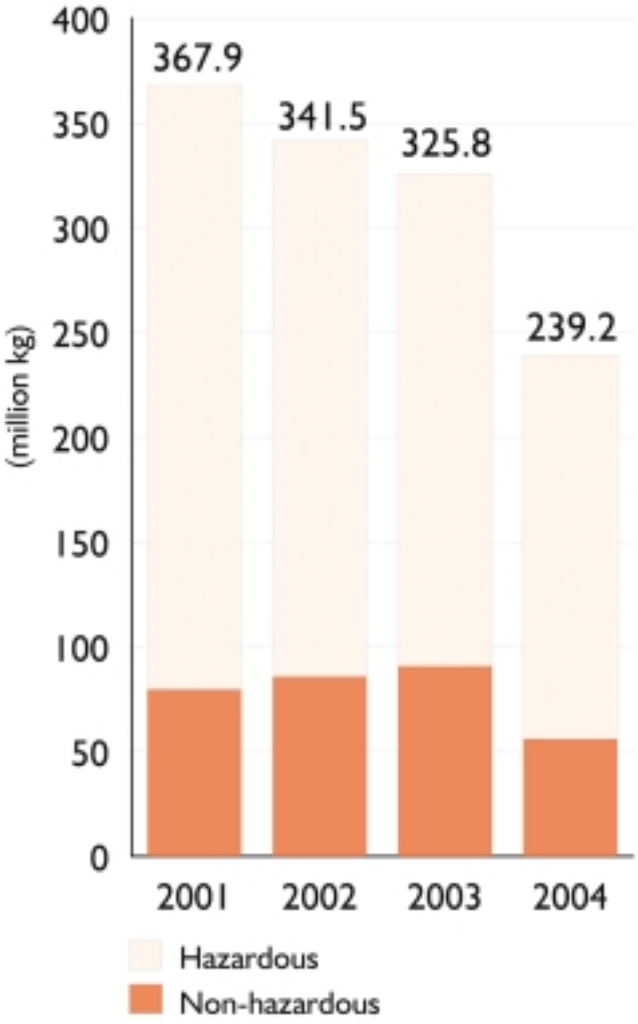
Waste recycled includes hazardous and non-hazardous waste (not non-routine waste) that has been reused, recovered or recycled, on-site and off-site. It includes in-process reuse of solvents.

Proportion of Total Waste Recycled (%)	
2001	75.9
2002	75.4
2003	75.6
2004	67.2

Percentage of 2001 Baseline				
2001	2002	2003	2004	2005
100%	99.3%	99.6%	88.5%	110%

Recycling (cont.)

Total Waste Recycled

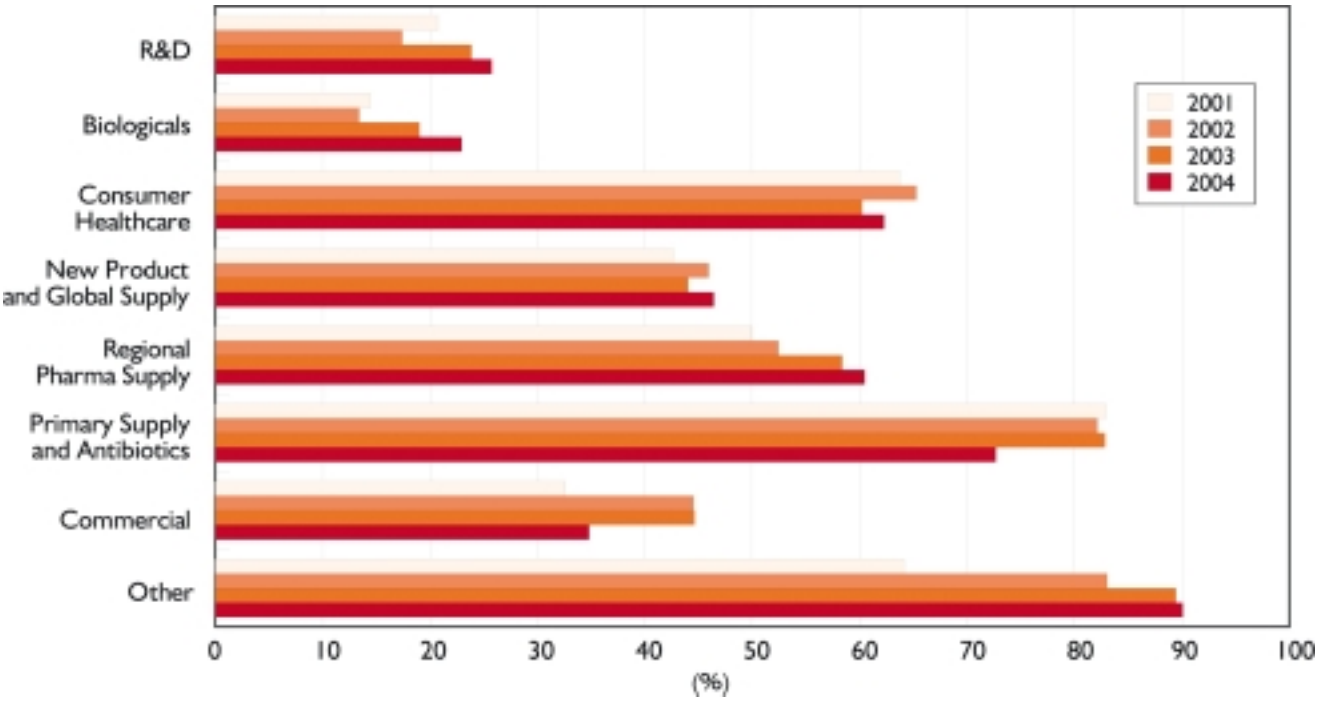


Total Waste Recycled

	Hazardous	Non-hazardous
	(million kg)	
2001	288.5	79.5
2002	255.9	85.7
2003	235.1	90.7
2004	183.3	55.9

Recycling (cont.)

Proportion of Total Waste Recycled by Business



Proportion of Total Waste Recycled by Business

	2001	2002	2003	2004
		(%)		
R&D	20.73	17.38	23.86	25.73
Biologicals	14.46	13.40	19.01	22.94
Consumer Healthcare	63.72	65.30	60.23	62.29
New Product and Global Supply	42.67	45.95	44.03	46.42
Regional Pharma Supply	49.96	52.46	58.38	60.48
Primary Supply & Antibiotics	82.93	82.15	82.84	72.68
Commercial	32.60	44.53	44.62	34.80
Other	64.17	83.05	89.46	90.09

Total waste recycled decreased by 26.6% since 2003 (35.0% since 2001).

The proportion of waste recycled decreased by 11.1% since 2003 (11.5% since 2001) - meaning we are not on track to meet our 2005 target of a 10% increase in the proportion of waste recycled since 2001.

Production changes during 2004 led to a greater proportion of solvent waste being blended as a fuel or incinerated and less recycled.

Non-routine Waste

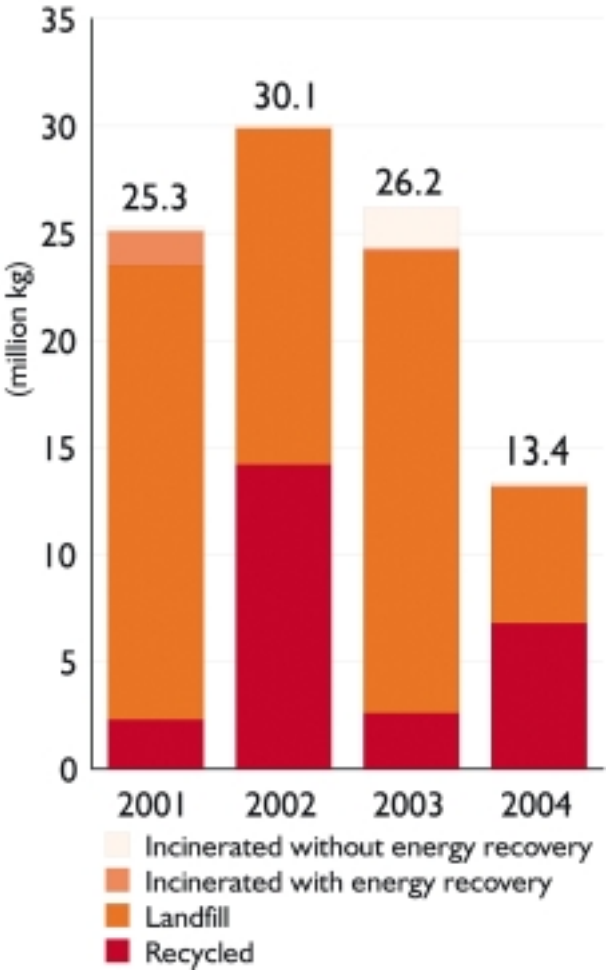
Non-routine waste is primarily demolition and construction waste and includes hazardous and non-hazardous waste from site demolition and construction activities and from small on-site remediation projects. In 2004, we disposed (via landfill or incineration) of 6.6 million kg of non-routine waste, and recycled 6.8 million kg.

Data Charts

- Non-routine Waste

Performance

Non-routine Waste



Note to Non-Routine Waste Charts

Although the definition of what constitutes waste varies, for GSK reporting purposes a material is considered a waste if it is no longer fit for its originally intended purpose.

Non-routine related waste disposal includes disposal to landfill and incineration either on or off GSK property. Incineration with energy recovery includes processes that result in beneficial energy or resource recovery and includes a small amount of composting. Incineration without energy recovery includes processes that do not result in beneficial energy or resource recovery. Non-routine waste disposed does NOT include waste recycled on-site and off-site.

Non-routine Waste

	Incinerated without energy recovery	Incinerated with energy recovery	Landfill	Recycled
	(million kg)			
2001	0.2	1.6	21.2	2.3
2002	0.2	0.0	15.7	14.2
2003	1.9	0.2	21.5	2.6
2004	0.2	0.1	6.3	6.8

Total non-routine waste disposed decreased by 48.9% since 2003 (47.0% since 2001). The amount of waste fluctuates each year depending on plant upgrades and site closures.

Ozone Depletion

The ozone layer is essential to human survival because it filters out harmful ultra-violet (UV) rays from the sun. Ozone depleting substances (ODSs) include chlorofluorocarbons (CFCs), hydrochloro-fluorocarbons (HCFCs) and halons.

CFCs are the main ODS we use - as the propellant gas in metered dose inhalers (MDI) for asthma sufferers. The CFC is released when patients use the inhaler.

In 2004, 464 thousand kilograms of CFC propellant were released when patients used our products in the EU and US. A much smaller amount of CFCs - 59 thousand kilograms - were released during worldwide production. Information on CFC releases is not compiled outside the US and UK where this is not required by regulation. We now offer a selection of alternatives to ODS-containing inhalers in most countries and plan to eliminate the use of ODSs from our product portfolio by 2010. See metered dose inhalers on page 111.

Ozone depletion potential from production per unit sales decreased by 67.5% since 2001—meaning we have exceeded our 2005 target of a 50% reduction per unit sales since 2001.

We also use ODSs in some cooling systems and for other ancillary uses at GSK facilities. We have switched to using hydrofluorocarbons (HFCs) in some cooling systems. HFCs do not deplete the ozone layer but do contribute to global warming. Ozone depletion potential from ancillary use per unit sales decreased by 60.5% since 2001, but the current trend indicates that we may miss our 2005 target to eliminate these emissions. We plan to establish a team in 2005 to develop a business strategy to eliminate ancillary emissions of ODSs.

Ozone Depleting Substances in Manufacturing

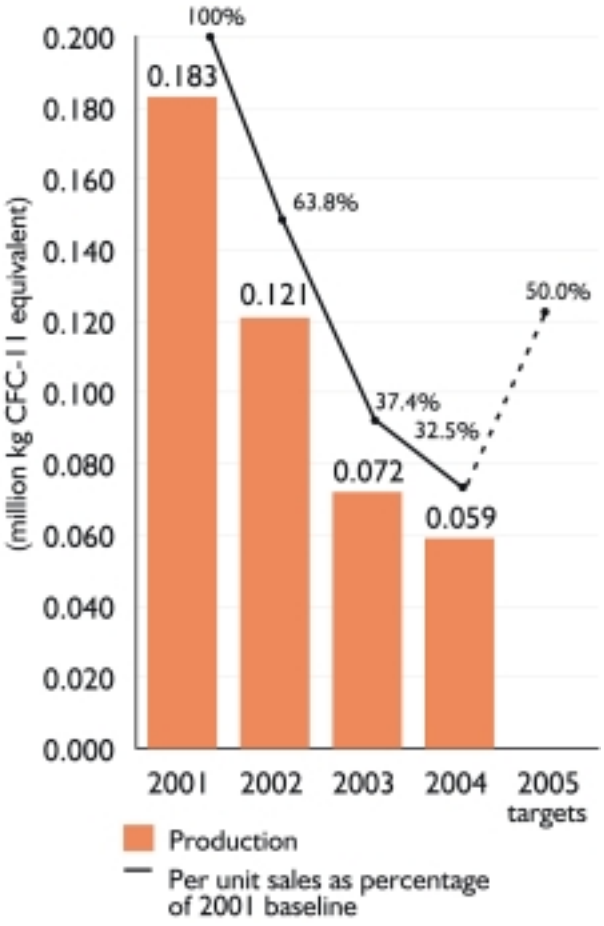
A small proportion of the CFC used to manufacture Metered Dose Inhalers (MDIs) is released during the manufacturing process. We are working to eliminate use of ozone depleting substances (ODSs) in MDIs by switching to HFC and dry powder inhalers (see metered dose inhalers on page 111).

Data Charts

- Ozone Depletion Potential from Production
- Ozone Depletion Potential from Production by Business

Performance

Ozone Depletion Potential from Production Use



Note to Ozone Depletion Potential Charts

We report ozone depletion potential in CFC-11 equivalents as defined by the United Nations Environment Programme (UNEP) Ozone Secretariat (**www.ghgprotocol.org** and **www.ipcc.ch**)

The data only include EU and US.

Ozone Depletion Potential from Production Use

	Production (million kg CFC-11 equivalent)
2001	0.183
2002	0.121
2003	0.072
2004	0.059

Per Unit Sales as Percentage of 2001 Baseline

2001	2002	2003	2004	2005
100%	63.8%	37.4%	32.5%	50.0%

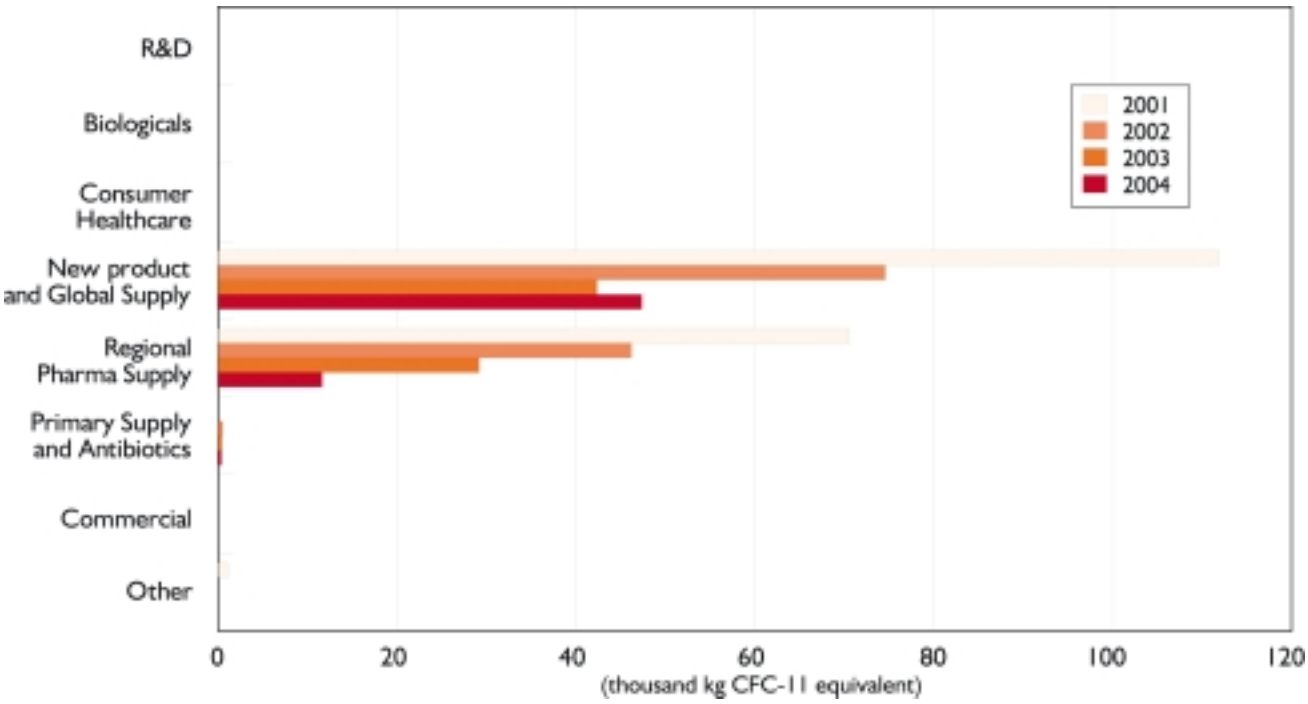
Ozone Depleting Substances in Manufacturing (cont.)

Ozone Depleting Substances Released from Production Activities

Substance	Kg	Factor	Ozone Depletion Potential
CFC11/R11	12,634	1.0	12,634
CFC12/R12	46,304	1.0	46,304
1,1,1 TRICHLOROETHANE	265	0.1	27
METHYL BROMIDE	590	0.6	354

Ozone Depleting Substances in Manufacturing (cont.)

Ozone Depletion Potential from Production by Business



Ozone Depleting Substances Released From Production Activities by Business

	2001	2002	2003	2004
	(thousand kg CFC-11 equivalent)			
R&D	0.00	0.00	0.00	0.00
Biologicals	0.00	0.00	0.00	0.00
Consumer Healthcare	0.00	0.00	0.00	0.00
New Product and Global Supply	111.87	74.59	42.35	47.36
Regional Pharma Supply	70.53	46.19	29.15	11.61
Primary Supply & Antibiotics	0.00	0.50	0.40	0.35
Commercial	0.00	0.00	0.00	0.00
Other	1.09	0.00	0.00	0.00

Total ozone depletion potential from production decreased by 18.1% since 2003 (67.8% since 2001). Ozone depletion potential from production per unit sales decreased by 13.1% since 2003 (67.5% since 2001) - meaning we have exceeded our 2005 target of a 50% reduction per unit sales since 2001.

As production of CFC-containing MDIs decreases, the amount of CFC lost during production also declines. We will no longer manufacture CFC-containing MDIs in the US after 2005 and in Europe after 2006. We will continue to manufacture them in Bangladesh, China, India and Pakistan until the end of 2009.

Ozone Depleting Substances in Ancillary Equipment

We use ozone depleting substances (ODSs) primarily in cooling systems. We have switched to using hydrofluorocarbons (HFCs) in some ancillary equipment. HFCs do not deplete the ozone layer but do contribute to global warming.

ODSs - mainly HCFCs - are sealed inside cooling systems and are only released in the event of a leak or during maintenance.

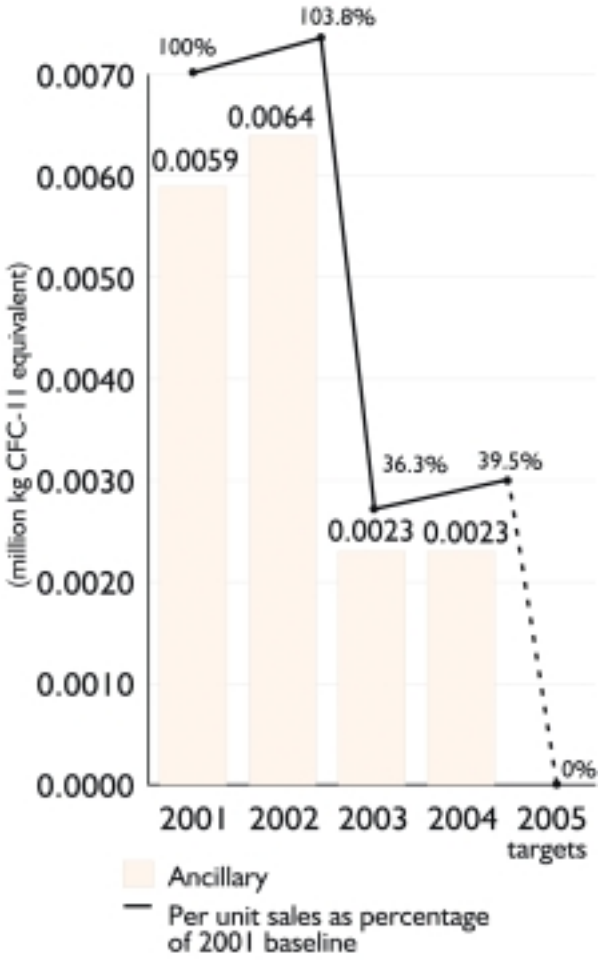
We plan to establish a team in 2005 to develop a business strategy to eliminate ancillary emissions of ODSs. This will closely monitor equipment and put in place recommendations on alternative refrigerants and new equipment.

Data Charts

- Ozone Depletion Potential from Ancillary Use
- Ozone Depletion Potential from Ancillary Use by Business

Performance

Ozone Depletion Potential from Ancillary Use



Ozone Depletion Potential from Ancillary Use

	Ancillary (million kg CFC-11 equivalent)
2001	0.0059
2002	0.0064
2003	0.0023
2004	0.0023

Per Unit Sales as Percentage of 2001 Baseline

2001	2002	2003	2004	2005
100%	103.8%	36.3%	39.5%	0%

Note to Ozone Depletion Potential Charts

We report ozone depletion potential in CFC-11 equivalents as defined by the United Nations Environment Programme (UNEP) Ozone Secretariat (**www.ghgprotocol.org** and **www.ipcc.ch**)

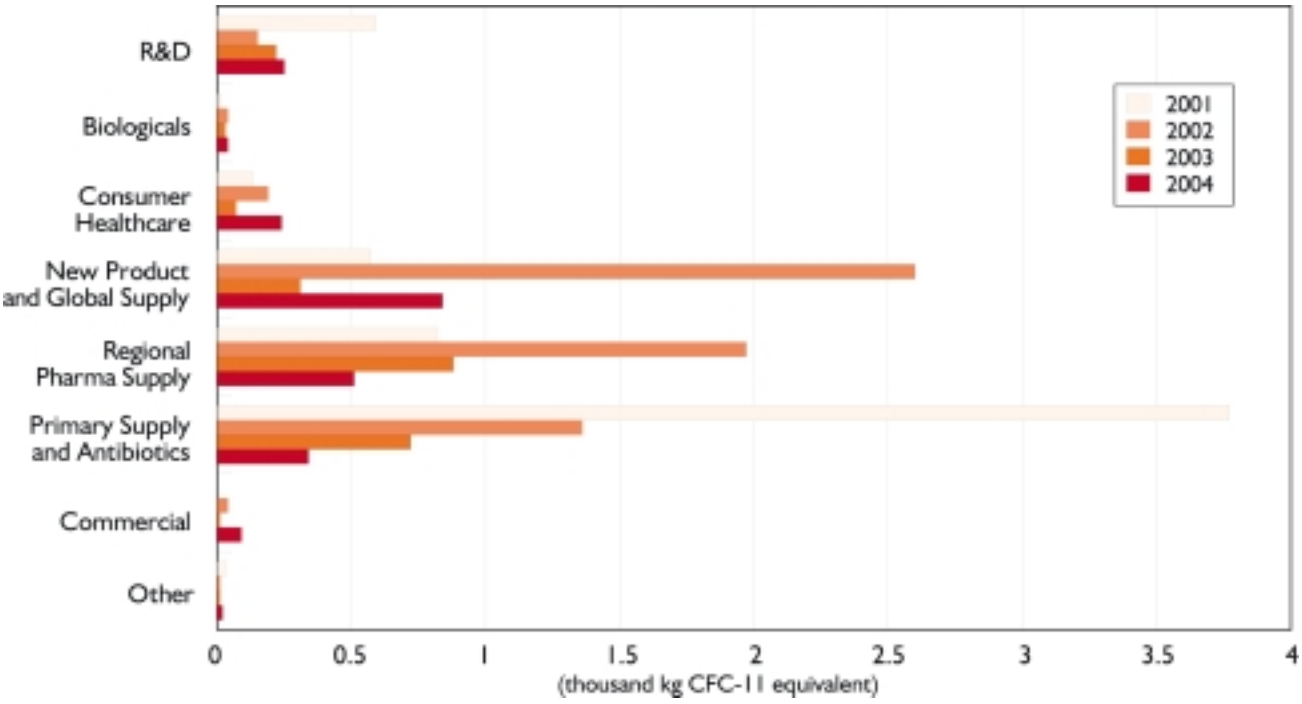
The data only include EU and US.

Ozone Depleting Substances in Ancillary Equipment (cont.)

Ozone Depleting Substances Released from Ancillary Activities			
Substance	**Kg**	**Factor**	**Ozone Depletion Potential**
CFC11/R11	934	1.000	934
CFC12/R12	314	1.000	314
HFC22/R22	16,355	0.055	900
HFC123/R123	239	0.020	5
R403a	56	0.055	3
R408a/FX10	351	0.055	19
R409a/FX56	262	0.048	13
R502	136	1.000	136
R503	1	1.000	1

Ozone Depleting Substances in Ancillary Equipment (cont.)

Ozone Depletion Potential from Ancillary Use by Business



Ozone Depleting Substances Released from Ancillary Use by Business

	2001	2002	2003	2004
	(thousand kg CFC-11 equivalent)			
R&D	0.59	0.15	0.22	0.25
Biologicals	0.01	0.04	0.03	0.04
Consumer Healthcare	0.13	0.19	0.07	0.24
New Product and Global Supply	0.57	2.60	0.31	0.84
Regional Pharma Supply	0.82	1.97	0.88	0.51
Primary Supply & Antibiotics	3.77	1.36	0.72	0.34
Commercial	0.00	0.04	0.01	0.09
Other	0.03	0.01	0.01	0.02

Total ozone depletion potential from ancillary use did not change from 2003 (but decreased by 61.0% since 2001). Ozone depletion potential from ancillary use per unit sales increased by 8.8% since 2003 (but decreased by 60.5% since 2001).

The current trend indicates that we may miss our 2005 target to eliminate ozone depleting emissions from ancillary use. It has not proved possible to eliminate all emissions during servicing and maintenance of cooling equipment. This means that we need to upgrade or replace equipment to use non-ozone depleting gases. New cooling systems are being introduced - which don't use ozone depleting gases. However, we will not have upgraded or replaced all equipment by 2005.

Volatile Organic Compounds

We use volatile organic compounds (VOCs) mainly as solvents in our primary manufacturing operations. In 2004, we released 5.45 million kilograms of VOCs to the atmosphere.

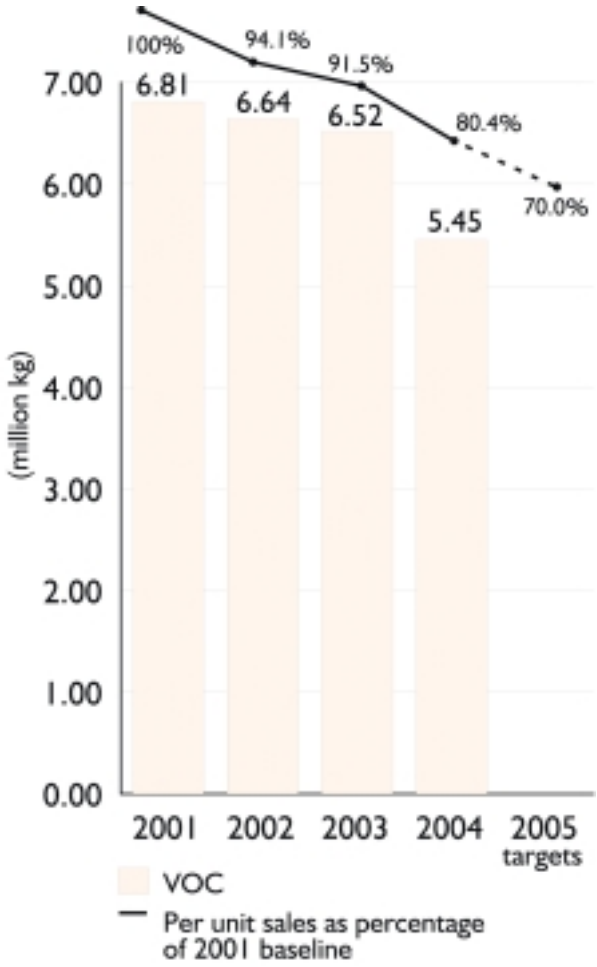
VOCs react with nitrogen oxides in the presence of sunlight, creating ozone in the lower atmosphere. This results in smog, which is a factor in human respiratory illness. Workplace exposure to certain VOCs can also pose a health risk.

Data Charts

- Volatile Organic Compounds Emitted to Air
- Volatile Organic Compounds Emitted to Air by Business
- Photochemical Ozone Creation Potential

Performance

Volatile Organic Compounds Emitted to Air



Note to VOC Charts

Emissions of volatile organic compounds (VOCs) are measured at GSK manufacturing operations and research and development facilities, including fugitive sources such as evaporation and leaks.

VOCs react with nitrogen oxides in the presence of sunlight, creating ozone in the lower atmosphere. This results in smog, which is a factor in human respiratory illness. We report photochemical ozone creation potential (POCP) in ethylene equivalents. Conversion to ethylene equivalents is based on the European Chemical Industry Council (CEFIC) "Responsible Care HSE Reporting Guidelines" for VOCs (1998).

ERM

Volatile Organic Compounds Emitted to Air

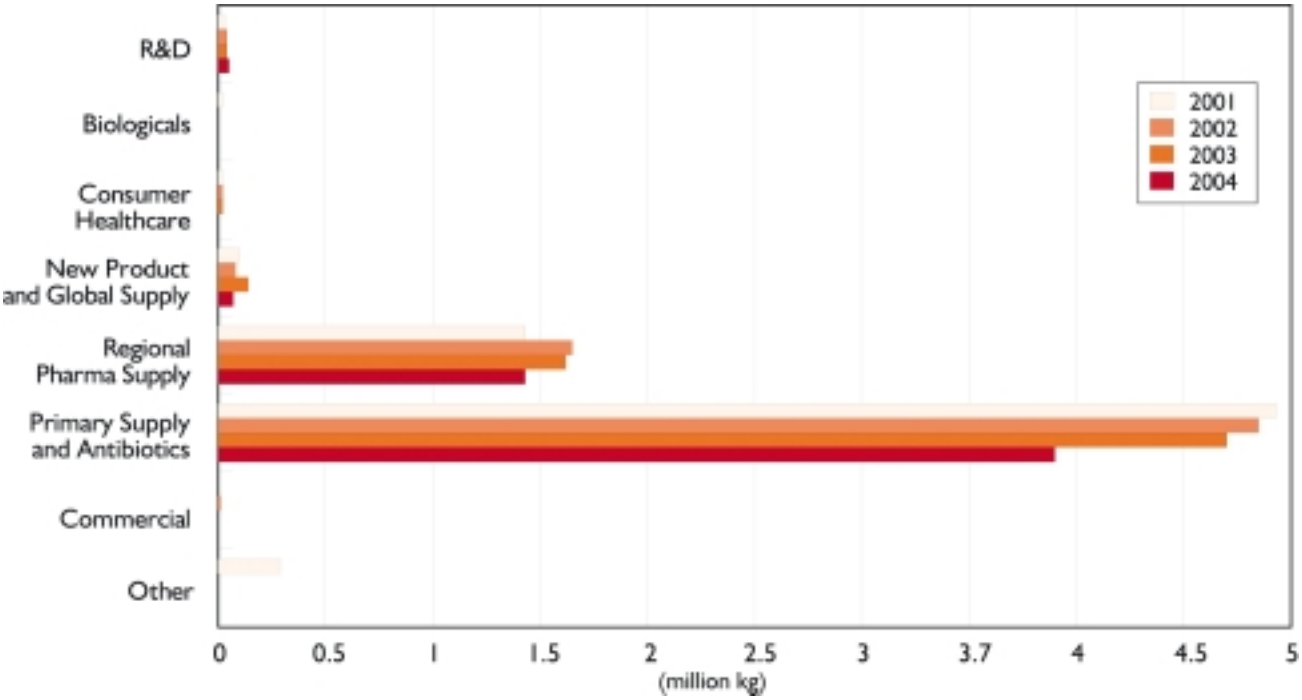
	VOC (million kg)
2001	6.81
2002	6.64
2003	6.52
2004	5.45

Per Unit Sales as Percentage of 2001 Baseline

2001	2002	2003	2004	2005
100%	94.1%	91.5%	80.4%	70.0%

Volatile Organic Compounds (cont.)

Volatile Organic Compounds Emitted to Air by Business

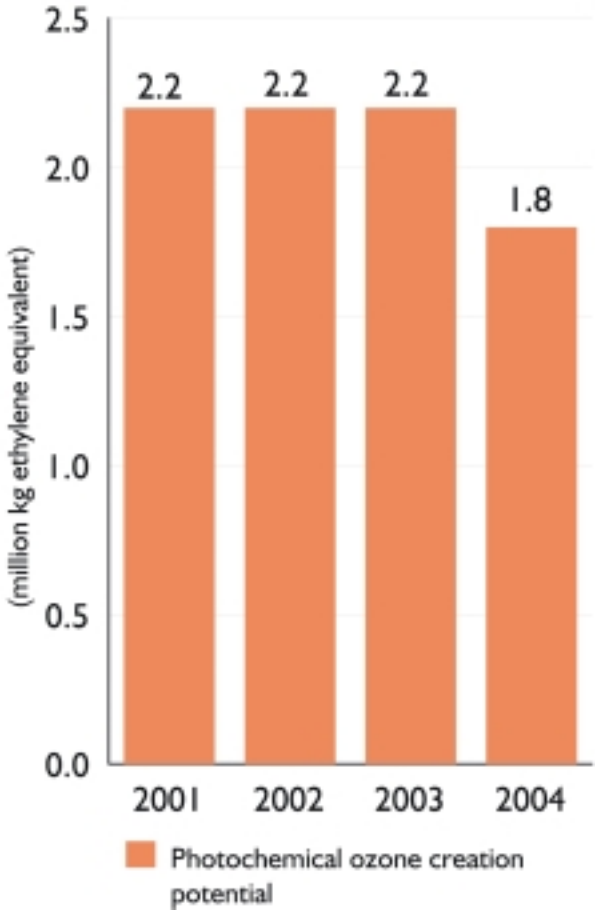


Volatile Organic Compounds Emitted to Air by Business

	2001	2002	2003	2004
	(million kg)			
R&D	0.03	0.04	0.04	0.05
Biologicals	0.02	0.00	0.00	0.00
Consumer Healthcare	0.02	0.02	0.02	0.00
New Product and Global Supply	0.10	0.08	0.14	0.07
Regional Pharma Supply	1.43	1.65	1.62	1.43
Primary Supply & Antibiotics	4.93	4.85	4.70	3.90
Commercial	0.00	0.01	0.00	0.00
Other	0.29	0.00	0.00	0.00

Volatile Organic Compounds (cont.)

Photochemical Ozone Creation Potential



Photochemical Ozone Creation Potential	POCP (million kg ethylene equivalent)
2001	2.2
2002	2.2
2003	2.2
2004	1.8

Total VOCs emitted to air decreased by 16.4% since 2003 (20.0% since 2001). VOCs emitted to air per unit sales decreased by 12.1% since 2003 (19.6% since 2001) - meaning we are on track to meet our 2005 target of a 30% reduction per unit sales since 2001.

Photochemical ozone creation potential decreased by 19.3% since 2003 (17.8% since 2001).

Volatile Organic Compounds (cont.)

CASE STUDY

Reducing Solvent Emissions at Ulverston, UK

We use a wide-range of solvents (volatile organic compounds) in the manufacture of Epivir (an antiretroviral), Zinacef and Zinnat (cephalosporin antibiotics) at our site in Ulverston, UK.

We endeavour to use these solvents in a sustainable manner and over 20,000 tonnes of solvent are recovered each year at the Ulverston-site for re-use in the manufacturing processes.

We have been working for a number of years to reduce releases of all solvents, including dichloromethane, at the site. In February 2003, the site produced a Solvent Management Plan and Substitution Plan - in line with the requirements of new EU regulations. These were updated in July 2004.

The site is authorised under the UK Environmental Protection Act 1990 to release a maximum of 1,000 tonnes of dichloromethane to air. In 2004, emissions to air totalled 269 tonnes - well below the limit and a reduction of 33% compared with 2003. Over the same period releases of other VOCs reduced by 10% and have declined by 30% over the last five years. Our target is to reduce emissions of dichloromethane to air to less than 190 tonnes in 2005 and 80 tonnes in 2006.

In 2004, we also reduced the amount of dichloromethane discharged into water by 80% compared with 2003. We aim to reduce this amount to below one tonne in 2005 and below 0.1 tonnes in 2006.

Dichloromethane continues to be used in enclosed equipment and regular monitoring of employees ensures their exposure levels remain low. The levels of all solvents, including dichloromethane, found around the edge of the site are well below guide limits set by the Environment Agency for England and Wales.

Product Stewardship

As well as managing environmental issues at our factories, we look more widely at the life-cycle of our products - from product design to use and eventual disposal. We call this product stewardship.

This section focuses on:

- product design - how we are incorporating environmental considerations into the design of new products;
- pharmaceuticals in the environment - what we are doing to understand and minimise the impact of pharmaceuticals released to the environment (following use);
- CFCs in metered dose inhalers - how we are progressing against our target to eliminate the use of CFCs (an ozone depleting gas) from our product portfolio by 2010.

There are a number of other environmental issues associated with our products, including the use of genetically modified organisms and the use of natural resources which may impact on biodiversity. See more on our approach to biodiversity on page 115 and genetically modified organisms on page 117. The research and development section of this report on our website.

Product Design

We are working to incorporate environmental considerations into the design of new products. This helps us to reduce waste and improve process efficiency.

Our eco-design toolkit alerts us to potential EHS issues early in the development process. It includes a green chemistry guide, materials guide, green packaging guide and FLASC (Fast life-cycle assessment for synthetic chemistry). It is available on our intranet.

In 2004, we made further progress in integrating our EHS Milestone Aligned Process (EHS MAP) into our product development and supply processes, including our "design for manufacturing" initiative. Approximately 650 employees in R&D and manufacturing attended training sessions on the EHS Map Process during the year. See business processes on page 20 for more about EHS Map .

See more on our approach to product design on page 105.

Product Design (cont.)

Designing Products for Environmental Sustainability

GlaxoSmithKline aspires to be a sustainable company but recognises that it will take many years of hard work to develop and fully integrate design for sustainability principles into the business and to effect the necessary change in culture to move from aspiration to reality. The initial focus will be to align environmental aspects of sustainability with the delivery of new products.

An example of the environmental focus is the GlaxoSmithKline eco-design toolkit, which was developed to support new product development and product transfer or redesign of processes. The eco-design toolkit can help us bring products to market faster as scientists and engineers begin to apply the eco-design principles and practices to design-out potential problems early in development. It also will help us bring products to market more cost effectively, because eco-design principles and practices will enable us to use less material and energy to make our products. It will also enable research and development to address potential environment, health and safety (EHS) issues during process development before a process is handed over to manufacturing where the cost of addressing process-related EHS issues may be considerably higher.

The toolkit is currently composed of four modules. Each of these was significantly revised during 2003 to enhance usability and to promote a standard look and feel. Each module was designed to ensure that all EHS impacts of materials, processes and services are considered, from the manufacture of the raw materials through to the ultimate fate of products and wastes in the environment. The modules currently available include the following:

Green Chemistry Guide

Green Chemistry Guide offers guidance to GlaxoSmithKline scientists and engineers on how to apply Green Chemistry concepts to enable more efficient use of resources, reduce environment, health and safety impacts and minimise costs. It includes:

- a ranking and summary of the most used chemistries and 'best-in-class' examples from well-developed GlaxoSmithKline processes;
- a ranking and review of issues encountered during process design and development;
- a ranking and summary of common technology alternatives for chemical processing;
- guidance on materials, process alternatives, synthetic route strategies and metrics for evaluating chemistries, technologies and processes.

Materials Guides

Solvent Selection contains information on a wide range of solvents used within GlaxoSmithKline operations and also identifies solvents that should be avoided. It:

- added a new section in 2003 to address recent legislative initiatives that affect future solvent use in the European Union;
- added a new section on the life-cycle impacts associated with solvent manufacture;

Product Design (cont.)

- compares and ranks 45 solvents according to environmental waste profile, environmental impact, safety profile and health impact;
- compares International Conference on Harmonisation (ICH) guidelines on allowable concentrations of solvents in active pharmaceutical ingredients against EHS characteristics of solvents;
- provides information on boiling point and azeotrope formation to assist in the selection of separable co-solvents;
- provides detailed information on physical properties, safety, health and environmental issues.

Base Selection ranks 42 chemical bases according to their environmental waste profiles, environmental impacts, safety profiles and health impacts. It also provides detailed information on each base.

Green Packaging Guide provides a packaging assessment tool, guidance and a business process for selection of packaging for the Pharmaceuticals and Consumer Healthcare businesses. In early 2003, the extensively revised site introduced a new interactive section of the Green Packaging Guide known as **WRAP** - Wizard for the Rapid Assessment of Packaging. **WRAP** is a tool and process that allows packaging designers and managers to rapidly assess the environmental impacts of existing and new packaging designs. WRAP represents a significant enhancement and includes:

- A facility for benchmarking new and existing packaging designs. Benchmarking is undertaken against GlaxoSmithKline's existing product portfolio split into the different product types. The method used considers five metrics that cover the product life-cycle:
  - Manufacture of packaging
  - Mass of packaging
  - Biodegradability
  - PVC content
  - Resource depletion
- A best-in-class example in each packaging category
- Green packaging guides for nutritional healthcare products and consumer healthcare products

Using a scoring mechanism, **WRAP** generates a simple colour-coded report that clearly shows if the packaging associated with a product is better or worse than the appropriate benchmark. **WRAP** also allows more detailed analysis of the underlying issues around the packaging and enables users to easily look at the effect of alternative packaging through scenario analysis. The benchmarks will be updated and expanded as more data on packaging for GlaxoSmithKline products are collected.

FLASC is the newest component of the eco-design toolkit. **FLASC** (Fast Life-cycle Assessment for Synthetic Chemistry) was launched in 2003. **FLASC** is a web-based application that allows bench chemists to perform a streamlined life-cycle evaluation of the environmental consequences of new or existing processes based upon the input materials used. **FLASC** is a process and tool that will enable an assessment of eight different environmental impact categories associated with materials used in a synthetic route or manufacturing process:

Product Design (cont.)

- Mass of materials used
- Energy required
- Photochemical Ozone Creation Potential (POCP)
- Greenhouse gas equivalents
- Acidification
- Eutrophication
- Total organic carbon generated before any waste treatments
- Oil and natural gas depletion for raw materials manufacture

FLASC helps scientists and managers to rapidly identify the greenest option by comparing and benchmarking processes and routes to make GlaxoSmithKline products using a simple scoring system. It identifies the materials that have the biggest environmental impacts and provides guidance on how to reduce those impacts. The tool also quantifies the energy and materials used in product manufacture, the emissions released and potential environmental impacts. And it serves as a tracking system for synthetic route or manufacturing process improvement throughout GlaxoSmithKline.

Pharmaceuticals in the Environment

When patients use pharmaceuticals, some of the active ingredient may not be completely metabolised and will generally be excreted. Wastewater treatment plants remove most pharmaceutical residues in the environment, but small concentrations do end up in rivers or the sea. In areas without wastewater treatment, higher concentrations are released to the environment.

In 2004, following consultation with external stakeholders, we developed a draft position statement on pharmaceuticals in the environment. This will be completed in 2005.

Internally, we have developed business processes to ensure that we carry out appropriate environmental tests as and when we should. Since environmental risk assessments (ERAs) are part of the new drug approval process in the EU and US, we work with various regulatory agencies to ensure that the potential environmental impacts of pharmaceuticals are understood and minimised. We also work with other pharmaceutical companies, universities and research groups to develop the science and methodologies to assess the environmental risks of pharmaceuticals in the environment and increase understanding of such risks. For example, in the US, GSK has been involved with the Pharmaceutical Research and Manufacturers of America (PhRMA) in developing the PhATE (Pharmaceutical Assessment and Transport Evaluation) model, a geographically explicit model based on hydrology and population patterns.

In 2004, we initiated more comprehensive environmental risk assessments using the PhATE™ model for about 40 active pharmaceutical ingredients (APIs), including paroxetine (the active ingredient in Paxil/Seroxat). These assessments will be published on our website. The underlying environmental fate and effects test data for pharmaceutically active components of GSK marketed products are now being embedded in Safety Data Sheets (SDS). These are available on our website at www.msds-gsk.com.

The risk assessments carried out to date indicate that our products do not appear to pose a risk for humans or the environment based on current methods for ascertaining effect levels. However, we continue to monitor the latest scientific studies and findings to improve our risk assessments in this area. A more in-depth review of our work on pharmaceuticals in the environment can be found on the following page.

Pharmaceuticals in the Environment (cont.)

When pharmaceuticals are administered to patients, some of the active pharmaceutical ingredient (API) may not be completely metabolised (biochemically altered and inactivated). These unmetabolised portions are generally excreted and find their way into sewage systems where they are transported to wastewater treatment systems that remove most of the pharmaceutical residues. However, extremely low concentrations may pass through the wastewater treatment plant and be discharged to the environment. Historically, the presence and amount of pharmaceuticals in different parts of the environment have been estimated. Recently, as a result of advances in analytical techniques, extremely low concentrations of pharmaceuticals are being measured in wastewater, surface water (rivers and streams) and drinking water. In addition, low level effects on aquatic organisms have been observed for specific APIs such as synthetic hormones.

The US Food and Drug Administration (FDA) have regulated pharmaceuticals in the environment in the USA since 1977 under the auspices of the National Environmental Policy act of 1969. Regulation occurs through the environmental review process for New Drug Applications submitted to the FDA. In Europe, draft guidelines for Environmental Risk Assessments (ERAs) that accompany Marketing Authorisation Approval Applications have been available for a number of years. The most recent guidelines were issued in January 2005 and are in the external comment period until April 2005. A key change in these guidelines is the requirement for chronic rather than acute ecotoxicity testing, recognising that most pharmaceutical active ingredients are not acutely toxic but may have longer term chronic effects at low levels. In Canada, a requirement for environmental assessment is in place and a specific ERA process for pharmaceuticals is under development. In Sweden, a classification scheme based on environmental characteristics of APIs is in development.

Since the late 1980's, GSK has been actively working with various regulatory agencies to ensure that potential environmental impacts of pharmaceuticals are understood and minimised. Over the last several years, there have been significant industry efforts to develop improved environmental risk assessment models in the United States and Europe. In the US, the pharmaceutical industry trade association, PhRMA (Pharmaceutical Research and Manufacturers of America) developed a watershed specific model to predict environmental concentrations from patient use (Anderson et al.). The industry task force developed a state-of-the-art geographically explicit model to facilitate a deeper understanding of potential environmental distribution of pharmaceuticals at a local or regional level. The PhATE™ (Pharmaceutical Assessment and Transport Evaluation) model is a watershed-based approach and was developed as a tool to more realistically estimate concentrations of active pharmaceutical ingredients (APIs) discharged to U.S. surface waters through consumption of medicines.

PhATE™ uses a mass balance approach to model predicted environmental concentrations (PECs) in eleven watersheds that are felt to be representative of most

Pharmaceuticals in the Environment (cont.)

hydrologic regions of the United States. Upon dividing the associated rivers into discrete segments, the model estimates the mass of API that enters a segment from upstream or from sewage treatment works (STWs) and the mass that is subsequently lost from the segment via in stream loss mechanisms or flow diversions (i.e. man-made withdrawals). STW discharge loads are estimated based on the population served, API use per capita, and the mass of the API removed in the STW. Monitoring data generated by the United States Geological Survey were used to corroborate the model. In addition, industry groups working through PhRMA developed human health effects data on the pharmaceutical compounds reported by USGS (Kolpin et al. 2002; Tabor and Barber 1993) and used the PhRMA PhATE™ (Pharmaceutical Assessment and Transport Evaluation) model to carry out human health risk assessments for 26 active pharmaceutical ingredients (APIs). A manuscript on this work has been submitted for publication in the peer-reviewed literature (Schwab et al. 2005). Another industry group under PhRMA has been working on potential impact of APIs on aquatic life. To date, a manuscript on issues connected with these types of assessments has been prepared for publication (Cunningham et al. 2005) and a literature database has been compiled on aquatic life impact data.

Independently, GSK has been using these models and methods to identify potential impacts of GSK pharmaceutical products entering the environment through patient use. A paper on the environmental risk assessment of paroxetine, the API in Paxil/Seroxat, has been published (Cunningham et al. 2004). This paper focuses on potential impacts of paroxetine on aquatic life. Another paper is in preparation that includes assessment of potential impacts on human health as well as aquatic life in the US for about 40 GSK APIs. Evaluations for selected European catchments using the GREAT-ER (Geography-referenced Regional Exposure Assessment Tool for European Rivers) Model, similar to PhATE™, are also in progress. In addition, the assessments and available environmental data for individual APIs are being provided in Safety Data Sheets that are available on the GSK website. The risk assessments that have been carried out to date using these models, combined with currently available human and environmental fate and effects data and methods, indicate that GSK pharmaceuticals in the environment do not appear to present a risk to humans or the environment. As part of its product stewardship activities, GSK continues to monitor the latest scientific studies and findings to continually improve risk assessments in this area. GSK is committed to providing leadership with regard to the science needed to assess potential impact, mitigation and management strategies, and to data, assessment and communication transparency.

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Metered Dose Inhalers

Metered dose inhalers (MDIs) were first introduced in the 1950s and are used as one of the main forms of treatment for asthma sufferers. They are pressurised, hand-held devices that use propellants to deliver doses of medication to the lungs of patients. CFCs were traditionally used as the propellant because they are non-toxic, non-reactive, non-flammable and odour and taste free.

When a patient uses the MDI, the propellant is released into the atmosphere. In 2004, 464 thousand kilograms of CFC propellant were released when patients used our products in the EU and US. A much smaller proportion of CFCs - 59 thousand kilograms - escaped during production (see ozone depleting substances in manufacturing on page 94).

Although the Montreal Protocol bans the production of CFCs, it does recognise a number of "essential uses" which are exempt from the ban. MDIs fall under the essential use exemption and are therefore still allowed to be manufactured.

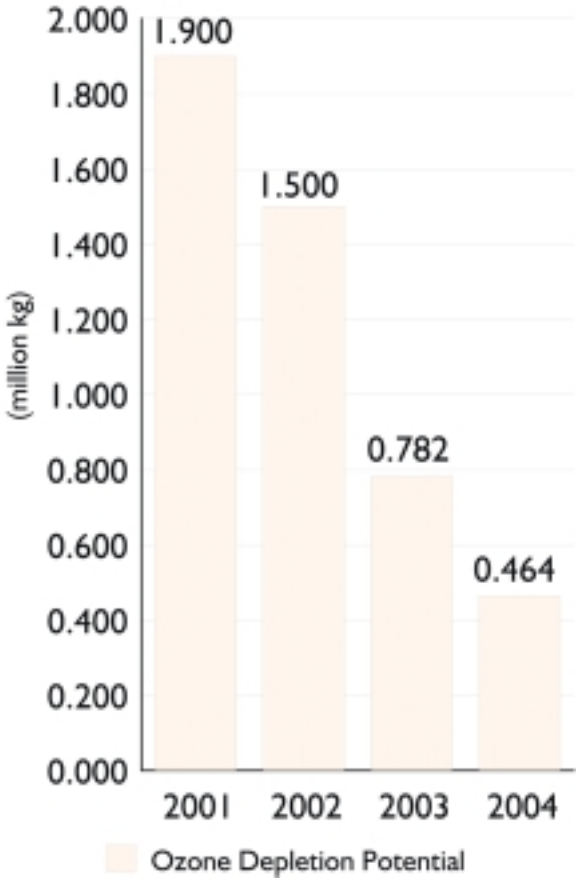
We plan to eliminate the use of CFCs from our product portfolio by 2010. We now offer a selection of alternatives to CFC-containing MDIs in most countries. The main alternative propellant we use is HFC 134a. We have also invested heavily in dry powder delivery systems that do not use CFCs. We estimate that the total amount we have spent on new plant and R&D on CFC-alternatives is over £550 million ($1 billion) since we identified this as an issue in the 1980s.

We are also researching alternatives to HFC 134a, which has a high global warming potential. A more in-depth review of our progress to eliminate emissions of ozone depleting substances can be found on page 93 and 113.

Metered Dose Inhalers (cont.)

Performance

Ozone Depletion Potential from Patient Use of Metered Dose Inhalers



Ozone Depletion Potential from Patient use of Metered Dose Inhalers	ODP (million kg)
2001	1.900
2002	1.500
2003	0.782
2004	0.464

Ozone depletion potential from patient use of metered dose inhalers decreased by 40.7% since 2003 (75.6% since 2001).

Note to Ozone Depletion Potential Charts

We report ozone depletion potential in CFC-11 equivalents as defined by the United Nations Environment Programme (UNEP) Ozone Secretariat (**www.ghgprotocol.org** and **www.ipcc.ch**)

The data only include EU and US.

Ozone Depletion

Ozone depleting substances (ODS) are a group of chemicals that can lead to destruction of ozone in the upper atmosphere. The mechanism of this chemical reaction is complex and it took many years for scientists to understand the effect on the environment. When ODSs are released at the earth's surface, they tend to accumulate close to the surface in the troposphere where they are not reactive and do not destroy the ozone. However, ODSs are eventually carried into the stratosphere where they are converted into more reactive gases, which then participate in reactions that destroy ozone. The loss of ozone in the upper atmosphere causes more ultraviolet-B radiation to reach the earth's surface and this can cause adverse environmental effects and adverse health effects such as skin cancer, ageing of the skin, eye disorders and suppression of the immune system. Before these adverse impacts were understood, industrial use of ODSs was very common.

GlaxoSmithKline uses ODSs in its Metered Dose Inhalers (MDIs). MDIs are used to treat Chronic Obstructive Pulmonary Disease or Asthma. Asthma is a chronic and life threatening disease that affects 300 million people around the world. Metered Dose Inhalers (MDIs) are one of the main forms of treatment for asthma. MDIs were first introduced in the 1950s. The MDI is a pocket-sized, hand-held, pressurised multiple dose inhalation system that can deliver a precise dose of medication to the airways when used appropriately. Essential components of an MDI are a canister, the drug substance, a gas to propel the drug into the patient and a device for releasing and directing the dose.

For decades, chlorofluorocarbons (CFCs), which are ozone-depleting substances, were the most suitable propellant for use in MDIs because they are non-toxic, non-reactive, non-flammable, odour and taste free and excellent solvents. However, CFCs have now been recognised as ozone depleting and global warming gases.

In support of the principles of the Montreal protocol GlaxoSmithKline has embarked on a comprehensive reformulation programme for all our metered dose inhalers. The company has also invested heavily in dry powder delivery systems that do not use CFCs. This has been a long and costly process with total costs estimated at $1 billion. As a result of this work, GlaxoSmithKline now offers a selection of alternatives to CFC-containing MDIs in most countries. We plan to make no further requests for "essential use" CFC volumes after 2005 and plan to eliminate the use of CFCs from our product portfolio and operations by 2010.

GlaxoSmithKline is taking steps to reduce the ozone depleting impact arising from our processes, products and operations by:

- reformulating the propellant in the MDIs from CFCs to HFC 134a, a non-ozone-depleting (although still a global warming) replacement;
- minimising emissions arising from MDIs rejected during the manufacturing stage in accordance with national standards;
- launching globally the non-CFC MDI as soon as possible after obtaining regulatory approval;

Learn More About

- Ozone Depletion
- Read about the Montreal protocol on the UNEP website

Ozone Depletion (cont.)

- removing the corresponding CFC product from the market within 6-12 months of launch depending on individual country health practices;
- offering a choice of an MDI or DPI (dry powder inhaler) device for our respiratory drugs;
- continuing to invest in research and development of novel inhaler devices with even lower environmental impacts;
- minimising fugitive emissions of CFCs and other ozone-depleting gases from our manufacturing sites through engineering controls and replacing halons (fire-fighting gases) and refrigerants.

GSK has been working to reduce production-related releases of ODSs and to replace ancillary plant (including cooling equipment) containing ODSs. GSK has two targets related to ODSs, one related to production-related emissions and the other related to emission of ODSs from ancillary equipment. GSK has stated that by the end of 2005, it will eliminate at least 50% of production-related ODS emissions and is currently on schedule to meet this target. GSK has also stated that it will eliminate the emission of ODSs from ancillary equipment by the end of 2005. GSK is not on schedule to meet this target and a team will be formed in 2005 to develop a business strategy to eliminate these emissions as soon as possible.

Biodiversity

While GlaxoSmithKline does not use natural product collection as a major source for existing products or as a major source of compounds for development of pharmaceuticals, we do work with collaborative partners such as Extracta in Brazil and the Centre for Natural Product Research in Singapore to collect some natural products. Because of the impact that their collection might have on biodiversity, medical researchers must follow rigorous standards regarding evaluation and collection of natural products. We are confident that our screening activities are conducted according to the principles set out in the Convention on Biodiversity (CBD).

GlaxoSmithKline's Position on Biodiversity

- Natural resource materials are potentially valuable sources of novel biologically active molecules which, once identified and their properties fully analysed, can serve as models for the invention of new, lifesaving medicines.
- GlaxoSmithKline recognises that all nations have sovereignty over the biological resources and indigenous knowledge within their territorial boundaries. Equally, unauthorised or unrestrained removal of natural materials from their indigenous habitats can harm the ecology and economy of the country concerned.
- GlaxoSmithKline's drug discovery efforts increasingly focus on high-throughput screening of synthetic chemical compounds. We therefore have limited interest in natural material collecting and screening programmes. However, where screening programmes are in place, the company supports the principles enshrined in the Convention on Biological Diversity (CBD).
- In the event of GlaxoSmithKline developing a commercial product from our natural material screening programmes, GlaxoSmithKline will ensure a clear benefit is returned to the country of origin. This benefit sharing may amount to payment of fair and reasonable royalties or other means determined by mutual agreement on a case-by-case basis.
- GlaxoSmithKline has a number of patents based on natural products and it is possible that more patents will arise from our screening programmes.

Specifically, GlaxoSmithKline has always undertaken to:

- work only with organisations and suppliers with the expertise and legal authority to collect plant and other natural material samples. These include botanic gardens, universities and research institutes around the world;
- ensure that the governments in developing countries are informed of and consent to the nature and extent of any proposed natural materials collection;
- protect biodiversity by classifying samples of plants and other organisms taxonomically and only investigate species if their supply is reproducible and sustainable;

Biodiversity (cont.)

- work with small quantities of natural materials to discover bioactive principles. Where possible further supplies of lead compounds and derivatives are synthesised;
- develop sustainable harvesting procedures to preserve the ecosystem from which the source material is derived where further supplies of the active compounds cannot be synthesised;
- where appropriate, collaborate with organisations to educate and train local people in collecting and screening skills;
- ensure an agreed benefit is returned directly or indirectly to the country of origin in the event of GlaxoSmithKline developing a commercial product based on a natural material;
- only transport potentially hazardous research and development material under contained use conditions and in accordance with the CBD's Cartagena Biosafety Protocol.

Conclusion

GlaxoSmithKline is fully aware of our responsibilities towards protecting biodiversity, respecting nature and working with the communities in which these natural resource materials are found. By adhering to the principles of the CBD, we are confident that we are operating in a sustainable manner and in a way that will enable us to continue developing, manufacturing and marketing new and innovative medicines that enable people to do more, feel better and live longer.

Genetically Modified Organisms

GlaxoSmithKline is in the forefront of the development and application of new scientific techniques to discover and develop new medicines and vaccines. We routinely use genetically modified organisms (GMOs) in the research and discovery of new therapeutic agents and also in the efficient manufacture of certain medical products such as vaccines.

Research and development operations use GMOs in a wide range of laboratory activities in our work to discover and develop new medicines. More specifically, they are used to identify the genetic targets and causes of disease, and to develop new drugs for conditions such as heart disease, diabetes and depression, as well as antibiotics. We use a number of different GMOs, predominantly harmless organisms such as disabled strains of the bacterium E.coli and eukaryotic cells in culture.

All work with GMOs within GlaxoSmithKline is controlled to the strictest national and international regulations, and we apply best practice across all our facilities. Any work with GMOs is subject to full risk assessment including safe conditions of use, storage and disposal. Any laboratory work with GMOs is performed under conditions of contained use, using containment laboratories appropriate to the risk of the materials handled. The large-scale fermentation or propagation of GMOs in research and development is always undertaken in fully contained systems. All processes are performed in closed vessels minimising the risk of release, in line with existing legislation and best practice. All work is controlled by written procedures, and regular maintenance checks ensure the processes are operated to the necessary level of contained use.

We also manufacture a number of products that are derived from genetically modified materials, such as Hepatitis B vaccine. GMOs are sometimes used as intermediates in the manufacturing process of medicines such as antibiotics, but GlaxoSmithKline does not produce any products that are or contain viable organisms. We have no plans to introduce products that are live GMO's for the foreseeable future. All manufacturing processes also operate under conditions of contained use to prevent the release of any GMOs to the environment.

GlaxoSmithKline has a policy of routinely treating all waste from our GMO operations, to ensure we do not release viable GMOs from our contained processes into the environment. As a result, all GMOs are inactivated prior to disposal by chemical or heat treatment.

We do not routinely undertake research and development involving the cultivation of genetically modified plant species. However, one exception was a small-scale field trial undertaken in Australia to develop morphine-containing medicines, which are only available on prescription from a doctor. Research was focused on increasing the yield of alkaloids in poppies with enhanced properties to develop more effective pain management medicines. The Australian government strictly controlled these small-scale trials. These trials have now been completed, and there are no plans at this stage to move to large scale production of GM poppies.

Contaminated Land

Land may become contaminated as a result of past practices in the management of materials, for example, through inadequate containment, accidental release or poor disposal practices. Depending on the circumstances, there may be potential for harm to the environment. GlaxoSmithKline employs global standards that require, among other things, the identification and management of contaminated land. GlaxoSmithKline enters into agreements with relevant authorities to assist in the remediation of contaminated land when required and then directs the remediation of contaminated areas to levels that are consistent with the expected future use of the land and with local regulatory requirements.

Following GlaxoSmithKline's earlier investigation of operational sites in the UK, it was determined that the majority featured low probability of contamination, or low hazard and pollution potential if contamination were present. A group of seven sites remained for further study, of which five are thought to require some remediation and two of these sites are undergoing partial or full decommissioning in preparation for sale.

In the US, GlaxoSmithKline is currently involved with 25 sites that must be remediated. These include 14 sites on the US Environmental Protection Agency's National Priority List (NPL) of so-called "Superfund" sites, as well as several sites listed under various state programmes. Most of these sites are abandoned waste disposal sites where waste generated from a GlaxoSmithKline facility may have been found among waste generated by several (in some cases, hundreds of) parties and often over many years.

In dealing with remediation sites over nearly 20 years, GlaxoSmithKline has always co-operated with the government upon notification and confirmation of our connection to a site, and worked with the other parties to effect the remediation. GlaxoSmithKline pays its fair share according to an agreed allocation of costs among the parties participating in the remediation. Even in cases where we cannot initially agree on an allocation, we employ an interim allocation to allow the work to go forward and settle final allocation later. GlaxoSmithKline generally participates in groups of companies organised to remediate sites in accordance with its allocation, among other factors. Participation varies from monitoring the activities of a committee to taking a leadership position in the committee.

Since 1980, GlaxoSmithKline and its heritage companies have spent over £100 million on remediation of more than 50 sites. Many of these sites will require long-term operation and maintenance (O&M) for systems such as groundwater treatment facilities. For "mature" sites – where "construction" is complete but O&M may be required long-term – GlaxoSmithKline and its corporate partners assess the possibility of returning such sites to beneficial use, such as community parklands, and where appropriate, assist in the implementation of such projects.

Animal Use Reduction in Occupational Toxicology

Occupational chemical hazard evaluation - Continued progress in reduction, refinement and replacement of testing in laboratory animals in 2004

Creation of GlaxoSmithKline products, from earliest research and development through to full-scale manufacture, requires that employees work directly with, or in proximity to, chemicals. To safeguard worker health, GlaxoSmithKline health and safety programmes have been organised to provide information on unique chemical hazards and to define health protective occupational exposure strategies. This dual approach supports design of equipment and facilities for containment and control of chemicals in the workplace to prevent or minimise human exposure and the possibility of harm. It also provides appropriate information for first aid and other care in the event of accidental contact with chemicals.

Occupational toxicologists in the Corporate Environment, Health and Safety (CEHS) group focus on understanding the potential effects of GlaxoSmithKline drugs and the chemical building blocks for these drugs handled in research and development and manufacturing settings. Special emphasis is placed on understanding the results of possible chemical exposure to the skin, eyes and respiratory tract; because they are common routes of workplace chemical exposure, as well as other human systems. Historically, achieving an understanding of the effects of chemicals in the workplace has involved use of laboratory animals as models for human systems. Growing scientific and public awareness around ethical use of laboratory animals has guided GlaxoSmithKline's efforts to continuously reduce reliance on animal models for occupational toxicology testing wherever possible without compromising worker safety. CEHS toxicologists have developed a programme to characterise the occupational health hazards of GlaxoSmithKline materials based on computer-generated prediction, cell and tissue culture and other methods not relying on animal testing.

We use a tiered approach to testing. In this approach, tiered evaluation of the potential effects of chemicals is initiated with searches for applicable information from literature databases. Structure-activity computer models are also used to predict possible effects. Initial research is complemented by evaluation of chemical parameters (such as acidic or basic character) that can contribute to possible adverse effects. In many cases, this first tier of assessment is sufficient to understand the hazards posed by chemicals making it possible to project likely effects from previously characterised materials to new materials and avoid use of laboratory animals altogether.

When insufficient or equivocal information is available from the initial tier of assessment, a second tier of testing is initiated. This second tier of testing involves use of cell culture, tissue culture and bacterial models. GlaxoSmithKline scientists have adopted several animal-use reduction techniques recognised by health regulatory and advisory agencies (such as the UK Health and Safety Executive and US National Institutes of

Animal Use Reduction in Occupational Toxicology (cont.)

Health) to organise the second tier of evaluation. GlaxoSmithKline scientists actively develop, publicise and validate alternative methods used in the second tier to allow increased reliance on test methods not using laboratory animals. Again, results of Tier II testing exempts many materials from evaluation in animal models. Finally, only when chemical production levels reach certain high volume levels (thereby increasing the potential for inadvertent or accidental chemical exposure) are tests with laboratory animals considered. In many cases these tests are required by regulatory guidelines. Even in these cases, alternate means for identifying chemical hazards are sought, and testing is done with reduced animal numbers. Data on animals used for hazard determination is submitted for regulatory reporting and the numbers of animals involved in occupational toxicology testing are included in the animal research section of the Corporate Responsibility Report.

Consistent application of the tiered approach to chemical hazard assessment adopted in 2001 has resulted in significant refinement of testing undertaken for worker health and safety purposes and continues to yield many examples of diminished and more effective use of animals.

Despite a great deal of progress, it was recognised in 2003–2004 that the integrated worker safety test strategy had a significant gap because there was no reliable non-animal test for the assessment of the potential of chemicals to irritate skin. Irritant damage to skin is a major source of occupational ill-health across the chemical and pharmaceutical industry. Furthermore, although playing a valuable role in our ongoing testing programme, our current screen for chemical irritation of the eyes relies upon animal tissues as source materials. With this in mind, two collaborative projects were started in 2003 and continued in 2004 in partnership with external research organisations, SafePharm Laboratories, Derby, England and SkinEthic Laboratories, Nice, France, to evaluate the performance of laboratory-prepared human tissue systems for prediction of the irritant potential of chemicals.

The first model evaluated the performance of reconstituted human-derived epidermal (RHE) tissues (derived via a semi-automated process from skin biopsy specimens) for predicting the skin irritant potential of chemicals. Twenty-three different chemicals, representative of those used or developed by GlaxoSmithKline, were applied directly to the cultured tissues and assessed for their effects on cell viability (survival over time), microscopic tissue structure and cytokine (cellular messenger molecules involved in the response to irritation) release. Overall concordance with existing data obtained from traditional assessments using live animals was excellent (80% or greater). Furthermore, by evaluating the time-course of toxicity it was possible to distinguish non-irritants from irritants and severe irritants from mild irritants. This ability to determine quantitative, graded effects is a major step forward towards identifying a real alternative to the animal models. The assay was also shown to be reliable and reproducible both within and between laboratories, which contrasts with wide

Animal Use Reduction in Occupational Toxicology (cont.)

variability reported for the current animal assay.

The second study used a human corneal epithelial (HCE) model based upon an immortal cell line of human origin to predict eye irritation. Twenty-one chemicals were tested, applied directly to the cultured corneal tissues. Responses in the form of effects on viability, microscopic appearance and cytokine release were then assessed. Results again showed excellent concordance (over 80%) with data derived from traditional models using live animals and an ability to distinguish in graded fashion non-irritants, mild irritants and severe irritants.

The results of these two studies verify the utility of these tissue culture models as predictive of results previously only achievable using live subject testing. Statistical evaluation of the studies suggests a high level of confidence in the results and we are planning to incorporate the two models into the tiered testing strategy for assessing occupational chemical hazards. In conjunction with current computerized assessments and other screening methods, sufficient information can now be obtained on the irritant potential of materials so that in many cases, animal assays will not be needed for worker safety purposes. Further investigative studies are planned, particularly with the corneal (eye) assay, to enable us to position these wholly in vitro techniques as the sole technology used for the assessment of the irritant potential of materials. Communications are also ongoing with international bodies such as ICCVAM (US Interagency Coordinating Committee for Validation of Alternative Methods) and ECVAM (European Centre for the Validation of Alternative Methods) to raise their awareness of GlaxoSmithKline's efforts in this area, and with other companies in the chemical and pharmaceutical industry to facilitate co-operation in progressing developments in this area.

These accomplishments highlight ongoing efforts by GlaxoSmithKline to significantly refine testing undertaken for worker health and safety purposes with the goal of reducing use of laboratory animal testing and operating more efficiently in circumstances where testing with live subjects can not be avoided.

Suppliers

Our supply chain is complex. It ranges from major strategic relationships with contract manufacturers that make final medicines for us to suppliers of key materials.

We have EHS standards for suppliers. We also include EHS requirements, based on the standards, in our initial agreements with new key suppliers and when we renew contracts.

We conduct regular EHS audits of our key suppliers to assess performance against our EHS standards and key legislation. We also carry out EHS audits before we start working with major new suppliers. We select which suppliers to audit on the basis of risk, including potential hazards. (The audits also cover basic questions on human rights.)

In 2004, we carried out 35 site-based EHS audits. Sixteen of the audits were in Asia, eleven in Europe, six in the US, one in Canada and one in Mexico. We also carried out four follow-up reviews.

We found a wide variation in performance across the sites audited. The lowest score was 22% and the highest was 92%. We make recommendations to sites following the audits and have a process to monitor progress, with a particular focus on poorly performing sites.

In 2004, three potential suppliers achieved unacceptable EHS scores (less than 30%) and therefore we did not source from them. No existing supplier scored below 30%.

In 2004, we developed an action pack for use by our procurement managers to help them identify the EHS risks associated with procurement activities.

In the US, we signed up to Green Suppliers Network (GSN) - a programme run by the US Environment Protection Agency to help small and medium-sized suppliers to reduce their environmental impact. In 2005, we will encourage our suppliers to participate in the project.

Key Audit Findings

Environment

We found the basic elements of an environmental management system at all of the sites we audited and 50% of the chemical sites were certified to the international environmental management standard ISO 14001. Most sites had a good understanding of environmental regulations and positive relationships with regulators.

In China and India, we generally found a high level of compliance with regulations and effective management of wastewater. However, the lack of infrastructure in these countries presents challenges. For example, the waste disposal options are limited and electricity is generated mainly from coal or poor-quality oil. We also found that air emissions were poorly controlled in a few cases.

Health and Safety

We found that health and safety was generally well managed at sites in Europe and North America. However, we identified some challenges in emerging economies, especially in areas relating to fire prevention and response, occupational hygiene and control of chemical exposure, identification of hazards and risks, and systems for reporting and investigating incidents.

Supplier Performance

We have approximately 80 centrally managed key suppliers, which include both contract manufacturers and suppliers of materials.

We are working towards quantifying the environmental impact of our contract manufacturers. This is a more difficult process than collecting data from our own sites because contract manufacturers are independently managed.

In 2004, we collected data from 14 major contract manufacturers for some core EHS parameters. The contract manufacturers produced 6,185,459 kilograms of product for GSK (including raw materials, primary and secondary manufacturing and secondary packaging). They disposed 37.8 million kilograms of hazardous waste and 4.9 million kilograms of non-hazardous waste. They used 541,535 gigajoules of energy related to energy and transport activities (146,737 gigajoules of electricity, 392,673 gigajoules of other non-transport fuels, and 2,125 gigajoules of transport fuels). Data from these companies are not included in any of the charts and they are not included in the verification by ERM.

See health and safety of Suppliers on page 148.

Compliance

As a minimum, we aim to comply with legal requirements on environment, health and safety.

Environmental Fines and Penalties

- Brasov, Romania - 24,333,400 ROL (approximately £409) from local water company for exceeding COD limit
- Zebulon, US - $100 (approximately £55) from local wastewater authority for exceeding permitted discharge limit for cyanide
- Clifton, US - 4 notices of violation without fines for pH excursions, one of which occurred in 2003
- Zebulon, US - 2 notices of violation without fines for pH, 1 for mercury, 1 for cyanide
- Memphis, US - Hazardous waste inspection resulted in 3 minor violations
- Ware GMS, UK - Unlicensed discharge from IPC AL7014 licensed processes

Health and Safety Fines and Penalties

- Clifton, US - $900 (approximately £500) OSHA fine for machine guarding incident

Progress Towards Targets

Our EHS Plan for Excellence sets out a strategy to improve our performance over the ten-year period to 2010, starting from a 2001 baseline. This includes interim targets to be reached by the end of 2005.

We are on track to meet seven of our ten targets. These cover some of our most important environmental issues, including energy and water consumption, ozone depleting potential, global warming potential, wastewater quality, volatile organic compound emissions and non-hazardous waste. We may not achieve the three targets on hazardous waste, recycling and ozone depletion potential of ancillary equipment by the end of 2005. A fuller explanation of our performance is provided on the relevant pages of this report. Next year we will set new targets for 2010.

Our group targets are based on improvement plans and forecasts from our sites. During the year, we asked all our sites to reconfirm their commitment to the 2005 targets they set in 2001. See more on our approach to setting targets on page 40.

This is a summary of our environmental performance per unit of sales. The graph shows the overall improvement (%) since 2001 and our 2005 targets.

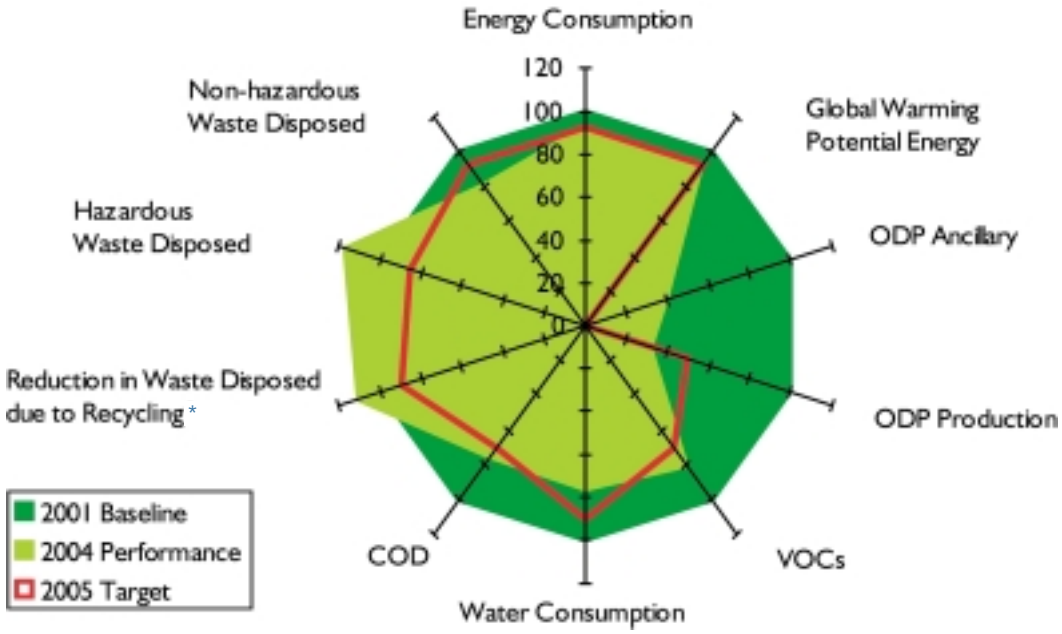
Data Charts

- Performance Summary

Progress Towards Targets (cont.)

Performance Summary

(expressed as a % change from a 2001 baseline)



* The formal wording of our target is to increase the proportion of waste recycled by 10%

Performance Summary

	2001 Baseline	2004 Baseline	2005 Target
	expressed as a % change from a 2001 baseline		
Energy Consumption	100	93.1	92
Global Warming Potential Energy	100	93.1	92
ODP Ancillary	100	39.5	0
ODP Production	100	32.5	50
VOCs	100	80.4	70
Water Consumption	100	76.7	90
COD	100	75.8	70
Reduction in Waste Disposed due to Recycling*	100	111.5	90
Hazardous Waste Disposed	100	117.3	85
Non-hazardous Waste Disposed	100	81.2	92

Health and Safety

The health and safety of employees and contractors is an absolute priority for GSK. We systematically assess the risks associated with our operations and take action to protect employees and others in the workplace.

We track the number of cases of work-related injury and illness resulting in time off work. Our target is to reduce work-related lost time injuries and illnesses per 100,000 employees by 15% every year until the end of 2005. During 2004, our injury and illness rate remained almost constant and therefore we did not meet our target. This may be partially explained by improvements in our reporting systems, including training, resulting in more accurate data.

We will redouble our efforts to resume the positive trend established between 2001 and 2003 that led to a 30% reduction in the illness and injury rate.

We routinely monitor the causes of incidents and assess what can be learned to avoid them happening again.

About the Health and Safety Section of This Report

This is the 5th year that we have reported on our health and safety performance. The legacy companies (Glaxo Wellcome and SmithKline Beecham) individually published EHS reports for a number of years prior to the formation of GSK in 2000. Copies of these reports are available on the Corporate Register Website.

In previous years, we have published a separate EHS report alongside our Corporate Responsibility Report, but this year we have fully integrated the two.

Scope of Data

The health and safety data covers the calendar year 2004. It is collected from all our 84 pharmaceutical and consumer manufacturing sites, 6 of 8 biologicals manufacturing sites and all 24 R&D sites as well as all 6 distribution centres, all 6 major office locations and 63 of our smaller offices and sales locations. We include data for sites that were in operation for all or part of the year.

Notes attached to the charts explain the scope and data collection process for each parameter in more detail.

Verification

The environment, health and safety sections of this report are externally verified by ERM (Environmental Resources Management). Web pages to which the verification applies are indicated by the symbol displayed on the right.

See ERM's Verification Statement on page 149.

How We Manage Health and Safety

We manage health and safety through an integrated environment, health and safety (EHS) management system. The system incorporates our EHS and Employee Health Policies, EHS Vision and 64 Global EHS Standards. Our EHS Plan for Excellence sets out our strategy for improving EHS performance up to 2010. See more on our EHS Management System on page 18.

Our Corporate Environment, Health and Safety (CEHS) and Employee Health Management (EHM) teams help coordinate our health and safety programmes. See more on our EHS Management Organisation on page 11.

In these pages we summarise activities during 2004 that relate specifically to health and safety. See the EHS Management section on page 5 for information on how we manage environmental and broader EHS issues.

Health and Safety Feedback From our EHS Audits

We aim to conduct EHS audits at each operational site at least once every four years. We carry out more frequent visits at selected sites, depending on an assessment of risk and the issues raised by previous audits. In 2004, 33 sites were audited including three key office locations. The average score was 71%.

Our audits identified several priority areas:

- Chemical risk assessment and control
- Managing resilience and mental well-being
- Ergonomic risk assessment and control
- Scope and adequacy of workplace risk assessments
- Management systems approach to auditing EHS programmes
- Root cause analysis of EHS incidents
- Implementation of permit-to-work programmes
- Management of contractors

All sites are required to develop plans to address any weaknesses and opportunities to improve identified in the audit. Auditors monitor sites' progress in implementing the plans. In 2004, the EHS audit process and scoring system were further refined based on experience and feedback. We are trialling EHS auditing software on our intranet site to help the auditors track progress, and aim to have a fully functional version ready in 2005.

How We Manage Health and Safety (cont.)

OHSAS 18001 Certification

In 2004, four sites achieved certification to the international health and safety standard OHSAS 18001 for the first time. This brings the total number of manufacturing sites certified to 14 out of 84 pharmaceutical and consumer manufacturing sites with one additional site that certified only the utilities area. The certified sites are in China, Egypt, France, India, Mexico, Poland, Turkey and the UK. See audits and certification on page 43 for information on certification to the environmental management standard ISO 14001.

Health and Safety Week

GSK runs an annual Health and Safety Week every October (to coincide with the European Health and Safety week). Information kits are sent to all sites to help them develop ideas and plan activities. In 2004, over 13,800 employees from 67 sites in 29 countries took part in the Health and Safety Week. Activities included sports days, safe driving education, ergonomics training, awareness-raising on healthy eating and lifestyles and family participation events.

Letter From the Vice President, EHM

Robert W. Carr,
Vice President,
Employee Health
Management

GlaxoSmithKline's mission - **improving the quality of human life by enabling people to do more, feel better and live longer** - depends on its people. At GlaxoSmithKline we are committed to creating the **best place** in which the **best people** can do their **best work** in order to achieve this mission.

When it comes to the **best people**, the health of our employees is vital to our ultimate success. The company's performance depends on people who are physically and mentally able and available to meet our business goals. The Employee Health Management (EHM) function provides the global framework and strategy that supports the protection and promotion of employee health and well-being. A key component of this strategy is disease prevention, which is accomplished through targeted health education and behaviour change programmes. Delivery of services and programmes within this framework is co-ordinated with the relevant Corporate and Business Human Resources and Environment, Health and Safety functions globally.

To attract, retain and develop the **best people**, we need to have the right culture; a culture that supports a resilient, diverse, healthy and performance-focused workforce. Resilience is the set of skills and behaviours necessary to be successful in the midst of a fast paced and continuously changing work environment. A web-based Team Resilience Toolkit provides managers with tools to assess organisational risks to well-being and develop action plans to address them. There is a group-wide commitment to supporting and enhancing the resilience of managers and staff, paying attention to stress prevention, pressure management and work-life balance. This process enables teams to identify barriers to doing their **best work** and promotes a supportive working environment. The term "resilience" is used to communicate to managers and staff the business case for workplace health and well-being. It emphasises the positive nature of organisational initiatives aimed at improving performance in a competitive business environment and the positive nature of taking personal responsibility for maintaining good health. In 2004, over 160 work teams have participated in resilience training leading to enhanced team resilience. The GlaxoSmithKline Resilience and Mental Well-being strategy was recognised by the UK Health and Safety Executive as a Beacon of Excellence and one of the best stress prevention strategies they have seen.

On a global basis, we continue to develop the capabilities of Employee Health professionals throughout GSK. Developing the EH Community is a top goal of the group. Regional Skills development workshops focusing on the top three global GSK health issues; musculoskeletal, mental health and chemical agents, as well as an intranet web community, an Employee Health Professional competency framework, and appropriate health intervention tools with global reach, are all important parts of achieving this goal. The use of best practice sharing enables these global health professionals to deliver employee health services using the **best work** processes in support of **GSK's businesses**. The focus on innovative program design and the use of cost-efficient channels has led to a broader outreach and more effective delivery to employees. Examples

Letter From the Vice President, EHM (cont.)

include innovative and prevention focused employee benefits, integrated re-engineering of the absence management process and linkage to Operational Excellence, optimisation of shared service delivery in the US and UK, and a "virtual consultancy" model for global operations. A key element of helping sites deliver best practice services is through focused planning and measurement and evaluation. At a group level this has been accomplished through a strategy mapping and balanced scorecard approach.

It is through these continued integrated efforts that GlaxoSmithKline will safeguard and enhance the health and well-being of employees and, as a consequence, will enhance shareholder value.

Robert W. Carr MD, MPH
Vice President,
Employee Health Management

Injury and Illness Rates

The main indicator we use to measure health and safety is the lost time injury and illness rate, i.e. work-related injuries and illnesses that result in time off work. Other measures include lost calendar days from injuries and illnesses, and reportable injury and illness without lost time.

Lost Time Injuries and Illnesses

Lost time injuries and illnesses are work-related incidents that are serious enough to result in one or more days away from work.

In 2004, there were 519 lost time injuries and 61 lost time illnesses corresponding to a combined rate of 0.30 per 100,000 hours worked.

At 71 sites in 35 countries, there were no lost time injuries or illnesses during the year. At one site in China, there have been no lost time injuries or illnesses for three years. In addition:

- two sites in Canada and Mexico achieved 5 million hours worked without a lost time injury or illness;
- one site in Puerto Rico achieved 4 million hours worked without a lost time injury or illness;
- three sites in Bangladesh, Pakistan and Singapore achieved 3 million hours worked without a lost time injury or illness;
- three sites in India, Saudi Arabia and the US achieved 2 million hours worked without a lost time injury or illness;
- ten sites in China, India, Pakistan, Poland, Spain, UK and the US achieved 1 million hours worked without a lost time injury or illness.

See more on injury and illness milestones on page 55.

Cases of work related mental ill health are excluded from the overall illness rate. This is because the consistency of reporting such cases is less robust than other occupational illnesses and there are variations in the way these illnesses are defined under local legislation which affects reporting. However, we are working to address these inconsistencies and aim to include these cases at a future date. In 2004, there were 30 cases of work-related mental ill health with lost time, a rate of 0.02 per 100,000 hours worked.

Note to Injury and Illness Charts

The health and safety data cover both our employees and contract workers who are directly supervised by GSK employees.

All injury and illness rates are per 100,000 hours worked.

Lost time injuries and illnesses are work-related injuries and illnesses that are serious enough to result in one or more days away from work.

Lost calendar days are the calendar days that employees could not work because of work-related injuries and illnesses. This helps to provide a measure of the severity of injuries and illnesses.

Reportable injuries and illnesses without lost time are reported incidents that did not result in time away from work (lost time). They are more serious than first aid but generally less serious than lost time.

We do not include cases of mental ill health in our lost-time illness rates. This is because of variations in the way mental ill-health is defined and reported across sites, which we are working to address.

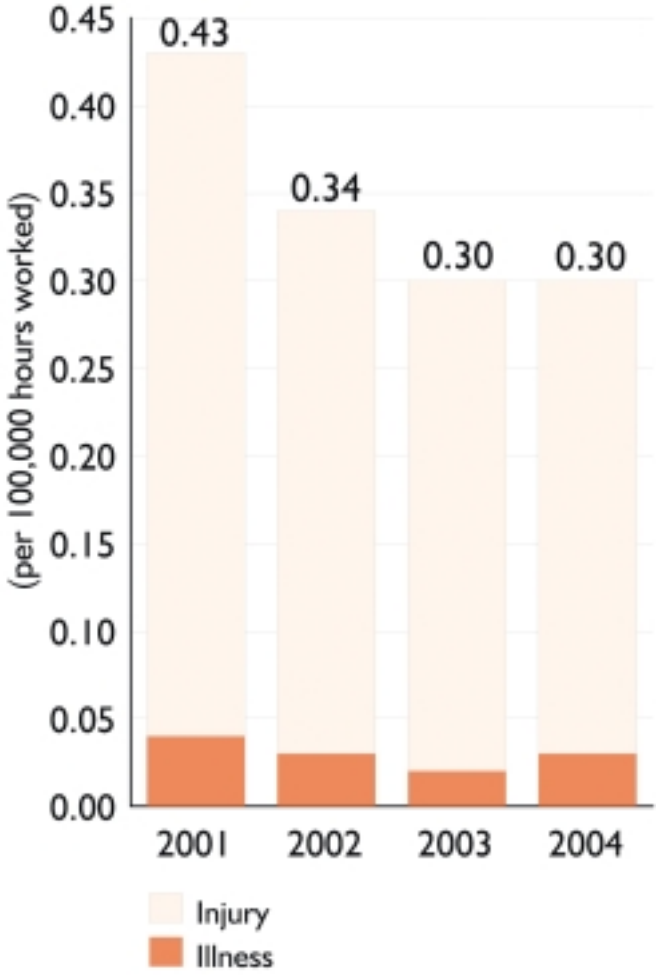
Data Charts

- Lost Time Injury and Illness Rate
- Lost Time Injury and Illness Rate by Business
- Calendar Days Lost Rate
- Reportable Injury and Illness without Lost Time Rate
- Reportable Injury and Illness without Lost Time Rate by Business

Injury and Illness Rates (cont.)

Performance

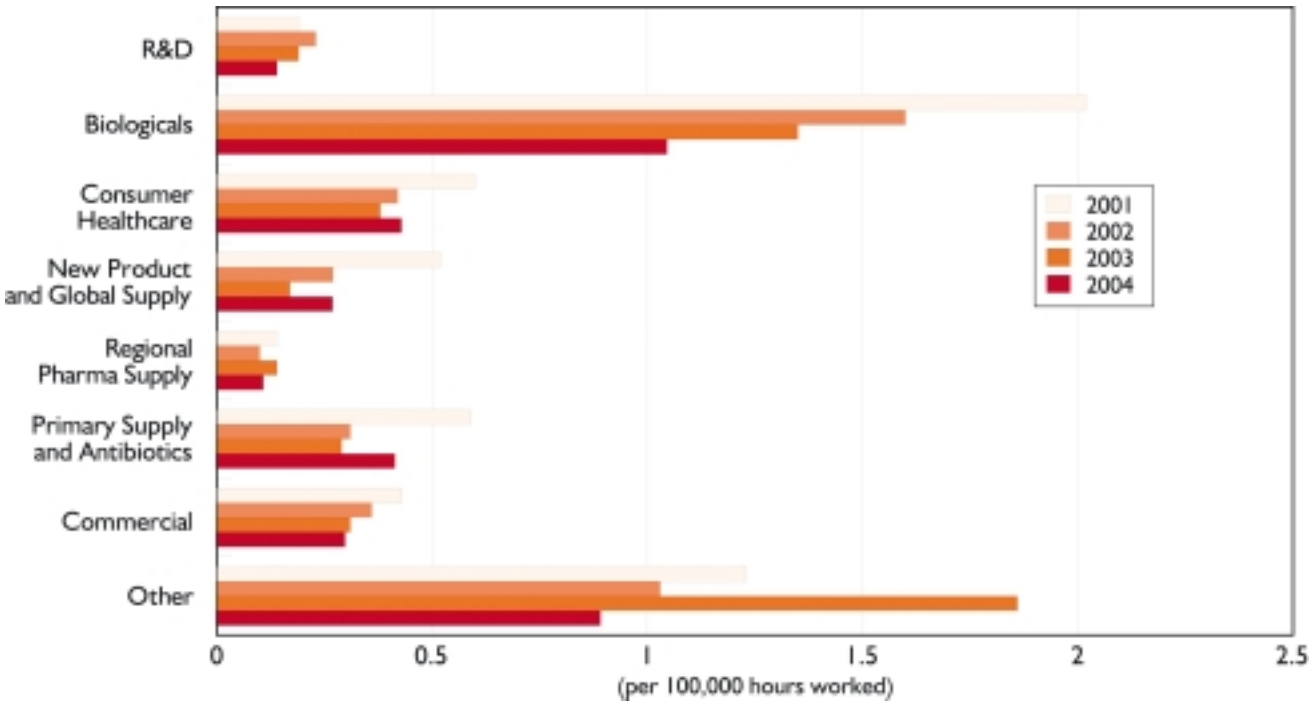
Lost Time Injury and Illness Rate



Lost Time Injury and Illness Rate		
	Injury	Illness
	(per 100,000 hours worked)	
2001	0.39	0.04
2002	0.31	0.03
2003	0.28	0.02
2004	0.27	0.03

Injury and Illness Rates (cont.)

Lost Time Injury and Illness Rate by Business



Lost Time Injury and Illness Rate by Business

	2001	2002	2003	2004
	(per 100,000 hours worked)			
R&D	0.19	0.23	0.19	0.14
Biologicals	2.02	1.60	1.35	1.05
Consumer Healthcare	0.60	0.42	0.38	0.43
New Product and Global Supply	0.52	0.27	0.17	0.27
Regional Pharma Supply	0.14	0.10	0.14	0.11
Primary Supply & Antibiotics	0.59	0.31	0.29	0.41
Commercial	0.43	0.36	0.31	0.30
Other	1.23	1.03	1.86	0.89

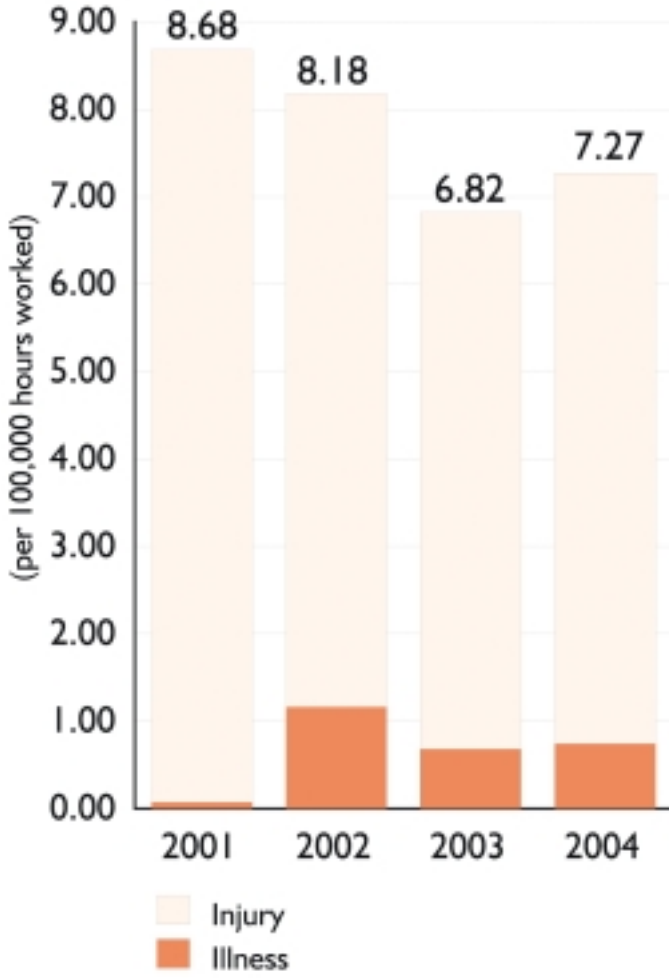
We track the number of cases of work-related injury and illness resulting in time off work. Our target is to reduce work-related lost time injury and illness per 100,000 employees by 15% every year until the end of 2005. During 2004, our injury and illness rate remained almost constant and therefore we did not meet our target. This may be partially explained by improvements in our reporting systems, including training, resulting in more accurate data.

We will redouble our efforts to resume the positive trend established between 2001 and 2003 that led to a 30% reduction in the illness and injury rate.

In 2005, we will need to achieve a 24% improvement to put us back on track to achieve our 2005 target.

Injury and Illness Rates (cont.)

Calendar Days Lost Rate



Calendar Days Lost Rate		
	Injury	Illness
	(per 100,000 hours worked)	
2001	8.61	0.07
2002	7.02	1.16
2003	6.14	0.68
2004	6.53	0.74

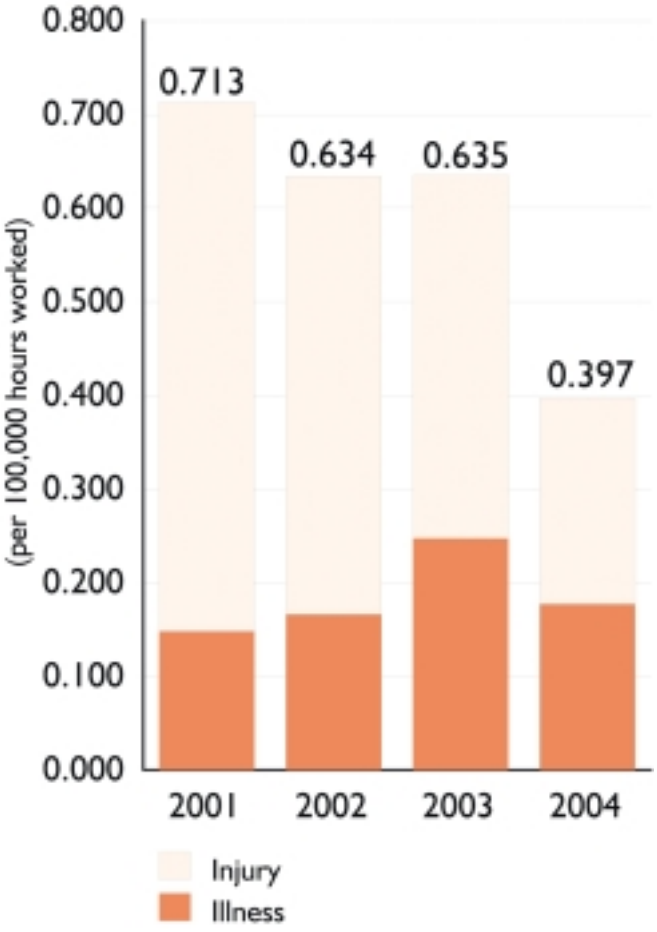
Lost Calendar Days From Injuries and Illnesses

We also measure the calendar days that employees could not work because of work-related injuries and illnesses. This helps to provide a measure of the severity of injuries and illnesses, although it is not always an accurate reflection, e.g., some illnesses such as hearing loss and sensitisation can result in permanent disability without resulting in lost time.

In 2004, excluding work-related mental illness, there were 12,748 lost days due to injury and 1,446 lost days due to illness. There were an additional 1,513 lost days due to work-related mental illness. In 2004, approximately 13% of illnesses resulted in permanent disabilities, such as noise-induced hearing loss, sensitisation to chemicals and some musculoskeletal illnesses.

Injury and Illness Rates (cont.)

Reportable Injury and Illness Without Lost Time Rate



Reportable Injury and Illness Without Lost Time Rate		
	Injury	Illness
	(per 100,000 hours worked)	
2001	0.564	0.148
2002	0.468	0.166
2003	0.388	0.247
2004	0.220	0.177

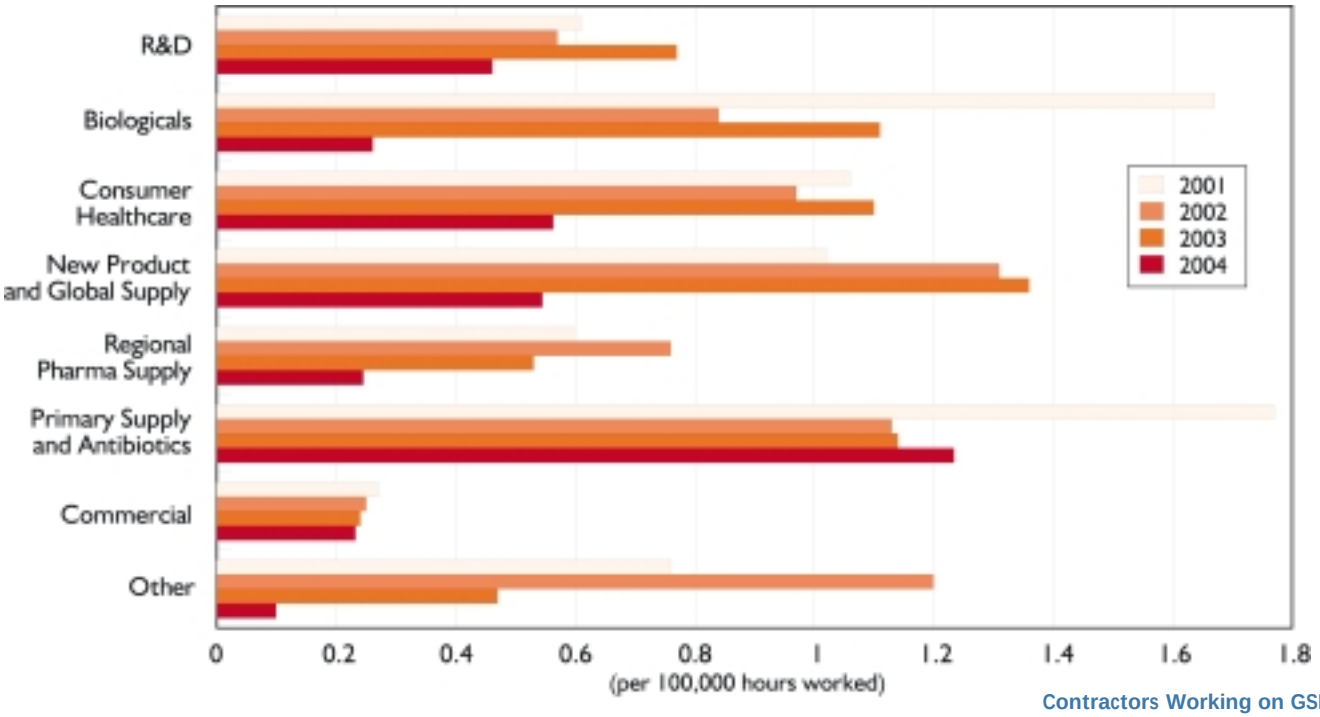
Reportable Injury and Illness Without Lost Time

We also measure the number of reportable injuries and illnesses that did not result in time away from work (lost days). These are work-related injuries and illnesses that are more serious than first aid but generally less serious than lost time.

In 2004, there were 430 injuries without lost time and 345 illnesses without lost time. There was also an additional 9 cases of mental illness without lost time, a rate of less than one per 100,000 hours worked.

Injury and Illness Rates (cont.)

Reportable Injury and Illness Without Lost Time Rate by Business



Reportable Injury and Illness Without Lost Time Rate by Business

	2001	2002	2003	2004
	(per 100,000 hours worked)			
R&D	0.61	0.57	0.77	0.46
Biologicals	1.67	0.84	1.11	0.26
Consumer Healthcare	1.06	0.97	1.10	0.56
New Product and Global Supply	1.02	1.31	1.36	0.54
Regional Pharma Supply	0.60	0.76	0.53	0.24
Primary Supply & Antibiotics	1.77	1.13	1.14	1.23
Commercial	0.27	0.25	0.24	0.23
Other	0.76	1.20	0.47	0.10

Contractors Working on GSK Sites (Not Directly Supervised by GSK Employees)

Here we report health and safety data for construction contractors or contract companies (e.g. those providing catering and landscaping services) who work on GSK sites but supervise and direct their own staff. The data for contract workers who are directly supervised by GSK employees are included in the data for GSK employees.

In 2004, there were 83 lost time injuries and illnesses (a rate of 0.40 per 100,000 hours worked). There were also 1,351 calendar days lost (a rate of 2.00 per 100,000 hours worked) and 412 reportable injuries and illnesses without lost time (a rate of 6.55 per 100,000 hours worked). This data is not included in the verification by ERM.

These rates are higher than those for GSK employees. Contract companies are responsible for supervising their own employees and also for providing them with safety training.

Causes of Injury and Illnesses

Lost Time Injuries and Illnesses

Slips/trips/falls, motor vehicle accidents and over-exertions/strains were the main causes of injuries resulting in lost time.

Mental illness, musculoskeletal illness (primarily repetitive strain injury) and infections were the main causes of illnesses resulting in lost time. There were two outbreaks of infection (caused by food poisoning at on-site catered events), resulting in 22 cases of food borne illnesses that resulted in lost time.

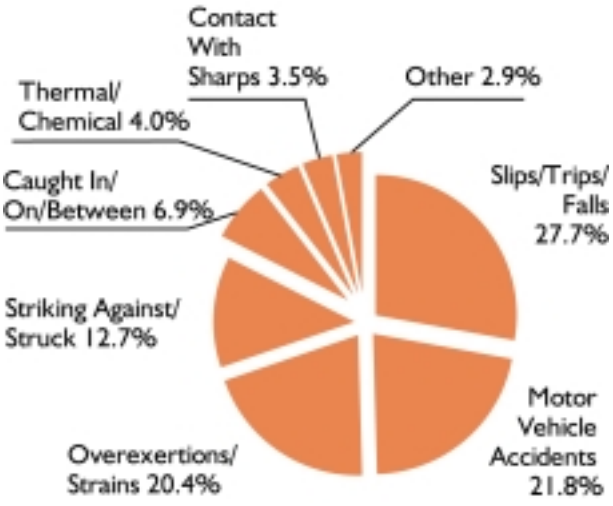
The causes of lost calendar days were very similar.

Performance

Data Charts

- Categories of Lost Time Injury
- Categories of Lost Time Illness
- Categories of Reportable Injury Without Lost Time
- Categories of Reportable Illness Without Lost Time

Categories of Lost Time Injury

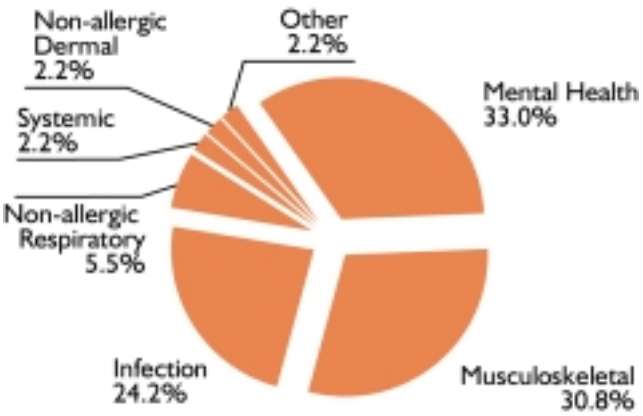


Categories of Lost Time Injury

Slips/Trips/Falls	27.7
Motor Vehicle Accidents	21.8
Overexertions/Strains	20.4
Striking against/struck	12.7
Caught in/on/between	6.9
Thermal/Chemical	4.0
Contact with Sharps	3.5
Other	2.9

Causes of Injury and Illnesses (cont.)

Categories of Lost Time Illness



Categories of Lost Time Illness	
Mental Health	33.0
Musculoskeletal	30.8
Infection	24.2
Non-allergic respiratory	5.5
Non-allergic dermal	2.2
Systemic	2.2
Other	2.2

Note to Injury and Illness Charts

The health and safety data cover both our employees and contract workers who are directly supervised by GSK employees.

All injury and illness rates are per 100,000 hours worked.

Lost time injuries and illnesses are work-related injuries and illnesses that are serious enough to result in one or more days away from work.

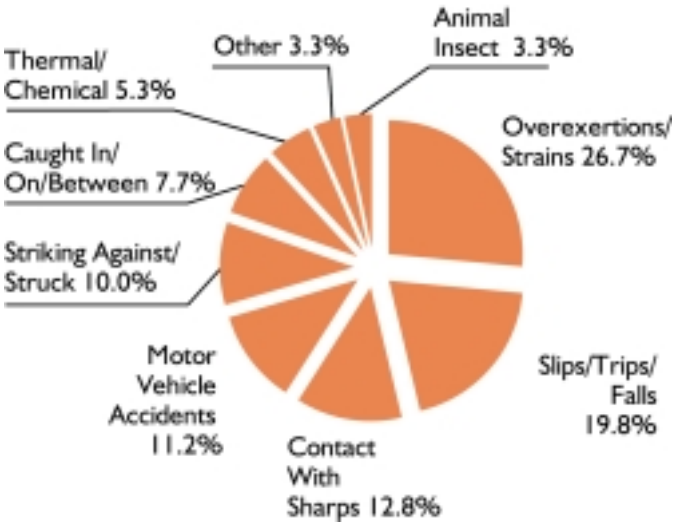
Lost calendar days are the calendar days that employees could not work because of work-related injuries and illnesses. This helps to provide a measure of the severity of injuries and illnesses.

Reportable injuries and illnesses without lost time are reported incidents that did not result in time away from work (lost time). They are more serious than first aid but generally less serious than lost time.

We do not include cases of mental ill health in our lost-time illness rates. This is because of variations in the way mental ill-health is defined and reported across sites, which we are working to address.

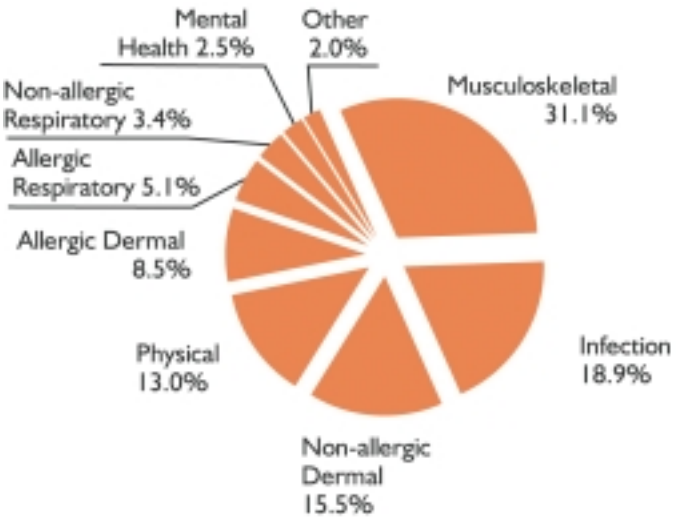
Causes of Injury and Illnesses (cont.)

Categories of Reportable Injury Without Lost Time



Categories of Reportable Injury Without Lost Time	
Overexertions/Strains	26.7
Slips/Trips/Falls	19.8
Contact with Sharps	12.8
Motor Vehicle Accidents	11.2
Striking against/struck	10.0
Caught in/on/between	7.7
Thermal/Chemical	5.3
Animal insect	3.3
Other	3.3

Categories of Reportable Illness Without Lost Time



Categories of Reportable Illness Without Lost Time	
Musculoskeletal	31.1
Infection	18.9
Non-allergic dermal	15.5
Physical	13.0
Allergic dermal	8.5
Allergic respiratory	5.1
Non allergic respiratory	3.4
Mental health	2.5
Other	2.0

Serious Incidents and Fatalities

We deeply regret two work-related employee fatalities and one work-related third party fatality during 2004.

In Egypt, a GSK sales representative fell into an elevator shaft while on a business trip. In the United States, a GSK sales representative died in a traffic accident. The third party fatality was in Brazil, where a visitor travelling in a GSK car died in a traffic accident. We are working to reduce traffic accidents through our driver safety programme. See safety programmes on page 146.

Our health and safety data covers driving accidents that occur on business travel. We only report data on commuting accidents if the vehicle is owned and operated by GSK. However, we took very seriously a commuting accident in Nigeria, where a truck collided with a bus (not owned or operated by GSK) carrying GSK employees to work, leading to six employee fatalities.

We also report serious incidents, i.e. incidents that result in permanent disability (including amputations) or those that are reported to the regulatory authorities. In 2004, accidents with machinery resulted in four employees (at sites in Japan, Pakistan, India and the US) needing to have part of a finger amputated. In addition, one employee (at a site in India) had to have a hand amputated and one employee (in the US) needed surgery but suffered no permanent disability. A Canadian employee suffered severe hand injuries following a serious car crash.

We investigate the circumstances of all fatalities and other serious incidents and assess what can be learned to avoid similar injuries again. We also issue global alerts (posted on our intranet site) to communicate information that could help prevent similar incidents at other sites.

Health Programmes

At GSK, we recognise that good employee health contributes to good business health.

Our Employee Health Policy – which sits alongside our EHS Policy – sets out our overall commitment to protecting and promoting the health and well-being of our employees. An Employee Health Management department supports our sites in implementing the policy globally. In 2004, we held workshops in India, Europe and the US for health practitioners to share information and best practice. See more on Employee Health Management Organisation on page 15

In 2004, our internal audits identified a number of weaknesses in the way sites manage key health risks, including chemical agents, ergonomics, and resilience and mental well-being. We have responded by developing new strategies on chemical exposure, ergonomics, and resilience and mental well-being and by introducing a number of new management tools and resources.

In 2005, we plan to set up a new employee health "scorecard" to measure and monitor the effectiveness of programmes and processes to promote the health and productivity of our employees.

Our aim is to improve GSK's business performance through enhancing the health and resilience of its people. Here are some of the key health achievements in 2004:

Resilience and Mental Well-being

There were 39 cases of mental illness (with and without lost time) at GSK in 2004 – a significant reduction from 79 in 2003. There was also a corresponding decrease in the number of days lost from work-related mental illness from 2,956 in 2003 to 1,513 in 2004.

Mental illness was the leading cause of work-related sickness absence, accounting for 33% of all work-related lost time illnesses. On average, each GSK case of work related mental illness resulted in 50 days off work, significantly more than the average number of days lost from other causes of occupational illness causing lost time.

We use the term 'resilience' to describe the set of skills and behaviours needed to cope successfully with the pressures of a rapidly changing work environment. We have strategies on resilience and mental well-being in the UK and the US. In 2005, we plan to develop a group-wide strategy on these issues.

During the year, a total of 150 teams in the UK used our Team Resilience Toolkit – developed in 2003 – to identify and manage risks and measure performance.

In many countries, including the UK and US, we continued to put in place health and stress-reduction programmes that are relevant to local conditions, cultures and workplace risks. Many of these are designed to reduce workplace pressure and encourage a good work-life balance. Examples include personal and team resilience, personal skills such as time management, flexible working options,

Topics in This Section

Health Programmes (cont.)

health awareness and education initiatives, and healthy food choices at our on-site catering facilities. We also provide fitness facilities either on-site or off-site at many of our sites. For example, in the UK, we have a fitness centre at GSK House in Brentford, and almost half (47%) of the employees who work there are members of it. In the US, we have fitness facilities at nine sites and an average of 20% of our employees have enrolled to use the facilities.

In 2004, our sites in Singapore and the UK received awards for initiatives to promote resilience. Our manufacturing site in Jurong, Singapore, received a Platinum Award from the Health Promotion Board of the Singapore Ministry of Health for programmes which encourage staff to "work hard, play hard and stay well." A bronze award was also presented to our Quality Road site for health programmes. In the UK, the GSK Resilience and Mental Well-being strategy was recognised by the UK Health and Safety Executive as a Beacon of Excellence and one of the best stress prevention strategies they have seen.

See more on our approach to resilience and mental well-being on page 30.

Ergonomics

In 2004, there were 28 cases of musculoskeletal illness (with lost time), mainly due to repetitive strain injury. These accounted for 31% of work-related lost time illnesses – the second most frequent category (after mental health). There were also 106 overexertion/strain injuries with lost time accounting for 20% of lost time injuries. In addition, musculoskeletal illness not related to work is the leading cause of sickness absence in the UK and one of the highest categories of healthcare spend in the US.

In response to these challenges, GSK has developed an ergonomics strategy up to 2010, and created and appointed a new position of a full-time professional ergonomist. With this appointment at the end of 2004 we will refine our strategy and programmes going forward.

Our approach to managing ergonomic issues is a collaborative one involving Employee Health Management staff, safety professionals, engineers, line managers and human resources functions.

In 2004, 106 sites carried out 3,243 office workstation risk assessments using our on-line ergonomics risk assessment tool. This has now been translated into French, Italian, Polish, Portuguese and Spanish and is available on our intranet.

During the year, we also started work to develop a specific ergonomics risk assessment and control tool for non-office based employees. This will be piloted in the US before being extended globally.

A key part of our strategy for 2005 and beyond is to establish employee-led ergonomic improvement teams at all GSK sites. In the UK, we now have such teams at thirteen sites. In 2004, these sites achieved a 40% reduction in musculoskeletal injuries and illnesses.

Over 80 examples of ergonomics best practice have been developed and shared on our intranet. We also created a new area on our intranet for people with ergonomics responsibilities to discuss issues, share ideas and access resources.

Health Programmes (cont.)

In 2005, the GSK ergonomics guidance will be updated to reflect the growing amount of knowledge and expertise in this field. We also plan to incorporate ergonomic principles into our design tool kits for new equipment and processes.

Our manufacturing site in Barnard Castle, UK, was awarded 1st place in the safety category of our EHS Excellence Awards for its ergonomic improvements. See case study on page 145.

See more on our approach to ergonomics on page 29.

Occupational Hygiene and Control of Chemical Exposure

In 2004, there were 9 cases of respiratory or dermal (skin) illness resulting in lost time and 115 non-lost time cases, mainly due to exposure to chemicals. Together, they accounted for 28% of work-related illnesses.

In 2004, we developed a strategy on control of chemical exposure up to 2010. This sets out a plan of action for achieving our 2010 goal of a 'shirt sleeve' working environment, i.e. a workplace where containment of chemicals during manufacture replaces the need for personal protective equipment.

During the year we surveyed all our sites to review the way they handle chemicals and control exposure to the most potent compounds (those with an exposure limit less than 100 micrograms per cubic metre. Note - a microgram is one millionth of a gram). This has helped us to understand our current position and set priorities for the future.

We have introduced new tools to help sites calculate the cost of different options for controlling exposure to chemicals. This has resulted in a better understanding of the true costs of control strategies and frequently demonstrates that engineering controls, including containment systems, are more cost effective than traditional control methods of extraction and personal protective equipment. A number of our sites have achieved significant savings by installing new containment systems. For example, in Parma, Italy, a new containment system for a toxic compound for treating cancer led to savings of £1.4 million. In Dungarvan, Ireland, a new enzyme containment solution led to financial savings of £0.2 million.

To share best practice across our sites, we have made available on our intranet site 43 engineering design kits for controlling chemical exposures (solutions already in existence that we know work) and 10 pre-engineered solutions (new designs). We are also working to develop new technologies that make it easier to contain highly potent compounds.

We continue to refine the way we assess the EHS hazards of materials and integrate this into our research and development process. In 2004, our experts established new occupational exposure limits for more than 40 materials and environmental limits based on scientific data for more than 300 materials.

A task force has been established in our antibiotic business to improve control of chemical exposures during manufacture. We are also addressing the challenging

Health Programmes (cont.)

task of controlling exposure to the most hazardous category of compounds during the manufacture of the final formulation of medicines that go to patients.

As with research into new medicines, testing of material hazards may involve animal experiments. GSK is committed to the principle of the 'three Rs' to reduce, refine and replace animal experiments. See more on occupational chemical hazard evaluation and animal testing on page 121.

See more on our approach to Occupational hygiene and control of chemical exposures on page 29.

HIV/AIDS

(Not verified)

In 2004, we continued to provide antiretroviral treatment (ARV) to all GSK employees (full and part time) and their families in the developing world where treatment is not provided adequately or consistently by the local healthcare system.

We also developed a number of awareness-raising initiatives. For example, in 2004, our factory in Nairobi, Kenya, worked with the National AIDS Trust in the UK to develop HIV/AIDs educational materials. This was funded by our Positive Action Programme which provides support to communities around the world affected by HIV/AIDs.

We also offer preferentially priced ARVs to other employers in Sub-Saharan Africa who provide care and treatment for staff.

Health Programmes (cont.)

CASE STUDY

Improving Ergonomics at our Barnard Castle Site

We have taken several initiatives to reduce ergonomic risks at our Barnard Castle site in northern England in 2004. The site won first place for safety in our 2004 internal Environment, Health and Safety awards for excellence.

The Ergonomic Improvement Team (EIT) was formed at the site in 2001 to combat increasing lost time illnesses and injuries related to musculoskeletal disorders such as repetitive strain injury. It includes 13 employees from a range of different departments across the site.

Ergonomics are considered in the design of new equipment - we conduct risk assessments and discomfort surveys, and consult trained local ergonomic experts.

We encourage employees to be aware of ergonomics and have seen a 160% increase in ergonomic hazards reported. The EIT has produced two ergonomics manuals for employees, an awareness training package and completed 80 improvement projects in a three year period (2002-2004) including the ones described below.

Warehouse employees operating very narrow aisle (VNA) hi-racker trucks complained of sore backs and wrists. The trucks were more than ten years old, so we decided to buy

The new isolator is one of 80 ergonomic improvement projects at Barnard Castle

a new fleet at a total cost of £347,000 ($635,000), primarily to improve operator comfort. The trucks have better controls that require less effort to manoeuvre, have more headroom to allow drivers to sit or stand comfortably, and fully adjustable seats designed to provide good back support. They are also more efficient and use less energy to operate.

We consulted employees when purchasing and installing a new isolator (to be used for the biological testing of products) in order to identify and minimise ergonomic risks. Responding to their comments, we modified the design of the isolator to minimise the amount of bending, twisting and stretching necessary to operate it.

In 2003, the site achieved its best ever EHS performance, with 3.4 million hours worked without a lost time injury or illness. The model developed at Barnard Castle is being rolled out across other GSK sites.

Safety Programmes

We systematically assess risks to anticipate potential accidents, and put programmes in place to minimise them. We also learn from investigating the causes of accidents and make improvements accordingly. In 2004, we introduced a number of new initiatives on driver safety and process safety.

Driver Safety

In 2004, there were 113 driving accidents (with lost time), which accounted for 22% of lost time injuries. Our sales representatives drive long distances every year and are therefore particularly at risk of driving accidents.

Our Global EHS standard on Occupational Travel includes requirements on driver safety. In 2004, we developed 11 technical instruction documents to help GSK businesses comply with the standard. These cover a wide range of topics including driver training, fitness to drive, vehicle selection, risk assessment, insurance, accident reporting, driver ergonomics, and driving and the environment. We monitor compliance with the standard through internal audits and self assessment questionnaires.

GSK also produced a number of tools to help commercial fleet managers improve driver safety. New driver safety programmes for sales representatives were introduced in 18 countries (Belgium, Bosnia, Brazil, Chile, Croatia, the Czech Republic, France, Germany, Hungary, Ireland, Italy, Lithuania, Nigeria, Slovenia, South Africa, Spain, Sri Lanka and Switzerland). More stringent requirements, such as additional training, were added to existing programmes in a number of countries (Australia, Canada, Japan, Poland and Romania and the US). In the UK, a comprehensive driver safety programme was developed in 2004 ready for roll-out to the three GSK commercial business units in January 2005. We will continue to expand driver safety programmes throughout commercial operations in the next few years.

In a few countries, we provide motorbikes or scooters for employees. In 2004, a GSK Motorbike Rider Safety Manual was produced. This was distributed in local languages to employees in countries where motorbikes are widely used, including Bangladesh, India, Indonesia, Pakistan and Vietnam. These countries have now also fully implemented the GSK requirement for every driver of a motorbike to wear a helmet. We will continue to follow up and monitor the implementation of the motorbike safety programme.

See more on our approach to driver safety in EHS Programmes in GSK Commercial on page 27.

Learn More About

- EHS Programmes in GSK Commercial.
- Our approach to process safety and safety engineering
- Download our safety data sheets
- Safe transport of materials

ERM

Safety Programmes (cont.)

Process Safety and Safety Engineering

Our process safety programme ensures that safety is built into our manufacturing processes. A Process Hazard Analysis (PHA) must be completed before any new project is carried out. In 2004, we launched a new Failure Mode and Effects Criticality Analysis (FMECA) system to help engineers develop safer processes.

See more on our approach to process safety and safety engineering on page 31.

We have developed safety data sheets (SDSs) for more than 1,200 of our products. Some of these are available on our website. In 2004, we developed an email notification tool which automatically keeps employees up-to-date with changes to SDSs. We also started to make environmental testing data available on our SDSs.

In 2004, we also launched the HazClass System to help track hazardous material shipments worldwide and ensure the safe transportation of over 10,000 materials per month. See more on safe transport of materials on page 25.

Suppliers

Our supply chain is complex. It ranges from major strategic relationships with contract manufacturers that make final medicines for us to suppliers of key materials.

EHS Audits

We conduct regular EHS audits of our key suppliers to check they comply with our EHS standards and key legislation. In 2004, we carried out 35 site-based EHS audits of existing and potential suppliers. We found a wide variation in performance across the sites audited. The lowest score was 22% and the highest was 92%. We make recommendations to sites following the audits and have a process to monitor progress, with a particular focus on poorly performing sites.

In 2004, three potential key suppliers achieved unacceptable EHS scores (less than 30%) and therefore we did not source from them. No existing supplier scored below 30%.

We found that health and safety was generally well managed at supplier sites in Europe and North America. However, we identified some challenges in emerging economies, especially in areas relating to fire prevention and response, occupational hygiene and control of chemical exposure, identification of hazards and risks, and systems for reporting and investigating incidents. See suppliers on page 122 for more about our EHS audits

Supplier Performance

We have approximately 80 centrally managed key suppliers, which include both contract manufacturers and suppliers of materials.

We are working towards reporting the health and safety performance of our contract manufacturers. This is a more difficult process than collecting data from our own sites because contract manufacturers are independently managed.

In 2004, we collected health and safety data from 13 major contract manufacturers. This data is not included in the verification by ERM.

Employees at the 13 contract manufacturers who reported health and safety data worked a total of 12.8 million hours on manufacturing GSK products in 2004.

Lost Time Injury and Illness:
There were 65 lost time injuries and 16 lost time illnesses corresponding to a combined rate of 0.64 per 100,000 hours worked.

Injury and Illness Without Lost Time:
There were 121 injuries without lost time and 22 illnesses without lost time corresponding to a combined rate of 1.11 per 100,000 hours worked.

Calendar Days Lost from Injury and Illness:
There were 1,540 lost days from injuries and 84 lost days from illnesses corresponding to a combined rate of 12.71 per 100,000 hours worked.

Verification Statement

ERM (Environmental Resources Management Limited) was asked by GSK to independently review the environment, health and safety (EHS) sections of its 2004 *Corporate Responsibility* report (at Section 2 '*Employment Practice*' and Section 11 '*Caring for the Environment*') and supporting background information provided at GSK.com.

This is the fourth year that ERM has verified GSK's EHS reporting. The objectives of our review were to: check that the information presented is accurate, and that it represents GSK's performance fairly; critically review the completeness and relevance of the information presented; and assess the effectiveness of GSK's data management systems. All pages that contain verified EHS data are marked with the following symbol.

We have focused on understanding GSK's EHS data management and reporting processes and EHS performance. The assessment covered 22 percent of GSK manufacturing sites and 17 percent of the R&D facilities, expanding ERM's coverage of sites compared to 2003.

Overall Findings

Subject to the comments and scope set out below, we believe GSK's *Corporate Responsibility* report covers the key EHS issues that interested parties need to know to inform decision making (i.e. is *relevant*), does not avoid major issues (i.e. is *complete*) and fairly reflects programmes and performance on the ground (i.e. is *accurate*).

ERM Scope

Between November 2004 and March 2005, ERM:

1. reviewed EHS data management and reporting processes, and performance changes, at a cross-section of sites, through four site visits and 20 telephone interviews;
2. interviewed personnel responsible for data collation in Corporate EHS (CEHS) and checked sample group data;
3. interviewed corporate representatives to obtain supporting information on the following EHS programmes: acquisitions and divestitures, contaminated land, climate change and ozone depleting potential, auditing of suppliers and contract manufacturers, and EHS reporting by the Commercial business support team;
4. participated in the final CEHS data-checking and review process undertaken after the sites had submitted all EHS data;
5. checked that the EHS sections of the 2004 *Corporate Responsibility* report reflect our findings.

Findings

Relevance and Completeness

Overall, the EHS sections of the 2004 *Corporate Responsibility* report cover the key issues that are relevant to GSK's business.

Each year, ERM makes recommendations for improvement. In response to an ERM recommendation made in the *Sustainability in Environment, Health & Safety report 2003*, GSK has attempted to collect information on the reasons for

Verification Statement (cont.)

changes in site EHS performance. ERM has noted improvement to GSK's reporting of the reasons for performance change in the 2004 EHS report sections.

We have also noted progress made in 2004 in relation to GSK's reporting of transport-related greenhouse gas emissions.

In 2004, GSK obtained EHS performance data from 14 contract manufacturers (versus seven in 2003), as part of its effort to quantify GSK's broader 'EHS footprint'. GSK has focused on collecting key EHS indicator data from business-critical contract manufacturers (this data was not verified by ERM).

Accuracy

This year, corporate data checking processes have been strengthened to increase the quality of the data, through involvement of additional GSK personnel and ERM's participation in the final checking process. GSK also observed ERM's verification process at one site visit. Next year, GSK proposes to use its myEHS database system to track data-checking actions with each site.

During 2004, we have seen examples of increased reporting of illness and injury data by sites, which may in part be due to improved awareness as a result of the introduction of the myEHS 'Incidents' database. Associated training has been provided to GSK personnel at approximately 100 sites.

ERM identified three material data inaccuracies relating to wastewater quality (COD), wastewater volume, and production use of ozone depleting substances. These were subsequently addressed by GSK to ensure accurate reporting in the 2004 *Corporate Responsibility* report.

ERM identified potentially material under-reporting of EHS data (in particular injury and illness data) by GSK's Commercial business, which includes office-based and field sales force staff.

Responsiveness

GSK has reported that stakeholders would like GSK to prepare a combined *Corporate Responsibility* report incorporating EHS and would like to better understand management and performance of a number of non-financial issues. In response, GSK has produced this single web-based *Corporate Responsibility* report, and is in the process of preparing position papers on a selection of issues (e.g., climate change).

Recommendations

ERM recommends that GSK:

- builds on work undertaken in 2004 to strengthen internal reporting processes, better understand the reasons for EHS performance changes and enable more consistent and explicit external reporting;
- further improves collection and reporting of performance data from contract manufacturers and suppliers, focussing on those which are business critical and those with the greatest EHS risk profile;
- improves the accuracy of environmental key performance data by more comprehensively checking completeness of data reported by the operations;

Verification Statement (cont.)

- supports key operations to more accurately monitor material flows and discharges related to key environmental performance indicators;
- assesses the potential for material data inaccuracies resulting from under-reporting by GSK's Commercial operations and puts in place improvement programmes to obtain a more complete data set;
- reviews the limitations of EHS performance data, in particular the potential scale of statistical uncertainty for target-related key EHS performance data, including transport derived emissions of greenhouse gases.

ERM
March 2005

GRI Index

This table shows which elements of the Global Reporting Initiative guidelines are covered in our report or elsewhere on the GSK website.

GRI Guideline			Covered?	Link
1. Vision and Strategy				
1.1	Core	Statement of the organisation's sustainability vision and strategy regarding its contribution to sustainable development	Yes	CR Principles EHS/ Management Framework/Vision
1.2	Core	Statement from CEO (or equivalent senior manager) describing key elements of the report	Yes	CEO Statement
2. Profile				
2.1	Core	Name of reporting organisation	Yes	CR Report 2004
2.2	Core	Major products and services	Yes	Products
2.3	Core	Operational structure of the organisation	Yes	Annual Review
2.4	Core	Description of major divisions, operating companies, subsidiaries and joint ventures	Yes	About GSK
2.5	Core	Countries in which the organisation's operations are located	Partial	Partial List Map for R&D Locations: Worldwide Locations
2.6	Core	Nature of ownership; legal form	Yes	Annual Report
2.7	Core	Nature of markets served	Yes	Annual Report
2.8	Core	Scale of the reporting organisation		Annual Review
		Number of employees	Yes	Employment Practices Annual Report
		Products/services offered		Products Annual Report

GRI Index

GRI Guideline			Covered?	Link
		Net sales	Yes	About GSK Annual Report
		Total capitalisation broken down in terms of debt and equity	Partial	Annual Report
2.9	Core	List of stakeholders	Yes	Engagement With Stakeholders
Report Scope				
2.10	Core	Contact person(s) for the report, including e-mail and web addresses	Partial (no contact name)	Feedback
2.11	Core	Reporting period (e.g., fiscal/ calendar year) for information provided	Yes	About This Report
2.12	Core	Date of most recent previous report (if any)	Yes	Previous reports are available for download: CR Reports Downloads
2.13	Core	Boundaries of report and any specific limitations on the scope	Yes	About This Report
2.14	Core	Significant changes in size, structure, ownership, or products/services that have occurred since the previous report	No	No significant changes since last report.
2.15	Core	Basis for reporting on joint ventures, partially owned subsidiaries, leased facilities, outsourced operations and other situations that can significantly affect comparability from period to period and/or between reporting organisations	Yes	About This Report Contractors' Performance
2.16	Core	Explanation of the nature and effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement	No	

GRI Index

GRI Guideline			Covered?	Link
Report Profile				
2.17	Core	Decisions not to apply GRI principles or protocols in the preparation of the report	Yes	The report provides a GRI Index (this table) that indicates which GSK indicators are also GRI indicators. The issues covered are those considered most important by our stakeholders.
2.18	Core	Criteria /definitions used in any accounting for economic, environmental, and social costs and benefits	Yes	Throughout the report.
2.19	Core	Significant changes from previous years in the measurement methods applied to key economic, environmental and social information	Yes	Any changes have been indicated next to relevant charts.
2.20	Core	Policies and internal practices to enhance and provide assurance about the accuracy, completeness, and reliability that can be placed on the sustainability report	Yes	We have consulted widely with our stakeholders about what should be in the report: Engagement With Stakeholders EHS Stakeholder Engagement EHS information has been externally verified: Verification Statement
2.21	Core	Policy and current practice with regard to providing independent assurance for the report	Yes	EHS information has been externally verified: Verification Statement

GRI Index

GRI Guideline			Covered?	Link
2.22	Core	Means by which report users can obtain additional information and reports about economic, environmental and social aspects of the organisation's activities, including facility-specific information (if available)	Yes	More information about corporate responsibility, community partnerships, economic performance, financial results, research and development is available on the website. Links are provided where relevant throughout the report. Previous reports are available for download: CR Reports Downloads
3. Governance Structure and Management Systems				
3.1	Core	Governance structure of the organisation, including major committees under the board of directors that are responsible for setting strategy and for oversight of the organisation	Yes	Managing CR EHS Management About GSK/Corporate Governance
3.2	Core	Percentage of the board of directors that are independent, non-executive directors	Yes	About GSK/Corporate Governance
3.3	Core	Process for determining the expertise board members needed to guide the strategic direction of the organisation, including with regard to environmental and social risks and opportunities	Yes	About GSK/Corporate Governance
3.4	Core	Board-level processes for overseeing the organisation's identification and management of economic, environmental, and social risks and opportunities	Yes	Managing CR
3.5	Core	Linkage between executive compensation and achievement of the organisation's financial and non-financial goals	Yes	Annual Report

GRI Index

GRI Guideline			Covered?	Link
3.6	Core	Organisational structure and key individuals responsible for oversight, implementation, and audit of economic, environmental, social and related policies	Yes	Managing CR EHS Management
3.7	Core	Mission and values statements, internally developed codes of conduct or principles, and policies relevant to economic, environmental and social performance and the status of implementation	Yes	About GSK/Corporate Governance/Corporate Ethics & Compliance Programme Business Ethics/Code of Conduct EHS/Management Framework/EHS Management Policy Managing CR EHS Management We report our progress against our CR Principles throughout the CR report.
3.8	Core	Mechanisms for shareholders to provide recommendations or direction to the board of directors	Yes	About GSK/Corporate Governance/Shareholders
Stakeholder Engagement				
3.9	Core	Basis for identification and selection of major stakeholders	Yes	Engagement With Stakeholders EHS Stakeholder Engagement
3.10	Core	Approaches to stakeholder consultation reported in terms of frequency of consultations by type and by stakeholder group	Yes	Engagement With Stakeholders Engagement With Investors

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GRI Guideline			Covered?	Link
				EHS Stakeholder Engagement
3.11	Core	Type of information generated by stakeholder consultations	Yes	Engagement on Corporate Responsibility Engagement With Investors EHS Stakeholder Engagement
3.12	Core	Use of information resulting from stakeholder engagements	Yes	Engagement on Corporate Responsibility EHS Stakeholder Engagement
Overarching Policies and Management Systems				
3.13	Core	Explanation of whether and how the precautionary approach or principles is addressed by the organisation	No	
3.14	Core	Externally developed, voluntary economic, environmental and social charters, sets of principles, or other initiatives to which the organisation subscribes or which it endorses	Yes	We are committed to upholding the principles in the UN Universal Declaration of Human Rights, OECD Guidelines for Multinational enterprises, and the ILO core labour conventions: Human Rights We use and refer to the GRI guidelines (this table).
3.15	Core	Principle memberships in industry and business associations, as well as national/ international advocacy organisations	Yes	Leadership and Advocacy
3.16	Core	Policies and/or systems for managing upstream and downstream impacts, including:	Yes	EHS Management Employee Code of Conduct

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GRI Guideline			Covered?	Link
		Supply chain management as it pertains to outsourcing and supplier environmental and social performance	Yes	Human Rights/Suppliers Environment/Suppliers and Contractors
		Product and service stewardship initiatives	Yes	Product Stewardship
3.17	Core	Reporting organisation's approach to managing indirect economic, environmental and social impacts resulting from its activities		Human Rights/Suppliers Environment/Suppliers and Contractors
3.18	Core	Major decisions during the reporting period regarding the location of, or changes in, operations	Yes	Annual Report
3.19	Core	Programmes and procedures pertaining to economic, environmental and social performance. Include: priority and target setting, major programmes to improve performance, internal communication and training, performance monitoring, internal and external auditing, senior management review	Yes	Programmes described throughout the report. Performance indicators reported in: Summary of Indicators EHS Performance Data Summary EHS Progress Towards Targets Internal communication on CR covered in: EHS Training and Awareness Internal Communication
3.20	Core	Status of certification pertaining to economic, environmental and social management systems	Yes	EHS Audits and Certification

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GRI Guideline			Covered?	Link
4. GRI Content Index				
4.1	Core	Provide a table identifying location of each element of the GRI Report Content (section and indicator) in the report	Yes	This table.
Economic Indicators				
5. Performance: Economic				
Customers				
EC1	Core	Net sales	Yes	About GSK and Annual Report
EC2	Core	Geographic breakdown of markets. (For each product or product range, disclose national market share by country where this is 25% or more. Disclose market share and sales for each country where national sales represent 5% or more of GDP)	Yes	Annual Report
Suppliers				
EC3	Core	Cost of all goods, materials, and services purchased	No	
EC4	Core	Percent of contracts that were paid in accordance with agreed terms (e.g., scheduling of payments, form of payment, etc.)	Partial	Payment performance covered in Annual Report (page 73)
EC11	Additional	Supplier breakdown by organisation and country	No	

GRI Index

GRI Guideline			Covered?	Link
Employees				
EC5	Core	Total payroll and benefits expense (incl. wages, pension, redundancy payments)	Yes	Annual Report
Providers of Capital				
EC6	Core	Distributions to providers of capital broken down by interest on debt and borrowings, and dividends on all classes of shares	Yes	Annual Report
EC7	Core	Increase/ decrease in retained earnings at end of period	Yes	Annual Report
Public Sector				
EC8	Core	Total sum of taxes of all types paid, broken down by country	Partial	Data broken down for UK and overseas: Annual Report
EC9	Core	Subsidies received broken down by country or region	No	
EC10	Core	Donations to community, civil society, and other groups broken down in terms of cash and in-kind donations per type group	Yes	Value of Community Investment
EC12	Additional	Total spent on non-core business infrastructure development, e.g., hospital/school for employees and their families	No	
Indirect Economic Impacts				
EC13	Additional	Describe the organisation's indirect economic impacts	No	

GRI Index

GRI Guideline			Covered?	Link
Performance: Environmental				
Materials				
EN1	Core	Total materials use other than water by type (report in tonnes, kg or volume)	No	
EN2	Core	Percentage of materials used that are wastes (processed or unprocessed) from sources external to the reporting organisation. (Refers to both post-consumer recycled material and waste from industrial sources)	No	Data collected for internal waste recovery and recycling only.
Energy				
EN3	Core	Direct energy use segmented by primary source. Report on all energy sources used by the reporting organisation for its own operations as well as for the production and delivery of energy products (e.g., electricity or heat) to other organisations	Partial	Data reported for total direct energy use - not broken down by primary source: Energy Consumption
EN4	Core	Indirect energy use. Report on all energy used to produce and deliver energy products purchased by the reporting organisation (e.g., electricity or heat)	Yes	Energy Consumption
EN17	Additional	Initiatives to use renewable energy sources and increase energy efficiency	Partial	Examples only: Energy Consumption
EN18	Additional	Energy consumption footprint (i.e. annualised lifetime energy requirements) of major products	No	

GRI Index

GRI Guideline			Covered?	Link
EN19	Additional	Other indirect (upstream/downstream) energy use and implications, such as organisational travel, product life-cycle management and use of energy-intensive materials	Yes	Transport
EN5	Core	Total water use	Yes	Water Use
EN20	Additional	Identify water sources and related ecosystems/habitats significantly affected by the organisation's use of water	Partial	Number of sites in water stressed regions: Water Use
EN21	Additional	Annual withdrawals of ground and surface water as a percent of annual renewable quantity of water available from the sources	No	
EN22	Additional	Total recycling and reuse of water. Includes wastewater and other used water (e.g., cooling water)	No	Report volume of wastewater & COD.
Biodiversity				
EN6	Core	Location and size of land owned, leased or managed in biodiversity-rich habitats	No	
EN7	Core	Description of the major impacts on biodiversity associated with the organisation's activities and/or products and services in terrestrial, freshwater, and marine environments	Yes	Issues/Biodiversity
EN23	Additional	Total amount of land owned, leased, or managed for production activities or extractive use by the organisation	No	

GRI Index

GRI Guideline			Covered?	Link
EN24	Additional	Amount of impermeable surface as a percentage of land purchased or leased	No	
EN25	Additional	Impacts of organisation's activities and operations on protected and sensitive areas (e.g., IUCN protected areas categories 1-4, world heritage sites and biosphere reserves)	No	
EN26	Additional	Changes to natural habitats resulting from the reporting organisation's activities and percentage of habitat protected or restored	No	
EN27	Additional	Objectives, programmes and targets for protecting and restoring native ecosystems and species in degraded areas	Partial	Position on biodiversity: Issues/Biodiversity
EN28	Additional	Number of IUCN Red List species with habitats in areas affected by the reporting organisation's operations	No	
EN29	Additional	List business units currently operating or planning operations in or around protected or sensitive areas	No	
Emissions, Effluents and Waste				
EN8	Core	Greenhouse gas emissions (CO_2, CH_4, N_20, HFCs, PFCs, SF_6). Report separate subtotals for each gas in tonnes of CO_2 equivalent for the following:	Partial	CO_2 only: Energy and Climate Impact
		direct emissions from sources owned or controlled by the reporting entity	Partial	CO_2 only: Energy Consumption

GRI Index

GRI Guideline			Covered?	Link
		indirect emissions from imported electricity heat or steam	Partial	CO_2 only: Energy Consumption
EN9	Core	Use and emissions of ozone-depleting substances. Report each figure separately in accordance with Montreal Protocol Annexes A, B, C and E in tonnes of CFC-11 equivalents	Yes	Ozone Depletion
EN10	Core	NOx, SOx and other significant air emissions by type	Yes	Energy Consumption Volatile Organic Compounds
EN11	Core	Total amount of waste by type and destination (i.e. the method by which it is treated, including composting, reuse, recycling, recovery, incineration or landfilling)	Yes	Hazardous Waste Non-Hazardous Waste Recycling
EN12	Core	Significant discharges to water by type	Partial	Total waste water volume and COD: Waste Water
EN13	Core	Significant spills of chemicals, oils and fuels in terms of total number and total volume (significance defined in terms of both the size of the spill and impact on the surrounding environment)	Yes	Compliance
EN30	Additional	Other relevant indirect greenhouse gas emissions, i.e. as a consequence of the reporting entity but occur from sources owned or controlled by another entity	Partial	Contractors' Performance
EN31	Additional	Identify all production, transport, import or export of any waste deemed "hazardous" under the terms of the Basel Convention Annex I, II, III and VIII	No	

GRI Index

GRI Guideline			Covered?	Link
EN32	Additional	Identify water sources and related ecosystems/habitats significantly affected by the organisation's discharges of water and runoff	No	
Suppliers				
EN33	Additional	Performance of suppliers relative to environmental components of programmes and procedures described in response to Management Systems and Governance section of GRI Guidelines	Yes	Suppliers and Contractors
Products and Services				
EN14	Core	Significant environmental impacts of principle products and services (describe and quantify where relevant)	Partial	Report ozone depletion potential from metered dose inhalers: Metered Dose Inhalers Pharmaceuticals in the Environment
EN15	Core	Percentage of the weight of products sold that is reclaimable at the end of the products' useful life and percentage that is actually reclaimed	No	
Compliance				
EN16	Core	Incidents of and fines for non-compliance with all applicable international declarations/conventions/ treaties, and national, subna-tional, regional and local regulations associated with environmental issues (explain in terms of countries of operation)	Yes	Compliance

GRI Index

GRI Guideline			Covered?	Link
Transport				
EN34	Additional	Describe significant environmental impacts of transportation used by reporting organisation for logistical purposes	Yes	Global warming potential from transport: Transport
Overall				
EN35	Additional	Total environmental expenditures by type (explain definitions used for types of expenditures)	Yes	EHS Costs
Social Indicators				
Performance: Labour Practices and Decent Work				
Employment				
LA1	Core	Breakdown of workforce by region/country, employment type (full/part time) and employment contract (permanent/ temporary)	Partial	Total number of employees and countries: Employment Practices
LA2	Core	Net employment creation and average turnover segmented by region/ country	No	
LA12	Additional	Employee benefits beyond those legally mandated (e.g., contributions to health care, maternity, education and retirement)	Yes	Information on our *TotalReward* programme: Your Reward Package
Labour/Management Relations				
LA3	Core	Percentage of employees represented by independent trade union organisations or other bona fide employee representatives, broken down geographically, OR percentage covered by collective bargaining agreements	Partial	Freedom of Association

GRI Index

GRI Guideline			Covered?	Link
LA4	Core	Policy and procedures involving information, consultation and negotiation with employees over changes in the organisation's operations (e.g., restructuring)	Partial	Internal Communication
LA13	Additional	Provision for formal worker representation in decision making or management, including corporate governance	Partial	Information on consultation forums: Internal Communication
Health and Safety				
LA5	Core	Practices on recording and notification of occupational accidents and diseases, and how they relate to the ILO Code of Practice on Recording and Notification of Occupational Accidents and Diseases	Partial	Health and Safety
LA6	Core	Description of formal joint health and safety committees comprising management and worker representatives and proportion of workforce covered	No	Health & safety management is covered in: How We Manage Health and Safety
LA7	Core	Standard injury, lost day and absentee rates and number of work-related fatalities (including subcontracted workers)	Yes	Injury and Illness Rates Health & Safety/Suppliers & Contractors
LA8	Core	Description of policies or programmes (for the workplace and beyond) on HIV/AIDS	Yes	Programmes for employees: Health Programmes HIV/AIDS Programmes to increase access to HIV/AIDS medicines in developing countries: Access to Medicines Community programmes for HIV/AIDS: Major Health Initiatives

GRI Index

GRI Guideline			Covered?	Link
LA14	Additional	Evidence of substantial compliance with the ILO Guidelines for Occupational Health Management Systems	Partial	Health & safety management is covered in: How We Manage Health and Safety
LA15	Additional	Description of formal agreements with trade unions or other bona fide employee representatives covering health and safety at work and proportion of the workforce covered	No	
Training and Education				
LA9	Core	Average hours of training per year per employee by category of employee (e.g., senior/middle management, professional, technical.)	Partial	Employee Development
LA16	Additional	Description of programmes to support the continued employability of employees and to manage career endings	Partial	Employee Development
LA17	Additional	Specific policies and programmes for skills management or for lifelong learning	Yes	Employee Development
Diversity and Opportunity				
LA10	Core	Description of equal opportunity policies or programmes, as well as monitoring systems to ensure compliance and results of monitoring	Yes	Diversity
LA11	Core	Composition of senior management and corporate governance bodies (including board of directors), including female/male ratio and other indicators of diversity as culturally appropriate	Yes	Data on gender diversity and ethnicity: Diversity About GSK/Corporate Governance

GRI Index

GRI Guideline			Covered?	Link
Performance: Human rights				
Strategy and Management				
HR1	Core	Description of policies, guidelines, corporate structure and procedures to deal with all aspects of human rights relevant to the reporter's operations, including monitoring mechanisms and results (state how policies relate to existing international standards such as UDHR and the ILO's Fundamental Conventions)	Yes	Human Rights
HR2	Core	Evidence of consideration of human rights impacts as part of investment and procurement decisions, including selection of suppliers/ contractors	Yes	Suppliers
HR3	Core	Description of policies and procedures to evaluate and address human rights performance within the reporting organisation's supply chain and contractors	Yes	Suppliers
HR8	Additional	Employees training on the reporter's policies and practices concerning all aspects of human rights relevant to the reporter's operations	Yes	Suppliers
Nondiscrimination				
HR4	Core	Description of global policy and procedures/ programmes preventing all forms of discrimination in the reporter's operations, including monitoring systems and results	Partial	Human Rights/Employees

GRI Index

GRI Guideline			Covered?	Link
Freedom of Association and Collective Bargaining				
HR5	Core	Description of freedom of association policy and extent to which it is universally applied independent of local laws, and description of procedures/programmes to address this issue	Partial	Human Rights/Employees
Child Labour				
HR6	Core	Description of policy excluding child labour as defined by the ILO Convention 138 and extent to which this policy is visibly stated and applied	Partial	Human Rights/Employees
Forced and Compulsory Labour				
HR7	Core	Description of policy to prevent forced and compulsory labour and extent to which this policy is visibly stated and applied	Yes	Human Rights/Employees
Disciplinary Practices				
HR9	Additional	Description of appeal practices, including, but not limited to, human rights issues	Partial	Global Integrity Helpline: Human Rights/Employees
HR10	Additional	Description of non-retaliation policy and effective, confidential employee grievance system	Yes	Employee Guide to Business Conduct
Security Practices				
HR11	Additional	Human rights training for security personnel (including type of training, number of persons trained and duration of training)	No	

GRI Index

GRI Guideline			Covered?	Link
Indigenous Rights				
HR12	Additional	Description of policies, guidelines, and procedures to address the needs of indigenous people	Partial	Traditional Knowledge
HR13	Additional	Description of jointly managed community grievance mechanisms/authority	No	
HR14	Additional	Share of operating revenues from the area of operations that are redistributed to local communities	No	
Performance: Society				
Community				
SO1	Core	Description of policies to manage impacts on communities in areas affected by the reporting organisation's activities, as well as description of procedures/ programmes to address this issue, including monitoring systems and results (Include explanation of procedures for identifying and engaging in dialogue with community stakeholders)	Yes	Access to Medicines Community Investment Major Health Initiatives Community Partnerships Supporting Education
SO4	Additional	Awards received relevant to social, ethical and environmental performance	Yes	Community Investment Employee Internal Communications Research and Development
Bribery and Corruption				
SO2	Core	Description of the reporting organisation's policy, procedures/management systems, and compliance mechanisms for organisations and employees addressing bribery and corruption	Yes	Standards of Ethical Conduct Products and Customers Business Ethics/Preventing Corruption

GRI Index

GRI Guideline			Covered?	Link
SO3	Core	Description of reporting organisation's policy, procedures/management systems and compliance mechanisms for managing political lobbying and contributions	Yes	Business Ethics/Political Donations Leadership and Advocacy
SO5	Additional	Amount of money paid by the reporter to political parties and institutions whose prime function is to fund political parties or their candidates	Yes	Business Ethics/Political Donations Annual Report
Competition and Pricing				
SO6	Additional	Court decisions regarding cases pertaining to anti-trust and monopoly regulations	Partial	Material issues: Annual Report Policy on anti-competitive behaviour: Business Ethics/Anti-Competitive Behaviour
SO7	Additional	Description of reporting organisation's policy, procedures/management systems, and compliance mechanisms for preventing anti-competitive behaviour	Yes	Business Ethics/Anti-Competitive Behaviour Business Ethics/Code of Conduct Standards of Ethical Conduct/Code of Conduct
Performance: Product Responsibility				
Customer Health and Safety				
PR1	Core	Description of policy for preserving customer health and safety during use of reporting organisation's products and services, and extent to which this policy is visibly stated and applied, as well as description of procedures/programmes to address this issue, including monitoring systems and results	Yes	Patient Safety Information on patient safety during clinical trials: Research and Innovation/Conduct of Clinical Trials Research and Innovation/Training and Auditing

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GRI Guideline			Covered?	Link
PR4	Additional	Number and type of instances of non-compliance with regulations concerning customer health and safety, including the penalties and fines for these breaches	No	Background information: Patient Safety
PR5	Additional	Number of complaints upheld by regulatory or similar bodies to oversee or regulate the health and safety of the reporting organisation's products and services	No	
PR6	Additional	Voluntary code of compliance, product labels or awards with respect to social and/or environmental responsibility that the reporter is qualified to use or has received	No	
Products and Services				
PR2	Core	Description of the reporting organisation's policy, procedures/management systems, and compliance mechanisms related to product information and labelling	Yes	Products and Customers/ Marketing Codes of Practice Products and Customers/ Training and Monitoring Public Disclosure of Trial Results Patient Safety/ Labelling of Medicines
PR7	Additional	Number and type of instances of non-compliance with regulations concerning product information and labelling, including any penalties or fines for these breaches	No	
PR8	Additional	Description of reporter's policy, procedures/management systems, and compliance mechanisms related to customer satisfaction, including results of surveys measuring customer satisfaction	No	Information on engagement with patient groups: Leadership and Advocacy/Patient Advocacy

GRI Index

GRI Guideline			Covered?	Link
Advertising				
PR9	Additional	Description of reporting organisation's policies, procedures/management systems and compliance mechanisms for adherence to standards and voluntary codes related to advertising	Partial	Information on marketing practices: Products and Customers
PR10	Additional	Number and types of breaches of advertising and marketing regulations	Partial	Employees dismissed for breaching marketing codes of practice: Products and Customers/Training and Monitoring
Respect for Privacy				
PR3	Core	Description of reporting organisation's policy, procedures/management systems and compliance mechanisms for consumer privacy	No	
PR11	Additional	Number of substantiated complaints regarding breaches of consumer privacy	No	

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