Welcome to our 2010 Corporate Responsibility Review

This Review explains our approach to corporate responsibility and our performance during 2010. It focuses on the most important issues for our business and our stakeholders:

- Access to medicines
- Research practices
- Ethical conduct
- Environmental sustainability
- Our work with communities
- Our people.

More information about our approach to these and other CR issues is available in our full online Corporate Responsibility Report. www.gsk.com/responsibility/cr-report-2010

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*Please note: This email address should not be used for reporting adverse events or side effects of medicines. If you want to report an adverse event or side effect, please call the GSK Response Center in the US on 1-888-825-5249 or the Customer Contact Centre in the UK on 0800 221441. For other locations, please contact your local GSK office.
Message from our CEO

We are transforming GSK into a more competitive and efficient company. A company built on strong values and a deep commitment to excellence – a company that our employees, our customers and the societies we work in can be proud of.

Continuing to run our business in a responsible way is central to our transformation. We don’t have a separate ‘responsible business strategy’ because our commitment to responsible, values-based business underlies everything we do. This means being led by our values and principles, being transparent about how we work, responding to the needs of our stakeholders especially by putting patients first in our decision-making, being thoughtful in how we communicate and not compromising our ethical standards. When we do this we generate real value for patients and for our business.

We are building on our strong culture in which all our decisions are guided by our values:

- Commit to transparency
- Show respect for people
- Always demonstrate the highest integrity in our conduct
- Be patient focused.

Access to medicines
We’re committed to increasing access to our medicines for patients, irrespective of where they live and their ability to pay. In 2010 we have further embedded a range of flexible pricing models to deliver our medicines and vaccines to as many of the people who need them as possible. Not only is this the right thing to do, it will also contribute to our business success. For example, we’ve capped the price of our patented medicines in Least Developed Countries at no more than 25% of what we charge in developed countries, and we’re introducing more flexible pricing in developing countries.

This is challenging and the work is at an early stage, however the results of some of our initiatives so far are promising, indicating that price reductions are extending access to more patients and providing a sustainable return to GSK.

This year we also created a specific operating unit dedicated to increasing access to medicines in developing countries. Its success will be judged not on profits but on its contribution to increasing access to our medicines.

I believe the approach we are taking will define GSK as a company that healthcare providers and patients can trust. Combined with our commitment to quality and ethical business practices, this will help us to stand out as a business that is truly committed to patients.

Neglected tropical diseases
We continue with our significant commitment to work on neglected tropical diseases and our R&D partnerships in this area are progressing well. GSK’s RTS,S malaria vaccine candidate is in phase III trials and, if all goes well, this will be the first ever vaccine against malaria, with the potential to save the lives of millions of children in Africa. We have committed to price RTS,S responsibly and will seek to ensure that price will not be a barrier to access. We will set a price which covers our costs and generates a small return of around 5% which we will reinvest in the development of next generation malaria vaccines or for other products for diseases of the developing world.

We also announced in 2010 that we will donate enough of our albendazole medicine to protect all school-aged children in Africa against intestinal worms. Intestinal worms cause more ill health in school-aged children than any other infection, so this will have a major positive health impact. When added to the albendazole we already donate to the Global Alliance to Eliminate Lymphatic Filariasis, it means we will be donating about one billion tablets a year for five years – a very significant commitment.

Environmental sustainability
We have strengthened our commitment to the environment too, setting new ambitious targets. Our goal is to reduce the environmental impact of our value chain, from raw materials to product disposal, becoming carbon neutral by 2050. We have already achieved a reduction of nearly 11% in greenhouse gas emissions since 2006 which, although less than we had hoped, gives us a good foundation to build on in the coming years. We have also reduced the amount of water we use by 16% since 2006, exceeding our 2% annual reduction target.

Operating with integrity
We are continuing to work towards resolving a number of long-standing legal matters. In light of these cases we have fundamentally changed our procedures for compliance, marketing and selling in the US. We now have far-reaching policies and procedures in place to guard against inappropriate promotion to healthcare professionals, and to seek to ensure that if breaches of regulations do occur they are reported to the US government.

To truly embed our values we need to be willing to change how we work, to invest resources and to demonstrate leadership. The changes we are making this year to how we reward our US sales teams are just one example of how we are doing this. Historically, sales teams were rewarded according to the volume of prescriptions in their area, a practice common across the industry. Our new incentive system will assess sales representatives on their scientific and business knowledge, feedback from customers in their region, and the overall performance of their business unit.

By focusing on providing the information and support our customers want, rather than generating the next prescription, we will be acting in the best interests of patients. The more we do this, the more healthcare practitioners will see us as a true partner in delivering the best possible care for their patients.

In my view, it is strong values that differentiate great companies from mediocre ones. By living our values we will achieve results that are good for society and good for GSK. As this Review demonstrates, we continue to make important and exciting changes and I look forward to updating you on further progress next year.

Andrew Witty
Chief Executive Officer
Responsible business at GSK

We know that the research and development, manufacture and sale of our products can raise ethical issues, and we aim to be open about how we tackle them.

We understand how important it is to communicate with our stakeholders, seeking to understand their views, and being transparent about any setbacks we have experienced as well as the progress we have made.

Ultimately we believe that responsible business is good for society and good for GSK. It helps us to operate efficiently, to gain the trust of our stakeholders, to create the products that patients and healthcare payers really need and to foster the right conditions for expansion of our business.

Our Principles
Our Corporate Responsibility Principles are underpinned by our values. They provide guidance for employees on the standards to which GSK is committed:

Access to medicines We will continue to research and develop medicines to treat diseases of the developing world. We will find sustainable ways to improve access to medicines for disadvantaged people, and will seek partnerships to support this activity.

Standards of ethical conduct We expect employees to meet high ethical standards in all aspects of our business by conducting our activities with honesty and integrity, adhering to our CR principles, and complying with applicable laws and regulations.

Research and innovation In undertaking our research and in innovating we may explore and apply new technologies and will constructively engage stakeholders on any concerns that may arise. We will ensure that our products are subject to rigorous scientific evaluation and testing for safety, effectiveness and quality. We will comply with or exceed all regulations and legal standards applicable to the research and development of our products.

Products and customers We will promote our products in line with high ethical, medical and scientific standards and will comply with all applicable laws and regulations.

Caring for the environment 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.

Employment practices We will treat our employees with respect and dignity, encourage diversity and ensure fair treatment through all phases of employment. We will provide a safe and healthy working environment, support employees to perform to their full potential and take responsibility for the performance and reputation of the business.

Human rights We are committed to upholding the UN Universal Declaration of Human Rights, the OECD guidelines for Multinational Enterprises and the core labour standards set out by the International Labour Organization. We expect the same standards of our suppliers, contractors and business partners working on GSK’s behalf.

Leadership and advocacy We will establish our own challenging standards in corporate responsibility, appropriate to the complexities and specific needs of our business, building on external guidelines and experience. We will share best practice and seek to influence others, while remaining competitive in order to sustain our business.

Engagement with stakeholders We want to understand the concerns of those with an interest in corporate responsibility issues. We will engage with a range of stakeholders and will communicate openly about how we are addressing CR issues, in ways that aim to meet the needs of different groups while allowing us to pursue legitimate business goals.

Community investment We will make a positive contribution to the communities in which we operate, and will invest in health and education programmes and partnerships that aim to bring sustainable improvements to under-served people in the developed and developing world.

Our key responsibility issues
We consider the following responsibility issues to be most significant for GSK:

- The contribution we make to health through research, development, manufacture and sale of medicines, vaccines and consumer healthcare products
- Increasing access to medicines by making our products more accessible and affordable
- Raising ethical standards in research and development and sales and marketing
- Our environmental impact, particularly relating to climate change.

GSK is a signatory to the UN Global Compact and the UN’s CEO Water Mandate and Caring for Climate initiatives. GSK received the following ratings from benchmarking organisations.

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Rating</th>
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<tr>
<td>Access to Medicine Index</td>
<td>GSK was ranked top in the Access to Medicine Index for the second successive time in June 2010.</td>
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<tr>
<td>Dow Jones Sustainability Index</td>
<td>GSK continued as a member of the Dow Jones Sustainability Index, which covers the top 10% of sustainable companies in each sector.</td>
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<tr>
<td>FTSE4Good</td>
<td>GSK was included in the FTSE4Good Index which benchmarks companies on corporate responsibility parameters including environmental sustainability, stakeholder relationships, human rights, supply chain labour standards and business ethics.</td>
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<tr>
<td>CommunityMark</td>
<td>GSK was one of 21 companies and the only manufacturing company to be awarded the new CommunityMark in 2008, following independent assessment, for outstanding community investment. GSK retained its CommunityMark in 2010.</td>
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<tr>
<td>Carbon Trust Standard</td>
<td>GSK achieved Carbon Trust Standard global certification in 2010, and was the first company to do so.</td>
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Access to medicines

Providing access to healthcare is one of society’s most pressing challenges. We want to increase access to our medicines and vaccines to all patients, irrespective of where they live and their ability to pay.

Every year millions of the world’s poorest people die from curable or preventable infectious diseases or suffer unnecessary ill health because they do not have access to basic healthcare services, including essential medicines or vaccines. The cost of healthcare can also be a barrier to access for patients in the developed world, particularly in the US where many people do not have healthcare insurance.

We believe increasing access to medicines is the right thing to do and know that it will also contribute to our business success. By striving to meet society’s healthcare needs, we build trust in our business, which helps to safeguard our licence to operate in the long term.

As well as pursuing progressive policies for the world’s Least Developed Countries (LDCs), we are also focusing on increasing access to medicines in developing countries. This helps us to build our business in increasingly important commercial markets such as Brazil, China, India, Indonesia and Russia.

Our access strategy focuses on areas where we can make the most difference through our core business activities, skills and resources. In particular this means initiatives to improve affordability and to conduct and encourage more investment in R&D for the developing world.

To achieve this we are:

• Pursuing flexible pricing strategies
• Refocusing our R&D activities to reflect the needs of developing countries
• Seeking innovative partnerships to try to reach people who would otherwise not have access to our medicines and vaccines.

We are increasingly looking at how to expand our access initiatives to include chronic non-communicable diseases (NCDs), such as diabetes and diseases of ageing. NCDs will become more prevalent in developing countries as improvements in tackling childhood and infectious diseases lead to people living longer.

In 2010 GSK was again ranked top in the Access to Medicine Index produced by the Access to Medicine Foundation and financial analysts RiskMetrics.

Our approach in different markets

Barriers to access vary significantly across countries, depending on poverty and income levels, coverage and quality of healthcare infrastructure, political commitment and the resources allocated to healthcare. We tailor our approach to the different needs of Least Developed Countries (LDCs), other developing countries and the developed world.

Wherever possible we work in partnership with companies, governments, international agencies, academic institutions, patient groups, NGOs and communities. By working together we can achieve more for patients than we can alone.

Access priorities in developing countries

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<tr>
<th>Have</th>
<th>Have Less</th>
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<tr>
<td>Infectious diseases</td>
<td>Diabetes</td>
<td>Asthma</td>
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<td>Heart disease</td>
<td>COPD</td>
<td>Cancers</td>
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Note: The diagram shows how disease priorities can differ between the poorer and wealthier sectors of society. This is a broad representation – diseases can affect anyone regardless of their economic status. Diseases such as cancer and heart disease do not only affect the affluent. The most urgent healthcare priorities for lower income sectors of society tend to be infectious diseases.

Least Developed Countries

The challenge of increasing access to medicines is particularly difficult in the world’s LDCs. Our approach in these countries includes, investment in R&D for new medicines and vaccines against neglected tropical diseases, encouraging research outside GSK through our open innovation strategy, progressive pricing policies, and encouraging investment in healthcare infrastructure.

We established a Developing Countries and Market Access (DCMA) operating unit in July 2010 which aims to increase patient access to GSK medicines and vaccines while expanding our presence and helping us to build a sustainable business in developing countries. Country managers for GSK’s businesses in LDCs now report into the new unit, enabling us to take a more consistent and integrated approach to increasing access in these countries. The unit is also working with GSK country managers in other developing countries to increase access through flexible pricing and other approaches.

Our pricing strategy for LDCs includes capping the prices of key patented medicines, setting not-for-profit prices for HIV/AIDS medicines through ViiV Healthcare, and tiered pricing for our vaccines.

We are broadening our portfolio of medicines and vaccines in LDCs and making it more relevant to people in these countries. This includes registering a wider range of GSK medicines in countries where they are not yet available. We are also expanding our distribution and supply-chain capability to help our medicines and vaccines reach those who need them.

We invest 20% of our profits from sales of our pharmaceutical and consumer healthcare products in LDCs back into projects that strengthen the healthcare infrastructure in those countries. Read more in Our work with communities section later in this Review.

Middle-income countries

Middle-income countries (MICs), such as Brazil, China, India, Indonesia and Thailand, have a large and affluent middle class, offering significant business opportunities for GSK. However, many MICs also have large numbers of people living in extreme poverty, and healthcare demands often outstrip available resources. These challenges are made worse by an increasing incidence of chronic diseases such as asthma and diabetes.

In the past, the majority of our revenue in MICs has come from selling our medicines and vaccines to the higher-income sectors of society. To achieve growth we need to go beyond the high-income sector and increase access for patients at lower income levels. We believe our business growth will only be sustainable if it delivers greater access to medicines for these lower income groups.

MICs will benefit from our R&D for neglected tropical diseases and open innovation strategy, as well as our research unit dedicated to making more of our product portfolio better suited for use in developing countries. We are continuing to implement flexible pricing strategies that make our medicines and vaccines more affordable for more segments of society. We are also using in-licensing, joint ventures and acquisitions to expand our portfolio to better reflect the local disease burden and demographic profile.

Developed countries

Even in developed countries some patients cannot afford the medicines they need and healthcare budgets are often under strain. In some cases innovative approaches to price setting may be needed to support patient access to medicines.

We aim to price our medicines fairly in all markets and to work with governments to make our medicines and vaccines available to as many people as possible. In a number of European countries we have introduced innovative pricing programmes for new products that balance fair reward for GSK with maintaining efficient and fast patient access.

In the US our Patient Assistance Programs (PAPs) and discount savings cards provide prescription medicines to uninsured patients for free or at minimal cost. GSK operates several programmes, including GSK Access which provides extra help for low-income senior and disabled patients enrolled in Medicare Part D.

Flexible pricing

Pricing is one factor that impacts on access to medicines and vaccines. We are adopting a range of flexible pricing models that reflect our commitment to work with governments and other stakeholders to deliver our medicines and vaccines to as many of the people who need them as possible.

Least Developed Countries

Since 2009 we have committed to significantly reducing our prices for patented medicines in the Least Developed Countries (LDCs). Our aim is to reduce prices to no more than 25% of their price in the UK (or in France for products not sold in the UK) while ensuring we cover our manufacturing costs so this offer is sustainable.

Demonstrating value through research

GSK is a founding member and active contributor to the European Healthcare Innovation Leadership Network (EHILN) which seeks to improve understanding between different stakeholder groups, as to what constitutes a medicine’s value. It is also exploring how the research process can be improved so that it generates the evidence needed to effectively demonstrate a medicine’s value.

During 2010 we were also involved in a number of pilot projects that explored whether stakeholder consultation can improve the research process. GSK received advice from a range of stakeholders on one of our pipeline products which offers a potentially new mechanism to help manage diabetes. We found the process very useful and the feedback has been used to shape our development strategy for the product.

Further pilots are planned for 2011 and it is hoped that such consultations may become a routine part of the way drugs are developed in the future.

This commitment applies to all patented products where GSK is the sole supplier in that market. In response to feedback from physicians, we have extended flexible pricing to some of our off-patent products. We have also reduced the prices of vaccines sold in the small private market in all LDCs to 25% of the Western European average. This will apply provided this price is not below those prices offered to agencies such as the GAVI Alliance and UNICEF which purchase large volumes for the world’s poorest children, and that are therefore always offered GSK’s lowest prices.

Patented products

Since April 2009 we have reduced prices in the Least Developed Countries (LDCs) for 11 GSK patented brands (110 individual product lines and formulations) in the countries where they are registered.

Prices were reduced by an average of 45% and apply to the following brands: Seretide (asthma, chronic obstructive pulmonary disease), Avamys (rhinitis), Flixotide (asthma), Malarone (malaria), Avodart (benign prostatic hypertrophy), Avanda (type 2 diabetes), Avandamet (type 2 diabetes), Fraxiparine (anti-coagulant), Ultiva (anaesthetic), Arixtra (venousthromboembolism) and Zeffix (hepatitis B).

In most cases prices have been reduced to no more than 25% of their price in the UK (or in France for products not sold in the UK). In some cases it is not possible to reduce prices this much and still cover our manufacturing costs. In these instances we have reduced our prices as much as possible and will look for opportunities to introduce further reductions.
Access to medicines

Sales volumes for the majority of products have increased significantly following the price decreases. For example, in East Africa the prices for GSK patented brands: **Avamys, Avandamet, Avodart, Flixotide, Malarone and Seretide** were reduced by an average of 69% in the first quarter of 2009 and the number of packs sold increased more than fourfold by the end of 2010.

In 2010 we focused on launching these 11 brands into more LDCs at our reduced prices.

The medicines covered by the price reductions are all products where GSK is the sole supplier. We know that these products may not meet the priority health needs of the general population in LDCs and we are exploring ways to expand access to other GSK products. For example, we are sponsoring research to assess the current reach of GSK respiratory products and to fully understand the barriers to access in 15 different urban areas, ten of which are in LDCs. We will use the findings to form partnerships with NGOs, healthcare providers and professional and patient respiratory groups to tackle these barriers and deliver better treatment.

Reducing the prices of our antibiotics
We have also reduced the prices of some of our off-patent antibiotics in some LDCs in response to feedback from local physicians for lower priced antibiotics given the high incidence of infectious diseases. For example, we reduced the prices of **Augmentin** and **Zinnot** by up to an average of 22% in East Africa in early 2010, and we have seen a twofold increase in the number of packs sold by the end of 2010.

**Middle-income countries**
In the first quarter of 2010, we introduced more flexible pricing for some of our innovative medicines and vaccines across MICs. The new reduced prices are more closely linked to a country's gross national income and ability to pay. This is challenging and the work is at an early stage, however the results so far are promising, indicating that price reductions are extending access to more patients and providing a sustainable return to GSK.

For example, **Avamys** is our once-daily nasal spray for treating allergic rhinitis. We have reduced the price of **Avamys** by an average of 45% in over 40 MICs. Following these reductions we are finding that the increased volume of units sold has off-set the impact of lowering our prices, so we can treat more patients for the same amount of profit.

We have also reduced the price of **Avodart**, our treatment for benign prostatic hyperplasia (BPH), by an average of 27% in MICs, and the number of packs sold has increased significantly. In Russia, treatment for BPH is not covered by any reimbursement programme. Compliance with treatment is low, with patients often stopping therapy in the first months of treatment. Since reducing the price of **Avodart** in Russia, the volume of packs sold has increased by 130%, suggesting that more patients are initiating and staying on treatment for longer.

In India, a 32% reduction in the price of our breast cancer treatment **Tyverb** resulted in double the number of new patients receiving the treatment and a 30% increase in the number of units sold in two months. This trend is encouraging and we are confident we will be able to expand access to more patients with the new price.

We have reduced the price of **Cervarix**, our cervical cancer vaccine, by an average of 30% across MICs. This has significantly increased uptake. For example, after reducing the price of **Cervarix** by 60% in the Philippines, monthly sales increased significantly, settling at around six times the volume of vaccines sold before the price reduction was introduced. Similar results have been achieved in Indonesia and Vietnam with a more than six-fold increase in the numbers of women vaccinated.

**Non-patented products**
We are also establishing more competitive private market pricing for some of our non-patented brands in MICs. For example, in Brazil, sales volumes of the antibiotic **Augmentin** have substantially increased since we reduced the market price by half for the most prescribed presentations in March 2010.

**Vaccines**
Vaccines play a major role in preventing disease. It is estimated that every year at least three million deaths are prevented due to vaccines1 and that the lives of two million children could be saved if existing vaccines were made accessible to all who need them.

GSK is one of the world’s largest vaccines producers and growing our vaccines portfolio is a key element of our business strategy. We aim to increase access to vaccines through investment in R&D, our tiered pricing and our partnerships that help to build local healthcare infrastructure and manufacturing capacity.

Our current portfolio of 30 vaccines addresses the medical needs of developing and developed countries and covers most of the leading causes of childhood mortality. Over 1,600 scientists work in vaccine research at GSK and we have over 20 potential new vaccines in our pipeline. One-third of these target diseases are particularly prevalent in the developing world.

Our vaccines were included in immunisation campaigns in 179 countries worldwide. In 2010, of the 1.4 billion vaccine doses we shipped, just over one billion went to developing countries, including LDCs and middle-income countries.

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Pricing vaccines for developing countries

For over 20 years we have made our entire vaccine portfolio available at preferential prices to developing countries using a tiered pricing system. Prices are linked to gross national incomes, as well as order size and length of contract. By selling our vaccines in large volumes through longer-term contracts we can significantly reduce the price of each individual dose. For the developing world, prices can be as little as a tenth of those for developed countries.

This model works for vaccines because demand is relatively predictable due to centralised bulk purchasing by groups such as UNICEF.

In March 2010, GSK became one of the first manufacturers to sign an agreement with the GAVI Alliance under a new financing mechanism, the Advance Market Commitment (AMC). This will speed access to our vaccine, Synflorix, which protects against respiratory pneumococcal disease, the leading cause of death in children under five in developing countries. Under this agreement we will supply up to 300 million doses of Synflorix to GAVI-eligible countries. It will be priced at just 10% of the cost in developed markets and could help to protect up to 100 million children over ten years.

Our malaria vaccine candidate

We want to maximise access to all of our vaccines, and there may be cases where tiered pricing is not appropriate so we have to try different approaches. One example is our malaria vaccine candidate known as RTS,S, which is currently in late-stage clinical trials across Africa. If successful, we expect to be in a position to make an initial submission to regulatory authorities in 2012. This vaccine will be exclusively for African children and there will be no market in developed countries to offset costs. Therefore, unlike virtually every other vaccine, we cannot tier the price, but we will seek to ensure that price will not be a barrier to access.

We have therefore committed to setting a price which covers our costs and makes a small return of around 5%. This will be reinvested fully in R&D for next generation malaria vaccines or for other products for diseases of the developing world.

We have taken this approach in full consultation with our partners such as the Bill & Melinda Gates Foundation and the PATH Malaria Vaccine Initiative. We believe it would not be helpful to launch the first malaria vaccine at a not-for-profit price. This could create an expectation that all following products would have to be similarly priced. This would be a major disincentive to investment in malaria R&D for some organisations and it is essential that we do not do anything that would have such unintended consequences.

We cannot provide guidance on what the actual price will be until we have a better idea of our own cost structure and the likely demand for the vaccine. In addition to the price commitment, we will donate at least 12.5 million doses to the PATH Malaria Vaccine Initiative.

Strategic alliances

We have a number of joint ventures and technology transfer arrangements for GSK vaccines. These can help to increase the supply and affordability of vaccines while enabling developing countries to develop their research and manufacturing capabilities, and increasing market access for GSK.

These arrangements include a new agreement in 2010 with Binnopharm to expand the National Immunisation Calendar in Russia, our long-standing partnership with Brazil’s Oswaldo Cruz Foundation (Fiocruz), and a joint venture and a research collaboration in China covering influenza and paediatric vaccines.

Research and development

There is an urgent need for newer and better medicines and vaccines for some neglected tropical diseases. More can also be done to make treatments for other diseases more suitable for use in developing countries.

We have a long-standing commitment to research and development into diseases of the developing world (DDW). Our R&D portfolio already includes projects for a number of diseases of particular relevance to developing countries including: bacterial meningitis, Chagas disease, chlamydia, dengue fever, HIV/AIDS, human African trypanosomiasis, leishmaniasis, malaria, pandemic flu, respiratory pneumococcal disease and TB.

We are ambitious to do more but we recognise that the challenges are too complex to be addressed by any one organisation alone. Partnership is essential and that is why we are pursuing an ‘open innovation’ approach, working together with industry, academia, NGOs and governments. Open innovation at GSK includes:

- Sharing our expertise and resources with scientists from around the world through our Tres Cantos Open Lab in Spain
- Sharing our intellectual property and know-how through the Pool for Open Innovation against Neglected Tropical Diseases
- Being more open with our data and DDW research to help stimulate research outside GSK.

Developing world research units

We aim to integrate research for the developing world into our pharmaceutical and vaccine R&D organisations.

We have a specific R&D group focused on diseases of the developing world, including neglected tropical diseases (NTDs). A significant portion of our developing world drug discovery work takes place at our Tres Cantos site. This campus links GSK scientists across the organisation including the UK and US. Research decisions are prioritised on their socio-economic and public health benefits rather than on commercial returns. A similar group is active in our vaccines organisation in Belgium.

To complement these discovery efforts, we created a new R&D unit in 2009 with a focus on drug development for patients in emerging markets. This focuses on late stage clinical products that match the needs of patients in emerging markets and aims to champion the needs of these patients throughout GSK’s R&D operations. This includes adapting GSK products so that they better meet the needs of patients in emerging markets and developing more affordable forms of medicines that will be accessible to more people in more countries.
Tres Cantos Open Lab
We have also created an open laboratory at our Tres Cantos Medicines Development campus in Spain to stimulate research into new treatments for diseases of the developing world. The open lab has space for visiting scientists from universities, not-for-profit partnerships and other research institutes to come to the site, work on projects with us, learn from our expertise and share our world-class facilities.

We have set up a not-for-profit foundation with an initial investment of £5 million to support visiting scientists and their research projects. A governing board of leading scientists within the field is providing strategic direction for the foundation and the research it supports. All projects supported by the Open Lab Foundation must contribute to research that helps discover new medicines for diseases of the developing world.

Opening up access to our facilities builds on the partnership approach we have always taken at Tres Cantos. Since the site was established in 2001 we have worked closely in public-private partnerships with groups such as the Medicines for Malaria Venture (MMV). There are more than 100 scientists working at the centre, and many of these posts are funded by our partners.

Pool for Open Innovation against Neglected Tropical Diseases (POINT)
In 2009 we helped to establish an independent knowledge pool where GSK and others could make available patents and knowledge that may stimulate research into treatments for 16 neglected tropical diseases (NTDs). This is now known as the Pool for Open Innovation against Neglected Tropical Diseases (POINT). Since January 2010 it has been independently administered by BIO Ventures for Global Health (BVGH), a non-profit organisation that aims to accelerate the development of drugs, vaccines and diagnostics to meet global needs.

Any medicines or treatments for NTDs developed using the pooled patents and intellectual property will be available to Least Developed Countries on a royalty-free basis.

We have contributed patents and patent applications to the pool covering small molecules and formulations directed at treatments and delivery technologies for one or more of the 16 NTDs. Several other companies and other organisations have also contributed patents.

Organisations which have been granted access to assets in POINT include the Emory Institute for Drug Discovery and iThemba Pharmaceuticals, which is working on TB with support from the South African government.

Sharing research information on DDW
In May 2010 we published in the leading scientific journal Nature research findings that could help identify potential new treatments against malaria. The research was the result of a year-long screening process in which five GSK scientists reviewed more than two million compounds in GSK’s chemical library to seek out those that could inhibit the malaria parasite. The research was co-funded by GSK and the Medicines for Malaria Venture.

This process identified 13,533 compounds that showed greatest activity. More than 80% of these molecules are proprietary to GSK, and this is the first time they have been available to the wider research community.

The data and chemical structures are also available online through the European Bioinformatics Institute (EMBL-EBI), the US National Institutes of Health PubChem resource and Collaborative Drug Discovery. The value of the information is enhanced by the research tools made available on those sites to researchers at no cost.

Many researchers have already accessed and downloaded the data. They are asked to report back their findings to the sites, to further expand our collective knowledge.

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2 Francisco-Javier Gamo et al Thousands of chemical starting points for antimalarial lead identification. Nature Vol. 465, issue 7296, pp 305-310, DOI: 10.1038/nature09107
HIV/AIDS and ViiV Healthcare

According to latest estimates, over 33 million people worldwide are living with HIV. Two-thirds of these are in sub-Saharan Africa. Although progress is being made only one-third of the 15 million people living with HIV who need therapy are receiving it.

GSK has had a significant history of developing medicines to treat HIV, offering its HIV/AIDS medicines at not-for-profit (nfp) prices since 2001 in LDCs and sub-Saharan Africa. In partnership with Pfizer we launched ViiV Healthcare in 2009; this is the only pharmaceutical company wholly focused on HIV. ViiV Healthcare is dedicated to the development of innovative medicines. It shares our commitment to increase access to medicines and aims to address the lack of suitable treatments and formulations for specific groups of people living with HIV such as children.

ViiV Healthcare will publish an update on its approach to increasing access to medicines during 2011. A short summary is provided here.

Research and development

In addition to its ongoing R&D activities, ViiV Healthcare has committed £10 million to support a public–private partnership into the research and development of new HIV/AIDS medicines and formulations specifically for children. This partnership will also support early detection of HIV, and access to therapy for HIV positive infants and young children.

Voluntary licensing

ViiV Healthcare considers requests from all genuine partners, to grant royalty-free voluntary licences for its entire current and future ARV portfolio for use in the 69 countries where 80% of all people with HIV live. ViiV Healthcare has now granted 11 voluntary licences for its ARVs, an increase from eight when the company was formed.

Pricing

ViiV Healthcare offers its complete ARV portfolio at not-for-profit (nfp) prices in the Least Developed Countries, the World Bank’s Low Income Countries and all of sub-Saharan Africa. This covers 80% of all the people currently living with HIV. Combivir, ViiV Healthcare’s leading ARV, now sells at $197 per patient per year in the LDCs compared to $730 in 2001.

The volume of nfp ARVs supplied by ViiV Healthcare declined during 2010, however this is more than outweighed by a growth of nearly 35% in volumes supplied by its licensees. They supplied over 594 million tablets of their versions of Epivir and Combivir to African countries in 2010.

ViiV Healthcare negotiates preferential pricing arrangements for HIV/AIDS medicines with middle-income countries on a case-by-case basis. Prices are lower than those paid by developed countries, but higher than the nfp prices paid by the Least Developed Countries.
Investment in R&D into new medicines and vaccines is at the core of our business. We focus our R&D efforts on areas where there is greatest patient need and where advances in science offer the best opportunities to discover new medicines and generate commercial returns.

Our aim is for new treatments to provide value over currently available treatments to both patients and to payers. Patient safety is always our priority and we evaluate the benefits and risks of our medicines at all stages of research and after a new product is approved for sale. We are committed to transparency and to disclosing the results of our clinical research.

It is essential that we meet consistently high quality and ethical standards in all our R&D in all parts of our business, and in all the markets where we operate. This enables us to protect the safety of clinical trial participants and the patients who use our medicines, to obtain regulatory approval for new medicines and vaccines, and to maintain the trust of patients and healthcare professionals.

We recognise that biomedical research can raise ethical concerns, including those relating to the use of emerging technologies such as stem cell research; animal research; clinical trial standards; the storage and use of human tissue; and the protection of personal information about research participants. We aim to address these by being open about our approach, participating in discussions on research practices and regularly engaging with academic scientists, regulators, policy makers and other stakeholders on these issues.

To guide our research we must understand what patients need. Our Focus on the Patient programme helps us to do this by bringing patients to GSK sites to speak directly to our R&D teams about their specific healthcare needs.

R&D in 2010

We make a significant investment in R&D each year, spending £3.96 billion in 2010. Around 75% of this expenditure was in pharmaceutical R&D with the remainder in vaccine and consumer healthcare research. In the UK, we came first in a government ranking of the top 1,000 companies by R&D investment³.

Our late-stage pipeline includes products that target autoimmune disorders, infections, many forms of cancer, metabolic and cardiovascular disease, neurological disease and respiratory disease. At the end of 2010 there were around 30 products in our late-stage development pipeline. More than 20 of these are assets that are not already approved for other indications.

Read more about our pipeline progress, product approvals and R&D expenditure in our Annual Report.

As part of our strategy to develop new medicines and improve returns by focusing on areas of science with a higher probability of success, we announced in 2010 the formation of a new standalone unit focusing on treatments for rare diseases. Research into rare diseases often involves areas of science that can reduce the time to develop new treatments. For instance, the identification of a disease is often very clear as it may be caused by mutation in a single gene, and it can be easier in clinical trials to assess the impact of new treatments.

We also made changes to our early-stage neuroscience research activities, and in 2010 ceased research in selected areas such as depression and pain. We will focus our neurology research efforts on identifying and developing treatments for neurodegenerative and neuro-inflammatory diseases, including Alzheimer’s disease, multiple sclerosis and Parkinson’s disease, where new treatment options are needed and where the advances in science offer greater prospects for the successful development of new medicines.

Animal research

Animal studies remain a small but vital part of our research. In many cases, they are the only method that can be used to demonstrate the effects of a potential new medicine in a living body before it is tested in humans. Animal research can also provide vital information about the causes of diseases and how diseases may develop.

Safety regulations require us to test all new medicines on animals before they are evaluated in clinical trials. Some vaccines must be tested on animals each time a new batch is produced, but for our most recent vaccines, Cervarix, Rotarix and Synflorix, we have developed alternative approaches to batch testing that do not use animals and have been accepted by EU regulators.

When animals are necessary for our research, we are committed to acting ethically, providing for the animals’ health and wellbeing and practising good animal welfare. In 2010 we revised and strengthened our policy on the care, welfare and treatment of animals by GSK, to clarify that:

• We do not conduct, contract, sponsor or support animal studies using great apes
• We only conduct animal testing for products that are used primarily for their medical or healthcare benefits. We do not conduct, contract, sponsor or support testing in animals for products designed primarily to improve the appearance of individuals (that is, aesthetic or beautifying purposes)
• For products with both aesthetic and healthcare uses and/or which are classified as cosmetics by regulators, animal testing is only permitted when it is required by regulators, and when the primary use and marketing claim relates to its healthcare benefits
• For other products or ingredients, for example nutritional products, animal testing is only permitted when it is required by regulators in order to make a marketing claim related to a health benefit.

³ Department for Business, Innovation and Skills, The 2010 R&D Scoreboard
The 3Rs
Our scientists apply the 3Rs – principles for finding non-animal alternatives and improving animal welfare – to all our biomedical research:

• Replacing research using animals with non-animal alternatives or species of the lowest possible phylogenetic order
• Reducing the number of animals used while still providing information of a given amount and precision, for example still obtaining the same information as in a larger study
• Refining techniques to minimise pain and distress and maximise the welfare of animals.

Before animal research can proceed, proposed studies must undergo both a scientific and an ethical review which assess study design and incorporation of the 3Rs.

We encourage a 3Rs culture at GSK through: regular training for staff involved in the care and use of animals; raising awareness and encouraging best practice by communicating advances in 3Rs across GSK’s medicine discovery and development teams; and recognising employees who have made outstanding advances in implementing the 3Rs through our Animal Welfare Awards.

In 2010 our progress in the 3Rs included:

• Refining blood sampling techniques to enable multiple samples to be taken from a single mouse, reducing the total number of mice required for certain studies
• Adapting a rodent model of influenza to enable researchers to anticipate findings before the disease becomes apparent in the trial animals, reducing pain and distress.

Number of animals
Almost all the animals used by GSK are rodents, mainly rats and mice. We also use rabbits, dogs, non-human primates, fish, ferrets, chickens, pigs, and goats. Together these non-rodents account for just under 2% of the number of animals used. Less than 0.5% of the animals we use are non-human primates, and we have made a voluntary commitment to no longer perform research on great apes.

Some animal research is conducted by external contractors on our behalf, representing around 8% of our total animal use. We require the same high standards of animal welfare in all animal studies carried out on our behalf.

The number of animals used in our laboratories in 2010 was almost 25% lower than in 1994, while R&D activity has increased significantly in the same period. This reduction in use is due to various factors including changing research priorities, fewer batches of vaccines requiring testing on animals before their release and continued focus on 3Rs initiatives. Compared with 2009, we are using 10% fewer animals.

GSK has animal research laboratories in Europe, Asia and North America. Our goal is for all GSK-owned animal facilities to be accredited by the Association for Assessment and Accreditation of Laboratory Animal Care International (AAALACi), a private, non-profit organisation that promotes the humane treatment of animals in science. In 2010 our accredited facilities covered 90% of the animals in GSK laboratories.

GSK Animal Welfare Award 2010
Our internal Animal Welfare Award recognises advances in the 3Rs that make a real difference to how animal experimentation is conducted at GSK or how animals are routinely cared for.

In 2010 we gave the award to a research group which adapted a method originally developed for humans to take bile samples from dogs. In the past, bile was collected from dogs through invasive surgery, with the potential for discomfort and complications. The new method involves the dog swallowing a string which absorbs bile from the animal’s intestine and can then be withdrawn through the animal’s mouth. Switching to this technique has significantly reduced the number of dogs that need to undergo surgery.

Animals used by GSK in 2010

<table>
<thead>
<tr>
<th>Animals used</th>
<th>%</th>
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<tbody>
<tr>
<td>Mice</td>
<td>74.5</td>
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<tr>
<td>Rats</td>
<td>17.8</td>
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<tr>
<td>Guinea pigs</td>
<td>5.6</td>
</tr>
<tr>
<td>Other rodents</td>
<td>0.4</td>
</tr>
<tr>
<td>Rabbits</td>
<td>0.6</td>
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<tr>
<td>Others</td>
<td>1.1</td>
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Note: This does not include animals used by external contractors on our behalf. Of the animals used by external contractors on our behalf in 2010, 92% were rodents and rabbits.

Change in R&D activity compared to change in number of animals used by GSK

<table>
<thead>
<tr>
<th>% change since 1994</th>
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<tr>
<td>0</td>
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Animals used
R&D activity (1994 = 100)

Note: These data do not include animal research conducted by external contractors on our behalf. R&D activity combines our R&D budget and our vaccine sales, the two main drivers of animal use. We use 1994 as our baseline year for comparison as this is the year from which we can start to compare data for GSK and its legacy companies, Glaxo Wellcome and SmithKline Beecham.
Medical governance framework
Our medical governance framework applies across GSK and ensures we apply recognised principles of good medical science, integrity, ethics and standards to the discovery, development and marketing of GSK products. The framework focuses clinical research involving human subjects, the safety of patients and clinical trial participants, the information we provide about our products and clinical trials, and our promotional activities.

Overall responsibility for medical governance sits with our Chief Medical Officer (CMO, the most senior physician at GSK). The CMO is supported by the Medical Governance Executive Committee (MGEC), which establishes medical governance policies, ensures that medical governance systems are standardised across GSK and identifies new risks. Medical Governance Boards, established in 2010 and reporting in to the MGEC, ensure the consistent, effective and efficient operation of our medical governance model within all our businesses and in all markets. The boards are also responsible for educating employees involved with human subject research and reporting our medical governance policies, approach and framework.

We require external collaborators to adhere to the same medical governance standards as GSK.

Conducting clinical trials
Clinical trials in healthy volunteers and patients enable us to assess a compound’s potential to become a new medicine or, once a medicine has been approved for marketing, to further evaluate the effect of the medicine for the approved use, to assess other potential uses, or to obtain additional safety data.

We conduct clinical trials in accordance with the Good Clinical Practice guidelines developed by the International Conference on Harmonisation and the principles contained in the World Medical Association Declaration of Helsinki on the Ethical Principles for Medical Research Involving Human Subjects (2008). All trial protocols are reviewed by an ethics committee that is independent of GSK.

GSK-sponsored clinical trials are conducted to the same high ethical standards irrespective of where they take place. Any contract research organisation, contracted to carry out trial-related activities on our behalf, for example monitoring of study centres or data quality management, is required to apply the same standards.

The safety of clinical trial participants is of paramount importance, and we evaluate safety throughout each phase of a clinical trial programme.

All GSK employees involved in conducting trials receive training on regulatory requirements and GSK policies. Trials may be audited by our internal audit department and by external regulators.

Informed consent
Potential clinical trial participants must voluntarily confirm their willingness to participate, after being informed about the study and its benefits and risks. This is known as informed consent.

We aim to provide information for potential trial participants in a non-technical style that a lay person can understand. Informed consent is an ongoing and interactive process; as well as written documents there are opportunities for face-to-face conversations between potential participants and members of the research team to discuss the trial and answer any questions before, during and after a trial.

Post-trial treatment
Continued treatment of clinical trial participants with nationally licensed medicines at the end of a trial is often required for the continued care of patients. In general, we are not responsible for funding this, because it is the responsibility of governments and other providers as part of national healthcare systems. However, before beginning trials in diseases and conditions that will continue after the completion of the trial, we must be assured that the healthcare system is able to provide, and will take responsibility for, the continued care of patients. In exceptional circumstances nationally licensed medicines may be funded by GSK after the trial so that they can be made available to trial participants who derived a measurable medical benefit. We will continue to fund the medicine until it is funded through the normal healthcare infrastructure or until the patient no longer derives a medical benefit.

There may be circumstances in which there is a compelling medical rationale for patients to continue to receive a GSK investigational medicine after the clinical trial. In this case, post-trial treatment may be provided through a further clinical trial as part of an expanded access programme which enables appropriate oversight and reporting of adverse events. In these instances, GSK will fund the investigational medicine for as long as the patient benefits from it, or until the compound is approved and licensed in that country.

Clinical trials in the developing world
In some Least Developed Countries we may need to take additional steps to ensure that trials are conducted according to Good Clinical Practice guidelines. For example, it may be necessary to match the objectives of informed consent to local culture, for instance by involving local leaders or family members.

GSK provides training to ensure healthcare professionals have the necessary skills and knowledge to conduct clinical trials on our behalf. As well as benefiting GSK, enhancing the skills of healthcare professionals in this way brings lasting benefits to communities.

We do not conduct trials in countries where we know at the outset that we do not intend to pursue registration and make the product available for use in that country.

Working with healthcare professionals
GSK conducts clinical research in partnership with healthcare professionals who have the unique medical insight and knowledge that are critical for the development of new medicines and vaccines.

Our policies governing interactions between GSK R&D staff and healthcare practitioners require that:
- All clinical trial investigators are selected solely on their qualifications to conduct good quality clinical research. Their history of using or not using GSK products must not be taken into account when deciding whether to include or exclude them as a trial investigator
- Payments to practitioners are governed by contracts, and any compensation reflects fair market value for the work performed and the services provided
- No payments are offered or made to influence their judgement on whether to enrol or maintain a research participant in a clinical study
- Gifts are not permissible to healthcare professionals involved in research projects for GSK
We have made a commitment to disclose research payments made to healthcare professionals and their institutions. This will commence with payments made in 2010 to US healthcare professionals and their institutions for research studies that began from January 2010 onwards. This first annual disclosure will be made in the first half of 2011 and will capture payments for all phases of medicine discovery and development, including clinical trials.

Outside the US, we will continue to work towards disclosure of individual payments. We will disclose payments to healthcare professionals and their research institutions on an aggregate basis, commencing with the publication in 2013 of payments made during 2012.

Public disclosure of clinical research
Pharmaceutical companies are legally required to disclose relevant data from clinical trials to the appropriate regulatory authorities when seeking approval for a new medicine, and to provide updated safety information from clinical trials after approval.

Safety and efficacy information is provided to doctors through prescribing information which is approved by regulators.

GSK is committed to public disclosure of all our clinical research, irrespective of whether the results are perceived to be positive or negative for our medicines. We believe this is fundamental for advancing medical science and informing prescribers and patients about scientific findings relating to our medicines.

Our Clinical Study Register
Our Clinical Study Register website, launched in 2004, serves as a resource for researchers, medical professionals and the public to access data from GSK-sponsored clinical trials. It supplements locally approved prescribing information and publications in the scientific literature. Our 2010 figures indicate that the site receives around 10,350 visitors a month.

The register includes:
- Protocol summaries for ongoing studies
- Summaries of results from completed clinical studies and observational research (studies of medicines used in normal medical practice) that evaluate our medicines, as well as studies of terminated medicines (compounds that are no longer being developed)
- The names of principal investigators who participate in our clinical research.

We aim to disclose trial results summaries for all new medicinal products on our Register at the time of first approval or within 12 months of terminating development of a medicine. If trials are completed after a product is approved for marketing, we aim to disclose the results within one year of trial completion.

By the end of 2010 the Clinical Study Register included protocol summaries of all actively recruiting GSK clinical trials of medicines, 353 in total. We posted 382 new results summaries to the Clinical Study Register during the year, bringing the total to 4,069 (see chart).
Patient safety

Ensuring the safety of our medicines and medical devices is critically important for the health and wellbeing of patients and the success of our business.

All medicines have potential risks as well as benefits, although not everyone who takes a medicine will experience side effects. It is important that we identify, evaluate and minimise safety concerns to ensure that the overall benefits of a medicine outweigh any risks.

We strive to serve patient interest by promptly detecting potential safety issues with our products and communicating with regulators so that appropriate decisions can be made and actions taken.

Product safety is assessed in clinical trials before a product can be approved for marketing. Sometimes, adverse events (possible side effects) may only be detected after approval when a product is being used by large numbers of patients. We have policies and a governance framework in place to help us detect and act on any adverse events.

We have a Global Safety Board (GSB) which makes decisions on product safety issues. The board is chaired by the Chief Medical Officer and is composed of other senior physicians and scientists. The GSB’s remit is to ensure that safety is a focus throughout product development and to review the safety of GSK products once they have gone to market.

We have a dedicated team of scientists and healthcare professionals across the world whose specific role is to monitor and communicate safety issues to regulatory authorities. We also work with government officials, industry partners and policy makers to enhance safety systems for medicines and vaccines.

Collecting and reporting safety data

We receive information on adverse events (possible side effects) from several sources, including:

- Unsolicited reports from healthcare professionals and patients
- Post-marketing trials or observational studies
- Investigators who submit clinical study reports
- Regulatory authorities
- Medical and scientific literature
- Newspapers and other media.

Every GSK employee is required to report any adverse event they become aware of. We have added an adverse event reporting button to the front page of our intranet site, to make reporting easier for employees.

All adverse events reported to GSK are recorded on our global safety database and clinical trial database and are investigated by our clinical and pharmacovigilance teams. We report potential safety issues to regulatory authorities regularly.
Ethical conduct

We are building on our strong ethical culture at GSK by developing robust policies, recruiting the right people and equipping them with the information they need to make ethical decisions. Putting patients first is the core principle of being an ethical healthcare company.

Our Code of Conduct sets out fundamental standards for all employees. It is supported by the Employee Guide to Business Conduct which helps employees make ethical decisions and emphasises GSK’s values.

We stress our commitment to performance with integrity. This means that all employees must understand our values and what we stand for as well as the policies and procedures that underpin our approach.

Our internal compliance systems are designed to identify and address breaches of our codes and reinforce GSK’s values. We fully investigate suspected breaches and take appropriate disciplinary action, up to and including dismissal.

Preventing bribery and corruption

In 2010 we reviewed and strengthened our approach to preventing, detecting and addressing bribery and corruption. This included updating our Preventing Corrupt Practices policy, introducing new training and launching an anti-bribery and corruption unit which will ensure we take a consistent approach across the company.

These steps, and the introduction of our Third Party Code of Conduct, will support our compliance with the new UK Bribery Act, the US Foreign Corrupt Practices Act and other anti-corruption laws.

Marketing our products

We market our prescription medicines and vaccines to healthcare professionals (HCPs), hospitals and governments. In some countries, such as the US, we also advertise medicines directly to consumers. Our specialist sales representatives meet regularly with doctors and pharmacists to inform them about our medicines and their approved uses.

We believe that sales representatives play an important role in providing up-to-date information to doctors on our products and their benefits and risks to patients. However, we recognise that the marketing of pharmaceutical products raises some challenging issues.

Some people are concerned that marketing by pharmaceutical companies exerts undue influence on doctors, that sales representatives do not always give doctors full information about potential side effects, or that promotion of unapproved uses of medicines may be occurring. Our global marketing code forbids these practices and other unethical conduct. We provide regular training for sales teams and monitor compliance.

Our ethical compass

Our Employee Guide to Business Conduct includes an ‘ethical compass’ that helps employees deal with ethical issues that are difficult to resolve. When faced with such a situation, we encourage our people to ask themselves these questions:

- Is it legal and ethical?
- Is it consistent with GSK policies and the Code of Conduct?
- Is it consistent with GSK’s Mission and Spirit?
- Can I explain it to my family and friends?
- Would I be comfortable if it appeared in a newspaper?

We encourage employees to seek guidance and to keep asking questions until they are certain that they are making the right choice.

Communicating our requirements to suppliers

In 2010 we introduced a Third Party Code of Conduct for GSK suppliers. This sets out the standards we expect suppliers to meet and covers ethical conduct; labour practices and environmental, health and safety standards; and management. We are making existing suppliers aware of the Code during our routine interactions. We require new suppliers to sign a statement confirming that they comply with the principles of the Code before they can do business with GSK.

Anti-corruption prevention training

Our anti-corruption training, introduced in November 2010, is designed to help employees understand and comply with our anti-bribery and corruption policies. It includes examples of scenarios that employees could encounter in their work. For example, being asked to make a facilitation payment to expedite the processing of a visa application. It explains how they should deal with such situations, including how to report a potential problem.

The course is available in 18 languages and completing it is mandatory for all GSK managers, as well as employees working in functions such as legal or in regions where there is a higher risk of corruption. Additional face-to-face training has been introduced for employees involved in the selection, payment and oversight of third parties, in business development and in interactions with government officials.

Read more about ‘Ethical conduct’ in our full CR Report on www.gsk.com/responsibility/cr-report-2010
It is very important that GSK is actively engaged in scientific debate and communication outside the company. This enables us to participate fully in the development of scientific understanding, to benefit from the knowledge of leading external scientists, practitioners and patients, and to apply the best science to the development of our medicines and vaccines. We must avoid activities which could be construed as promotion of a product or a new use of a product before we have authorisation to market it. To support this we are implementing clear standards for the way we work, to emphasise the distinction between non-promotional scientific dialogue and legitimate promotional activity to support licensed products.

**Marketing codes of practice**

Our GSK global code on promotional activities and interactions with HCPs, and our regional marketing codes, set consistent standards for our employees and agents working on our behalf. They commit us to promotional practices that are ethical, responsible, principled and patient-centred. They prohibit kickbacks, bribery or other inducements to HCPs or government officials, and any promotion for unapproved uses of our medicines.

Our regional codes reflect differences in market structures, national healthcare systems and regulations. They are at least as stringent as our global code, and in some regions and countries may be more restrictive.

GSK supports efforts to strengthen marketing standards across the pharmaceutical industry. This benefits patients by supporting their appropriate treatment. It also helps to ensure that companies operating to high ethical standards are not put at a competitive disadvantage and helps to improve the reputation of the pharmaceutical industry as a whole.

**United States**

We are continuing to work towards resolving a number of long-standing legal matters. In light of these cases we have fundamentally changed our procedures for compliance, marketing and selling in the US. We now have far-reaching policies and procedures in place to guard against inappropriate promotion to HCPs, and to seek to ensure that if breaches of regulations do occur they are reported to the US government.

We have strengthened our training and compliance programmes, we have eliminated past practices and have adopted new measures so that our relationships with HCPs enhance the practice of medicine. This approach reflects GSK’s commitment to honesty and integrity, and to focus on the best interests of patients.

We updated our US Commercial Practices Policies which support our marketing code to make sure they are fully aligned to our values. The language used in the policies has been simplified to make them easier for employees to understand.

**Sales force remuneration**

To reinforce our requirement for field sales staff to behave consistently with our values, we are changing the way we incentivise our representatives. To date, the variable part of their pay has been dependent on the volume of prescriptions for GSK products in their sales territory.

During 2011 we are putting in place a system which reflects three factors in representatives’ bonus pay: an assessment of their scientific and business knowledge; feedback from customers in their region, including demonstration of GSK’s values; and overall performance of the business unit they support. This will shift the focus from generating the next prescription to providing the information and support our customers want. This programme will be fully implemented in July 2011.

**Continuing medical education grants**

In 2010 we implemented new standards on funding continuing medical education which are educational activities that help HCPs to maintain, develop or increase their knowledge, skills and professional performance. We have reduced the number of education providers we support and have restricted our funding to academic medical centres and professional medical associations only. We no longer fund medical education programmes offered by commercial medical education providers. This will help us focus on the education programmes with the greatest potential to improve patient health.

**Europe**

We updated our European Marketing Code in 2010, to clarify the provisions on gifts. It now states that the only items that can be provided for use at GSK-sponsored medical and educational meetings are pens and paper pads and these must only be branded with the GSK logo, not one of our product-specific brand logos. Medical and educational items are permitted if they enhance the responsible use of medicines in GSK therapy areas, carry no product branding and are not more than 10 in value.

**Asia Pacific, Japan and Emerging Markets**

Our revised Promotion and Marketing Code for these GSK regions was implemented in 2010. It requires each country to set an annual maximum limit (cap) for the fees that can be paid to an individual HCP within their country. Clauses on grants and donations, samples, market research and medical education were also updated.

**Direct-to-consumer advertising**

In the US it is legal to advertise prescription medicines to consumers through television and print advertisements. This is known as direct-to-consumer (DTC) advertising.

New Zealand, Bangladesh and South Korea also allow limited DTC advertising and some other markets allow limited advertising for some vaccines. DTC advertising of prescription medicines is not permitted in other markets. Promoting the use of prescription medicines directly to consumers can raise concerns. Critics believe that it encourages people to request unnecessary treatment, adding to the burden on healthcare systems.

We believe that responsible pharmaceutical advertising is a useful source of health information for patients. It helps to increase knowledge of conditions and educates patients about treatment options. Patients must still consult with their physicians about their condition and the appropriateness of a prescription medicine, and obtain his or her consent before receiving such medicines.
Prescription medicines in the US
Our DTC Communications policy is based on the PhRMA Guiding Principles: Direct to Consumer Advertisements about Prescription Medicines.

We have a detailed approval process for DTC advertising, which includes review by legal, regulatory and medical specialists as appropriate. We have trained US marketing employees on our DTC policy.

New DTC television advertisements are submitted to the US Food and Drug Administration (FDA) for review and comment prior to broadcast.

Members of the public and healthcare professionals can send comments or complaints on DTC advertising to PhRMA’s Office of Accountability, which reports the comments and the responses of the companies to the FDA.

In 2010 our US Pharmaceuticals business received three ‘notices of violation’ from the FDA’s Division of Drug Marketing, Advertising and Communications (DDMAC) and one DDMAC response expressing concerns about draft promotional materials submitted to them for review. In each case we immediately reviewed and withdrew the material. Retraining was provided to employees involved in developing the material.

We take the directions provided to us by the FDA very seriously and are developing new standard operating procedures that will help to ensure that FDA requirements are reflected in all our future advertising.

There were no violations in other countries in which GSK uses DTC advertising.

Grants and donations to healthcare organisations
GSK is regularly asked to make grants and donations to healthcare organisations. These are private or public sector organisations or associations made up of HCPs or patients and which support research or provide information to HCPs or patients.

Grants are monetary contributions made to healthcare organisations to fund the attendance of HCPs at medical or scientific meetings, to support their research projects, or to support independent medical education programmes. Donations are non-monetary contributions such as healthcare equipment or medical textbooks.

GSK does not solicit requests for grants and donations, and cannot be involved in the detail of how they are used. However, we must be assured that there is a valid purpose for any grant or donation, and that it will benefit patients and public health. Our standards are explained in our marketing codes.

Publishing grants and donations
We started to publish quarterly reports of the grants and donations we make in the US in February 2009. Achieving this for all countries is challenging because we do not currently have the appropriate data collection systems in place. We will continue to work towards disclosure of individual healthcare organisation grants and donations, and we will publish aggregate payments made in 2010 by the end of 2011.

Our principles for DTC advertising in the US
Our policy requires us to commit an appropriate amount of time to educating healthcare professionals on new medicines or indications before launching DTC advertising. It states that DTC advertising should:

- Be designed to educate the public about the medicine and the condition for which it is prescribed
- Be accurate and supported by evidence
- Include information on the risks and benefits of treatments
- Provide information on other treatment options such as diet and lifestyle changes, where these are referenced in the prescribing information for a product
- Only be targeted at an audience at least 80% of whom are adults.

Payments to healthcare professionals
HCPs bring expert knowledge and perspectives which they share with healthcare companies such as GSK, and with other HCPs, to support improvements in patient care. These services are valuable to improving patients’ health, and GSK believes HCPs should be fairly compensated if they provide services and expertise to us.

GSK makes payments to HCPs to enable participation at scientific conferences, to speak at meetings and conferences about GSK products and disease or therapy areas relevant to us, and to participate on advisory panels. We also pay for the conduct of research – read more in the Research practices section earlier in this Review.

We have clear standards which set out how we work with HCPs and how much we pay. Support provided will never be an inducement or reward for prescribing our products.

Publishing details of our payments
In the US, we publish quarterly reports to show the payments made to HCPs for speaking and advisory services. These are available on our US website. Achieving this in all countries is challenging because we do not yet have the appropriate data collections systems in place. We will continue to work towards disclosure of payments made to individual HCPs and we will publish aggregate payments made in 2010 by the end of 2011.
**Ethical conduct**

**Training and awareness**
Training and awareness programmes help employees understand the importance of ethical conduct and apply our policies in practice.

Before hiring new recruits we carry out pre-employment checks to ensure they share GSK’s values. We include questions on ethics and integrity in our guides that are used during employee interviews. The importance of living up to the GSK values is reinforced through our Employee Guide to Business Conduct and by senior leaders during meetings and employee broadcasts. Communication and training are used to help employees understand what this means in practice.

Our Corporate Ethics and Compliance intranet contains links to all company policies, ethics and compliance training for new recruits, our ethical decision-making model, connections to key training programmes (such as Anti-Bribery and Corruption), contact details for compliance officers, and the freephone numbers for our Global Confidential Reporting line and US Integrity Helpline.

Employees can also get advice and guidance from their manager, human resources and legal departments, and their local compliance officers and champions.

New employees complete induction training on the GSK Code of Conduct, which is available on our intranet site. We train new general managers and site directors on their compliance responsibilities, and our monitoring and compliance arrangements. Specialised training is provided for employees working in R&D, manufacturing, and sales and marketing, where there are additional regulatory requirements.

Our annual business ethics certification programme requires managers, and employees who interact with healthcare professionals, to confirm that they comply with our ethics policies. The programme covers over 14,000 managers worldwide and was extended in 2010 to include employees who regularly interact with healthcare professionals, bringing the total to over 24,000 employees. We provide extra training and guidance for employees committing minor breaches to help prevent them committing more serious breaches in future.

**Training examples from 2010**

**United States**
In our US Pharmaceuticals business, we appointed around 60 Integrity Champions to help raise awareness about compliance and embed the GSK values. These manager-level employees are provided with training materials each quarter to help them promote discussion of compliance-related topics in their part of the business.

In 2009-2010 all US Pharmaceuticals marketing employees completed a half-day workshop on ‘Delivering Growth through Good Decisions’ to help them apply the ethical decision-making model in their work.

**Europe**
Our European Pharmaceuticals business launched a new compliance programme, called ‘How Do We Know?’, which includes training to help employees improve their understanding of our policies and regular bulletins with updates on our compliance programmes. A new senior management team was established led by commercial senior vice presidents, which regularly reviews audit and compliance results, to help us learn from any mistakes.

**Monitoring and compliance**
All managers must ensure compliance with company policies in their areas of responsibility. They are overseen by and can seek advice from our Corporate Ethics and Compliance department, which promotes effective compliance programmes, addresses compliance issues, and reports problems and progress to senior management and the Board.

Our Corporate Ethics and Compliance department monitors and tracks allegations and suspected legal, ethical or policy infractions. It ensures that all allegations are appropriately investigated. Disciplinary action, up to and including dismissal and reporting to the relevant external authorities, is taken where necessary. Serious violations of our policies are reported to the Audit and Risk Committee of the Board.

Compliance officers are senior managers with direct access to GSK’s Corporate Executive Team. They are a source of expertise for anyone with a question on ethics or GSK policies. Our Corporate Compliance Officer reports directly to the CEO.

We have a dedicated compliance officer for each of our business units – R&D, Manufacturing, Biologicals (vaccines), Pharmaceuticals Europe, Pharmaceuticals Emerging Markets, Asia Pacific and Japan, Consumer Healthcare, Corporate, North America Pharmaceuticals – and additional compliance representatives in some markets and regions.

In 2010 we appointed four deputy compliance officers to work with GSK’s brand and sales teams and R&D centres to ensure compliance is integrated into core processes such as the development of marketing plans. Sales representatives are supervised by their managers, who regularly monitor educational events, visits to doctors and expenses. We use a risk-based approach to determine the frequency of our checks on different teams and individual sales representatives.

**Reporting channels**
Employees are encouraged to seek help on ethical issues and to report any concerns or suspected cases of misconduct. They can do this through their line manager, the Corporate Ethics and Compliance department, a compliance officer or compliance champion, GSK’s human resources and legal departments, or through our Global Confidential Reporting Line or the US Integrity Helpline. The Global Confidential Reporting Line is available in 70 different languages.

Reporting channels are promoted through the Employee Guide to Business Conduct on the GSK intranet and during training.

We are committed to protecting all employees who raise concerns in good faith. Any form of retaliation is prohibited. We will take disciplinary action up to and including termination for any manager, supervisor or employee who engages in retaliation, retribution or harassment of an employee who reports a compliance concern in good faith.

When an employee reports a concern we remind them of our commitment to protect them from retaliation. During the investigation process, interviewed people are reminded of GSK’s zero tolerance for retaliation. We do not share the complainant’s name with other employees during the investigation unless absolutely necessary. Usually, whistleblowers receive a note from the compliance
officer or business unit head, thanking them for raising their concerns and reminding them of GSK’s non-retaliation policy.

In 2010 we settled the long-standing legal issue relating to the investigation of the company’s former manufacturing facility in Cidra, Puerto Rico. This included a settlement with a former employee who worked briefly at the Cidra plant. GSK strongly rejected the initial claim that the former employee had been fired for whistleblowing, and this claim was subsequently dropped from the lawsuit.

**Addressing misconduct**

In 2010 there were 5,258 contacts made through our ethics and compliance channels. These included enquiries and requests for information or guidance as well as allegations of misconduct made via line managers, compliance officers, our confidential Integrity Helplines and offsite post office box (in the US).

In 2010 1,124 employees were disciplined for policy violations compared with 972 in 2009. We believe this may be due to tightening controls for addressing Code of Conduct issues, good manufacturing practices and use of company resources. Of the 1,124 employees, disciplined, 246 were dismissed or agreed to leave the company voluntarily. Other disciplinary actions included 878 documented warnings. In addition to appropriate discipline, employees staying with the company received retraining and increased monitoring. In some cases retraining is also extended to an employee’s colleagues to help prevent them making similar mistakes.
Environmental sustainability

GSK is committed to integrating environmental sustainability into our business. We have a responsibility to contribute to meeting environmental challenges, but we also see this as an opportunity.

There is a compelling business case for saving energy, water and materials, and it aligns with GSK's strategic priority of simplification. We have continued to make progress in all our previous target areas.

We have reduced the amount of water we use by 16% since 2006, exceeding our 2% annual reduction target. We also exceeded the five-year targets for wastewater quality, waste, mass efficiency and emissions of volatile organic compounds. We met our 2010 targets for 5% reductions in energy and greenhouse gases. However, we missed our cumulative energy and greenhouse gas emissions targets of 20% for 2006 to 2010, but the investments made in the early part of the five-year period are now starting to deliver benefits. The final small amounts of ozone-damaging CFCs in a few pieces of cooling and ancillary equipment will be removed in 2011 to meet our goal of complete elimination.

In 2010 we developed a revised environmental sustainability strategy with ambitious goals, not just for our own operations but also for our value chain, from raw materials to product disposal. Our long-term goal is for our value chain to be carbon neutral by 2050.

**Strategy and targets**

Our objective is to significantly benefit the environment, to engage employees in tackling key issues and to benefit GSK financially. We believe we can reduce our annual costs by £100 million by 2020 through reduced energy, materials and distribution costs.

Analysis of our impacts shows we must concentrate on three main areas: carbon dioxide and other emissions that contribute to climate change; water use; and environmental stewardship, which covers the impacts of our products, the use of materials and the generation of waste.

We need to act beyond our own operations because 40% of our carbon footprint results from our supply chain and a further 40% derives from propellants when customers use our inhalers.

Our long-term vision is for our operations and products to be carbon neutral by 2050. This very ambitious target means that there will be no net greenhouse gas emissions from manufacturing, distributing, using and disposing of our products, including the sourcing of raw materials. We do not have all the answers to how we will achieve these goals but some projects that will contribute to this are already underway, such as the Jurong ‘factory of the future’ in Singapore.

To support this vision we have set specific goals for key impacts. Each business, as well as R&D and functional areas such as Procurement and Packaging, is responding appropriately to make its own contribution to GSK’s goals and sustainability priorities. For example:

- Pharmaceuticals manufacturing has set up a Sustainable Manufacturing Centre of Excellence which is providing support and direction to improve sites’ processes and reduce waste
- The vaccines business has created a Sustainability Council of senior managers with climate change as its top environmental priority
- R&D has a Platform Technology and Science (PTS) group which has developed a sustainability strategy for R&D
- Consumer Healthcare has developed a ‘Bright Green’ strategy covering six key environmental sustainability areas
- US Pharmaceuticals is piloting a recycling scheme for our respiratory product inhalers and a similar pilot is starting in the UK in 2011.

**Jurong - factory of the future**

A comprehensive environmental sustainability strategy is turning our site at Jurong, Singapore, into a ‘factory of the future’.

Jurong is targeting step changes in environmental performance on energy, water, mass efficiency, chemical oxygen demand in wastewater and volatile organic compound releases to air.

The site has already identified major improvements in manufacturing lamivudine, the active ingredient in many HIV combination therapies. A new process will reduce the water used in a solvent recovery operation from 60 to 15 litres per kg of lamivudine, and will cut the chemical oxygen demand in wastewater to less than a third of the previous level.

**Sustainability targets for 2015 and 2020**

<table>
<thead>
<tr>
<th>Target</th>
<th>2015 %</th>
<th>2020 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduction in GSK’s overall carbon footprint across the value chain</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduction in GSK’s operational water consumption</td>
<td>20</td>
<td>–</td>
</tr>
<tr>
<td>Reduction in water consumption across the value chain</td>
<td>–</td>
<td>20</td>
</tr>
<tr>
<td>Environmental stewardship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mass efficiency of new pharmaceutical processes</td>
<td>2.5</td>
<td>5</td>
</tr>
<tr>
<td>Reduction in waste to landfill from our operations</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td>Reduction in waste generated from our operations (hazardous and non-hazardous)</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Paper packaging from sustainable sources</td>
<td>50</td>
<td>90</td>
</tr>
</tbody>
</table>

Note: reduction targets are for absolute % change compared to 2010, with the exception of mass efficiency and packaging.

Sustainability awards

The CEO’s Sustainability Awards programme recognises GSK teams for innovation that creates benefits for society, the environment and our business – creativity that achieves a genuine step change towards sustainability. Each winner receives a trophy and selects a charity to receive a donation from GSK.

In 2010 there were 69 entries from 19 countries and nine projects were honoured. The winners included:

Sustainable Science & Technology
R&D Chemical Development at Stevenage in the UK for a project improving the sustainability of manufacturing darapladib, used in treatment of heart disease. The new manufacturing process route has improved the efficiency of material use (mass efficiency) to 6.1% compared to the original 1.7%. This will save emissions of about 80,000 tonnes of CO₂ a year, as well as reducing costs and eliminating hazardous zinc waste streams.

Environmental Sustainability
Global Manufacturing and Supply Production Procurement, for embedding sustainability in production procurement ways of working. The Procurement team developed tools to help staff select suppliers that are using sustainable materials, are efficient at manufacturing our products, have sustainability at the heart of their organisation and understand the impact of their carbon footprint in relation to the products or processes they use.

Supply chain
GSK is committed to introducing sustainability concepts across the full product life cycle from the supply chain to the disposal of the product.

In 2010 we developed a framework for procurement teams to integrate sustainability in line with our objectives for carbon, water and material sourcing. We developed an educational programme for procurement staff and provided new tools, systems and processes.

We have begun to measure some of our suppliers’ performance to identify areas for improvement. All existing and new suppliers will be required to complete a Request for Information that will provide a greater understanding and awareness of the environmental and social impacts of our supply chain, helping to identify potential risks and opportunities for improvement.

In 2010 we surveyed 200 of our larger suppliers, asking about their resource use and material sourcing policies. We have used this information to help us better understand the life cycle impacts associated with several GSK products. In 2011 we aim to establish a set of sustainable sourcing targets and to share sustainable sourcing best practice with suppliers.

Climate change and energy

GSK supports efforts to agree an international treaty with legally binding targets because this will provide the clarity businesses need. However, regardless of the outcome of global negotiations we are committed to reducing our own impact. We have set challenging energy and carbon reduction targets to achieve the long-term goal for our entire value chain to be carbon neutral by 2050.

Our carbon footprint
We undertook a high-level, company-wide exercise to identify the main contributors to our carbon footprint by each stage in the value chain using data for 2009. The study estimated our total footprint at about 14 million tonnes of CO₂. The main contributors are the materials we use in our processes and products and propellant releases during inhaler use.

This analysis, together with life cycle assessments of individual products, emphasises that we need to work with suppliers and others beyond our own sites. The results are helping to set priorities and programmes.

GSK’s carbon footprint in 2009 (million tonnes CO₂e per annum)

1 Materials/supply chain (5.66)
2 Product use (5.50)
3 Production and operations (2.65)
4 Distribution (0.18)
5 Product end of life (0.03)

*Carbon dioxide* and *CO₂* refer to all greenhouse gases as CO₂ equivalents unless otherwise specified.
Our climate change programme
We expect to achieve substantial energy and emissions reductions by:

- Making our buildings and equipment more energy efficient
- Installing on-site renewable technologies, using biomass, wind turbines and photovoltaic panels
- Buying electricity produced from renewable sources
- Reducing the climate impact of travel and transport by switching from air to sea freight and from road to rail
- Encouraging the use of collaborative information technologies to reduce the need for business travel.

We have created a central fund to help finance carbon reduction and energy-saving projects. One of the first renewable energy projects supported by this fund was a rooftop solar array at our IT global data centre. Since 2007, investments supported by the fund have saved 148,000 tonnes of greenhouse gas emissions.

Propellants
Propellants used in inhalers for asthma and chronic obstructive pulmonary disease represent approximately 40% of our total carbon footprint. Traditionally these products contained either hydrofluoroalkanes (HFAs) or chlorofluorocarbons (CFCs) which are potent greenhouse gases. CFCs also damage the ozone layer.

We have met our goal of eliminating the use of CFCs in our products by the end of 2010, replacing them with HFAs. This has reduced emissions associated with our inhaler products from 24 million tonnes CO₂ in 1998 to approximately 4.7 million tonnes in 2010.

We increasingly supply dry powder inhalers which do not use a propellant, however some patients find them difficult to use. We are researching ways to further reduce the impacts from products containing HFAs, including inhalers that require less propellant, searching for alternative propellants with a lower global warming potential, and programmes to recycle devices when the patient has finished taking their medication. Take-back schemes began in the US in 2010 and a pilot scheme will start in the UK in 2011.

Facilities
More than 1,400 energy-saving projects have been financed by a central fund since 2007. In 2010 we completed almost 200 projects with potential savings of more than 350,000 GJ and more than 52,000 tonnes of CO₂ emissions.

Renewable energy is a growing part of the GSK energy and climate programme and includes biomass as well as wind and solar. During 2010 we generated 1,742 GJ from renewables at sites in Belgium, Germany, India, Singapore, South Africa, the UK and the US. Sites in several countries also installed solar water heating systems.

Product transport
We estimate that transport of our products, the sales fleet and employees’ business air travel accounted for approximately 22% of the direct greenhouse gas emissions from our operations and transport in 2010.

We achieved our target to save 9,000 tonnes of CO₂ a year from the distribution of products, by:

- Switching from air to sea transport where practical
- Improving vehicle loading in Europe so there are fewer vehicles on the road
- Improving warehousing to reduce energy use in refrigeration, lighting and travel between warehouses.
Since 2007 our Air-to-Ocean programme has switched over 140 routes, saving more than 38,000 tonnes of CO₂ emissions. We initiated 16 air-to-sea mode changes in 2010, including routes from Evreux in France to Japan and from Zebulon, North Carolina to Australia.

**Business travel**

We have made a significant investment in videoconferencing systems, with over 500 videoconference rooms in 68 countries. In 2010 there was a 40% increase in the use of videoconferencing compared to 2009. The distance flown fell by more than 200 million km and we used nearly 85,000 fewer single flights compared to 2009. This reduced CO₂ emissions by more than 30,000 tonnes, a 25% reduction.

**Climate and energy performance**

GSK achieved Carbon Trust Standard Global certification in 2010, the first company to achieve this recognition of global excellence in carbon management.

In 2010 we reduced energy consumption for operations and transport by 5.5% and greenhouse gas emissions by 5.8% relative to sales. The cumulative reduction for 2006-2010 was 9.1% for energy and 10.7% for emissions. These reductions were below our target of 20% for each, mainly because initial progress was slow in the early years of the five-year period.

If we include patient use of inhalers the total GSK climate change impact was 6.9 million tonnes of CO₂, 9.2% lower than in 2009. This includes 4.6 million tonnes from patient use of inhalers, down by 10.1% from 2009.

**Water**

By 2025, a third of the world’s population is expected to suffer severe and chronic water shortages, damaging ecosystems and the quality of human life.

We recognise the need for a strategic approach to water use that reflects the complex interactions with human population growth, climate change, disease pattern changes and biodiversity stresses.

As well as using water more efficiently in our operations, we encourage suppliers to take action and encourage consumers to save water. For example, Consumer Healthcare’s Turn off the Tap campaign, launched in Italy in 2010, encourages people to use less water when they brush their teeth. We estimate that 40,000 litres of water will be saved by this education and awareness campaign.

**Our water use**

Action to reduce water consumption focuses on sites in areas of water scarcity and on water-intensive products. We are developing site-specific targets for facilities in areas of water scarcity, which account for less than 10% of all our sites.

We estimate that for most products, 80-90% of the estimated total water use is embedded in the supply chain. Recognising that this ‘virtual water’ associated with the materials we buy represents a major part of our water footprint, we are engaging with suppliers to assess their awareness of, exposure to and plans for mitigating water risks. We will use this information to grade suppliers and drive improvements.

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**Climate change impact from operations, energy and transport**

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
</tr>
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<tbody>
<tr>
<td>2006</td>
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</tr>
<tr>
<td>2007</td>
<td>81.5</td>
</tr>
<tr>
<td>2008</td>
<td>83.1</td>
</tr>
<tr>
<td>2009</td>
<td>79.2</td>
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<tr>
<td>2010</td>
<td>66.8</td>
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**Climate change impact from operations, transport and inhaler use**

<table>
<thead>
<tr>
<th>Year</th>
<th>Use of inhalers by patients</th>
<th>Operations energy</th>
<th>Travel and transport</th>
<th>Other sources</th>
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</thead>
<tbody>
<tr>
<td>2006</td>
<td>7.4</td>
<td>4.6</td>
<td>5.4</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>7.8</td>
<td>4.6</td>
<td>5.4</td>
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</tr>
<tr>
<td>2008</td>
<td>7.2</td>
<td>4.6</td>
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<tr>
<td>2009</td>
<td>7.6</td>
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<tr>
<td>2010</td>
<td>6.9</td>
<td>4.6</td>
<td>5.4</td>
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</tr>
</tbody>
</table>

**The CEO Water Mandate**

We endorsed the United Nations CEO Water Mandate in 2009. This commitment demonstrates our recognition that water is a valuable natural resource, and that businesses can play a positive role in managing it. By endorsing the mandate, we have pledged to:

- Improve our water sustainability in direct operations and our supply chain
- Work with other organisations and governments to encourage sustainable policy and practices
- Engage with our sites’ local communities in providing education and support on water and sanitation
- Be accurate and transparent in our reporting of water-related issues.
GSK’s worldwide water use in 2010 totalled 18.7 billion litres, 0.5 billion litres less than in 2009. Cumulatively, water use per unit of sales has fallen by 16% since 2006, ahead of our 2% annual reduction target.

Achievements in 2010 include:
- Agbara (Nigeria) saved 81,000m³, more than 36% of its overall water consumption, by removing old, inefficient washing equipment and improving the inspection and maintenance of water pipelines and sources to minimise losses
- Parma (Italy) saved 67,000m³, more than 15% of its overall water consumption, through a water reduction programme focused on cooling water, resin replacement in water softeners and steam discharges from autoclaves.

Environmental stewardship

We aim to operate responsibly, using input materials and packaging efficiently and safely, minimising waste and avoiding harm to humans and the environment.

Raw materials are typically one of the top contributors to the overall environmental impact of pharmaceutical operations. Using materials more sustainably requires changing business processes to consume fewer resources and generate less waste, removing hazardous substances where possible and eliminating waste that is persistent, toxic or bio-accumulative.

The pharmaceutical industry has typically used more than 100 tonnes of material for every tonne of active pharmaceutical ingredient (API) produced, a mass efficiency of 1%. The average mass efficiency of new GSK products during 2006-2010 reached 3.3%.

Our target is to achieve 5% mass efficiency by 2020 and we are achieving substantial improvements. For example a redesigned process at Jurong in Singapore will improve its mass efficiency from about 2.5% to about 4.5%. We also work to design manufacturing processes for new products to improve mass efficiency early in the product life cycle. For example using a new manufacturing route for albiglutide, a product in development at Upper Merion in Pennsylvania, improved the overall yield by 24%, reduced water consumption by more than half and increased mass efficiency from 1.7% to 3.9%. These improvements also reduced the cost of raw materials by 35%.

Potential hazards

We continuously examine the use of materials of concern across all phases of development to determine which are being used and identify how they can be replaced during development. For instance, a new manufacturing route for an epilepsy treatment eliminates the use of a highly hazardous oxidizing agent, peracetic acid, as well as a chlorinated solvent, a highly odorous sulphur reagent and its sulphur waste.

In 2010 we used 73 metric tonnes of materials of concern (up from 26 tonnes in 2009). The increase was driven by undertaking more manufacturing to support late-stage development of products which needs higher volumes of product for clinical trials. Seven solvents accounted for about 80% of this volume. Most of the solvent waste from this production was destroyed by incineration, although some was recycled.
Environmental sustainability

The amount of non-hazardous waste we generated increased by 6% in 2010 due to higher production at two of our manufacturing facilities in Australia and India. However, we still managed to reduce the amount of non-hazardous waste sent for disposal by 7% in 2010. This was achieved by increasing the proportion sent for recycling from 73% to 77% in 2010. Since 2006, we have reduced the amount of waste sent for disposal by a total of 22%. This improvement is substantially beyond our 1% per year target. In 2010 33 GSK sites (excluding offices) did not send any waste to landfill.

Hazardous waste sent for disposal in 2010 was 27% lower than in 2009 due to continued efforts to recycle it, especially solvents. Only 0.2% of hazardous waste went to landfill.

Our new target is to cut total waste generated (hazardous and non-hazardous) by 25% by 2015 and 50% by 2020, as well as aiming for zero waste to landfill by 2020.

Packaging

We have substantial opportunities to improve the environmental impact of product packaging. We have set a target to derive 50% of our paper packaging from sustainable sources by 2015, and 90% by 2020.

In 2010 we began to implement a sustainable packaging strategy based on evaluations of a series of packaging options using life cycle assessment and carbon footprint analysis.

Examples of packaging improvements include:
- The new pack for Iodex pain relief ointment reduced the material used by 85%
- Moving from glass to polypropylene or PET bottles for Horlicks, Iodex, and Crocin in India saves 11,700 tonnes of CO₂ per year
- Horlicks carton reduction saves 5,000 tonnes of CO₂ per year.

Emissions to air

The main emissions from GSK sites, apart from greenhouse gases, are gases that damage the ozone layer (CFCs) and volatile organic compounds (VOCs) that cause low-level pollution.

We stopped manufacturing CFC-containing inhalers in all GSK sites and our two contract manufacturing sites in 2009. More than 99% of CFCs associated with cooling systems and other ancillary uses were eliminated by 2010. We plan to eliminate the use of CFC associated with the few remaining pieces of equipment before the end of 2011.

We emit VOCs to the atmosphere mainly from solvents used in manufacturing active pharmaceutical ingredients and in R&D pilot manufacturing plants. In 2010 VOC emissions fell by 14% to 2,660 tonnes, bringing the total reduction since 2006 to 36%.

Data, audit and assurance

Environmental data are collected from all 76 of our Pharmaceuticals, Consumer Healthcare and Nutritional Healthcare manufacturing sites, 14 vaccines sites, 22 Pharmaceuticals and Consumer Healthcare R&D sites, the UK headquarters building and 60 offices and distribution centres.

We regularly audit our operations, contract manufacturers and key suppliers to assess systems for managing risks and impacts, compliance with legislation and performance against our environment, health, safety, and sustainability (EHSS) standards. Audits also assess whether appropriate management systems are in place to improve performance and maintain compliance. Our internal auditors are certified as lead auditors against the ISO 14001 standard.

SGS, an independent external assurer, has reviewed the data in the environmental sustainability and the health and safety pages of the full online Corporate Responsibility Report.

See our CR Report for five-year trends, internal audit and external assurance reports.
Our work with communities

We invest in community partnership programmes that seek to improve access to medicines and healthcare around the world and to create opportunities in education and economic development.

We aim to make a real difference to communities by working with our partners to find innovative solutions to healthcare challenges. Our programmes include global initiatives designed to tackle diseases of the developing world across multiple countries. We also support local programmes that are tailored to the specific needs and challenges of our many different markets. Our support includes donations of time, money, expertise and medicines.

We encourage employees to get involved because this benefits the organisations and charities we support and contributes to employees’ personal development. Every employee at GSK is entitled to one paid day off each year to volunteer in the community. We also run PULSE which enables high-performing employees to share their expertise and learn from our NGO partners through 3-6 month placements.

Our global community investment was £222 million ($345 million) in 2010 which includes donations of our products worth £147 million. We value our donations at cost, using an average cost of goods rather than the higher wholesale acquisition price (WAC) often used by others, as we believe this is a more accurate reflection of the true cost to GSK.

Our giving in 2010 was 36% higher than in 2009 due to the expansion of key programmes including product donations for our US Patient Assistance Programs, our donations of albendazole to the Global Alliance to Eliminate Lymphatic Filariasis, the 20% reinvestment initiative for Least Developed Countries and the cost of donating 24 million doses of our H1N1 vaccine against pandemic flu to the World Health Organization for use in developing countries.

Key programmes

In developing countries millions of people continue to suffer and die from preventable or treatable diseases. Our health programmes are designed to improve the health and quality of life for people in these communities through provision of medicines, education and advocacy, and investment in disease prevention and healthcare infrastructure. By working in partnership with NGOs and health organisations, we believe it is possible to achieve significant and long-lasting improvements in healthcare. Programmes in 2010 included:

- **Investing in developing world healthcare infrastructure:** We are reinvesting 20% of our profits (from our medicines and Consumer Healthcare products) in the Least Developed Countries into projects to improve local healthcare infrastructure. This amounts to £5 million based on profits made in 2009 and 2010 and to date we have committed £1.8 million to a number of projects. In 2011 we have set up new partnerships with AMREF, Save the Children and Care International to deliver future investments.

- **PHASE:** We established PHASE in 1998 to reduce diarrhoea-related disease by encouraging school children to wash their hands. In 2010 PHASE reached 1.4 million children in 16 countries.

- **African Malaria Partnership:** We are working with Save the Children and other partners to improve access to treatment and prevention of malaria in sub-Saharan Africa. This programme works through education of communities and training to help community health volunteers diagnose cases of severe malaria.

- **Eliminating lymphatic filariasis (LF):** We work in partnership to eliminate LF, one of the world’s most disabling diseases, through the Global Alliance to Eliminate Lymphatic Filariasis. We are committed to donating as much of the anti-parasitic drug albendazole as required to reach the one billion people at risk in over 80 countries. In 2010 556 million albendazole treatments were donated to 26 countries.

- **Expansion of our albendazole donation:** We announced in 2010 that we would expand our donation of albendazole to enable treatment of all school-aged children in Africa against intestinal worms from 2012 onwards. Intestinal worms cause more ill health in school-aged children in Africa than any other infection.

- **Disaster response:** We donate cash and supplies of our products to people affected by emergencies and natural disasters. In 2010 this included £250,000 to help the British Red Cross provide emergency safe water and sanitation for people affected by the Haiti earthquake and £170,000 to support communities affected by the earthquake in Pakistan.

Method of giving (£ million)

1. Cash (£53m)
2. Product (at cost) (£147m)
3. In kind (£4m)
4. Management costs (£18m)

Read more about ‘Our work with communities’ in our full CR Report on www.gsk.com/responsibility/cr-report-2010
Our people

GSK employs over 90,000 people in 114 countries worldwide. We want GSK to be known as a great place to work and an employer of choice for talented people from all backgrounds.

Our employment practices are designed to help us create the right workplace culture in which all GSK employees feel valued, respected, empowered and inspired. Important elements of our approach include our values and behaviours; our commitment to inclusion and diversity and support for flexible working practices; regular two-way communication with employees; and respectful and fair treatment of employees during changes to the company.

Our leaders set the tone and all employees have a role to play in maintaining this culture. We ask them to adopt our company values and behaviours in all their work. In return, we aim to provide a great employee experience for everyone at GSK. This includes high-quality training and development opportunities, competitive reward packages, and a commitment to protect employee health, safety and wellbeing.

Inclusion and diversity
We aim to be an inclusive and diverse company. This empowers our employees because it shows that we value and respect their contribution. It is good for business because it brings different knowledge, perspectives, experiences and working styles to GSK.

In 2010 we revised our inclusion and diversity strategy to help us create a workforce that reflects our global presence and the communities we serve. Our strategy is supported by senior management accountability for ensuring that we have the right initiatives in place and for raising awareness across the business.

Inclusion and diversity are also supported through our mentoring programme which encourages mentors to coach someone with a different background from their own.

Our approach to disability
We work to ensure that people with disabilities can access the full range of recruitment and career opportunities at GSK. In the UK, for example, we partner with the Employers’ Forum on Disability and hold the ‘Two Ticks’ symbol from Jobcentre Plus, which demonstrates our commitment to employing people with disabilities.

Gender diversity
Despite a continued period of change we have maintained the percentage of women working at all levels of management at GSK. By the end of 2011 we will have three women on the Corporate Executive Team (CET), two of whom will be leading major commercial operations. This is a significant increase since 2008 when there were no women on the CET.

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<thead>
<tr>
<th>% of positions held by women</th>
<th>2010</th>
<th>2009</th>
<th>2008</th>
<th>2007</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVP, VP</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Director</td>
<td>37</td>
<td>36</td>
<td>36</td>
<td>35</td>
<td>34</td>
</tr>
<tr>
<td>Manager</td>
<td>42</td>
<td>42</td>
<td>41</td>
<td>40</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>37</td>
<td>36</td>
</tr>
</tbody>
</table>

Ethnic diversity
We report ethnic diversity for two markets, the UK and US.

Ethnic minorities accounted for 19.4% of UK employees in 2010, the same proportion as recorded in 2009. To put this in context, ethnic minorities accounted for 12.5% of the UK population of England and Wales in 2001, the last UK Census.

In the US, minorities comprised 20.5% of our workforce in 2010, compared with 20.4% in 2009, maintaining the level despite substantial workforce reductions. Comparing our US workforce data against the North American Industry Classification System (NAICS) for the Pharmaceutical and Medicine Manufacturing industry, we have identified areas to address. While the GSK US workforce of 8.1% African-American is comparable with the NAICS industry figure of 8.5%, the GSK US workforce is 3.7% Latino and 8.4% Asian, compared to the industry figures of 7.3% and 11.6%, respectively.

<table>
<thead>
<tr>
<th>% of employees from ethnic minorities</th>
<th>2010</th>
<th>2009</th>
<th>2008</th>
<th>2007</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>19.4</td>
<td>19.4</td>
<td>19.2</td>
<td>19.1</td>
<td>18.3</td>
</tr>
<tr>
<td>US</td>
<td>20.5</td>
<td>20.4</td>
<td>20.5</td>
<td>20.1</td>
<td>19.8</td>
</tr>
</tbody>
</table>

Training and engagement
The right training and development can help employees improve their performance, feel engaged in their work and make progress in their careers.

Opportunities available to GSK employees include secondments to other departments, work-related training courses, and mentoring by senior leaders. Additionally we offer excellent employee volunteering opportunities which help GSK employees gain new experiences and skills and, in many cases, acquire a deeper understanding of patient needs, at the same time as supporting communities and charities. GSK gives every employee one paid day off each year to volunteer in their community and, through the PULSE programme, offers the chance for employees to spend up to six months working for a non-governmental organisation.

We provide tailored training for existing and future leaders, including assignments and responsibilities designed to stretch and enhance their learning. In 2010 we provided training to nearly 8,000 GSK leaders worldwide. We also provide leaders with coaching designed to help them reach their personal and business goals.
Our people

Employee engagement
We communicate regularly with our workforce to provide updates about progress towards our goals and changes to the business, to listen to their feedback, and to stimulate innovative ideas. This includes face-to-face communications, web broadcasts to reach large and geographically dispersed teams, and our global intranet site.

In 2010 we launched a new portal with social media and networking tools that enable employees to collaborate and share information more easily. We also introduced ‘Idea Engine’, an online tool which allows employees to submit ideas and recommendations, and vote for or against suggestions from their colleagues. For example, in January 2010 we asked employees for their ideas on how to simplify our company procedures and reduce bureaucracy. Nearly 25,000 employees visited the site, and we received over 1,000 recommendations.

Andrew Witty, our CEO, talks regularly to employees through global forums and broadcasts. His CEO Advisory Board comprises employee representatives from across the company, and acts as an informal sounding board for ideas. On the intranet, the myCEO page gives staff the chance to pose questions to Andrew and other members of the Corporate Executive Team (CET). Many CET members also hold web broadcasts; others have blogs and Q&A pages to keep their teams informed.

Consultation and restructuring
We recognise trade unions for consultation and collective bargaining in many countries worldwide.

In Europe, we have additional mechanisms for consulting employees about significant developments or changes to the business. Our staff and works councils meet regularly, providing employees with the chance to speak directly to company management.

Employee representatives from 28 EU countries also participate in our European Employee Consultation Forum, which works alongside national consultation processes.

From time to time we undertake restructuring programmes to improve the effectiveness and productivity of our operations and ensure the long-term sustainability of GSK. This can include outsourcing, site closures and staff reductions. At present we are streamlining our operations in developed markets and growing operations in emerging markets, in line with the changing shape of our business.

We are very conscious of the effect restructuring has on our employees and whenever possible we aim to achieve our organisational and financial goals while preserving jobs. We consult with employees and their representatives before implementing measures that affect our workforce. In the event of redundancies, affected employees receive a wide range of support, including a competitive severance package, assistance in finding alternative employment, career counselling and retraining. We also work hard to maintain the morale of other employees at GSK during restructuring.

Employee survey
Nearly 60,000 employees worldwide took part in our December 2009 workforce survey.

Overall, survey results indicate that people are proud to be a part of GSK, clear about what they are accountable for and empowered to do, feel trusted to do their jobs, and understand what constitutes ethical behaviour. Areas identified for improvement include the need for greater transparency, raising further the bar on employee empowerment, and continuing to provide opportunities for personal development.

Health, safety and wellbeing
Keeping employees and contractors healthy and safe is a business priority and reflects GSK’s core value of respect for people. This is an essential part of being a responsible employer and contributes to business performance by improving engagement and productivity and by reducing healthcare, business disruption and insurance costs.

In 2010 the health and safety aspects of our workforce sustainability strategy focused on:
• improving the health and safety culture
• addressing key health and safety risks
• expanding several high-impact global programmes.

Health and safety culture
In 2010 we focused on increasing the skills of our environment, health and safety professionals. Staff at sites have embarked on new qualifications such as the International NEBOSH Diploma (from the National Examination Board in Occupational Safety and Health), and advanced qualifications in both occupational hygiene and environmental management.

Living Safety
Our Living Safety programme is designed to embed a strong safety culture throughout GSK. It identifies strengths and gaps in a team’s or larger unit’s health and safety culture and establishes the behaviours we expect everyone to demonstrate in their everyday work. Three important elements of the programme focus on:
• Behaviours that all employees and contractors should display and which establish everyone’s responsibility for the health and safety management system
• Supervisor behaviours that ensure GSK’s health and safety standards are understood, implemented and maintained by their team, including contractors
• Managers’ attitudes and behaviours that set the tone and lead with high health and safety standards, communicate openly with employees about issues, quickly address any risks they identify and involve others in their efforts to improve safety performance.

We will assess the business and health and safety impacts of the programme in 2011.
Key health and safety risks
Health and safety risks for GSK range from chemical exposure at R&D and manufacturing sites to repetitive strain and other musculoskeletal injuries in offices.

Chemical and process safety
We conduct hazard assessments and develop safety data sheets for new materials and products as they progress through the development process. This ensures that health and safety information is readily available to employees, contractors, contract manufacturers and customers to handle, transport and dispose of materials and products safely.

We aim to make 80% of operations that handle hazardous compounds ‘free from respirators’ by 2012 so employees do not need to wear respiratory protective equipment for routine production tasks. Sites are installing technology that prevents the release of hazardous compounds into the work environment and 56% of operations are now ‘respirator free’. All new facilities will be respirator free from the start.

There were around 80 process safety incidents in 2010 including a significant overpressure incident at our Thane manufacturing facility in India. We carried out a full technical and management systems investigation of the incident. We are implementing a detailed response plan at Thane with support from staff seconded from other GSK sites, concentrating on risk reduction measures for each of the processes conducted at the site.

A process safety review by an external consultant will be completed in 2011.

Driver safety
Sales representatives spend significant amounts of time driving and accidents have been the most common cause of fatalities since 2002, including one death in 2010. Vehicle accidents caused 16% of the injuries with lost time in 2010.

We conducted driver safety audits in three higher risk countries – Turkey, India and Egypt. They found that there has been progress in implementing the global driver safety programme but we can reduce risks further. For example, we are improving training and maintenance of vehicles in these and other countries.

Ergonomics and human factors
Musculoskeletal illnesses and repetitive strain injuries are some of the leading causes of time away from work.

Seventy cross-disciplinary ergonomic improvement teams work to identify risks, develop solutions and share best practice globally through an ergonomics intranet site. More than 900 trained facilitators help manage computer-based ergonomic risk assessments.

We have far exceeded our targets and achieved an average annual reduction in the musculoskeletal-related injury and illness rate of 18% per year between 2006 and 2010. But musculoskeletal injuries and illnesses continue to be a major cause of worker ill health and will continue to be a focus for improvement.

Health and wellbeing programmes
Mental and emotional health
In 2010 we began introducing a global employee assistance programme (EAP) designed to provide emotional counselling, evaluation and support for employees. By the end of 2010, 15 countries had an EAP in place.

During 2011 it will be introduced in further markets so that every employee in over 100 countries will have access to free, basic mental and emotional healthcare. This will include up to eight sessions of counselling with a qualified health professional for each new life or emotional issue arising during the year. The programme will also provide counselling and emotional support at the time of disasters, crises or site downsizings.

Personal and team resilience
Resilience is the ability to be successful in a high-pressure, fast-paced and continuously changing work environment. It supports good performance and helps prevent mental illness arising from stress, a leading cause of ill health and disability at work.

The personal resilience programme helps people build skills to increase their focus, energy and confidence and reduce tension, anxiety and fatigue. More than 2,500 employees have participated since it started in 2008.

The team resilience programme helps employees and their managers to identify and act on sources of pressure on their teams, such as lack of workplace flexibility or accountability. The programme has been completed by 33,000 employees in 55 countries since it began in 2003. Participants have identified positive outcomes such as more successful team work, more efficient machine operation, increased empowerment and better sales performance.

Studies of groups following the team resilience process have found reduced perception of workplace pressures along with increased pride in GSK and work motivation, a sense of greater control and influence over the team’s work, and improved communication.

Energy for Performance
High energy levels help employees focus better and work more efficiently. The Energy for Performance (E4P) programme helps employees to build skills to better manage their physical and mental energy more effectively. It helps people develop habits that improve their engagement at work and at home.

In 2010 2,300 employees participated in E4P workshops. In total, over 7,300 employees from 80 countries have attended the programme since 2007. Almost 90% have reported significant improvement in their physical and mental performance and emotional energy. Participants find that improved energy levels last for at least 12 months after the workshop.
Health and safety performance

Our main health and safety measure is the reportable injury and illness rate. We also measure the number of injuries and illnesses that result in lost days, as well as the number of days lost from these injuries and illnesses. This provides an indication of the severity of the incidents, although it is only a rough guide.

The main target has been to reduce reportable injuries and illnesses and ergonomic injuries and illnesses by 5% a year from 2006 to 2010. We have exceeded both annual targets, with annual reductions over the five-year period of 14% improvement in the total rate and 18% for the musculoskeletal rate. We have also exceeded the target to reduce lost time incidents by 20%.

Causes

The leading causes of injuries and illnesses continue to be slips, trips and falls, ergonomic injuries (mainly strains and repetitive musculoskeletal injuries) and road traffic incidents.

Mental ill health accounts for only 2% of all illnesses but these cases result in the highest number of days lost, at over 69 days per case on average. This is being addressed by our resilience programme.

Fatalities and serious injuries

There was one fatality in 2010 and two amputations to GSK employees who placed their hands into equipment that had not been switched off:

- An employee in India was killed when his motorbike collided with a truck
- An operator was removing a fixed guard while attempting to clear a jam when his finger was cut on the edge of a star wheel, leading to the amputation of his left index finger
- An operator was clearing a foil jam on a packaging machine when a cutter rotated unexpectedly, resulting in the amputation of the middle finger of his right hand.

Health and safety targets and progress

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Target 2006-10</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reportable injury and illness rate to the end of 2010</td>
<td>5% reduction a year</td>
<td>44.8% (average of 13.7% per year)</td>
</tr>
<tr>
<td>Reportable musculoskeletal illness and injury rate</td>
<td>5% reduction a year</td>
<td>58.3% (average of 18.1% per year)</td>
</tr>
<tr>
<td>Lost time injuries and illnesses</td>
<td>20% by 2010</td>
<td>30.5% (average of 8.5% per year)</td>
</tr>
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</table>

Reportable injury and illness rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
<th>Actual</th>
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</thead>
<tbody>
<tr>
<td>2010</td>
<td>0.57</td>
<td>0.57</td>
</tr>
<tr>
<td>2009</td>
<td>0.48</td>
<td>0.48</td>
</tr>
<tr>
<td>2008</td>
<td>0.57</td>
<td>0.57</td>
</tr>
<tr>
<td>2007</td>
<td>0.68</td>
<td>0.68</td>
</tr>
<tr>
<td>2006</td>
<td>0.72</td>
<td>0.72</td>
</tr>
</tbody>
</table>

Note: The reportable injury and illness rate is the number of incidents per 100,000 hours worked.
## Data summary

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Access to medicines</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of <strong>Combivir</strong> and <strong>Epivir</strong> tablets shipped (millions)</td>
<td>1.7</td>
<td>33.0</td>
<td>70.0</td>
<td>85.0</td>
<td>86.3</td>
</tr>
<tr>
<td>Number of generic ARVs supplied under licence from GSK (millions)</td>
<td>594</td>
<td>439</td>
<td>279</td>
<td>183</td>
<td>120</td>
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<tr>
<td><strong>Combivir</strong> not-for-profit price ($ per day)</td>
<td>0.54</td>
<td>0.54</td>
<td>0.54</td>
<td>0.54</td>
<td>0.65</td>
</tr>
<tr>
<td>Voluntary licences granted to generic manufacturers for GSK ARVs (cumulative total)</td>
<td>11</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>9</td>
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<tr>
<td>Value of products donated through GSK Patient Assistance Programs in the US (£ millions, 2010-2007 at cost, 2006 at wholesale price (WAC))</td>
<td>100</td>
<td>80</td>
<td>56</td>
<td>45</td>
<td>200</td>
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<tr>
<td><strong>Research and Development</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenditure on R&amp;D (£ billions)</td>
<td>4.0</td>
<td>4.1</td>
<td>3.7</td>
<td>3.3</td>
<td>3.5</td>
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<tr>
<td>Number of trials published on the GSK Clinical Study Register (cumulative total)</td>
<td>4,069</td>
<td>3,687</td>
<td>3,273</td>
<td>3,089</td>
<td>2,760</td>
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<td><strong>Ethical conduct</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Number of employees completing certification to the GSK Code of Conduct</td>
<td>&gt;24,000</td>
<td>&gt;14,000</td>
<td>&gt;14,000</td>
<td>&gt;14,000</td>
<td>&gt;12,000</td>
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<tr>
<td>Number of contacts through our ethics compliance channels</td>
<td>5,258</td>
<td>5,445</td>
<td>3,812</td>
<td>5,265</td>
<td>5,363</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women in global management grades (%)</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>37</td>
<td>36</td>
</tr>
<tr>
<td>Ethnic diversity – people of colour (US, %)</td>
<td>20.5</td>
<td>20.4</td>
<td>20.5</td>
<td>20.1</td>
<td>19.8</td>
</tr>
<tr>
<td>Ethnic diversity – ethnic minorities (UK, %)</td>
<td>19.4</td>
<td>19.4</td>
<td>19.2</td>
<td>19.1</td>
<td>18.3</td>
</tr>
<tr>
<td>Reportable injury and illness rate (per 100,000 hours worked)</td>
<td>0.40</td>
<td>0.48</td>
<td>0.57</td>
<td>0.68</td>
<td>0.72</td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total climate change impact (thousand tonnes CO₂ equivalent)</td>
<td>6,931</td>
<td>7,633</td>
<td>7,248</td>
<td>7,801</td>
<td>7,424</td>
</tr>
<tr>
<td>– Climate change impact from energy for operations and transport</td>
<td>2,011</td>
<td>2,159</td>
<td>2,214</td>
<td>2,231</td>
<td>2,246</td>
</tr>
<tr>
<td>– Climate change impact from patient use of inhalers</td>
<td>4,647</td>
<td>5,171</td>
<td>4,747</td>
<td>5,200</td>
<td>4,685</td>
</tr>
<tr>
<td>Energy from operations and transport (million gigajoules)</td>
<td>24.3</td>
<td>26.0</td>
<td>26.7</td>
<td>26.5</td>
<td>26.7</td>
</tr>
<tr>
<td>Water use (million cubic metres)</td>
<td>18.7</td>
<td>19.2</td>
<td>19.7</td>
<td>20.3</td>
<td>22.1</td>
</tr>
<tr>
<td>Wastewater chemical oxygen demand (COD) (thousand tonnes)</td>
<td>12.0</td>
<td>13.1</td>
<td>14.9</td>
<td>14.3</td>
<td>15.9</td>
</tr>
<tr>
<td>Non-hazardous waste disposed (thousand tonnes)</td>
<td>29.5</td>
<td>31.7</td>
<td>33.2</td>
<td>38.0</td>
<td>37.9</td>
</tr>
<tr>
<td>Hazardous waste disposed (thousand tonnes)</td>
<td>35.3</td>
<td>48.5</td>
<td>54.0</td>
<td>72.6</td>
<td>71.0</td>
</tr>
<tr>
<td>Volatile organic compound emissions (thousand tonnes)</td>
<td>2.7</td>
<td>3.1</td>
<td>3.7</td>
<td>4.3</td>
<td>4.1</td>
</tr>
<tr>
<td><strong>Community investment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total community investment expenditure (£ millions, 2010-2007 at cost, 2006 at wholesale price (WAC))</td>
<td>222</td>
<td>163</td>
<td>124</td>
<td>109</td>
<td>302</td>
</tr>
<tr>
<td>Value of albendazole donations (£ millions, 2010-2007 at cost, 2006 at wholesale price (WAC))</td>
<td>17</td>
<td>13</td>
<td>12</td>
<td>7</td>
<td>38</td>
</tr>
<tr>
<td>Number of albendazole tablets donated for prevention of lymphatic filariasis (millions)</td>
<td>556</td>
<td>425</td>
<td>266</td>
<td>150</td>
<td>155</td>
</tr>
</tbody>
</table>

You will find the footnotes for this table on the following page.
Data summary

1. 2010 data relate to ViV Healthcare, 2009-2006 are GSK data.

2. Includes ARVs sold at not-for-profit and discounted prices.

3. Includes freight and delivery costs. The Médecins Sans Frontières pricing report lists the average cost of generic equivalents.

4. 2010, 2009, 2008 and restated 2007 figures reflect value at cost (average cost of goods) rather than wholesale acquisition price (WAC). This is the third year we have valued our donations this way and believe it is a more accurate reflection of the true cost to GSK and is therefore more transparent. 2006 figures remain at WAC.

5. Includes contacts with line managers, compliance officers, our confidential Integrity Helplines or offsite post office box (in the US).

6. Climate change impact is calculated as CO₂ equivalent using the Greenhouse Gas Protocol developed by the World Resources Institute and the World Business Council for Sustainable Development. Each year we review the CO₂ factors and update the data for all years as appropriate.
About our reporting

We report our CR performance annually, as part of our commitment to being open and transparent about our business activities.

This Review is supported by a full online Corporate Responsibility Report that explains our approach and performance on each CR issue in more detail. As well as the issues covered in this Review, it also explains our approach to issues such as supply chain management, human rights, public policy and patient advocacy.

Information on corporate responsibility is also included in our Annual Report.

Brand names appearing in italics throughout our CR reporting are trademarks either owned by and/or licensed to GSK or associated companies.

Data
Data relate to worldwide operations for the calendar year 2010, except where stated. Data in the environment and health and safety sections have been independently assured by SGS, an independent external assurer.

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