

ENVIRONMENTAL SUSTAINABILITY

In this section, we describe our commitment in two key areas of environmental sustainability: managing our carbon footprint and understanding the potential impact of pharmaceuticals in the environment. More information about our work in these areas and others, such as waste management, resource efficiency, biodiversity and emissions to air and water, can be found on our website, astrazeneca.com/responsibility.

We continue to track, actively participate in, and pursue initiatives relating to international research and policy developments associated with emerging safety, health and environment (SHE) policy and legislative matters.

CLIMATE CHANGE

We are committed to minimising our impact on climate change and in recent years we have been making good progress in reducing our greenhouse gas emissions. In 2008 our total emissions from all sources were 5% lower than in 2007. Data on our performance over the last three years is provided on page 15.

In common with most businesses, our emissions arise from the energy we use at our facilities, from other in-house activities and from the various means of transport we use. Our carbon footprint is also affected by some of our respiratory therapies, specifically our pressurised metered dose inhaler (pMDI) products which rely on propellants such as hydrofluoroalkane (HFA, a greenhouse gas), to deliver the medicine to the airways. Patients who are unable to use our *Turbuhaler* dry powder inhaler, which does not require propellants, need these pMDI products. We believe that the expanded treatment choice and potential benefits that they offer outweigh the potential impact on the environment.

The business of developing, manufacturing and distributing innovative medicines is increasingly complex and uses energy both in our facilities and in travel and transport. We continue to drive the implementation of initiatives and programmes that are focused on managing our carbon footprint across key areas of our business activity. For example, recognising the significant global warming emissions from business road travel for sales and marketing activities, we continue to invest in advanced driver training to improve both safety and efficiency associated with road travel and we are increasingly using a range of hybrid and alternative fuel vehicles.

Other areas in which we are driving further improvement include:

- > Implementation of green technology principles in our process design.
- > Exploring the potential for further investment in low carbon and renewable energy options at our sites.
- > Further investment in greener energy supply from external power suppliers.
- > Implementation of further energy conservation programmes, particularly related to fume cupboards in laboratories.

Alongside this, we also continuously seek to use external opportunities to share learning and foster best practice. For example, as part of prioritising the selection of goods transport partners on the basis of their reliability, quality and internal safety, health and environmental management, we take into consideration the efficiency of their air and road fleets. In 2008, AstraZeneca, in conjunction with our European road freight and logistics provider, was recognised in the European Outsourcing Awards for the success of a new initiative to co-load our product into vehicles with product from other companies – minimising vacant space and significantly reducing costs and environmental impact.

OUR TARGETS

We continue to work hard to manage our environmental impact without compromising our ability to deliver new therapies for important areas of healthcare. Our current climate change targets, approved by the Board in 2005, aim to ensure that our absolute emissions in 2010 will be no greater than they were at the start of the decade and 55% less than they were in 1990.

This requires substantial efforts to be made across our business to produce, by 2010, an absolute reduction of 12% in global warming emissions from all sources other than pMDIs, when compared with 2005. More details about our reduction targets and performance can be found on our website, astrazeneca.com/responsibility.

We are currently in the process of developing a new environmental sustainability strategy, together with associated objectives and targets, which will take us beyond 2010 and drive our continued commitment in this important area.

PHARMACEUTICALS IN THE ENVIRONMENT

The presence of trace amounts of pharmaceuticals in the environment (PIE) resulting from patient excretion is an inevitable result of the way most current medicines work: pharmaceuticals need to be stable enough to have a useful shelf life and oral dosage forms must be robust enough, in most cases, to pass through the stomach intact.

Continued publication of data relating to the presence of pharmaceutical residues in surface waters and more recently also in drinking water has stimulated a wider debate. We understand the concerns these publications raise and are committed to addressing this issue responsibly.

Whilst the scientific studies published to date suggest that the low levels of pharmaceuticals detected in the environment are unlikely to pose a risk to human health, we continue to develop a better understanding of the potential long-term effects on aquatic life. We are committed to ensuring that any potential adverse effects are responsibly balanced against the benefits our medicines bring to patients.

This is an ongoing priority for our scientists at our Environmental Laboratory in Brixham, UK, who are at the forefront of this field of science, working both independently and in collaboration with other companies, leading academics and regulatory bodies to advance PIE-related research. We recently invested \$24 million in new laboratories at the Brixham site to further improve the facilities for the evaluation of the environmental fate and persistence of pharmaceuticals.

The environmental profile of our new pharmaceuticals is assessed prior to applying for government approval in a manner that is consistent with applicable regulatory regimes. In addition, many of our existing products are assessed to comply with the new EU requirements in connection with post approval applications.

We have also introduced internal Environmental Risk Management Plans that will accompany all new medicines and which will enable all available environmental data for a product to be taken into account at key decision points during development.