

Managing our GHG emissions

We met our first voluntary target: to reduce GHG emissions from our operations by 10% below 1990 levels in 2002.* Reductions came mainly from ending the venting of natural gas at oil production facilities. Our focus now is on meeting our second target: to keep these emissions 5% below 1990 levels by 2010.

Finding reductions to offset the rising emissions from our changing portfolio is getting harder. The amount of energy needed for us to produce each unit of oil or natural gas is already more than 50% higher than in 2000. It will continue to rise as our fields age and as more of our production comes from heavier oil and oil sands. Producing more low-sulphur transport fuels will help reduce our customers' CO₂ emissions. However, they increase our direct emissions, since more refining energy is needed to make them.

Up to now, we have succeeded in offsetting these higher emissions. In 2006, facilities we operate emitted 98 million tonnes of GHGs, about seven million lower than the previous year and more than 20% below 1990 levels.

The reduction since 2002 has been achieved mainly by reducing continuous flaring. For

example, since 2000, the SPDC joint venture in Nigeria, has invested more than \$3 billion in equipment to capture and use gas previously flared. SPDC accounts, on average, for two-thirds of our continuous flaring.

In 2006, our total flaring worldwide dropped. This was mainly because of cuts in production due to major security problems in Nigeria. However, operational changes to increase associated gas recovery in Oman and new equipment installed in 2005 to reduce flaring in Gabon also helped.

Improvements in the energy efficiency of our refineries and chemicals plants have further reduced our GHG emissions. Our refineries have boosted their energy efficiency by 3% since 2002, as measured by the Solomon Associates Energy Intensity Index (EII). Our chemical plants have become 9% more energy efficient since 2001 based on our Chemicals Energy Index. These gains were made by operating our plants closer to their full production capacity, by having fewer shutdowns, and by running our Energise™ energy efficiency programme and Business Improvement Review process at most sites. Energise and Business Improvement Review have reduced our GHG emissions by nearly

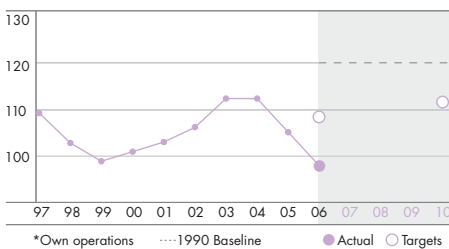
1 million tonnes a year and saved us more than \$70 million annually at our refineries and chemical plants.

In 2006, we missed our annual EII target, partly because we had underestimated how much extra energy would be required to produce more environmentally friendly lower sulphur fuels and partly because of unplanned equipment shutdowns at several facilities that required extra energy to start up again. Our chemical plants made their target despite several unplanned shutdowns.

In early 2007, we launched a new energy efficiency programme in our upstream business. It will make up for part of the increase. We will continue our efforts to end continuous flaring at upstream locations, other than Nigeria, by 2008. In Nigeria, the Shell Petroleum Development Company (SPDC) joint venture expects to end continuous flaring there as planned, during 2009. Achieving this plan depends on funding being secured from our joint venture partners in Nigeria, and on communities allowing us free and safe access to our production sites. Further GHG reductions will come from the energy efficiency drive underway at our refineries and chemicals plants.

GREENHOUSE GAS EMISSIONS*

Million tonnes CO₂ equivalent



*Petroleum Industry Guidelines for Greenhouse Gas Estimation, December 2003 (API, IPIECA, OGP) indicate that uncertainty in greenhouse gas measurements can be significant. Accordingly, we have assumed that the uncertainty associated with our 1990 CO₂ measurements was the same as that associated with our measurement in 2002.

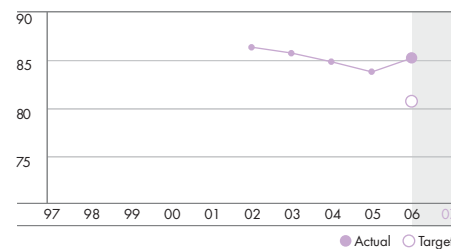
FLARING IN EXPLORATION & PRODUCTION

Million tonnes hydrocarbon flared



ENERGY INTENSITY - IN OUR REFINERIES

Energy Intensity Index



ZEROGEN: CLIMATE FRIENDLY COAL-FIRED POWER

The Queensland State Government in Australia is working on a project to demonstrate that coal-fired power and low CO₂ emissions can go hand in hand. If it goes ahead, the ZeroGen project would be the world's first demonstration plant to produce low-emission electricity by combining coal gasification with CO₂ capture and storage.

The plan is to turn the coal into a hydrogen-rich gas and high-pressure CO₂. The gas would then be burned to drive a high-efficiency turbine to produce power. The CO₂ would be piped approximately 220 km and stored away in underground aquifers. Shell is the preferred provider of the gasification technology and is currently providing drilling and CO₂ storage expertise.

Up to 70% of the plant's CO₂ emissions (up to approximately 420,000 tonnes annually) could be captured and stored. Commercial versions would have CO₂ emissions nearly 40% lower than those from a comparable sized gas-fired power plant.

At present, the owners of coal-fired power plants have no economic reason to make the extra investment in CO₂ capture and storage. If this promising technology is to be rolled out more widely, government support in establishing a price signal for emitting CO₂ will be needed.