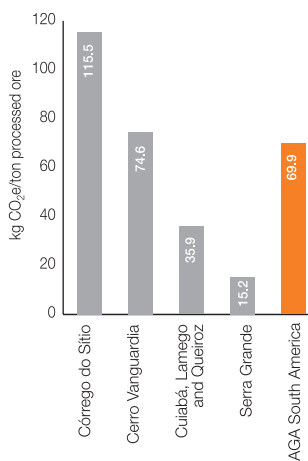




*Cerro Vanguardia, Argentina and
Brasil Mineração, Brazil*

Case study: Establishing AngloGold Ashanti's carbon footprint in South America

kgCO₂e/ton of processed ore



In support of its global efforts to understand the company's carbon footprint, AngloGold Ashanti's South American operations undertook the company's first baseline study of both their direct and indirect greenhouse gas (GHG) emissions. (Note that direct emissions are GHG emissions from sources owned or controlled by the company, while indirect emissions are those from imported electricity, heat or steam consumed by the company).

Included in this analysis were the following sites: the Lamego, Cuiabá, Córrego do Sítio mines and Queiroz plant (all part of AngloGold Ashanti Mineração in Brazil), the Serra Grande mine in Brazil and the Cerro Vanguardia mine in Argentina. The baseline year adopted was the period 1 January to 31 December 2006 and emissions for prior periods were not considered – this is particularly relevant in the case of extensive reforestation and biodiversity enrichment activities that happened prior to this year, and for deforestation activities before 2006.

The globally accepted Guidelines for National Greenhouse Gas Inventories (2006) published by the Intergovernmental Panel on Climate Change (IPCC) were the main tool applied to the quantification process, which included the following categories of GHG emissions:

- emissions from fossil fuel consumption;
- emissions from energy consumption;
- emissions from land use change;
- emissions from solid waste and wastewater treatment;
- emissions from the consumption of explosives;
- emissions from the consumption of reagents; and
- emissions from industrial processes.

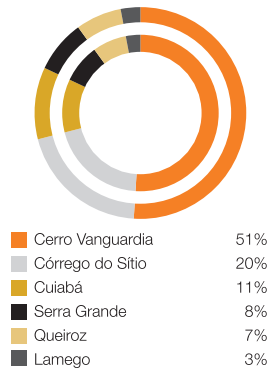
In total, GHG emissions from the South American operations amounted to 146,000 tonnes of CO₂e in 2006. The graph below shows the share of emissions from the individual operational units. CO₂ remained the predominant gas even after the other gases were weighted by Global Warming Potential.

Consumption of fossil fuels (mainly diesel and natural gas) and emissions caused by land use change were the largest contributors to emissions, amounting to 86% of the total.

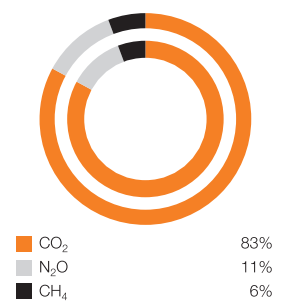
Says Dr Willer Pos, Director of Environment, South America: “We initiated this project because we wanted to get a good understanding of the sources of our carbon emissions and to be able to report fully in terms of the new GRI G3 guidelines. There is an acute awareness of environmental issues in Brazil, and growing calls on companies to reduce their carbon emissions, even though there are no legal requirements to cut these. We also wanted to be able to identify potential opportunities to reduce emissions and start carbon trading.”

Adds Pos, “This information is not simply going to be used for reporting. We identified opportunities to reduce our carbon intensity during the study and these are being explored. Possibilities include installing wind turbines at Cerro Vanguardia, substituting diesel with biodiesel, increasing the capacity of the hydro-electric plant, using different explosives and installing solar-powered water heaters.”

Share of GHG emissions from individual operational units – 2006



Weighted share of individual GHGs – 2006



Carbon emissions by activity (Tonnes of CO₂e)

