

# VALE'S COMMITMENT TO **ADAPTATION AND MITIGATION**



Vale has taken up the challenge of acting proactively in the context of climate change. The company is working in the area by evaluating operational risks, minimising vulnerabilities and maximising opportunities – such as technological innovation to reduce consumption of fossil fuels and investment in clean energy supplies – and developing strategies for adapting to physical impact risks.

In 2011, Vale invested approximately US\$10 million in energy efficiency and corporate projects in the field of climate change. In addition to that, in 2012 the company updated its Global Climate Change Policy and included the commitment to establish a global target for reducing emissions, as well as to mobilising the supply chain to tackle climate change in an integrated way. The target, established in 2012, is for Vale to cut its 2020 projected emissions by 5 per cent.

As part of the company's commitment to reducing its impact on climate change and to creating long-term value, Vale has implemented the Greenhouse Gas Emissions Management in the Value Chain programme, which aims to involve suppliers. Under the programme, Vale is encouraging its suppliers to build their own capacity to establish an emissions inventory at their companies. During 2011 and 2012, a number of training workshops were carried out in the various continents where Vale is present.

Although the company is already a significant user of renewable sources, it recognises its fundamental

role in actively pursuing greater use of clean energy sources. Accordingly, Vale is working to replace diesel with biodiesel in its operations. In Brazil, the target is to raise the share of biodiesel used in biofuel blends from around 5 per cent now to 20 per cent in 2015. Vale has a 70 per cent stake in Biopalma, a company in Pará, Brazil, that processes palm oil used to produce biodiesel. This project will enable a reduction in greenhouse gas emissions while restoring impacted areas in the Amazon biome, since the palm trees are being planted in areas previously used for pasture before being abandoned.

Vale has also been applying innovation and technology to mineral production in its new project in the Brazilian state of Pará, S11D, which will increase iron production at Carajás by up to 90 million tonnes a year. In addition to a completely dry process which will lead to a 93 per cent reduction in water consumption, 86 per cent of the water will be reused. Mining operations will not feature trucks, but rather a system using in-pit crushing and conveying technology, saving diesel consumption and emissions, and reducing waste such as tyres, filters, lubricants and other items. This system will save emissions of about 118,000 tonnes of carbon dioxide equivalent per year. ■

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