

# Massive energy savings for Western Cape steel plant

**E**ffective energy management is showing significant cost savings at South Africa's largest steel producer, ArcelorMittal's Western Cape plant in Saldanha, says the National Cleaner Production Centre of

South Africa (NCPC-SA).

Energy savings were achieved at the Saldanha plant with the help of NCPC-SA, which challenged and changed some of the plant's standard operational practices, instead

of focusing on major capital investment.

ArcelorMittal Saldanha Works in the Western Cape, which is a steel producer mainly for the export market, was recently praised by donor partners of the Industrial Energy Efficiency Improvement Project (IEE Project) for the significant energy efficiency improvements that it has achieved through its participation in the project.

The plant served as a pilot site for the IEE Project, which is managed by the NCPC-SA. The NCPC-SA is hosted by the Council for Scientific and Industrial Research (CSIR) on behalf of the Department of Trade and Industry (DTI).

Interventions to manage energy usage at the plant required an investment of R500 000, but led to gross financial savings of more than R89.6-million within the first year (2011).

By the end of June 2013, the value of energy savings reached R176-million and it is estimated that the savings realised will account for R362-million by 2016.

Examples of interventions, include reducing the use of fans and pumps, maintaining the temperature of the water-cooling system, preventing the unnecessary use of burners, and reducing the consumption of liquid petroleum gas (LPG).

"Results have been reached with a relatively small investment; however, I realise the complexities around implementation of the energy-saving methods as well as how skilful the management and workforce must be to achieve these objectives," Swiss ambassador to South Africa **Christian Meuwly** said during a recent donor partners visit to the plant.

The IEE Project was initiated in South Africa after rolling blackouts in 2008 exposed the country's acute shortage of electricity. The project is a collaboration between the Department of Energy, the DTI, the Swiss Secretariat for Economic Affairs as well as the UK Department for International Development, and is implemented by the United Nations Industrial Development Organisation and the NCPC-SA.

During the visit, DTI green industries chief director **Gerhard Fourie** said the project is important in light of the rapid increases in the cost of energy, which have been prevalent over past years, as well as the pressure on the South African economy to reduce its carbon footprint.

"The interventions to reduce the energy requirement on the power grid make this industry more competitive, and make a large contribution to the reduction in our greenhouse-gas emissions," says Fourie.