



# AfriSam Vanderbiljpark, Gauteng



**10%**

Overall energy consumption saved



**36 000 GJ**

Energy saved over two years



**ZAR 2 620 000**

Money saved over two years



**4858.4 tCO<sub>2</sub>e**

GHG mitigated

**Sector:** Chemicals

**Intervention:** Energy management system (EnMS), 2015

## THE COMPANY AND THEIR PRODUCT



AfriSam is a leading supplier of superior quality construction materials and technical solutions. The company's cement, ready-mix concrete, and aggregate materials have been making significant contribution to infrastructure developments on the continent for over 80-years. Founded as Anglovaal Portland Cement Company Limited in 1934, AfriSam is now the leading black-controlled construction materials group in southern Africa.

The Vanderbiljpark plant has the capacity to produce over 800 000 tonnes of slagment and over 200 000 tonnes of blended cementitious products per year. They've produced slag for over 50-years, contributing towards building major structures such as dams, bridges and roads.

## THE ENERGY EFFICIENCY INTERVENTION

The AfriSam Vanderbiljpark plant recently implemented an energy management system (EnMS) in line with ISO 50001 standards. It formed part of a year-long training programme conducted by the National Cleaner Production Centre South Africa (NCPC-SA), with the Vanderbiljpark plant selected as a demonstration plant during the training. A team of consultants assisted the plant in implementing the EnMS.

While implementing the EnMS, consideration of both energy as well as product quality guided the decision making process, which resulted in a consolidation of the different products into one product.

The significant energy users (SEUs) that were identified included ball mill 1-4 and 5, auxiliary equipment, and the dryer that is coal fired. The ball mills consume 92% of electricity at the facility, while the dryer is the coal consumer at the facility. Energy opportunities focused on these identified SEUs.

## CAPACITY BUILDING



The Vanderbiljpark facility was one of six NCPC-SA candidate plants that implemented an EnMS during round three of the Pretoria EnMS expert training programme, which commenced in May 2015. This provided an opportunity for skills and capacity development for the plant and for participating consultants, and a systematic framework for the energy performance improvement initiatives to reduce consumption and costs.

