

First National Battery

Benoni, Gauteng



3.4%

Overall consumption saved



2346.52 GJ

Energy saved



ZAR 521 448

Money saved



587 tCO₂e

GHG mitigated



ZAR 187 179

Investment made

Sector: Automotive

Intervention: Energy management system (EnMS), 2018

THE COMPANY AND THEIR PRODUCT

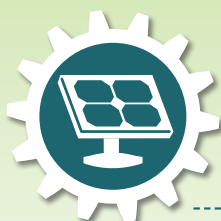


First National Battery (FNB) has four dedicated plants across South Africa to support their production, processing and recycling operations. FNB's listed holding company drove the ISO 50001 certification of all its plants: Settlers Way, Fort Jackson, Buffalo View and Benoni.

Chris Roberts, FNB's Safety Health and Environment National Manager, was requested in 2017 to implement the ISO 50001 standard in all the plants. During this period, he met a representative from the National Cleaner Production Centre South Africa (NCPC-SA) at a separate training

course, subsequently FNB signed up its plants for energy management system (EnMS) and energy systems optimisation (ESO) training.

The Benoni plant distributes and recycles more than 17 000 tonnes of lead per annum. The plant implemented EnMS and ESO. The plant houses the lead smelter, warehousing, distribution, plus the marketing and finance divisions.



THE ENERGY EFFICIENCY INTERVENTION

The quickest win for the Benoni plant was switching off warehouse lighting at night and over the weekends. Further analysis revealed that replacing old luminaires with LED and adding occupancy sensors could allow for significant savings. Modification to furnace reload operations resulted in less heat loss. Equipment upgrades were identified and will be implemented as capex budget allows.

CAPACITY BUILDING

To ensure success in a limited time period, and to allow for energy performance improvement by 2018, the Benoni energy team signed up for EnMS training. Twelve employees attended the EnMS two-day end user course, while two more attended the EnMS expert level training, and a final two employees attended the two-day energy performance management indicators training. Due to the interventions and capacity building embarked upon, the plant achieved an actual performance improvement of 3.4% by November 2018. This exceeded the plant's own improvement target of 2.5% based on the 2017 baseline year.