## LIST OF ACRONYMS

ADB - Air Dried Basis

AMD - Acid Mine Drainage

- API2 Physical coal price index published each week by McCloskey and Argus Media. API2 is the price for 1 metric ton of coal (6,000 kcal/kg net as received, less than 1% sulphur as received) delivered CIF Europe (ARA = Amsterdam, Rotterdam, Antwerp) in Capesize vessels (~150,000 tons) (after Schernikau 2010)
- API4 Physical coal price index published each week by McCloskey and Argus Media. API4 is the price for 1 metric ton of coal (6,000 kcal/kg net as received, less than 1% sulphur as received) delivered FOB Richards Bay, South Africa, (after Schernikau 2010)

AR - As Received

ARB - As Received Basis

ASTM – American Society for Testing and Materials

BEE – Black Economic Empowerment

CAPEX - Capital Expenditure

CCSEM – Computer Controlled Scanning Microscopy

CHPP – Coal Handling & Preparation Plant

Corr – Correlation (factor)

CPI - Consumer Price Index

Comb Rec - Combustible Recovery. The Combustible Recovery can be described as the recovery percentage of the combustible material in the concentrate fraction. As per below:

Combustible Recovery Formula: Comb Rec (%) = 
$$\frac{\%Yield \times (100 - Ash_{conc})}{(100 - Ash_{food})}$$

Where Yield = Actual Yield (%), Ash<sub>conc</sub> = ash content in concentrate (%) and Ash<sub>feed</sub> = ash content in feed (%)

CRT - Cathode Ray Tube

CSIR - Council for Scientific and Industrial Research in South Africa

CV - Calorific Value

DB - Dry Basis

DCF - Discounted Cash Flow

DMC - Dense Medium Circuit

DMR - Department of Mineral Resources

EBITDA – Earning Before Tax Depreciation & Amortisation

EIA – Energy Information Administration

Epm – Ecart Probable Moyen (Probable Mean Error of Separation)

ESP - Electrostatic Precipitator

FGD - Flue Gas Desulphurisation

FGX - Fluidised Gas Separator

FOB - Free On Board

FOR - Free on Rail

FS/NV - Free State New Vaal

FV - Future Value

GAR - Gross As Received

GDP - Gross Domestic Product

GJ - Gigajoule

HAP - Hazardous Air Pollutants

ICP-MS – Inductive Coupled Plasma Mass Spectroscopy

IFRS – International Financial Reporting Standards

IM - Inherent Moisture

IPP – Independent Power Provider

IRR - Internal Rate of Return

ISO – International Standards Organisation

kW - Kilo Watt

kWh - Kilo Watt Hour

LCA - Life Cycle Analysis

LOM - Life of Mine

MM - Mineral Matter

MW - Mega Watt

MWh – Mega Watt Hour

NAR – Net As Received Calorific Value

NCV - Net Calorific Value

NGM - Near Gravity Material

NPV - Net Present Value

OPEX – Operational Expenditure

PCA – Principle Component Analysis

PCI – Pulverised Coal Injection

PSD - Particle Size Distribution

QEMSEM – Quantitive Evaluation of Materials by Scanning Electron Microscopy

R - Rand

RB1 – Richard's Bay Standard Thermal Product (6,000 kcal/kg net as received, less than 1% sulphur as received)

RB3 – Richard's Bay Standard Thermal Product (5,500 kcal/kg net as received, less than 1% sulphur as received)

RD - Relative Density

ROM – Run Of Mine

RSA - Republic of South Africa

S - Sulphur

SABS - South African Bureau of Standards

SANS - South African National Standard

SG - Specific Gravity

SM - Surface/Superficial Moisture

TE - Trace Element

TM - Total Moisture

US - United States

\$ - US Dollar

Vols – Volatile Content

WBUE - Waterberg Upper Ecca

WC4S - Witbank Coalfield No. 4 Seam

XRD - X-Ray Diffraction

 $\omega$  – Power Plant Efficiency