ENERGY & MINING

Strategic Imperative

Besides labour, energy emerging as key future risk for platinum sector

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hile the crippling strike in the platinum sector in South Africa placed a spotlight on labour costs in the industry, Trade and Industrial Policy Strategies researcher Georgina Ryan believes it will be increasingly important for the sector to also deal with escalating energy costs if it is to safeguard its long-term sustainability.

The policy researcher acknowledged that resolving the labour issues had been the main priority. But she stresses that it is not the sole future risk for the industry, with the platinum sector (like other mining subsectors) being an intensive energy user.

Electricity costs and the dependency on electricity in its energy mix are among the top business challenges of the platinum sector and could affect its sustainability in future.

The dependence on electricity affects sustainability mainly in terms of the cost of electricity – which has been one of the biggest price increases in terms of inputs to the sector over the last five years.

As such, platinum, and any other deep-shaft mining industries, uses considerably more electricity than other sources of energy in the mining and processing stages.

Ryan says this economic risk posed by a reliance on electricity as the chief source of energy is compounded by the two main challenges facing the electricity sector - achieving cost reflective tariffs and a predictable price path as well as providing a sufficient and reliable supply of electricity.

"In a broader sense, platinum companies are actively finding ways to reduce the amount of electricity used in operations (notably through energy efficiency improvements) and to some extent building and using renewable sources of energy (including cogeneration options). By doing so, this will not only add to economic sustainability but also to environmental sustainability for the platinum sector," she explains.

What this means in terms of sustainability in general, considering the reality that the platinum sector uses 33% of State-owned power utility Eskom's electricity provided to the mining sectors, is that the platinum sector has a part to play in the efficient use of electricity.

While the platinum sector participates in Eskom's demand side management programmes and has agreed to reduce consumption by 10% in cases of emergency, it must be investigated whether the platinum sector is maximising energy efficiency, which, in turn, should lead to the contemplation of alternative sources of energy to contribute to more sustainable energy use, says Ryan.

Ryan, therefore, suggests that the platinum sector focus its attention on managing this risk in terms of cost-reducing energy efficiency.

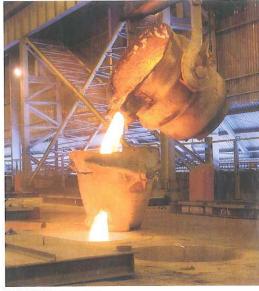
Meanwhile, it is vital that the industry diversify into new markets beyond autocatalysts.

Ryan says diversifying into new markets is a strategic innovation approach companies can take in order to find new revenue streams, particularly in the platinum sector.

The reason I find the new-market development options in platinum so interesting is that they link directly to forms of clean energy, such as fuel cell technology.

So it is not only beneficial for platinum companies to develop these markets, but these markets in themselves will help bring about the commercialisation of cleaner energy technologies," she notes.

Fuel cells, as an alternative source of energy to electricity, could also open up new energy sources



ENERGY INTENSIVE Rising costs and the platinum sector's dependency on electricity are among the top business-sustainability challenges

relevant to many industrial applications that may even be incorporated into mining value chains, Ryan believes, adding that prototype designs are being tested by diversified mining major Anglo American at its own operations.

Fuel cell technologies have been identified as the next platinum market frontier, with recent commitments of up to \$100-million made to the Platinum Group Metals Development Fund of South Africa, which aims to further the commercialisation of fuel cell technologies as a clean energy source.

The issue of the commercialisation of fuel cell technology, however, remains the main challenge, requiring feasible and bankable products to be developed faster.

Ryan says, while platinum producers struggle to deal with the impact of cost pressures on their businesses, energy efficiency improvements and the development of fuel cell technologies will remain a "strategic imperative" for companies that want to secure a sustainable future. MINING WEEKLY COUPON ON PAGE 21 E334087

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