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REAL ECONOMY INSIGHT: COAL



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Real Economy Yearbook: Coal

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The global coal industry remains in an oversupply – estimated to be at about 16-million tonnes this year – putting a dampener on prices; however, coal is expected to remain a key contributor to global energy supply, particularly in emerging markets, for many years still.

While many countries are investing in alternative, cleaner energy sources, including renewables, gas and nuclear, the costs can be prohibitive, especially in developing countries.

The International Energy Agency states in its 'Medium-Term Coal Market Report 2016' that the share of coal in the power generation mix will fall to 36% by 2021, down from 41% in 2014, owing, in part to lower demand from China and the US.

Although coal demand in China is lower, with some saying it has reached a peak, it remains the biggest consumer of coal, making developments in this country hugely important to the global coal market.

Other Asian countries, including Indonesia, Malaysia, Taiwan, Vietnam and Thailand, are also experiencing growing demand for electricity and are likely to increase their demand for coal as they strive to meet the energy needs of citizens.

Meanwhile, in the US, where the coal industry has faced significant pressure from growing natural gas supplies in recent years, President Donald Trump is advocating for a revival of the coal sector as opposed to investing in renewable energy.

XMP Consulting senior coal analyst Xavier Prevost told delegates at the IHS Market 2017 South African Coal Export Conference, in Cape Town, in February, that although there was still growth in coal demand, the industry's future was uncertain, owing to global efforts to reduce greenhouse-gas (GHG) emissions. He suggested that power utilities would have to invest in new technologies to ensure less GHG emissions were produced while burning coal.

The World Coal Association, which represents major global coal producers, is a strong advocate of using

technology, such as high-efficiency, low-emission (HELE) and carbon capture, use and storage, or CCUS, to reduce GHG emissions in the generation of electricity from coal. It states on its website that developing countries will, in decades to come, have to "balance environmental imperatives with the aims of universal access to energy, energy security and social and economic development".

The association contends that it is necessary to ensure that countries that invest in coal-fired power generation to meet the growing needs of their citizens and economies, are informed of measures to use coal in the cleanest way possible. It highlights that HELE coal-fired power stations emit 25% to 33% less carbon dioxide (CO₂) than other coal-fired power plants.

With CCUS, meanwhile, up to 90% of CO₂ produced from electricity generation is captured and transported for use or storage.

South African coal market

According to the Chamber of Mines, South Africa's coal mining industry produced about 293.70-million tonnes of coal in 2016, with a large proportion of the coal consumed locally to generate electricity and produce liquid fuels.

The majority of coal is produced by five major producers, namely Anglo American Coal South Africa (AACSA), Exxaro, Sasol, South32 and Glencore, with smaller miners contributing only about a fifth of the coal produced.

South Africa's largest thermal coal producer AACSA's parent company, Anglo American announced plans in February 2016 to refocus the group on a core portfolio of 16 diamond, platinum group metals and copper assets, with its South African and Australian coal assets and its South African iron-ore operations put up for sale.

Glencore and South32 produce coal for the domestic and export markets, while diversified miner Exxaro Resources produces thermal and coking coal, with some of its mines tied to Eskom power stations.

South32 in April revised its South African coal production guidance for the 2017 and 2018 financial years downwards, following heavy rainfall and

delays in the development of new mining areas at its Wolvekrans-Middelburg Complex, in Mpumalanga.

Petrochemicals group Sasol subsidiary Sasol Mining, meanwhile, produces coal as a gasification feedstock for Sasol Synfuels, in Secunda, Mpumalanga, as well as for the generation of electricity and steam for the Sasolburg operations, in the Free State.

Coal mining in South Africa is still centred in Mpumalanga, as the high cost to transport coal from the highly prospective Waterberg region, in Limpopo, to the Richards Bay Coal Terminal (RBCT) for export is seen as a significant challenge for mining companies.

The Waterberg region, which is estimated to hold 75-billion tonnes of coal reserves, or about 40% of the country's remaining coal reserves, is considered the next big growth area for domestic coal production. However, the only large-scale mine in the region that is currently operating is Exxaro's Grootegeuk megamine, while several smaller companies are working to develop projects in the area.

Corporate activity

The South African coal mining sector has experienced a stream of acquisition deals in the past three years.

Exxaro Resources completed the buyout of Total Coal South Africa in August 2015, which it renamed Exxaro Coal Central, for \$262-million in cash and a further five yearly payments of up to \$120-million until 2019, depending on the price of coal. In October 2016, it sold the closed Inyanda colliery, in Mpumalanga, to a privately owned consortium, comprising Burgh Group and Lurco Group, for an undisclosed amount.

Meanwhile, the Gupta family-owned Tegeta Exploration and Resources' controversially bought Optimum Coal Holdings (OCH), which owns Optimum Coal Mine (OCM), from majority shareholder Glencore. OCM had been placed into business rescue in August 2015, with Glencore saying the coal supply contract under which it was obligated to supply Eskom's Hendrina power station with 5.50-million tons a year of coal at about R190/t was onerous. The power utility had also levied fines of R2-billion on OCM for not meeting supply targets and not delivering the contracted coal qualities.

Tegeta bought OCH from Glencore for R2.15-billion in April 2016. As part of the deal, it also accepted the R2-billion in fines levied against OCM but also gained OCH's eight-million-ton-a-year RBCT export allocation. It emerged in June 2016 that Eskom had at the time of the closure of the deal to buy OCH provided Tegeta

with a R586-million prepayment to supply 1.20-million tons of coal to Eskom's Arnot power station over six months from June 2016.

Questions have since been asked about the cost to Eskom of buying the coal from Tegeta and the coal qualities being supplied to the power utility's power stations. The prepayment by Eskom also increased speculation, by the media and others in South Africa, that the Gupta family were having undue influence on the State and State-owned entities.

Molefe's return to the helm of Eskom, however, was short lived. On May 21, government ordered that his reinstatement be rescinded and conceded that it had inflicted reputational harm on the country and the power utility.

Molefe has since approached the courts to overturn his sacking.

Former Public Protector Thuli Madonsela's 'State of Capture' report, released in November 2016, detailed a close relationship between Eskom CEO Brian Molefe and the Gupta family. It also states that Eskom had convened an urgent board meeting on the night of April 11, 2016, to approve the R586-million prepayment to Tegeta, after Tegeta had told the OCH business rescue practitioners that it was R600-million short of the full R2.15-billion purchase price for OCH. Eskom and Tegeta have, however, repeatedly stated that such prepayment arrangements were not new for the utility.

Molefe resigned as CEO of Eskom in November 2016, stating that it was in the interests of "good corporate governance". However, in May, he returned as CEO of the power utility – after a dispute over a R30-million pension pay-out could not be resolved with the Eskom board – without the judicial commission of inquiry into State capture recommended by Madonsela having even started and with the allegations around the Tegeta deal still hanging over his head.

Former Mineral Resources Minister Ngoako Ramatlhodi, who was succeeded by Mosebenzi Zwane in a surprise Cabinet reshuffle in September 2015, in May also told local media that Molefe and Eskom chairperson Ben Ngubane had, in 2015, asked him to suspend all Glencore's mining licences in South Africa until the R2-billion penalty owed by OCM was paid to the utility. Ramatlhodi said he refused, citing the threat of such a move to the 35 000 jobs provided by Glencore in South Africa. He claimed that Ngubane then threatened to tell President Jacob Zuma about the outcome of the meeting and that, not long after, Zuma announced the reshuffle.

Ngubane has strongly denied the allegations and has questioned the timing of Ramatlhodi's revelations.

The deal has, however, also come under the scrutiny of other entities, including PricewaterhouseCoopers (PwC), which notes in a report compiled on behalf of Eskom, that the coal supply contract signed by Eskom and Tegeta contained discrepancies, was hastily and poorly drafted and was in contravention of supply chain management procedures.

The report raises questions about why various coal supply contracts were awarded to Tegeta, without it being able to meet coal quality requirements. In the report, which was presented to the Standing Committee on Public Accounts in May, PwC recommends that the deal, estimated to be valued at between R7-billion and R10-billion over a ten-year period, be reviewed. Public Enterprises Minister Lynne Brown has indicated that she may ask the Special Investigating Unit to further probe the deal, based on the outcomes of the PwC report, which she conceded did point to various allegations.

Eskom and Tegeta, meanwhile, reached a settlement in April pertaining to the penalties owed to Eskom by OCM over its failure to supply the correct coal qualities.

The settlement amount has, however, not been publicly revealed.

Meanwhile, Anglo American has clinched a deal to sell AACSA operations. After months of speculation about the potential bidders, which reportedly included Exxaro, Pembani Group, Sibanye and Royal Bafokeng Holdings, Anglo American announced in April that it would sell the operations, which includes the Eskom-tied New Vaal, New Denmark and Kriel collieries, as well as four closed collieries, to a subsidiary of 79%-black owned Seriti Resources, which is headed up by Mike Teke, for R2.30-billion. Anglo American and Seriti have both welcomed the deal as a step in advancing transformation within the South African coal mining sector.

Labour unions, the National Union of Mineworkers and Solidarity, also support the deal; however, Eskom has expressed some concern about the ownership of the mines being sold, given that the utility owns some of the assets at the mines. The utility planned to meet with Anglo American to resolve the issue.

There has also been a fair deal of activity among coal juniors.



Picture by Duane Daws

IchorCoal made a \$58-million offer in August 2015 to acquire the remaining stake in fellow South Africa-focused coal miner Universal Coal. Another South African miner Coal of Africa Limited (CoAL), made a competing bid of A\$126.40-million to acquire Universal. Universal recommended its shareholders accept CoAL's offer, with IchorCoal abandoning its bid. The deal between Universal and CoAL, however, collapsed in July 2016, after certain conditions could not be met.

Diversified miner Rio Tinto has sold its 74% stakes in each of its Zululand Anthracite Colliery and Riversdale Anthracite Colliery to Menar Holdings and Acacia Coal respectively.

In line with government's ambitions of transforming the South African economy and the mining sector, in particular, Wescoal has transitioned to a majority black-owned company. It entered into a R211-million deal with a consortium of existing shareholders – chairperson Muthanyi Robinson Ramaite, Simeka Capital and Eric Nthuthuko Mzimela – in September 2016 to increase its black ownership from 44% to 59%.

CoAL, which has long expressed an interest in acquiring a cash-generative coal asset while it advances its coal development projects, acquired Pan African Resources Coal Holdings in April, which holds a 91% stake in the Uitkomst colliery, in KwaZulu-Natal, for R275-million. This, along with securing R240-million in funding from the Industrial Development Corporation to advance the development of its existing Makhado project, in Limpopo, is expected to provide CoAL with a platform for growth in the junior coal mining sector. CoAL's Makhado project is unlikely to start generating cash for at least another two to three years, and the Uitkomst colliery will provide cash flows to support the company's other operations. The Uitkomst colliery comprises an underground mine, the South mine, and a planned life-of-mine extension project in the north of the project area.

Electricity generation

Eskom is the biggest buyer of domestically produced coal, with 53% of the coal produced in the country used to fuel its 13 existing coal-fired power stations, as well as units at the Medupi and Kusile power stations that are still under construction. Eskom notes in its integrated report for 2016 that it burnt an estimated 121.87-million tonnes of coal in the 2015/16 financial year, compared with 114.87-million tonnes the year before. It also bought about 125.84-million tonnes of coal in 2015/16.

Eskom has in recent years wanted to pull back from cost-plus mines, in favour of fixed-price coal contracts,



Picture by Wescoal

stating that R39-billion of investment or recapitalisation of the cost-plus mines is needed to maintain production levels or increase production, with many of the mines considered to be underperforming, making such an investment unsustainable. Coal analyst Xavier Prevost has, however, previously warned that the move away from cost-plus agreements may negatively impact on the profitability of the domestic coal mining sector, thereby impacting on mining companies' willingness to invest in productive capacity.

As part of government's ambitions of transforming the economy, as well as the mining sector, the Junior Mining Strategy, an initiative between Eskom and the departments of Mineral Resources and Public Enterprises, has widened the utility's supply base, enabling it to procure 40% of its coal requirements from black-owned junior miners. The utility has also implemented a 50%-plus black ownership requirement for mining companies that want to secure new coal supply agreements (CSAs) with the utility.

This has already led to a disagreement between the utility and Exxaro, which in November 2016 announced that it would establish a new black economic-empowerment (BEE) scheme to replace the existing scheme that was

being unwound. Exxaro's BEE partner had been Main Street 333, which was obligated to maintain a 50.1% ownership in Exxaro up to November 28, 2016. A new BEE entity, which will be created to be Exxaro's new empowerment vehicle, will hold 30% of the diversified miner. This means that Exxaro's black ownership level will be lower than the 51% required by Eskom for the signing of new CSAs. Exxaro has, however, assured shareholders that this will not impact its existing long-term CSAs with Eskom.

Miningmx reported in January this year that the country's other big miners also have long-term CSAs in place with Eskom and that the 50%-plus black-ownership requirement will, therefore, not impact them as much as anticipated. The report notes that, while Eskom could try to renegotiate the existing CSAs with the big miners, this would be risky, as the miners could ask for changes in the prices charged by them, which is generally below export prices.

It further states that the black-ownership requirement will have the biggest impact on new mines wanting to secure CSAs with Eskom, with these contracts generally coming in at a higher cost than that of the Eskom-tied mines.

In an environment of muted electricity demand and excess generation capacity, Eskom is, meanwhile,

also facing pressure from labour unions. Unions are unimpressed with Eskom's proposals that it may, in future, close five coal-fired power plants, in Mpumalanga, to offset the additional renewables capacity that will come on line if the utility proceeds with the signing of power purchase agreements (PPAs) for 37 projects selected as preferred bidders under government's Renewable Energy Independent Power Producer Procurement Programme. In February, Zuma said the signing of the PPAs would go ahead, but the process has now stalled to give new Energy Minister Mmamoloko Kubayi time to consider the matter.

Energy diversification

South Africa also wants to further diversify its energy mix, with renewables, nuclear energy and gas to play a greater role in the future. The Department of Energy in November 2016 released the draft Integrated Resources Plan update base case, which outlines that only 15 000 MW of new coal-fired capacity will be created up to 2050. Over the same time frame, 20 385 MW of new nuclear energy capacity will be procured, while a further 17 600 MW of new solar photovoltaic capacity and 37 400 MW of onshore wind generation capacity is set to be bought. Open-cycle gas turbine capacity will expand by a further 13 332 MW and combined-cycle gas turbine capacity by a further 21 960 MW by 2050.



Caption

Picture by Duane Daws

While there is much disagreement about the country's future energy mix and whether or not nuclear energy and renewables are the best options for South Africa, given cost constraints, particularly in terms of nuclear, and questions around whether renewables are truly a baseload energy option, it is clear that coal-fired power generation will remain an important part of the country's energy mix.

Coal exports

South Africa is the world's fifth-largest coal exporter. The main coal export terminal, the RBCT exported about 72.50-million tonnes of coal last year, a decrease on the 75.40-million tonnes exported in 2015, as a result of lower deliveries from coal producers. Transnet Freight Rail (TFR) had delivered about 72.60-million tonnes of coal to the terminal in 2016, compared with 73.90-million tonnes in 2015.

Prevost in February noted that South Africa's coal exports were falling, compared with domestic coal sales.

RBCT is targeting coal exports of 77-million tonnes this year, still significantly below its design capacity of 91-million tonnes, but in line with expected coal deliveries from TFR. To improve the efficiency of the terminal, it has embarked on a R1.40-billion equipment replacement programme that will be completed in January 2018.

India remains the largest importer of South African coal, followed by Pakistan, but policy decisions in the key Asian coal markets may negatively impact on South Africa's coal exports. India has announced plans for State-owned Coal India Limited to increase its coal production to one-billion tonnes by 2020 and to stop importing thermal coal this year. Although many are sceptical of India's ability to entirely halt coal imports, uncertainty remains and it is unlikely that the country's coal imports will expand.

Pakistan, which already imports 90% of its coal requirements from South Africa, plans to expand its coal-fired power generation capacity by about 8 000 MW over the next five to seven years and is considering increasing coal imports from South Africa to power those plants.

At the IHS Markit 2017 South African Coal Export Conference, held in Cape Town, in February, Prevost also highlighted the potential for South Africa to increase coal exports to Pakistan, but warned that Colombia

was a serious competitor, as it was able to sell coal at a slightly cheaper price than South Africa.

Meanwhile, Australia's Office of the Chief Economist reported in its March 'Resources and Energy Quarterly' report that South Africa's exports for this year are likely to be similar to that of last year and it expects the country's thermal coal exports will rise by an average rate of 0.9% a year to 78-million tonnes by 2022.

"The strongest growth in exports is expected to come towards the end of the outlook period, driven by increased import demand from India – as it imports higher calorific coal – to fuel its growing share of advanced technology, coal-fired power plants," the Office of the Chief Economist noted.

Meanwhile, the smaller RBT-Grindrod Terminals is increasing its coal export capacity to 3.60-million tons a year.

Wage negotiations

This year's wage negotiations in the coal sector are likely to be tense, as the coal producers move away from the centralised bargaining method previously used. The two-year wage agreement signed by unions and coal producers in 2015 will come to an end on June 30.

The Chamber of Mines in February reported that coal producers Anglo American Coal, Msoobo Coal, Delmas Coal, Exxaro Coal Mpumalanga, Kangra Coal, Koornfontein Mines and Glencore Operations had previously indicated their intention to move away from centralised bargaining and to negotiate wages on a mine-by-mine basis.

While the chamber had met with unions, the National Union of Mineworkers, Solidarity and UASA, on several occasions to discuss the matter, the parties had been unable to come to an agreement by the end of January, with the unions declaring a dispute.

Miningmx reported in early May that the Commission for Conciliation, Mediation and Arbitration had recommended that the industry continue with centralised bargaining this year and to establish a statutory council to deal with matters ahead of future wage negotiations. Coal producers, however, rejected the proposal, with unions warning that a strike by workers was likely if the producers and unions were unable to reach an agreement on the format of negotiations.



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