

3Q 2017 OPERATIONS REVIEW

TiZir Limited owns 90% of the Grande Côte Mineral Sands Project in Senegal, West Africa and 100% of the ilmenite upgrading facility TiZir Titanium & Iron, in Tyssedal, Norway.

KEY POINTS

GCO

- Production consistency a key feature of 2017 performance
- Record quarterly production of finished products
- Fifth successive quarter of positive free cash flow

TTI

- Production ramp up continues to schedule
- 3Q 2017 production at 92.5% of expanded production capacity

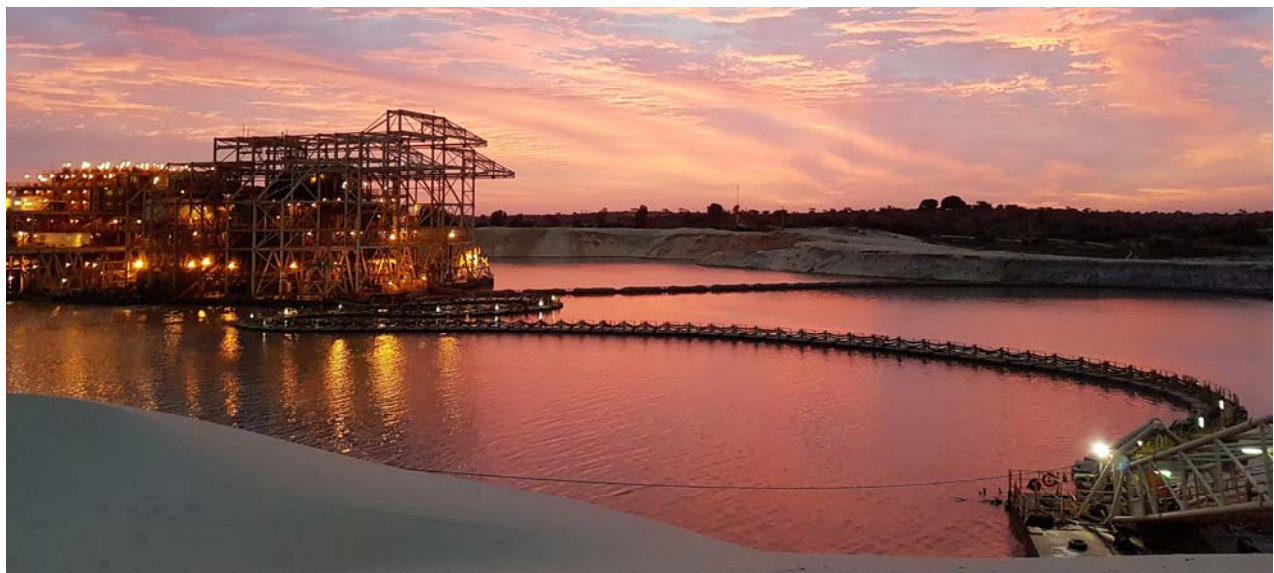
Market

- Good price increases achieved for TiZir's zircon

GCO

GCO mining operations continued to deliver strong production results in 3Q 2017. Production of 196.4kt of heavy mineral concentrate (HMC) was achieved with consistent runtime of 81.5%. The lower average throughput rate (6,246tph) was the result of a strategy designed to maximise recoveries as the dredge progressed through sections of the ore body with higher grade zones.

Significantly, year-to-date availability of the mining operation has increased by 19% and throughput by 9% compared to the same period last year. These performance improvements are a direct result of ongoing optimisation initiatives at GCO.



Grande Côte Operations, Senegal

The graph below demonstrates the continued improvement and progression of the mining operation since commissioning in 2014:



Note: Operating time and throughput for 2014, 2015 and 2016 represent annualised figures for each calendar year.

The mineral separation plant (MSP) continues to operate with high availability resulting in record finished goods production (with the exception of medium grade zircon sands).

The mine and MSP's strong performance throughout 2017 is demonstrated by a 24% increase in ilmenite, 25% increase in zircon and 15% increase in rutile production during the nine months ended 30 September 2017 compared to the prior period.

GCO production volumes

100% basis		3Q 2016	4Q 2016	1Q 2017	2Q 2017	3Q 2017	9 mths 2016	9 mths 2017
Mining								
Ore mined	(kt)	8,071	11,258	11,661	11,793	11,234	27,945	34,689
HMC produced	(kt)	140.0	194.1	140.5	204.2	196.4	419.6	541.0
Finished goods production								
Ilmenite	(t)	96,503	119,882	99,400	126,030	140,713	296,467	366,143
Zircon	(t)	11,844	16,462	11,688	16,203	17,271	36,165	45,163
Medium grade zircon sands	(t)	-	-	7,179	2,927	5,235	-	15,341
Rutile & leucoxene	(t)	2,192	3,042	2,152	2,384	3,047	6,622	7,583

GCO sales volumes

100% basis		3Q 2016	4Q 2016	1Q 2017	2Q 2017	3Q 2017	9 mths 2016	9 mths 2017
Sales volume								
Ilmenite	(t)	84,857	142,408	81,636	129,713	123,474	268,507	334,823
Zircon	(t)	14,721	15,961	13,030	13,722	16,331	37,139	43,082
Medium grade zircon sands	(t)	-	-	2,711	8,043	3,549	-	14,303
Rutile & leucoxene	(t)	2,620	2,159	2,588	3,208	2,398	6,660	8,194

GCO sales volumes were broadly consistent with 2Q 2017 and mirrored production volumes during 3Q 2017. Zircon sales of 16,331t represented a record quarterly sales volume.

In line with the increase in production, sales volumes for the nine months ended 30 September 2017 were significantly higher than the prior comparative period, with ilmenite sales increasing by 25%, zircon sales increasing by 16% and rutile & leucoxene sales increasing by 23%.

Largely because of improved pricing, GCO had a strong financial quarter generating a record quarterly cash flow performance.

During the quarter, GCO received awards for its community and social programs. The IEF of Tivaouane (a decentralised branch of the Senegalese Ministry of Education) and the town of Darou Khoudoss formally recognised GCO’s contribution to educational infrastructure and funding. Further, the Department of Tivaoune awarded GCO a good citizen award in recognition of the company’s overall contribution to community health & safety, clean water supply, education and other socio-economic areas.

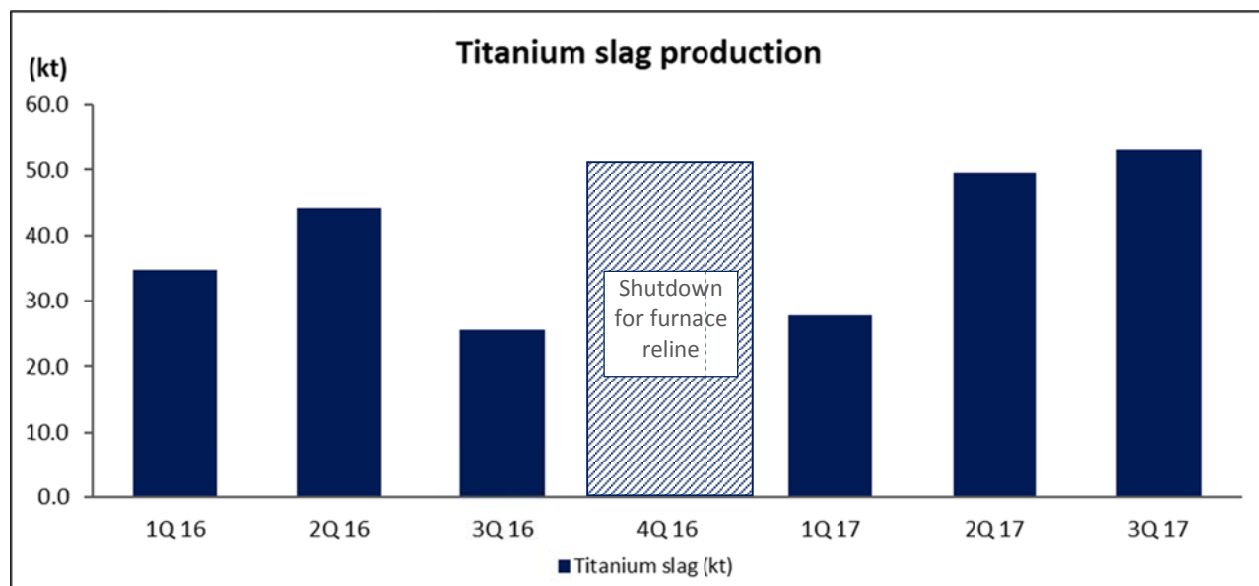
TTI

Production at TTI continues to follow the plan for its ramp up to the expanded production rate of 230,000tpa. Titanium slag production for 3Q 2017 was 8% higher compared to 2Q 2017 at 53.2kt, whilst high-purity pig iron (HPPI) production was 7% higher at 21.6kt. Production of titanium slag in 3Q 2017 represented 92.5% of this target, with August and September production volumes representing the two highest titanium slag production months since the establishment of TiZir in 2011.

More importantly, the furnace continued to exceed expectations in terms of operating efficiency. In particular, heat losses were well below expectations, indicating that power is being transformed into energy for use in the production process more efficiently than anticipated. A major reason for this outcome is the copper roof technology developed and installed by TTI at the time of the conversion of the smelter from sulphate to chloride slag. In addition, the operation continues to use less key raw materials such as ilmenite and coal, further contributing to overall enhanced cost efficiencies. Above budget chloride slag yields continued due to crushing optimisation initiatives implemented in 2Q 2017.

Production for the nine months to 30 September 2017 was significantly above the prior corresponding period – 26% and 24% increase in titanium slag and HPPI respectively – due to the 2016 furnace shutdown.

The graph below illustrates the continued strong ramp up profile throughout 2017:



Shipments of both titanium slag and HPPI in 3Q 2017 were below production levels primarily due to shipment timing. As a result, however, it is expected that sales volumes for 4Q 2017 will be stronger. TTI’s products continue to be well received by current and prospective customers.

Titanium slag sales volumes for the nine months ended 30 September 2017 were consistent with the prior comparative period, predominantly due to the timing of shipments and the impact of the furnace shutdown in 2016.

TTI physical volumes

100% basis		3Q 2016	4Q 2016	1Q 2017	2Q 2017	3Q 2017	9 mths 2016	9 mths 2017
Titanium slag								
Produced	(kt)	24.6	-	27.8	49.5	53.2	103.6	130.5
Sold	(kt)	36.5	3.9	11.5	47.1	39.0	96.6	97.7
High-purity pig iron								
Produced	(kt)	10.6	-	11.2	20.1	21.6	42.6	53.0
Sold	(kt)	13.2	3.7	7.0	20.0	15.2	43.6	42.2

Note: 4Q 2016 production performance was impacted by furnace repairs following an operational incident in August 2016.

Cashflow performance continues to improve with the working capital build now completed at TTI.



TiZir Titanium & Iron ilmenite upgrading facility, Tyssedal, Norway

MARKETS

Market conditions continued to strengthen throughout the quarter, with the outlook for zircon looking particularly strong.

Titanium dioxide feedstocks: Western pigment producers are currently reporting high utilisation rates, low inventories and improved profitability due to high demand and tight supply translating into continued good demand for TiZir's titanium feedstocks (produced by GCO and TTI).

Zircon: Positive sentiments in European and North American markets persisted through the summer holidays and price increases forecast at the end of 1H 2017 have materialised sooner than expected. Market indicators suggest that demand continues to exceed current supply and is expected to do so for the remainder of the year, placing further upward pressure on prices.

High-purity pig iron: Sales volumes of HPPI have remained consistent throughout the quarter, with the majority of volumes contracted for 4Q 2017. Despite some higher pricing realised in 3Q, pig iron prices are currently facing some pressure from competing scrap and raw materials.

CORPORATE

As announced on 5 July 2017, the Company successfully completed a new 9.5%, US\$300 million senior secured bond issue with maturity scheduled in July 2022. The proceeds were primarily used to refinance the US\$275 million senior secured bonds that matured in September 2017.

At 30 September 2017, external borrowings (excluding shareholder loans) by the TiZir Group amounted to US\$370.2 million, comprising the abovementioned US\$300 million senior secured bonds (including accrued interest) and amounts drawn under TTI's and GCO's working capital facilities.

The Group's cash and cash equivalents at 30 September 2017 were US\$34.0 million, giving external net debt of US\$336.2 million.

OUTLOOK

Production consistency at GCO is expected to continue in the final quarter of the year. Further improvements in TTI's production performance are expected during 4Q 2017 in line with its planned ramp up to the expanded production target of 230,000tpa.

Core operational 4Q activities:

- advancement and completion of further mine optimisation initiatives at GCO to maintain and improve runtime, throughput and recovery of the wet concentrator plant; and
- the furnace at TTI is expected to operate at or above levels achieved in 3Q 2017, while shipment volumes are expected to be higher due to timing of shipments.