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BATTERY METALS

Seaborne lithium price stability continues; further downside not unlikely

International lithium prices were steady for the seventh straight week, amid no change in market fundamentals.

S&P Global Platts assessed battery-grade lithium carbonate and lithium hydroxide unchanged at $9,900/mt and $11,700/mt, respectively. Both assessments are on a CIF North Asia basis, based on deliveries to the main ports of China, Japan and South Korea.

Different from earlier in the year when many market participants were focused on the persistent price decline trend, sources have been quiet since early October.

Although most contracts are negotiated for long periods of a year or more, some consumers buy under quarterly contracts that provide guidance for the spot market.

Many consumers are well covered with their existing contracts, which could incentivize them to postpone consumption, sources said.

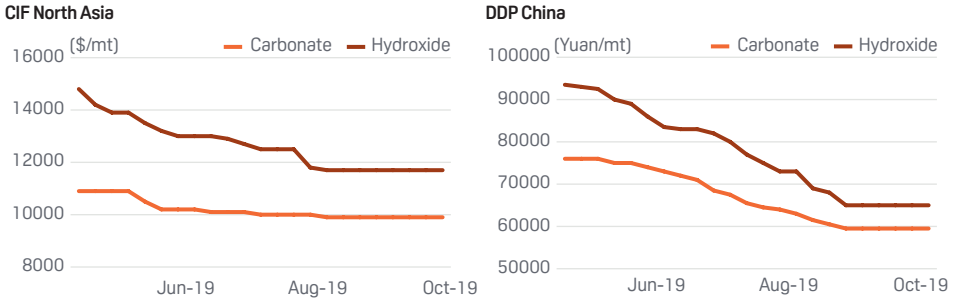
The consequent low liquidity would prevent lower-priced deals from being reported, "but this doesn't mean that prices are not falling, only that there are few transactions taking place," said a market

(continued on page 2)

BATTERY METALS

		Change	Date Assessed
Weekly Prices			
Lithium Carbonate			
CIF North Asia ($/mt)	9900	+0	18-Oct-19
DDP China (Yuan/mt)	59500	+0	18-Oct-19
CIF North Asia Import Parity (Yuan/mt)	79081	-41	18-Oct-19
Lithium Hydroxide			
CIF North Asia ($/mt)	11700	+0	18-Oct-19
DDP China (Yuan/mt)	65000	+0	18-Oct-19
CIF North Asia Import Parity (Yuan/mt)	93459	-49	18-Oct-19
Cobalt Sulfate			
CIF North Asia ($/mt)	8500	+0	17-Oct-19
DDP China (Yuan/mt)	58000	-1500	17-Oct-19
Monthly Prices			
Lithium Spodumene			
FOB Australia ($/mt)	545	-5	30-Sep-19

PLATTS LITHIUM CARBONATE AND LITHIUM HYDROXIDE



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participant based in the Americas.

Despite the recent stability, it is still unclear if seaborne lithium prices have reached the bottom.

"I believe this [recent stability] is calm before the storm," said the Americas-based source. "Negotiations have been complicated, I wouldn't expect battery-grade carbonate to trade at something different than $9,000/mt," he said, adding that he also expects lithium hydroxide "to finish this year below the $10,000/mt mark."

The persistence in the current levels for the seventh week in a row supports this theory, but international prices remain well above the import parity with Chinese domestic prices, which could indicate that there is still room for further decreases.

In the Chinese domestic market, both hydroxide and carbonate prices also moved sideways this week.

Lithium carbonate was assessed stable at Yuan 59,500/mt DDP China, while hydroxide was also steady at 65,000/mt DDP China.

In comparison, Platts' $9,900/mt CIF assessment for carbonate was equivalent to Yuan 79,081/mt, including 13% value-added tax, based on Platts' import-parity formula, while hydroxide's price of $11,700/mt was equivalent to Yuan 93,459/mt on the same basis. The dollar was assessed at Yuan 7.069 at 4:30 pm Singapore time Friday.

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Chinese domestic lithium prices remain stable for fifth week

Chinese domestic lithium carbonate and hydroxide prices continued to be range-bound this week for the fifth consecutive week, with the market quiet and supply and demand fundamentals unchanged.

S&P Global Platts assessed battery-grade lithium carbonate at Yuan 59,500/mt Friday and lithium hydroxide at Yuan 65,000/mt, both unchanged from last week. Both assessments are on a delivered, duty-paid China basis.

One cathode maker said nothing much had changed since before the National day holidays, with consumers in general noting that battery grade lithium carbonate was tradable around Yuan 58,000-60,000/mt.

One cathode maker source said he had bought one truckload of lithium carbonate this week at Yuan 59,000/mt.

A large producer said he had sold battery grade lithium carbonate at Yuan 60,000/mt. He added that the market was not very active, most likely due to cathode makers not having finished consumption of the material bought before the holidays.

In the lithium hydroxide market, one consumer said the lithium-manganese-cobalt-oxide (NCM) battery downstream was not doing well, which another agreed with as demand remained weak.

"The lithium hydroxide price is trending down for sure due to bad demand from downstream. Inventories at producers are quite high. It is a buyers' market with no demand. I don't think Yuan 70,000/mt for fine powder is achievable and the price inches down each week," the latter said.

Another cathode maker said he had bought 40-50mt, or two truckloads, of fine powder at Yuan 68,000/mt with letter of credit terms and said coarse sand was tradable around Yuan 61,000-65,000/mt, although demand in general was "quite bad indeed".

One consumer put fine powder tradable levels at Yuan 65,000-68,000/mt, saying he had bought a small amount of around 15mt. Coarse sand he put below Yuan 60,000/mt, although a producer put all battery grade lithium hydroxide above Yuan 60,000/mt.

Another producer said he was offering fine powder at Yuan 72,000/mt and wouldn't accept any lower than Yuan 70,000/mt.

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Chinese cobalt sulfate prices retreat on slack buying interest

Chinese domestic cobalt sulfate prices fell this week as demand weakened and sentiment turned more bearish.

S&P Global Platts assessed cobalt sulfate with 20.5% cobalt content at Yuan 58,000/mt delivered, duty-paid China Thursday, down Yuan 1,500 week on week.

A major Chinese producer reported deals concluded this week at around Yuan 60,000/mt for October-loading cargoes of slightly less than 300 mt, followed by a second South Central China-based producer reported selling smaller tonnages of about 30 mt at Yuan 58,000/mt Thursday near market close.

Demand was slower than last week, and market sentiment was dampened by the sharp drop in cobalt metals traded on Chinese platforms Wednesday and Thursday, sources said.

Two other producer sources had no sales this week, they did not offer as one said "fewer inquiries after National Day holidays, the market is more like wait and see," pegging tradable value at Yuan 60,000/mt. And the other said: "Upstream [producers] are struggling to support prices." Reasonable market levels heard were around Yuan 56,000-58,000/mt as buyers stuck to the sidelines.

A Chinese trader-consumer agreed Yuan 60,000/mt as a possible selling idea or indicative offers by producers, however, he said the tradable price "is now as low as Yuan 56,000/mt and nobody is buying."

A Northern Chinese cathode maker agreed tradable prices were around Yuan 56,000-60,000/mt.

Market participants raised concerns whether domestic new energy vehicle production would meet earlier market expectations of 1.5 million units. Over January-September, China's NEV output totaled 888,000 units, according to latest monthly data from the China Association of Automobile Manufacturers published earlier this week. Though the figure was up 20.9% year on year, the growth rate slowed significantly compared with January-August, CAAM said.

"One point two million [units] seems a more realistic number. Good enough to keep the same figure as 2018, given this year's great subsidy cut has had a very severe impact on the entire industrial chain," a Shanghai-based trader said.

The Platts seaborne 20.5% Co cobalt sulfate assessment was unchanged at $8,500/mt CIF North Asia in the absence of any trading.

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Chile project could be path to lithium supply for Russia's Rosatom

Russia's state nuclear company Rosatom is pursuing its goal of applying lithium ion battery technology in the Russian economy by positioning itself to join Canadian corporation Wealth Minerals' lithium greenfield project in Chile, Wealth Minerals' president, Tim McCutcheon, told S&P Global Platts.

Wealth Minerals signed a memorandum of understanding this week with Uranium One Group (U1G), a subsidiary of Rosatom, outlining the acquisition by U1G of up to a 51% ownership in Wealth's Atacama lithium project in northern Chile.

This is the second MoU on lithium that Rosatom has signed this year, after sealing a non-binding agreement in July with Bolivia's energy ministry to cooperate in developing lithium deposits and making lithium products. In May 2018, the Russian company also signed a similar document with the Chilean Atomic Energy Commission covering lithium processing.

The MoU with Wealth Minerals seems to be the most tangible of these agreements and relates to an actual project. It provides for a due diligence period and would give U1G the right to purchase 100% of the output of the Atacama Project, provided the transaction closes. The companies have not disclosed a timeline, and they have yet to agree on commercial terms as well as receive the required approvals, including that of Toronto-based stock exchange TSX Venture Exchange.

"U1G has decades of resource development, which we anticipate will be of great importance to create a world class operation at Wealth's Atacama project," McCutcheon said, referring to the company's portfolio of assets worldwide, including in Kazakhstan, the US and Tanzania.

Different approach

The plan is to extract lithium from the Atacama brines and then pump the brine back into salars -- underground brine reservoirs -- and represents an environmentally friendly and sustainable production method, McCutcheon said.

This sorption technology proposed by U1G was part of the company's draw in the deal. Typical lithium extraction operations use underground brine reservoirs, with solar evaporation as the major part of the lithium recovery process. While this process is cost effective and technologically simple, it also requires significant land for ponds in which lithium brine, after subsurface pumping, is placed for drying.

Water in the brine is evaporated and lost from the location. In extremely dry areas like the Andes mountains, where most lithium brine operations are located, this method has sustainability issues.

Wealth Minerals' team has studied alternative methodologies for developing its lithium assets and found the one proposed by the Russian company to be the most viable in terms of commercial implementation. U1G suggested utilizing a reusable catalyst material to draw lithium out of brine, eliminating the need for solar evaporation and greatly reducing the physical footprint.

Lithium products

Rosatom already makes lithium products marketed in Russia and abroad. A spokesman for the company told Platts Wednesday that, given its competencies and technological capabilities in mining, its plans in lithium extraction are well justified.

The company has been interested in expanding its lithium business for several years. Rosatom applied to participate in the Chilean lithium processing program one-and-a-half years ago. To kick off the program, in May 2017 the Chilean government hosted the Lithium Call Roadshow, aimed at potential investors and partners seeking to set up production of lithium cathodes, components for batteries and other such products in Chile.

Rosatom was among the attendees, but its interests were not limited to value-added processing projects. It also eyed the extraction of lithium in Chile -- the country holds just over half of all global lithium reserves -- in order to be able to feed its own operations in Siberia.

Shortly after the roadshow, Rosatom said in mid-2017 it would invest Rb1 billion ($15.6 million) to set up the production of lithium-ion power batteries at its Novosibirsk Chemical Concentrates Plant. The latter mainly makes fuel for nuclear power plants but is also Russia's sole producer of commercial lithium metal.

Raw materials

Russia has its own lithium deposits -- in eastern Siberia, Irkutsk region and Yakutia -- but they have not yet been tapped. And the Novosibirsk plant sources lithium substrate outside the country. Without captive raw materials, it is limited in its ability to develop lithium production at competitive costs, according to Rosatom's website.

So far, Russia has only one plant, Liotech, producing lithium-ion batteries -- mainly for electric vehicles. Also in Novosibirsk, the plant belongs to another Russian state-owned corporation, Rosnano, which focuses on nanotechnologies. Launched in 2011, Liotech saw downtimes between 2014 and 2016, a period that brought continuous ruble devaluations that pushed up the cost of imports.

By joining lithium operations in Chile, Rosatom would strengthen ties between the countries and increase its chances of taking part in Chile's nuclear projects, analysts have said.

— Ekaterina Bouckley, katya.bouckley@spglobal.com

W Australia amends lithium royalty to spur downstream expansion

The Western Australian government announced Friday that it has amended its lithium royalty arrangement in a move aimed at encouraging investment in downstream processing and manufacturing.

There will be a 5% feedstock royalty rate for lithium hydroxide and lithium carbonate, where these are the first products sold and the feedstock is spodumene concentrate, will be introduced as soon as practicable, it said.

"Updating the royalty arrangements provides a fairer system for all lithium producers and will enable Western Australia to move up the battery value chain beyond mining and processing," the Western Australian mines and petroleum minister Bill Johnston said.

The chief executive of Western Australia's Chamber of Minerals and Energy, Paul Everingham, said the move was an important step and recognized that the state is moving beyond simply mining and processing and into downstream processing and manufacturing.

"The royalty regime was not originally designed to accommodate the extent or scale of downstream processing that is proposed for lithium minerals," he said.

"The 2015 Mineral Royalty Rate Analysis recommended amendments to the regime to include an ad valorem rate of 3.75% to lithium carbonate. This approach was strongly opposed by industry given the lack of mathematical basis and the magnitude of cost and effort required for the beneficiation of lithium feedstock," he said.

Lithium producers have been facing downstream demand constraints with delays to the construction, commissioning and ramp-up in China of chemical conversion facilities that handle lithium concentrate.

China's Tianqi Lithium has run into delays with its Western Australian lithium hydroxide plant, which is Australia's first. Last month, while announcing the launch of operations at the plant, it flagged that it will stall the project's second stage.

The facility, which is the first fully automated lithium chemical manufacturing facility outside of China, is planned to produce 48,000 mt/year of battery grade lithium hydroxide once fully operational.

— Nathan Richardson, newsdesk@spglobal.com

Ganfeng Lithium completes $27.6 million investment in Bacanora

Mexico-focused Bacanora Lithium has received the GBP22 million ($27.6 million) in funds from Ganfeng Lithium after the relevant authorities in China approved the latter's strategic investment.

In exchange for the funds, Ganfeng will receive a 29.99% equity interest in Bacanora and a 22.5% joint venture direct investment in the Sonora lithium project in Mexico.

The 57.6 million Bacanora shares are expected to be admitted to trading on the London Stock Exchange's AIM market on or around October 18 and Ganfeng's vice president and vice-chairman of the board Wang Xiaoshen has been added to the Bacanora board as a director.

Ganfeng intends to advance the development of Sonora during the second half of 2019, where its technical team has started work on the hydrometallurgical circuit and is reviewing sourcing key sections of the lithium production equipment from its current equipment suppliers in China.

At the same time, Bacanora's project team is progressing the final design work for the Sonora mine, concentrator and kiln sections of the processing plant.

Elsewhere, Ganfeng is also continuing its planned manufacturing capacity expansion work in China, Australia and Argentina to achieve 200,000 mt/year of lithium carbonate equivalent production capacity by 2025, depending on future lithium demand.

As part of this work, the battery maker is increasing the capacity of its battery-grade lithium carbonate production line in China's Jiangxi province, which has reached its 17,500 mt/year design capacity and achieved its 2019 production targets.

Ganfeng also intends to build a battery-grade lithium hydroxide production line with a 50,000 mt/year capacity at the Basic lithium plant in Xinyu, Jiangxi province, to be commissioned in 2020.

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Neo Lithium teams up with Argentine municipality to create industrial park

Lithium brine explorer Neo Lithium has teamed up with the municipality of Fiambala in Argentina to create a lithium industrial park close to the city of Fiambala.

It announced Tuesday that Fiambala's mayor, Roxana Paulon, and the city council had unanimously approved the granting of a 610-hectare land parcel for the development of the Fiambala Industrial Park.

As part of the development, Neo Lithium will use a 349 ha section of the land to build a full-scale lithium carbonate plant for its 100%-owned Tres Quebradas (3Q) lithium project in the southern end of Argentina's "Lithium Triangle" in the Puna Plateau.

Neo Lithium said it had completed an environmental base line and study to ensure that the site is safe and appropriate for its specific industrial use.

Cooperation between the municipality and Neo Lithium on the industrial park was first agreed in February 2018 and a general agreement concerning the land grant was signed in June this year.

The relevant parties are busy finalizing a 30-year agreement for the use of the land.

Other lithium and related industry participants are expected to follow suit and eventually have a presence in the industrial park.

The park is planned to be powered by the new 11-MW solar facilities recently built in Fiambala and also be connected to the new 22-MW solar plant in the nearby city of Tinogasta, with Neo Lithium due to draw power from the latter for its plant.

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China's domestic mobile phone shipments down 7.1% on year in September

China's domestic mobile phone shipments in September were 7.1% lower year on year at 36.2 million units, according to the China Academy of Information and Communications Technology.

The number of news models released during the month was also down 1.1% on the year to 90.

The volume of shipments was up from August's 30.9 million units and was the highest since May's seven-month high of 38.3 million units.

The September data brought total domestic mobile phone shipments for the first nine months of 2019 to 287.4 million units, down 5.7% from the 2018 period, with the number of new models released 32% lower at 433.

BMO analyst Colin Hamilton said in a note Tuesday that mobile phones make up around 10% of global lithium demand and about 35% of cobalt demand, with China taking up a "significant segment of the global market".

He said he expected shipments to pick up as the roll-out of 5G phones and infrastructure accelerated.

"The first Chinese shipments of 5G phones were made in July (70,000 units), and since then, sales picked up to 220,000 units and 500,000 units in August and September respectively," Hamilton said.

— *Jacqueline Holman, jacqueline.holman@spglobal.com*

Vale, Sumitomo confirm sale of 20% in Indonesian nickel operations to state

Vale Canada Ltd. (VCL), a unit of the Brazilian miner, and Sumitomo Metal Mining (SMM) have signed an accord to sell 20% of their stakes in Indonesian nickel miner PT Vale Indonesia (PTVI) to state-owned Indonesian mining holding company PT Indonesia Asahan Aluminium (Inalum), Vale said Monday.

This was foreshadowed by an agreement struck with the Indonesian government in October 2014, in line with PTVI's long-standing commitment to value-added processing of nickel resources, sustainability and local empowerment in Indonesia, Vale said.

Currently, VCL and SMM hold 58.7% and 20.1% of the issued shares of PTVI, respectively. Following the transaction, VCL and SMM will together hold together about 59% of PTVI's shares.

The final terms and conditions of the transaction are expected to be agreed by the end of 2019.

Production of finished nickel from PTVI totaled 18,500 mt in the third quarter of 2019, 40.2% higher than in the prior quarter and 10.2% lower than in the year-ago period, as both the Matsusaka and Clydach refineries returned to full operation after scheduled maintenance in Q2, Vale said in a production report Monday.

Vale's total finished nickel production was 51,400 mt in Q3, 14.2% higher than in Q2, but 7.7% lower than in the year-ago period, as operations returned to regular rates after maintenance at the company's North Atlantic and Asian facilities, it said.

— *Diana Kinch, diana.kinch@spglobal.com*

BHP maintains 2019-2020 copper, nickel production guidance after on year lift in Jul-Sep

Australia-based mining giant BHP saw year on year increases in copper and nickel production over the July-September quarter, while volumes of each fell from the April-June quarter – and guidance ranges for fiscal 2019-2020 (July-June) have been maintained.

The company's copper production for the three-months was 430,000 mt, which is up 5% year on year and down 3% quarter on quarter with guidance for the 12-month period unchanged at between 1.71 million mt and 1.82 million mt, it said Thursday in its quarterly activities report.

The world's largest copper mine, the Chilean Escondida operation saw record concentrator throughput, which was offset by planned maintenance related to a refinery crane replacement at the Australian Olympic Dam operation, BHP said.

Escondida's production was 293,000 mt in the September quarter, which is down by 1% year on year and up 2% quarter on quarter with guidance maintained at 1.16 million-1.23 million mt, it said.

Olympic Dam's copper production was 35,000 mt, which is up 5% year on year as a result of the prior period having an acid plant outage. This was partially offset by the impact of planned preparatory work in the September quarter.

"The preparatory work is the most significant part of the project, with the physical replacement and commissioning of the refinery crane scheduled for the March 2020 quarter," it said. Guidance remains at 180,000 mt-205,000 mt.

BHP's nickel production for the quarter was 21,600 mt, which is up 1% year on year and down 25% from the June quarter.

The year on year lift reflected higher volumes at the Australian Kalgoorlie smelter following a fire last year, it said.

"Major quadrennial maintenance shutdowns at the Kwinana refinery and the Kalgoorlie smelter are scheduled for the December quarter," the company noted. Nickel production is expected to be roughly 87,000 mt this year.

— *Nathan Richardson, newsdesk@spglobal.com*

OZ Minerals on track to deliver first Carrapateena copper conc in Nov

Adelaide-based miner OZ Minerals is on track to deliver first salable copper concentrate in November, from its developing Carrapateena underground project in South Australia, as it posted double-digit declines in July-September production.

It had already stockpiled over 180,000 mt of Carrapateena development ore, the miner said in its third quarter report released Wednesday.

Production drilling has begun on the first production level and staged energization of the minerals processing plant is underway. Underground crusher chamber works are well advanced and the conveyor decline installation is tracking to plan.

The commissioning of Carrapateena will give an immediate boost to OZ's shrinking mined copper production. The miner harvested 24,663 mt of copper-in-concentrate in Q3 from its flagship operation Prominent Hill (South Australia) and Antas (Brazil), 13.5% less than the second quarter and a 22.7% slide from a year earlier.

JPMorgan Chase and Co. said in a research note that OZ's production results were generally soft versus the firm's estimate, with Q3 copper output of 23,100 mt at Prominent Hill a 9% miss, and down 14% from Q2.

OZ's January-September 2019 mined copper production also slipped 6.8% year on year to 80,630 mt. The miner has set its copper output target lower at 103,000-115,500 mt for 2019, after it produced 115,998 mt in 2018.

— *Winnie Lee, newsdesk@spglobal.com*

Miner MMG's Q3 copper conc output surges 15% to 97,369 mt

Hong Kong and Australian-listed MMG produced 97,369 mt copper concentrates in the third-quarter, up 15% from Q2 and up 12% year on year, mainly on the back of higher output from its Las Bambas mine in Apurimac, Peru, the mining company owned by China Minmetals said in its quarterly late-Thursday.

For the January-September period, MMG's output rose 3% year on year to 283,894 mt.

Las Bambas churned out 96,990 mt of copper concentrates in Q3, up 15% from Q2 and 12% year on year, with the higher output attributed to better operational performance, the data showed.

MMG noted that since September 22, some sections of the access road to Las Bambas was blocked, and on October 15, the Peruvian government declared a State of Emergency for a section of the road and authorities have now begun to clear the road.

The company said that should the road be accessible in the next few days, its guidance for Las Bambas copper output would be slightly less than 385,000 to 405,000 mt, with C1 costs at the higher-end of the $1.15 to $1.25/lb range.

The miner said copper smelting capacity in mainland China has kept on growing, hiking demand for imported copper concentrates, which is up 11% in August and is seen breaching this year's record. It noted that robost concentrates demand and flat mine output assured that treatment and refining charges stayed below the annual benchmark in Q3.

Meanwhile, Las Bambas' Q3 moly (contained metal in concentrate) output was 467 mt, down 17% year on year on lower ore grades, its data showed.

— *Joshua Leung, newsdesk@spglobal.com*

South32's Jul-Sep manganese ore output rises 10% on quarter to 1.42 million wmt

South32 produced 1.42 million wet mt of manganese ore in the three months ended September, a 9.7% rise over the 1.29 million wmt output recorded in the April-June quarter as the international mineral resources company maintained higher production rates at its South African and Australian operations.

A yearly comparison showed that the July-September volume was 2.2% lower than the 1.45 million wmt in the same 2018 period, South32 said in its September 2019 quarterly report on Thursday.

During the reporting period, South32 received 868,000 wmt of manganese ore from its 60%-owned GEMCO mining joint venture in Australia's Northern Territory, a 20.9% spike from 718,000 wmt in the previous quarter, but 6.9% lower year on year.

It attributed the quarterly production increase to higher utilization rates in the primary circuit as the impact of heavy rainfall in the prior quarter subsided. The No. 2 premium concentrate ore circuit operated at about 120% of its design capacity during the September quarter, with low-cost fines product from the circuit contributing 11% of total production.

In South Africa, South32 reaped 547,000 wmt manganese ore in July-September from its 60% share in the Samancor mining joint venture. The amount was 4.4% less than the previous quarter, but 6.2% higher than a year ago. The quarterly decline was due to the planned maintenance at Samancor-operated, high-grade underground Wessels mine.

South32 has kept its manganese ore production guidance unchanged for financial year 2019-2020 (July-June) at 5.66 million wmt. Its Australian operation is anticipated to contribute 62.9% of the total projected volumes, with the remainder to come from the South African operation.

Quarterly nickel output from South32's 99.9%-owned Cerro Matoso operations in Columbia was relatively stable at 10,600 mt over July-September. Production for fiscal year 2019-2020 is expected to reach 35,600 mt of nickel. The company has scheduled a major furnace refurbishment over April-June 2020.

— *Winnie Lee, newsdesk@spglobal.com*