S&P Global Platts

METALS DAILY

REPRINT: Volume 8 / Issue 151 / August 2, 2019

BATTERY METALS

Seaborne lithium prices drop as oversupply continues

Chinese seaborne lithium prices edged lower this week, with market participants expecting further falls, as seen in the domestic market.

S&P Global Platts assessed battery-grade lithium carbonate at $10,000/mt, down $100 on the week, while lithium hydroxide dropped $200 to $12,500/mt. Both assessments reflected offers, bids and deals for battery-grade material delivered to the main ports of China , Japan and South Korea.

Given no changes in fundamentals, market participants said the persistent oversupply was still considered the main factor weighing on prices.

They added that the downtrend in spodumene prices had also been reducing the cost to produce lithium chemicals.

On July 31, Platts assessed Li 6% spodumene concentrate down $20 from June 30 at $580/mt on a FOB Australia basis.

A consumer source who operates a plant in South Korea said, based on Chinese domestic prices, lithium carbonate shouldn't be trading above $10,000/mt CIF North Asia .

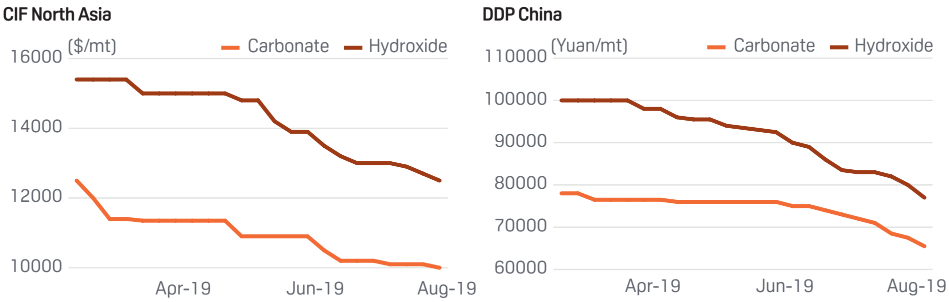
"Probably the Chinese will keep leading

(continued on page 2)

BATTERY METALS

		Change	Date Assessed
Weekly Prices			
Lithium Carbonate			
CIF North Asia ($/mt)	10000	-100	02-Aug-19
DDP China (Yuan/mt)	65500	-2000	02-Aug-19
CIF North Asia Import Parity (Yuan/mt)	77965	-552	02-Aug-19
Lithium Hydroxide			
CIF North Asia ($/mt)	12500	-200	02-Aug-19
DDP China (Yuan/mt)	77000	-3000	02-Aug-19
CIF North Asia Import Parity (Yuan/mt)	97457	-1272	02-Aug-19
Cobalt Sulfate			
CIF North Asia ($/mt)	6900	+0	01-Aug-19
DDP China (Yuan/mt)	36500	+1500	01-Aug-19
Monthly Prices			
Lithium Spodumene			
FOB Australia ($/mt)	580	-20	31-Jul-19

PLATTS LITHIUM CARBONATE AND LITHIUM HYDROXIDE



Source: S&P Global Platts

METALS DAILY

Volume 8 / Issue 151 / August 2, 2019

ISSN: 2325-0658

the market [in terms of pricing] and the other regions will follow," he added.

According to other sources, Chinese producers have been increasing their exports to neighboring countries, benefiting from arbitrage opportunities.

A Chinese consumer source said even a $9,500/mt CIF price "was too high compared to domestic prices," meaning that "imports will continue to drop."

Chinese domestic prices saw greater falls, with lithium carbonate falling Yuan 2,000 on week to be assessed at Yuan 65,500/mt DDP China and hydroxide down Yuan 3,000 to Yuan 77,000/mt DDP China .

As a result, the Chinese domestic market remains well below the seaborne on an import parity basis.

The Platts $10,000/mt CIF mark for carbonate was equivalent to Yuan 77,965/mt, including 13% value-added tax, based on the Platts' import-parity formula, while hydroxide's price of $12,500/mt was equivalent to Yuan 97,457/mt on the same basis. The yuan was assessed at 6.8996 to the dollar at 4:30 pm Singapore time Friday.

— Lucy Tang, lucy.tang@spglobal.com
— Henrique Ribeiro, henrique.ribeiro@spglobal.com
— Jacqueline Holman, jacqueline.holman@spglobal.com

Chinese domestic lithium prices fall on oversupply

The Chinese domestic lithium market moved down this week as producers lowered prices further because of oversupply and sluggish demand, resulting in consumers successfully achieving spot deals at lower prices.

S&P Global Platts assessed the battery grade lithium carbonate DDP China price at Yuan 65,000/mt, down Yuan 2,000, while lithium hydroxide fell Yuan 3,000 to Yuan 77,000/mt on the same basis.

Market players said one potential reason behind the fall was the persistent downtrend in spodumene prices, which eased the pressure on Chinese converters' margins.

Platts assessed Li 6% spodumene concentrate at $580/mt on a FOB Australia basis on July 31, down $20 from the end of June.

A supplier source said there was also a "lack of momentum from the demand side." He said he had offered lithium carbonate at Yuan 65,000/mt without closing any deals.

A consumer source said he expected Chinese prices to continue heading south in tandem with spodumene , which he said "is going down due to the oversupply — the price tends to go 'cost plus', and we still haven't reached that level."

A second consumer source heard "recyclers could sell [lithium carbonate] below Yuan 60,000/mt due to their lower costs," adding that "the downtrend might continue at least in the near term".

He pegged the carbonate tradable value at Yuan 65,000-66,000/mt for spodumene -converters, or Yuan 64,000/mt for net-cash payment — which aligns to Platts specifications.

A third source said he had recently bought lithium carbonate at Yuan 64,000/mt and considered Yuan 62,000-63,000/mt to be tradable for some negotiations, adding that the market outlook remained bearish.

"Battery makers are driving a hard bargain now, although orders from them have picked up slightly," he said.

On the other hand, another consumer source saw Yuan 67,000-68,000/mt as tradable for lithium carbonate , with two other market participants agreeing that some major sellers were currently offering at this level.

On the production side, although ternary cathode materials producers experienced a slight uptick in orders, it was not enough to reverse the current downtrend.

Some sources said market sentiment had started to turn more bullish and expected lithium carbonate prices were close to bottoming out, with limited room for further falls due to support from production costs.

The market trend would become clearer in the end of August or early September, sources said.

One producer source said tradable prices were around Yuan 65,000/mt, but his company's prices were closer to Yuan 69,000/mt due to higher costs and quality.

"Larger cathode materials producers found more orders in August. The current prices are almost close to the bottom in light of the production cost converted from spodumene ," he said.

Another producer said he was offering at Yuan 67,000-68,000/mt, but it was difficult to reach deals at this level.

He said he had traded at Yuan 66,000/mt on a cash basis, although bids were now at Yuan 65,000/mt cash.

"There is room for a further decrease, but it is limited. The trading volume is not large now," he said.

A third producer said his company didn't deliver much battery-grade lithium carbonate at the moment, but industrial grade carbonate could be traded at Yuan 60,000/mt and it was possible to see Yuan 58,000-59,000/mt.

"We're mainly processing for some Jiangxi clients, so don't have much pressure for sales. 70% [of business has] relied on processing for clients from the end of last year to date," he said.

The producer said he had heard tradable level for battery grade lithium carbonate at around Yuan 64,000/mt, but added that he didn't think current prices allowed for much profit margin.

"Some new capacities, due to come on stream in the second half of this year, are yet to be put into operation. It's better to wait on the sidelines now," he said.

A fourth producer source put the tradable value of battery grade lithium carbonate a bit higher at Yuan 65,000-66,000/mt, adding that quasi-battery grade prices might be around or below Yuan 60,000/mt.

Lithium hydroxide down on stagnant demand

Demand also remained stagnant for Chinese domestic lithium hydroxide, resulting in producers further lowering their prices in response.

A Chinese consumer said he had bought lithium hydroxide fine power slightly above Yuan 70,000/mt recently, but this price would not be repeatable due to the long-term contract.

He said that, although there was still room for the prices to bottom out, it was limited.

A third consumer said he had heard hydroxide fine powder had dropped below Yuan 80,000/mt to around Yuan 78,000-79,000, which would mean hydroxide coarse sand should be at around Yuan 71,000-72,000/mt "given the conversion fee of around Yuan 7,000/mt".

Another consumer said he had paid Yuan 75,000/mt for lithium hydroxide coarse sand.

Meanwhile, most Chinese producers held their prices around Yuan 75,000-78,000/mt and pegged lithium hydroxide coarse sand prices at Yuan 73,000-74,000/mt.

One producer said large producers could offer at Yuan 76,000-77,000/mt, but they would not be able to sell at these prices, due to the "lukewarm" domestic lithium hydroxide demand.

He said exports were performing better, although it was not possible to sell at $12,000/mt CIF North Asia at the moment, but prices higher than $11,000/mt CIF North Asia would be reasonable.

"Domestic consumers would prefer to buy from the domestic market in view of the current market situation. They would suffer losses amid the downtrend trajectory due to the long lead time for imports," he said.

"Demand has yet to pick up completely, but has improved compared with earlier. Current prices are close to the bottom."

The producer put the fine power tradable value around Yuan 78,000-79,000/mt and the valued for industrial grade and battery grade coarse sand at Yuan 67,000-68,000/mt and Yuan 73,000/mt, respectively.

A second producer said he hadn't made any offers for fine powder recently as there was no buying interest, but if someone asked, he'd offer a bit higher than Yuan 80,000/mt, although tradable value was likely more around Yuan 78,000-79,000/mt.

A third producer also put fine powder prices around Yuan 80,000/mt and coarse sand offers around Yuan 76,000-77,000/mt.

"It is possible to see trades at Yuan 72,000-73,000/mt, depending on the different qualities.

Orders could be better than the past two months, but it is hard to say how the market will trend," he said.

— Lucy Tang, lucy.tang@spglobal.com
— Henrique Ribeiro, henrique.ribeiro@spglobal.com
— Xinyue Zhang, xinyue.zhang@spglobal.com
— Jacqueline Holman, jacqueline.holman@spglobal.com

Australian spodumene concentrate continues downward trend

S&P Global Platts assessed lithium spodumene concentrate, 6% lithium oxide content (SC6) $20/mt lower at $580/mt FOB Australia in July, down 3.32% from $600/mt in June, reflecting the spot price of a minimum volume of 1,000 mt cargoes exported from Western Australian ports.

Market sources continue to cite current high inventories resulting in short-term oversupply in lithium ore . Some miners had to lower sales prices to turn inventory on lackluster buying interest from Chinese lithium converters, despite buyers claiming that demand was still apparent and may pick up on preparation for seasonally busier markets in the fourth quarter.

Tradable levels were mostly indicated at around $570-$600/mt FOB Australia and $580-$620/mt CIF China for spot cargoes.

A source at a Chinese lithium carbonate and hydroxide converter saw $600/mt FOB Australia tradable in general, but the lowest prices he heard were $570-$580/mt FOB Australia , which one miner said could be enough to let some cargoes go. The converter source reported offers received from a major miner in Western Australia at $580/mt CIF China , adding the seller was offering to the public at $600-$620/mt for September loading from Port Hedland .

"Summer is typically [the] slow season," the buyer said. Two other miners agreed, adding that producing miners took the opportunity to upgrade techniques in order to achieve higher conversion rates, while junior miners slowed down their paces under financing pressures.

The second miner said the slide in the Q3 contract price was mainly caused by the persistent downward pressures from Chinese domestic and seaborne lithium carbonate and hydroxide, which are linked to term contracts through formula pricing. He added that he would not sell anything below the term price since "SC6 is trending lower in China , but [buyers in] South Korea and Japan still pay a premium."

The third miner considered selling spot cargoes at $600/mt CIF, minimum tonnage of 7,000 mt per shipment preferred. He agreed the overall market price was reasonable at $600-$610/mt. However, he received quite a number of sluggish feedbacks from China . He questioned, if prices dropped further below production costs, how long other high-cost miners could endure such losses.

Buying ideas from Chinese converters were heard below $550/mt, CIF. "Converter said demand is there, but the price must be very attractive, otherwise they won't consider buying," said a Chinese trader, adding that he did not know if the market would reach a floor anytime soon but "now is not the bottom yet."

A Japanese trader put his bid-ask spread at $600-$610/mt CIF China . The profit margin has been squeezed to $10/mt or less in a weak market, according to the trader. He was holding 10,000-20,000 mt cargoes and looking for interested buyers.

Australian lithium direct shipping ores (DSO) exports to China were slashed this year to minimal amounts. The market is only left with very few players, according to sources.. Bid-ask indications were heard $60-$80/mt, and market participants said they were waiting for clearer direction.

Platts surveyed market participants earlier on freight rates from Western Australia to major Chinese ports and how they convert CIF China values to FOB Australia throughout June. Several indicated CIF values would typically be at around $20/mt above FOB. Others cited price differentials ranging from $25-$45/mt, depending on load and discharge ports, vessel sizes and whether the cargoes were co-load or a full-ship loads. The third miner specifically, calculated FOB at a $30/mt discount to CIF.

— Xinyue Zhang, xinyue.zhang@spglobal.com

China cobalt sulfate prices rebound on higher producer offers

Chinese domestic cobalt sulfate prices rebounded for the first time Thursday after declining for about three consecutive months, as Chinese producers were reluctant to sell and increased their offers.

Meanwhile, seaborne prices remained unchanged from last week, with buyers choosing to wait on the sidelines in view of the rebound in China .

S&P Global Platts assessed cobalt sulfate with 20.5% cobalt content at Yuan 36,500/mt delivered, duty-paid China on Thursday, up Yuan 1,500/mt from July 25, while the seaborne market was assessed unchanged at $6,900/mt CIF North Asia .

Tradable prices for cobalt sulfate DDP China were widely seen at Yuan 36,000-37,000/mt, even on cash or credit basis, market sources said. Some offers were heard at Yuan 38,000/mt, they added.

A large Chinese producer said that his company would not sell at this level and requested that offers should be as high as Yuan 42,000/mt.

"The main reason [for the rebound] should be production cuts and shutdowns of producers," said a second Chinese producer, who confirmed tradable values at Yuan 36,000-37,000/mt.

Some Chinese producers with lower inventories held on offers in the face of the rebound. Most market sources did not think the rebound would be sustainable for the lack of support from demand side.

It was reasonable to see the rebound as the prices in the past few weeks were too low and already below production costs, said a Chinese consumer. He did not think the prices would continue to rise as demand remained lukewarm and the market remained over-supplied.

A second Chinese consumer said the outlook remained gloomy. Battery makers were driving a hard bargain now. although orders from them had picked up slightly, he added.

On the seaborne market, inquiries from buyers increased, although they will likely watch the market to see whether the rebound is sustainable, said one European producer. Compared with domestic prices, it would even also be profitable to sell at $6,500/mt CIF North Asia , the first Chinese producer commented.

A third Chinese producer said that the offers above $7,000/mt CIF North Asia were too high to reach any deals now.

— Lucy Tang, lucy.tang@spglobal.com

Mineral Resources Li spodumene concentrate price to fall 11%

Australian lithium miner Mineral Resources said Monday that the sale price for its lithium spodumene concentrate from its Mt Marion operation for the July-September quarter will be 11% lower than April-June.

The sale price for 6% spodumene concentrate shipments for the quarter will be $608.95/mt, down from $682.38/mt in the June quarter, it said. The price has slid from $930.80/mt in the October-December quarter, and from $781.84/mt in January-March.

The price slide comes amid global oversupply. "The present lithium oversupply is a side effect of miners attempting to position output to meet an expected rapid rise in future demand," Australia's department of industry, innovation and science said earlier this month.

"Electric vehicle sales have risen by more than 50% relative to the same point in 2018, and the rate of growth is accelerating. The fact that supply is being triangulated against future demand makes it somewhat unlikely that oversupply will correct in the very near future. However, demand growth is likely to outstrip supply by around 2023," it said.

The Canberra-based unit forecasts that lithium production on a carbonate-equivalent basis will rise to 403,000 mt in 2019, from 384,000 mt in 2018 — and then to 411,000 mt in 2020 and to 420,000 mt in 2021. That compares to consumption growth from 234,000 mt in 2018 to 349,000 mt by 2021.

It forecasts the spodumene price to average $672/mt in 2019, down $782/mt in 2018. It is expected to tail off further to $616/mt in 2020, and to $517/mt in 2021.

Mineral Resources said on Friday that total shipments of spodumene from Mt Marion in the June quarter were 81,000 wet mt, a 15% fall year on year and 27% drop from the March quarter.

Mt Marion is owned and operated by Reed Industrial Metals , a 50-50 joint venture between Minerals Resources and China's Ganfeng Lithium .Mineral Resources was not immediately available for comment.

— Nathan Richardson, newsdesk@spglobal.com

Australian Li miner Altura reports Q1 production at 42,402 wmt

Australia's Altura Mining produced 42,402 wet mt of lithium concentrate over April-June, its first full quarter of production, the company said Tuesday in its quarterly activities report.

The miner's Altura lithium project at Pilgangoora in Western Australia , which began commercial production in March, saw its April-June output rise 42% from the previous quarter, while its shipments of the product surged 161% over the same period to 38,491 wmt, the company said.

Altura said it saw an average realized price for the June quarter of $600/dmt CIF China basis SC6, which was in line with the $601/dmt realized in the March quarter.

The company said process plant improvements throughout the June quarter delivered a monthly production record of 16,020 wmt of concentrate in June, and this rate is expected to continue into the current quarter.

The project has a life of mine forecast of 26 years at current rates and exports via Port Hedland . Altura said it has completed a definitive feasibility study on a potential stage 2 expansion, with a final investment decision due following a review of stage 1 and ramp-up to nameplate production.

— Nathan Richardson, newsdesk@spglobal.com

Chile's Codelco to study lithium JV with juniors

Chile's Codelco is mulling a joint venture with private investors to produce lithium from one of the country's largest resources of the mineral , the state mining company said Thursday.

Under the non-binding memorandum of understanding, Codelco , the world's largest copper producer, and Minera Salar Blanco will study the economic, environmental and social aspects of producing lithium from the Maricunga Salar, or salt pan, in northern Chile.

Construction could begin as soon as next year or early 2021, once the definitive agreement is reached, environmental approvals are granted and financing obtained, Codelco said in a statement.

Minera Salar Blanca is a Chilean company owned by Australian junior Lithium Power International, Chilean businessman Martin Borda and Canada's Bearing Lithium .

"The objective of the MOU is to define the term for a definitive agreement to develop a joint project in the Maricunga Salar under a public—private alliance model, which would allow it become the third lithium producer in Chile," said LPI CEO Cristobal Garcia-Huidobro in the statement.

The deal seeks to combine the two companies' mining claims on the Salar, MSB's existing project to produce lithium at the site and marketing permits granted to Codelco by the Chilean Nuclear Energy Commission which oversees the country's lithium industry and the Special Lithium Operating Contract signed with the mining ministry.

Lithium is protected under the Chilean Constitution as a strategic resource meaning that companies require special approval from the state to produce the mineral .

Earlier this year, LPI announced the completion of a feasibility study to produce 20,000 mt/year of lithium carbonate equivalent from MSB's claims on the Maricunga Salar.

Chile is pushing to ramp up lithium production to meet growing demand for the electric vehicles led by existing producers Albemarle and SQM which operate from state-owned claims on the Atacama Salar, Chile's largest.

Numerous juniors have staked claims on other salares dotted across northern Chile, but none has yet obtained the multiple permits required to begin production.

— *Tom Azzopardi, tom.azzopardi@spglobal.com*

Jinchuan cuts H1 cobalt sales by 67% and builds inventory

Jinchuan Group International Resources slashed its cobalt sales in the first half of 2019 by 67.1% compared with the first half of last year, and built inventory on expectations that prices of the key rechargeable battery metal will gradually rebound in the second half of the year.

The Africa -focused copper and cobalt miner said H1 cobalt sales fell to 844 mt from 2,566 mt during the same period in 2018, according to its 2019 interim operational update filed Thursday with the Stock Exchange of Hong Kong .

Its majority-controlled Ruashi mine in the Democratic Republic of the Congo produced 2,611 mt of cobalt in H1, up 1.2% year on year. Inventory saw a 128.6% spike to about 3,200 mt by the end of June, from around 1,400 mt at the end of December.

Jinchuan said it has built inventories as cobalt prices during first half slumped by approximately 59% year on year, adding that it has the ability to sell the inventory quickly to realize value.

The miner has observed that a sharp decline of global cobalt prices in mid-2018 after hitting a peak in April last year was largely caused by rising supplies produced by artisanal miners in DRC and a supply surplus of cobalt chemicals in China for the production of rechargeable batteries for electric vehicles.

It anticipates that as manufacturers and traders drain their inventories, the year-long downward trend of cobalt prices would come to an end, with healthier and more sustainable demand for the metal leading to a gradual price recovery.

— *Winnie Lee, winnie.lee@spglobal.com*

— *Paul Bartholomew, paul.bartholomew@spglobal.com*

Umicore remains committed to EVs despite market downturn

European specialist chemicals company and recycler Umicore remains committed to the transition to an electrified mobility future, in the face of a downturn in global sales of both conventional and EV vehicles.

Declining global car sales have led to "tough" trading conditions, Umicore CEO Marc Grynberg said in a first half 2019 results call, and he did not foresee a pickup anytime soon. But the company remains fully committed to the EV transition and is ideally placed to profit from this, Umicore said.

Revenues of €1.6 billion ($1.8 billion) were down 3% year on year, while net profit was down 8% to €151 million, leading earnings per share to fall 9% to 63 cents.

"Umicore is facing a temporary slowdown in demand for its cathode materials and has adjusted its capital spending to the current slower pace of growth," the company said in a statement. "The mid- and long-term fundamentals behind Umicore's rechargeable battery materials activity are intact, with electrification strongly supported by legislation in key regions and a technology roadmap that offers ample room for innovation and differentiation."

Umicore expects its recurring EBIT for the full year to be in a range of €475 million to €525 million, assuming no material further deterioration of the macroeconomic environment.

On battery supply chains, Grynberg noted that persistently low cobalt prices, driven by a glut of metal from artisanal mining in the Democratic Republic of Congo, will likely dent its balance sheet.

Road bumps

He noted that despite current "road bumps" drivers for growth remained. "We are proving our agility to deal with challenging market conditions while continuing to execute our strategy in clean mobility materials and recycling," he said.

In its first-half results, Umicore reconfirmed it is fully committed to its long-term strategy in clean mobility materials and recycling, and continues to invest in R&D and expand capacity to support the growth of its businesses.

"In catalysis, the new production lines in Poland came online in the second quarter, while the new capacity in China is due to be commissioned by the end of 2019," the company statement said.

"In rechargeable battery materials , construction of the new plant in Poland has started," it said. "The greenfield plant in China will start to come online after the summer with an adjusted timing for the addition of new lines."

Umicore announced two important steps in May to expand its integrated and sustainable battery materials value chain: the agreement to acquire Freeport Cobalt's cobalt refining and cathode precursor activities in Kokkola , Finland , and a long-term partnership with Glencore for cobalt supply.

On Wednesday Glencore announced its H1 results, in which it also reported poor cobalt trading conditions and a $350 million EBIT loss associated with mounting stocks in the Democratic Republic of Congo at its Katanga operations.

— Ben Kilbey, ben.kilbey@spglobal.com

European EV demand seen equaling China in future; lithium deficit likely: Savannah Resources

Europe's electric vehicle demand continues to rise and is on course to equal that of the current world's number one producer/consumer, China , according to energy metals group Savannah Resources.

In an interview with S&P Global Platts, Asa Bridle, head of business development and strategy at Savannah , said that if EV sales projections proved accurate, a "significant" supply deficit of refined lithium , a key ingredient in battery cells, was likely.

Auto companies continue to pump more cash into the EV transition, in an attempt to counter tightening emissions standards and avoid hefty fines from governments.

The number of EV models on the European market will more than triple within the next three years, according to research firm Transport & Environment.

After several years of timid growth, EU carmakers will be offering 214 electric models in 2021 — up from the 60 available at the end of 2018.

"There is concern generally from consumers about the security of supply of battery raw materials and batteries," Savannah's Bridle said.

However, for now there appears to be a glut of metal in the market, with lithium prices on a downward projection for the past few months.

"There seems to be a short-term build-up of lithium raw material during 2019 which has fed through into short term lithium pricing [and lithium company share prices]. In the case of spodumene [hard rock metal , normally sourced from Australia], much of this seems to in fact relate to the delays in the development of the additional conversion capacity required to process this material in China , as opposed to any significant deterioration in the outlook for demand," Bridle added.

Platts assessed lithium spodumene concentrate, 6% lithium oxide content (SC6) $20/mt lower at $580/mt FOB Australia in July, down 3.32% from $600/mt in June, reflecting the spot price of a minimum volume of 1,000 mt cargoes exported from Western Australian ports.

Market sources continue to cite current high inventories resulting in short-term oversupply in lithium ore . Some miners had to lower sales prices to turn inventory on lackluster buying interest from Chinese lithium converters, despite buyers claiming that demand was still apparent and may pick up on preparation for seasonally busier markets in the fourth quarter.

On the subject of how important a "mine-to-mouth" solution is for Europe , Bridle, like others in the business interviewed by S&P Global Platts, said it was vital.

"In the EU this concern has several facets; the EU's auto industry employs 12 million people and accounts for 4% of GDP — this would be put at risk if motor manufacturing was impacted by a lack of key raw materials with sales most likely lost to car producers elsewhere (e.g. China). The auto companies would be faced with very large fines as emissions targets wouldn't be met, and the EU would be failing to meet its goals on emissions /climate change," he added.

— Ben Kilbey, ben.kilbey@spglobal.com

Battery Metals Weekly wrap-up

It was a fairly busy week for the global battery business, with supply chains in focus, the plight of the planet, as well as electric taxis.

The world's largest mining company, BHP, said last week it will spend $400 million on new technology and other investments over the next five years to address climate change.

"We require a considered and orderly transition to a lower carbon world, in which resource companies like BHP have both critical expertise and a key role to play," CEO Andrew Mackenzie said.

Global automaker Ford is looking to accelerate its electrification plans in the UK by partnering with power firm Centrica to offer lower EV charging fees to its customers.

Ford has committed $11.5 billion globally to its EV transition. Not small change, and indeed a surefire signal that things are coming; and they are going to be electric.

European specialist chemicals company and recycler Umicore has said it remains committed to the transition to an electrified mobility future, in the face of a downturn in global sales of both conventional and EV vehicles.

Declining global car sales have led to “tough” trading conditions, Umicore CEO Marc Grynberg said in its first-half 2019 results call, and he said he did not foresee a pickup anytime soon. But the company remains fully committed to the EV transition.

Some people are questioning why EV car sales are under pressure. There are a variety of reasons, including subsidy cuts in the world’s number one producer and consumer, China.

Still, Lithium Australia CEO Adrian Griffin told S&P Global Platts this week that it isn’t simply that demand isn’t there, it’s more to do with the fact that in China, where processing of raw materials to cathodes for battery cells takes place, there are bottlenecks in production.

These jams are slowing the ability for autos to spin more cars off the production line and into showrooms.

Yet auto companies continue to pump more cash into the EV transition, in an attempt to counter tightening emissions standards and avoid hefty fines from governments.

And it was good news for some. MG Motor UK has smashed its new car pre-sales records by securing 1,000 orders for its MG ZS EV in just two weeks.

Having officially launched the car to the press and public July 17, MG has experienced “unprecedented demand” as customers raced to be one of the first 1,000 retail customers to snap up the high-tech electric SUV from just GBP 21,495 ($26,000).

The first 1,000 retail customers were able to benefit from the lowball launch price after MG matched the government’s GBP 3,500 incentive grant with a GBP 3,500 MG grant of its own.

The number of EV models on the European market will more than triple within the next three years, according to research firm Transport & Environment.

After several years of timid growth, EU carmakers will be offering 214 electric models in 2021 — up from the 60 available at the end of 2018.

Polish transport operator Miejskie Zaklady Autobusowe w Warszawie (MZA) has awarded a Zloty 400 million ($104 million) contract for 130 electric buses in Warsaw to manufacturer Solaris Bus & Coach, the company said.

Solaris said the order, which is expected to be delivered in 2020 and co-financed by EU funds for Zloty 180 million ($46.7 million), is the largest of its kind for zero-emission buses in Europe.

London EV Company (LEVC) has produced 2,500 units of its TX electric taxi – and the vehicles are already making a huge contribution to reducing urban emissions in London, as well as cities across the UK and in Europe too.

Combined, the cabs have prevented 6,800 mt of CO2 from entering the atmosphere – the same as 1,500 return flights from London to Sydney – and they’ve reduced NOx emissions, the major contributor to poor urban air quality, by 99.5% (compared with the same amount of a traditional taxi).

Shirley Rodrigues, London’s Deputy Mayor for Environment and Energy, said: “In addition to increased walking, cycling and using cleaner public transport, electric vehicles can help reduce pollution and address our climate emergency.”

On that note, until next week, taxxxiiiiiiiiiiiiiiiiiiiiiiiiiiii for Kilbey.

— *Ben Kilbey, ben.kilbey@spglobal.com*