

# **METALS DAILY**

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#### **BATTERY METALS**

#### Seaborne lithium prices steady despite bearish sentiment

International lithium prices remained stable this week after resuming their downtrend in the previous one, despite persistent bearish sentiment from some market participants.

S&P Global Platts assessed lithium carbonate flat at \$9,500/mt, while lithium hydroxide held at \$11,500/mt. Both assessments are for battery-grade material on a CIF North Asia basis, based on deliveries to the main ports of China, Japan and South Korea.

The oversupply of converted lithium and spodumene, combined with tepid demand, has been forcing prices down for most of this year, with the pressure likely to persist in early 2020, sources said.

Platts assessed spodumene concentrate with 6% lithium oxide down \$25/mt to \$520/mt FOB Australia Thursday. Some market participants were anticipating that the price could fall below \$500/mt on a CIF China basis next year.

#### Effect of spodumene prices

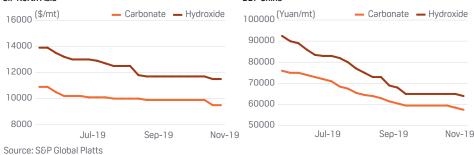
Currently, most Chinese lithium carbonate and hydroxide are converted

(continued on page 2)

#### **BATTERY METALS**

		Change	Assessed
Weekly Prices			
Lithium Carbonate			
CIF North Asia (\$/mt)	9500	+0	01-Nov-19
DDP China (Yuan/mt)	57500	-1000	01-Nov-19
CIF North Asia Import Parity (Yuan/mt)	75614	-335	01-Nov-19
Lithium Hydroxide			
CIF North Asia (\$/mt)	11500	+0	01-Nov-19
DDP China (Yuan/mt)	64000	-1000	01-Nov-19
CIF North Asia Import Parity (Yuan/mt)	91533	-405	01-Nov-19
Cobalt Sulfate			
CIF North Asia (\$/mt)	8500	+0	31-0ct-19
DDP China (Yuan/mt)	56000	+0	31-0ct-19
Monthly Prices			
Lithium Spodumene			
FOB Australia (\$/mt)	520	-25	31-0ct-19

# PLATTS LITHIUM CARBONATE AND LITHIUM HYDROXIDE CIF North Asia DDP China



#### **METALS DAILY**

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from spodumene, meaning that further decreases in the mineral price could force down lithium prices if demand doesn't reheat.

"Major suppliers are offering lithium carbonate 2020 annual contracts at very aggressive prices, much lower than the reported spot levels," a trader source said, confirming that the lower-priced offers were for battery-grade material.

He wasn't able to elaborate on figures for offers for term contracts.

The trader agreed, though, that current seaborne lithium carbonate prices should be hovering around \$9,500/mt on a CIF North Asia basis.

Considering this difference to the 2020 contracts' offers, he added, "I believe spot prices will keep on falling."

A producer source based in the Americas said his company would be starting contract negotiations in November and, although he did not have any new price references, he considered Platts' current assessments of \$9,500/mt for lithium carbonate and \$11,500/mt for lithium hydroxide as still reflective of the spot market.

Last week, Australia-based Orocobre stated in its quarterly earnings report that prices for the fourth quarter were expected to be \$6,200-6,500/mt, FOB basis, for its industrial grade lithium carbonate.

#### Outlook hard to determine

A trader based in Japan said he had heard that another South American producer was going to sell all its spot in the market this year, which had heightened concerns that a huge quantity of lithium might flood the market

He said he had some spot orders and long-term contracts were in negotiation for 2020.

The trader said a container of Novemberloading lithium carbonate had traded last week at \$9,000-10,000/mt CIF non-North Asia. "It is hard to determine outlook. It depends on the Chinese government's EV subsidy policy in 2020," he said.

Meanwhile, in the Chinese domestic market, lithium prices fell further this week.

Lithium carbonate and lithium hydroxide both dropped Yuan 1,000 on week to be assessed at Yuan 57,500/mt DDP China and Yuan 64,000/mt DDP China, respectively.

As such, the Chinese domestic market continued to trade well below the seaborne on an import parity basis.

Platts' \$9,500/mt CIF assessment for carbonate was equivalent to Yuan 75,614/mt, including 13% value-added tax, based on Platts' import-parity formula, while hydroxide's price of \$11,500/mt was equivalent to Yuan 91,533/mt on the same basis. The dollar was assessed at Yuan 7.0437 at 4:30 pm Singapore time Friday..

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#### Poor demand drags Chinese domestic lithium lower

Chinese domestic lithium prices fell Yuan 1,000/mt this week, dragged down by persistent poor demand.

S&P Global Platts assessed battery grade lithium carbonate at Yuan 57,500/mt Friday and lithium hydroxide at Yuan 64,000/mt, both down Yuan 1,000/mt week on week. Both assessments are on a delivered, duty paid China basis.

Global sales of electric vehicles fell for the second straight month in August, with a 9% year-on-year decline led by China and the US, S&P Global Platts Analytics said in its most recent monthly EV Essentials report.

"The market situation was much better at the same time last year," said a Chinese seller source who sold some lithium carbonate at both Yuan 56,000/mt (cash payment) and Yuan 57,000/mt (with credit terms).

"There's room for price to drop further before Chinese New Year in January given the weak demand," the source added. A second Chinese supplier, however, believed domestic lithium carbonate had bottomed out, although there were many domestic stocks of spodumene mineral, which could result in further pressure on lithium prices.

He pegged lithium carbonate's tradable value at Yuan 56,000-58,000/mt, "but definitely there will be someone selling at as low as Yuan 55,000/mt," he added.

Another Chinese producer source agreed that battery grade lithium carbonate was tradable at Yuan 57,000/mt, adding that the company's sales for the week had been "normal".

On the other hand, a source at an East China-based producer said he had sold his company's weekly battery grade lithium carbonate output of 300 mt at Yuan 59,000 for cash or telegraphic transfer.

On the buy-side, consumers also put tradable levels around Yuan 56,000-57,000/mt, with two saying they had bought at the upper end of the range, one 300 mt and the

other "a normal quantity".

The third said his company had no demand for spot material.

The second consumer said he had heard some brine converters were offering industrial grade at Yuan 45,000-47,000/mt, so he did not think prices for this grade could remain at Yuan 48,000/mt.

In the lithium hydroxide market, one producer put tradeable coarse sands levels at Yuan 60,000/mt, adding that market fundamentals were weak. However, a consumer said coarse sand was rather tradable below Yuan 60.000/mt.

Consumers had different ideas about fine powder tradable prices, with one saying they were around Yuan 67,000/mt and another putting them lower at Yuan 64,000/mt.

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#### Asia cobalt sulfate prices drift sideways amid subdued activity

Asia cobalt sulfate prices remained steady this week amid muted spot trading activity.

S&P Global Platts assessed cobalt sulfate with 20.5% cobalt content at Yuan 56,000/mt delivered, duty-paid China Thursday, unchanged from last week. The Platts seaborne 20.5% Co cobalt sulfate price assessment was also unchanged at \$8,500/mt CIF North Asia.

Chinese sellers shrugged off offers for November cargoes, while some buyers stood on side-lines amid persisting soft demand. A Hunan precursor maker said there is no demand for purchasing raw materials, but market tradable around Yuan 56,000/mt DDP China.

A Chinese producer source said he sold some cargoes at Yuan 56,000/mt cash or T/T payment and Yuan 57,000/mt L/C payment, and offered Yuan 1,000/mt higher than the deals. But Yuan 56,000/mt is a tradable number in general.

"We seldom conclude business this week. Market level is in range [around Yuan 56,000/mt]," said a second producer.

A third producer had no updates on their November offers and said "transactions were inactive" in weak demand.

Demand from 3C electronics shrank sharply in October, as a second precursor maker said their October orders plunged from active orders from end July over September as some 3C battery makers piled up stocks in the summer cobalt rally.

The buyer heard lower prices for 20.5% Co at Yuan 55,000/mt and a producer's offer for 21% Co at Yuan 60,000/mt, but "think they have Yuan 2,000-3,000/mt room to negotiate for a firm deal".

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## Australian spodumene concentrates slide further amid lackluster buying interest

Lithium spodumene concentrate moved lower in October to reflect the spot price of a minimum volume of 1,000 mt cargoes exported from Western Australian ports.

S&P Global Platts assessed lithium spodumene concentrate with 6% lithium oxide content (SC6) at \$520/mt FOB Australia for October, down slightly from \$545/mt in September.

Few deals were concluded throughout the month, but there are still a few ships carrying the minerals that left ports in Western Australia, bound by term contracts, sources said.

The market was in a stalemate in the first half of October, as buyers were reluctant to pile up existing high inventories at plants and sellers found resistance to offer anything firm at a lower price.

"It does not help with the business even if we lower offers. The market is in such a bad condition that once we make any firm offer, the market price will lose grip," a Shanghai-based trader said in mid-October. Several sources put \$550/mt CIF China as a tradable level at that time.

Lower numbers were heard towards the end of the month. A Chinese lithium converter put \$520/mt CIF as a market price for 6% grade ores, based on its formulalinked term contract with Australian miners. The formula factored in lithium carbonate, lithium hydroxide prices in Chinese Yuan and US dollars, without further details, according to the source.

The consumer said the calculated price "is reflective of spot market price."

Another Chinese buyers said \$520/mt CIF "sounds low," and put tradable levels around \$535/mt CIF China.

He said not many shipments had loaded in recent days as faltering demand from electronics and automobiles had dented buying interest.

"We are hearing people talking about \$470/mt CIF China for Q1 2020 contracts -- market price has dropped below \$550/mt for sure," a second Shanghai-based trader said.

"I guess no one is willing to take \$530-\$540/mt, though the market is around the level," he said.

Platts surveyed market participants earlier on freight rates from Western Australia to key Chinese ports and how they converted CIF China values to FOB Australia throughout October.

Some sources said in general CIF values would typically be around \$10-\$30/mt above FOB depending on load and discharge ports, vessel sizes and whether the cargoes were co-load or a full-ship loads. The two traders used a price differential of \$30/mt in their own conversions. Platts considered the midpoint \$20/mt when assessing the market.

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#### Market bearish on lithium price, bullish on electric vehicle outlook: trade

The outlook for the global lithium market is decidedly bearish this week, although views on electric vehicle growth remained bullish, according to a variety of industry sources.

During events at the annual LME Week annual gathering in London -- as well as on its sidelines -- conversation centered around one main theme: the growing global electrification trend.

Although there has been a slowdown in EV sales in the world's number one consumer China, participants remained bullish the overall trend toward electrification; with 2025 widely touted as the magic number for sales to really take-off

globally and market penetration to deepen.

"The transition to EVs is irreversible," Jose Lazuen, analyst for EVs, battery and supply chain, told the audience at the consultancy's roadshow Tuesday. This was echoed industry-wide.

Automakers continue to pump billions of dollars in to the transition to electric

powertrains in a bid to comply with mounting government policy to lower global carbon emissions.

"There's no turning back now. Too much has been thrown at EVs. Too much is at risk," said one senior banking source in conversation with S&P Global Platts.

Roskill's Lazuen said that one hurdle for market to overcome in order to become mainstream is the cost of battery packs, that have not come down as quickly as forecast.

In his view sub-\$100/kWh won't be possible until 2025, slowing down the rate of adoption. This is widely seen as a benchmark price for parity with conventional internal-combustion engines.

The cost of buying an EV remains a sticking point for many.

"I want to own an EV, I just can't justify the initial outlay yet," said one market source.

In a report published earlier in 2019 Bernstein Investment Research said that it sees cost parity coming around 2022-23.

"Rapid advances in battery technology has improved EV economics, demand has accelerated, and incumbents are jumping onboard," the report said.

BHP agreed that costs need to be reduced to around \$100/kWh from the current \$150-180/kWh.

Global sales of electric vehicles fell for the second straight month in August, with a 9% year-on-year decline led by China and the US, S&P Global Platts Analytics said in its most recent monthly EV Essentials report.

Talking to Platts Thursday Zane McDonald, senior transportation technology analyst at S&P Global Platts Analytics, said: "Battery cost declines are clearly to the benefit to plug-in EVs. Cost competitiveness with internal combustion engine vehicles is however a complex issue, with factors like oil product price, vehicle resale value, maintenance costs, and supportive policy each playing an important role. The

confluence of these factors mean that the timeline of EV price parity, and thus EV sales, will vary regionally."

However, not everyone agreed that pushing prices down was the way forward.

Last week another source said that automakers were getting it wrong strategically by trying to cut costs to the bone in a quest to get as many EVs on the road as possible.

"I have a car, it wasn't cheap, but the battery is great," the source said. "It can get me 350 km [219 miles] on one charge...I only drive more than that in one go twice a year. The batteries work, if they keep trying to pressure prices lower, the market won't."

Roskill's Lazuen believes that is the way the market will go over the next five-years, with big automakers "squeezing" battery cell makers to get prices lower and lower.

On the subject of cost in the supply chain, the outlook for lithium, a key ingredient in EV batteries, remained incredibly bearish this week.

Daniel Jimenez, a partner at consultancy iLi Markets told the audience at a London Metal Exchange presentation Thursday morning that "these are rough times [and] will continue to get worse [for the lithium price]."

He suggested that it is not so much a demand issue, but instead one of increasing supply in an already heavily overstocked market. He added that is difficult to predict when the rot will stop.

For much of 2019, the lithium price has been plunging because of a perceived supply glut. However, opinion is divided on whether that stockpile is battery grade or a lesser quality material.

S&P Global Platts assessed lithium carbonate at \$9,500/mt CIF North Asia last Friday, down from \$9,900/mt on October 18, while the assessment for lithium hydroxide fell \$200/mt to \$11,500/mt, same basis.

Producer Ablemarle, another LME lithium committee member, said in a statement it

expects lithium prices to keep falling in 2020.

The panel on Thursday morning all suggested that the carbonate price could be trading around \$7,000/mt, or even lower, one year from now.

Still further out, much further out, nearly the entire value chain agreed that as EV demand continues to ramp up, and raw materials prices fall, there will be another boom in the lithium price basis a lack of investment on the supply-side.

"Miners need to look further down the road to 2030," said Jimenez, suggesting another move higher could be on the cards then.

On the subject of localized supply-chains he said that until the automakers start investing in the mine side of the business it is unlikely the business will take off in Europe.

"I don't [yet] see any [auto] investment on the mining side," Jimenez said.

"Automakers want to de-risk and shorten their supply chain, such as taking on the responsibility of sourcing battery raw materials in-house. This comes along with [the need for] having more regional sourcing and exploring domestic battery metals resources," Vincent Ledoux Pedailles, an executive director at European developer Infinity Lithium, told S&P Global Platts on the sidelines of the industry gathering this week.

The European Battery Alliance has called for investment in the nascent European battery value chain -- from extraction of raw materials all the way through to recycling at the other end of the value chain -- in order to build the industry and create job security.

"We are trying to get the show on the road in Europe by working across the European battery value chain," EBA's program director for industry, Thore Sekkenes, said in a recent interview with Platts.

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### Albemarle, MRL complete agreement on Wodgina; spodumene mine to stay idled

Albemarle has finalized a lithium joint venture agreement with Mineral Resources Limited, a move to increase capacity and support future demand, Albermarle said in a statement late Thursday.

The agreement grants Albemarle access to high-quality spodumene through a 60% interest in MRL's Wodgina spodumene mine

in Western Australia. MRL gains a 40% interest in two 25,000 mt/year lithium hydroxide conversion trains being built by Albemarle in Kemerton, Western Australia,

according to the statement.

Albemarle CEO Luke Kissam said both parties agreed to temporarily idle production at the Wodgina mine until market demand improves.

"We have made the prudent decision to idle mine activity until market conditions improve, but we are well positioned for future growth given the high-quality Wodgina resource and the combined operating expertise of both companies," Kissam said.

The North Carolina-based company said

in the statement that 50,000 mt/year lithium hydroxide conversion capacity at Kemerton is scheduled to be commissioned in stages starting in the first half of 2021, with future capacity development to be decided based on market demand.

The JV between the two companies, named MARBL Lithium Joint Venture, will manage the Wodgina mine and the Kemerton conversion train operations. The companies entered the definitive agreement on December 14, 2018.

Albemarle reported \$324.8 million in lithium sales in its second-quarter earnings in August, up from \$317.6 million in Q2 2018. During the Q2 call, Albemarle said Kemerton's initial capacity was redesigned for 50,000 mt/year of lithium hydroxide, which will be converted from spodumene obtained at Wodgina.

The company is expected to provide further details on the JV during its Q3 2019 earnings call November 7.

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# Mali Lithium signs MOU with China's CHICO for Goulamina mine

Australian miner Mali Lithium signed a Memorandum of Understanding (MOU) with Chinese state-owned construction and engineering company China Henan International Cooperation Group (CHICO), to provide, free of cost, capital expenditure and operating expenditure estimates for its Goulamina project by the end of January 2020, the company said Tuesday.

The estimates provided by CHICO "will complement and validate costs being developed for the project's Definitive Feasibility Study (DFS)," Mali Lithium said.

The DFS is scheduled for completion in the first quarter of next year ahead of a Final

Investment Decision in the second half of the year, it added.

"CHICO is an experienced contractor who is currently constructing and operating in a number of West African countries," Mali Lithium Managing Director Chris Evans said in a statement. "The mutual benefit that this relationship will bring to each of our organizations will be significant."

"As well as benefits such as the optimization of the Goulamina Project, getting competitive pricing and the formal cost estimates, CHICO has extensive networks within China with prospective offtake partners and investors and will work with us to leverage these networks,"

Evans added.

CHICO operates across 14 countries in Africa, including operating a major bauxite mine in Guinea, and is active in Cote d'Ivoire, from where Mali Lithium may export the output of Goulamina, the company said.

In December 2018, Mali Lithium signed a Letter of Intent with China Minmetals, a Chinese government-owned \$470 billion company, to discuss engineering, procurement and construction plus offtake and funding possibilities, according to Evans. In September, China Minmetals committed to testing ore from Goulamina at a laboratory in Changsha.

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### Indonesia accelerates imposing ban on nickel ore exports by 2 months

The Indonesian government has decided to ban the export of nickel ore with effect from October 29, two months earlier than its previous plan, a senior government official said late Monday.

"The decision (to speed up the imposition of the ban) is not based on technical reasons by the ministry. But based on agreement and on the thought of providing added value for the nickel commodity," the newly appointed head of the Investment Coordinating Board, or BKPM, Bahlil Lahadalia, told reporters.

He added that the last nickel ore export from Indonesia was carried out on October 28, and that nickel ore is no longer allowed to be exported from October 29 onwards.

The government, via the Ministry of Energy and Mineral Resources' No. 11 decree

of 2019, had decided to accelerate the ban on nickel ore exports from 2022 to January 1, 2020. The prohibition is due to the limited amount of nickel the country has, SP Global Platts reported previously.

However, the accelerated prohibition was carried out by BKPM, and not the Energy and Mines Resources Ministry.

The changes to the export schedule does not require an amendment to the existing decree, as the new decision was made by mutual agreement between the government and the industries, Lahadalia said.

Lahadalia also revealed that the coordination meeting held on Monday had also decided that up to December 2019, existing nickel ore production will be purchased by companies with domestic

smelters at International prices set by China minus taxes and shipment costs.

As for the system of payment, it will be made on a business-to-business basis. The government will only intervene in the payment process when necessary, and act only as a mediator.

"We have to guarantee investors in our country and we also have to take care of domestic companies," he said.

Lahadalia also noted that companies, whose nickel ore export contract expires in December 2019, such as Antam, are expected to be able to negotiate with buyers.

"Business is full of negotiations and flexibility. I think Antam has a way to handle it. Business is dynamic," Lahadalia said.

Indonesia has about 700 million mt of proven nickel reserves. This is expected

to be able to support domestic smelters for seven to eight years. The country also has 2.8 billion mt of probable nickel reserves, but this needs to be further explored, Platts reported previously.

Indonesia has 11 smelters and another 25 are in various stages of construction.

According to data from the Ministry of

Energy and Mine Resources, Indonesia aims to process low nickel content.

— <u>Anita Nugraha,</u> newsdesk@spglobal.com

#### LME introduces lithium committee to assist with market price solution

The London Metal Exchange on Tuesday said it has set up a lithium committee made up of key market participants ahead of the potential launch of a lithium contract.

The LME is looking to launch a futures contract it argues will bring price transparency to the lithium market. So far, there has been significant pushback from the industry as it views lithium as a chemical, not a commodity.

The topic was aired regularly during the annual LME Week gathering in London this week.

One fund manager said that regardless of whether the material is a commodity or a

chemical, the market still needs a transparent pricing mechanism.

The LME agreed, saying in a statement Tuesday, "as the lithium market grows, there is considerable demand for trusted and transparent prices and a liquid derivatives market."

Over the past two years, the LME has been engaging with the lithium market as it prepared for the launch of a lithium futures contract, "which will support the growing demand for price risk management solutions for battery metals."

The committee will represent the interests and views of stakeholders of the

lithium industry, the LME said. Members include Tesla, BASF and Jaguar Land Rover.

For much of 2019, the lithium price has been plunging because of a perceived supply glut. However, opinion is divided on whether that stockpile is battery grade or a lesser quality material.

S&P Global Platts assessed lithium carbonate \$400/mt lower week on week at \$9,500/mt Friday, while lithium hydroxide fell \$200/mt to \$11,500/mt.

Producer Ablemarle, another LME lithium committee member, said in a statement it expects lithium prices to keep falling in 2020.

- Ben Kilbey, ben.kilbey@spglobal.com

### Global electric-vehicle adoption rate around 10-12.5% by 2025: LME seminar

The global electric vehicle adoption rate should be around 10-12.5% by 2025, up from around 2% currently, was the view of an audience of metals industry participants at a seminar hosted by the London Metal Exchange on Monday.

During a panel looking at the outlook for the global EV business, Jessica Fung, VP at investment firm Pala, agreed with the figure but cautioned that the revolution was at very early stages. However, she stressed that the market is not in danger of getting overexcited as the move, driven by a necessity to reduce carbon emissions, is a "structural trend" rather than "hype".

Denis Sharypin, head of market research at Norilsk Nickel, agreed that the move to electrification is "structural" and will happen.

Global sales of electric vehicles fell for the second straight month in August, with a 9% year-on-year decline led by China and the US, S&P Global Platts Analytics said in its most recent monthly EV Essentials report.

"August's falling global electric vehicle sales are a reminder that technological shifts do not happen smoothly," independent analyst Matthew Turner told S&P Global Platts. "But I do not think it offers too many clues as to the future. The EV market remains small and still heavily dependent on subsidies, meaning sales trends are erratic. Sustained sales growth will come with new model launches, and there are plenty to come in 2020 and 2021."

On the panel Monday, Roberto Browne, equity research analyst at Morgan Stanley, was the most bearish on the rate of adoption. He said there was risk of the market getting "over-excited" and noted that slack global economic conditions could weigh on people's purchasing power.

Still, Norilsk's Sharypin said that using car sales as the main metric might not be the correct methodology for working out true demand.

He said that raw material demand for cobalt and nickel remained "strong" and pointed to decent manufacturing rates for batteries, and associated offtake agreements.

Nickel is somewhat detached from the rest of the market, having had a stellar year in 2019 as others have faltered on uncertainty created by the ongoing US/China trade spat.

The main factor for the outperformance has been news of one of the world's largest producing nations, Indonesia, halting nickel

ore exports in order to create more value in country.

On Monday that was brought forward with immediate effect. The move was meant to come into play at the start of 2020.

Sharypin said that this would lead to a market deficit in 2020, and that "upside risks" were in play for the nickel price. "There is a very bright future" for the nickel market, he said.

Nickel started the year at \$10,670/mt and hit a high of \$18,850/mt in September. The main ingredients in EV batteries are lithium, cobalt and nickel.

Fung said that going forward, even though nickel's main usage is in the stainless steel industry, there will be a "certain element" of the EV story built into the nickel price.

"Nickel is a very exciting part of the battery story," she said.

This year has been a stinker for the lithium price, which has been on a downward trend since the start of 2019 owing to a perceived glut of supply. However, the jury is out on whether that stockpile is battery grade or lesser quality material. Either way, the story has been bearish and applied price pressure

throughout the year. S&P Global Platts assessed lithium carbonate down \$400/mt on the week to \$9,500/mt last Friday, while lithium hydroxide fell \$200/mt to \$11,500/mt.

Morgan Stanley's Browne said that at some point the price will need to track higher in order to incentivize supply as demand grows in the coming years, but he cautioned that a sky-high price would put

the brakes on the EV revolution. He pegged around \$10,000/mt as a sustainable level. He called for more "rational supply" and for "efficient, low-cost" production.

— Ben Kilbey, ben.kilbey@spglobal.com

#### Albemarle sees flat lithium prices, but pressure remains

Albemarle's lithium prices were "flat to slightly up" in the third quarter versus the same period of last year, according to the company. No pricing figures were provided.

However, "continuing price pressure on lithium sales in China unfavorably impacted EBITDA by about \$5 million" in the period, Ablemarle said in its preliminary Q3 results, filled last Friday night.

Moreover, "price pressure, combined with the need to utilize more tolled volume to meet customer commitments, will result in fourth quarter 2019 Lithium performance being lower than previously forecast," it said.

Ablemarle expects lithium prices to keep moving down next year, which should reduce

2020's EBITDA from 2019 as the company will not increase capacity, it said.

In Q3, Albemarle's lithium operation is expected to deliver revenue of \$330 million, up 22% year on year, and adjusted EBITDA of \$128 million (up 12% year on year), the company forecast.

The chemical-maker's performance was affected by the Typhoon Tapah in late September, which forced the postponement of shipments from ports in Shanghai. "The volume shortfall impacted the third quarter by approximately \$15 million in EBITDA but is expected to be fully recovered in the fourth quarter," stated Albemarle.

The lithium producer also needed to use tollers to meet customer commitments and

address operating issues in its Chilean brine operation (La Negra), consuming \$10 million of EBITDA. Despite improvements that enabled the facility to resume full production, "given customer commitments, tolling is expected to continue into the fourth quarter," Albemarle said.

Also, "an out-of-period adjustment regarding lithium carbonate inventory values was identified and corrected during the third quarter close process and resulted in a \$7 million non-cash charge in the third quarter," Ablemarle said.

The company will release final Q3 earnings on November 6.

— <u>Henrique Ribeiro</u>, <u>henrique.ribeiro@spglobal.com</u>

### Chinese lithium prices to remain relatively stable in 2020: SMM

Lithium prices in China are expected to remain relatively steady in 2020, according to Shanghai Metals Market.

SMM New Energy Analyst Lu Hong told a seminar in London the research group forecast Chinese lithium prices would stabilize between Yuan 50/kg and Yuan 60/kg (\$7.11-8.53/kg), or Yuan 50,000 and Yuan 60,000/mt, in 2020.

S&P Global Platts assessed domestic China lithium carbonate at Yuan 58,500/ mt DDP last week, while the domestic lithium hydroxide price was Yuan 65,000/ mt DDP.

Hong said prices had come under pressure in 2018 as Australian mines started operations and building inventories due to the high prices seen in 2017.

"If we compare overseas and Chinese inventory, we can see that before this year, China's [lithium] inventory increased a lot. That is because the smelters were worried about the future supply so they signed a lot of offtake contracts with overseas companies," she said.

Hong said price decreases had led to smelters not executing all of their offtake orders, which had led to inventory pressure transferring this year to the mining side outside of China.

She added that lithium smelting product inventories in China had also increased notably in 2018, due to debottlenecking and increases in the amount of smelting capacity through the commissioning of projects.

"We believe that in the future, as lithium remains in oversupply and the lithium price remains at low levels, greenfield projects will be delayed," Hong said.

Despite a number of Australian lithium mines having high cash costs, Hong said there were still some in operation and in development.

"People may wonder why there are still some mines with higher cash costs in operation. That's because when we see the lithium demand increase rate, it is over 70%, and this smelting capacity needs over two years to commission, so people always

invest in the mines with a long-term perspective," she said.

Hong added that global lithium demand was expected to grow 14.5% in 2019 to 285,000 mt of lithium carbonate equivalent, with a compound annual rate of growth for 2019-2021 of 17%.

#### Cobalt supply to be steady

In cobalt, SMM expects the prices to fluctuate between Yuan 270/kg and Yuan 300/kg in the next 12 months, with the major factors being the pre-holiday stockpiling activities in January, the publishing of new electric vehicle subsidy policies and sales of 5G mobile phones.

"For the global cobalt raw material balance, we believe that for the next two years from 2019-2021, it is still oversupplied, but the oversupply will narrow down in the future," Hong said.

"We believe that this year the total the global cobalt supply will keep the same level as last year, totaling 163,000 mt of cobalt," she added.

She said inventories of cobalt raw materials in China had been high before this year, but had now started declining after smelters stopped signing long-term purchase agreements with suppliers overseas.

SMM Singapore General Manager Ian Roper, in a separate presentation, said that battery metals had "lost a lot of shine", with people bearish on the demand side.

He said the market was starting to see supply losses at the current lithium and cobalt prices, which could eventually eat into the current excess of supply.

Roper said SMM forecast European battery sales to rise 33% in 2020, with Hong

saying globally there were now over 7 million battery electric vehicles (BEVs) on the road, with 90% in China, the US and EU.

She said SMM expected BEV production to increase by 8% this year to 1.35 million units.added.

— <u>Jacqueline Holman,</u> <u>jacqueline.holman@spglobal.com</u>

## Livent to raise lithium hydroxide output with new facilities

US-based Livent Corporation will begin construction on new lithium hydroxide production facilities in Bessemer City, North Carolina in a move to increase supply in the lithium market, the company said Tuesday.

The construction of new facilities is expected to boost lithium hydroxide production by nearly 5,000 mt/year.

In 2018, Livent produced 15,900 mt of hydroxide, and it targeted to produce 21,000-

22,000 mt this year.

"Bessemer City is one of the cornerstones of Livent's business and is becoming increasingly more important to many of our customers who want the flexibility of sourcing their lithium products from the Western hemisphere," Paul Graves, president and chief executive officer of Livent, said in a statement.

Livent will initiate the construction of the

facilities with a groundbreaking ceremony on Wednesday at its manufacturing plant in Bessemer City.

"Livent is committed to ensuring that Bessemer City remains an important part of the global revolution in electric vehicles and lithium technology innovation," Barbara Fochtman, Livent's global head of manufacturing and operations, added.

— Nick Lazzaro, nick.lazzaro@spglobal.com

## Chinese lithium processors Tianqi, Ganfeng's profits tank on weaker prices

China's top lithium processors Ganfeng Lithium and Tianqi Lithium reported sharp fall in profits for January-September period due to weaker lithium prices, according to the companies' earnings results.

Ganfeng Lithium Co. Ltd. reported on Tuesday a net profit of Yuan 329.2 million (\$46.6 million) for the first three quarters of 2019, down 66.2% from the same period last year. The Shenzhen-listed unit of China's second largest converter of lithium chemicals reported operating revenues of Yuan 4.2 billion during the same period, up 17.2% year on year.

In a note on Ganfeng's results, Citigroup analysts said: "We believe that the lithium carbonate price is bottoming in China as the high-cost lepidolite producers are already loss-making, while the spodumene importbased conversion capacity is still slightly profitable."

Tianqi Lithium -- China's largest lithium converter -- reported a net profit of Yuan 139.5 million over January-September, down 91.7% year on year. The company's revenues fell 20.2% on the year to Yuan 3.8 billion over the same period, according to results released last week.

Tianqi expects its net profit to fall by 94.6%-96.4% in 2019 due to increased loans and lower lithium chemicals prices.

S&P Global Platts assessed battery grade lithium carbonate at Yuan 58,500/mt (\$8,280/mt) and lithium hydroxide at Yuan 65,000/mt (\$9,200/mt) on October 25, down 29.1% and 52.4%, respectively, compared to the level on September 7, 2018 when Platts launched the assessments. Both assessments are on a delivered, duty-paid China basis.

— <u>Lucy Tang,</u> <u>lucy.tang@spglobal.com</u>

# Zero- and low-emission car sales highly unbalanced across EU: ACEA

Sales of alternatively-powered vehicles are following a highly uneven pattern across EU member states, with consumer uptake of battery electric, plug-in hybrid and hybrid electric passenger cars, as well as those fueled by natural gas or hydrogen, varying widely between countries, the European Automobile Manufacturers' Association (ACEA) said Tuesday.

The number of battery electric cars and plug-in hybrids (electrically-chargeable

vehicles, or ECVs) sold last year ranged from just 93 cars in Latvia (0.6% market share) to 67,504 in Germany (2% market share), ACEA data showed.

"This picture is very representative, as the consumer uptake of electrically chargeable cars is particularly low in Central and Eastern Europe, with Poland for instance selling hardly any (0.2% of total passenger car sales)," ACEA said.

An ECV market share of more than 1.5%

"is something that is exclusive to Western European countries," it said.

ACEA data identified not only an east-west divide, but also a "marked north-south distinction," with electric cars representing less than 1% of total sales in Italy and Spain last year -- the third- and fourth-largest EU economies, respectively.

The uptake of electrically-chargeable cars is correlated to a country's standard of living, with half of all EU member states

having a market share lower than 1%; in only four EU countries do electrically-chargeable vehicles make up more than 2.5% of the car market.

"Mobility must remain affordable for all layers of society," ACEA director general Eric-Mark Huitema said. "That is why we are calling on governments to put in place more meaningful and sustainable incentive schemes to stimulate sales EU-wide."

ACEA figures also showed sales of cars running on natural gas are mainly concentrated in Italy and Germany (74% of the EU total), and that fuel-cell cars account for a "negligible" share of total EU passenger car sales.

"If the extremely ambitious 2025 and 2030 CO2 targets set by the EU are to be achieved, sales of all types of alternatively powered vehicles will have to pick up rapidly in all member states," ACEA said.

— <u>Andy Blamey, andy.blamey@spglobal.com</u>

### Home charge points newest anxiety for EV owners: Co-op Insurance

As the electric vehicle revolution continues apace, a new type of charging anxiety is coming to the fray, with homeowners concerned not having a charge port could lower the price of a property, Co-op Insurance said in recent research.

According to the insurer's research around 11% of UK households currently have charging facilities.

However, "with a third (31%) of motorists expecting to swap to some kind of EV within the next five years a charge point is set to become the latest must have for house buyers."

Range anxiety, or how far an EV will go on one charge, was a sticking point at the start of the year, but since then there has been a deluge of announcements across Europe regarding charging points and partnerships in a bid to make the transition to electric as seamless as possible.

On the side-lines of an industry

conference in London on Monday, once source said that range anxiety will quickly be dissolved as battery technology improves, and at a rapid rate.

"A lack of charge point won't be that big an issue, as batteries can run for longer," he said

Last week another source said that automakers are getting it wrong strategically by trying to cut costs to the bone in a quest to get as many EVs on the road as possible.

"I have a car, it wasn't cheap, but the battery is great. It can get me 350 km [219 miles] on one charge... I only drive more than that in one go twice a year. The batteries work, if they keep trying to pressure prices lower, the market won't."

Co-op's research said that a growing number of its policyholders have EVs.

"39% think properties without a facility to charge an electric car will be definitely

(10%) or probably (29%) less valuable in the future," it said.

In July, the UK government issued a consultation paper with the view to changing building regulations so developers would be responsible for every new residential building with an associated car parking space having a charge point.

Nick Ansley, Head of Motor Insurance at Co-op, said: "We can see that more and more of our policyholders are opting for an EV and so going forward a charge point will be a necessity that house buyers will be looking for when looking to buy a new home."

A UK government is providing grants of GBP500 (\$640) towards the cost of purchasing and installing a home charging point for homes with a garage or a drive by the Office for Low Emission Vehicles (OLEV), the report noted.

— Ben Kilbey, ben.kilbey@spglobal.com

## Global copper deficit reaches 325,000 mt for January-July: ICSG

The global refined copper market likely experienced a supply deficit of 325,000 mt during the first seven months of the year, according to preliminary data released Tuesday by the International Copper Study Group.

Accounting for changes in unreported Chinese stocks and based on apparent Chinese usage, the deficit likely remained at 325,000 mt, the Lisbon-based research group said in a report.

"Although Chinese net refined copper imports declined by 15%, Chinese apparent usage grew by around 2.4% as a consequence of higher Chinese refinery output," ICSG analysts said.

Among other major copper-consuming

countries, demand increased in the US, India and Taiwan, but declined in the European Union and Japan, the ICSG said.

World demand ex-China declined by around 1.5% during the first seven months.

#### Refined output hold steady

World refined production remained essentially unchanged in the first seven months at 13.87 million mt, with primary production (electrolytic and electrowinning) declining by 0.5% and secondary production from scrap increasing by 1.5%, according to the ICSG.

Global refined production was constrained by a 35% decrease in Chilean electrolytic output due to smelter upgrades and shutdowns. Total Chilean refined production, including electrowinning, declined by 14%.

India's production was negatively impacted by the shutdown of Vedanta's Tuticorin smelter in April 2018 and fell 26% in the first seven months of the year.

Zambian refined output during the first seven months fell 27% due to power supply interruptions, smelter outages and temporary shutdown, and the introduction of a 5% custom duty on copper concentrate imports on January 1, the research group said.

Output in Japan, Peru, the US and a few European countries fell due to smelter maintenance shutdowns.

"However, these reductions were offset by growth in Chinese output and by

increases in countries recovering from production constraints in 2018 such as Australia, Brazil, Iran and Poland," ICSG analysts said.

On a regional basis, ICSG analysts estimated that refined output increased 3% in Asia and 15% in Oceania, but declined in 7% in Africa, 8% in the Americas and 1% in Europe.

#### Mine production falls 1.3%

World mine production declined by about 1.3% in the first seven months to 11.62 million

mt, with concentrate production declining 1% and solvent extraction-electrowinning by 2.7%, the ICSG said.

Reduced output in major producing countries more than offset growth in other countries, the group added.

Lower copper ore grades and a few production disruptions early in the year caused mine production in Chile, the world's largest producer, to fall 2% in January-July.

The transition of Indonesia's two largest mines to different ore zones caused the

country's concentrate production to decline 55% over January-July, the ICSG said.

After growth of 13% in 2018, aggregated mine production in the Democratic Republic of Congo and Zambia declined by 1.5% as consequence of temporary suspensions at SX-EW mines, reductions in planned production and few operational constraints.

Production in Peru, Australia, China and Mexico increased due to improved grades and recovery from constrained output in 2018, according to the ICSG. said.

— Nick Jonson, nick.jonson@spglobal.com

# Indonesian Antam's Q3 nickel ore output falls 4.5% year on year after export ban brought forward

Indonesia's Aneka Tambang or Antam produced 2.6 million wet mt of nickel ore in the third quarter, down 4.5% year on year, but up 1.6% from 0.2, the company said Monday in a quarterly operations report.

The year-on-year decline was attributed to the Indonesian government announcing in late August that it would bring forward a ban on nickel ore exports by two years to January 1 next year.

Over January-September, the

company's nickel ore production rose 13.9% year on year to 7.4 million wmt, after it posted a 84.7% year-on-year surge to 6.49 million wmt in the same period of 2018.

Antam's nickel ore sales to domestic and overseas smelters fell 27% year on year to 1.6 million wmt in Q3, and dropped 26% from Q2.

Most of Indonesia's nickel exports go to China for processing into nickel pig

iron to produce stainless steel.

Indonesia, the world's biggest nickel ore producer, had initially said it would ban nickel ore exports from January 2022. By bringing the ban forward by two years, Jakarta is aiming to preserve its nickel ore resources for the country's expanding processing and smelting industry and to increase raw material supply for the production of batteries used in electric vehicles.

— <u>Winnie Lee, newsdesk@spglobal.com</u>

### LME investors favor copper, nickel; shun lead and zinc: survey

Copper and nickel are the preferred London Metals Exchange metals, while lead and zinc are the least popular among investors, according to a survey of the metals community undertaken by BMO Capital Markets during the current LME Week.

Copper gained as much as 60% of the vote for the metal with best market prospects, followed by nickel with 21%, BMO commodities analyst Colin Hamilton said in a presentation distributed Wednesday. Lead was the least favored by 26% of the total, with zinc out of favor with 24% of voters.

According to BMO's research, copper's prospects are favored by mine supply constraints which means inventories continue to decline, despite some rebuilding of LME stocks.

"Copper is in a deficit market this year, and further out we will need more supply

projects," Hamilton told a seminar in the runup to the LME Dinner Tuesday evening. The current copper market supply is put at 4.4 million mt, which is lower than the availability of a few years ago. "There are few projects in the pipeline, but a high execution rate.....up to 2 million mt of supply to come on," he said.

A deficit of 160,000 mt of copper this year is likely to increase to 290,000 mt in 2020, before switching to a surplus of 115,000 mt in 2021, according to BMO. In the second quarter of 2020, copper prices are expected to average 9% above current spot levels, but in the longer term, with demand from electric vehicle charging infrastructure and other electrification projects, BMO sees them averaging 22% above current spot levels.

Tom Mulqueen, head of research at Amalgamated Metal Trading, an LME ring-

dealing member, a guest speaker at the BMO event, saw "strong potential for a rebound in copper."

One factor to watch out for, however, is China's current shift towards copper cathode self-sufficiency in the downstream market, which could impact the Asian giant's annual imports of 3 million mt of copper, Hamilton noted.

#### Nickel 'jiggery-pokery'

In nickel, the investors' second favorite, and which is a major input in stainless steel production, price gains have come amid a supply scramble ever since Indonesia's 2014 nickel ore export ban. This week, moreover, the country has brought forward another new nickel ore export ban that was originally expected to come into force in 2020.

In a climate of some nickel "jiggerypokery", Hamilton said the Indonesian export ban cannot be viewed as impacting market fundamentals, as nickel is still coming out of Indonesia onto world markets in different forms. It is mainly exported as nickel pig iron, production costs of which can now be considered a

market indicator.

Still, "Indonesia is totally reshaping the nickel and stainless markets: more NPI from Indonesia is a challenge to world stainless producers," Hamilton said.

Nickel is in deficit and its Q2 2020

prices are expected to average 18% more than current spot prices, although prices are expected to fall below current spot levels in the longer term, according to BMO Research.

— <u>Diana Kinch newsdesk@spglobal.com</u>

### Rio Tinto remains committed to decarbonizing business by 2050

Global diversified mining major Rio Tinto said it continues to take steps toward decarbonizing its business by 2050, and is "not complacent" in its approach, according to the company's CEO at its London investor day Thursday.

The comments came as many market players, and miners in particular, are increasingly highlighting the importance of Environmental, Social and Governance (ESG) factors. In fact, Rio Tinto underscored its environmental and sustainability credentials, noting it is the only major diversified miner that does not extract fossil fuels.

"Rio Tinto has reduced its emissionsintensity footprint by almost 30% since 2008
and today, over 70% of electricity comes
from renewable sources," the company said
in a statement issued alongside the event.
"Current emissions targets, which have
already been achieved, expire at the end of
2019 and new targets will be disclosed in
early 2020," it added. "The new targets will
move Rio Tinto closer to its long-term
commitment of substantially decarbonizing
its business by 2050."

CEO J-S Jacques gave an upbeat presentation, in the face of tough operating conditions, noting that the miner has \$10

billion of free cash flow in 2019, at current spot prices. Rio Tinto is well positioned to continue generating strong returns, he said, building on a track record of \$32 billion returned to shareholders since 2016.

"We think the market greatly underappreciates the importance of Rio's dividend as its shares effectively behave as a highyield bond proxy with a growing coupon, and history shows that these shares have delivered spectacular returns even in bear markets for commodities," broker Jefferies said in a recent research note to clients.

Total capital expenditure in 2019 is expected to be \$0.5 billion lower than previous guidance at around \$5.5 billion, with \$0.5 billion deferred into 2020. As a result, guidance for 2020 is around \$7 billion. Guidance for 2021 remains unchanged at around \$6.5 billion. Guidance for 2022 was included for the first time at around \$6.5 billion.

#### Update on Mongolian copper project

Rio Tinto said in July it would delay the expansion of its giant Oyu Tolgoi copper project in Mongolia for 16-30 months. The miner had also previously said that once fully ramped up, which was initially slated for 2027, Oyu

Tolgoi was expected to produce more than 500,000 mt/year of copper.

"Construction of Shaft 2 is now complete and commissioning is in progress, which will facilitate a step-change in lateral development productivity, providing the ability to move more material, equipment and people between the surface and underground," Thursday's statement noted, but giving no estimate for completion. The underground development is large and complex, with more than 200 km of underground roads and infrastructure.

"Work evaluating design options continues, including reviewing the location of access drives, the ore handling system and options for panel sequencing. Mine design will be completed in H1 2020," Rio Tinto added Thursday. In H2 2020 a complete cost of construction is expected to be announced.

JP Morgan said in a research note that while the issues were known to the market, the impact was worse than expected. "If Rio moves the mine location, it is likely grades will not be as high; this could impact initial production rates," the investment bank said.

— <u>Ben Kilbey, ben.kilbey@spglobal.com</u>

## Battery Metals weekly wrap

As they say in the business, the trend is your friend. And if we look back over the past few months the trend is massively bullish in the electric-mobility sector.

From scooters to trucks, the way we move is going to spark a new green revolution. Every day I get another press release or statement from a global automaker laying out plans for electrification of its fleet. This is real, this is happening.

You don't have to take my word for it; the entire industry from miners to consumers is

talking up the movement.

At the coffee machine this week I spoke to a colleague who is learning to drive in an electric car. She spoke so highly of it I was almost sold. Although, sadly, for the timebeing at least, price entry remains a barrier.

However, I could afford an e-bike. And Cycle Republic has been busy extolling the virtues of the two-wheelers. Using data from the Department of Transport, the company said after only 1,000 km an e-bike would offset all carbon emissions from its

production. 89.5 million mt of CO2 is produced by road travel per year, whereas e-bikes produce none. Built-in battery packs on modern e-bikes can take you 257 laps of an Olympic track, that's around 40 miles on a full charge. It's hard to argue against that.

Colin Williams, Owner of FLi Distribution -- another bike outlet -- says: "People need to be encouraged to see the benefits of using their e-bike for lots of different types of trips, not just leisure. Used in place of cars, e-bikes can help to reduce congestion

and pollution and cancel out the environmental impact of their production."

According to SEAT, it is estimated that it costs only a third as much to maintain an electric car compared to a conventional engine vehicle. So maybe that initial outlay isn't such a bad investment after all?

The outlook for the global lithium market was decidedly bearish this week, although views on electric vehicle growth remained bullish, various industry sources said.

During events at the annual LME Week annual gathering in London -- as well as on its sidelines -- conversation centered around one main theme: the growing global electrification trend.

Although there has been a slowdown in EV sales in the world's number one consumer, China, participants were bullish on the overall trend toward electrification, with 2025 widely touted as the year for sales to really take off globally and market penetration to deepen.

"The transition to EVs is irreversible," Roskill analyst for EVs, battery and supply chain Jose Lazuen told the audience at the consultancy's roadshow Tuesday. This was echoed industry-wide.

Shanghai Metals Market Singapore General Manager Ian Roper forecast European battery sales to rise 33% in 2020, with Analyst Lu Hong saying there were now over 7 million battery electric vehicles (BEVs) on the road globally, with 90% in China, the US and EU. She said SMM expected BEV production to increase by 8% this year to 1.35 million units.

More than one in five drivers now say their next car will be all-electric -- overtaking diesel and hybrid buying intentions for the first time -- shooting EVs into second place in motorists' preferred power option.

The findings are especially significant because they come from the mainstream car market, rather than an audience specifically interested in electric vehicles. Researchers say interest from mainstream

motorists is now only marginally trailing that of existing EV enthusiasts, according to a survey by DrivingElectric.com.

"There's no turning back now," said one senior banking source in conversation with S&P Global Platts. "Too much has been thrown at EVs. Too much is at risk."

Finally, in a first for the African continent, Volkswagen has launched a pilot project in partnership with Siemens to test the feasibility of electric mobility in Rwanda.

During the pilot phase, four e-Golfs and one charging station will be introduced in the capital of Rwanda, Kigali. Volkswagen has signed a joint development agreement with Siemens to provide the charging infrastructure for the electric cars.

The plan is to increase the number of the electric cars to 50 units and 15 charging stations, depending on the outcomes of the pilot project.

Until next week. Stay charged!

— Ben Kilbey, ben.kilbey@spglobal.com