SP Angel – Morning View – Thursday 05 07 18
Metals continue to tumble ahead of imminent tariff spat

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Amur Minerals Corp (AMC LN) – Drill programme update
Bacanora Lithium (BCN LN) – US$150m senior debt for the Sonora lithium project
Glencore (GLEN LN) – US$1bn share buyback programme

VW announces new all-electric car-sharing platform ‘WE’ to launch next year

- With the decline in car ownership for young people and the increased interest in all-electric vehicles, VW is announcing a new all-electric car-sharing platform called ‘WE’ that will launch next year.
- Volkswagen says that the first electric vehicle-on-demand services for the ‘WE’ platform will launch in Germany in 2019 and it will be extended “to major cities in Europe, North America and Asia as early as 2020.
- Volkswagen executive said last year they were aiming for the mass-market vehicle to be “about $7,000 to $8,000 cheaper than the Model 3” when it launches in 2019-2020.
- The development of mass-market car-sharing is expected to support the swelling outlook for battery and electric motor metal consumption.

<table>
<thead>
<tr>
<th>Index</th>
<th>Change</th>
<th>Level</th>
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<tbody>
<tr>
<td>Dow Jones Industrials</td>
<td>-0.54%</td>
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<tr>
<td>Nikkei 225</td>
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<td>HK Hang Seng</td>
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<td>AIM Basic Resources</td>
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Economics

Currencies

US$1.1700/eur vs 1.1669/eur yesterday  Yen 110.64/$ vs 110.39/$  SAr 13.655/$ vs 13.666/$  $1.325/gbp vs $1.321/gbp  0.738/aud vs 0.740/aud  CNY 6.637/$ vs 6.607/$

Commodity News

Precious metals:
Gold US$1,255/oz vs US$1,260/oz yesterday
  Gold ETFs 69.6moz vs US$69.6moz yesterday
Platinum US$843/oz vs US$841/oz yesterday
Palladium US$951/oz vs US$950/oz yesterday
Silver US$16.06/oz vs US$16.12/oz yesterday

Base metals:
Copper US$ 6,370/t vs US$6,440/t yesterday
  - Miners could reduce the cost of copper production by as much as 20 percent following a breakthrough innovation by Australia's Commonwealth Scientific and Industrial Research Organization (CSIRO).

Please, see disclaimer at the of this document
Both energy and water emissions were set to be slashed by the CSIRO's new copper analyser, which used magnetic resonance technology to detect large quantities of waste rock and rejected the rock before it even entered the manufacturing process.

The analyser worked by using short pulses of radio waves which illuminated batches of ore and allowed the magnetic resonance technology to penetrate through the copper to rapidly and accurately detect ore quality.

The CSIRO said this had the potential to double average ore grades as other analysers were only able to go "skin deep" and detect mineral particles on the ore's surface which led to less reliable results.

Aluminium US$ 2,086/t vs US$2,086/t yesterday
Nickel US$ 14,135/t vs US$14,280/t yesterday
Zinc US$ 2,674/t vs US$2,750/t yesterday
Lead US$ 2,322/t vs US$2,377/t yesterday
Tin US$ 19,590/t vs US$19,685/t yesterday

Energy:
Oil US$77.8/bbl vs US$78.0/bbl yesterday
Natural Gas US$2.838/mmbtu vs US$2.875/mmbtu yesterday
Uranium US$22.95/lb vs US$22.95/lb yesterday

Bulk:
Iron ore 62% Fe spot (cfr Tianjin) US$64.2/t vs US$64.2/t

- The Chinese government is aiming to move all haulage of iron ore and coking coal from the country's major coastal ports to either rail or waterways by 2020, ending the use of trucks, as part of efforts to curb air pollution.
- Steel companies must speed up construction of special railway lines connecting mills to major rail networks to reduce the use of trucks for last-mile transportation of iron ore and coking coal, Beijing said.
- China's largest steelmaking city Tangshan has already announced plans to transport all iron ore and coal from port to steel mills on railway lines by the end of 2019.
- Doubts about the logistical and economic viability of such a massive shift in modes of transportation in such a short period, move could have major impact on the landed cost of raw materials at mills, although whether costs rise or fall would depend on how efficiently the change is implemented.
- The measures are part of a new plan by the state council, China's cabinet, which aims to reduce pollution sharply by 2020.
- Analysts at National Australia Bank (NAB) is out with its iron-ore price forecast in the coming months. Expect iron ore prices to drop to $ 60/ton, citing easing Chinese demand.

Former Rio Tinto exec jailed for corruption in China let free

- Former Rio Tinto's head of iron ore business in China, Stern Hu, has been released Wednesday after spending nearly nine years in prison in Shanghai, following a 2010 conviction for corruption and industrial espionage.
- His trial strained relations between Australia and its biggest trading partner, China, it also ended with Rio walking away from a $19.5 billion tie-up with Aluminum Corp. of China, better known as Chinalco, which fuelled speculation that Hu and his colleagues were being targeted for retaliation.
- Hu's release come at a sensitive time for China's business and political relationship with Australia, as Prime Minister Malcolm Turnbull's government has just introduced new laws aimed at curbing perceived Chinese interfering in national affairs.

Chinese steel rebar 25mm US$639.8/t vs US$642.2/t

- China’s three-year plan to tackle hazardous air pollution threatens to tighten constraints on steel and aluminium production by expanding the region subject to environmental controls.
- The State Council, the nation’s top administrative body, on Tuesday unveiled its ‘blue-sky protection plan’ through 2020, which looks to expand the area where anti-pollution curbs such as seasonal winter production cuts can be enforced. The zone now stretches much farther to the south, adding 13 cities and three provinces to the 28 areas hit with production controls during the most recent winter.
Enforcing controls on the same scale as 2017-2018 on the expanded zones could impact as much as 60.7 m tonnes of steel capacity, equivalent to 7.2% output. Capacity equivalent to about 3.5% of aluminium production and 7.4% of alumina production would also be exposed.

The three-year plan is part of a broader push by China’s ruling Communist Party to reduce pollution and raise environmental standards after decades of intense industrial growth. The winter restrictions on production -- as well as shutdowns of unlicensed or substandard plants -- contributed to higher steel prices and better profitability for remaining producers. Some firms can also be ordered to close at any time when pollution breaches certain limits, according to the plan.

The 2020 program could spur the closure or relocation of 56 million tonnes of steel capacity from the top-producing province of Hebei, while raising production costs, changing the geography of industries including steel, aluminium, cement and glass. Restrictions are expected to deepen disruptions to raw material demand, with iron ore stockpiles across China rising the record levels during last years’ winter production cuts.

**Thermal coal (1st year forward cif ARA) US$91.6/t vs US$91.1/t**

**Premium hard coking coal Aus fob US$193.1/t vs US$193.9/t**

- China will cut coal consumption, boost electric vehicle sales and shut more outdated steel and coke capacity in the coming three years, the State Council said in a long-awaited 2018 to 2020 pollution action plan published on Tuesday.
- It also said no new capacity for steel, coke and primary aluminum production will be allowed in the regions through to 2020, the State Council, or China’s cabinet, said.
- It will cap steel capacity in Hebei, the country’s largest steelmaking province, at 200 million tonnes by 2020, down from 286 million tonnes in 2013.
- The cabinet also set an annual production and sales target for new energy vehicles at around 2 million vehicles a year by 2020 in order to reduce road emissions.

**Other:**

**Cobalt LME 3m US$71,750/t vs US$74,750/t**

**Tungsten APT European US$350-354/mtu vs US$342-347/mtu**

**Rare Earth – China environmental inspections halts operations**

- State-owned Aluminium Corp of China, or Chinalco, has reported suspended operations in southern China’s Guangxi region, after inspectors found the company in breach of environmental rules. The Guangxi unit was ordered to swiftly rectify the problems identified and discipline those responsible, while calling on more than 600 subsidiaries to step up their environmental compliance.
- Reports suggest the unit of Chinalco Rare Earth & Metals Co Ltd had been contaminating water sources. Inspectors also found it had been carrying out mining activities outside of its permitted areas, with 24 complaints made about the company by members of the public in Guangxi.
- Separately, China’s Ministry of Ecology and Environment said in a statement dated July 1 that inspectors in another of China’s rare earth hubs, Baotou in Inner Mongolia, had found that mining slag was being dumped illegally. The quantity and variety of industrial waste being dumped in 12 sand mining pits selected at random by inspectors was described as "shocking" by the ministry, which in May unveiled new measures to crack down on the illegal transportation and dumping of solid waste in China.
- More stringent environmental restrictions across the world’s top producer will limit domestic supply, causing China to become a net importer of raw concentrate. Consequently, advanced stage projects outside of China will play a more dominant role in supplying growing permanent magnet demand in the high-tech future.

**Lithium - Lithium mine near Tesla Gigafactory plans to break ground as global shortage rears head**

- Just 150 miles north of Tesla’s Gigafactory, a plan is brewing to build a massive mine capable of growing the world’s lithium carbonate supply by a full 15% as early as 2022 and more than 20% by 2026, compared to 2018.
- Tesla could, in other words, find itself neighbors with one of the largest concentrated supplies of lithium carbonate in the world less than a decade from now.
- Known as Lithium Americas, the company behind the study has conservatively estimated that it could break ground on its prospective Northern Nevada Li2CO3 mine as early as the end of 2020 and ramp up to an annual output of 30,000 metric tons of the basic Li-ion battery precursor just 21 months after that.
The mine’s output would then double by 2026, coming to rest at a maximum annual lithium carbonate output of 60,000 tons.

Company News

Amur Minerals Corp (AMC LN) 4.0p, mkt cap £26.2m – Drill programme update

- Amur Minerals provides its second drill update covering June 2018 at its wholly owned Kun-Manie nickel copper sulphide project in Russia. This year’s field programme is focused on the completion of specific tasks related to advancing the development of the project into one of the world’s largest nickel producers.

- Drilling is designed to establish the final data set for allowance of reporting Russian reserves that will, in turn, allow the Company to obtain mining production approvals from the Russian Federation and local agencies, to convert a large high grade block of Inferred resource for inclusion in the Mining Ore Reserve (“MOR”). This is expected to facilitate an earlier period of the production schedules, and allow the acquisition of a large metallurgical sample to define the variability and content of the life of mine sulphide concentrate for either toll smelter and or Low Grade Matte (“LGM”) generation (an owner operated option).

- At the end of June 2018, a total of 66 holes (10,809.3 metres) have been completed since initiation of the planned 20,300 metre drill programme on 6 May 2018. The company has completed approximately 50% of the 2018 planned programme.

- Detailed infill drilling of limited areas within the four deposits, from which mining is planned, is well advanced. This regulatory related drill work has been completed at the largest of the two deposits, Maly Kurumkon / Flangovy (“MKF”) and the Ikenske / Sobolevsky (“IKEN”) deposit, and is presently being implemented at Kubuk (“KUB”). Work at Vodorazdelny (“VOD”) is scheduled for later in the season. To date, nearly 70% of the planned infill drill metres (4,677.2 metres of the planned 6,500.0 metres) have been completed.

- The largest Inferred resource inventory at Kun-Manie is located at the southern limits of the IKEN ore deposit. An estimated 27.8 million tonnes containing 222,000 nickel tonnes and 63,000 copper tonnes is contained within this area, and to the east toward the KUB deposit. The nickel grade of this Inferred block ranks the area to be amongst the highest nickel grade blocks at Kun-Manie, and for this reason, drilling for resource conversion (Inferred to Indicated) and its subsequent inclusion into the Mining Ore Reserve (“MOR”) has been implemented. The indicated vertical thickness is 23.6 metres (28.7 metres at year end 2017) with a nickel grade of 0.87% (0.94% at year-end 2017) and a copper grade of 0.24% (0.26% at year-end 2017).

- The current Inferred resource is included in the Pre-Feasibility Study and is scheduled for mining during the mid-life stage of the planned 15 year operation. Successful conversion of the Inferred resource will trigger a rescheduling and it is likely the area would be brought forward in the mine life which could further improve the project Net Present Value (“NPV”) and the Internal Rate of Return (“IRR”) of the Kun Manie project.

- Nine metallurgical sample collection holes have been completed bringing the total drill meterage for this category to 1,933.3 metres (28% complete).

- Drill results thus far have confirmed the continuity of the mineralisation with regard to both thickness and grade. Final analytical results from Alex Stewart Laboratories (“ASL”) are now being received and the information provided within this announcement and future drill update reports will be updated to reflect these final independent and certified results suitable for use in resource and reserve definition

Bacanora Lithium (BCN LN) 92.5p, Mkt Cap £124.1m –US$150m senior debt for the Sonora lithium project

- Bacanora Lithium has obtained a US$150m Senior debt facility to help the financing of its Phase 1 development of the Sonora lithium project in Mexico.

- The facility, provided by RK Mine Finance for a 6 year term, bears interest at the 3-month LIBOR rate plus 8%pa but allows for interest to be capitalised every three months for the initial 24 months.

- RK has also provided a second US$56m bond with a 20 years term which is “repayable by reference to monthly production of lithium at a rate of US$160 per tonne of lithium produced, with any remaining amount repayable at the end of the 20-year term.”

- Both facilities are structured as Eurobonds to be listed in Jersey. RK Mine Finance is described as a specialist provider of “bespoke financing solutions to metals focused mining companies … [and] … The fund has a strong track record of supporting mining companies with their financing needs and since its inception has committed capital of over US$1.6bn.”
The capital expenditure for the phase 1 development of 17,500tpa of Li2O production at Sonora amounts to US$420m and “In addition to this, Company estimates that approximately a further US$40 million will be required for working capital purposes.”

In addition to the debt financing, “The Company is continuing its financing discussions with its off-take partner, Hanwa, the Japanese trading company, and other strategic, long term investors for the additional funding required to complete the Stage 1 project development.”

Describing the debt facility as one of the larger such facilities for a junior resource company in recent years, and highlighting its competitive costs and terms, Bacanora Lithium’s CEO, Peter Secker, went on to underline the scale of the deposit and its expected position within the lowest quartile of production costs as well as the team’s proven operating credentials during extensive pilot plant testing.

Mr. Secker went on to summarise, saying “We believe that it is this compelling combination that has enabled us to attract blue-chip backers including the Japanese trading company Hanwa as an off-take partner and strategic investor, tier one fund managers as major shareholders, and now RK as a debt provider. We continue to talk with other important participants in the lithium space with a view to securing additional high quality strategic partners, as we focus on entering into the construction phase of what we believe will be the next significant producer of battery grade lithium carbonate.”

**Conclusion:** Debt funding marks a milestone in Bacanora’s development of the Sonora Lithium project. We look forward to further news on the continuing financing discussions and offtake arrangements.

**Glencore (GLEN LN) 333p, mkt cap £48bn – US$1bn share buyback programme**

- Glencore has announced a US$1bn share buyback programme to be implemented by the end of 2018.
- An initial £350m phase of the programme to be conducted independently of the company by Citigroup “will commence today and end not later than close of dealings on 7 August 2018 (the day before the announcement of the Company’s half-year results).”
- During the second phase “trading decisions may be undertaken by Citi in accordance with the directions of the Company”.
- The announcement, which implements authorities granted by shareholders at the 2018 AGM, comes shortly after news earlier this week of the US Department of Justice subpoenas for documents relating to Glencore’s activities in the DRC, Nigeria and Venezuela triggered a sharp decline in the share price. Currently the share price is recovering, however, recovering around half of the ground lost.
- We wonder whether some of the liquidity generated by Glencore’s share buyback programme will filter into the junior mining sector.

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