

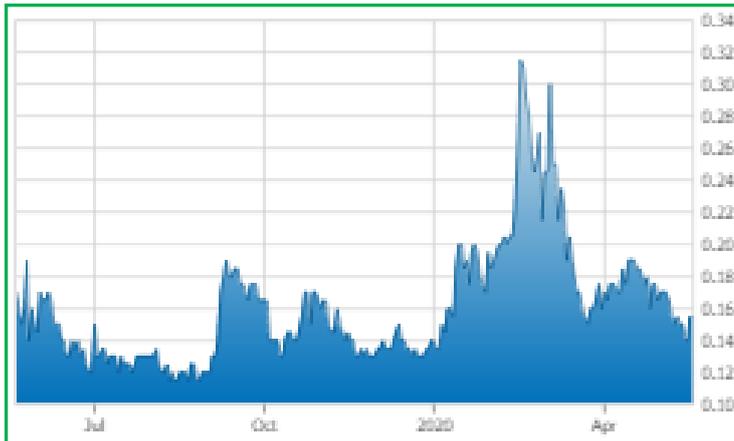
# Strategic Metals & Rare Earths Letter

## INTERNATIONAL

*the independent information and advisory publication on investing in Strategic Metals & Rare Earths*

**INVESTMENT ALERT – May 20, 2020**

[www.pacificrimcobalt.com](http://www.pacificrimcobalt.com)



### Bolt Metals Corp.. (C\$ 0.155)

CNX : BOLT  
OTCQB : PCRCF  
Frankfurt : NXFE

H + L prices (12 months) : C\$ 0.34 - 0.11

Net shares issued : 67.6 million

Market Capitalization : C\$ 10.0 million  
(US\$ 12.6 million)

**2020 price target C\$ 0.70**

## INVESTMENT ALERT

- ▶ **Indonesia** has passed revisions to its 2009 Coal and Mineral Mining Law aimed at attracting international investment in the sector
- ▶ **Bolt Metals** to benefit from establishing the maiden compliant **Cyclops Cobalt-Nickel Project** in Papua Province, Indonesia

On May 12, 2020, Indonesia's House of Representatives passed a revision of the 2009 Coal and Mineral Mining Law. The law, jointly drafted by the House and government seeks to grow the economy by developing the downstream mining industry.

As the **world leader in nickel production**, **Indonesia** continues to update its national strategy and laws governing the minerals and mining sector supporting their mandate to lead the world in battery metals and cathode material production capacity.

The Company is looking to attract foreign investors by creating a full nickel supply chain, starting from extraction, processing into metals and chemicals used in batteries, all the way to building electric vehicles.



**Bolt Metals'** (formerly Pacific Rim Cobalt) efforts will focus on historically identified and drill-tested prospects, as well as previously undrilled prospects in the **Cyclops Mountain range, situated in the northern coast of Papua Province, Indonesia**, a country ranked among the largest hosts of nickel laterite occurrences in the world.

## Key Points of the Cyclops Nickel-Cobalt Project

- Total historical estimate<sup>1</sup> of **37Mt @ 0.11% Co and 1.31% Ni** at 0.8% Ni cut-off grade
- Estimate based on over **856 shallow drill holes** and 26 test pits
- Historical **high grade** drill intercepts<sup>1</sup>; 8m @ 0.18% Co; 13m @ 0.15% Co; and 10m @ 0.19% Co
- Environmental (AMDAL) and Production/Mining Permits Issued
- Mineralization is from surface, average historic drilling to depth of 11-15 metres.
- **Strategically located near China, the world's largest cobalt buyer**
- Project covers 5,000 Ha with 9 prospects, with 5 drill-tested and known cobalt-nickel prospects
- **Cyclops Project Area** is 40km from Jayapura, capital of Papua Province, Indonesia. 15km from Sentani Airport with year round access by sealed roads
- Indonesia Laterites have the potential to be a leading source of Nickel and Cobalt for the EV Battery sector

<sup>1</sup> See page 35 for information regarding historical estimate



On September 24, 2019, **Bolt Metals** announced results from its ongoing 2019 shallow drilling program at its **Cyclops Project**. The drilling is part of a multi faceted exploration program aimed at confirming historical results and guiding a project development plan.

### Highlight Intersections include:

- 11 metres @ 0.89% nickel, 0.15% cobalt; from surface
- 8 metres @ 1.03% nickel, 0.29% cobalt; from surface
- 7 metres @ 1.19% nickel, 0.20% cobalt; from surface
- 8 metres @ 1.42% nickel, 0.16% cobalt; 2 metres from surface
- 10 metres @ 1.31% nickel, 0.15% cobalt; from surface
- 10 metres @ 0.80% nickel, 0.14% cobalt; from surface
- 10 metres @ 1.65% nickel, 0.12% cobalt; from surface
- 8 metres @ 0.96% nickel, 0.14% cobalt; from surface

As previously announced, highly anomalous cobalt values together with elevated nickel were intersected in the near surface zone. These intersections were encountered in the limonite zone and form a continuous blanket over the entire 600 metre x 300 metre area drilled.

This zone varies in thickness from 2 to 11 metres and immediately overlies previously reported nickel values in the saprolite zone and considerably enhances the potential size of the mineralized body of material.

- **Bolt Metals** is confident in its ability to further improve recovery rates as it conducts further testing.
- The Company continued to engage with downstream users and commodity suppliers to the EV battery space as the Company continues its strategy of actively engaging with market players in China, Indonesia and Korea.

## ► Preliminary Offtake Agreement with **Beijing Easpring Material Technology Co of China**

In July 2018, **Bolt Metals** entered into a non-binding Preliminary Offtake Agreement with **Beijing Easpring Material Technology Co.** (“Easpring” – Shenzhen Stock Exchange: symbol 300073) of China for its **Cyclops Nickel-Cobalt Project** in Papua Province, Indonesia, located proximal to the world’s largest cobalt market.

Today, **Easpring**, listed on the Shenzhen Stock Exchange with a market capitalization of CNY 11.34 billion (US\$ 1.59 billion), is recognized as the leader in China in its industry and was one of the first suppliers for export lithium cathode material.

Presently, **Easpring** supplies 5 of the world’s six larger lithium-ion battery manufacturers and is one of the only Chinese suppliers that simultaneously sell high-quality cathode materials in China and internationally, including Japan and Korea’s high-end lithium-ion battery markets.

**Bolt Metals** and **Easpring** intend to formalize the terms of a definitive binding agreement subject to further due diligence to be completed between the parties.

The **Definitive Agreement** is expected to grant **Easpring** the right to purchase nickel sulphate and cobalt sulphate from the Company’s **Cyclops Project** for an initial term of 5 years from the commencement of commercial production.

Annual volume will be determined in the Definitive Agreement and it is presently intended that **Bolt Metals** will not be limited in respect to third parties to which it may sell any amount of nickel and cobalt product not committed to **Easpring**.

Pricing is intended to be linked directly to LME and LMB quoted metal pricing for nickel and cobalt, respectively, with sulphate premia to be quarterly based on the prevailing market pricing. Specific pricing parameters will be determined with granted certainty in the Definitive Agreement.

In addition, the Definitive Agreement contemplates a Strategic Investment Option, providing **Easpring** a preferential opportunity to make an equity investment directly in **Bolt Metals**, or invest at the project level in Cyclops or other nickel-cobalt assets acquired by the Company.

Jashan Guan, Purchasing Director of Easpring, stated “The demand for lithium-ion batteries is growing rapidly due to the global shift to electric vehicle usage. Our partnership with **Bolt Metals** is an important part of Beijing Easpring’s strategy”.

## ► **Update on progress achieved during the second half of 2019 and strategic goals for 2020**

- The Company continued bulk sampling, which included excavation and sampling of test pits from the Cyclops project with a total of 530 kg sent to Canada for the bench-scale test program and later pilot plant studies.
- In September 2019, the Company completed its shallow drilling program, which confirmed elevated nickel and cobalt values from surface of the laterite profile. The drilling program was extensive, including 75 drill holes at depths of between 10 to 29 metres, with a total of 1,020 metres drilled. In conjunction with 11 test-pits of 2 to 6 metres in depth and 51 auger holes to depths of 1 to 3 metres.

These results are part of a multi-faceted exploration program which further supports the extensive suite of historic results, which included 856 drill holes, and 26 test-pits. Pacific Rim Cobalt’s shallow drilling program further supports the Company’s long-held view that the Cyclops Project is amenable to shallow, low-cost, logistically straightforward drilling and continued development.

- Selected elevated nickel results are given below from the Company’s shallow drilling program (*for further information, please refer to the Company’s press releases of March 5, April 1, April 23, June 13, June 20 and September 10, 2019*):

Intersection Length (metres from surface)	Nickel Percentage	Cobalt Percentage
11.0	0.89%	0.15%
8.0	1.03%	0.29%
7.0	1.19%	0.20%
8.0	1.42%	0.16%
10.0	1.31%	0.15%
10.0	0.80%	0.14%
10.0	1.65%	0.12%
8.0	0.96%	0.14%

- On October 28, 2019, **Bolt Metals** announced the final results from the completed detailed recovery process bench-scale test program in conjunction with its extractive technology and process development partner, **Process Research ORTECH Inc. (“Ortech”)**. This followed rapidly on from the Company’s scoping test program which had already confirmed the suitability of mixed chloride leach technology on multiple samples of Indonesian laterite. Using Ortech’s patented solvent extraction process, the bench-scale test program successfully defined optimal leach conditions.

### ► Cooperation Agreement with **Hunan Jinxin Material of China**

On March 2, 2020, **Bolt Metals** announced that it has signed a non-binding Cooperation Agreement with **Hunan Shijiyintian New Material Co. Ltd.**, a 100% owned subsidiary of **Hunan Jinxin New Material Co. (“Hunan Jinxin”)** of **China**.

**Bolt Metals** and **Hunan Jinxin** will immediately commence negotiations with the intention of entering into one or more definitive binding agreements (“Definitive Agreement”) subject to further due diligence to be completed between the parties.

It is anticipated that there will be two primary components of a Definitive Agreement with 1) **Hunan Jinxin preliminary offtake** and 2) **investment**.

Subjective to successful negotiations the **preliminary offtake section** of the **Definitive Agreement** will grant Hunan Jinxin the right to purchase nickel sulphate and cobalt sulphate from the **Cyclops Nickel-Cobalt Project** or other projects owned or represented by **Bolt Metals**.

**Bolt Metals** will not be restricted from entering into subsequent offtake related agreement with third parties in respect of output, which has no been committed to **Hunan Jinxin**.

Subject to successful negotiations, the **investment section** of the Definitive Agreement will grant **Hunan Jinxin** the **option to purchase equity in Bolt Metals** or to **make a strategic investment in the Cyclops Project** or other projects owned or represented by **Bolt Metals**.

### ► Strategy for 2020

**2020** will see continued and consistent development in Pacific Rim Cobalt’s strategy as the Company continues to set ambitious milestones with the goal of becoming a leading international player in the EV battery metals sector and creating significant long-term shareholder value.

These will include preparations to commission and operate the Company’s pilot plant in Canada which will contain an integrated circuit to produce high purity nickel and cobalt strip solutions in order to develop battery-grade nickel and cobalt.

The results of the pilot plant will then be used to establish the design criteria for the subsequent demonstration plant in Indonesia which will produce nickel and cobalt products suitable to meet market specifications. As well as demonstrating **Bolt Metals’** ability to produce a product within market specifications, this will also be used to establish the design criteria for the Company’s commercial scale plant.

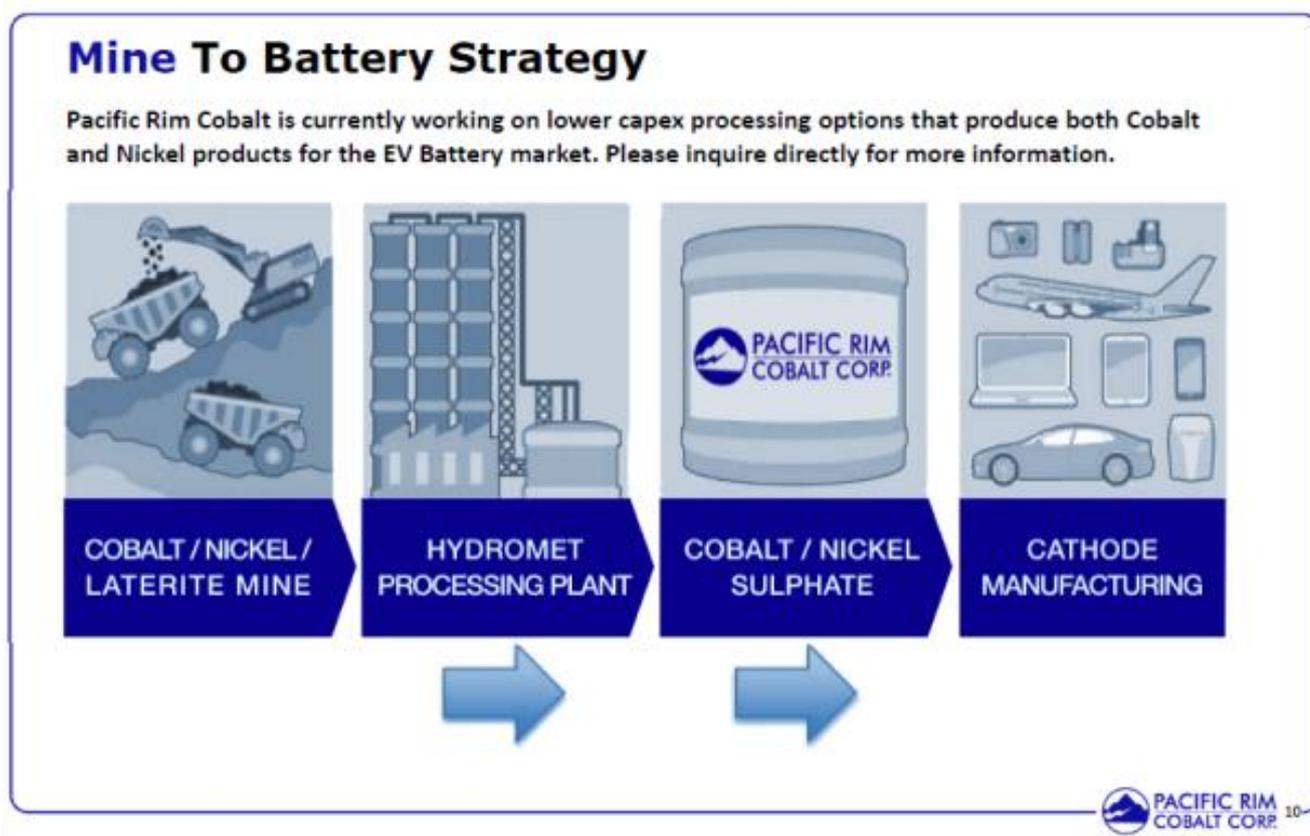
## ► The Electric Vehicle market

The growth in global EV sales continues to expand rapidly. Deloitte's latest research projects global EV sales at 2 million units in 2018 and predicts that this total will double to 4 million units in 2020, and 21 million by 2030. The past five years have seen an annual 20% reduction in the cost of EV battery packs which Bloomberg now forecasts to become cheaper than equivalent combustion engine models by as soon as 2022.

According to **CRU Mobility** and **Energy Futures**, by 2030 the EV market will require an estimated 1.3 million tons per annum of nickel compared to just 600,000 tons in 2018. For cobalt, the required total is forecast to be 314,000 tons per annum of cobalt, which equates to 332% of the metal's entire global supply in 2017.

**Bolt Metals** has always maintained that **Indonesia** is perfectly placed to take advantage of the burgeoning EV sector and 2019 has seen the continuation of a number of exciting trends and developments which lay the foundations for the continued future growth in every vertical of the EV supply chain.

Spending on new nickel processing plants in **Indonesia** is expected to total US\$20 billion by 2024, supported by the Indonesian government's determination to create a world-leading EV supply chain.





## **Indonesia's** strategy decisions to strengthen its position as the world's largest nickel producer

In pursuit of the goal to strengthen its position as the world's largest nickel producer, in August 2019, the head of Indonesia's Investment Agency announced a ban on the export of nickel ore which became effective on January 1, 2020. Anticipation of the export ban had pushed global nickel prices up by 40% between June and October 2019 to US\$ 17,500 per ton. Wood Mackenzie have stated their belief that mine production from the Philippines and other nickel exporting countries cannot offset the loss to the Chinese nickel market from the Indonesian export ban which was estimated at 350,000 tons in 2019.

On January 14, 2020, Bolt Metals reported that Indonesia has improved environmental impact studies for factories to produce battery-grade nickel chemicals in Morowali, Coordinating Minister of Maritime and Investment Affairs Luhut Pandjaitan said on January 8, 2020.

There are at least 5 of these plants being built in Indonesia currently as the government seeks to use its nickel resources to create an integrated industry, including production of chemicals used in car batteries and the building of electronic vehicles.

With **Indonesia** continuing to make significant strategic decisions, the latest announcement on having passed revisions to its 2009 Coal and Mineral Mining Law, represents an important step in Bolt Metals' efforts to benefit from Indonesia's rapid development as a leading market for all strategies of the EV supply chain. **These developments also strengthen Indonesia's ability to capitalize on its abundant resources, which includes 25% of global nickel resources.**

**Spending on new nickel processing plants in Indonesia is expected to total US\$20 billion by 2024, supported by the Indonesian government's determination to create a world-leading EV supply chain.**

This commitment extends to the very top of government, with Joko Widodo – Indonesia's President – stating in September 2019 that "for nickel, we want raw materials to be processed in Indonesia. We want added values". This supports previous pronouncements from key officials, including Indonesian Maritime Minister, Luhut Pandjaitan who remarked that Indonesia will "become the main player in lithium batteries" and that it will "control the world market".

### ► Some key **Indonesian** based project and investment highlights include:

- Investment in downstream nickel projects clustered around Sulawesi Island and Halmahera Island have already passed US\$ 9 billion, and are expected to increase to US\$20 billion within 5 years.
- PT Vale and Sumitomo Metal plan to spend US\$ 5 billion on nickel projects during the next few years, including a US\$ 2.5 billion plant to make battery-grade metal.
- Chinese battery materials company GEM has stated its intention to work with CATL and Tsingshan to construct a US\$ 700 million plant in Indonesia to produce nickel for the EV battery market.
- Toyota Motor Corp. has committed to invest US\$ 2 billion by 2023 to develop electric vehicles in Indonesia.

► **Nickel market is offering high investment leverage potential**

Indonesia’s decision as the world’s largest nickel producer to stop exports as of January 2020 resulted in a sharp increase of the nickel price in 2019 from a 52-week low of US\$ 5.01/lb to US\$ 8.45/lb, followed by a correction to a current price is US\$ 5.58/lb.

## Nickel–Cobalt Laterite Formations

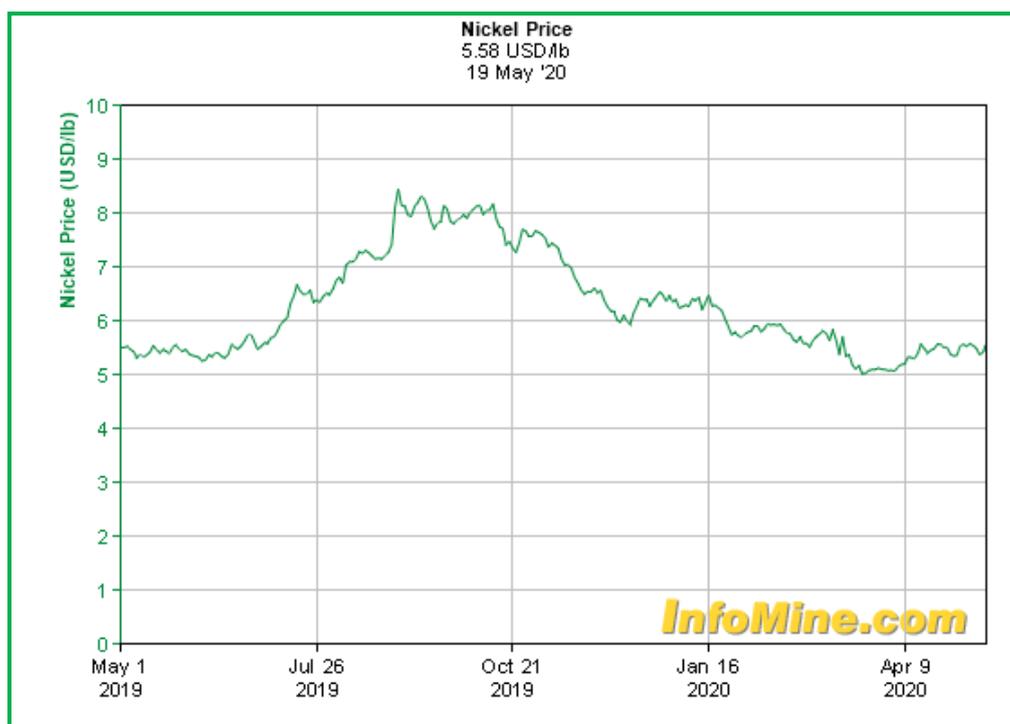
Laterites are a type of soil, rich (in this case) with cobalt-bearing nickel ore that formed through prolonged chemical and mechanical weathering in wet, warm, tropical environments.

Indonesia contains 12% of the world’s Ni-Co laterite formations.

Grades of cobalt in laterite deposits vary widely in the range 0.1 – 1.5% Co

Cobalt currently mined economically in 4 different geological settings

Deposit Type	Economic Grade	Example
* Laterite (by-product Ni)	0.05 – 0.15%	Vale, ANTAM (Indonesia); New Caledonia
* Nickel sulphide (by-product Ni)	0.10%	Sudbury (Canada); Kambalda (Australia)
* Sediment hosted (by-product Cu)	0.1-0.4%	Zambian Copper belt (DRC, Zambia)
* Hydrothermal/volcanogenic(primary)	0.10%	Bou Azzer (Morocco); Keretti (Finland)
* Manganese nodule and cobalt rich crust	Up to 2.5%	Not currently economic



## Investment comments:

With **Indonesia** having passed revisions to its 2009 Coal and Mineral Mining Law aimed at attracting international investment in the sector, **Bolt Metals** is in a position to benefit from establishing its maiden compliant **Cyclops Nickel-Cobalt Project** in **Papua Province Indonesia**.

Thanks to its non-binding Cooperation Agreement with **Hunan Jinxin Material** of **China**, with two components to achieve a Definitive Agreement on preliminary offtake and investment, as well as a similar existing non-binding preliminary offtake agreement with **Beijing Easpring Material** of **China**, the Company has created a prominent position to take advantage of **Indonesia** to become the main player in lithium batteries that will control the world market for nickel.

Having the official registration of the project licence secured and to be transferred into a fully compliant Foreign Investment License, this is an important step forward to the development of the **Cyclops Project** to one of the major economically viable cobalt projects outside of the **DRC**, which country, as a geopolitically unstable destination, controls almost two-thirds of the global cobalt market.

The **Cyclops Nickel-Cobalt Project** has a significant, shallow, historic **estimate of 37 million tonnes grading 0.11% Co and 1.31% Ni at 0.8% cut-off grade** and has the potential for considerable expansion as mineralization is open at and on strike (*historical not NI-43-101 compliant estimate*).

The Company's efforts will primarily focus on historically identified and drill-tested prospects, as well as previously undrilled prospects. The goal of the program is to establish a compliant maiden resource on the **Cylops Project**, as well as to identify target location for exploration of mining bulk samples required to upcoming metallurgical process testing.

With the secured Indonesian approval for the registration of its **Cyclops Nickel-Cobalt Project** having offered the opportunity of securing strategic partnerships and as a result to participate in Asia's growing battery metals chain, at a depressed market valuation of US\$ 12.6 million, **I consider Bolt Metals to offer one of the world's most attractive nickel-cobalt investment opportunities.**

**My 2020 price target remains C\$ 0.70.**