

Around the Corner

Colonial Coal International Corp.

Bulk Materials - Developer/Explorer

16 November 2021

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Overview

Colonial Coal International Corp. (CAD-TSX.V) is a Canadian-listed, publicly traded, pure-play metallurgical (coking) coal development company with a 100% interest in two strategically located development-stage coal project assets in the pre-eminent Peace River Coal Field of western Canada. CAD expects its projects to produce premium coal products with low deleterious element content that are expected to be in increasing demand as the steel industry moves to de-carbonize itself. The company notes the projects are located proximal to existing infrastructure and adjacent to other properties owned by large producers that could leverage regional infrastructure, making them attractive acquisition targets. Management and insiders currently own 27.8% of the company, with founder, Chairman and CEO David Austin alone owning 10.96%.

Potential key Asian source of clean coking coal...

Premium product: The coal seams at CAD's projects host a premium metallurgical (coking) coal product that is expected be in increasing demand as the steel industry moves to lower emissions in the transition to "green steel". Metallurgical coal prices are currently at all-time highs.

Strategic location within the Peace River Coal Field: The Peace River Coal Field ("PRC") in northeast BC is one of the world's foremost coal fields and is served by established high-quality infrastructure (transportation, power, ports). CAD's assets are strategically situated within the PRC, proximal to development assets owned by major producers, Teck Resources and Anglo American, implying infrastructure synergies.

Access to East Asian markets: The West Coast of BC, particularly Prince Rupert in the north, is significantly closer to East Asian markets than major US coal fields. While not as close as Queensland, Australia (the world's largest premium coking coal exporting region), we note that as of October 2020, China (by far the world's largest steel producer) has banned coal imports from Australia. Canada has since emerged as a preferred supplier to coastal Chinese steel mills.

Experienced management team with a proven track record in the PRC as well as Asian markets: David Austin (Founder, CEO and Chairman) co-founded and built Western Energy Corp., which was sold to Walter Energy for C\$3.3 billion in 2020, as well as Northern Energy & Mining, which was sold to Anglo American for C\$400 million. Director Partha Bhattacharyya is the former Managing Director of Coal India, the largest coal producing company in the world.

...which is currently trading at all-time highs.

Q3/21 was a perfect storm: Coking coal prices soared in Q3, as a confluence of supply factors created a significant supply crunch despite declining steel production. A combination of the Chinese ban on Australian imports (October 2020), domestic production challenges due to productivity issues and safety inspections, COVID-19 restrictions in Mongolia and rains in Indonesia have resulted in severe shortages in the Chinese market. As such, we saw premium coking coal pricing in China increase from an already elevated \$307/t on July 1 to \$522/t currently. The supply-demand dynamics outside China aren't much better. After a long period of trade flow re-routing following the Chinese ban on Australian imports, FOB pricing has been increasing dramatically since May as global steel production ramps up. We note the increase in FOB pricing from \$192/t on July 1st to ~\$400/t as of September 30.

Longer-term dynamics remain attractive, despite the prevailing narrative: Steel production is expected to remain robust for the foreseeable future, with blast furnaces and BOFs remaining the predominant production pathway. New technologies, such as steel plants powered by green hydrogen, have been highlighted recently as a panacea to the industry, but we believe commercialization at mass scale is unlikely before 2040 at the earliest. In the interim, the use of high-quality inputs coupled with carbon-capture technology remains the most applicable option to drive near- and medium-term decarbonization efforts. Finally, we believe the restriction of capital to fossil fuel producers will result in well-supported pricing for premium coking coal through the transition.

Key Metrics Management

PriceC\$2.59CEODavid AustinMarket Cap (M)C\$451CFOMatthew J. AndersonShares Out (M)174COOJohn Perry

Headquarters

Colonial Coal International 595 Howe Street Suite 200 Vancouver, British Columbia V6C 2T5

Global Locations

British Columbia

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For important information, please see the Important Disclosures beginning on page 23 of this document.



Colonial Coal International Corp.

Figure 1: Colonial Coal logo



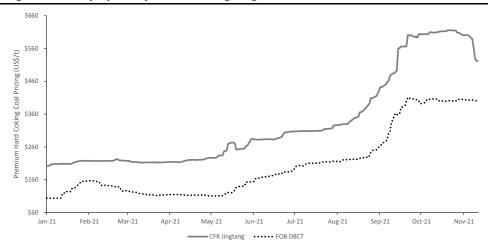
Source: Company Reports

Summary

Colonial Coal International Corp. (CAD-TSX.V) is a Canadian-listed, publicly traded, pure-play metallurgical coal development company with assets in the pre-eminent Peace River Coal Field in western Canada. The company holds a 100% interest in two strategically located development-stage coal projects: Huguenot and Flatbed (Gordon Creek). Primary attributes of the company include:

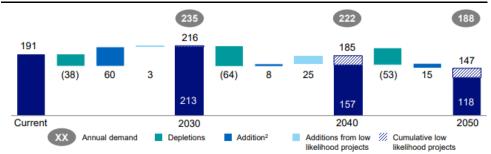
Premium product: The coal seams at CAD's projects host a premium metallurgical (coking) coal product that is expected be in increasing demand as the steel industry moves to lower emissions in the transition to "green steel". Metallurgical coal prices are currently at all-time highs given supply shortages relative to existing demand.

Figure 2: Premium Hard Coking Coal pricing - FOB Dalrymple Bay and CFR Jingtang benchmarks



Source: Fastmarkets, Bloomberg Finance LP

Figure 3: High-quality coking coal will be required for the low-carbon transition



Seaborne Steelmaking Coal Supply/Demand Gap (Mt)

(Mt)	Net Capacity 2030	Net Capacity 2040	Net Capacity 2050
Gap with high likelihood projects	-22	-65	-70
Gap with high and low likelihood projects	-19	-37	-41

Source: Teck Resources Ltd.

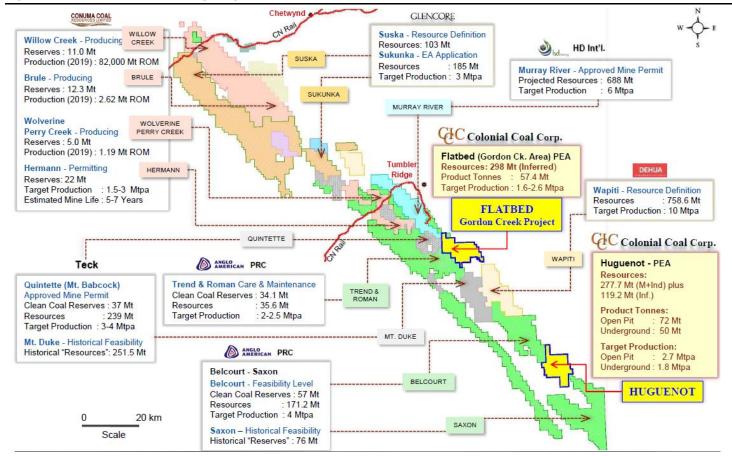
• Strategic location within the Peace River Coal Field: The Peace River Coal Field ("PRC") in northeast BC is one of the world's foremost coal fields and is served by established high-quality infrastructure (transportation, power, ports). CAD's assets are strategically situated within the PRC, proximal to development assets owned by major producers Teck Resources and Anglo American; as such,

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it is conceivable these assets could either be consolidated or at least benefit from infrastructure synergies in the region.

Figure 4: CAD's assets are strategically situated within the Peace River Coal Field



Source: Company Reports

Access to East Asian markets: The West Coast of BC, particularly Prince
Rupert in the north, is significantly closer to East Asian markets than major US
coal fields. While not as close as Queensland, Australia (the world's largest
premium coking coal exporting region), we note that as of October 2020 China
(by far the world's largest steel producer) has banned coal imports from
Australia. Canada has since emerged as a preferred supplier to coastal Chinese
steel mills.



To Shanghai - 4,642 miles To Tokyo - 3,830 miles Dalian Tianjin-13.8 British 142 Columbia Shanghai Prince Rupert Tokyo 13.2 To Shanghai - 5,092 miles Vancouver To Tokyo - 4,280 miles Kolkata Japan 23.1 Korea Closer to Japan than Newcastle: Kobe Newcastle to Tokyo - 4,284 miles China India Guangzhou Pusan **Shipping Days** Mumbai from Prince Rupert Hong Kong Chennai Shipping Days from Vancouver

Figure 5: Shipping distance to East Asian markets

Source: Company Reports

Experienced management team with a proven track record in the PRC as well as Asian markets: David Austin (Founder, CEO and Chairman) cofounded and built Western Energy Corp., which was sold to Walter Energy for C\$3.3 billion in 2020 as well as Northern Energy & Mining, which was sold to Anglo American for C\$400 million. Director Partha Bhattacharyya is the former Managing Director of Coal India, the largest coal producing company in the world, and is an advisor to the Indian Government as it attempts to accelerate growth in its domestic steel industry. Management and insiders currently own 27.8% of the company, with Mr. Austin alone owning 10.96%.

Figure 6: CAD ownership - top insiders

Holders	MV (MM)	%Out
Emri David	53.5	12.3
Austin David J /Running/	47.7	11.0
Perry John H	19.4	4.4
Hammond Anthony Clive	0.6	0.1
Bhattacharyya Partha Sarathi	0.0	0.0
Downie Ian /Colonial/	0.0	0.0
Waller Gregory A	0.0	0.0
-	-	-
Other Insiders/Stakeholders	0.0	0.0
Total Insiders/Stakeholders	121.2	27.8

Source: Factset LP



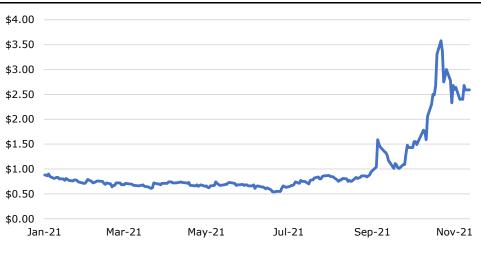


Figure 7: CAD share price performance

Source: FactSet

Coal market overview

Types and uses of metallurgical coal

There are two main types of coal: metallurgical (met) and thermal coal, which differ by their fixed carbon, volatile matter, moisture, ash, and sulphur content. Met coal is used for making steel in blast furnaces (0.77t of met coal per tonne of steel), whereas thermal coal is primarily used for generating heat and energy.

Further, there are three main categories of metallurgical coal. From highest to lowest quality, they are (1) hard coking coal, (2) semi-soft coking coal, and (3) pulverized coal injection (PCI) (or low volatile pulverized coal [LVPCI] injection). Met coal quality can be improved by different washing processes, but only to a certain extent as there is an inherent "coal quality."

Met coal is needed to produce coke, which is then used in a blast furnace along with iron ore and flux to ultimately produce steel. Coke has three main functions: (1) it must be strong enough to support the furnace charge, (2) it must provide adequate heat to smelt the charge, and (3) it must also act as a reducing agent for the iron oxides. Coke is obtained from hard coking coal (HCC), which must be low in ash since ash is retained in the coking process and would introduce impurities to the liquid. The coal must also be low in sulphur since only approximately one-third of the sulphur is released as gas in the coking oven. Sulphur is also a contaminant in the liquid metal. While some amount of coke can be replaced by lower-quality coal (such as PCI) in the blast furnace, coke, and thus hard coking coal, is always required: the higher the quality, the higher the price received. Furthermore, coking coal is sold to steel plants as part of certain blend specifications and tested over months or years; thus, switching coking coal quality is not always straightforward.

Global production

Approximately 7.5 billion tonnes of coal are produced annually, of which $\sim 15\%$ (1.1 billion tonnes) is metallurgical coal. Of this material, ~ 300 mt are delivered to the export market, where Australia and Canada are the largest suppliers. The largest supplier of premium HCC is the BHP-Mitsubishi Alliance (BMA), operating out of Queensland, Australia; global benchmark premium Free-on-Board (FOB) HCC pricing is estimated at the Dalrymple Bay Coal Terminal in Hay Point, QLD. Teck Resources, with its operations in the Elk Valley, BC, is the world's second largest supplier of seaborne coking coal.



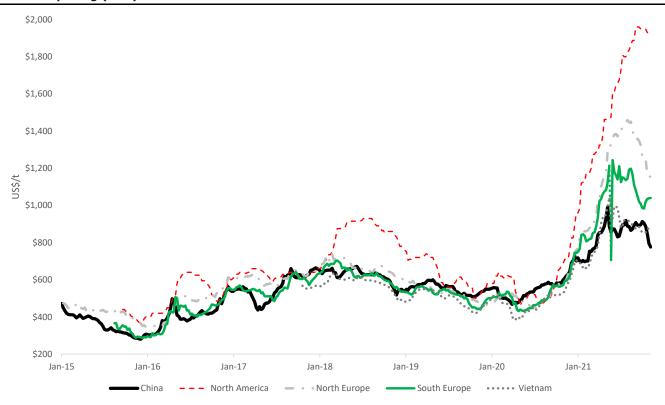
Recent market dynamics (from our October 18 Q4 2021 Commodity Outlook)

The global steel value chain is currently going through a seismic upheaval, and as with all things commodity related, the current state of affairs leads back to Chinese dynamics. China produced 10% more steel through June 30 of this year relative to the same period last year, and despite significant YoY declines in July and August, YTD steel production as of August 31 is still 5% ahead of 2020. We believe the Chinese government remains firm in its commitment to keeping steel production in 2021 in line with 2020, implying a 9% decline vs. last year for the September through December period. This government mandate is being assisted by three other factors:

- The Evergrande debt crisis and implications for the broader Chinese property sector weighing on steel demand.
- 2. The energy crunch in China due to thermal coal and LNG shortages resulting in the curtailment of power-intensive industry such as steel making.
- 3. The ongoing emissions-reduction mandate ahead of the energy-intensive winter season and the push for clear skies ahead of the Beijing Winter Olympics in February 2022.

As such, we believe Chinese steel production is clearly set to decelerate through February 2022, and the Chinese government has already moved to manage incountry steel inventory levels through discouraging exports (higher tariffs, rebate eliminations etc.). This has served to keep Chinese steel prices reasonably stable, while creating shortages and prices spikes elsewhere in the world.

Figure 8: Steel pricing (HRC) - China vs. the rest of the world



Source: Bloomberg Finance LP, Fastmarkets, Canaccord Genuity estimates

190 | 180 | 170 | 160 | 170 | 160 | 170 | 160 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 |

Figure 9: Monthly global steel production

Source: World Steel Association, Canaccord Genuity estimates

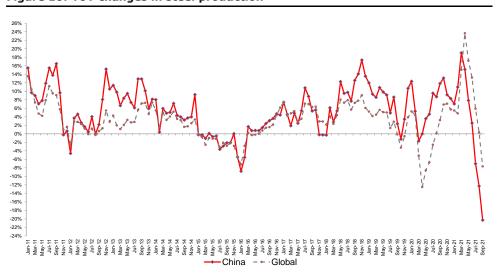


Figure 10: YoY changes in steel production

Source: World Steel Association, Canaccord Genuity estimates



Figure 11: Iron ore and coking coal market dynamics - Q3 2021

Met Coal		Start	End	Δ	% Δ	Peak	Date	Peak to close Δ	Peak to close %	Trough	Date	Trough to close Δ	Trough to close 9
Premium HCC pricing													
CFR Jingtang	\$/t	\$306.59	\$603.28	\$296.69	96.8%	\$603.28	Sept 30th	\$0.00	0.0%	\$306.59	July 1st	\$296.69	97%
FOB DBCT	\$/t	\$191.80	\$400.20	\$208.40	108.7%	\$411.07	Sept 23rd	(\$10.87)	-2.6%	\$191.80	July 1st	\$208.40	109%
HCC pricing													
CFR Jingtang	\$/t	\$266.21	\$565.14	\$298.93	112.3%	\$575.23	Sept 24th	(\$10.09)	-1.8%	\$265.89	July 2nd	\$299.25	113%
FOB DBCT	\$/t	\$163.42	\$337.84	\$174.42	106.7%	\$341.51	Sept 28th	(\$3.67)	-1.1%	\$163.42	July 1st	\$174.42	107%
PCI low-vol pricing													
CFR Jingtang	\$/t	\$172.03	\$273.27	\$101.24	58.9%	\$273.27	Sept 27th	\$0.00	0.0%	\$168.78	July 9th	\$104.49	62%
FOB DBCT	\$/t	\$141.62	\$252.92	\$111.30	78.6%	\$252.92	Sept 24th	\$0.00	0.0%	\$141.62	July 1st	\$111.30	79%
Premium vs. HCC spread	\$/t	\$40.38	\$38.14	(\$2.24)	-5.5%	\$95.22	Sept 15th	(\$57.08)	-59.9%	\$22.84	Aug 27th	\$15.30	67%
Premium CFR-FOB spread	\$/t	\$114.79	\$203.08	\$88.29	76.9%	\$203.08	Sept 30th	\$0.00	0.0%	\$96.39	July 22nd	\$106.69	111%
Iron Ore													
62% Fe Fines, CFR China	\$/t	\$214.43	\$116.81	(\$97.62)	-45.5%	\$217.43	July 5th	(\$100.62)	-46.3%	\$99.04	Sept 18th	\$17.77	17.9%
65% premium	\$/t	\$41.48	\$34.69	(\$6.79)	-16.4%	\$83.00	Aug 19th	(\$48.31)	-58.2%	\$14.26	Sept 27th	\$20.43	na

Source: Bloomberg Finance LP, Fastmarkets, Canaccord Genuity estimates

Coking coal prices soared in Q3, as a confluence of supply factors created a significant supply crunch despite declining steel production. A combination of the Chinese ban on Australian imports (October 2020), domestic production challenges due to productivity issues and safety inspections, COVID-19 restrictions in Mongolia and rains in Indonesia have resulted in severe shortages in the Chinese market – we note that through August, Chinese coking coal imports were only $\sim\!50\%$ of 2020 levels despite 5% higher steel production. As such, we have seen premium coking coal pricing in China essentially double from an already elevated \$307/t on July 1 to \$603/t on September 30.

The supply-demand dynamics outside China aren't much better. After a long period of trade flow re-routing following the Chinese ban on Australian imports, FOB pricing has been increasing dramatically since May. We note in particular the increase in Q3, from \$192/t on July 1 to \$400/t on September 30. Key drivers behind the price trajectory appear to be suppliers (ex-Australia) routing shipments into China at a time of significantly increasing global (ex-China) steel production to compensate for a reduction in Chinese exports as well as ongoing supply hiccups (e.g., wildfires disrupting Canadian shipments).

<u>Outlook:</u> Given our expectation of a 9% YoY decline in Chinese steel production through year-end, as well as production curtailments ex-China due to the power crisis in Europe and Asia, we believe coking coal prices will moderate from current levels (albeit remain elevated relative to history). We expect current supply-demand imbalances to resolve themselves prior to the Chinese spring construction season, at which time we expect the coking coal market to revert to more typical dynamics. A key risk to our forecast is the mandate from the Chinese government to local coal producers to prioritize the production of thermal coal, which could exacerbate coking coal shortages in China.

\$560 Premium Hard Coking Coal Pricing (US\$/t) \$460 \$260 \$160 Jan-21 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 CFR Jingtang · · · · · FOB DBCT

Figure 12: Premium HCC pricing - CFR and FOB

Source: Fastmarkets, Canaccord Genuity estimates

450
400
350
300
250
200
100
0
2014
2015
2016
2017
2018
2019
2020
2021

Figure 13: Premium HCC FOB pricing is well above its recent historical range

Source: Bloomberg Finance LP, Canaccord Genuity estimates

Longer-term market dynamics

Steel is the world's largest metal market and is a critical input to three major long-term structural trends: renewable power systems, infrastructure upgrades in first and second world countries, and the evolution of third world countries. As such, steel demand is expected to remain robust for the foreseeable future, but the fact remains that the steel industry today is one of the largest carbon emitters globally. With blast furnace capacity in India and southeast Asia set to grow significantly over the next 20+ years, the de-carbonization of the steel industry is a critical issue facing all stakeholders.



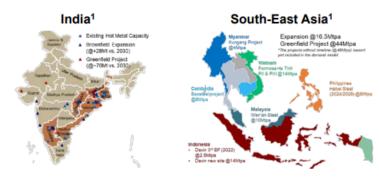
Billion tonnes 2.5 2.1 2.1 2.0 2.0 1.8 **Developing** 1.5 India 1.0 China 0.5 Mature 0 Current 2030 2040 2050

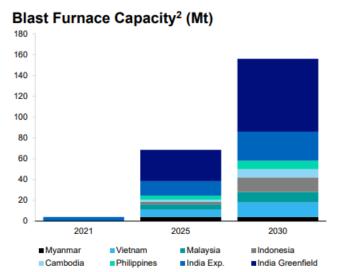
Figure 14: Forecast steel demand under the IEA's Sustainable Development Scenario

Source: Teck Resources

Figure 15: Blast furnace commitments are well underway in Asia

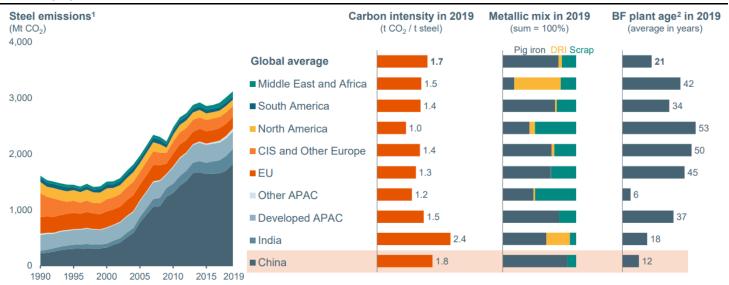
- · Asia committing to 20+ years of traditional steel making
- · European steel mills seek alternatives to coal feed
- Hydrogen pilot plants only, commercial technology still decades away and currently prohibitively expensive
- Seek alternative carbon abatement in CCUS





Source: Teck Resources

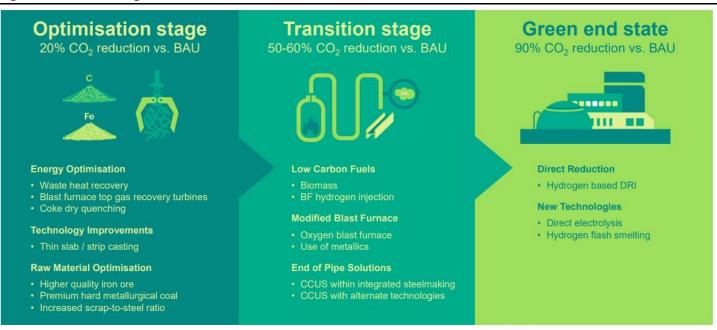
Figure 16: Steel emissions have roughly doubled in the last three decades, with rising demand more than offsetting efficiency uplifts



Source: BHP - Decarbonizing steelmaking roundtable, Nov 2020

New technologies such as steel plants powered by green hydrogen have been highlighted recently as a panacea to the industry, but we believe that commercialization at mass scale is unlikely before 2040 at the earliest. In the interim, we believe easily available solutions today will likely be adopted in order to kick-start the decarbonization process, as outlined in the figures below.

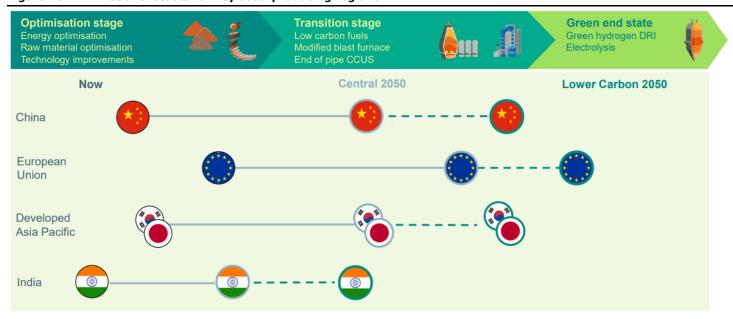
Figure 17: BHP's 3-stage steel decarbonization framework



Source: BHP - Decarbonizing steelmaking roundtable, Nov 2020. Note: BAU = business-as-usual



Figure 18: BHP 2050 forecasts for key steel producing regions



Source: BHP - decarbonizing steelmaking roundtable, Nov 2020

We highlight the following key takeaways with regard to the demand and supply of metallurgical coal:

- Coal-fired blast furnaces are expected to remain the predominant pathway to steel production for the next 20-30 years
- Optimization and carbon capture technology offers a pathway to meaningful decarbonization in a much shorter time frame using existing technology that can be deployed at scale
- High-quality coking coal (and iron ore) should command an increasing premium on a go-forward basis
- The restriction of capital to fossil fuel producers should result in well-supported pricing for premium coking coal through the transition

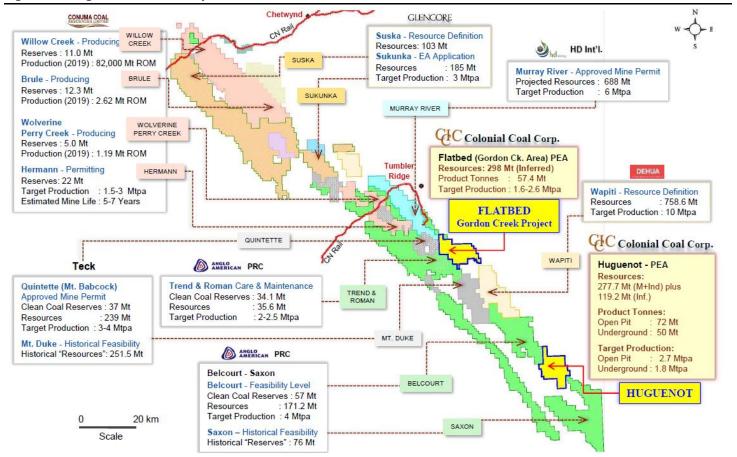


Project overview

HUGUENOT (100%)

The Huguenot project is situated in the southern portion of the PRC, adjacent to the feasibility-stage Belcourt South open pit project (owned by Anglo American). The asset is ~110km trucking distance (or ~85km by rail) from the Quintette and PRC rail loadouts to link with the existing rail line. The Project currently consists of one contiguous block of 17 coal licenses covering 9,531 ha which were acquired by company insiders beginning in 2005.

Figure 19: Huguenot location map



Source: Company Reports



Project resources

Figure 20: Huguenot project resources

	Surface Resources				Underground Resources			
Block	Measured Mt	Indicated Mt	Measured & Indicated Mt	Inferred Mt	Measured Mt	Indicated Mt	Measured & Indicated Mt	Inferred Mt
North	58.32	7.91	66.23		7.18	30.41	37.59	86.84
Middle	37.88	9.02	46.90	0.53	11.67	19.50	31.17	1.58
South		18.82	18.82			76.97	76.97	30.24
Total	96.20	35.75	131.95	0.53	18.85	126.88	145.73	118.66

Source: Company Reports

A minimum seam thickness of 0.6m was used for the open pit resources, and 1.5m for the underground resources. We note that for the 2020 PEA, only an open pit scenario was considered, while the previous 2018 scenario considered both an open pit and underground scenario. For the purposes of this report we will only consider the 2020 PEA.

Project summary

The 2020 PEA considers the production of 72mt of HCC over a period of 27 years, or average production of 2.7mtpa.

Open pit mining will be conducted on the North, Middle and South blocks at an average rate of 3.66mtpa run-of-mine coal, with an average life of mine strip ratio of 10.5 (similar to TECK's Elk Valley mines on a consolidated basis). 75% of the total available open pit M&I resources have been considered in the mine plan. Mining will commence in the South and move North, with waste from the Middle and North pits being deposited in the South and Middle pits, respectively.

ROM coal will then be washed in a dedicated, standard-design Coal Handling and Preparation plant with a nominal capacity of 4.0mtpa. An overall yield of 73% clean coal is expected. The final HCC product will then be trucked 76km over an upgraded forestry service road to Provincial Highway 52, and then a further 36km to the (currently unused) PRC Loadout in Tumbler Ridge. Once on a train, sufficient capacity is assumed to exist at some combination of the Westshore, Neptune and Ridley terminals, although no rail or port contracts are currently in place.

Management projects the Huguenot project to produce a clean premium HCC product with low ash, low sulphur and low phosphorus, similar to other HCC product exported from BC.

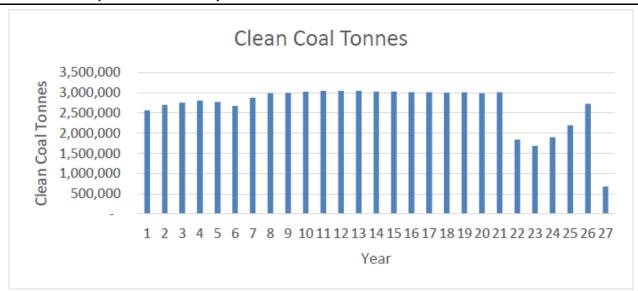


Figure 21: Huguenot Coal Quality Comparison

Coal Quality Comparison: Huguenot HCC VS. Canadian Export Coking Coals						
	Huguenot HCC1	Canadian NEBC HCC ²	Canadian SEBC HCC ²			
Total Moisture (% as received)	9	8 - 9	8			
Volatile Matter (% air dry)	22.5 - 23.5	23.0 - 24.5	21.0 - 27.0			
Ash Content (% air dry)	8.50 - 9.00	8.25 - 8.60	8.50 - 9.60			
Sulphur Content (% air dry)	0.40	0.45 - 0.55	0.35 - 0.75			
Free Swelling Index (FSI)	6.5 - 7	7 - 8	6 - 8			
Mean Max Reflectance of Vitrinite (%)	1.15 - 1.20	1.15 - 1.25	1.08 - 1.35			
Maximum Fluidity (ddpm)	100	150 - 300	40 - 300			
Phosphorus in Coal (% dry)	0.044	0.008 - 0.040	0.010 - 0.065			
Base/Acid Ratio of Ash	0.08 - 0.10	0.12 - 0.18	0.07 - 0.10			
Coke Strength after Reaction (CSR)	60 - 65	58 - 60	68 – 72			
		NEBC = Northeast British Columbia	SEBC = Southeast British Columbia			
	Results based on laboratory scale washing and testing of exploration samples. Results based on full washing plant under operations.					
	Data Source: Kobie Koomhof Associates Inc.					

Source: Company Reports

Figure 22: Life of mine production summary



Source: Company Reports

Project economics

Project economics were assessed under two scenarios:

Scenario A: purchased equipment

- Weighted average HCC price of \$174/t
- Pre-production capex: \$510 million
- Cash operating costs: \$55/t
- $_{\odot}$ TECK Elk Valley consolidated operating costs of C\$65/t YTD in 2021
- Total FOB costs: \$92/t
- TECK Elk Valley consolidated FOB costs of C\$108/t YTD in 2021
- LOM sustaining capex of \$215 million



We present CAD's NPV and IRR estimates for the purchased equipment scenario in Figure 23 below. The company estimates a breakeven HCC price of \$125/t (10% discount rate) and a required price of \$137/t to earn a 15% IRR. For context, the current spot FOB price is \$401/t, the 2021 average FOB price is \$209/t and the average FOB price since 2014 is \$158/t.

Figure 23: Huguenot project NPV and IRR - purchased equipment scenario

PEA 2020 Coal	PURCHASED EQUIPMENT SCENAR				
Price/Tonne	5%	7.5%	10%	IRR%	
US\$174	\$1,482	\$1,027	\$718	26.30%	
CAD\$224	\$1,949	\$1,351	\$944	26.30%	

Source: Company Reports

Scenario B: leased equipment

Pre-production capex: \$303 millionCash operating costs: \$61/t

Total FOB costs: \$98/t

LOM sustaining capex of \$42 million

We present CAD's NPV and IRR estimates for the leased equipment scenario in Figure 24 below – we note that the project economics are very similar to the purchased equipment scenario. The company estimates a breakeven HCC price of \$125/t (10% discount rate) and a required price of \$137/t to earn a 15% IRR. For context, the current spot FOB price is \$401/t, the 2021 average FOB price is \$209/t and the average FOB price since 2014 is \$158/t.

Figure 24: Huguenot project NPV and IRR - leased equipment scenario

PEA 2020 Coal	LEA	NARIO		
Price/Tonne	5%	7.5%	10%	IRR%
US\$174	\$1,474	\$1,032	\$732	29.40%
CAD\$224	\$1,939	\$1,357	\$963	29.40%

Source: Company Reports

We note that the project economic assessments include a 1.5% production royalty (FOB port) payable on all coal produced to private stakeholders in the project, including directors of CAD.

Permitting, environmental and social considerations

To advance a project to development in BC, the project must acquire a provincial Environmental Assessment Certificate and a federal Environmental Assessment Decision Statement. The provincial and federal impact assessment processes are expected to be completed in parallel to eliminate duplication of activities. Timelines to completion vary – the company expects a 2-3 year permitting process. The most recent permitted coal project in northeast BC, Murray River, received its provincial EA certificate in October 2015 and federal EA Decision Statement in December 2017. The Sukunka (Glencore) and Wolverine-Hermann (Conuma Coal) projects are currently undergoing the environmental assessment process.

A preliminary environmental study was conducted on the project in 2013, which identified no known environmental issues that would prohibit project advancement. However, the study noted that declining caribou populations and the release of selenium were growing concerns in the region. Since that time, the selenium issue



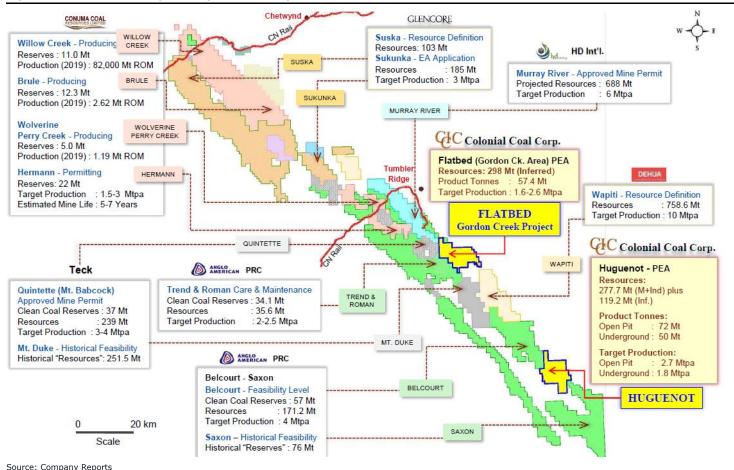
has expanded significantly, with TECK being subjected to multiple lawsuits and committing >C\$2.0 billion to the construction of multiple water treatment facilities and other ancillary requirements. Moving Huguenot into production will likely involve the construction of an Active Water Treatment Facility or a Saturated Rock Fill plant, another piece of infrastructure that could benefit from being shared with proximal projects.

From a social perspective, the project is located within the Treaty 8 First Nations Territory. Management has been in constant communication with First Nations leaders since 2012, and no major issues have been identified to date. Communications with local communities to date have been restricted to mayors and other community leaders only.

Gordon Creek (100%)

The Gordon Creek project is located within CAD's 100%-owned Flatbed Coal property, ~27km south-southeast of the town of Tumbler Ridge, BC. The property is in the central portion of the PRC, adjacent to Anglo American's Trend mine as well as TECK's Quintette project. As such, the project is located close to key infrastructure, such as the PRC and Quintette rail load-outs, existing and planned power lines, and BC Provincial Highway 52.

Figure 25: Gordon Creek (Flatbed) location map



16 November 2021

PRC Possible Rail Loadout Flatbed Rail 5 Loadout Murray River Proposed Bearhole Loadout Area Lake Park **Rail Line** Paved to Huguenot Highway (36 km) Quintette) Plant Site GIC Quintette Sub-Station & Loadout FLATBED Trend COAL PROPERTY Mine Haul Rd. Windy Pit Proposed Wash Plant Babcock Mtn. Proposed Flatbed Gordon Creek U/G Portal & Proposed Resource Area Decline Window Pit Footprint Proposed **Power Line** to Huguenot Roman Pit Area Quintette Mtn. Trend Pits

Figure 26: Gordon Creek is located close to existing and planned infrastructure

Source: Company Reports

Project resources

Figure 27: Gordon Creek Inferred Resource (January 10, 2018)

	(Effective Date: January 10, 2018)							
Seam ID	Thickness m	Coal Rank	Volume m³'000	Density (SG) GSC 88-21	Resource Mt			
В	2.93	mvb	32,400	1.61	52.2			
D	2.45	mvb	24,564	1.49	36.6			
Е	1.40	mvb	13,295	1.44	19.1			
F1	1.48	mvb	13,795	1.52	21.0			
F2	3.67	mvb	33,960	1.45	49.2			
G	2.40	lvb	21,512	1.62	34.8			
J	4.40	lvb	36,881	1.47	54.2			
K	2.56	lvb	20,223	1.53	30.9			
				Total	298.0			

Source: Company Reports



The Gordon Creek project currently has a defined Inferred Resource of 298mt across eight seams in the Gates Formation. The resource was defined based on a minimum seam thickness of 1.0m and mineable parting thickness of 0.5m, down to a maximum depth of 900m from surface. Seams D and G are expected to produce hard coking coals, seams B, F1 and F2 are expected to produce semi-hard coking coals, and seams J and K are expected to produce high-quality PCI coals. Seam E is currently not considered for mining given mine layout constraints in the proposed mine plan.

Project summary

Gordon Creek is expected to produce a total of 39.3mt of HCC and semi-hard coking coal over a 22-year period, followed by 18.1mt of PCI product from year 20 through 30.

Longwall mining has been selected as the preferred mining method, with the seams being accessed via a shaft / slope combination to the uppermost seam (Seam B), and then sequenced downward through slope extensions and inter-seam raise shafts.

Run-of-mine coal will be sized and washed in a dedicated standard-design Coal Handling and Preparation Plant with a nominal capacity of 5.0mtpa. An overall yield of 51% is expected, implying peak clean coal production of 2.6mtpa (the LOM average is 1.9mtpa). The final production will then be trucked 16.5km to a new rail load-out, and then transported by rail over a new 1.8km rail-spur to the main CN line and then out to some combination of the Westshore, Neptune and Ridley terminals on the coast (no rail or port contracts are currently in place). We note that the PEA on the project contemplates the construction of a dedicated rail load-out and spur despite the proximal PRC and Quintette load-outs. The operation is expected to be powered via the construction of a 230kV powerline from the Quintette substation 14km away.

The Gordon Creek project is projected to produce a clean premium HCC product with low ash, low sulphur and low phosphorus, similar to other HCC product exported from BC. The expected PCI product is similar to low-vol PCI product currently exported from northeast BC or Queensland, Australia.



Figure 28: Gordon Creek Coal quality comparison

Gordon Cı Export PCI fro			•	
	Gordon PCI (Low Vol PCI from QLD/NEBC ²	
	Seam J	Seam K	Min	Max
Total Moisture (% as received)	8.0 - 9.0	8.0 - 9.0	8.0	10.5
Volatile Matter (% air dry)	18.5	18.2	9.5	20.4
Ash Content (% air dry)	8.5	6.0	7.5	10.5
Sulphur Content (% air dry)	0.37	0.41	0.28	0.70
Free Swelling Index (FSI)	3.5	3.5	0	2
Hardgrove Grindability Index (HGI)	80	79	65	90
Carbon Ultimate DAF %	90	91	88	92
Hydrogen Ultimate DAF %	4.2	4.2	3.6	4.9
Mean Max Reflectance of Vitrinite (%)	1.43	1.43	1.26	1.75
Phosphorus in Coal (% dry)	0.020	0.002	0.030	0.100
Calorific Value (Gross air dry) Kcal/kg	7913	8138	7450	7910
Coke Replacement Ratio*	0.92	0.93	0.87	0.93

Note: * = Calculated; QLD = Queensland; NEBC = Northeast British Columbia

1 Results based on laboratory scale washing and testing of exploration samples.

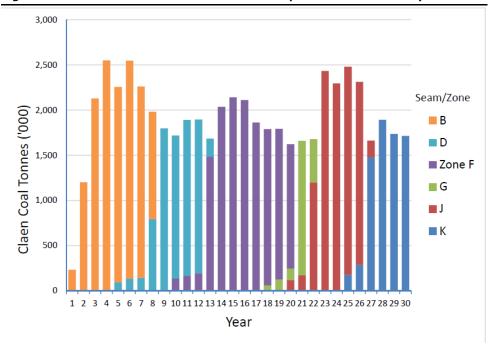
Gordon Creek Coking Coal VS. Canadian Export Coking Coals						
	Gordon Creek Coking Coal ¹		Canadian NEBC HCC ²	Canadian SEBC HCC ²		
	Min	Max		02201100		
Total Moisture (% as received)	8	9	8 - 9	8		
Volatile Matter (% air dry)	20.7	25.2	23.0 - 24.5	21.0 - 27.0		
Ash Content (% air dry)	8.00	8.90	8.25 - 8.60	8.50 - 9.60		
Sulphur Content (% air dry)	0.44	0.90	0.45 - 0.55	0.35 - 0.75		
Free Swelling Index (FSI)	6	8	7 - 8	6 - 8		
Mean Max Reflectance of Vitrinite (%)	1.18	1.39	1.15 - 1.25	1.08 - 1.35		
Maximum Fluidity (ddpm)	12	1135	150 - 300	40 - 300		
Phosphorus in Coal (% dry)	0.049	0.089	0.008 - 0.040	0.010 - 0.065		
Base/Acid Ratio of Ash	0.08	0.22	0.12 - 0.18	0.07 - 0.10		
Coke Strength after Reaction (CSR)	51*	70*	58 - 60	68 - 72		

Note: * = Calculated; NEBC = Northeast British Columbia; SEBC = Southeast British Columbia

² Results based on full washing plant under operating conditions.

Source: Company Reports

Figure 29: Gordon Creek life of mine Clean Coal production forecast by seam



Source: Company Reports

Project economics

The 2018 PEA on Gordon Creek assessed the economics of the project based on the following parameters:

Weighted average coking coal price of \$165/t

Results based on full washing plant under operating conditions.

¹ Results based on laboratory scale washing and testing of exploration samples.



- For context, the current spot FOB price is \$401/t, the 2021 average FOB price is \$209/t and the average FOB price since 2014 is \$158/t
- Weighted average PCI price of \$141/t
 - For context, the current spot FOB price is \$223/t and the 2021 average FOB price is \$151/t
- Pre-production capex of \$300 million
- Total FOB port operating costs of \$81/t
- Life-of-mine sustaining capex of \$406 million

Based on these estimates, the Gordon Creek project has an indicative after-tax NPV of \$446 million at a 10% discount rate, and a 24.4% IRR.

Figure 30: Gordon Creek 2018 PEA economic analysis. Note that the coal price is a weighted average of the assumed HCC and PCI prices.

PEA 2018 Overall Average	Gordor	1		
Coal Price/Tonne	5%	7.5%	10%	IRR%
US\$160.5	\$1,081	\$691	\$446	24.4%
CAD\$208.7	\$1,405	\$898	\$579	24.4%
Note: The exchange rate used in this report is US\$1.00 equals CAD\$1.30				

Source: Company Reports

The project economic assessments include a 1.5% production royalty (FOB port) payable on all coal produced to private stakeholders in the project, including directors of CAD.

Permitting, environmental and social considerations

To advance a project to development in BC, the project must acquire a provincial Environmental Assessment Certificate and a federal Environmental Assessment Decision Statement. The provincial and federal impact assessment processes are expected to be completed in parallel to eliminate duplication of activities. Timelines to completion vary – the company expects a 2-3 year permitting process. The most recent permitted coal project in northeast BC, Murray River, received its provincial EA certificate in October 2015 and federal EA Decision Statement in December 2017. The Sukunka (Glencore) and Wolverine-Hermann (Conuma Coal) projects are currently undergoing the environmental assessment process.

No material environmental work has been conducted on the Gordon Creek project. However, as with Huguenot, declining caribou populations and the release of selenium are major concerns in the region. Moving Gordon Creek into production will likely involve the construction of an Active Water Treatment Facility or a Saturated Rock Fill plant, another piece of infrastructure that could benefit from being shared with proximal projects.

From a social perspective, the project is located within the Treaty 8 First Nations Territory. Management has been in constant communication with First Nations leaders since 2012, and no major issues have been identified to date. Communications with local communities to date have been restricted to mayors and other community leaders only.



Leadership team

(Appended from company website)

Management and Board of Directors

David Austin - Chairman of the Board, President and CEO

Mr. Austin is the co-founder of Colonial Coal and has served as the President and as a Director of the company since 2005. Previously, he co-founded Northern Energy & Mining (which was sold to Anglo American) and Western Coal (which was sold to Walter Energy in 2010).

John Perry - Director and Chief Operating Officer

Mr. Perry is a geologist with 45 years of experience in exploration and development of coal and other mineral projects. He has held senior roles for various coal projects in northeast British Columbia, including as Director of exploration for Belcourt Saxon Coal LP (a subsidiary of Walter Energy) and Manager of exploration for Northern Energy & Mining.

Matthew J. Anderson - Chief Financial Officer

Mr. Anderson is a Chartered professional Accountant who works for Malaspina Consultants, a private company that provides accounting and administrative services to junior public companies. He has 10 years' experience serving as the CFO for various junior mining companies.

Partha S. Bhattacharyya - Director

Mr. Bhattacharyya currently serves as a director for various companies in the extraction industry. Previously, he served as Chairman & Managing Director of Coal India and Bharat Coking Coal.

Ian Downie - Director

Mr. Downie has been a Director and Chair of the Audit Committee for Colonial Coal since 2008. He currently acts as a consultant for a mediation and dispute resolution consulting company. He previously served as Director of Terminal Operations for BC Ferry Corporation.

Anthony Hammond - Director

Mr. Hammond has over 40 years of experience as a mining engineer and been a Director of the company since 2008. He has also served as a Director for Northern Energy & Mining.

Greg Waller - Director

Mr. Waller has over 30 years of experience in the mining industry. He served as Senior Vice President, Investor Relations and Strategic Analysis for Teck Resources until his retirement in 2017.



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Date and time of first dissemination: November 16, 2021, 10:14 ET

Date and time of production: November 16, 2021, 10:14 ET

Distribution of Ratings:

Global Stock Ratings (as of 11/16/21)

Rating	Coverag	Coverage Universe			
	#	%	%		
Buy	645	68.69%	44.81%		
Hold	138	14.70%	25.36%		
Sell	10	1.06%	30.00%		
Speculative Buy	141	15.02%	60.99%		
	939*	100.0%			

^{*}Total includes stocks that are Under Review

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