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Teck

# Global Metals, Mining & Steel Conference

May 14, 2019



# Caution Regarding Forward-Looking Statements

Both these slides and the accompanying oral presentations contain certain forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 and forward-looking information within the meaning of the Securities Act (Ontario) and comparable legislation in other provinces (collectively referred to herein as forward-looking statements). Forward-looking statements can be identified by the use of words such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variation of such words and phrases or state that certain actions, events or results "may", "could", "should", "would", "might" or "will" be taken, occur or be achieved. Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Teck to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. These forward-looking statements include statements relating to management's expectations with respect to: future value catalysts; the creation of value through Project Satellite; production, supply, demand and outlook regarding coal, copper, zinc and energy for Teck and global markets generally; projected and targeted operating and capital costs; expected EBITDA margins at our operations; future value from QB2/QB3; Teck's share of remaining equity capital and timing of contributions relating to our QB2 project; the terms and availability of project financing for the QB2 project; potential additional return of capital to shareholders, including by way of repurchasing or refinancing outstanding notes; all projections and expectations regarding QB2 and QB3 set out in the "Quebrada Blanca" Appendix (including but not limited to statements that QB2 will be a world class, low cost copper opportunity and statements and expectations regarding the value and amount of contingent consideration, timing of first production, long-life and expansion potential, projected IRR, QB2 throughput, mine life, projected copper production, including Teck's pro-forma copper exposure estimates, strip-ratios, costs (including C1 and AISC), reserves and resources, construction schedule and ownership of pipelines and port facilities, Teck's expectations around how it will fund QB2 development costs and its expectation that its solid financial position and return of cash to shareholders will be maintained throughout QB2 construction, Teck's expectation that it will have significant free cash flow between 2018 and 2020, all economic and financial projections regarding the QB2 project and Teck's contributions thereto including expected EBITDA from the project, expansion and extension potential, and all other projections and expectations regarding the QB2, QB3 and QB2 optimization); long-term strategy; our sustainability strategy and the targets, goals and expectations relating thereto; the long life of our projects and operations, their positioning on the cost curve and the low risk of the jurisdictions in which they are located; mine life estimates; commodity price leverage; our reserve and resource estimates; potential growth options; all guidance including but not limited to production guidance, sales and unit cost guidance and capital expenditures guidance; future commodity prices; the benefits of our innovation strategy and initiatives described under the "Innovation" Appendix and elsewhere, including regarding smart shovels, autonomous haul trucks and artificial intelligence, and the savings potential associated therewith; the coal market generally; growth potential for our steelmaking coal production, including our expectation that our coal reserves support approximately 27-28 million tonnes of production in 2020 and beyond; the upside potential of Mackenzie Redcap; strip ratios; potential costs and savings associated with saturated rock fills and the expectation that saturated rock fills have the potential to replace or augment AWTs in the future; capital costs for water treatment; port capacity increases; the copper market generally; copper growth potential and expectations regarding the potential production profile of our various copper projects; our Highland Valley Copper 2040 Project; our Project Satellite projects including future spending and potential mine life; the zinc market generally; anticipated zinc production, capital investments and costs; our potential zinc projects, including Aktigirun/Anarraaq and a potential restart of Pend Oreille; the energy market generally; anticipated Fort Hills production and cost estimates and debottlenecking opportunities; potential benefits and capacity increase from debottlenecking opportunities at Fort Hills and costs associated with debottlenecking; production estimates and timing for regulatory approvals at Frontier and Lease 421; the expectation that Fort Hills will provide free cash flow for decades and a steady and reliable cash flow; potential for longer term expansion opportunities at Fort Hills and associated costs; the low carbon intensity of Fort Hills; statements regarding liquidity and availability of credit facilities; Teck's capital priorities and objectives of its capital allocation framework, including with respect to its dividend policy and maintenance of investment grade metrics; the number of Class B shares that might be purchased under the normal course issuer bid; and exchange rates.

The forward-looking statements in these slides and accompanying oral presentation are based on numerous assumptions, and actual results may vary materially. These assumptions include, but are not limited to, assumptions regarding: general business and economic conditions; the supply and demand for, deliveries of, and the level and volatility of prices of, zinc, copper and coal and other primary metals and minerals as well as oil, and related products; the supply and demand for our blended bitumen; the timing of the receipt of regulatory and governmental approvals for our development projects and other operations, including our QB2 and QB3 projects; our production and productivity levels, as well as those of our competitors; our anticipated costs of development and production; power prices; continuing availability of water and power resources for our projects and operations; market competition; the accuracy of our reserve and resources estimates (including with respect to size, grade and recoverability) and the geological, operational and price assumptions on which these are based; conditions in financial markets generally; the future financial performance of the company; our ability to attract and retain skilled staff; our ability to procure equipment and operating supplies in sufficient quantities and on a timely basis; positive results from the studies on our expansion projects; our product inventories; our ability to secure adequate transportation for our products; our ability to obtain permits for our operations and expansions; our ongoing relations with our employees and business partners and joint ventures; interest rates; acts of foreign and domestic governments; the timing of development of our competitors' projects; and the impact of changes in the Canadian – U.S. dollar and other foreign exchange rates on our costs and results.

Statements regarding returns of cash to shareholders include assumptions regarding our future business and prospects and other uses for cash or retaining cash. Payment of dividends is in the discretion of the board of directors. Statements regarding our reserve and resource life estimates assume the mine life of longest lived resource in the relevant commodity is achieved, assumes production at planned rates and in some cases development of as yet undeveloped projects and assumes resources are upgraded to reserves and that all mineral and oil and gas reserves and resources could be mined. Management's expectations of mine life are based on the current planned production rates and assume that all reserves and resources described in this presentation are developed. Assumptions regarding our potential reserve and resource life assume that all resources are upgraded to reserves and that all reserves and resources could be mined. Our estimated profit and EBITDA and EBITDA sensitivity estimates are based on the commodity price and assumptions stated on the relevant slide or footnote, as well as other assumptions including foreign exchange rates. Cost statements are based on assumptions noted in the relevant slide or footnote. Statements regarding future production are based on the assumption of project sanctions and mine production. Our Elk Valley Water Quality Plan statements are based on assumptions regarding the effectiveness of current technology, and that it will perform as expected. Statements concerning future production costs or volumes are based on numerous assumptions of management regarding operating matters and on assumptions that demand for products develops as anticipated, that customers and other counterparties perform their contractual obligations, that operating and capital plans will not be disrupted by issues such as mechanical failure, unavailability of parts and supplies, labour disturbances, interruption in transportation or utilities, adverse weather conditions, and that there are no material unanticipated variations in the cost of energy or supplies. Statements regarding anticipated steelmaking coal sales volumes and average steelmaking coal prices depend on timely arrival of vessels and performance of our steelmaking coal-loading facilities, as well as the level of spot pricing sales.

All QB2 economic analysis assume the inferred resources in the Sanction Case and inferred resources are considered to geologically speculative to be economic. Forward-looking statements relating to the timing and amount of Teck's equity contributions for QB2 assume that the project spending does not increase and contributions are required in accordance with the current project schedule and that project financing will be made available on terms acceptable to us in Q2 2019. All QB2 mining and economic projections (including QB2 mine life, throughput, timing of first production, amount of production, costs (including C1 and AISC), expected EBITDA from the project) and projected capital intensity figures depend on the QB2 project coming into production in accordance with the current budget and project schedule. Forward looking statements regarding the amount of pro forma copper produced from QB2 depends on Teck achieving its projected copper production targets for 2021 and QB2 producing as expected. The unescalated contributions and capital requirements for QB2 do not include a number of variables that are described in the footnotes to the disclosure and could be greater once those variables are taken into account. The final amount of the US\$50 million contingent payment is tied to throughput and depends on achieving certain throughput targets by December 31, 2025 and is subject to reduction in the event that certain throughput and recovery targets are not achieved. The amount of the contingent payment regarding QB3 depends on a sanction decision being made by December 31, 2031 and may also be reduced if certain throughput and recovery targets on QB2 are not achieved. Assumptions are also included in the footnotes to various slides. The foregoing list of assumptions is not exhaustive.

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Factors that may cause actual results to vary materially include, but are not limited to: changes in commodity and power prices; changes in market demand for our products; changes in interest and currency exchange rates; acts of foreign and domestic governments; the outcome of legal proceedings; inaccurate geological and metallurgical assumptions (including with respect to the size, grade and recoverability of reserves and resources); unanticipated operational difficulties (including failure of plant, equipment or processes to operate in accordance with specifications or expectations, cost escalation, unavailability of materials and equipment, government action or delays in the receipt of government approvals, industrial disturbances or other job action, adverse weather conditions and unanticipated events related to health, safety and environmental matters); any change or deterioration in our relationships with our joint venture partners; union labour disputes; political risk; social unrest; consequences of climate change; changes in laws or regulations or enforcement thereof; development and use of new technology; failure of customers or counterparties (including but not limited to rail, port, pipeline and other logistics providers) to perform their contractual obligations; changes in our credit ratings or the financial market in general; unanticipated increases in costs to construct our development projects; difficulty in obtaining permits or securing transportation for our products; inability to address concerns regarding permits of environmental impact assessments; changes in tax benefits or tax rates; resolution of environmental and other proceedings or disputes; failure to obtain project financing for QB2 on acceptable terms or in a timely manner; and changes or deterioration in general economic conditions. We will not achieve the maximum mine lives of our projects, or be able to mine all reserves at our projects or operations, if we do not obtain relevant permits for our operations. Our Fort Hills and Antamina operations are not controlled by us, as a result the actions of our partners may affect anticipated outcomes. NuevaUnión and our Galore Creek project are each 50% owned by us and the timing of development may be impacted by the actions of our partner. Unanticipated technology or environmental interactions could affect the effectiveness of our Elk Valley Water Quality Plan strategy. Purchases of Class B shares under the normal course issuer bid may be impacted by, amongst other things, availability of Class B shares, share price volatility, and availability of funds to purchase shares.

We assume no obligation to update forward-looking statements except as required under securities laws. Further information concerning assumptions, risks and uncertainties associated with these forward-looking statements and our business can be found in our most recent Annual Information Form, as well as subsequent filings of our management's discussion and analysis of quarterly results and other subsequent filings, all filed under our profile on SEDAR ([www.sedar.com](http://www.sedar.com)) and on EDGAR ([www.sec.gov](http://www.sec.gov)).

## QB2 Project Disclosure

All economic analysis with respect to the QB2 project based on a development case which includes inferred resources within the life of mine plan, referred to as the Sanction Case, which is the case on which Teck is basing its development decision for the QB2 project. Inferred resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. Inferred resources are subject to greater uncertainty than measured or indicated resources and it cannot be assumed that they will be successfully upgraded to measured and indicated through further drilling. Nonetheless, based on the nature of the mineralization, Teck has used a mine plan including inferred resources as the development mine plan for the QB2 project.

The economic analysis of the Sanction Case, which includes inferred resources, may be compared to economic analysis regarding a hypothetical mine plan which does not include the use of inferred resources as mill feed, referred to as the Reserve Case, and which is set out in Appendix slides "QB2 Project Economics Comparison" and "QB2 Reserves and Resources Comparison".

The scientific and technical information regarding the QB2 project was prepared under the supervision of Rodrigo Marinho, P. Geo, who is an employee of Teck. Mr. Marinho is a qualified person, as defined under National Instrument 43-101.

# A Transformational Time for Teck



## MILESTONES ACHIEVED

- QB2 permit received, sanctioning announced and partnership closed
- Fort Hills ramp up
- Waneta sale closed
- Returned to investment grade credit rating



## SOLID FOUNDATION

- Quality operating assets in stable jurisdictions
- Right commodities at the right time
- Strong financial position
- Sustainability leader



## FUTURE VALUE CATALYSTS

- Cash returns to shareholders
- Potential for further reduction in notes outstanding
- QB2/QB3
- Project Satellite value creation
- Transformation through innovation

## CAPITAL ALLOCATION FRAMEWORK

# Quality Long Life Operating Assets in Stable Jurisdictions



## STEELMAKING COAL

Elk Valley Mines in B.C.

- High quality steelmaking coal
- Low carbon intensity
- ~\$24 billion of Adjusted EBITDA since the Fording acquisition<sup>1</sup>
- EBITDA margin 56%<sup>2</sup>



## ZINC

Red Dog in Alaska

- Bottom quartile of cost curve
- Strong market position
- Outstanding potential at Aktigirug
- Red Dog EBITDA margin of 62%<sup>2</sup>



## COPPER

Antamina in Peru, Highland Valley in B.C., Carmen de Andacollo in Chile

- Competitive cost
- Low carbon intensity
- QB2 in construction
- Growth options: QB3, Zafranal, San Nicolás, Mesaba, Galore Creek, NuevaUnión
- EBITDA margin of 45%<sup>2</sup>



## ENERGY

Fort Hills in Alberta

- Higher quality, lower carbon intensity product
- Low operating costs
- Full production in Q4 2018
- Evaluating future debottlenecking opportunities of 10-20%

FOUNDATION OF SUSTAINABILITY



# Responsible Tailings Management


Comprehensive [systems and procedures](#) in place based on six pillars:

- |                                |                                 |
|--------------------------------|---------------------------------|
| 1. Surveillance Technology     | 4. Internal Review              |
| 2. Staff Inspections           | 5. Detailed Third-Party Reviews |
| 3. Annual External Inspections | 6. Independent Review Boards    |

Full [emergency preparedness plans](#) in place at relevant facilities:

- Plans reviewed with local stakeholders
- Drills and community meetings conducted

Tailings management and emergency response aligned with the [Mining Association of Canada Towards Sustainable Mining Protocols](#).



**100%**  
of tailings facilities independently verified to meet external/internal standards

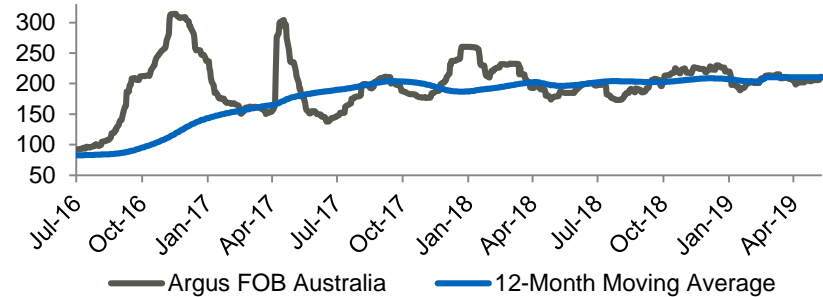
**100%**  
of our major tailings facilities have independent review boards

Related SASB<sup>1</sup> Metric: EM-MM-150a.1 | [Link to Data](#)

# Steelmaking Coal Market Remains Tight



Declining Coal Price Volatility  
(US\$/tonne)<sup>1</sup>



## STEELMAKING COAL

- Market remains tight
- Growing demand, especially in India & Southeast Asia
- Capital markets are rationing capital to coal, which is directed at thermal coal but impacts steelmaking coal; will constrain supply and increase the value of existing assets
- Supply disruptions continue, investment remains modest, permitting is challenging
- Chinese safety checks restrict domestic production
- Teck's steelmaking coal sales to China declined from ~30% in 2013 to ~10% in 2018, and could be below 10% in 2019. In the same period, our sales to India increased from ~5% to ~15%

Steelmaking coal price averaged US\$182/t, or US\$200/t on an inflation-adjusted basis, from January 1, 2008<sup>1</sup>

# Strong Fundamentals in Copper and Zinc



## COPPER

- Market moving into deficit for the next two years
- Prices recovered to just below US\$3.00/lb in early 2019
- Mine production growth expected to slow
- Market remains tight, and new smelters in China are ramping up
- Scrap availability is constrained due to environmental restrictions in China
- Cathode demand is weaker, but still positive
- Structural deficit forecasted for 2021+



## ZINC

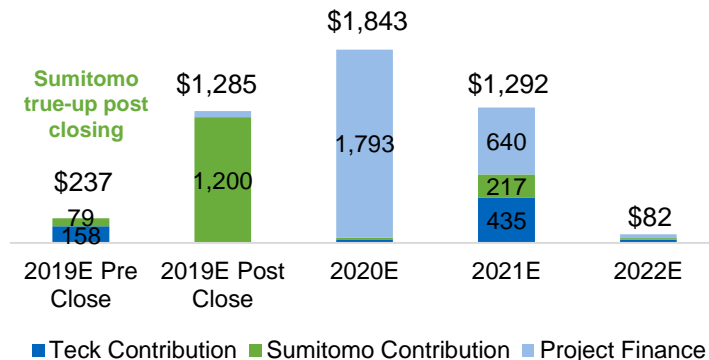
- Global concentrate market in surplus due to decreased refined production; TC's increased rapidly in 2H 2018
- Large drawdowns of stocks are bringing exchange inventory levels to critical levels
- Growing concern over potential impacts on zinc consumption from the macro economic backdrop
- Smelter bottleneck expected to develop in 2019, with concentrate surpluses and refined deficits
- Additional mine and smelter production needed



# Strong Financial Position

- Strong operating cash flow
- ~C\$8.7 billion of liquidity<sup>1</sup>
  - Includes C\$2.5 billion in cash, with C\$1.3 billion in Chile for development of the QB2 project
- No significant note maturities prior to 2024
- QB2 partnership and financing plan dramatically reduces Teck's capital requirements
  - Teck's share of remaining equity capital before escalation is only ~US\$693 million, after transaction proceeds and project financing<sup>2</sup>
  - No contributions required until late 2020<sup>3</sup>
- Upgraded to investment grade by four agencies in Q1 2019
  - Cancelled C\$1.1 billion in letters of credit

**QB2 Funding Profile Before Escalation<sup>4</sup> (US\$M)**

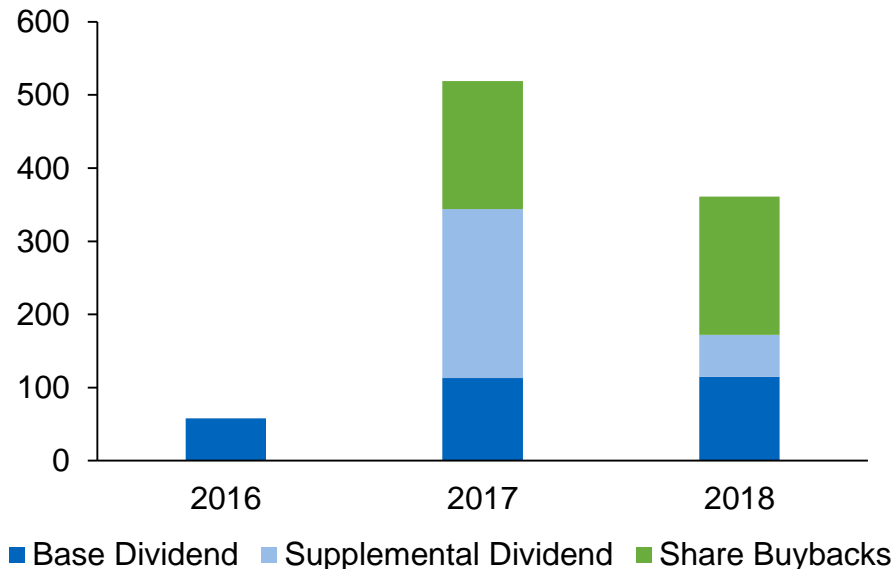


	Credit Rating <sup>5</sup>	Outlook <sup>5</sup>
Moody's	Baa3	Stable
Fitch	BBB-	Stable
S&P	BBB-	Stable
DBRS	BBB (low)	Stable

# Cash Returns to Shareholders

- In November 2018, announced a \$400 million purchase of Class B shares under NCIB, with \$348 million or ~11.9 million shares purchased to April 22, 2019
- Continue to pay \$0.05/share regular quarterly dividend (\$0.20/share annualized)
- Paid \$0.10/share supplemental dividend in December 2018
- From January 1, 2003 to March 31, 2019, ~\$6.0 billion returned to shareholders:
  - \$1.7 billion share buybacks
  - \$4.0 billion base dividends
  - \$300 million supplemental dividends

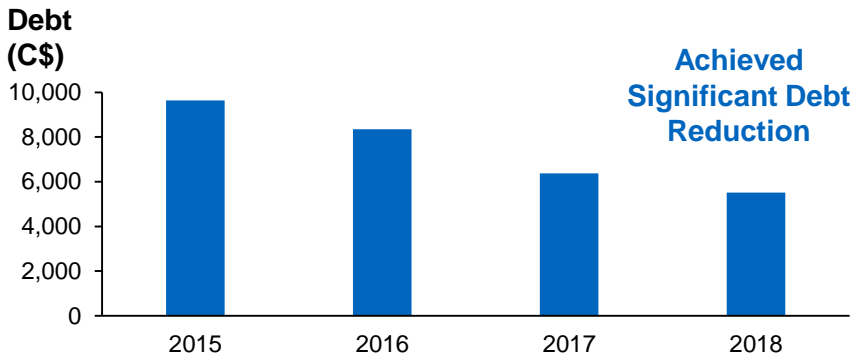
**Significant Returns to Shareholders (\$M)**



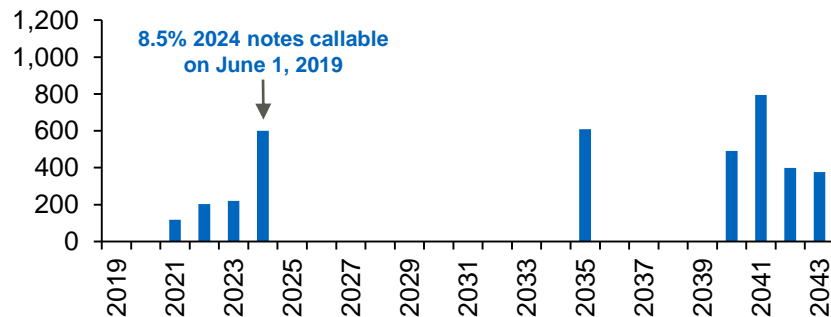
# Potential for Further Reduction of Outstanding Notes

- US\$600 million 8.5% 2024 notes callable in June 2019
- Teck will be opportunistic on further reductions or refinancing of outstanding notes

No significant debt maturities prior to 2024.



**Note Maturity Profile (US\$M)<sup>1</sup>**



# QB2 Value Creation

## Delivers on Copper Growth Strategy

- Rebalances Teck's portfolio over time to make the contribution from copper similar to steelmaking coal
- World class, low cost copper opportunity in an excellent geopolitical jurisdiction
- First production in late 2021 when copper is expected to be in deficit
- Vast, long life deposit with expansion potential (QB3)
- Teck's IRR is significant<sup>1</sup>
  - At US\$3.00/lb copper, unlevered IRR is 19% and levered IRR is 30%
  - At US\$3.50/lb copper, unlevered IRR is 24% and levered IRR is 40%<sup>2</sup>

## Low Strip Ratio<sup>3</sup>

### QB2 (0.7:1)



### Antamina (2.9:1)<sup>4</sup>



### Collahuasi (3.4:1)<sup>4</sup>



### Escondida (2.6:1)<sup>4</sup>



Based on Sanction Case (Including 199 Mt Inferred Resources)

Refer to “QB2 Project Economics Comparison” and “QB2 Reserves and Resources Comparison” slides for Reserve Case (Excluding Inferred Resources)

The description of the QB2 project Sanction Case includes inferred resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. Inferred resources are subject to greater uncertainty than measured or indicated resources and it cannot be assumed that they will be successfully upgraded to measured and indicated through further drilling

# A Transformational Time for Teck

## FUTURE VALUE CATALYSTS

Cash returns to  
shareholders



Potential to  
further reduce  
outstanding  
notes



Growth through  
QB2/QB3  
execution



Project Satellite  
value creation



Transformation  
through  
innovation



## COMPELLING VALUE



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# Appendix

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# Notes

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## **Slide 5: Quality Long Life Operating Assets in Stable Jurisdictions**

1. Adjusted EBITDA generated from October 1, 2008 to March 31, 2019. This reflects the change in accounting policy to capitalize stripping from January 1, 2013. Waste rock stripping costs incurred in the production phase of a surface mine are recorded as capitalized production stripping costs within property, plant and equipment when it is probable that the stripping activity will improve access to the orebody when the component of the orebody or pit to which access has been improved can be identified, and when the costs relating to the stripping activity can be measured reliably. When the actual waste-to-ore stripping ratio in a period is greater than the expected life-of-component waste-to-ore stripping ratio for that component, the excess is recorded as capitalized production stripping costs. Adjusted EBITDA is a non-GAAP financial measure. See "Non-GAAP Financial Measures" slides.
2. Three months ended March 31, 2019. EBITDA margin is a non-GAAP financial measure. See "Non-GAAP Financial Measures" slides.

## **Slide 6: Responsible Tailings Management**

1. Sustainability Accounting Standards Board Standards. <https://www.sasb.org/>

## **Slide 7: Steelmaking Coal Market Remains Tight**

1. Average steelmaking coal prices are calculated from January 1, 2008. Inflation-adjusted prices are based on the US Consumer Price Index. Source: Argus, FIS, Teck. Plotted to May 10, 2019.

## **Slide 9: Strong Financial Position**

1. Liquidity is as at April 22, 2019 and includes \$2.5 billion in cash, of which \$1.3 billion is in Chile for the development of our QB2 project.
2. On a go forward basis from January 1, 2019. Assumes US\$2.5 billion in project finance loans without deduction of fees and interest during construction, and US\$1.2 billion contribution from Sumitomo.
3. Assumes project finance facility available in Q2 2019, and US\$1.2 billion of Sumitomo contributions associated with purchase price spent before first draw. Thereafter, project finance facility used to fund all capital costs until target debt : capital ratio achieved on a cumulative basis, after which point project finance and equity contributions are made ratably based on this same debt : capital ratio.
4. On a 100% go forward basis from January 1, 2019 in constant Q2 2017 dollars and a CLP:USD exchange rate of 625, not including escalation (estimated at US\$300 - \$470 million based on 2 - 3% per annum inflation), working capital or interest during construction. Includes approximately US\$500 million in contingency. At a spot CLP/USD rate of approximately 675 capital would be reduced by approximately US\$270 million.
5. As at May 2, 2019.

## **Slide 11: Potential for Further Reduction of Outstanding Notes**

1. Public notes outstanding as at March 31, 2019.

## **Slide 12: QB2 Value Creation**

1. As at January 1, 2019. Assumes optimized funding structure. Does not include contingent consideration. Assumes US\$10.00/lb molybdenum and US\$18.00/oz silver.
2. Assumes US\$2.5 billion in project finance loans without deduction of fees and interest during construction, and US\$1.2 billion contribution from Sumitomo.
3. 1 truck = a strip ratio of 0.1.
4. Source: Wood Mackenzie over 2021-2040.

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# Quebrada Blanca

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# QB2 Project Disclosure

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The scientific and technical information regarding the QB2 project was prepared under the supervision of Rodrigo Marinho, P. Geo, who is an employee of Teck. Mr. Marinho is a qualified person, as defined under National Instrument 43-101.

# QB2 Summary

## Benefits of Partnering

- ✓ **Prudent approach to capital allocation**
  - Choosing measured growth preserves ability to return further capital to shareholders and reduce outstanding bonds
- ✓ **Partnership and financing plan dramatically reduces Teck's QB2 capital requirements**
  - Teck's share of remaining equity is approximately US\$693 million before escalation<sup>1</sup>
  - No contributions required from closing until late 2020<sup>2</sup>
- ✓ **Significantly enhances Teck's economics bringing after-tax levered IRR to 30-40%<sup>3</sup>**
- ✓ **Builds on already strong relationship with Sumitomo Metal Mining and Sumitomo Corporation**

## Benefits of Sanctioning QB2

- ✓ **Rebalances Teck's portfolio over time making the contribution from copper similar to steelmaking coal**
- ✓ **World class, low cost copper opportunity in an excellent geopolitical jurisdiction**
- ✓ **First production in late 2021 when copper is expected to be in deficit**
- ✓ **Vast, long life deposit with expansion potential (QB3)**
- ✓ **Advanced stage of operational readiness incorporating leading technology and innovation to create a modern mine**
- ✓ **Experienced team ready to execute together with industry leading EPCM partner in Bechtel**



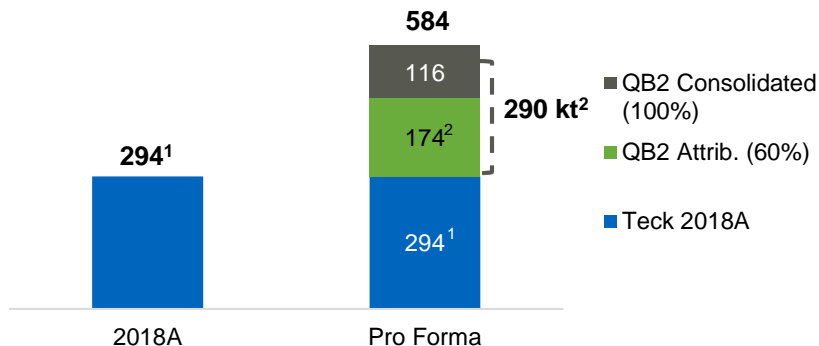
# QB2 Transaction Terms

<b>Upfront Consideration</b>	<ul style="list-style-type: none"><li>• Total contribution of US\$1.2 billion into the QB2 project for a 30% interest<ul style="list-style-type: none"><li>- US\$800 million earn-in contribution</li><li>- US\$400 million matching contribution</li></ul></li></ul>
<b>Contingent Consideration<sup>1</sup></b>	<ul style="list-style-type: none"><li>• US\$50 million to Teck on QB2 achieving mill throughput optimization target of 154 ktpd</li><li>• 12% of the incremental QB3 expansion NPV upon sanction<ul style="list-style-type: none"><li>- 8% contingent earn-in contribution</li><li>- 4% matching contribution</li></ul></li></ul>
<b>Post-Transaction Project Ownership</b>	<ul style="list-style-type: none"><li>• 60% Teck / 30% Sumitomo / 10% ENAMI<ul style="list-style-type: none"><li>- 25% Sumitomo Metal Mining</li><li>- 5% Sumitomo Corporation</li></ul></li></ul>
<b>Capital Cost Funding</b>	<ul style="list-style-type: none"><li>• US\$2.5 billion project financing planned</li><li>• Remaining capital cost funded two-thirds by Teck, one-third by Sumitomo</li><li>• ENAMI has 10% non-funding interest</li></ul>
<b>Conditions &amp; Closing</b>	<ul style="list-style-type: none"><li>• Customary conditions, including regulatory approvals</li><li>• Transaction effective date January 1, 2019</li><li>• Closed March 29, 2019</li></ul>

# QB2 Rebalances Teck's Portfolio

## Delivers on Copper Growth Strategy

Teck's Annual Copper Production  
(kt Cu)



- ✓ Rebalances Teck's portfolio over time to make the contribution from copper similar to steelmaking coal
- ✓ On a consolidated basis copper production is doubled
- ✓ On an attributable basis copper production increases by ~60%
- ✓ Based on expected long term prices for copper and steelmaking coal, increased copper production could reduce steelmaking coal to below 50% of EBITDA over time
- ✓ QB3 and other copper development projects could further increase copper exposure and diversification

**Based on Sanction Case (Including 199 Mt Inferred Resources)**

**Refer to “QB2 Project Economics Comparison” and “QB2 Reserves and Resources Comparison” slides for Reserve Case (Excluding Inferred Resources)**

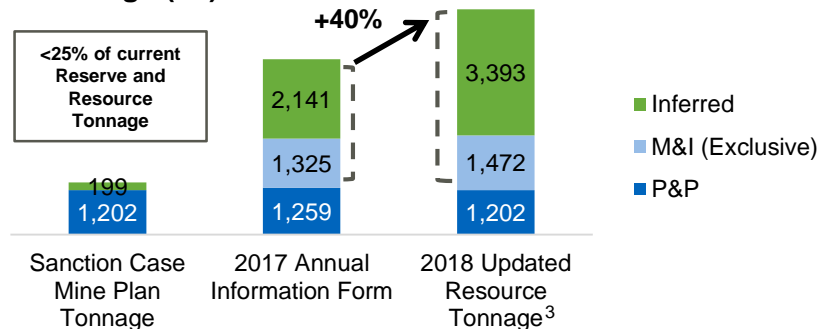
20 The description of the QB2 project Sanction Case includes inferred resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. Inferred resources are subject to greater uncertainty than measured or indicated resources and it cannot be assumed that they will be successfully upgraded to measured and indicated through further drilling

# QB2 Project Highlights

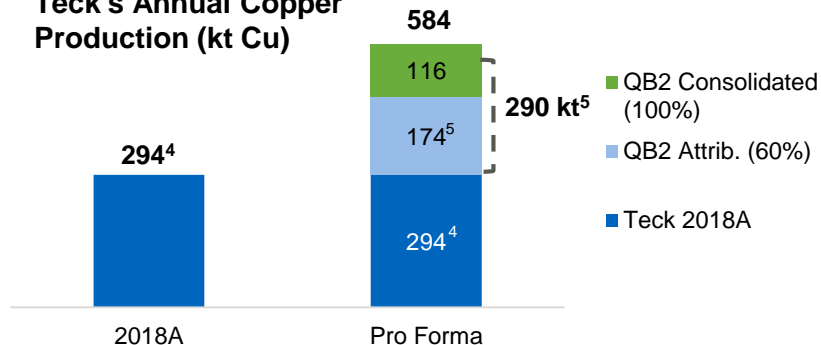
## World Class Development

- ✓ Vast, long life deposit in favourable jurisdiction
- ✓ Will be a top 20 producer
- ✓ Very low strip ratio
- ✓ Low all-in sustaining costs (AISC<sup>1</sup>)
- ✓ High grade, clean concentrates
- ✓ Significant brownfield development
- ✓ Permitted with engineering 85%<sup>2</sup> complete; construction underway
- ✓ Community agreements in place and strong local relationships
- ✓ Expansion potential (QB3) with potential to be a top 5 producer

### Reserve and Resource Tonnage (Mt)



### Teck's Annual Copper Production (kt Cu)



# QB2 is a World Class Copper Opportunity<sup>1</sup>

Project Metrics (100%)	US\$2.4-\$4.2B After-Tax NPV <sub>8%</sub> <sup>2,3</sup>	14%-18% Unlevered After-Tax IRR <sup>2,3</sup>
	US\$1.1-\$1.4B First 5 Full Years Annual EBITDA <sup>2</sup>	316 kt First 5 Full Years Annual CuEq Production <sup>4</sup>
	US\$1.28/lb First 5 Full Years C1 Cash Cost (net of by-products) <sup>5</sup>	US\$1.38/lb First 5 Full Years AISC (net of by-products) <sup>6</sup>
	QB2 Uses <25% of R&R Continuing to Grow	US\$4.7B Capital Cost (100%) <sup>7</sup>
Transaction Metrics	~US\$3B Implied Value of Teck's 90% Ownership Prior to Sumitomo Transaction <sup>8</sup>	30%-40% Teck's Levered After-Tax IRR Post Transaction <sup>2,3,9</sup>

Based on Sanction Case (Including 199 Mt Inferred Resources)

Refer to “QB2 Project Economics Comparison” and “QB2 Reserves and Resources Comparison” slides for Reserve Case (Excluding Inferred Resources)

22 The description of the QB2 project Sanction Case includes inferred resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. Inferred resources are subject to greater uncertainty than measured or indicated resources and it cannot be assumed that they will be successfully upgraded to measured and indicated through further drilling

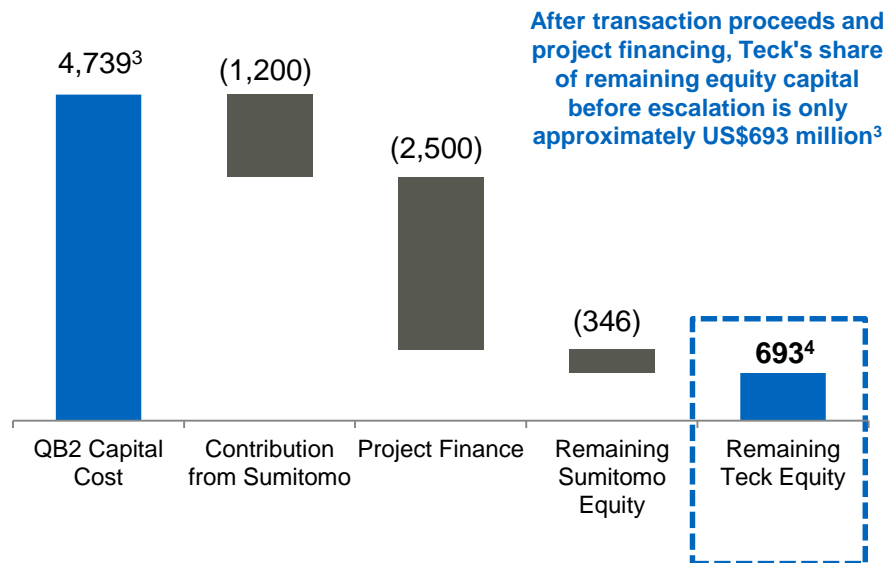
# Prudent Balance Sheet Management Through QB2

## Maintaining Solid Financial Position

- Teck intends to fund its share of required equity capital through cash on hand and free cash flow
  - No cash requirement from Teck post closing until late 2020<sup>1</sup>
  - Significant free cash flow anticipated between 2018 and 2020
  - Current liquidity of approximately C\$8.7 billion, including C\$2.5 billion in cash with C\$1.3 billion in Chile for development of the QB2 project<sup>2</sup>
  - Only US\$117 million in debt maturities through 2021
- Transaction preserves Teck's solid financial position and ability to return cash to shareholders through QB2 construction

## QB2 Development Funding

### QB2 Capital Costs Before Escalation (US\$M)<sup>3</sup>

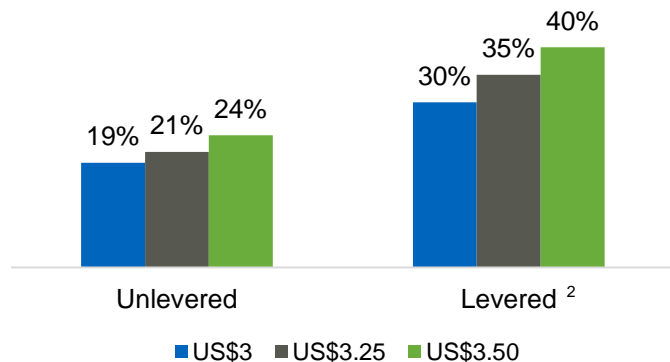




# Increasing Teck's Returns on QB2

## Enhancing IRR

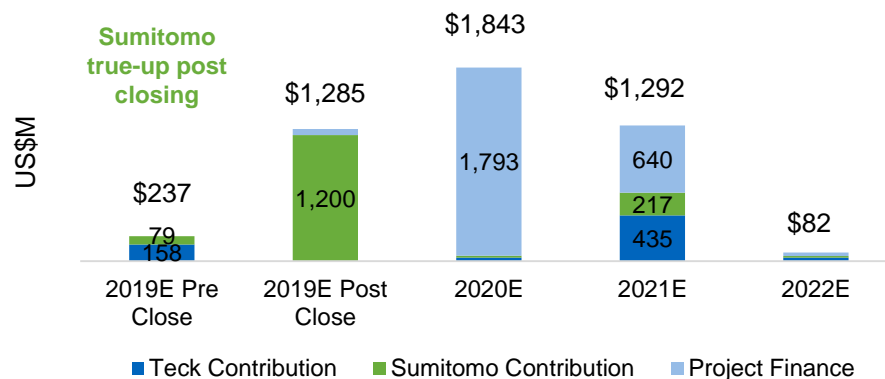
Teck's Post Transaction After-Tax IRR (%)<sup>1</sup>



Transaction with Sumitomo and US\$2.5 billion project financing significantly enhances Teck's IRR

## Reducing Teck's Equity Contributions

QB2 Funding Profile Before Escalation (US\$M)<sup>3</sup>



Transaction proceeds and project financing reduce Teck's equity contributions to ~US\$693 million<sup>4</sup> with no contributions required post-closing until late 2020<sup>5</sup>

Based on Sanction Case (Including 199 Mt Inferred Resources)

Refer to "QB2 Project Economics Comparison" and "QB2 Reserves and Resources Comparison" slides for Reserve Case (Excluding Inferred Resources)

24 The description of the QB2 project Sanction Case includes inferred resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. Inferred resources are subject to greater uncertainty than measured or indicated resources and it cannot be assumed that they will be successfully upgraded to measured and indicated through further drilling

# QB2's Competitive Cost Position

## Competitive Operating Cost & Capital Intensity

- Given the exceptionally low strip ratio, consistent grade profile, compact site layout, and high level of automation, QB2 is expected to have attractive and relatively stable operating costs
- Exceptional strip ratio of 0.70 LOM, meaning for every one tonne of ore mined, only 0.70 tonnes of waste need to be mined (0.44 over first 5 full years)
  - Compares to other world class asset strip ratios of 3.5 for Antamina, 3.1 for Collahuasi, and 2.5 for Escondida<sup>1</sup>
  - Major benefit to sustaining capital since it reduces mobile fleet size and replacement costs
- Capital intensity of ~US\$15k/tpa copper equivalent is in line or lower than recent comparably sized projects with the ability to amortize these costs over a very long mine life<sup>2</sup>

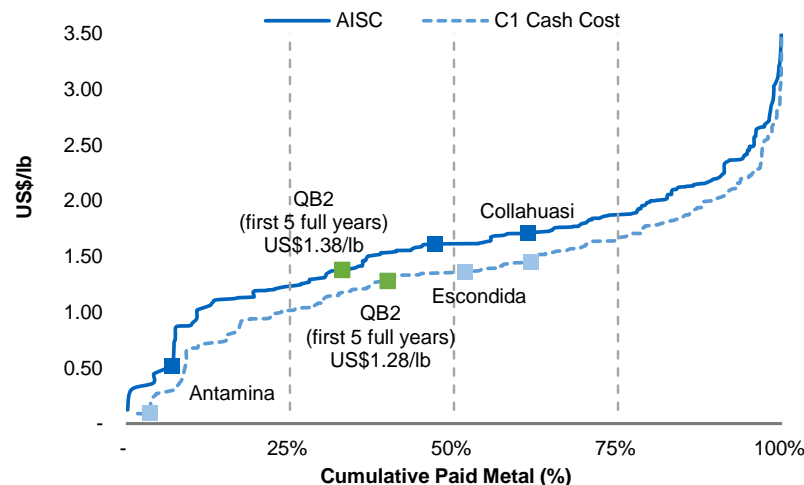
**Based on Sanction Case (Including 199 Mt Inferred Resources)**

**Refer to “QB2 Project Economics Comparison” and “QB2 Reserves and Resources Comparison” slides for Reserve Case (Excluding Inferred Resources)**

The description of the QB2 project Sanction Case includes inferred resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. Inferred resources are subject to greater uncertainty than measured or indicated resources and it cannot be assumed that they will be successfully upgraded to measured and indicated through further drilling

## Low Cash Cost Position

C1 Cash Cost<sup>3</sup> & AISC<sup>4</sup> Curve (US\$/lb, 2023E)<sup>1</sup>

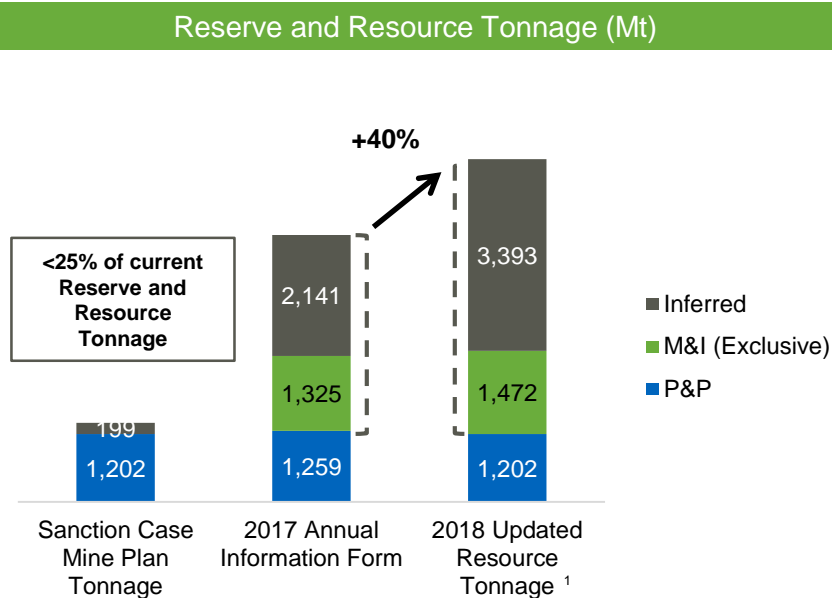


# Vast, Long Life Deposit at QB

## QB2 Uses Less than 25% of R&R

- Resource exclusive of Reserve increased 40% since 2017
- Initial 28 year mine life processes <25% of the currently defined Reserve and Resource Tonnage
- Deposit is capable of supporting a very long mine life based on throughput rate of 143 ktpd by utilizing further tailings capacity at already identified sites
- Actively evaluating potential options to exploit value of full resource through mill expansion and / or mine life extension
- Beyond the extensive upside included in the defined QB deposit, the district geology is highly prospective for exploration discovery and resource addition
  - Mineralization is open in multiple directions with drilling ongoing

## Extension Potential



# QB3 – Long-Term Growth

## Expansion potential to realize full potential of the orebody

QB2 utilizes less than 25% of resource

QB3 evaluating options to exploit the full value of the resource through mill expansion and / or mine life extension

### Ongoing work includes:

- ~18 km of drilling in 2018
- 60 km of drilling planned for 2019
- Scoping Study underway to be followed by a Prefeasibility Study

### Key Value Drivers:

- Defining the full size of the deposit through drilling
- Proactive evaluation of long-term options for production
- Maximizing the performance of the QB2 plant
- Leveraging the QB2 infrastructure to target production increases at a lower capital intensity

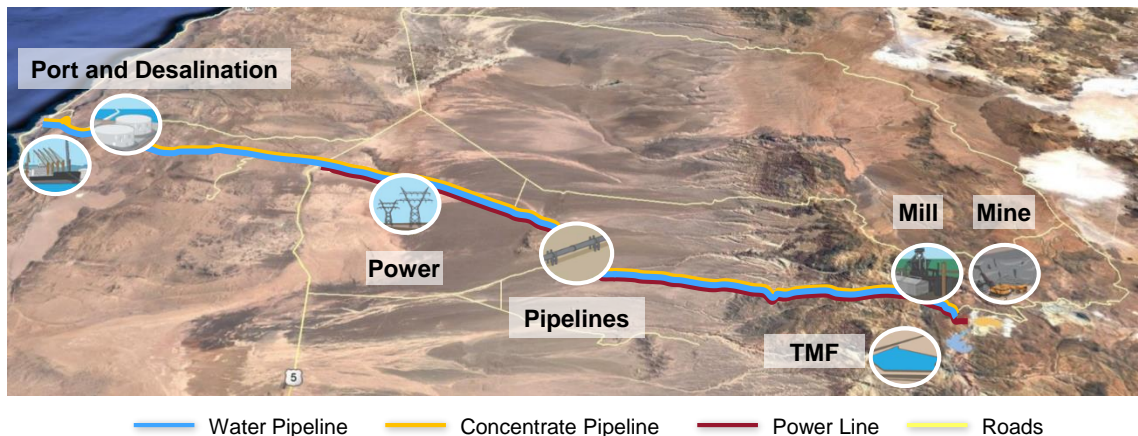


2018 drilling returned long intervals of +0.5% Cu, with predictable sulfide zonation patterns

# Clear Path to Production at QB2

## Construction Approach

- Key project elements are segregated by area and can be managed more efficiently reducing risk:
  - Open pit mine (120 Mtpa peak);
  - Concentrator (143 ktpd);
  - Tailings storage facility (1.4 Bt capacity);
  - Concentrate and water supply pipelines (165 km); and
  - Port facility (including a desalination plant and concentrate filtration plant)
- QB will own and operate its pipelines and port facilities



## Operational Readiness

- Early focus on operational readiness and commissioning to ensure a seamless transition to operations
- Organizational design incorporating Integrated Operations and Business Partner Model
  - Driving value by linking process, people and workplace design
- Engagement of experienced consultants to support detailed plan development and execution, integrated operations design and systems, and commissioning planning



# Execution Readiness at QB2

## Experienced Project Team Including Bechtel, a Leading EPCM Company

Teck Owner's Team			
Name	Title	Years of Experience	Major Project Experience
Karl Hroza	Project Director	25+	Sturgeon Refinery, El Morro, Koniambo, Fort Hills, Ravensthorpe
Sergio Vives	Director, Environment and Permitting	20+	Pascua Lama, Los Pelambres, Chuquicamata and Codelco Smelting
Grant McLaren	Site Manager	35+	Escondida (Phase IV, North satellite), Cerrejon P40 Expansion, Olympic Dam
Carlos Opazo	Concentrator Manager	25+	Fort Hills, Carmen de Andacollo, Los Pelambres, El Abra, Escondida, Chuquicamata, CAP Iron Ore, MCC, Millennium Coker Unit – U and O
Francisco Raynaud	Port Area Manager	25+	Escondida, To-2 – Codelco
Andrés Corbalan	Engineering Manager	25+	El Abra, Los Pelambres
Dale Webb	Operations Readiness General Manager	20+	QB1, Trail Operations
Bechtel Management Team			
Name	Title	Years of Experience	Major Project Experience
Jim McCloud	Project Manager	25+	El Abra, Radomiro Tomic, Collahuasi, Escondida (EWS), Los Pelambres, Yanacocha, Antamina, Antapaccay
Carlos Ruiz	Deputy Project Manager	25+	Escondida (EWS, OGP1, OLAP, Laguna Seca Debottlenecking), Los Bronces
Sergio Baldini	Senior Site Manager	20+	Escondida (EWS, OGP1), Antapaccay
Eduardo Rochna	Project Controls Manager	18+	Los Pelambres Repower I and II projects, Antapaccay
Jorge Kettlun	Contracts Manager	25+	Escondida (EWS, OGP1), Los Bronces, Los Pelambres Repower II projects
Edgar Gomez	Engineering Manager	25+	Escondida (OGP1), Andina Development Project (PDA) Phase I, Codelco PTMP, Los Pelambres Repower I, Collahuasi Ujina Rosario, Antamina, Goro Nickel

# QB2 Project Economics Comparison

## Changes Since Feasibility Study<sup>1</sup>

			2016 FS (Reserves) <sup>7</sup>	Reserve Case <sup>8</sup>	Sanction Case <sup>8</sup>
General	Mine Life	years	25	28	28
	Throughput	ktpd	140	143	143
	LOM Mill Feed	Mt	1,259	1,400	1,400
	<b>Strip Ratio</b>				
	First 5 Full Years		0.40	0.16	0.44
Operating Metrics (Annual Avg.)	LOM <sup>2</sup>		0.52	0.41	0.70
	<b>Copper Production</b>				
	First 5 Full Years	ktpa	275	286	290
	LOM <sup>2</sup>	ktpa	238	228	247
	<b>Copper Equivalent Production<sup>3</sup></b>				
	First 5 Full Years	ktpa	301	313	316
	LOM <sup>2</sup>	ktpa	262	256	279
	<b>C1 Cash Cost<sup>4</sup></b>				
	First 5 Full Years	US\$/lb	\$1.28	\$1.29	\$1.28
	LOM <sup>2</sup>	US\$/lb	\$1.39	\$1.47	\$1.37
	<b>AISC<sup>5</sup></b>				
	First 5 Full Years	US\$/lb	\$1.34	\$1.40	\$1.38
	LOM <sup>2</sup>	US\$/lb	\$1.43	\$1.53	\$1.42
	<b>Annual EBITDA<sup>11</sup></b>				
	First 5 Full Years	US\$B	\$1.0	\$1.0	\$1.1
	LOM <sup>2</sup>	US\$B	\$0.8	\$0.7	\$0.9
After-Tax Economics	NPV @ 8%	US\$B	\$1.3	\$2.0	\$2.4
	IRR	%	12%	13%	14%
	Payback Period <sup>6</sup>	years	5.8	5.7	5.6
	Mine Life / Payback		4.3	4.9	5.0

## Sensitivity Analysis<sup>1</sup>

Reserve Case <sup>8</sup>			
Copper Price (US\$/lb)	\$3.00	\$3.25	\$3.50
<b>Annual EBITDA (US\$B)</b>			
First 5 Full Years	\$1.0	\$1.2	\$1.3
First 10 Full Years	\$1.0	\$1.1	\$1.3
<b>Payback Period (Years)<sup>6</sup></b>	5.7	5.0	4.4
<b>NPV at 8% (US\$B)</b>	\$2.0	\$2.9	\$3.7
<b>Project Unlevered IRR (%)</b>	13%	16%	17%
<b>Teck's Unlevered IRR (%)<sup>9</sup></b>	18%	21%	23%
<b>Teck's Levered IRR (%)<sup>10</sup></b>	29%	35%	40%
Sanction Case <sup>8</sup>			
Copper Price (US\$/lb)	\$3.00	\$3.25	\$3.50
<b>Annual EBITDA (US\$B)</b>			
First 5 Full Years	\$1.1	\$1.2	\$1.4
First 10 Full Years	\$1.0	\$1.1	\$1.3
<b>Payback Period (Years)<sup>6</sup></b>	5.6	4.9	4.4
<b>NPV at 8% (US\$B)</b>	\$2.4	\$3.3	\$4.2
<b>Project Unlevered IRR (%)</b>	14%	16%	18%
<b>Teck's Unlevered IRR (%)<sup>9</sup></b>	19%	21%	24%
<b>Teck's Levered IRR (%)<sup>10</sup></b>	30%	35%	40%

# QB2 Reserves and Resources Comparison

## Reserve Case (as at Nov. 30, 2018)<sup>1,2</sup>

		Grade		
Reserves	<i>Mt</i>	<i>Cu %</i>	<i>Mo %</i>	<i>Silver ppm</i>
Proven	476	0.51	0.018	1.40
Probable	924	0.47	0.019	1.25
<b>Reserves</b>	<b>1,400</b>	<b>0.48</b>	<b>0.018</b>	<b>1.30</b>
<b>Resources (exclusive of reserves)<sup>3</sup></b>				
Measured	36	0.42	0.014	1.23
Indicated	1,558	0.40	0.016	1.14
<b>M&amp;I (Exclusive)</b>	<b>1,594</b>	<b>0.40</b>	<b>0.016</b>	<b>1.14</b>
Inferred	3,125	0.38	0.018	1.15

## Sanction Case (as at Nov. 30, 2018)<sup>2,4</sup>

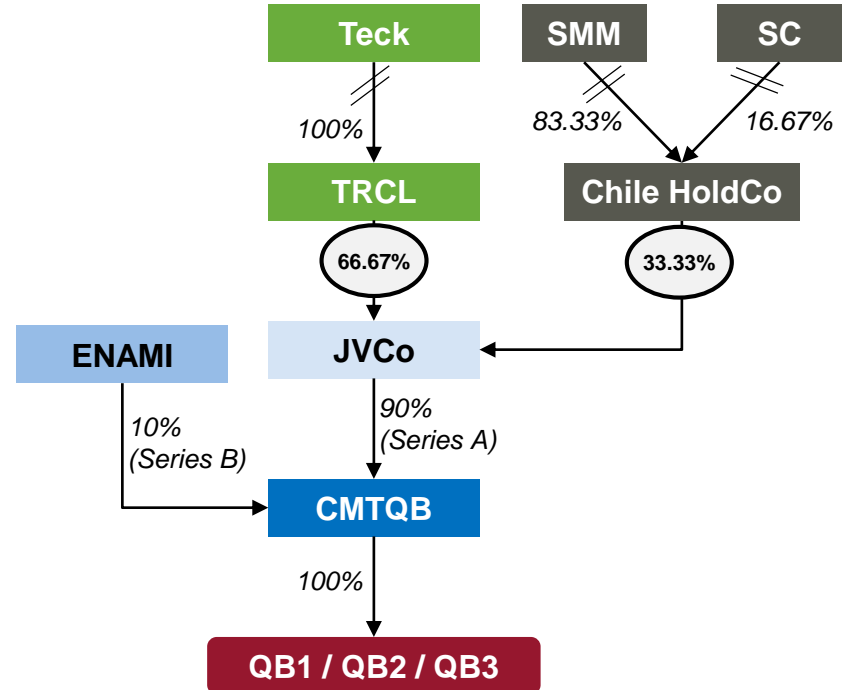
		Grade		
Reserves	<i>Mt</i>	<i>Cu %</i>	<i>Mo %</i>	<i>Silver ppm</i>
Proven	409	0.54	0.019	1.47
Probable	793	0.51	0.021	1.34
<b>Reserves</b>	<b>1,202</b>	<b>0.52</b>	<b>0.020</b>	<b>1.38</b>
<b>Resources (exclusive of reserves)<sup>5</sup></b>				
Measured	36	0.42	0.014	1.23
Indicated	1,436	0.40	0.016	1.13
<b>M&amp;I (Exclusive)</b>	<b>1,472</b>	<b>0.40</b>	<b>0.016</b>	<b>1.14</b>
Inferred	3,194	0.37	0.017	1.13
+ Inferred in SC pit	199	0.53	0.022	1.21

# ENAMI Interest in QB

## Overview

- The government of Chile owns a 10% non-funding interest in Compañía Minera Teck Quebrada Blanca S.A. (CMTQB) through its state-run minerals company, Empresa Nacional de Minería (ENAMI)
- ENAMI has been a partner at QB since 1989 and is a 10% shareholder of Carmen de Andacollo
- ENAMI is not required to fund QB2 development costs
- Project equity funding in form of:
  - 25% Series A Shares
  - 75% Shareholder Loans
- Until shareholder loans are fully repaid, ENAMI is entitled to a minimum dividend, based on net income, that approximates 2.0-2.5% of free cash flow
  - Thereafter, ENAMI receives 10% of dividends / free cash flow
- ENAMI is entitled to board representation

## Organizational Chart



# Quebrada Blanca Accounting Treatment

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## BALANCE SHEET

- 100% of project spending included in property, plant and equipment
- Debt includes 100% of project financing
- Total shareholder funding to be split between loans and equity approximately 75%/25% over the life of the project
- Sumitomo (SMM/SC)<sup>1</sup> contributions will be shown as advances as a non-current liability and non-controlling interest as part of equity
- Teck contributions, whether debt or equity eliminated on consolidation

## INCOME STATEMENT

- Teck's income statement will include 100% of QB's revenues and expenses
- Sumitomo's<sup>1</sup> 30% and ENAMI's 10% share of profit will show as profit attributable to non-controlling interests

## CASH FLOW

- 100% of project spending included in capital expenditures
- In 2019, Sumitomo<sup>1</sup> contribution will be recorded within financing activities and split approximately 50%/50% as:
  - Loans recorded as "Advances from Sumitomo"
  - Equity recorded as "Sumitomo Share Subscriptions"
- 100% of draws on project financing included in financing activities
- After start-up of operations
  - 100% of profit in cash flow from operations
  - Sumitomo's<sup>1</sup> 30% and ENAMI's 10% share of distributions included in non-controlling interest

# Notes - Appendix: Quebrada Blanca

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## **Slide 18: QB2 Summary**

1. On a go forward basis from January 1, 2019. Assumes US\$2.5 billion in project finance loans without deduction of fees and interest during construction, and US\$1.2 billion contribution from Sumitomo (not including contingent consideration). Based on remaining capital costs of US\$4.739 billion in constant Q2 2017 dollars, assuming a CLP:USD exchange rate of 625, not including escalation (estimated at US\$300 - \$470 million based on 2 - 3% per annum inflation), working capital or interest during construction, but including approximately US\$500 million in contingency.
2. Assumes project finance facility available in Q2 2019, and US\$1.2 billion of Sumitomo contributions associated with purchase price spent before first draw. Thereafter, project finance facility used to fund all capital costs until target debt : capital ratio achieved on a cumulative basis, after which point project finance and equity contributions are made ratably based on this same debt : capital ratio.
3. Range based on US\$3.00-\$3.50/lb copper price. Assumes US\$10.00/lb molybdenum and US\$18.00/oz silver. As at January 1, 2019. Assumes optimized funding structure, US\$2.5 billion in project finance loans without deduction of fees and interest during construction, and US\$1.2 billion contribution from Sumitomo. Does not include contingent consideration.

## **Slide 19: QB2 Transaction Terms**

1. Sumitomo has agreed to make a supplemental payment to Teck of US\$50 million if QB2 project throughput reaches 154,000 tonnes per day prior to the earlier of the sanctioning of a major expansion or December 31, 2025. Expansion contingent consideration is payable if project expansion sanction occurs before December 31, 2031 and Sumitomo elects to participate. If Sumitomo elects not to participate in the expansion, its interest in the joint venture will be diluted on a basis that effectively gives Teck 100% of the value of the expansion. Both these supplemental payments are subject to downward adjustment in the event that QB2 mill throughput and copper recoveries do not meet certain targets.

## **Slide 20: QB2 Rebalances Teck's Portfolio**

1. We include 100% of the production and sales from QB and Carmen de Andacollo mines in our production and sales volumes because we fully consolidate their results in our financial statements. We include 22.5% of production and sales from Antamina, representing our proportionate equity interest in Antamina. Copper production includes cathode production at QB.
2. Based on QB2 Sanction Case first five full years of copper production.

## **Slide 21: QB2 Project Highlights**

1. All-in sustaining costs (AISC) is a non-GAAP financial measure.
2. Status at April 22, 2019.
3. Resources figures as at November 30, 2018. Resources are reported separately from, and do not include that portion of resources classified as reserves. See "QB2 Reserves and Resources Comparison" slide for further details.
4. We include 100% of the production and sales from QB and Carmen de Andacollo mines in our production and sales volumes because we fully consolidate their results in our financial statements. We include 22.5% of production and sales from Antamina, representing our proportionate equity interest in Antamina. Copper production includes cathode production at QB.
5. Based on QB2 Sanction Case first five full years of copper production.

# Notes - Appendix: Quebrada Blanca

## Slide 22: QB2 is a World Class Copper Opportunity

1. Unless otherwise stated, all metrics assume US\$3.00/lb copper, US\$10.00/lb molybdenum and US\$18.00/oz silver.
2. Range based on US\$3.00-\$3.50/lb copper price. EBITDA is a non-GAAP financial measure. See "Non-GAAP Financial Measures" slides.
3. As at January 1, 2019. Assumes optimized funding structure.
4. Copper equivalent production calculated assuming US\$3.00/lb copper, US\$10.00/lb molybdenum and US\$18.00/oz silver without adjusting for payability.
5. C1 cash costs are presented after by-product credits assuming US\$10.00/lb molybdenum and US\$18.00/oz silver. Net cash unit costs are consistent with C1 cash costs. C1 cash costs for QB2 include stripping costs during operations. Net cash unit costs and C1 cash costs are non-GAAP financial measures. See "Non-GAAP Financial Measures" slides.
6. All-in sustaining costs (AISC) are calculated as C1 cash costs after by-product credits plus sustaining capital requirements. C1 cash costs are described above. AISC is a non-GAAP financial measure. See "Non-GAAP Financial Measures" slides.
7. On a 100% go forward basis from January 1, 2019 in constant Q2 2017 dollars and a CLP:USD exchange rate of 625, not including escalation (estimated at US\$300 - \$470 million based on 2 - 3% per annum inflation), working capital or interest during construction. Includes approximately US\$500 million in contingency. At a spot CLP/USD rate of approximately 675 capital would be reduced by approximately US\$270 million.
8. The valuation of approximately ~US\$3 billion for Teck's 90% interest prior to the Sumitomo transaction is based on a transaction value of US\$1 billion comprising an earn-in contribution of US\$800 million and assumed contingent consideration proceeds with a present value of approximately US\$200 million. The undiscounted contingent consideration is estimated at US\$300 million and comprises: (a) US\$50 million relating to achieving the mill throughput optimization target as described in Note 1 on the "QB2 Transaction Terms" slide, assumed to be received in 2024; and (b) 8% of the net present value of the QB3 expansion at sanction, assuming an expansion sanctioned in 2024 which doubles QB2 throughput with further tailings facility construction deferred. At a real copper price of US\$3.00/lb, the payment is estimated at approximately US\$250 million. Using a real discount rate of 8%, the present value of the contingent consideration, based on the above assumptions is estimated at approximately US\$200 million. This estimate is based on a number of significant assumptions in addition to those described above. There can be no assurance that the contingent consideration will approximate the amounts outlined above, or that it will be received at all.
9. Assumes US\$2.5 billion in project finance loans without deduction of fees and interest during construction, and US\$1.2 billion contribution from Sumitomo. Does not include contingent consideration.

## Slide 23: Prudent Balance Sheet Management Through QB2

1. Assumes project finance facility available in Q2 2019, and US\$1.2 billion of Sumitomo contributions associated with purchase price spent before first draw. Thereafter, project finance facility used to fund all capital costs until target debt : capital ratio achieved on a cumulative basis, after which point project finance and equity contributions are made ratably based on this same debt : capital ratio.
2. Liquidity is as at April 22, 2019 and includes \$2.5 billion in cash, of which \$1.3 billion is in Chile for the development of our QB2 project.
3. On a 100% go forward basis from January 1, 2019 in constant Q2 2017 dollars and a CLP:USD exchange rate of 625, not including escalation (estimated at US\$300 - \$470 million based on 2 - 3% per annum inflation), working capital or interest during construction. Includes approximately US\$500 million in contingency. At a spot CLP/USD rate of approximately 675 capital would be reduced by approximately US\$270 million
4. On a go forward basis from January 1, 2019. Assumes US\$2.5 billion in project finance loans without deduction of fees and interest during construction, and US\$1.2 billion contribution from Sumitomo.



# Notes - Appendix: Quebrada Blanca

## Slide 24: Increasing Teck's Returns on QB2

1. As at January 1, 2019. Assumes optimized funding structure. Does not include contingent consideration. Assumes US\$10.00/lb molybdenum and US\$18.00/oz silver.
2. Assumes US\$2.5 billion in project finance loans without deduction of fees and interest during construction, and US\$1.2 billion contribution from Sumitomo.
3. On a 100% go forward basis from January 1, 2019 in constant Q2 2017 dollars and a CLP:USD exchange rate of 625, not including escalation (estimated at US\$300 - \$470 million based on 2 - 3% per annum inflation), working capital or interest during construction. Includes approximately US\$500 million in contingency. At a spot CLP/USD rate of approximately 675 capital would be reduced by approximately US\$270 million.
4. On a go forward basis from January 1, 2019. Assumes US\$2.5 billion in project finance loans without deduction of fees and interest during construction, and US\$1.2 billion contribution from Sumitomo.
5. Assumes project finance facility available in Q2 2019, and US\$1.2 billion of Sumitomo contributions associated with purchase price spent before first draw. Thereafter, project finance facility used to fund all capital costs until target debt : capital ratio achieved on a cumulative basis, after which point project finance and equity contributions are made ratably based on this same debt : capital ratio.

## Slide 25: QB2's Competitive Cost Position

1. Source: Wood Mackenzie.
2. Based on first five full years of copper equivalent production. Copper equivalent production calculated assuming US\$3.00/lb copper, US\$10.00/lb molybdenum and US\$18.00/oz silver without adjusting for payability.
3. C1 cash costs are presented after by-product credits assuming US\$10.00/lb molybdenum and US\$18.00/oz silver. Net cash unit costs are consistent with C1 cash costs. C1 cash costs for QB2 include stripping costs during operations. Net cash unit costs and C1 cash costs are non-GAAP financial measures. See "Non-GAAP Financial Measures" slides.
4. All-in sustaining costs (AISC) are calculated as C1 cash costs after by-product credits plus sustaining capital requirements. C1 cash costs are described above. AISC is a non-GAAP financial measure. See "Non-GAAP Financial Measures" slides.

## Slide 26: Vast, Long Life Deposit at QB

1. Resources figures as at November 30, 2018. Resources are reported separately from, and do not include that portion of resources classified as reserves. See "QB2 Reserves and Resources Comparison" slide for further details.

## Slide 27: QB3 – Long-Term Growth

1. DDH-756 @176.6m, Field of view 2cm.

## Slide 30: QB2 Project Economics Comparison

1. All metrics on 100% basis and assume US\$3.00/lb copper, US\$10.00/lb molybdenum and US\$18.00/oz silver unless otherwise stated. NPV, IRR and payback on after-tax basis.
2. Life of Mine annual average figures exclude the first and last partial years of operations.
3. Copper equivalent production calculated assuming US\$3.00/lb copper, US\$10.00/lb molybdenum and US\$18.00/oz silver without adjusting for payability.
4. C1 cash costs are presented after by-product credits assuming US\$10.00/lb molybdenum and US\$18.00/oz silver. Net cash unit costs are consistent with C1 cash costs. C1 cash costs for QB2 include stripping costs during operations. Net cash unit costs and C1 cash costs are non-GAAP financial measures. See "Non-GAAP Financial Measures" slides.
5. All-in sustaining costs (AISC) are calculated as C1 cash costs after by-product credits plus sustaining capital requirements. C1 cash costs are described above. AISC is a non-GAAP financial measure. See "Non-GAAP Financial Measures" slides.
6. Payback from first production.
7. Based on go-forward cash flow from January 1, 2017. Based on all equity funding structure.
8. Based on go-forward cash flow from January 1, 2019. Based on optimized funding structure.
9. Does not consider contingent consideration.
10. Includes impact of US\$2.5 billion project financing. Does not consider contingent consideration.
11. EBITDA is a non-GAAP financial measure. See "Non-GAAP Financial Measures" slides.

# Notes - Appendix: Quebrada Blanca

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## **Slide 31: QB2 Reserves and Resources Comparison**

1. Mineral reserves are constrained within an optimized pit shell and scheduled using a variable grade cut-off approach based on NSR cut-off US\$13.39/t over the planned life of mine. The life-of-mine strip ratio is 0.41.
2. Both mineral resource and mineral reserve estimates assume long-term commodity prices of US\$3.00/lb Cu, US\$9.40/lb Mo and US\$18.00/oz Ag and other assumptions that include: pit slope angles of 30–44°, variable metallurgical recoveries that average approximately 91% for Cu and 74% for Mo and operational costs supported by the Feasibility Study as revised and updated.
3. Mineral resources are reported using a NSR cut-off of US\$11.00/t and include 23.8 million tonnes of hypogene material grading 0.54% copper that has been mined and stockpiled during existing supergene operations.
4. Mineral reserves are constrained within an optimized pit shell and scheduled using a variable grade cut-off approach based on NSR cut-off US\$18.95/t over the planned life of mine. The life-of-mine strip ratio is 0.70.
5. Mineral resources are reported using a NSR cut-off of US\$11.00/t outside of the reserves pit. Mineral resources include inferred resources within the reserves pit at a US\$ 18.95/t NSR cut-off and also include 23.8 million tonnes of hypogene material grading 0.54% copper that has been mined and stockpiled during existing supergene operations.

## **Slide 33: Quebrada Blanca Accounting Treatment**

1. Sumitomo Metal Mining Co. Ltd. and Sumitomo Corporation are collectively referred to as Sumitomo.

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# Strategy and Overview

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# Consistent Long-Term Strategy

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Diversification

Long life assets

Low cost

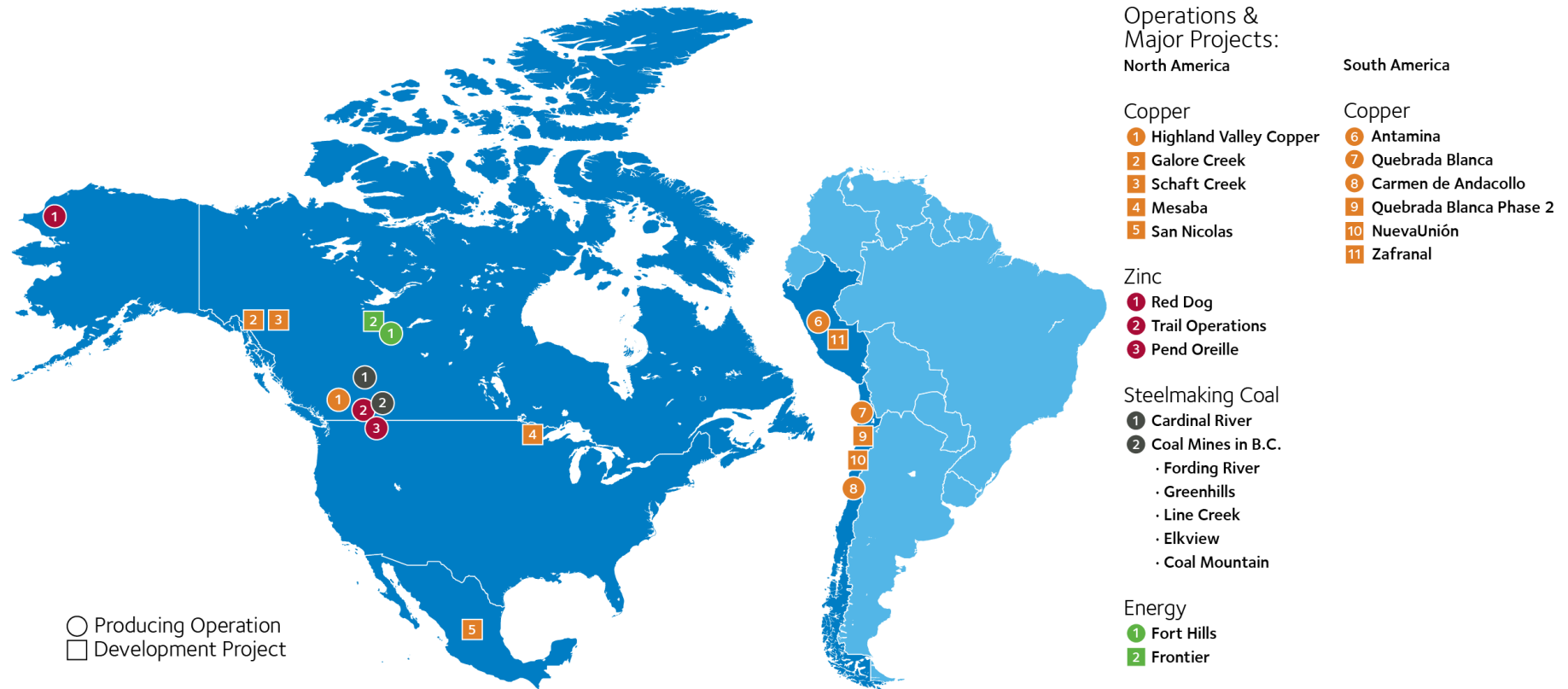
Appropriate scale

Low risk jurisdictions



# Attractive Portfolio of Long-Life Assets

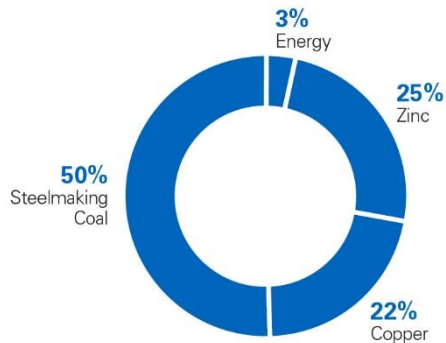
## Low risk jurisdictions



# Global Customer Base

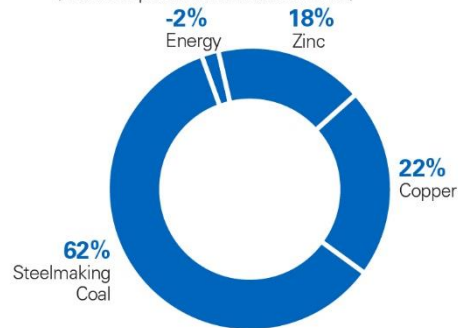
## Revenue contribution from diverse markets (2018)

2018 Revenue by Business Unit

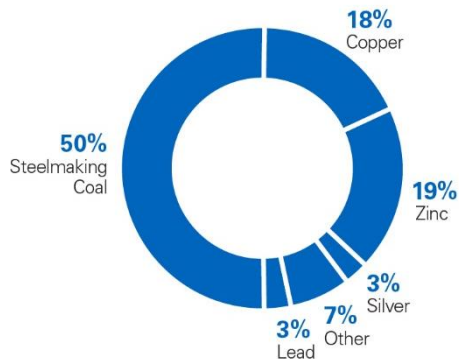


2018 Gross Profit by Business Unit<sup>1</sup>

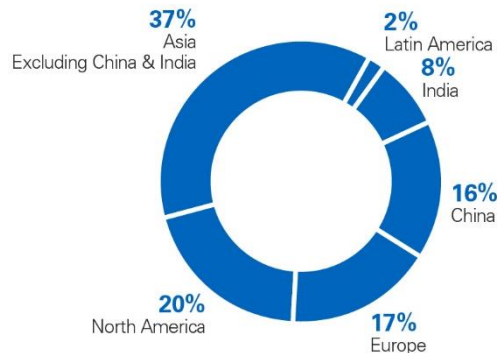
(Before depreciation and amortization)



2018 Revenue by Commodity



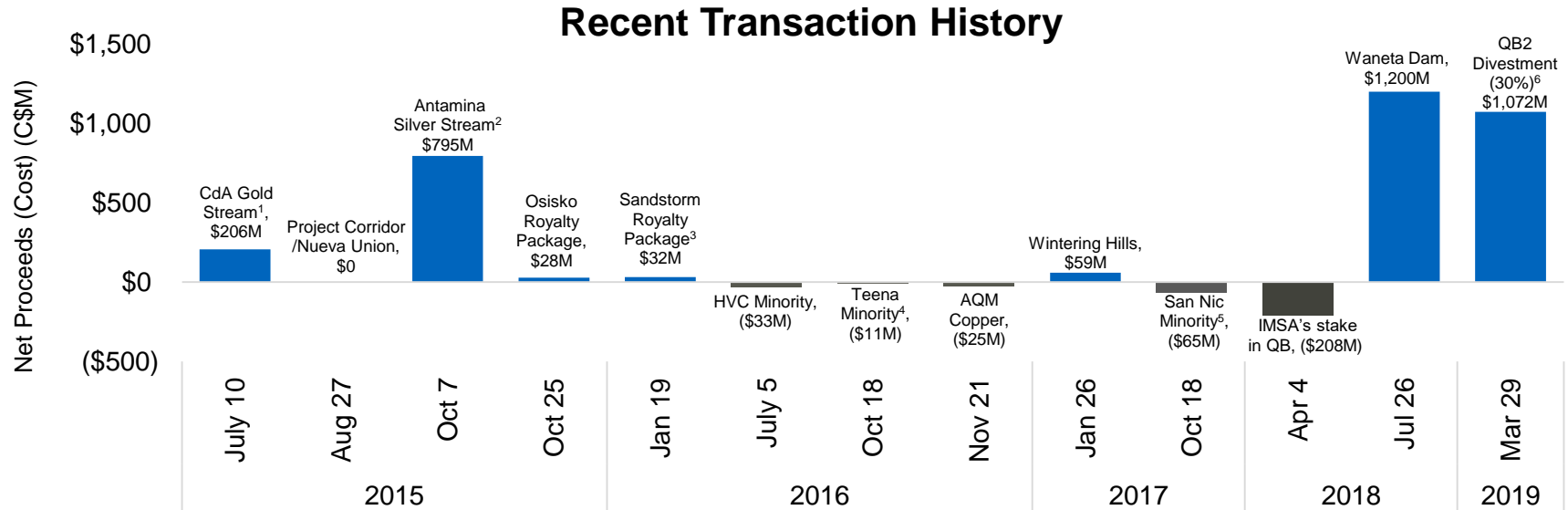
Customer Base



# Diverse Pipeline of Growth Options

	In Construction	Medium-Term Growth Options	Future Options
<b>Copper</b> Strong platform with substantial growth options	QB2	QB3	Galore Creek
	HVC D3 Project	Zafranal	Schaft Creek
		HVC Brownfield	Mesaba
		NuevaUnión	
		San Nicolás (Cu-Zn)	
<b>Zinc</b> Premier resource with integrated assets	Red Dog VIP2 Project	Antamina Brownfield	Teena
		Red Dog Satellite Deposits	Cirque
<b>Coal</b> Well established with capital efficient value options	Elk Valley Replacement Brownfield		Quintette/Mt. Duke
	Neptune Terminals Expansion		Coal Mountain 2
<b>Energy</b> Building a new business through partnership			Elk Valley Brownfield
		Fort Hills Debottlenecking & Expansion	Frontier
			Lease 421

# Disciplined Approach to M&A



## Total net proceeds of C\$3.1B:

- Balance sheet strengthened by divestment of non-core assets at high EBITDA<sup>7</sup> multiples
- Modest 'prudent housekeeping' acquisitions to consolidate control of attractive copper and zinc development assets
- Innovative NuevaUnión joint venture to create world scale development opportunity



# Production Guidance

		2018 Results	2019 Guidance <sup>1</sup>	3 Year (2020-2022) Guidance <sup>1</sup>
<b>Steelmaking Coal</b>		26.2 Mt	26.0-26.5 Mt	26.5-27.5 Mt
<b>Copper<sup>2,3,4,6</sup></b>				
Highland Valley	Concentrate	100.8 kt	115-120 kt	135-155 kt
Antamina	Concentrate	100.4 kt	95-100 kt	90-95 kt
Carmen de Andecollo	Concentrate + Cathode	67.2 kt	62-67 kt	60 kt
Quebrada Blanca	Cathode	25.5 kt	20-23 kt	-
Total Copper	Concentrate + Cathode	293.9 kt	290-310 kt	285-305 kt
<b>Zinc<sup>2,3,5</sup></b>				
Red Dog	Concentrate	583.2 kt	535-555 kt	500-520 kt
Antamina	Concentrate	92.1 kt	65-70 kt	100-110 kt
Pend Oreille	Concentrate	29.7 kt	20-30 kt	-
Total Zinc	Concentrate	705 kt	620-650 kt	600-630 kt
<b>Refined Zinc - Trail</b>	Refined	302.9 kt	305-310 kt	310-315 kt
<b>Bitumen - Fort Hills<sup>3,7,8</sup></b>		6.8 Mbbl	12-14 Mbbl	14 Mbbl
<b>Lead - Red Dog<sup>2</sup></b>	Concentrate	98.4 kt	85-90 kt	85-100 kt
<b>Refined Lead - Trail</b>	Refined	61 kt	70-75 kt	85-95 kt
<b>Molybdenum<sup>2,3</sup></b>				
Highland Valley	Concentrate	8.7 Mlbs	6.0 Mlbs	4.0-5.0 Mlbs
Antamina	Concentrate	2.3 Mlbs	2.0 Mlbs	2.0-3.0 Mlbs
Total Molybdenum	Concentrate	11.0 Mlbs	8.0 Mlbs	6.0-8.0 Mlbs
<b>Refined Silver - Trail</b>	Refined	11.6 Moz	13-14 Moz	-

# Sales and Unit Cost Guidance

Sales	Q1 2019 Results	Q2 2019 Guidance <sup>1</sup>
<b>Steelmaking Coal</b>	6.2 Mt	6.4-6.6 Mt
<b>Zinc</b>		
Red Dog – Zinc in Concentrate	131 kt	80-85 kt

Unit Costs	2018 Results	2019 Guidance <sup>1</sup>
<b>Steelmaking Coal</b>		
Adjusted site cost of sales <sup>2</sup>	C\$62/t	C\$62-65/t
Transportation costs <sup>2</sup>	C\$37/t	C\$37-39/t
Unit costs <sup>2</sup>	C\$99/t	C\$99-104/t
<b>Copper</b>		
Total cash unit costs <sup>3</sup>	US\$1.74/lb	US\$1.70-1.80/lb
Net cash unit costs <sup>3</sup>	US\$1.23/lb	US\$1.45-1.55/lb
<b>Zinc</b>		
Total cash unit costs <sup>4</sup>	US\$0.49/lb	US\$0.50-0.55/lb
Net cash unit costs <sup>4</sup>	US\$0.31/lb	US\$0.35-0.40/lb
<b>Bitumen</b>		
Adjusted operating costs <sup>5</sup>	C\$32.89/bbl	C\$26-29/bbl

# Capital Expenditures Guidance

## Sustaining, Major Enhancement, New Mine Development

(Teck's share in CAD\$ millions)	2018	2019 Guidance <sup>1</sup>
<b>Sustaining</b>		
Steelmaking coal <sup>2</sup>	\$ 232	\$ 540
Copper	157	240
Zinc	225	170
Energy	21	60
Corporate	10	5
	\$ 645	\$ 1,015
<b>Major Enhancement</b>		
Steelmaking coal <sup>2</sup>	\$ 230	\$ 410
Copper	62	70
Zinc	107	60
Energy	69	100
	\$ 468	\$ 640
<b>New Mine Development</b>		
Copper <sup>3</sup>	\$ 56	\$ 130
Zinc	38	30
Energy	285	30
	\$ 379	\$ 190
<b>Sub-total</b>		
Steelmaking coal <sup>2</sup>	\$ 462	\$ 950
Copper <sup>3</sup>	275	440
Zinc	370	260
Energy	375	190
Corporate	10	5
	\$ 1,492	\$ 1,845

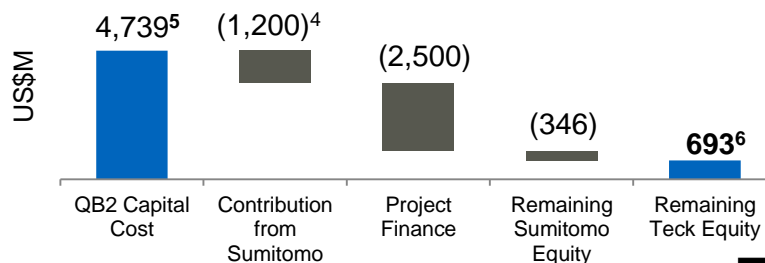
## Quebrada Blanca 2

(Teck's share in CAD\$ millions)	2018	2019 Guidance <sup>1</sup>
<b>QB2 Capital Expenditures</b>	\$ 414	\$ 1,930
Total capex, before SMM/SC contribution	\$ 1,906	\$ 3,775
Estimated SMM/SC contributions <sup>4</sup>	-	(1,585)
Total Teck spend	\$ 1,906	\$ 2,190

## Capitalized Stripping

(Teck's share in CAD\$ millions)	2018	2019 Guidance <sup>1</sup>
<b>Capitalized Stripping</b>		
Steelmaking coal	\$ 507	\$ 410
Copper	161	175
Zinc	39	45
	\$ 707	\$ 630

## QB2 Capital Costs Before Escalation<sup>5</sup>



# Commodity Price Leverage<sup>1</sup>

	Mid-Point of 2019 Production Guidance <sup>2</sup>	Change	Estimated Effect on Annualized Profit <sup>3</sup>	Estimated Effect on Annualized EBITDA <sup>3</sup>
\$C/\$US		C\$0.01	C\$51M /\$0.01Δ	C\$80M /\$0.01Δ
Coal	26.25 Mt	US\$1/tonne	C\$20M /\$1Δ	C\$31M /\$1Δ
Copper	300 kt	US\$0.01/lb	C\$5M /\$0.01Δ	C\$8M /\$0.01Δ
Zinc <sup>4</sup>	942.5 kt	US\$0.01/lb	C\$10M /\$0.01Δ	C\$13M /\$0.01Δ
WCS <sup>5</sup>	13 Mbbl	US\$1/bbl	C\$12M /\$1Δ	C\$17M /\$1Δ
WTI <sup>6</sup>	-	US\$1/bbl	C\$9M /\$1Δ	C\$12M /\$1Δ

# Tax-Efficient Earnings in Canada

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## **~\$3.8 billion in available tax pools<sup>1</sup>, including:**

- \$2.9 billion in net operating loss carryforwards
- \$0.7 billion in Canadian Development Expenses (30% declining balance p.a.)
- \$0.2 billion in allowable capital loss carryforwards

## **Applies to:**

- Cash income taxes in Canada

## **Does not apply to:**

- Resource taxes in Canada
- Cash taxes in foreign jurisdictions



# Share Structure & Principal Shareholders

## Teck Resources Limited<sup>1</sup>

	<u>Shares Held</u>	<u>Percent</u>	<u>Voting Rights</u>
<b>Class A Shareholdings</b>			
Temagami Mining Company Limited	4,300,000	55.4%	32.1%
SMM Resources Inc (Sumitomo)	1,469,000	18.9%	11.0%
Other	1,999,304	25.7%	14.9%
	<u>7,768,304</u>	<u>100.0%</u>	<u>58.0%</u>
<b>Class B Shareholdings</b>			
Temagami Mining Company Limited	725,000	0.1%	0.1%
SMM Resources Inc (Sumitomo)	295,800	0.1%	0.0%
China Investment Corporation (Fullbloom)	59,304,474	10.5%	4.4%
Other	501,972,680	89.3%	37.5%
	<u>562,297,954</u>	<u>100.0%</u>	<u>42.0%</u>
<b>Total Shareholdings</b>			
Temagami Mining Company Limited	5,025,000	0.9%	32.2%
SMM Resources Inc (Sumitomo)	1,764,800	0.3%	11.0%
China Investment Corporation (Fullbloom)	59,304,474	10.4%	4.4%
Other	503,971,984	88.4%	52.4%
	<u>570,066,258</u>	<u>100.0%</u>	<u>100.0%</u>

# Notes: Appendix – Strategy and Overview

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## **Slide 41: Global Customer Base**

1. Gross profit before depreciation and amortization is a non-GAAP financial measure. See “Non-GAAP Financial Measures” slides.

## **Slide 43: Disciplined Approach to M&A**

1. Carmen de Andacollo gold stream transaction occurred in USD at US\$162 million.
2. Antamina silver stream transaction occurred in USD at US\$610 million.
3. Sandstorm royalty transaction occurred in USD at US\$22 million.
4. Teena transaction occurred in AUD at A\$10.6 million.
5. San Nicolás transaction occurred in USD at US\$50 million.
6. QB2 Partnership (sale of 30% interest of project to Sumitomo; SMM and SC) for total consideration of US\$1.2 billion, including US\$800 million earn-in and US\$400 million matching contribution; converted at FX of 1.34 on March 29, 2019
7. EBITDA is a non-GAAP financial measure. See “Non-GAAP Financial Measures” slides.

## **Slide 44: Production Guidance**

1. As at April 22, 2019. See Teck's Q1 2019 press release.
2. Metal contained in concentrate.
3. We include 100% of production and sales from our Quebrada Blanca and Carmen de Andacollo mines in our production and sales volumes because we fully consolidate their results in our financial statements. We include 22.5% and 21.3% of production and sales from Antamina and Fort Hills, respectively, representing our proportionate ownership interest in these operations.
4. Copper production includes cathode production at Quebrada Blanca and Carmen de Andacollo.
5. Total zinc includes co-product zinc production from our copper business unit.
6. Excludes production from QB2 for three-year guidance 2020–2022.
7. Results for 2018 are effective from June 1, 2018.
8. The 2020–2022 bitumen production guidance does not include potential near-term debottlenecking opportunities. See energy business unit in Q4 2018 press release for more information.

## **Slide 45: Sales and Unit Cost Guidance**

1. As at April 22, 2019. See Teck's Q1 2019 press release.
2. Steelmaking coal unit costs are reported in Canadian dollars per tonne. Adjusted site cost of sales includes site costs, transport costs, and other and does not include deferred stripping or capital expenditures. Adjusted site cost of sales is a non-GAAP financial measure. See “Non-GAAP Financial Measures” slides.
3. Copper unit costs are reported in U.S. dollars per payable pound of metal contained in concentrate. Total cash unit costs are before co- and by-product margins. Copper net cash costs are after by-product margins and include adjusted cash cost of sales, smelter processing charges and cash margin for by-products including co-products. Assumes a zinc price of US\$1.30 per pound, a molybdenum price of US\$12 per pound, a silver price of US\$16.00 per ounce, a gold price of US\$1,250 per ounce and a Canadian/U.S. dollar exchange rate of \$1.30. See “Non-GAAP Financial Measures” slides.
4. Zinc unit costs are reported in U.S. dollars per payable pound of metal contained in concentrate. Total cash unit costs are before co- and by-product margins. Zinc net cash costs are after by-product margins and are mine costs including adjusted cash cost of sales, smelter processing charges and cash margin for by-products. Assumes a lead price of US\$1.00 per pound, a silver price of US\$16.00 per ounce and a Canadian/U.S. dollar exchange rate of \$1.30. By-products include both by-products and co-products. See “Non-GAAP Financial Measures” slides.
5. Bitumen unit costs are reported in Canadian dollars per barrel. Adjusted operating costs represent costs for the Fort Hills mining and processing operations and do not include the cost of diluent, transportation, storage and blending. See “Non-GAAP Financial Measures” slides.

# Notes: Appendix - Strategy and Overview

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## **Slide 46: Capital Expenditures Guidance**

1. As at April 22, 2019. See Teck's Q1 2019 press release.
2. For steelmaking coal, sustaining capital includes Teck's share of water treatment charges of \$57 million in 2018. Sustaining capital guidance includes Teck's share of water treatment charges related to the Elk Valley Water Quality Plan, which are approximately \$235 million in 2019. Steelmaking coal major enhancement capital guidance includes \$175 million relating to the facility upgrade at Neptune Bulk Terminals that will be funded by Teck.
3. For copper, new mine development guidance for 2019 includes QB3 scoping, Zafranal, San Nicolás and Galore Creek.
4. Total estimated SMM and SC contributions are \$1.77 billion. The difference will be in cash at December 31, 2019. Total estimated contributions are US\$1.2 billion as disclosed and US\$142 million for their share of expenditures from January 1, 2019 to March 31, 2019.
5. On a 100% go forward basis from January 1, 2019 in constant Q2 2017 dollars and a CLP:USD exchange rate of 625, not including escalation (estimated at US\$300 - \$470 million based on 2 - 3% per annum inflation), working capital or interest during construction. Includes approximately US\$500 million in contingency. At a spot CLP/USD rate of approximately 675 capital would be reduced by approximately US\$270 million
6. On a go forward basis from January 1, 2019. Assumes US\$2.5 billion in project finance loans without deduction of fees and interest during construction, and US\$1.2 billion contribution from Sumitomo.

## **Slide 47: Commodity Price Leverage**

1. As at April 22, 2019. Before pricing adjustments, based on our current balance sheet, our expected 2019 mid-range production estimates, current commodity prices and a Canadian/U.S. dollar exchange rate of \$1.32. See Teck's Q1 2019 press release.
2. All production estimates are subject to change based on market and operating conditions.
3. The effect on our profit attributable to shareholders and on EBITDA of commodity price and exchange rate movements will vary from quarter to quarter depending on sales volumes. Our estimate of the sensitivity of profit and EBITDA to changes in the U.S. dollar exchange rate is sensitive to commodity price assumptions. EBITDA is a non-GAAP financial measure. See "Non-GAAP Financial Measures" slides.
4. Zinc includes 307,500 tonnes of refined zinc and 635,000 tonnes of zinc contained in concentrate.
5. Bitumen volumes from our energy business unit.
6. Our WTI oil price sensitivity takes into account our interest in Fort Hills for respective change in revenue, partially offset by the effect of the change in diluent purchase costs as well as the effect on the change in operating costs across our business units, as our operations use a significant amount of diesel fuel.

## **Slide 48: Tax-Efficient Earnings In Canada**

1. As at December 31, 2018.

## **Slide 49: Share Structure & Principal Shareholders**

1. As at December 31, 2018.



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# Sustainability

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# Sustainability Strategy

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- Strong sustainability performance enabled by a strategy built around developing opportunities and managing risks
- Implementing a sustainability strategy with short-term, five-year goals and long-term goals stretching out to 2030

*Goals cover the six areas of focus representing the most significant sustainability issues and opportunities facing our company:*



Community



Water



Our People



Biodiversity









Energy and  
Climate Change



Air

# Teck's Performance on Top ESG Ratings

ESG Evaluation	Teck's Performance
	<ul style="list-style-type: none"><li>• Named to 2019 Global 100 Most Sustainable Corporations list by Corporate Knights</li><li>• Ranked 37<sup>th</sup> globally; only mining company listed</li></ul>
 MEMBER OF Dow Jones Sustainability Indices In Collaboration with RobecoSAM	<ul style="list-style-type: none"><li>• 2nd in metals and mining universe out of ~60 companies.</li></ul>
	<ul style="list-style-type: none"><li>• “A” rating since 2013 (scale of CCC – AAA)</li><li>• Outperforming all 10 of our largest industry peers identified by MSCI</li></ul>
	<ul style="list-style-type: none"><li>• 2nd out of 83 companies in mining &amp; metals category</li></ul>
	<ul style="list-style-type: none"><li>• Environment and Social Scores in top 10% out of all industries</li></ul>
	<ul style="list-style-type: none"><li>• Percentile rank of 91% in mining and metals industry</li><li>• Listed on FTSE4Good Index Series</li></ul>

# Why Sustainability Matters

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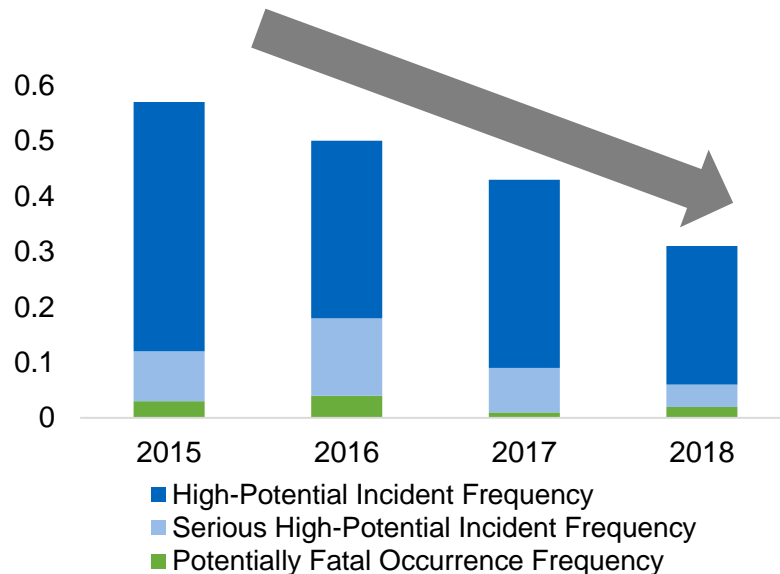
## Driving Growth and Managing Risk

- Reduced risk of operations disruption
- Efficient project and permit approvals
- Meet rising supply chain and societal expectations
- Employee retention and recruitment
- Increased access to capital at a lower cost
- Increased cost savings and productivity
- Higher financial returns
- Brand value and reputation

# Health and Safety Performance

- Safety performance in 2018
  - 28% reduction in High-Potential Incidents
  - 21% decrease in Lost-Time Injury Frequency
- Conducted Courageous Safety Leadership training with 97% of employees
- Two fatalities in 2018: one at Fording River Operations and one at Elkview Operations. Carried out in-depth investigations into the incidents to learn as much as possible and implement measures to prevent a reoccurrence

Incident Frequency  
(per 200,000 hours worked)



62% reduction in High-Potential Incident Frequency rate over past four years

# Leading Practices in Tailings Management

## Transparency

- Details on all tailings facilities available online
- Dam Safety Inspections publically available on our website

## Collaboration

- Actively engaged on the International Council on Mining and Metals (ICMM) Tailings Position Statement and Governance Framework
- Participant in ICMM's leadership work on an aspirational goal of reducing reliance on conventional tailings practices

### Teck Tailings Facility Inventory

The below table provides additional detail on each tailings facility with dam(s) managed by Teck at both our active operations and legacy sites. Not included below are 16 unsaturated/dry-stack tailings facilities and two in-pit tailings facilities located at our steelmaking coal operations.

Mine Operation	Tailings Facility	Construction Method	Consequence Classification	Status	Number of Tailings Dams Structures	Most Recent Dam Safety Inspection	Independent Review Board
<b>Active operations</b>							
Carmen de Andacollo Chile	Embalse de Relaves Carmen de Andacollo	Downstream	Very High	Active	5	2018	Yes
Duck Pond Canada	Duck Pond Tailings Management Facility	Single Stage	Low	Closed	2	2018	No
Elkview Canada	Lagoon A	Single Stage	Low	Closed	1	2018	Yes
	Lagoon B	Single Stage	Low	Closed	1	2018	Yes
	Lagoon C	Upstream/ Downstream	High	Closed	1	2018	Yes
	Lagoon D	Upstream	Very High	Active	1	2018	Yes
Fording River Canada	West Fork Tailings Facility	Single Stage	Low	Active	1	2018	Yes
	North Tailings Pond	Downstream	Very High	Closed	1	2018	Yes
	South Tailings Pond	Downstream	Very High	Active	2	2018	Yes
Greenhills	Turnbull Pit South Tailings Storage Facility	N/A	High	Active	1	2018	Yes
	2 Pit - 3 Pit Tailings Disposal Area	Centrelined	Low	Closed	2	2018	Yes
Greenhills	Tailings Storage	Downstream	High	Active	2	2018	Yes

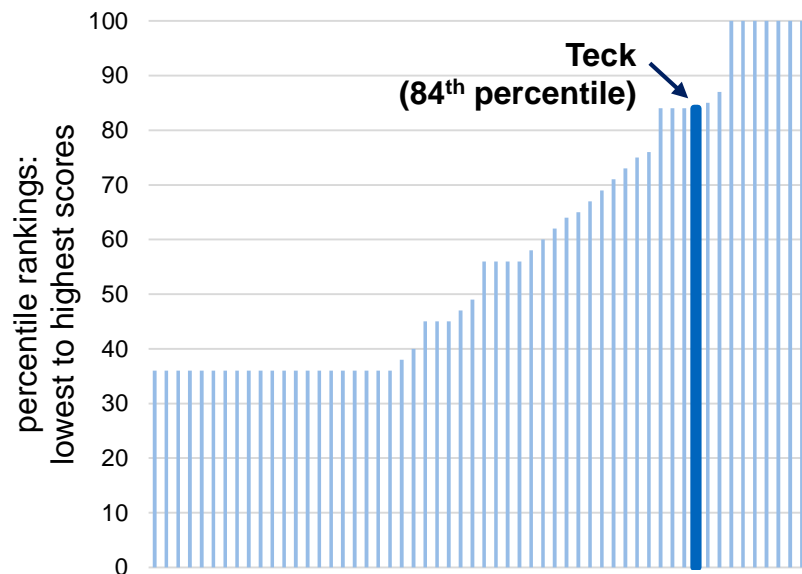
Full table and additional information available at [www.teck.com/tailings](http://www.teck.com/tailings)

# Reducing Freshwater Use

- Water recycled average of **3 times** at mining operations in 2018
- Target to **reduce freshwater use** at Chilean operations by 15% by 2020
- Desalinated seawater for Quebrada Blanca 2 project **in place of freshwater**; 26.5 million m<sup>3</sup> per year

Teck in top 10 of 50+ companies ranked by DJSI

DJSI Water Related Risks Assessment: 2018  
Percentile Rankings<sup>2</sup>



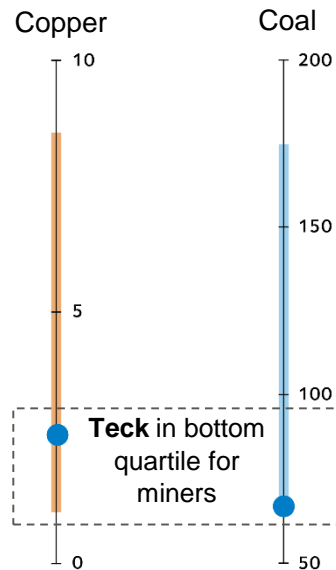
Related SASB<sup>1</sup> Metric: EM-MM-140a.1 | [Link to Data](#)

# Low Cost, Low Carbon Producer

- Among world's **lowest GHG intensity for steelmaking coal and copper** production
- Fort Hills – one of the **lowest carbon intensities** among North American oil sands producers on a wells-to-wheels basis
- **Progressive carbon pricing** already built into majority of business
- **Well-positioned** for a low-carbon economy

## GHG Emissions Intensity Ranges Among ICMM Members<sup>1</sup>

kgCO<sub>2</sub>e per tonne of product

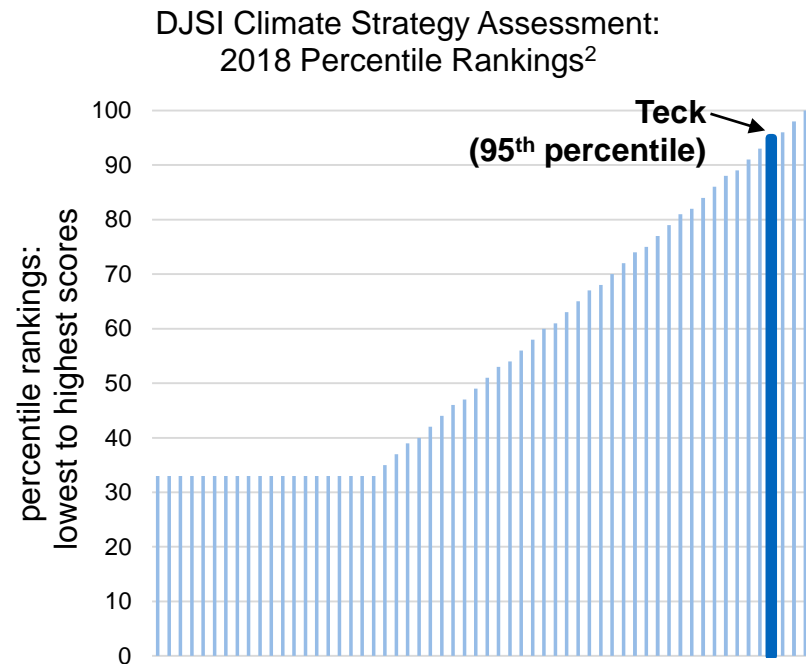




# Taking Action on Climate Change

- Goal to reduce GHG emissions by **450,000 tonnes by 2030** and have already reduced **289,000 tonnes of emissions** as a result of projects implemented since 2011
- Advocating for climate action – member of **Carbon Pricing Leadership Coalition**
- Releasing second **Climate Action and Portfolio Resilience** report in 2019, which is structured to align with the recommendations from the **Task Force on Climate Related Financial Disclosure**

Teck in top 5 of 50+ companies ranked by DJSI



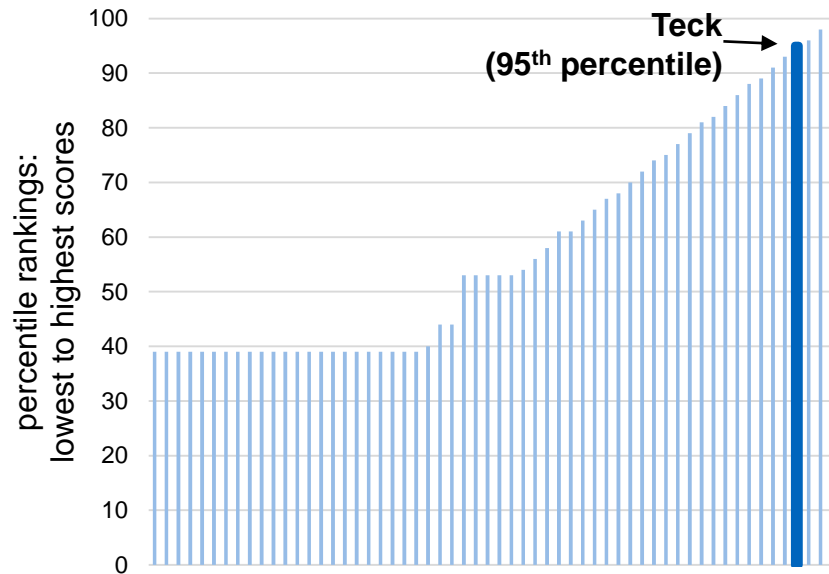
Related SASB<sup>1</sup> Metric: EM-MM-110a.2 | [Link to Data](#)

# Lower-Risk Jurisdictions, Comprehensive Assessments

- All operations in countries with **well-developed mining industries**: Canada, United States, Chile, Peru
- Robust **regulatory regimes and rule of law** in place
- **Strong foundation** for protection of human rights
- Human rights **assessments conducted at all operations in 2018**

Teck in top 5 of 50+ companies ranked by DJSI

DJSI Human Rights Assessment:  
2018 Percentile Rankings<sup>2</sup>



Related SASB<sup>1</sup> Metric: EM-MM-210b.1 | [Link to Data](#)

# Strengthening Relationships with Indigenous Peoples

- Agreements in place at [all mining operations](#) within or adjacent to Indigenous Peoples' territories
- Achieved agreements with all [Indigenous Communities](#) near the QB2 project
- Achieved agreements with 14 out of 14 potentially affected [Indigenous groups near our Frontier project](#)
- Working with UN Women in Chile to [advance economic opportunities for Indigenous women](#)



Related SASB<sup>1</sup> Metric: EM-MM-210a.3 | [Link to Data](#)

# Employee Relations and Diversity

- 57% of our employees are unionized and there were **zero strikes in 2018**
- Collective agreements at **Quebrada Blanca, Line Creek and Carmen de Andacollo** operations set to expire in 2019; collective agreement at Antamina currently expired
- Focused on strengthening diversity, with women making up **26% of new hires** in 2018
- In 2018, **9% of total hires self-identified as Indigenous** from our Red Dog, Highland Valley Copper and steelmaking coal operations in the Elk Valley



# Collective Agreements

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Operation	Expiry Dates
Antamina	July 31, 2018
Quebrada Blanca	November 30, 2019
	January 31, 2022
	March 31, 2022
Line Creek	May 31, 2019
Carmen de Andacollo	September 30, 2019
	December 31, 2019
Elkview	October 31, 2020
Fording River	April 30, 2021
Highland Valley Copper	September 30, 2021
Trail Operations	May 31, 2022
Cardinal River	June 30, 2022

# Notes: Sustainability

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## **Slide 58: Reducing Freshwater Use**

1. Sustainability Accounting Standards Board Standards. <https://www.sasb.org/>
2. SAM Corporate Sustainability Assessment 2018.

## **Slide 59: Low Cost, Low Carbon Producer**

1. The cost of carbon pricing: competitiveness implications for the mining and metals industry. ICMM.

## **Slide 60: Taking Action on Climate Change**

1. Sustainability Accounting Standards Board Standards. <https://www.sasb.org/>
2. SAM Corporate Sustainability Assessment 2018.

## **Slide 61: Lower-Risk Jurisdictions, Comprehensive Assessments**

1. Sustainability Accounting Standards Board Standards. <https://www.sasb.org/>
2. SAM Corporate Sustainability Assessment 2018.

## **Slide 62: Strengthening Relationships with Indigenous Peoples**

1. Sustainability Accounting Standards Board Standards. <https://www.sasb.org/>

## **Slide 63: Employee Relations and Diversity**

1. Sustainability Accounting Standards Board Standards. <https://www.sasb.org/>

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# Innovation

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**Teck**

# Changing Landscape in the Mining Sector



While **technology has been a driving force of improvement in mining**, the basic operating system has remained unchanged for decades



In most industries, **companies that move slowly to seize digital and analytics opportunities are falling behind** or even disappearing



With the **expansion in analytics, automation and digital tools**, we can **now transform mining**, adopt a manufacturing model to unlock significant value and competitive advantage

Teck is pursuing a **transformation of our business – called RACE21™** with some elements already underway



# Teck is Actively Pursuing a Transformation Of Our Business Through Technology

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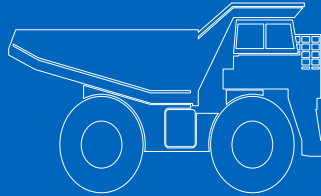
## RACE21™

### Renew



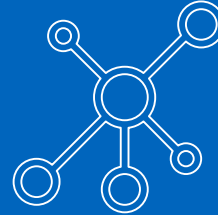
Modernize Teck's  
technology  
foundation

### Automate



Accelerate and  
scale autonomy  
program

### Connect



Develop  
digital platform  
for sensing and  
analytics

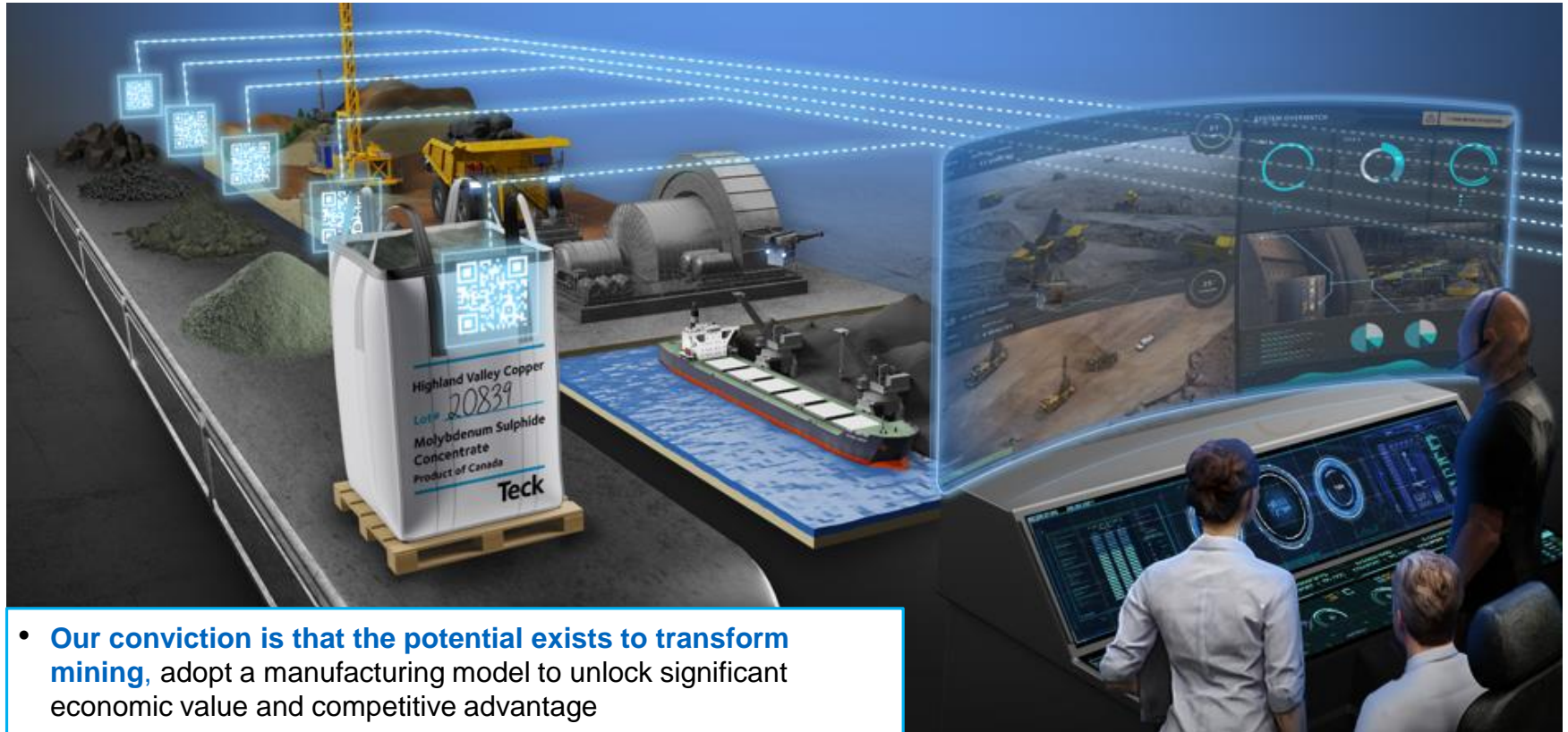
### Empower



Design future  
operating model  
to empower our  
employees

# RACE21™

## Moving to a manufacturing model



- **Our conviction is that the potential exists to transform mining**, adopt a manufacturing model to unlock significant economic value and competitive advantage

# Why Pursue a Technology Transformation?

Technology leadership could create multiple opportunities



## INTERNALLY

A new operating model and capabilities to extract more value from the long-life resources Teck owns for a more sustainable future



## WITHIN THE INDUSTRY

A source of strategic advantage to identify undervalued assets, and attract the best partners



## BEYOND THE MINING INDUSTRY

We could leverage our capabilities to explore opportunities in the broader global innovation ecosystem

# Significant Value To Be Captured

## Safety



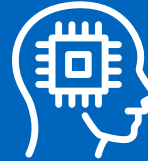
Transformational safety impact with fewer people in high risk environments

## Profitability



Step-change impact to profitability

## Productivity



Increased productivity through new technologies and internal innovation

## Cost



Reduced operational costs by achieving manufacturing levels of variability

**Example value capture areas:** Autonomy, Integrated Operations, Advanced Analytics, Real Time Data Systems

**A SUSTAINABLE FUTURE**

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# Steelmaking Coal Business Unit & Markets

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# Steelmaking Coal Facts

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Global Coal Production<sup>1</sup>:  
7.5 billion tonnes

Steelmaking Coal Production<sup>2</sup>:  
~1,140 million tonnes

Export Steelmaking Coal<sup>2</sup>:  
~330 million tonnes

Seaborne Steelmaking Coal<sup>2</sup>:  
~290 million tonnes

**Our Market - Seaborne Hard Coking Coal<sup>2</sup>:**  
**~200 million tonnes**

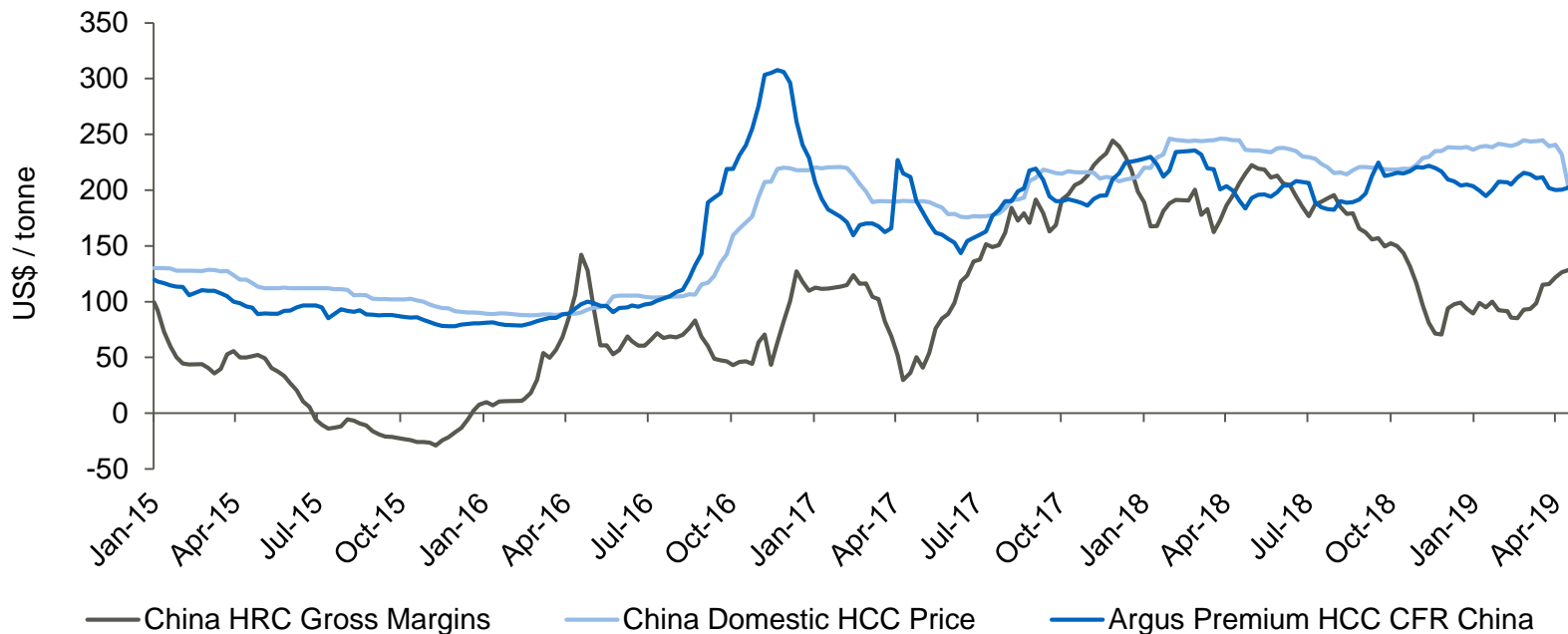


- ~0.7 tonnes of steelmaking coal is used to produce each tonne of steel<sup>3</sup>
- Up to 100 tonnes of steelmaking coal is required to produce the steel in the average wind turbine<sup>4</sup>

# Strong Chinese Steel Margins

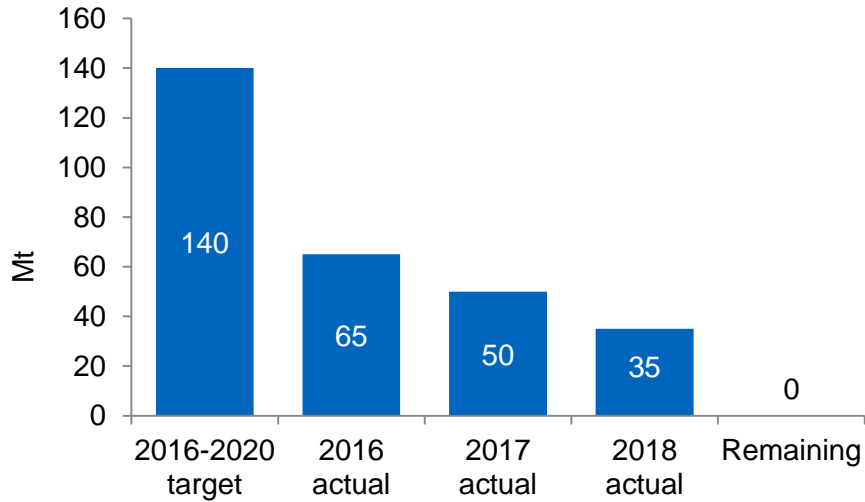
Support steelmaking coal prices

## China Hot Rolled Coil (HRC) Margins and Steelmaking Coal (HCC) Prices<sup>1</sup>

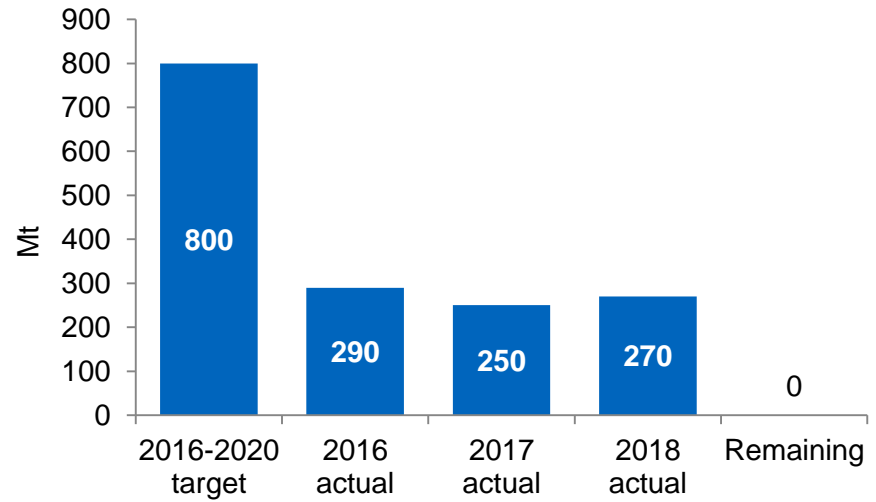


# Capacity Reductions in China Support Pricing

## Steel Capacity Reduction Achieved<sup>1</sup>



## Coal Capacity Reduction Achieved<sup>1</sup>



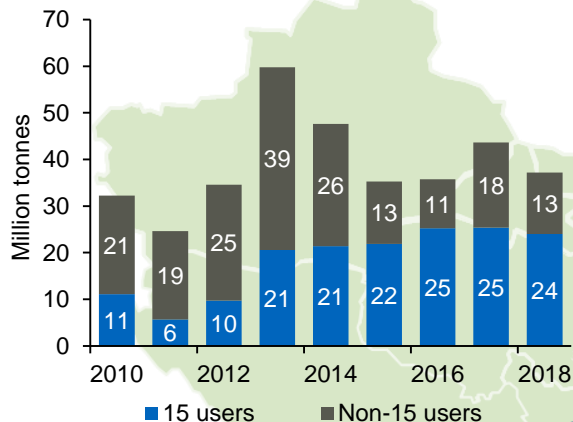
- Steel: Profitable steel industry supports raw materials pricing
- Coal: Capacity reductions support seaborne imports



# Large Users in China Increasing Imports

~2/3 of China crude steel produced on coast; projects support imports

## Seaborne Coking Coal Imports<sup>1</sup>



### **Liusteel Fangcheng Project**

- Greenfield project
- Capacity: Phase 1 crude steel ~10 Mt
- Status: Construction started in 2017

### **Baowu Zhanjiang Plant**

- Expansion
- Capacity: crude steel 3.6 Mt (phase 2)
- Status: Construction started in 2019

### **Zongheng Fengnan Project**

- Inland plant relocating to coastal area
- Capacity: crude steel 8 Mt
- Status: Construction started in 2017; completion in 2021

### **HBIS Laoting Project**

- Inland plant relocating to coastal area
- Capacity: crude steel 20 Mt
- Status: Construction started in 2017; completion in 2020

### **Shougang Jingtang Plant**

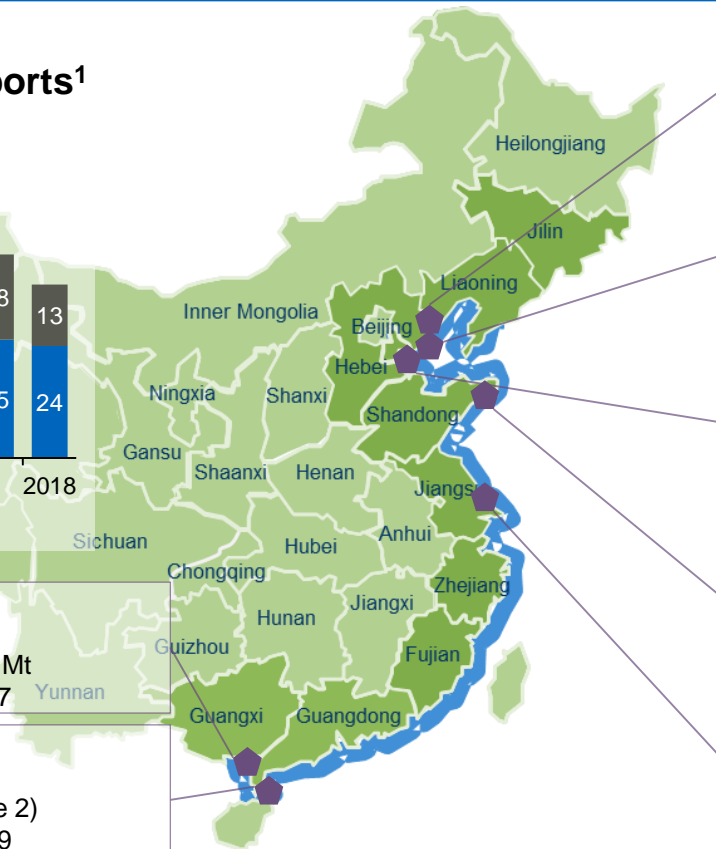
- Expansion
- Capacity: crude steel 9.4 Mt (phase 2)
- Status: Construction started in 2015; completion in H1 2019

### **Shandong Steel Rizhao Project**

- Greenfield project
- Capacity: crude steel 8.5 Mt
- Status: Construction started in 2015; BF #1 completed in 2017; BF #2 completion in 2019

### **Baowu Yancheng Project**

- Inland plant relocating to coastal area
- Capacity: crude steel 20 Mt
- Status: Construction to start in 2019

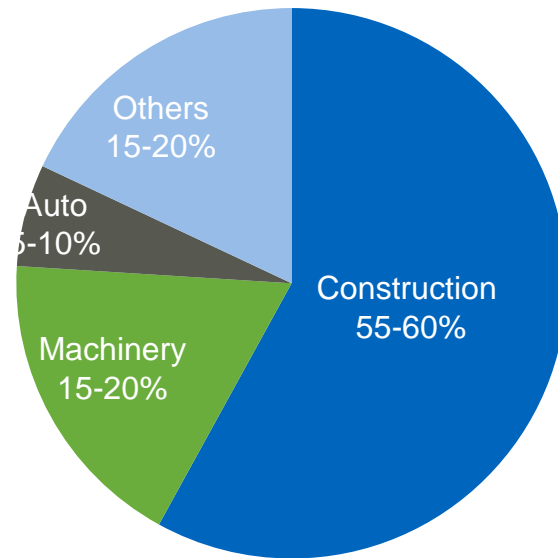
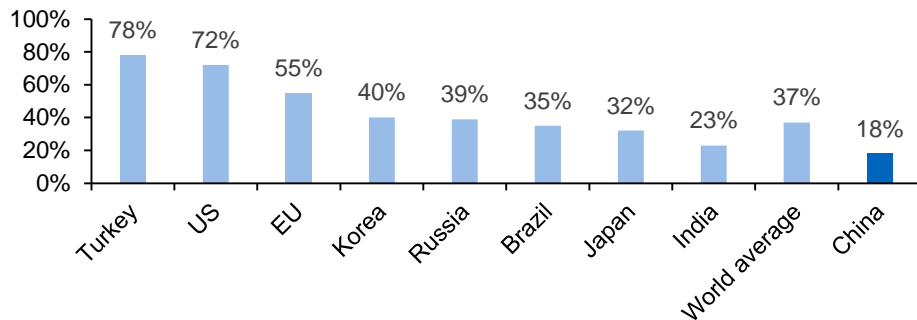


# Chinese Scrap Use to Increase Slowly

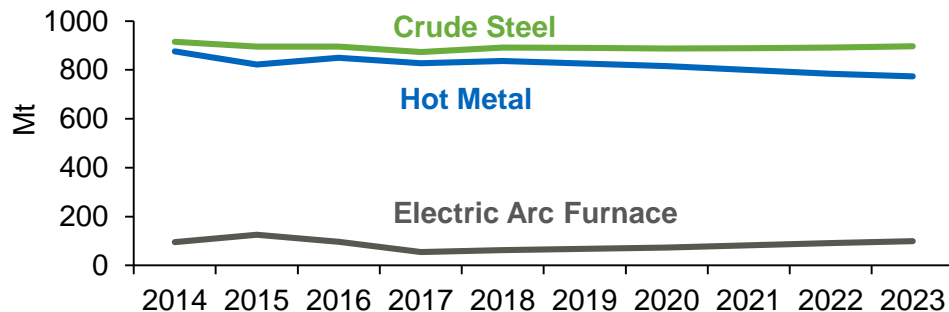
EAF share in crude steel production to recover only to 2016's level

China's Scrap Ratio was ~1/2 of World Average in 2017<sup>1</sup>

China Steel Use By Sector (2000-2017)<sup>2</sup>



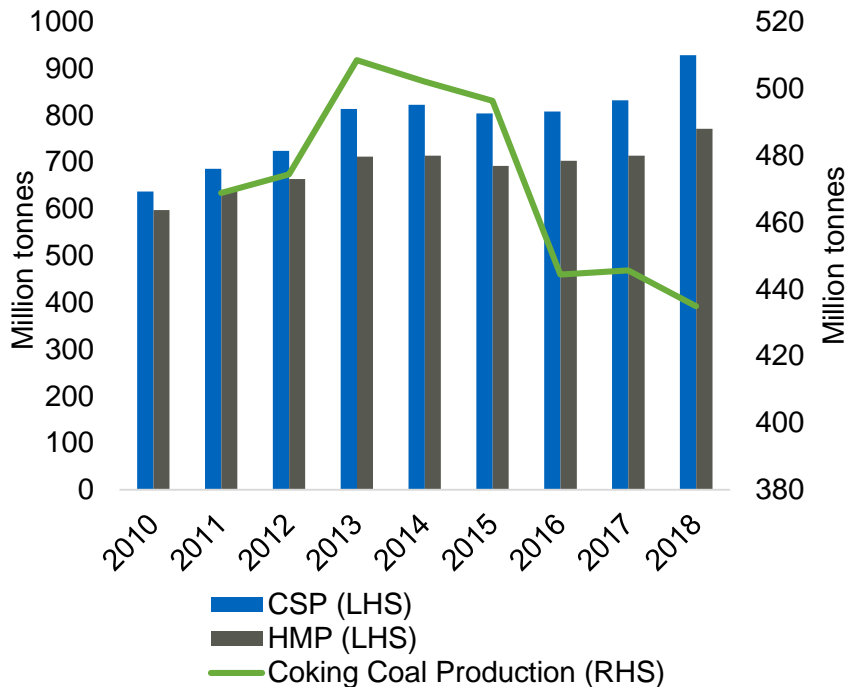
Crude Steel and Electric Arc Furnace Production<sup>3</sup>



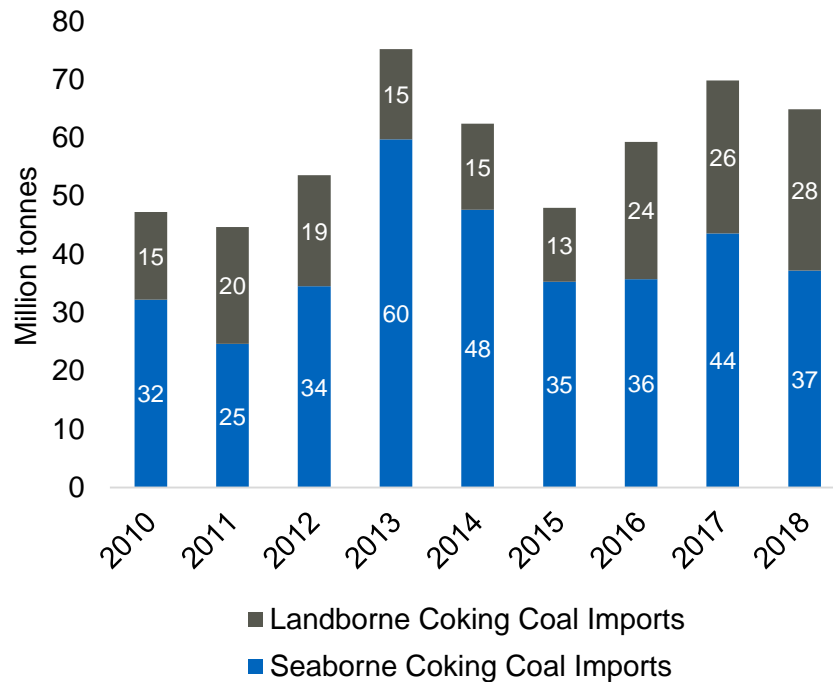
# Chinese Steelmaking Coal Imports

Seaborne Q1 2019 imports up by +2 Mt

**Chinese Crude Steel Production (CSP), Hot Metal Production (HMP) and Coal Production<sup>1</sup>**



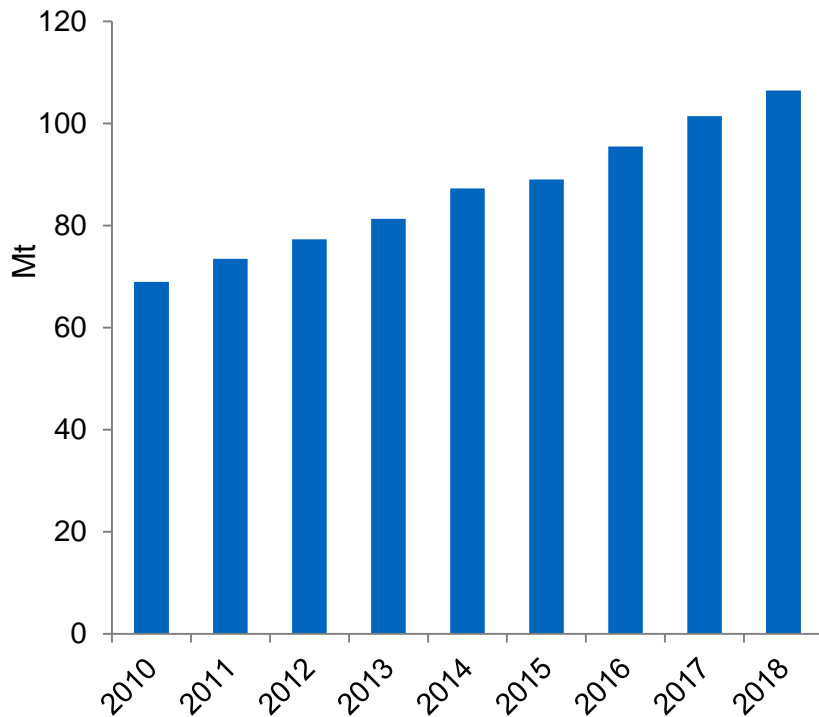
**Chinese Coking Coal Imports<sup>2</sup>**



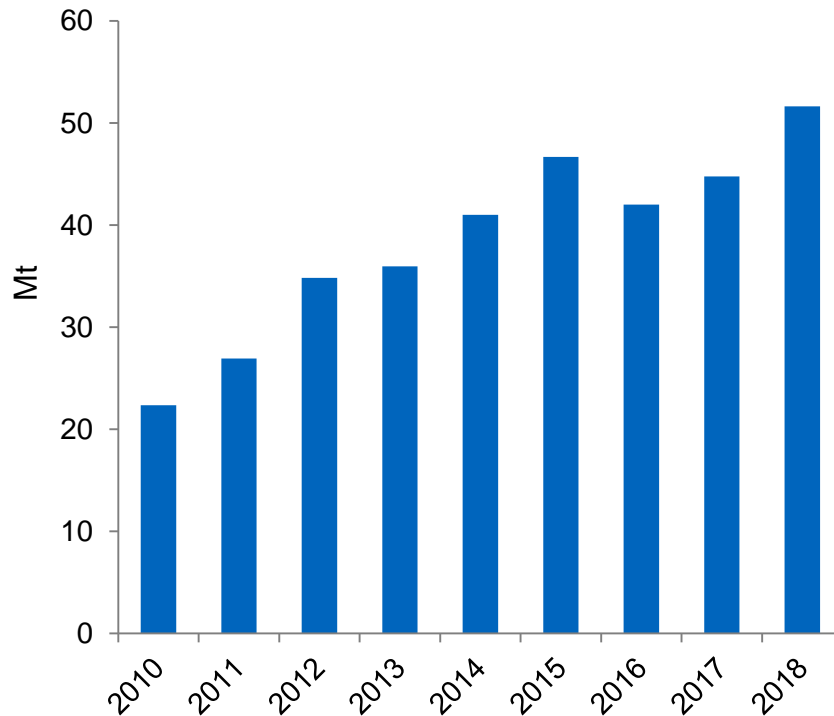
# Indian Steelmaking Coal Imports

Imports supported by secular demand and government growth targets

## Indian Crude Steel Production<sup>1</sup>

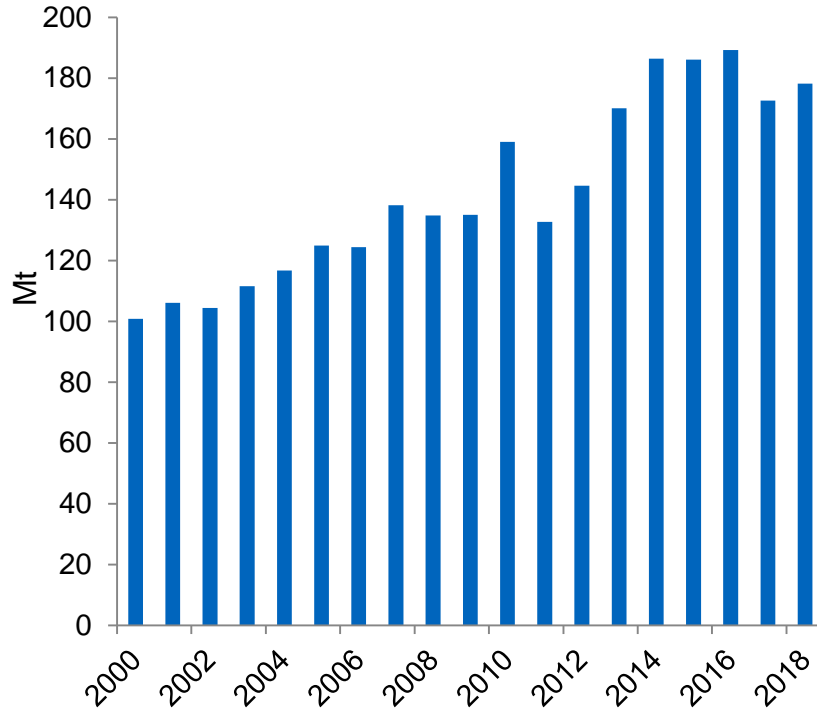


## Indian Seaborne Coking Coal Imports<sup>2</sup>

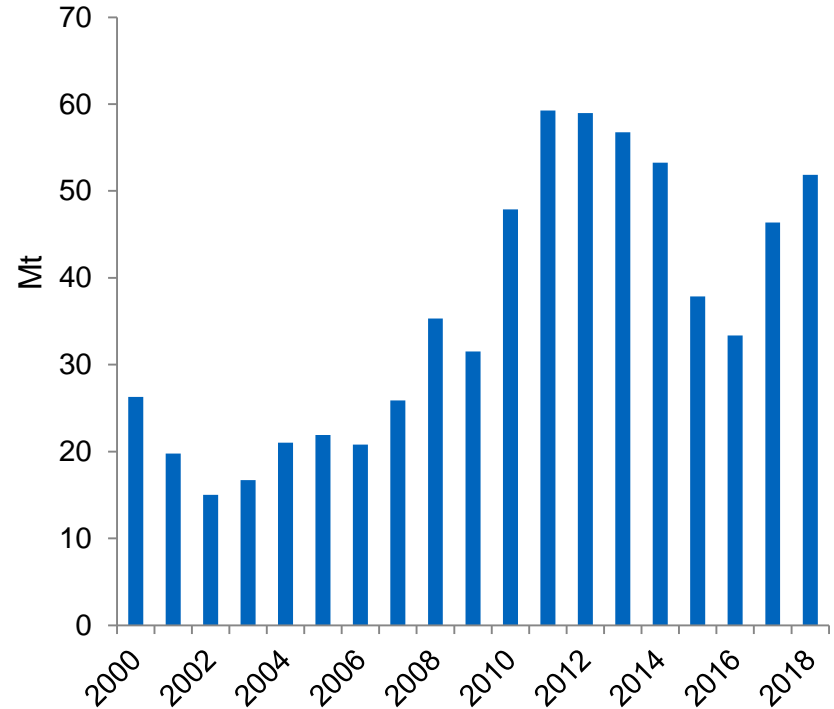


# US Coal Producers are Swing Suppliers

## Australian Steelmaking Coal Exports<sup>1</sup>

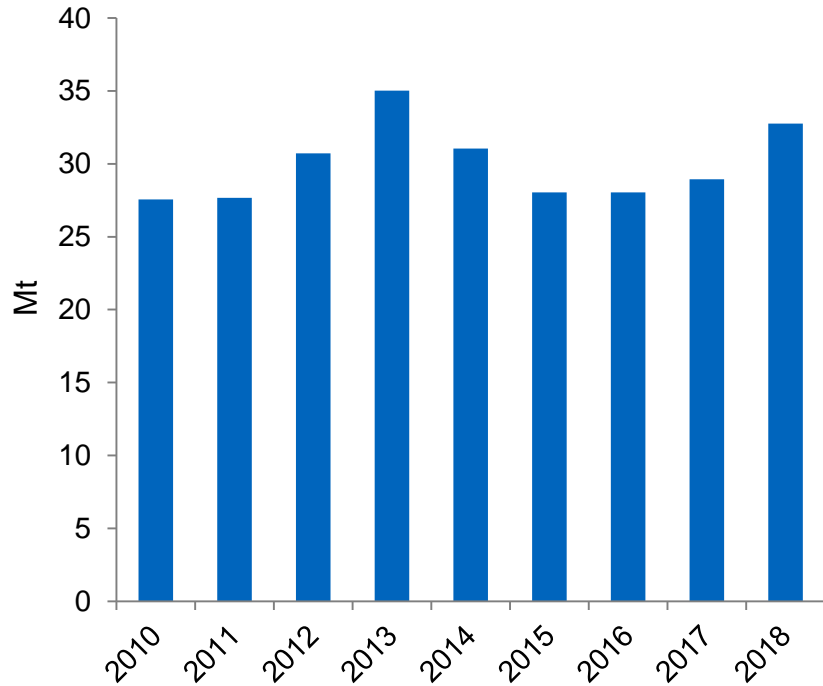


## US Steelmaking Coal Exports<sup>1</sup>

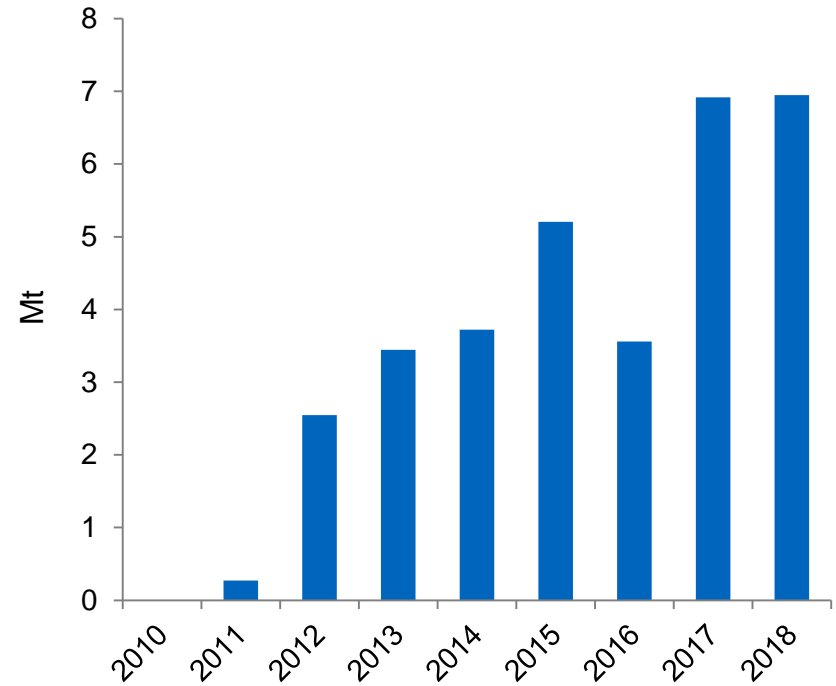


# Canadian and Mozambique Steelmaking Coal Exports

## Canadian Exports<sup>1</sup>

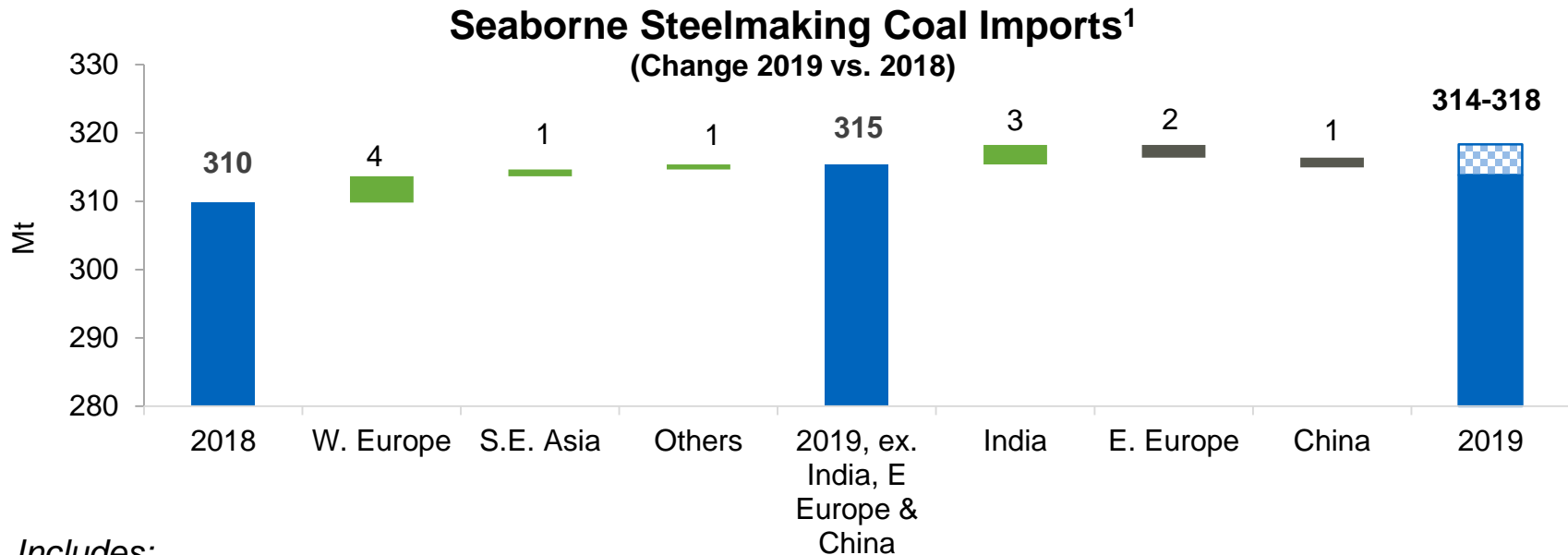


## Mozambique Exports<sup>2</sup>



# Steelmaking Coal Demand Growth Forecast

Growth drivers: Western Europe, India and Southeast Asia

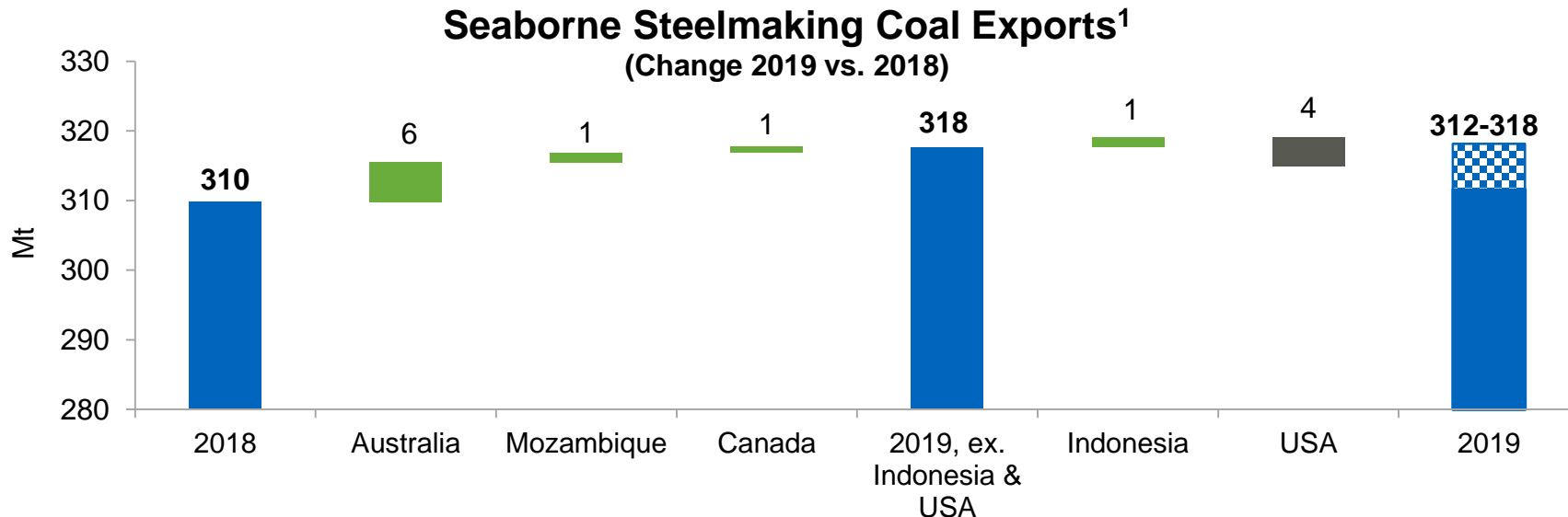


*Includes:*

- Western Europe: Growth mostly from Italy, France, Turkey, Germany
- Southeast Asia: Growth mostly from Vietnam
- India: Analyst views ranging from +2 Mt to +4 Mt<sup>2</sup>
- Eastern Europe: Analyst views on Ukraine and Poland ranging from -3 Mt to +1 Mt<sup>3</sup>
- China: Analyst views ranging from -1 Mt to -2 Mt<sup>3</sup>

# Steelmaking Coal Supply Growth Forecast

Most growth comes from Australia



## *Includes:*

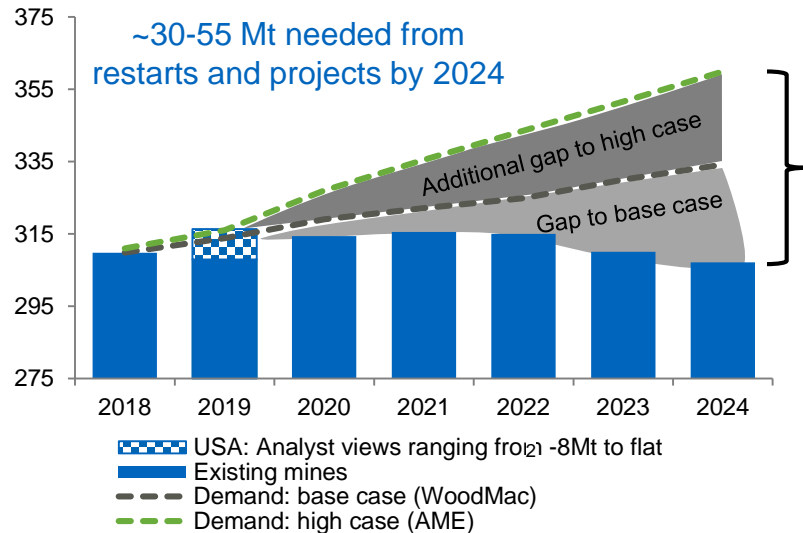
- Australia: Growth from existing mines (Caval Ridge/Peak Downs, Grosvenor, Appin, Byerwen) and mine restarts (Burton, Russel Vale)
- Mozambique: Vale Moatize ramp up
- Canada: Restarted mines ramp up
- Indonesia: Analyst views ranging from +0.5 Mt to +2 Mt<sup>2</sup>
- USA: Analyst views ranging from -8 Mt to flat<sup>3</sup>



# Steelmaking Coal Supply / Demand Balance

Coal gap is developing unless projects progress

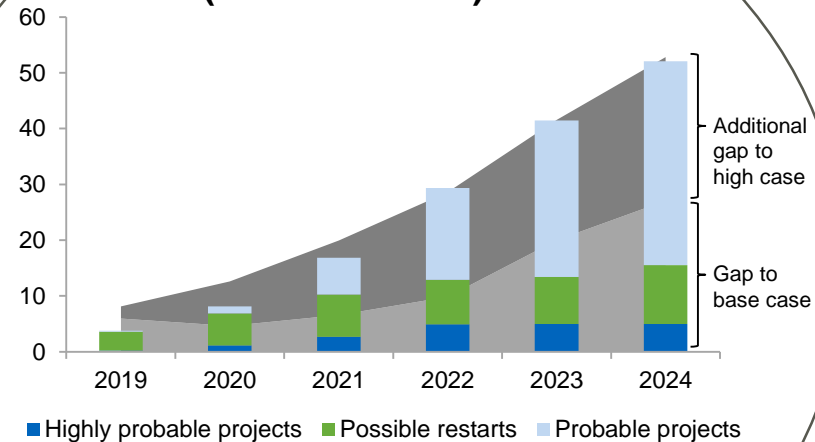
## Supply & Demand from Existing Mines<sup>1</sup> (Million Tonnes)



Includes:

- Existing mines: expansion (~35Mt) and depletion (~40Mt)
- Expansions: Australia (~50%), Indonesia/Russia/Mozambique/Canada/ROW (~10% each)
- Depletion: Australia (~50%), USA (~30%), ROW (~20%)

## Possible Restarts and Projects<sup>1</sup> (Million Tonnes)



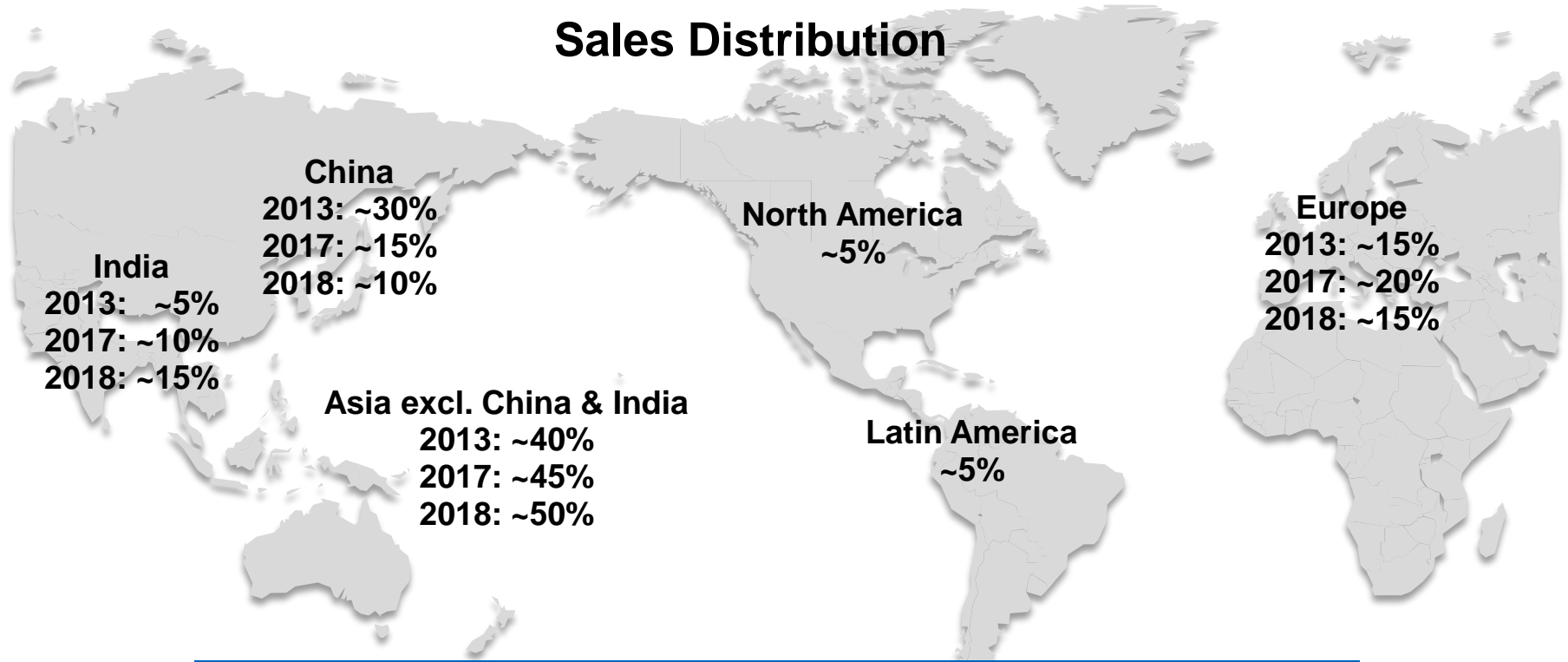
Includes:

- Highly probable projects: Russia (~45%), Australia (~30%), USA (~25%)
- Possible restarts: Australia (~60%), Canada (~20%), ROW (~20%)
- Probable projects: Australia (~45%), Canada (~35%), ROW (~20%)

# 2<sup>nd</sup> Largest Seaborne Steelmaking Coal Supplier

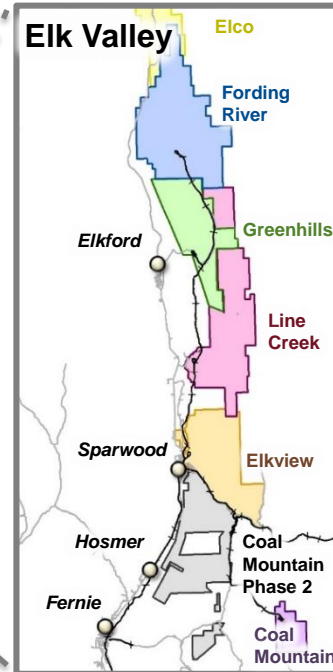
Competitively positioned to supply steel producers worldwide

## Sales Distribution



Sales to India exceeded China from 2018

# An Integrated Long Life Coal Business



- 940 million tonnes of reserves support ~27 Mt of production for many years
- Geographically concentrated in the Elk Valley
- Established infrastructure and capacity with mines, railways and terminals

# Long Life With Growth Potential in Steelmaking Coal

## 26.0-26.5 million tonnes in 2019

- Advancing production in new areas to fully offset Coal Mountain closure

## 27-28 million tonnes in 2020 and beyond

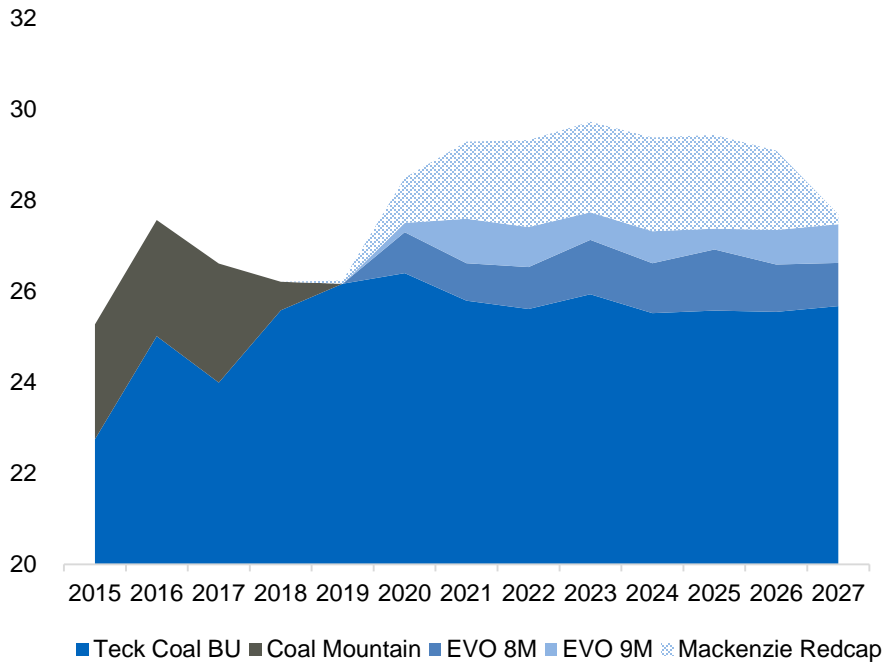
- Investment in plant throughput capacity at Elkview to capitalize on lower strip ratio beginning in 2020

## +1.8 million tonne upside potential in 2020-2027

- Mackenzie Redcap under evaluation

Investing in low capital intensity production capacity to maximize near term profit generating potential.

Annual Production Capacity<sup>1</sup>  
(Million tonnes)



# Maximizing Cash Flow in Any Market in Steelmaking Coal

## High Price Environment

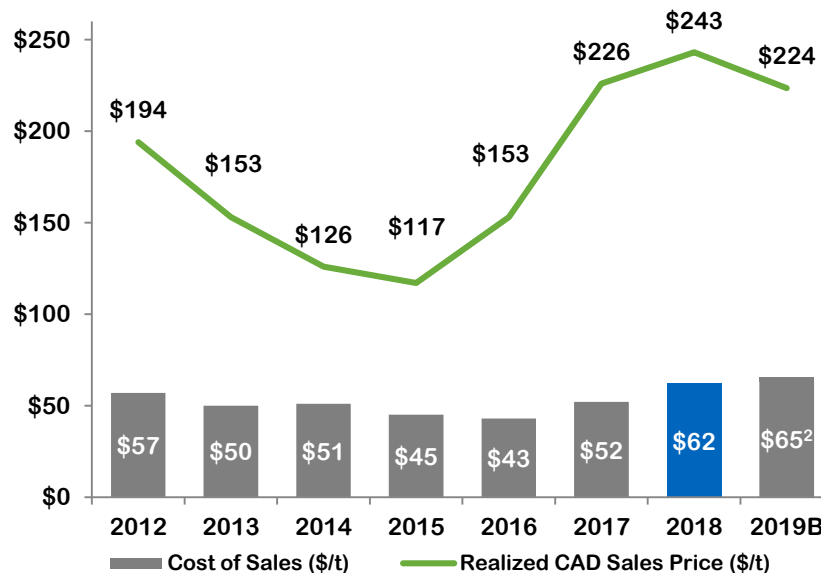
- Production focus to capture high margins and maximize free cash flow<sup>1</sup>
  - Utilize higher cost equipment, contractor labour, internal overtime, & intersite processing to increase production

## Low Price Environment

- Cost focus to protect margins and maximize free cash flow<sup>1</sup>
  - Parking higher cost equipment, reduced contractor trades and mining reliance, hiring freeze, lower material movement
  - Emphasis on cost reduction initiatives

Production maximizing initiatives generated ~\$135 million in additional free cash flow in 2018<sup>1</sup>.

Cost of Sales and Realized Sales Price (\$/tonne)



# Setting Up for Strong Long-Term Cash Flows in Steelmaking Coal

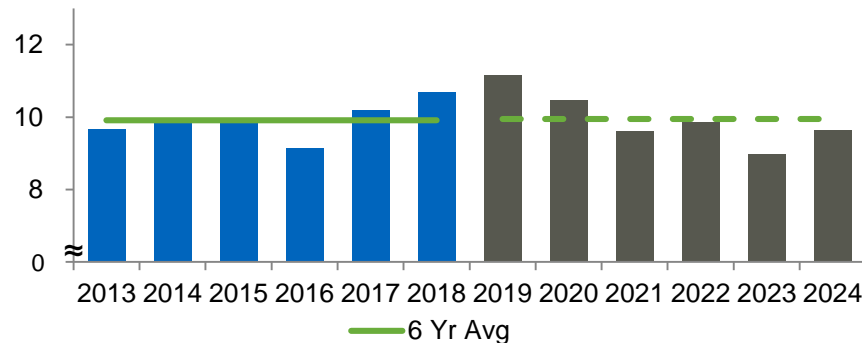
## Strip ratio increase planned in 2019 to advance clean coal expansion

- Future strip ratio on par with historical average

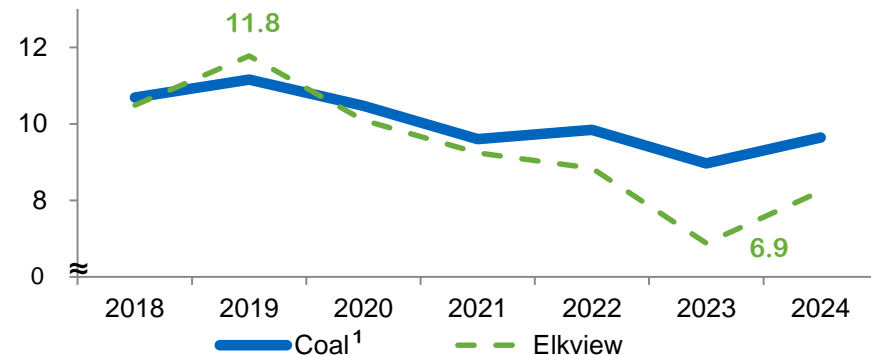
## Elkview Operations driving the increase in clean coal strip ratio to advance ability to produce at 9 million tonne rate by 2021

- Elkview strip ratio drops from 11.8 in 2019 to 6.9 by 2023
  - 2018-2029 average of 9.2

Clean Strip Ratio<sup>1</sup>



Clean Strip Ratio<sup>1</sup>



# Reinvesting to Maintain Productivities and Manage Costs in Steelmaking Coal

## Maintaining historical dollar per tonne sustaining investment levels

### 2010-2016: Average spend of ~\$6 per tonne<sup>1</sup>

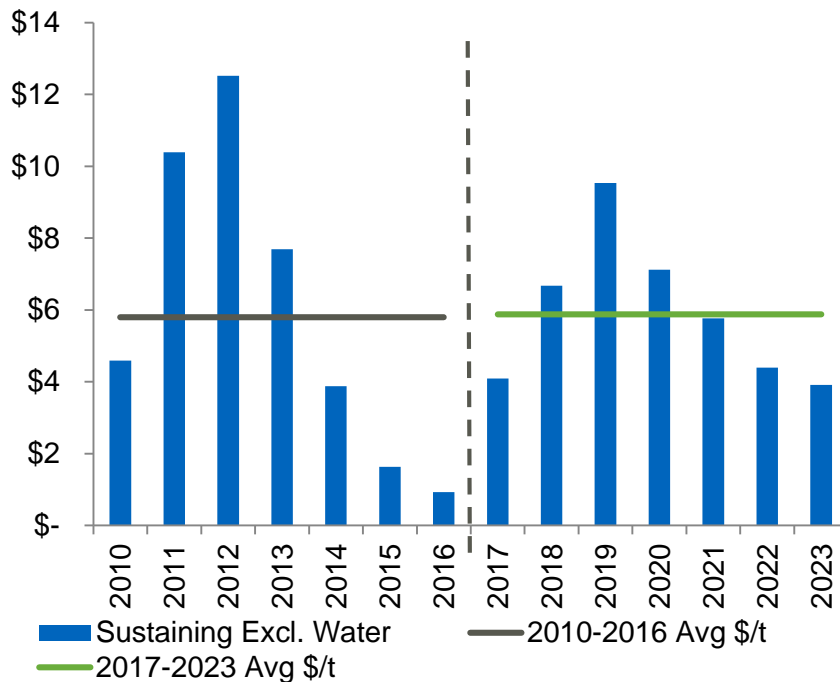
- Reinvestment in 5 shovels, 50+ haul trucks

### 2017-2023: Average spend of ~\$6 per tonne<sup>1</sup>

- Reinvestment in equipment fleets and technology to increase mining productivity and processing capacity

Long term run rate for sustaining capital is ~\$6 per tonne.

Sustaining Capital, Excluding Water Treatment<sup>1</sup> (\$/tonne)



# Investing In Production Capacity in Steelmaking Coal

## Major enhancement projects increasing long-term production capacity:

- SWIFT at Fording River Operations
- Baldy Ridge Extension at Elkview Operations
- 9 Million project at Elkview Operations
- Mackenzie Redcap (MKRC) at Cardinal River Operations under evaluation

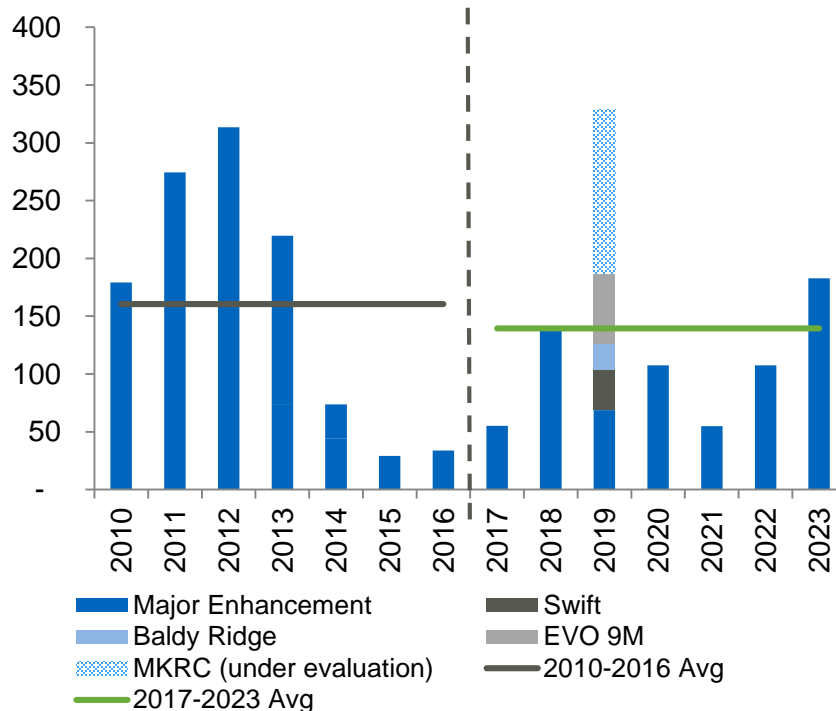
## 2010-2016: Average spend of ~\$160 million<sup>2</sup> per year

- Increased production capacity by ~3.5 million tonnes

## 2017-2023: Average spend of ~\$134 million<sup>2</sup> per year

- Increasing production capacity for 2020-2026 production by ~3 million tonnes per year
  - Increasing plant capacity at Elkview Operations (EVO 9M)
  - Possible development of Mackenzie Redcap at Cardinal River Operations

## Major Enhancement Capital Expenditures<sup>1,2,3</sup> (\$ million)





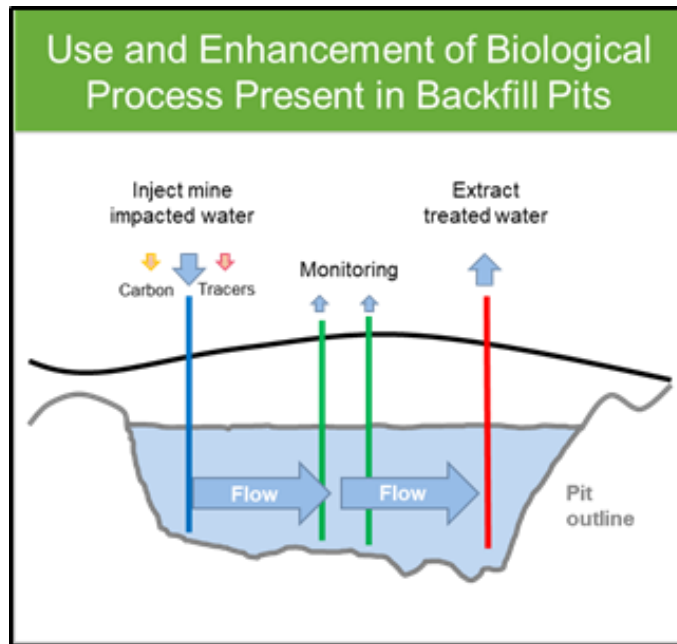
# Progress on Reducing Long-Term Water Treatment Costs

**Saturated Rock Fills (SRF) demonstrated to be a direct replacement for current Active Water Treatment Facilities (AWTF), subject to regulatory approval**

**SRF strategy could reduce water capital to \$600 million to \$650 million in 2018-2022<sup>1</sup>**

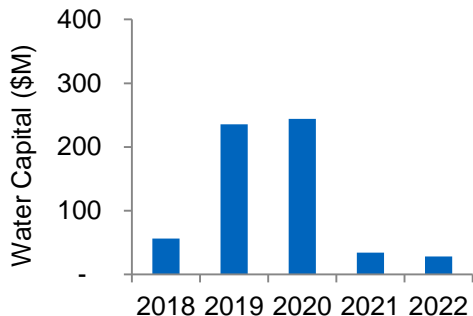
- SRF capital costs ~20% of current permitted treatment option (AWTF)
- SRF operating costs are ~50% of AWTF

**Currently permitting second phase of Elkview's SRF to 20,000 m<sup>3</sup> per day and advancing first pilot at Fording River**



# Water Treatment Capital

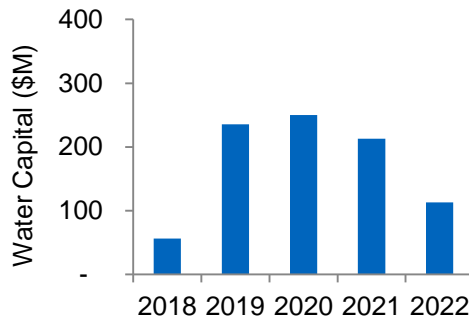
**Best Case<sup>1,2</sup>**



**SRF permitted would reduce water capital to \$600 million to \$650 million<sup>3</sup>**

- 1 LCO<sup>4</sup> AWTF completed
- EVO<sup>4</sup> SRF
- FRO<sup>4</sup> AWTF–South
- Replacing FRO AWTF–North with SRF capacity

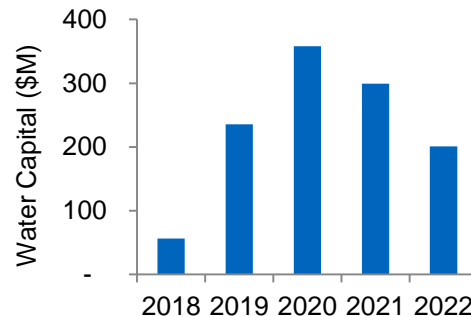
**Previous Guidance<sup>1,2</sup>**



**Previous guidance of \$850 million to \$900 million**

- 1 LCO AWTF completed
- Construction of 3 AWTFs
  - EVO AWTF
  - FRO AWTF–North
  - FRO AWTF–South

**Worst Case<sup>1,2</sup>**



**AWTF revised requires ~\$250 million in additional capital**

- Needed if SRF strategy is not permitted
- Design scope change at EVO AWTF
- Increased design capacity at FRO AWTF–North

# Teck's Pricing Mechanisms

Coal sales book generally moves with the market

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## Sales Mix

- ~40% quarterly contract price
- ~60% shorter than quarterly pricing mechanisms (including “spot”)

## Product Mix

- ~75% of production is high-quality HCC
- ~25% is a combination of SHCC, SSCC, PCI and a small amount of thermal

## Key Factors Impacting Teck's Average Realized Prices

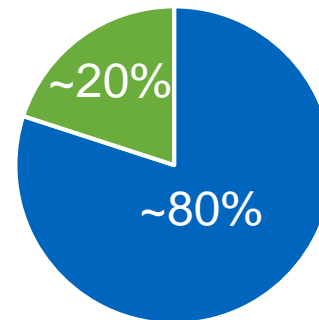
- Variations in our product mix
- Timing of sales
- Direction and underlying volatility of the daily price assessments
- Spreads between various qualities of steelmaking coal
- Arbitrage between FOB Australia and CFR China pricing

### Index Linked Sales

- Quarterly contract sales index linked
- Contract sales index linked
- Contract sales with index fallback
- Spot sales index linked

### Fixed Price Sales

- Contract sales spot priced
- Contract sales with index fallback
- Spot sales with fixed price

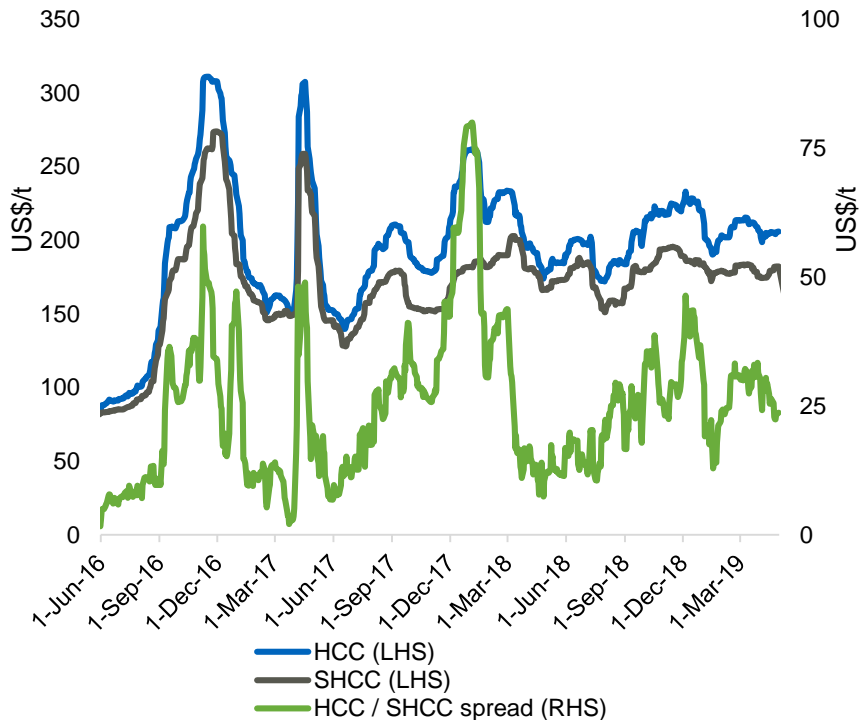


■ Index Linked ■ Fixed Price

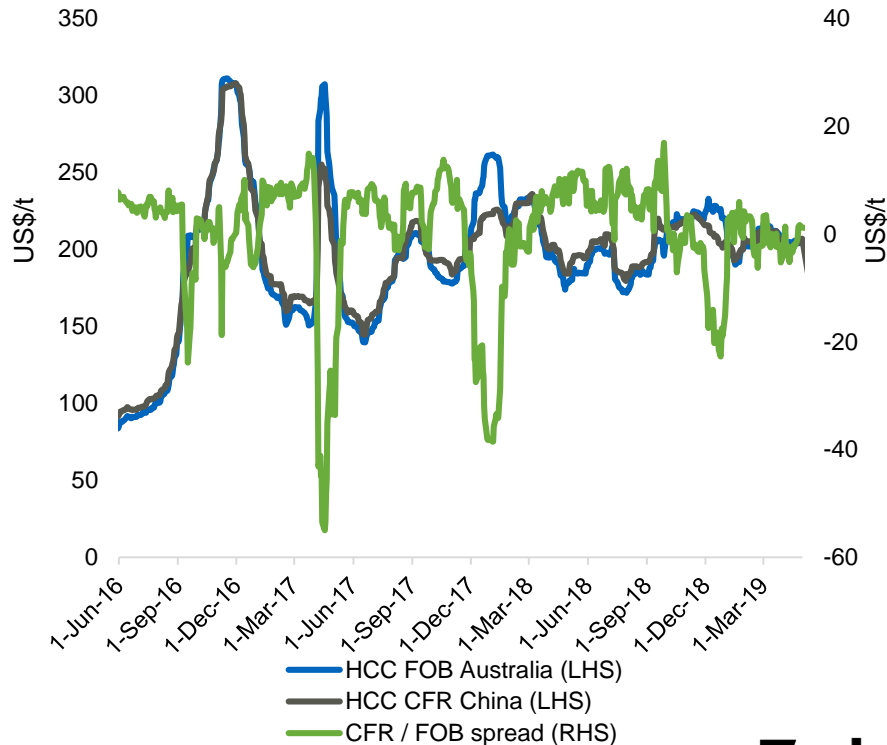
# Quality and Basis Spreads

Impact Teck's average realized steelmaking coal prices

## HCC / SHCC Prices and Spread<sup>1</sup>



## HCC FOB / CFR Prices and Spread<sup>2</sup>



# ~75 Mtpa of West Coast Port Capacity Planned

Teck port capacity exceeds current production plans, including Quintette

## Westshore Terminals



- Current capacity 33 Mtpa
- ~\$275 million upgrade to 35 Mtpa by 2019
- Teck is largest customer at 19 Mtpa
- Contract expires March 31, 2021

## Neptune Coal Terminal



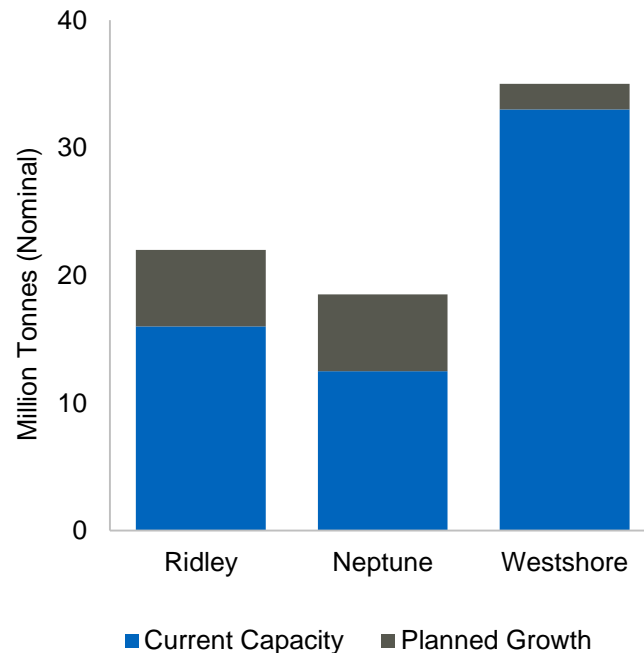
- Teck / Canpotex Joint Venture
- Current capacity 12.5 Mtpa
- ~\$510 million investment to upgrade and rejuvenate
- Planned growth to > 18.5 Mtpa

## Ridley Terminals



- Current capacity 16 Mtpa
- Teck contracted at 3 Mtpa
- Planned growth to > 20 Mtpa

## West Coast Port Capacity



# Notes: Appendix – Steelmaking Coal

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## **Slide 73: Steelmaking Coal Facts**

1. Source: IEA.
2. Source: CRU.
3. Source: World Coal Association. Assumes all of the steel required is produced by blast furnace-basic oxygen furnace route.
4. Source: The Coal Alliance. Assumes all of the steel required is produced by blast furnace-basic oxygen furnace route.

## **Slide 74: Strong Chinese Steel Margins**

1. Source: China HRC Gross Margins is estimated by Mysteel. China Domestic HCC Price is Liulin #4 price sourced from Sxcoal and is normalized to CFR China equivalent. Seaborne HCC Price (CFR China) is based on Argus Premium HCC CFR China. Plotted to April 26, 2019.

## **Slide 75: Capacity Reductions in China Support Pricing**

1. Source: Governmental announcements.

## **Slide 76: Large Users in China Increasing Seaborne Imports**

1. Source: China Customs, Fenwei, Teck.

## **Slide 77: Chinese Scrap Use to Increase Slowly**

1. Source: WSA.
2. Source: China Metallurgy Industry Planning and Research Institute.
3. Source: CRU.

## **Slide 78: Chinese Steelmaking Coal Imports**

1. Source: NBS, Fenwei.
2. Source: China Customs, Fenwei.

## **Slide 79: Indian Steelmaking Coal Imports**

1. Source: WSA.
2. Source: Global Trade Atlas.

## **Slide 80: US Coal Producers are Swing Suppliers**

1. Source: Global Trade Atlas. US exports do not include exports to Canada.

## **Slide 81: Canadian and Mozambique Steelmaking Coal Exports**

1. Source: Global Trade Atlas.
2. Source: CRU.

# Notes: Appendix – Steelmaking Coal

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## **Slide 82: Steelmaking Coal Demand Growth Forecast**

1. Source: Wood Mackenzie.
2. Source: Wood Mackenzie, AME.
3. Source: Wood Mackenzie, CRU.

## **Slide 83: Steelmaking Coal Supply Growth Forecast**

1. Source: Wood Mackenzie. Exports include disruption allowance that is based on the difference between Wood Mackenzie's Q4 forecast and actual exports over the period 2015 to 2017.
2. Source: Wood Mackenzie, CRU.
3. Source: Wood Mackenzie, Seaport Global Securities LLC.

## **Slide 84: Steelmaking Coal Supply / Demand Balance**

1. Source: Wood Mackenzie, AME. High case demand is based on AME for India's imports and Wood Mackenzie for imports by other countries. Exports include disruption allowance that is based on the difference between Wood Mackenzie's Q4 forecast and actual exports over the period 2015 to 2017.
2. Source: Wood Mackenzie, Seaport Global Securities LLC.

## **Slide 87: Long Life with Growth Potential in Steelmaking Coal**

1. Subject to market conditions and obtaining relevant permits.

## **Slide 88: Maximizing Cash Flow in Any Market in Steelmaking Coal**

1. Free cash flow is a non-GAAP measure. See "Non-GAAP Financial Measures" slides.
2. Assumes cost of sales of \$63/tonne for 2019. Effective January 1, 2019, the IFRS 16 accounting standard change required the capitalization of equipment leases historically included in cost of sales. This policy change is expected to decrease cost of sales by ~\$2/tonne, therefore a cost of sales figure of \$65/tonne should be used for comparison to historical figures.

## **Slide 89: Setting Up for Strong Long-Term Cash Flows in Steelmaking Coal**

1. Reflects weighted average strip ratio of all coal operations. Cardinal River Operations includes the Mackenzie Redcap project.

## **Slide 90: Reinvesting to Maintain Productivities and Manage Costs in Steelmaking Coal**

1. Historical spend has not been adjusted for inflation or foreign exchange. 2019-2023 assumes annualized average production of 28.6 million tonnes and excludes the impact of the change in accounting for leases under IFRS 16. All dollars referenced are Teck's portion net of POSCAN credits for Greenhills Operations at 80% and excludes the portion of sustaining capital relating to water treatment and Neptune Terminal. Water capital is addressed in "Progress on Reducing Long-Term Water Treatment Costs" slide.

## **Slide 91: Investing In Production Capacity in Steelmaking Coal**

1. Historical spend has not been adjusted for inflation or foreign exchange. 2019-2023 excludes the impact of the change in accounting for leases under IFRS 16.
2. All dollars referenced are Teck's portion net of POSCAN credits for Greenhills Operations at 80% and excludes the portion of major enhancement capital relating to the Neptune Facility Upgrade.
3. Swift, Baldy Ridge Extension, Elkview 9M and Mackenzie Redcap (MKRC) project spending in 2019 is noted to illustrate the peak in major enhancement spending. All projects have spending prior and subsequent to 2019.

# Notes: Appendix – Steelmaking Coal

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## **Slide 92: Progress on Reducing Long-Term Water Treatment Costs**

1. Water capital figures present total spending, a portion of which will be paid by POSCAN joint venture partner. Future POSCAN amounts are not yet determinable as the percentage varies year-to-year with selenium load factors which are measured annually. For further information, please see "Water Treatment Capital" slide.

## **Slide 93: Water Treatment Capital**

1. Water capital figures present total spending, a portion of which will be paid by POSCAN joint venture partner. Future POSCAN amounts are not yet determinable as the percentage varies year-to-year with selenium load factors which are measured annually.
2. All capital scenarios exclude \$40M in research and development for construction of the SRF full scale trial substantially completed in 2017 and commissioned at Elkview Operations in early 2018. LCO AWTF capital spend in 2018 was \$22M for completion of the Advanced Oxidation Process. Dollars are unadjusted for the POSCAN joint venture portion.
3. Best case replaces construction of 2 of the 3 AWTF's identified in previous guidance with SRFs at 20% of construction costs. Best case includes ~\$130M to progress construction of replaced AWTFs in 2018 and 2019 until SRF strategy is permitted.
4. LCO stands for Line Creek Operations, FRO stands for Fording River Operations, and EVO stands for Elkview Operations.

## **Slide 95: Quality and Basis Spreads**

1. HCC price is average of the Argus Premium HCC Low Vol, Platts Premium Low Vol and TSI Premium Coking Coal assessments, all FOB Australia and in US dollars. SHCC price is average of the Platts HCC 64 Mid Vol and TSI HCC assessments, all FOB Australia and in US dollars. Source: Argus, Platts, TSI. Plotted to April 30, 2019.
2. HCC FOB Australia price is average of the Argus Premium HCC Low Vol, Platts Premium Low Vol and TSI Premium Coking Coal assessments, all FOB Australia and in US dollars. HCC CFR China price is average of the Argus Premium HCC Low Vol, Platts Premium Low Vol and TSI Premium JM25 Coking Coal assessments, all CFR China and in US dollars. Source: Argus, Platts, TSI. Plotted to April 30, 2019.



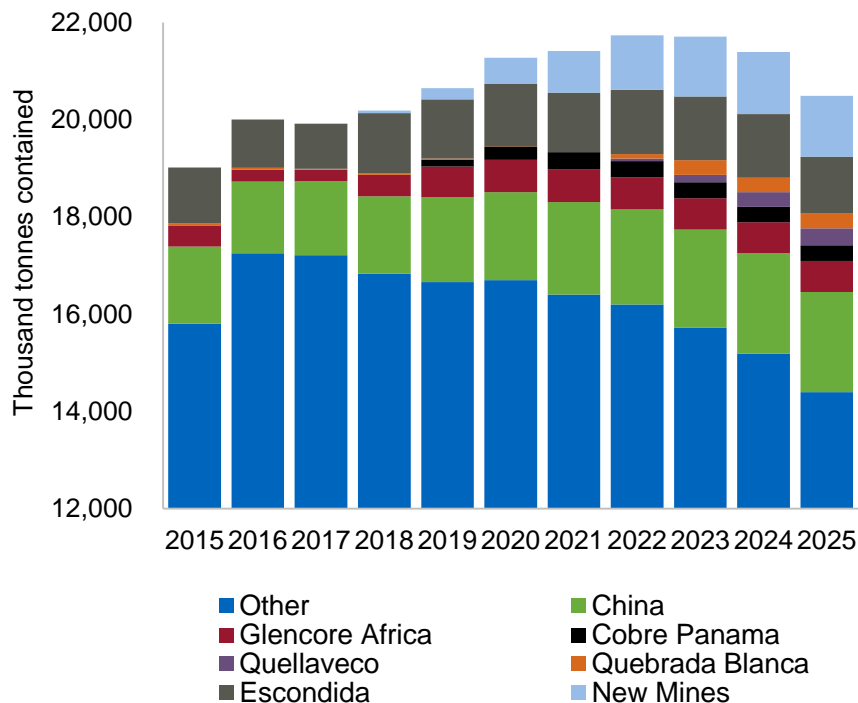
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# Copper Business Unit & Markets

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# Global Copper Mine Production Increasing Slowly

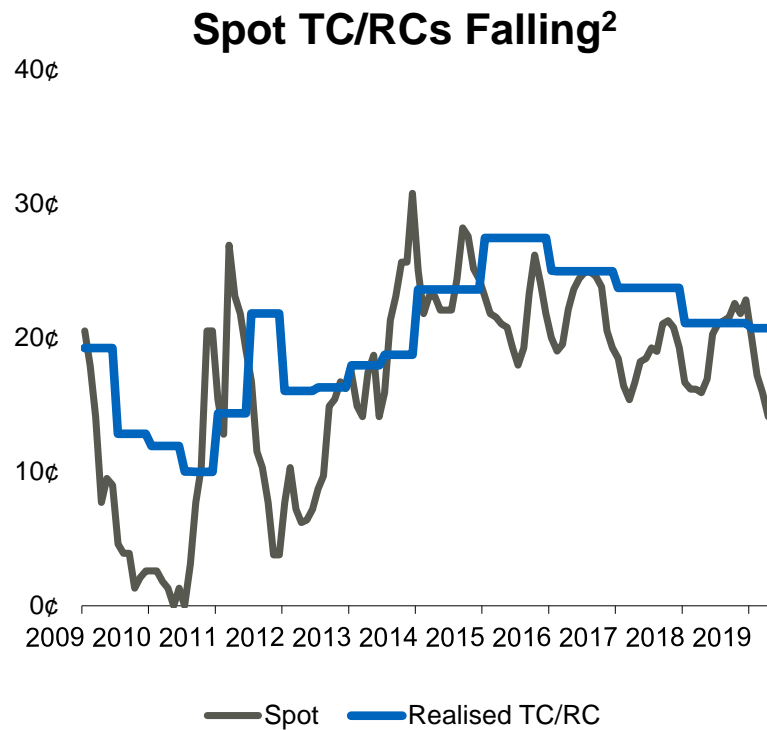
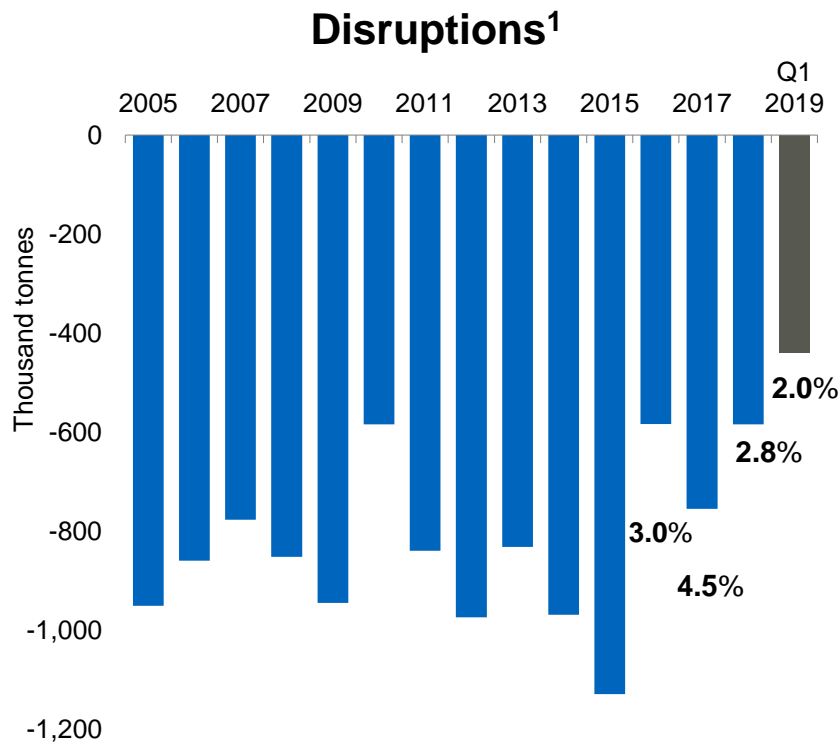
## Global Copper Mine Production<sup>1</sup>



- Mine production set to increase 1.8 Mt by 2023, including:
  - Glencore's African mine restarts: 400 kmt
  - Cobre Panama 330 kmt
  - Escondida 390 kmt
  - Quellaveco 350 kmt
  - Quebrada Blanca 300 kmt
  - China 490 kmt
  - All others (Oyu Tolgoi UG, Spence, Chuqui UG) 1,250 kmt
  - Reductions & closures (1,500 kmt)
- Mine production currently peaks in 2022
- Chinese mine production growth relatively flat at ~100 kmt per year
- Total probable projects: 1,570 kmt

# Copper Disruptions

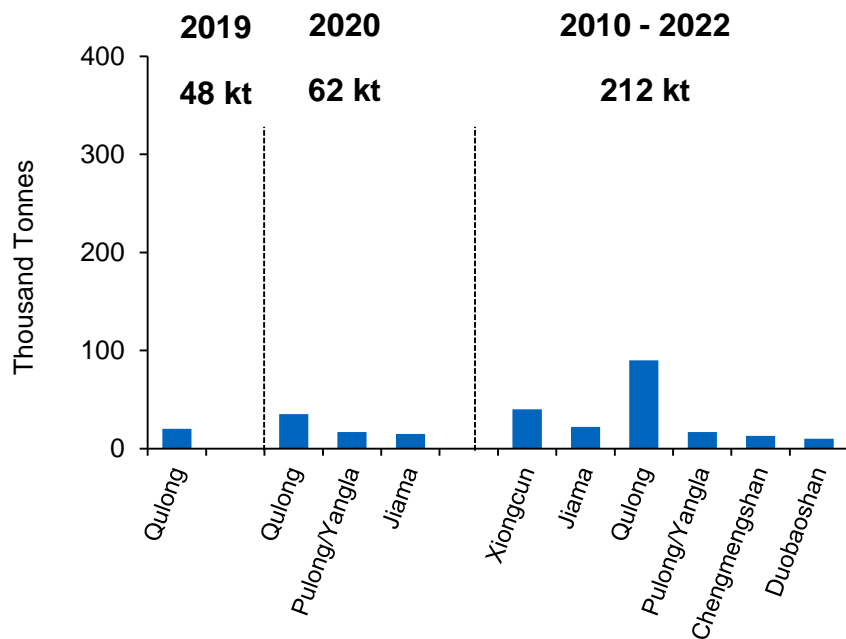
Disruptions return to impact mines



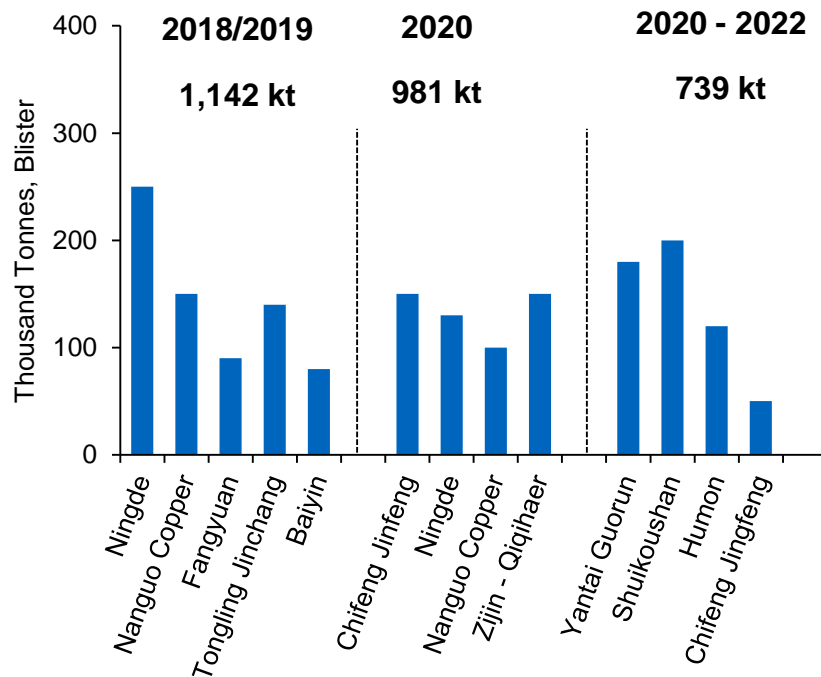
# Rapid Growth in Chinese Copper Smelter Capacity

Limited domestic mine projects and lots of delays

## Chinese Copper Mine Growth<sup>1</sup>



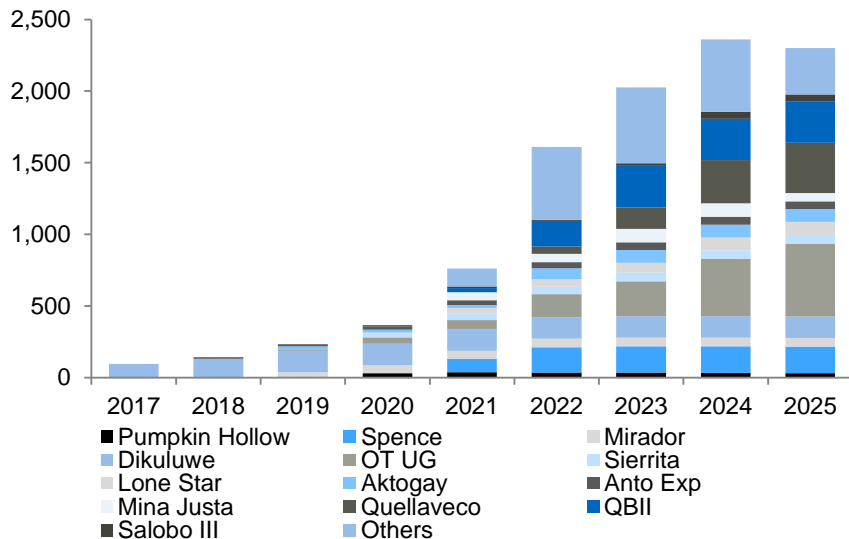
## +2.8 Mt of Smelting Projects in the Pipeline<sup>2</sup>



# Copper Supply

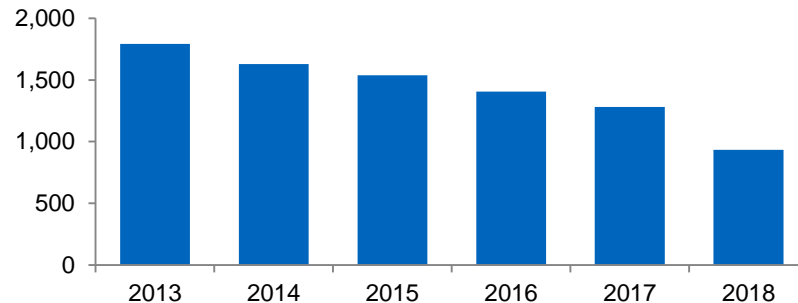
## Mine production rising and scrap availability falling

**Sanctioned Projects Since 2017<sup>1</sup>**  
(Thousand tonnes)

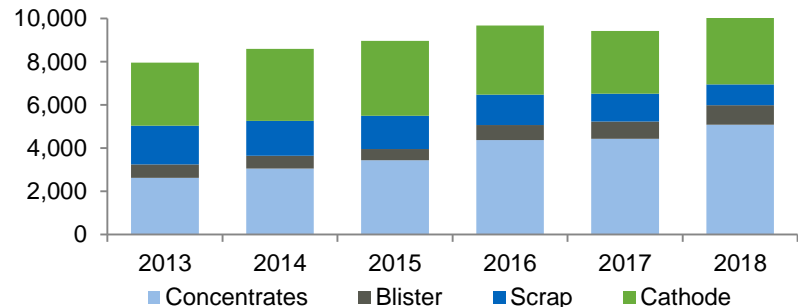


**New mines commissioned will add 2.3 million tonnes from 2017-2025.**

**China Copper Scrap Imports Decline<sup>2</sup>**  
(Copper content, kt)



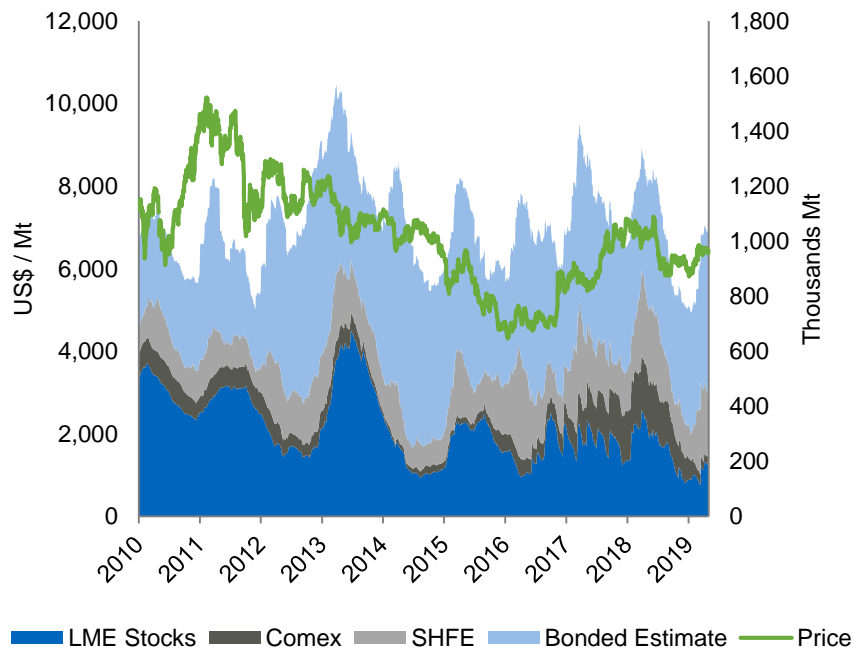
**Chinese Imports Shift to Concentrates<sup>3</sup>**  
(Copper content, kt)



# Copper Metal Stocks

## Better than expected demand; smelter disruptions

Daily Copper Prices & Stocks<sup>1,2</sup>  
(US\$/mt)

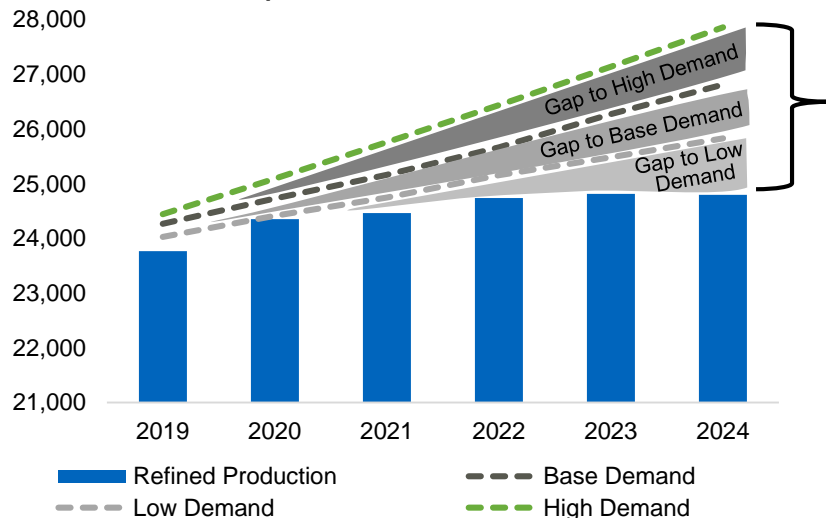


- Production cuts at Asian smelters combined with lower scrap availability contributed to a drawdown in cathode stocks
- Exchange stocks have fallen 425,000 tonnes since March 2018, now equivalent to just over one week's global consumption.
- In mid-March 2019 stocks reached lowest level since late 2014. Including bonded stocks, lowest since 2009
- Stocks were building in China, but have fallen in last four weeks. Backwardation in copper starting to draw stocks onto the LME, up 100,000 tonnes in last four weeks

# Copper Supply / Demand Balance

## Projects available to fill low demand scenario gap

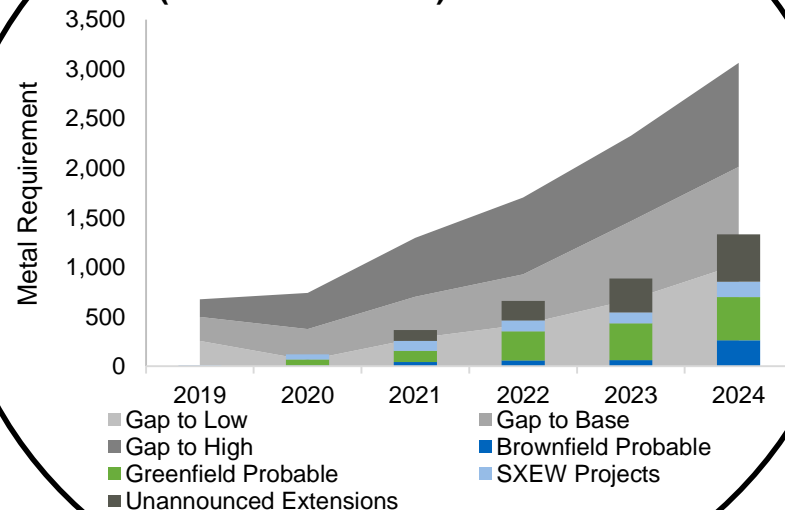
Existing and Fully Committed Supply<sup>1</sup>  
(Thousand tonnes)



Assumed average growth to 2024:

- High Demand (2.7%): 3.1 million tonne gap
- Base Demand (2.0%): 2.0 million tonne gap
- Low Demand (1.5%): 1.0 million tonne gap

Probable Projects Sufficient  
Only to Fill Low Gap Scenario<sup>2</sup>  
(Thousand tonnes)



# Long Life and Stable Assets in Copper



Antamina

- C1 costs in the 1<sup>st</sup> quartile<sup>1</sup>
- Record combined concentrate production in 2018
- Lower zinc in 2019, increasing in 2020
- Debottlenecking study in progress



Highland Valley

- Copper production rising with higher grades and recovery
- Technology focus with autonomous haulage and shovel-based ore sorting
- D3 mill project complete in Q2 2019, ahead of schedule and under budget



Carmen de Andacollo

- Consistent near term production profile
- Sizer project in commissioning
- Focus on water reduction and effectively managing dust



Quebrada Blanca

- Mining equipment and workforce successfully transitioned to QB2
- Strong platform for QB2 start-up and future operations
- Focus on labour efficiency and productivity

FOUNDATION OF STABLE OPERATIONS



# Cost Discipline and Improvement Focus in Copper

## Operating expenses & productivity

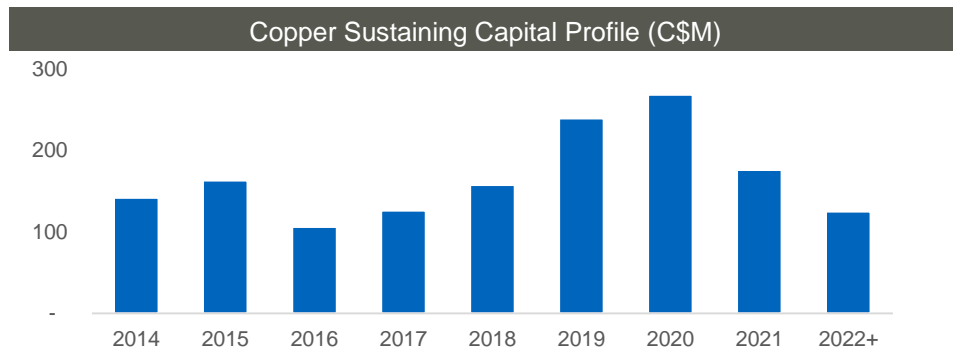
- Cross site sharing in asset management continues to improve availabilities and reduce costs
- Robust continuous improvement pipeline - key driver of margins

## Supply management at Teck

- Leveraging Teck-wide spending
- 7 primary categories started in 2010 with >\$50 million in sustained annual savings
- 6 more categories added in 2018
  - Additional \$30 million in annual savings
- China sourcing initiative

## Focused investment priorities in Copper

- Numerous projects finishing in 2019 and early 2020
  - D3 Ball Mill at HVC, QB1 water management
- Near term spending driven by tailings facility cost at Antamina – declining in 2022
- Long-term sustaining capex in copper expected at \$125 million, excluding QB2



# Major Growth Projects in Copper

## Setting up major growth projects in Chile for long-term success



### Quebrada Blanca

- QB2: 316 kt of CuEq production for first 5 years<sup>1</sup>
  - Increases copper production by ~60% with low strip ratio and AISC of US\$1.38/lb copper<sup>2</sup>
  - Early debottlenecking focus to unlock upside
- QB3: Scoping Study on expansion potential in progress
  - Mineral resource supports studying 3 or 4 times milling rate with continued low strip ratio
  - Lower capital intensity, with potential to more than double production and be a top 5 global producer

### NuevaUnión

- Feasibility study in progress
  - Continued focus on reduced environmental footprint
  - Advancing innovative designs including rope conveyors and high pressure grinding roll technology
- Proactive, participatory community engagement approach
  - EIA submission targeted for H2 2019



# Major Extension Projects in Copper

Strong brownfield pipeline for value creation

## Antamina

### Debottlenecking and extension studies ongoing

- Increase mill throughput >15%
- Relocation of crushing and conveying system
- Increasing waste rock and tailings storage capacity



## HVC 2040

### Advancing HVC Mine Life Extension Feasibility Study

- Targeting extension ~12 years
- Increase mill throughput >20%

### Leverage recent capital and technology projects

- Mill Optimization Project (2014) and D3 Ball Mill
- Ore sorting and automation



# Notes: Appendix – Copper

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## **Slide 101: Global Copper Mine Production Increasing Slowly**

1. Source: Wood Mackenzie, AME, Teck.

## **Slide 102: Copper Disruptions**

1. Source: Wood Mackenzie, AME, Teck, Company Reports.
2. Source: Wood Mackenzie, CRU, Metal Bulletin.

## **Slide 103: Rapid Growth in Chinese Copper Smelter Capacity**

1. Includes mine projects with copper capacity >10 ktpa. Source: BGRIMM.
2. Source: CRU, BGRIMM, SMM, Teck.

## **Slide 104: Copper Supply**

1. Source: Wood Mackenzie, Teck, Company Reports. Announced Project Sanctioning Decisions since January 2018, Based on Corporate Guidance and/or Wood Mac forecasts to Q4 2018.
2. Source: Wood Mackenzie, GTIS, SMM.
3. Source: Wood Mackenzie, GTIS, NBS, SMM.

## **Slide 105: Copper Metal Stocks**

1. Source: LME, Comex, SHFE, SMM

## **Slide 106: Copper Supply / Demand Balance**

1. Source: Wood Mackenzie, CRU, ICA, Yale, Teck. Low Demand based on Wood Mackenzie forecast demand outlook. Base Case Demand based on Teck copper demand model. High Demand based on combination of ICA study done for long term Copper Demand and a Yale University study done based on IEA forecasts for 2DS on Climate reduction goals.
2. Source: Wood Mackenzie, CRU, ICA, Yale, Teck. Forecasts based on projects from Wood Mackenzie Probable list of projects from Q4 2018 flexed at their historic rates of probable projects entering production (70% of Probable Brownfields, 50% of Probable Greenfield projects and an allowance for unidentified mine extensions based on historic precedent that 20% of capacity projected to close will stay open through such extensions).

## **Slide 107: Long Life and Stable Assets in Copper**

1. Source: Wood Mackenzie.

## **Slide 109: Major Growth Projects in Copper**

1. Copper equivalent production calculated for the first 5 full years of production assuming US\$3.00/lb copper, US\$10.00/lb molybdenum and US\$18.00/oz silver without adjusting for payability.
2. All-in sustaining costs (AISC) are calculated as C1 cash costs after by-product credits plus sustaining capital requirements. C1 cash costs are calculated after by-product credits assuming US\$10.00/lb molybdenum and US\$18.00/oz silver. Net cash unit costs are consistent with C1 cash costs. C1 cash costs for QB2 include stripping costs during operations. Net cash unit cost, C1 cash cost and AISC are non-GAAP financial measures. See "Non-GAAP Financial Measures" slides.

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Zinc

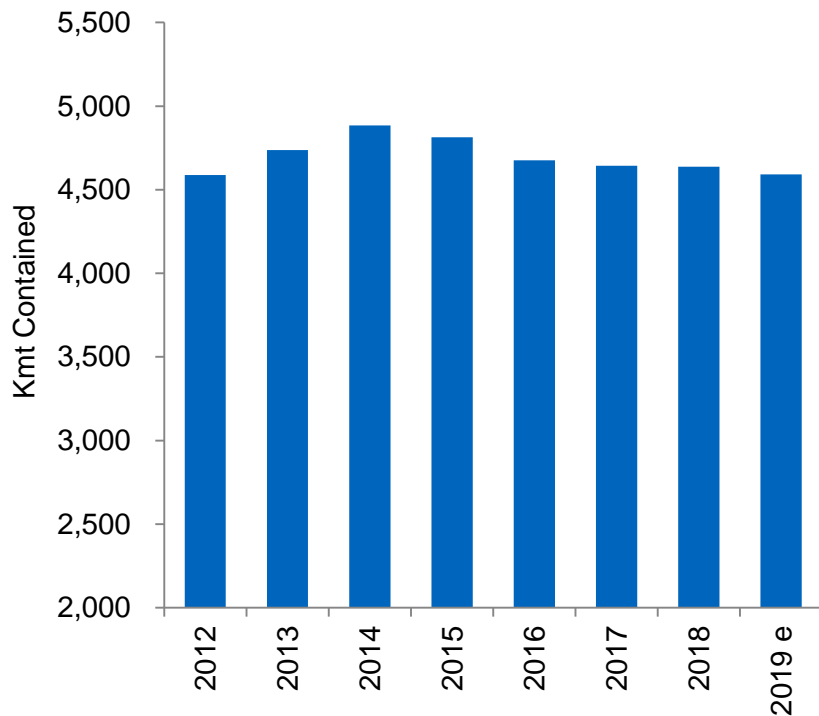
Business Unit & Markets

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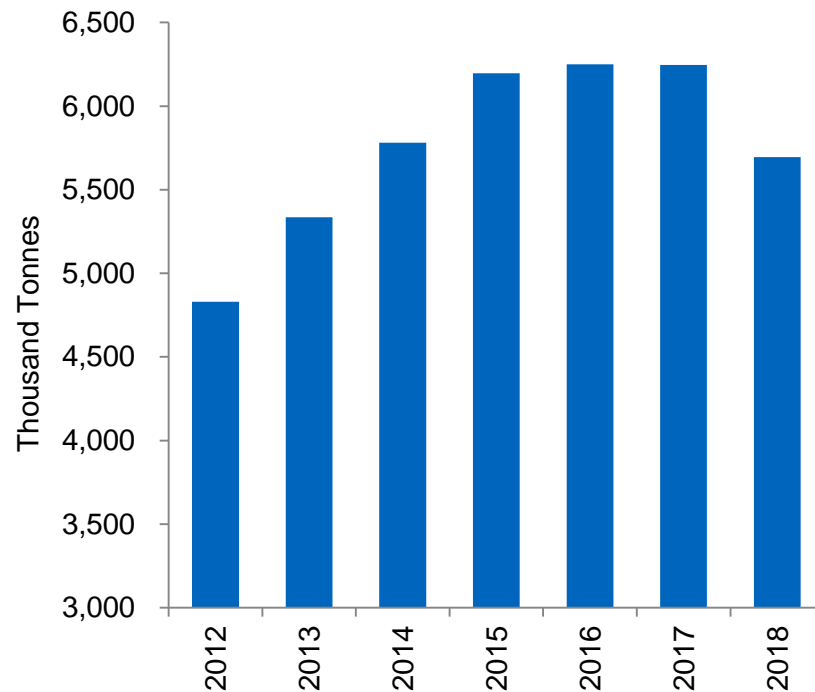
Teck

# Environmental Policy Decreasing Chinese Production

**Chinese Mine Production Down 2.3% in 2018<sup>1</sup>**

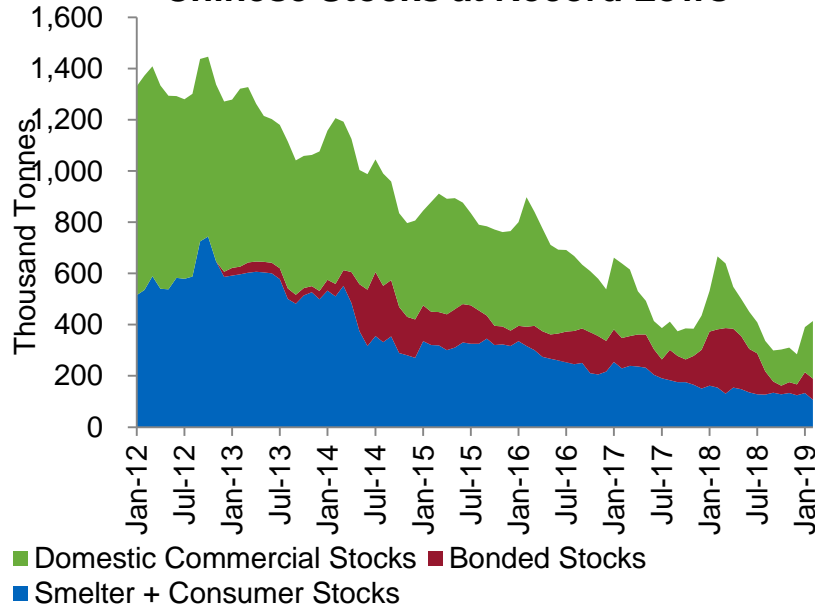


**Chinese Refined Production Down 9% in 2018<sup>2</sup>**

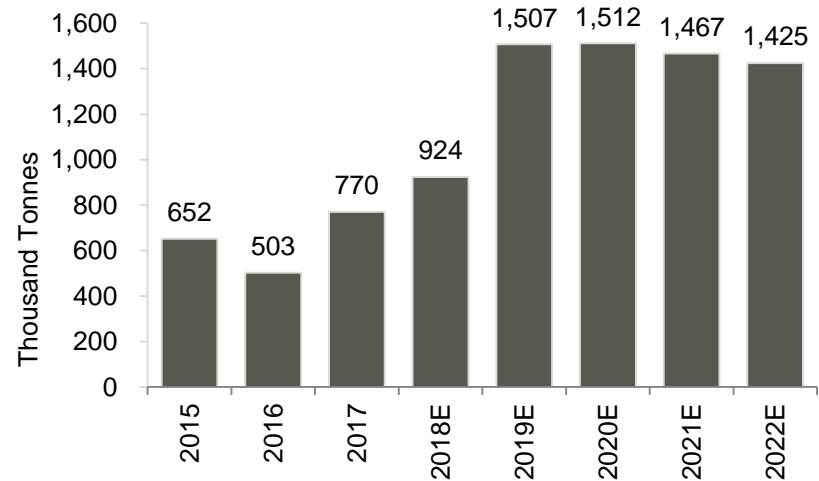


# Increasing Demand for Zinc Metal Imports

**De-stocking Continues  
Chinese Stocks at Record Lows<sup>1,2</sup>**



**More Imported Zinc Metal  
Required to Fill the Gap<sup>3</sup>**

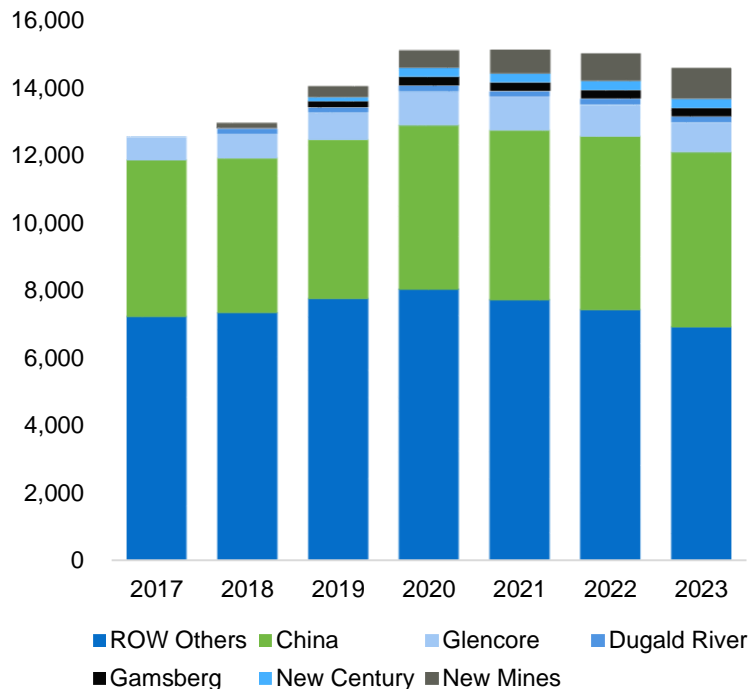


**Smelter cutbacks lead to drawdown of warehouse inventories – now record low;  
If China does import 1.7 Mt of concentrates, still requires 1.5 Mt of metal imports**

# Zinc Supply

## Mine production missed forecast in 2018

### Zinc Mine Production<sup>1</sup> (Thousand tonnes contained)



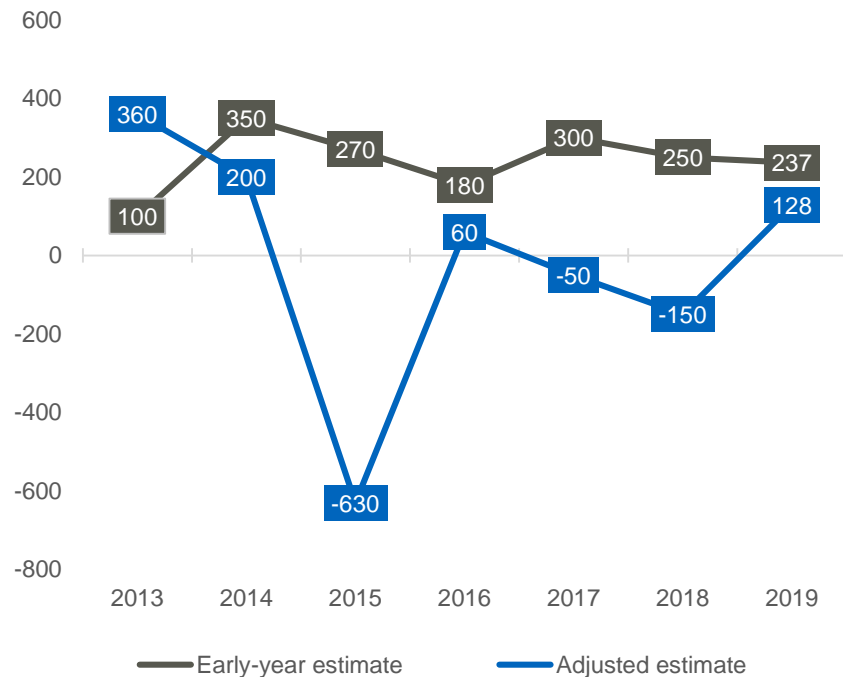
- Teck originally forecast global mine production would grow 7.9% or over 800,000 tonnes in 2018
  - Due to start up of large mines, Dugald River, Gamsberg, New Century and restarts by Glencore
- Global mine production in 2018 missed Teck's forecast by almost 600,000 tonnes
  - Slow or delayed start-ups at New Century, Gamsberg, and several smaller mines
  - China originally expected to increase 250,000 tonnes contained in 2018, but now estimated to be down 150,000 tonnes contained in 2018
- Today, Teck forecasts an 8.1% increase in mine production in 2019, but significant risks continue
  - Mine guidance has already decreased around 120 thousand tonnes in Q1 2019
  - Chinese environmental inspections continue at domestic mines and may restrict production into H2 2019



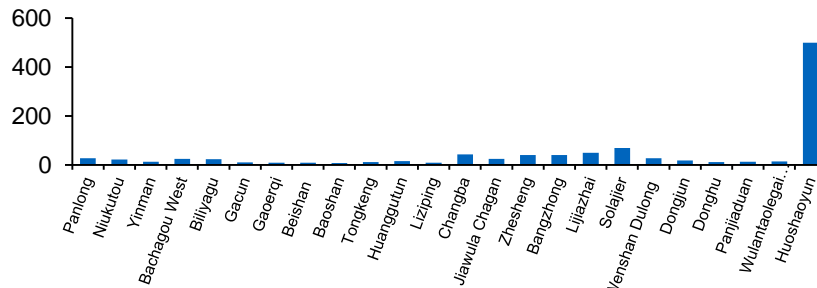
# Chinese Zinc Mine Projects Delayed

Impacted by inspections and low zinc ore grades

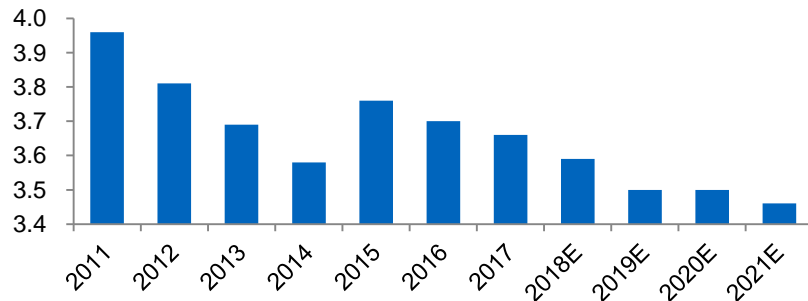
**Estimated Chinese Zinc Mine Growth Rarely Achieved<sup>1</sup>**  
(Thousand tonnes contained)



**Chinese Mine Growth 2019-2021 Heavily Dependent On Single Project<sup>2</sup>**  
(Thousand tonnes contained)



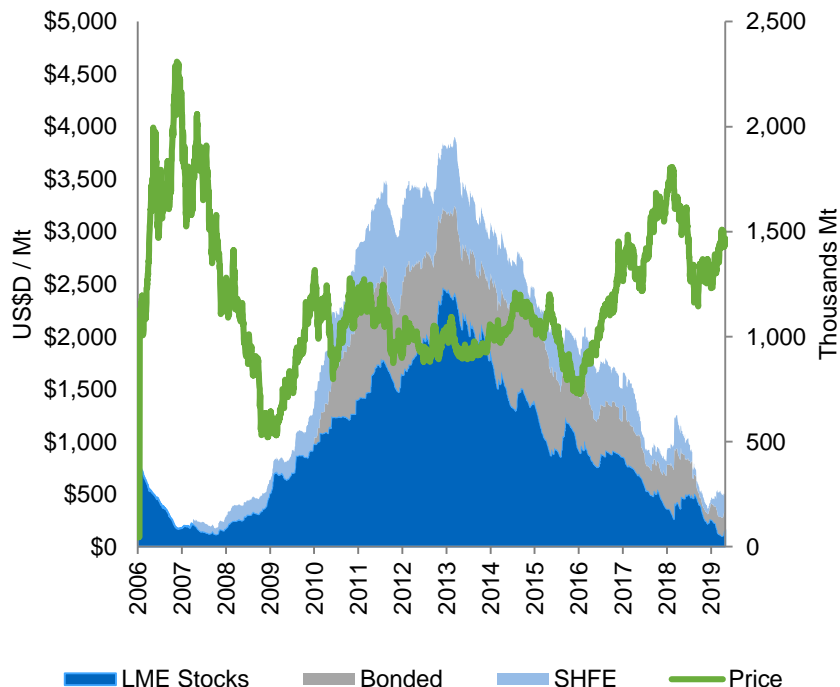
**Zinc Ore Grades Falling at Chinese Mines<sup>3</sup>**  
(Ore grade, zinc %)



# Zinc Metal Stocks

## Consecutive deficits decreasing zinc inventories

### Daily Zinc Prices & Stocks<sup>1,2</sup> (US\$/lb)

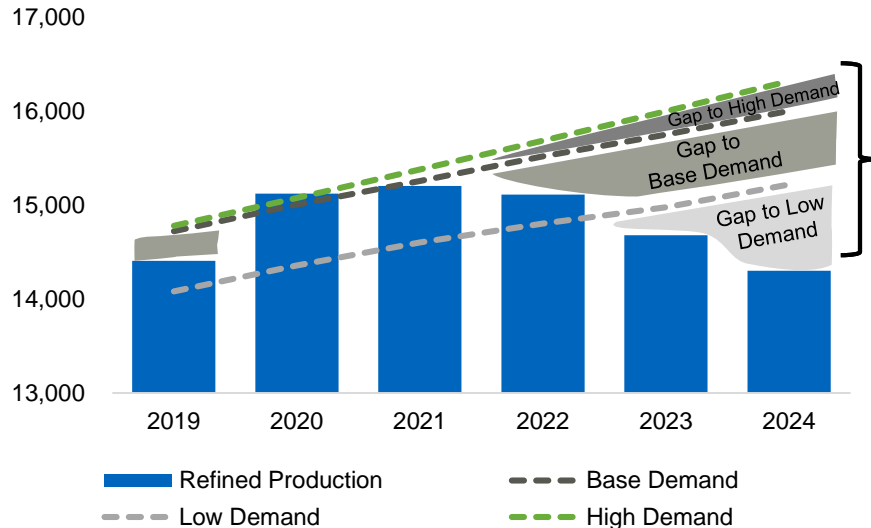


- Deficits in past 5 years have driven down stocks
- LME refined zinc stocks have decreased 48,000 tonnes year-to-date in 2019
- Less than 80,000 tonnes of refined zinc remaining on LME
- SHFE stocks have increased 59,000 tonnes year-to-date in 2019
- Decreased Chinese refined production is increasing demand for refined imports into China
- Smelter cuts announced in Q1 2019:
  - Elektrozinc Russia (80,000 tonnes): permanently closed due to safety infractions following a fire at the smelter
  - Skorpion: closing for 5 weeks, strike at mine reduces oxide stockpiles
  - Queensland Townsville zinc smelter: at risk due to flooded rail lines

# Zinc Supply / Demand Balance

## Zinc mine production peaks in 2021

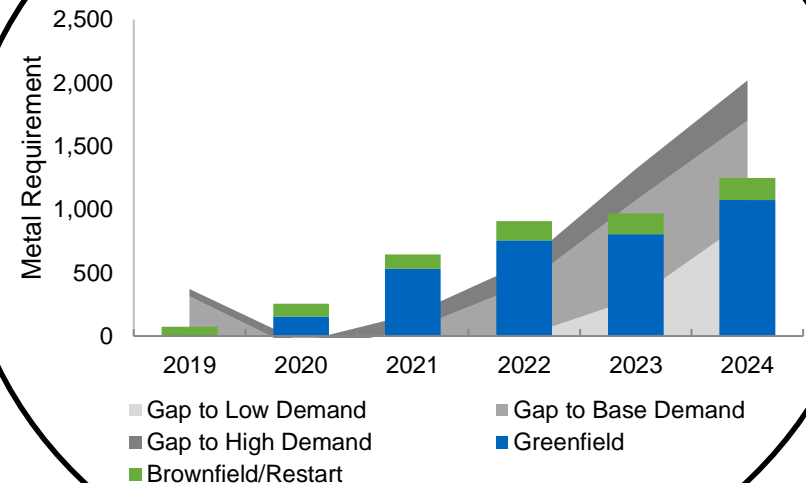
**Existing and Fully Committed Supply<sup>1</sup>**  
(Thousand tonnes)



*Assumed average growth to 2024:*

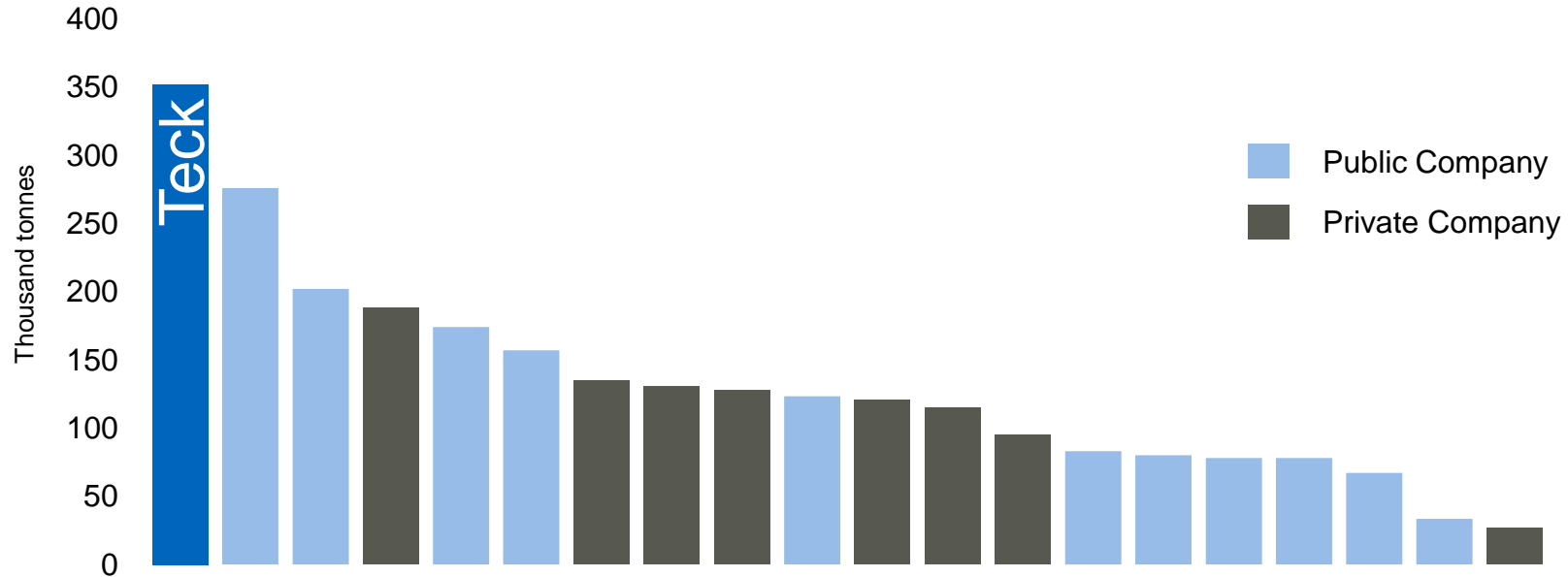
- High Demand (2.0%): 2.0 million tonne gap
- Base Demand (1.6%): 1.7 million tonne gap
- Low Demand (1.2%): 1.0 million tonne gap

**Probable Projects Sufficient To Fill Gap<sup>2</sup>**  
(Thousand tonnes)



# Largest Global Net Zinc Mining Companies

**Teck is the Largest Net Zinc Miner<sup>1</sup>**  
**Provides Significant Exposure to a Rising Zinc Price**



# Integrated Zinc Business



Red Dog

- » Cash costs in bottom 1<sup>st</sup> quartile<sup>1</sup>
- » Optimized stockpiling strategy to increase mill throughput
- » VIP2 project advancing to commissioning in 2020 and expected to improve throughput by ~15%
- » Winter weather conditions impacting port access road



Trail

- » Strong zinc production in 2019 with improving outlook for TC/RC's
- » KIVCET lead furnace shutdown safely completed in Q4 2018
- » Acid Plant #2 project ahead of schedule and under budget
- » Reinvesting some proceeds from Waneta dam sale to strengthen core
- » Margin improvement focus



Pend Oreille

- » Low iron feed and transport advantage for Trail
- » Exploration and contractors reduced to lower costs
- » Care and maintenance planned for Q3 2019
- » Potential for future restart

STRENGTHENING OUR ZINC BUSINESS

# Cost Discipline and Improvement Focus in Zinc

## Operating expenses & productivity

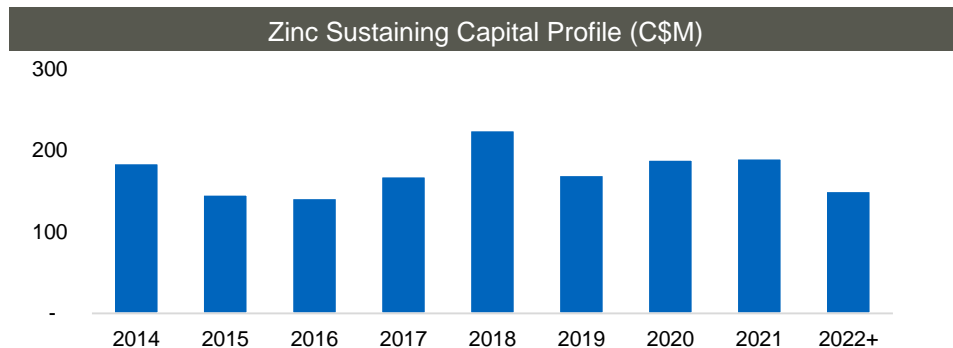
- Cross site sharing in asset management continues to improve availabilities and reduce costs
- Robust continuous improvement pipeline - key driver of margins

## Supply management at Teck

- Leveraging Teck-wide spending
- 7 primary categories started in 2010 with >\$50 million in sustained annual savings
- 6 more categories added in 2018
  - Additional \$30 million in annual savings
- China sourcing initiative

## Focused investment priorities in Zinc

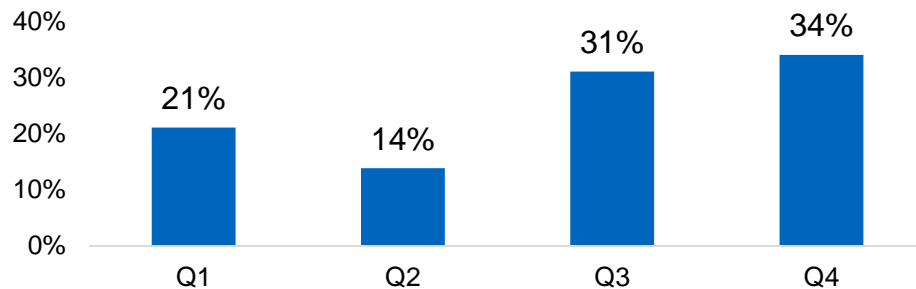
- Numerous projects finishing in 2019 and early 2020
  - Zinc: VIP2 at Red Dog, Acid Plant #2 at Trail
- Near term spending driven by tailings facility costs at Red Dog – declining in 2022
- Long-term sustaining capex in zinc expected at \$150 million



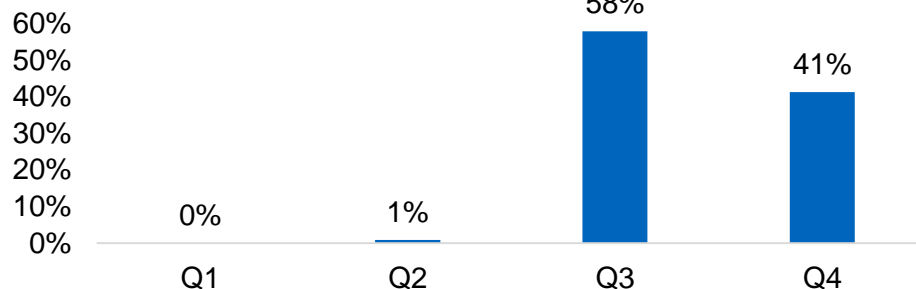
# Red Dog Sales Seasonality

- Operates 12 months
- Ships ~ 4 months
- Shipments to inventory in Canada and Europe; Direct sales to Asia
- ~65% of zinc sales in second half of year
- ~100% of lead sales in second half of year

**Zinc Sales<sup>1</sup>**



**Lead Sales<sup>1</sup>**

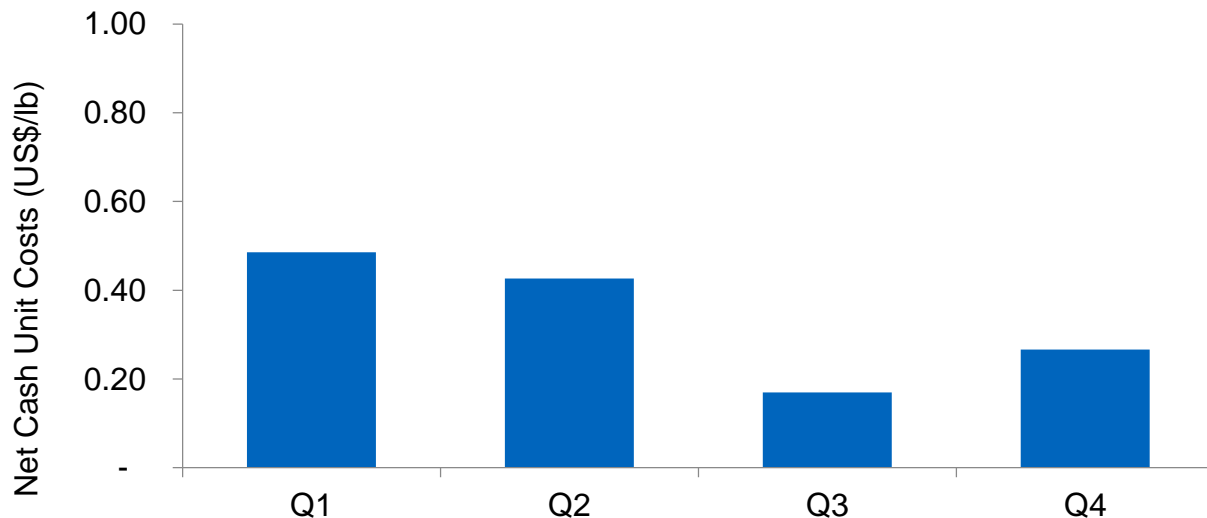


# Red Dog Operating Cost Seasonality

Significant quarterly variation

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**Red Dog Net Cash Unit Costs<sup>1</sup>**

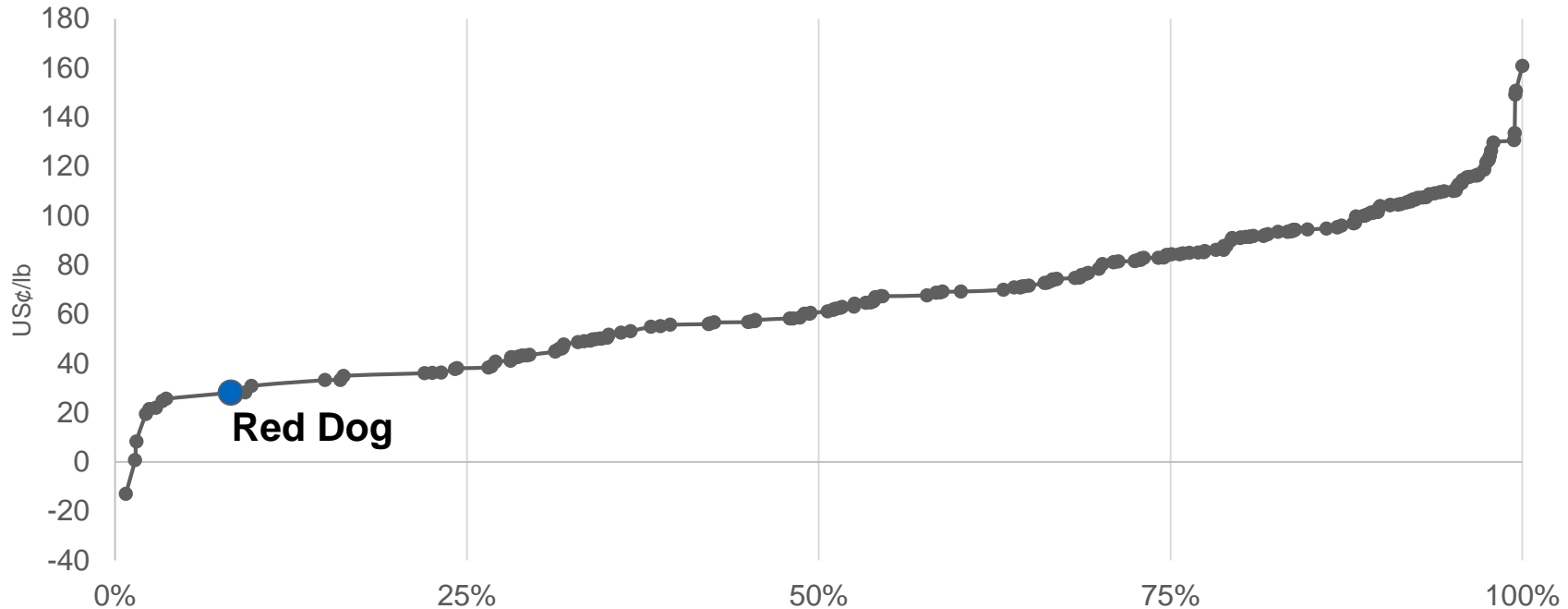


- Seasonality of Red Dog unit costs largely due to lead sales during the shipping season
- Zinc is a by-product credit at Antamina and accounted for in the Copper Business Unit



# Red Dog in Bottom Quartile of Zinc Cost Curves

**C1+Sustaining Cost Curve 2018<sup>1</sup>**



# Red Dog Extension Project

## Long Life Asset

- Aktigiruaq exploration target of 80-150 Mt @ 16-18% Zn + Pb<sup>1</sup>
- Anarraaq Inferred Resource<sup>2</sup>: 19.4 Mt @ 14.4% Zn, 4.2% Pb

## Quality Project

- Premier zinc district
- Significant mineralized system
- High grade

## Stable Jurisdiction

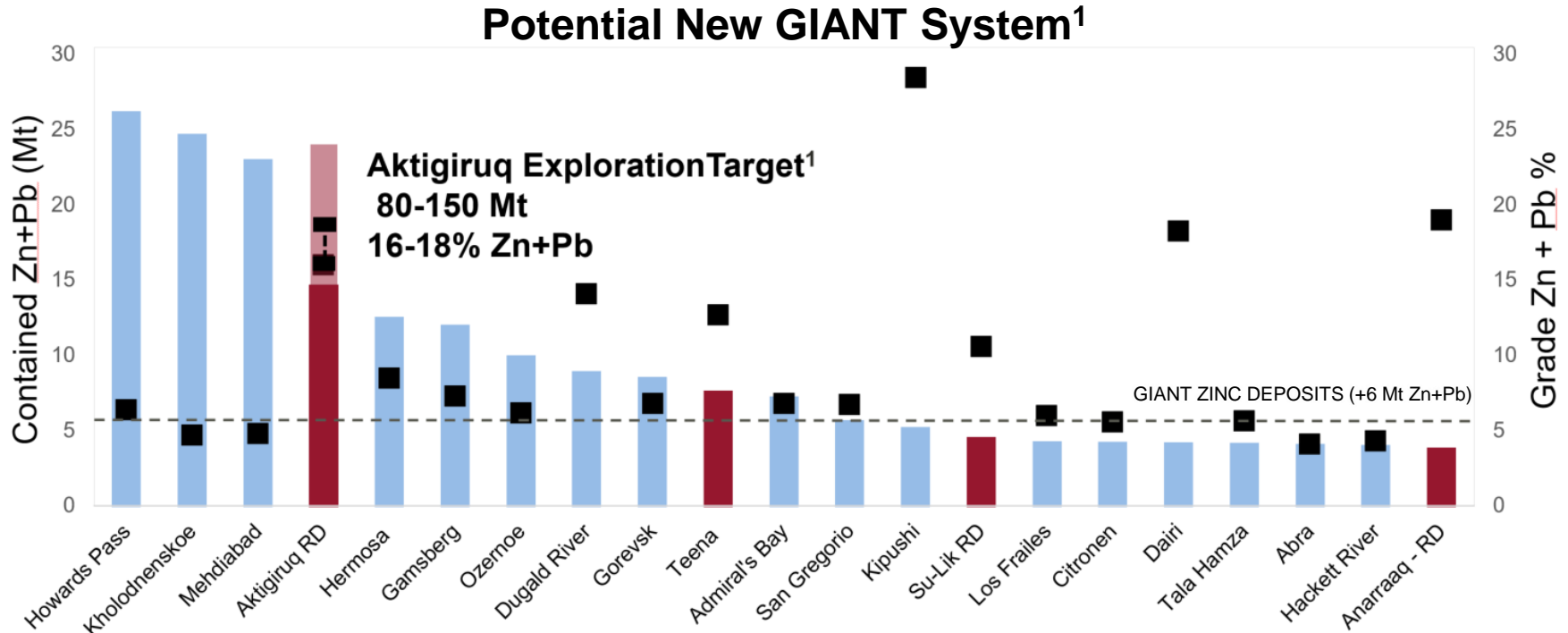
- Operating history
- ~12 km from Red Dog operations
- Strong community ties

## Path to Value Realization

- 2001: Initial drill hole
- 2017: Exploration target announced
- Next 18 months: Advancing delineation

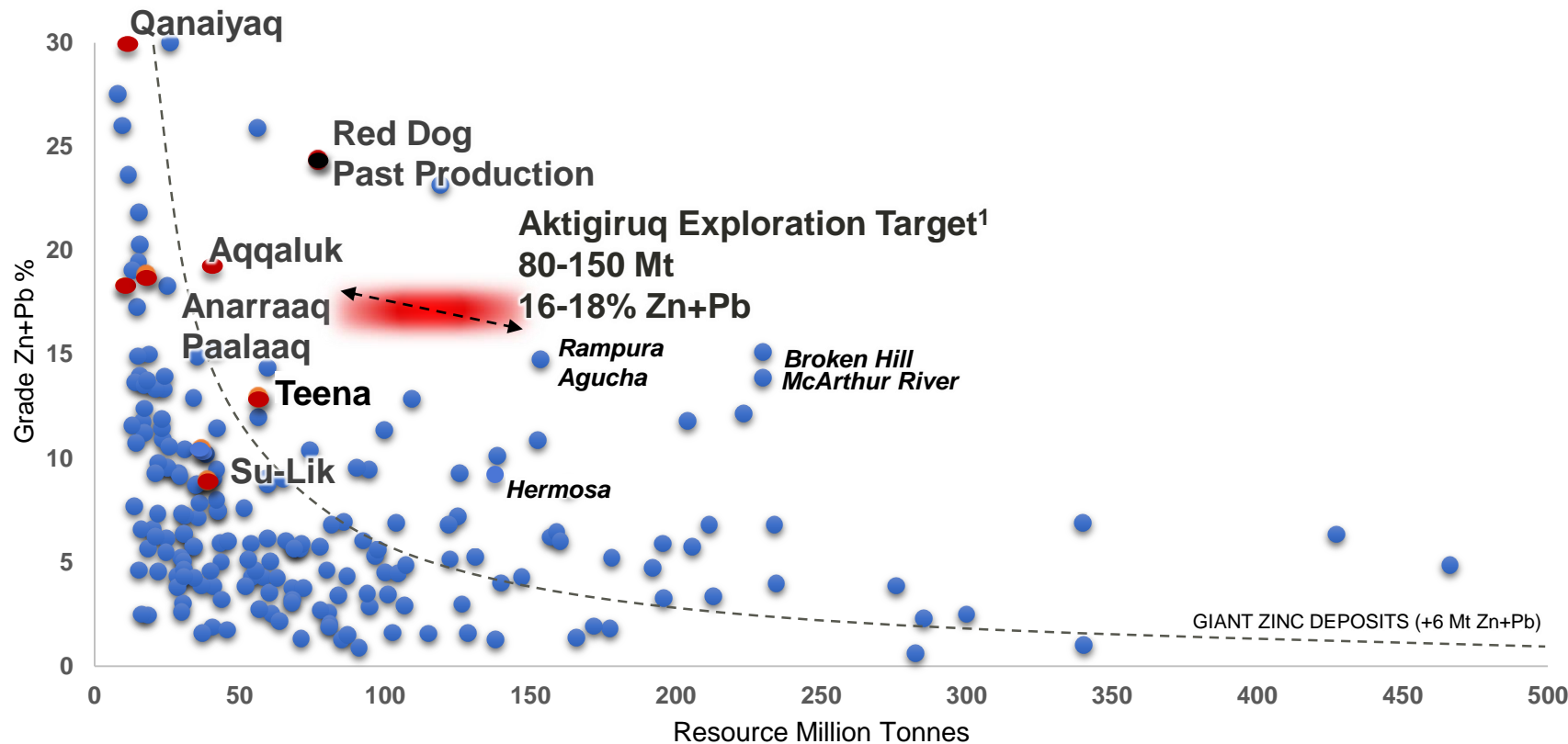


# Building a Quality Zinc Inventory



# Global Context of Teck's Zinc Resources

Well positioned; world class



# Notes: Appendix – Zinc

---

## **Slide 113: Environmental Policy Decreasing Chinese Production**

1. Source: BGRIMM.
2. Source: BGRIMM.

## **Slide 114: Increasing Demand for Zinc Metal Imports**

1. Source: SHFE, MyMetal, SMM, Industrial sources, Teck.
2. "Smelter + consumer stocks" refers to zinc metal held in the plants of smelters and semi producers and those on the road; "Bonded stocks" refers to zinc stored in bonded zones and will need to complete Customs clearance before entering China; "Domestic commercial stocks" refers to zinc stored in SHFE warehouses and other domestic commercial warehouses not registered in SHFE.
3. Source: China Customs, Wood Mackenzie, Teck.

## **Slide 115: Zinc Supply**

1. Source: BGRIMM, SMM & CNIA.

## **Slide 116: Chinese Zinc Mine Projects Delayed**

1. Source: Antaike, BGRIMM, Teck. Early year estimates from consolidation of several analyst views in the year preceding.
2. Source: Antaike, BGRIMM, Teck.
3. Source: CNIA, NBS.

## **Slide 117: Zinc Metal Stocks**

1. Source: LME, SHFE, SMM, CRU.
2. Source: LME, Fastmarkets, Argus, Acuity, company reports.

## **Slide 118: Zinc Supply / Demand Balance**

1. Source: Wood Mackenzie, CRU, Teck. Low Demand based on CRU, Base Case Demand based on Teck Zinc demand model. High Demand based long term historical averages and view on improved Trade Outlook flexed into Base Demand Model.
2. Source: Wood Mackenzie, CRU, Teck. Forecasts based on projects from Wood Mackenzie Probable list of projects from Q4 2018 flexed at their historic rates of probable projects entering production (only 50% – 60% of probable zinc projects and zinc mine life extensions historically are brought to market).

# Notes: Appendix – Zinc

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## **Slide 119: Largest Global Net Zinc Mining Companies**

1. Source: Wood Mackenzie, 2018.

## **Slide 120: Integrated Zinc Business**

1. Source: Wood Mackenzie.

## **Slide 122: Red Dog Sales Seasonality**

1. Average sales from 2010 to 2018.

## **Slide 123: Red Dog Operating Cost Seasonality**

1. Average quarterly net cash unit cost (2013-2017) before royalties, based on Teck 's reported financials. See "Non-GAAP Financial Measures" slides.

## **Slide 124: Red Dog in Bottom Quartile of Zinc Cost Curves**

1. Source: Wood Mackenzie

## **Slide 125: Red Dog Extension Project**

1. Aktigiruiq is an exploration target, not a resource. Refer to press release of September 18, 2017, available on SEDAR. Potential quantity and grade of this exploration target is conceptual in nature. There has been insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the target being delineated as a mineral resource.
2. See 2018 Annual Information Form.

## **Slide 126: Building a Quality Zinc Inventory**

1. Sources: S&P Global Market Intelligence, SNL Metals & Mining Database, Teck Public Disclosures. Aktigiruiq is an exploration target, not a resource. Refer to press release of September 18, 2017, available on SEDAR. Potential quantity and grade of this exploration target is conceptual in nature. There has been insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the target being delineated as a mineral resource.

## **Slide 127: Global Context of Teck's Zinc Resources**

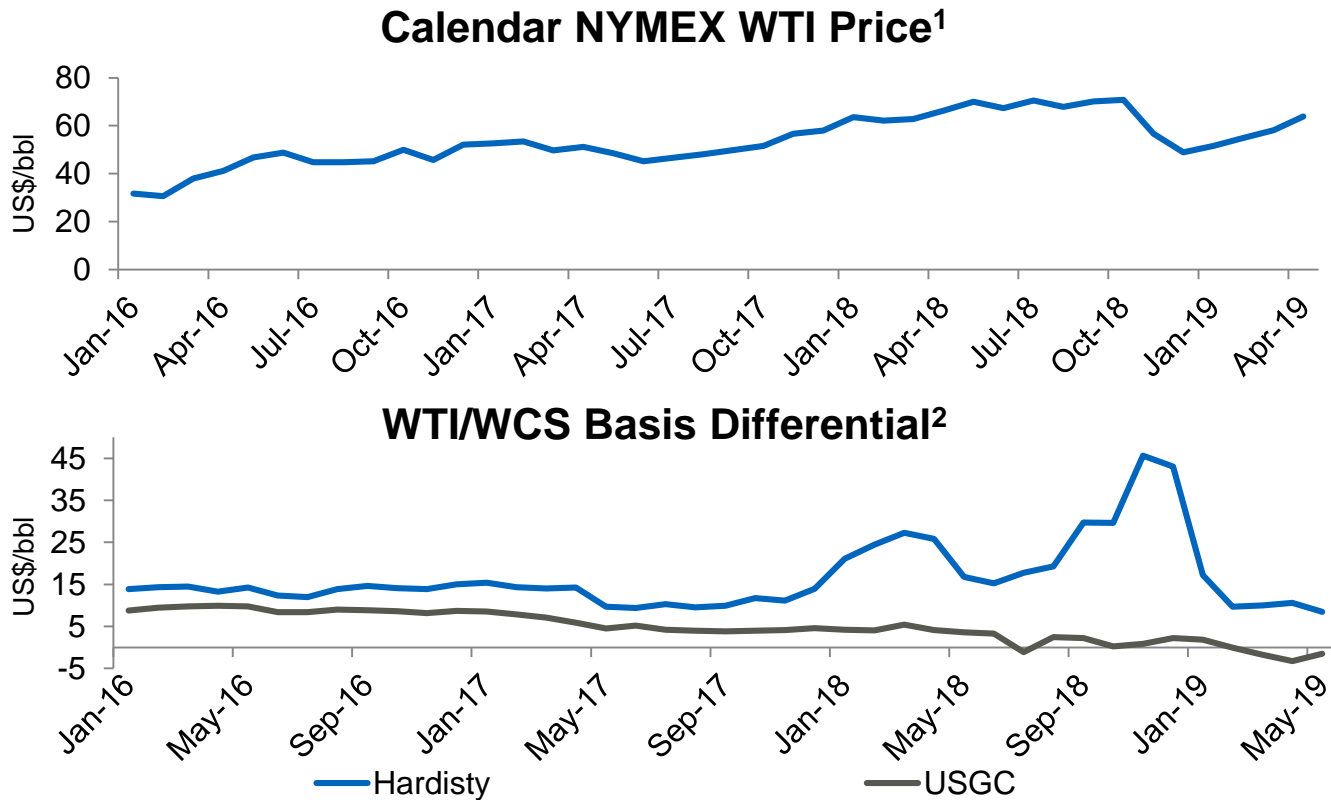
1. Sources: S&P Global Market Intelligence, SNL Metals & Mining Database, Teck Public Disclosures. Aktigiruiq is an exploration target, not a resource. Refer to press release of September 18, 2017, available on SEDAR. Potential quantity and grade of this exploration target is conceptual in nature. There has been insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the target being delineated as a mineral resource.

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# Energy Business Unit & Markets

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# Energy Benchmark Pricing





# Export Capacity Needed To Meet Global Demand

## Near term (2019-2021):

- Canadian export capacity lagging
- Reliant on rail (400-500 Kbpd)

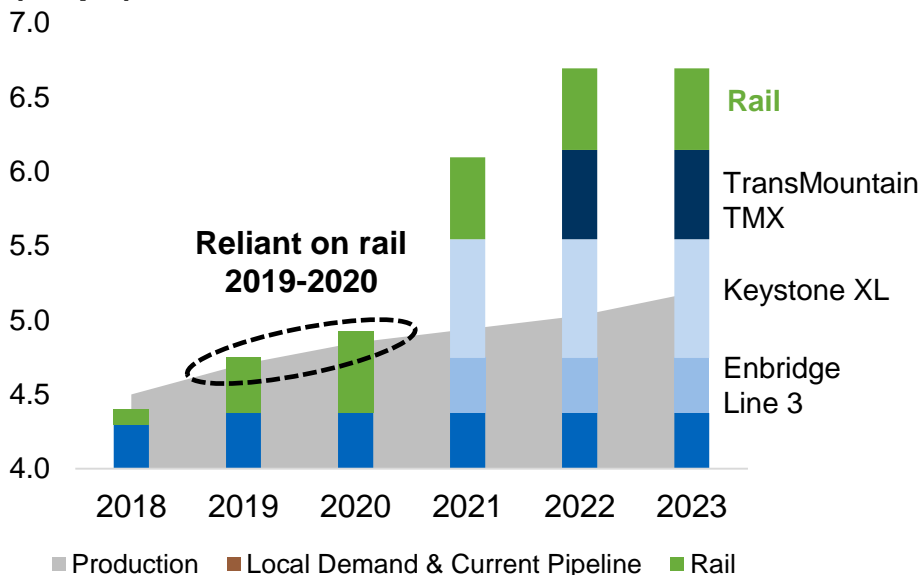
## Pipeline development progressing:

- Enbridge: 370 Kbpd (2020-2021)
- Keystone XL: 800 Kbpd (2021-2022)
- TMX: 600 Kbpd (2022)

## Longer term:

- Global heavy refining capacity increase
- US, India and China largest markets

## Western Canada Supply & Markets<sup>1</sup> (Mbpd)

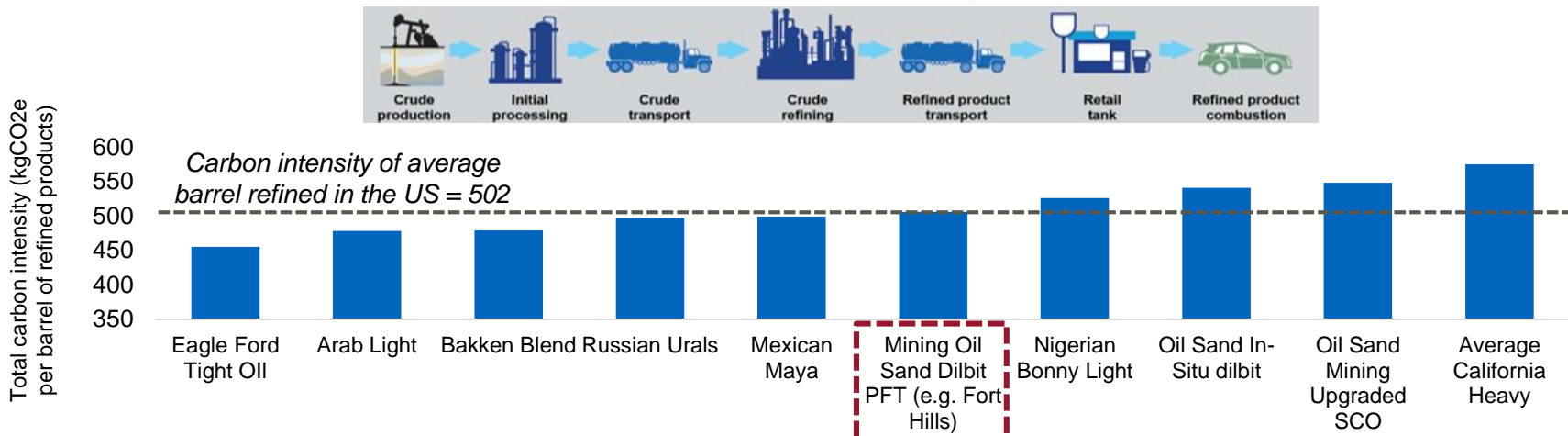


Existing pipeline/rail sufficient to meet takeaway capacity through 2023

# Lower Carbon Intensity Product at Fort Hills

Comparable to the average barrel refined in the U.S.

**PFT Diluted Bitumen has a Lower Carbon Intensity Than  
Around Half of the Barrels of Oil Refined in the US, on a Wells-to-Wheels Basis<sup>1</sup>**



Source: IHS Energy Special Report "Comparing GHG Intensity of the Oil Sands and the Average US Crude Oil", May 2014.

- Paraffinic Froth Treatment (PFT) removes asphaltenes
- Best in-class Canadian oil sands carbon intensity, including in-situ
- Pushing technology for continuous improvement

# Fort Hills Blend Widely Accepted In Market

**We produce a high quality refinery feedstock**  
**Low GHG intensity: <50% of US crude supply**

- Including in-situ and upgraded synthetic

**Our sales mix provides diverse market access**

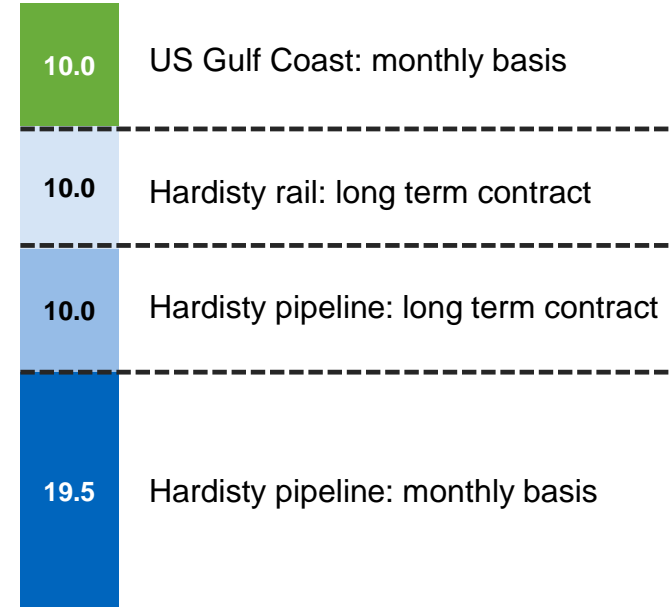
- 80% pipeline connected, 20% rail loading
- 10 Kbpd to **US Gulf Coast**, 39.5 Kbpd at **Hardisty**

## Teck's Commercial Activities<sup>1</sup>

Bitumen production	38.5 kbpd
+ Diluent acquisition	11.0 kbpd
<b>= Bitumen blend sales</b>	<b>49.5 kbpd</b>

Teck Blend:  
49.5 Kbpd

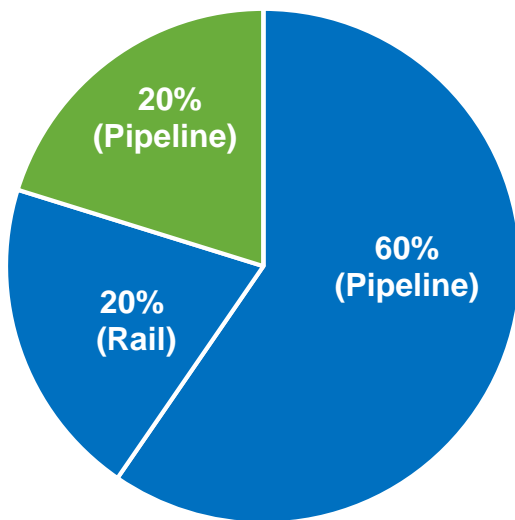
*Delivery Location*



We are well-positioned for future opportunities

# Diverse Portfolio of Sales in Energy

Blend Sales By Delivery Point



US Gulf Coast
  Hardisty

Revenue Calculation (US \$/bbl)

Location	Nymex WTI	Western Canadian Select Differential Basis
US Gulf Coast (Pipeline)	Calendar average monthly WTI	Monthly contracted spot differential at US Gulf Coast
Hardisty: Pipeline & Rail Transfers	Calendar average monthly WTI	Weighted average WTI/WCS indexed differential at Hardisty

Fort Hills blend sales subject to crude quality differential vs Western Canadian Select:

- Estimated at minus US\$2-\$3/bbl for 2019

# Quality Barrels in a Progressive Jurisdiction

4<sup>th</sup> largest oil sands **mining** portfolio...

## Fort Hills in operation

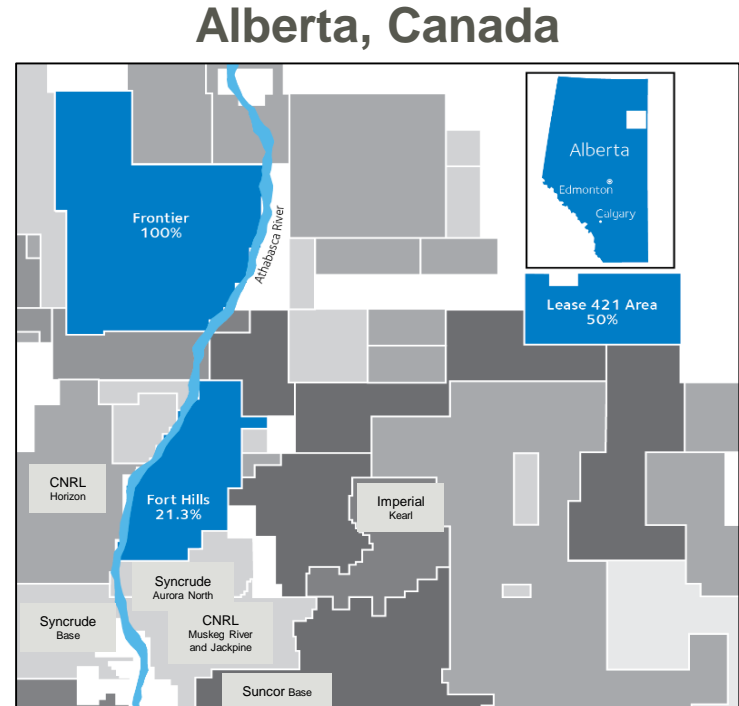
- Teck 21.3% = 0.6 billion barrels<sup>1</sup>

## Frontier in the regulatory phase

- Teck 100% = 3.2 billion barrels<sup>2</sup>

## Lease 421: future growth

- Teck 50%
- High quality lease: high grade, high recovery, low fines



...strong strategic fit: long life mining assets and low operating costs

# Our Energy Strategy

With an absolute focus on...

---



## **Maximizing value of Fort Hills**

- » Start-up complete, increase production volumes, lower costs



## **De-risking Frontier & Lease 421**

- » Frontier regulatory hearing completed in 2018, decision in early 2020



## **Driving business results through technology & innovation**

- » Safe & reliable production, cost and footprint

...to maximize shareholder value, position Teck as partner of choice

# Fort Hills is a Modern Mine

Built for low cost operations...

**201,000**

bpd

December 2018

**<\$23/bbl**

adjusted  
operating costs<sup>1</sup>

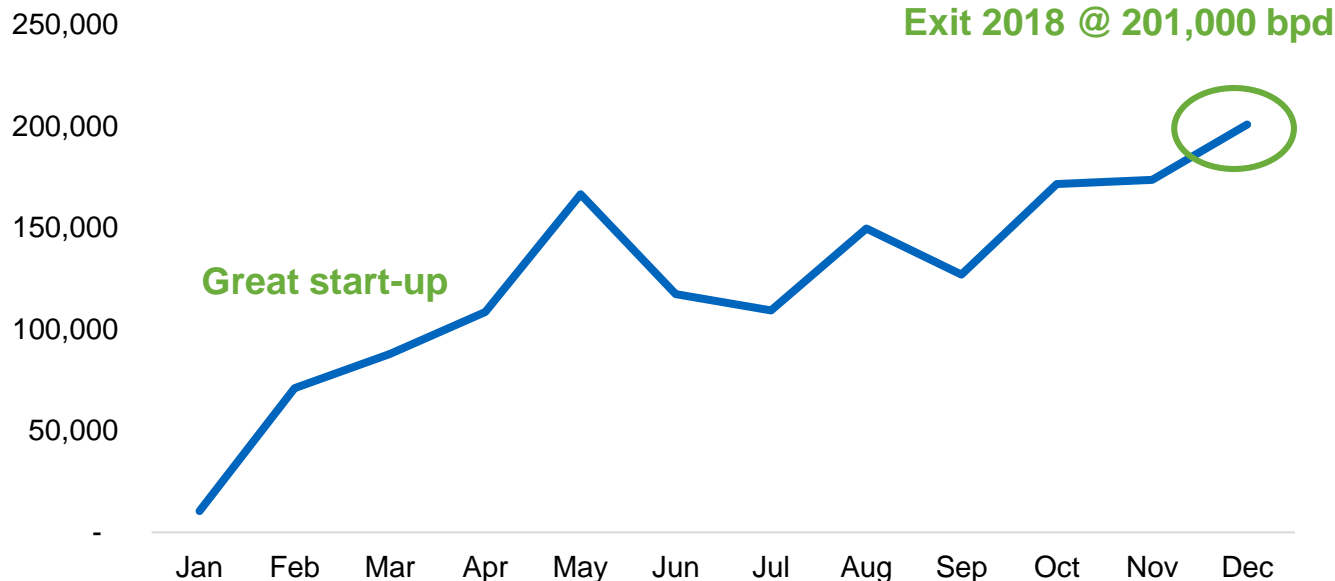
December 2018

**PFT**

product

low GHG emissions

Fort Hills 2018 Production @100%  
(Barrels per day)



...high quality barrels with significant debottlenecking potential





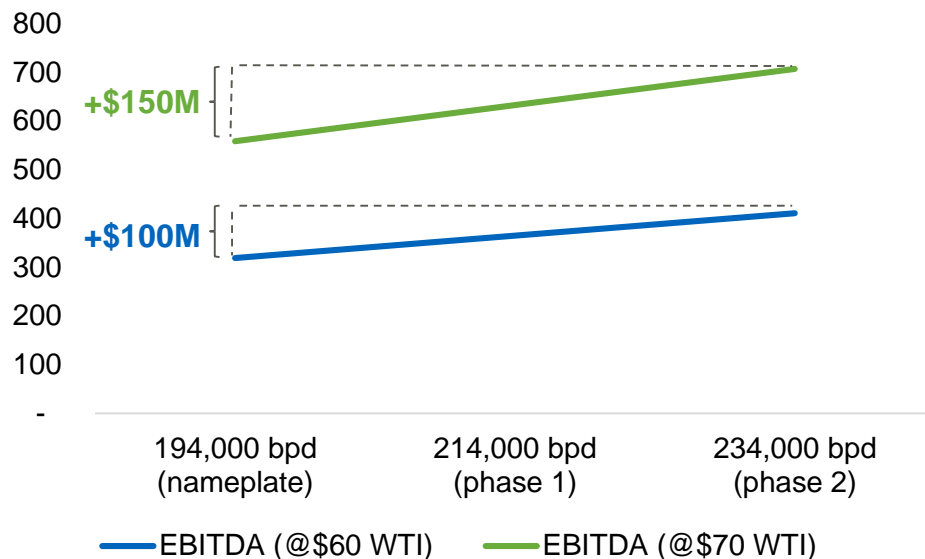
# Significant EBITDA Upside Potential in Energy

Providing the basis for strong and steady cash flow for decades...

## Assumptions

	WTI @ US\$70/bbl	WTI @ US\$60/bbl
WTI-WCS differential	US\$10.00	US\$14.75
C\$/US\$ exchange rate	1.30	1.32
Adjusted operating costs <sup>2</sup>	C\$20/bbl	C\$20/bbl

## EBITDA<sup>1</sup> Potential – Teck's share (\$ millions)



...potential annual EBITDA of \$400M – \$700M with debottlenecking

# Teck's Energy Outlook

Price environment improved significantly in the first quarter...

## GOVERNMENT OF ALBERTA CURTAILMENTS

- Effective January 1, 2019
- 325,000 barrels per day across the industry
- Subsequently reduced to 225,000, 200,000 and 175,000 barrels per day in April, May and June, respectively

### 2019 PRODUCTION

- 33,000-38,000 barrels per day
- 30,000-32,000 barrels per day in Q2

#### Life of mine:

- Nameplate 194,000 bpd
- ~38,500 bpd Teck's share

### 2019 OPERATING COSTS

- C\$26-29 per barrel adjusted operating costs<sup>1</sup>

#### Life of mine:

- C\$22-23/bbl<sup>2</sup>
- Long term target below C\$20/bbl

### 2019 CAPITAL

- C\$11.50-\$13.50 per barrel
- Higher in 2019 due to tailings and equipment ramp-up spending (as previously disclosed in 2017 & 2018)

#### Life of mine:

- C\$3-5/bbl<sup>3</sup>

...sharp focus on reducing costs (operating and capital)

# Notes: Appendix – Energy

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## **Slide 131: Energy Benchmark Pricing**

1. Source: CME Group. As at May 1, 2019.
2. Sources: Net Energy, CalRock and Link. As at May 1, 2019.

## **Slide 132: Export Capacity Needed to Meet Global Demand**

1. Sources: IHSMarkit, Lee & Doma, Teck Energy.

## **Slide 133: Lower Carbon Intensity Product at Fort Hills**

1. Source: IHS Energy Special Report "Comparing GHG Intensity of the Oil Sands and the Average US Crude Oil" May 2014. SCO stands for Synthetic Crude Oil.

## **Slide 136: Quality Barrels in a Progressive Jurisdiction**

1. Proved and probable reserves as at December 31, 2018. See Teck's 2018 Annual Information Form available under our profile on SEDAR ([www.sedar.com](http://www.sedar.com)) and on EDGAR ([www.sec.gov](http://www.sec.gov)) for further information regarding Fort Hills reserves.
2. Best estimate of unrisks contingent resources as at December 31, 2018, prepared by an independent qualified resources evaluator. Further information about these resource estimates, and the related risks and uncertainties and contingencies that prevent the classification of resources as reserves, is set out in Teck's management discussion and analysis dated February 12, 2019 available under our profile on SEDAR ([www.sedar.com](http://www.sedar.com)) and on EDGAR ([www.sec.gov](http://www.sec.gov)). There is no certainty that the Frontier project will produce any portion of the volumes currently classified as contingent resources.

## **Slide 138: Fort Hills is A Modern Mine**

1. Adjusted operating costs is a non-GAAP financial measure. See "Non-GAAP Financial Measures" slide.

## **Slide 139: Attractive Debottlenecking Opportunities at Fort Hills**

1. EBITDA is a non-GAAP financial measure. See "Non-GAAP Financial Measures" slide.

## **Slide 140: Significant EBITDA Upside Potential in Energy**

1. EBITDA assumes production is ~90% of stated amounts to account for planned outages. Includes Crown royalties assuming pre-payout phase. EBITDA is a non-GAAP financial measure. See "Non-GAAP Financial Measures" slide.
2. Adjusted operating costs is a non-GAAP financial measure. See "Non-GAAP Financial Measures" slide.

## **Slide 141: Teck's Energy Outlook**

1. Adjusted operating costs is a non-GAAP financial measure. See "Non-GAAP Financial Measures" slide.
2. Life of Mine operating cost estimate represents the Operator's estimate of costs for the Fort Hills mining and processing operations and do not include the cost of diluent, transportation, storage or blending. Estimates of Fort Hills operating costs could be negatively affected by delays in or unexpected events involving the ramp up of production. Steady state operations assumes full production of ~90% of nameplate capacity of 194,000 barrels per day.
3. Sustaining cost estimates represent the Operator's estimate of sustaining costs for the Fort Hills mining and processing operations. Estimates of Fort Hills sustaining costs could be negatively affected by delays in or unexpected events involving the ramp up of production. Fort Hills has a >40 year mine life.

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# Energy Business Unit Modelling

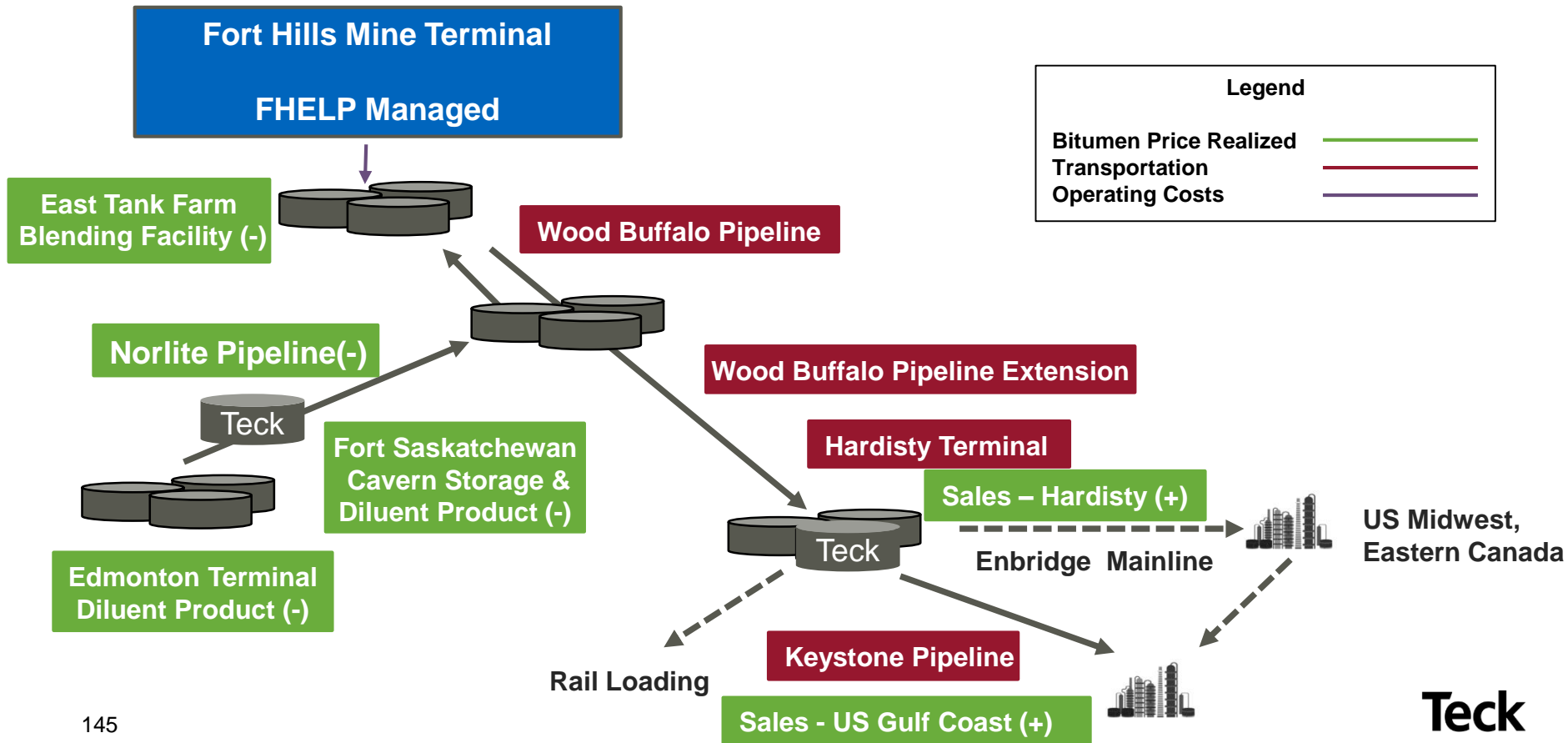
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# Operating Netback – Q1 2019

- Operating netback is a non-GAAP measure, **presented on a product and sales barrel basis** on page 23 of the Q1 2019 news release.
- Derived from the Energy segmented information (P&L), after adjusting for items not directly attributable to the revenues and costs associated with production and delivery.
- Excludes depreciation, taxes and other costs not directly attributable to production and delivery of Fort Hills product.

CAD\$/bbl	Q1 2019	
Bitumen price realized	\$48.42	Blended bitumen sales revenue less diluent expense (includes diluent product, Norlite, East Tank Farm)
Crown royalties	(\$1.75)	Downstream of East Tank Farm: Wood Buffalo system, Keystone, Hardisty tank
Transportation costs	(\$10.30)	Royalties are payable at 1-9% of gross revenue or 25-40% of net revenue depending on project's financial status. More information on royalties is available at: <a href="#">Alberta Energy</a>
Operating costs	(\$29.42)	Costs at the mine to produce bitumen: labour, fuel (diesel, natural gas), materials (tools, tires), maintenance, Teck 100% Fort Hills G&A
<b>Operating netback</b>	<b>\$6.95</b>	

# Operating Netback – Q1 2019



# Operating Netback Reconciliation – Q1 2019

## Non-GAAP Financial Measures on page 52 of Q1 2019 news release

(C\$ in millions, except where noted)	Three months ended March 31, 2019	(C\$ in millions, except where noted)	Three months ended March 31, 2019
<b>Revenue as reported</b>	<b>\$ 212</b>	<b>Per barrel amounts (C\$/barrel)</b>	
Less:		Bitumen price realized (A/B)	\$48.42
Cost of diluent for blending	(73)	Crown royalties (D/B)	(1.75)
Non-proprietary product revenue	(8)	Transportation costs for FRB (C/B)	(10.30)
Add back: Crown royalties <sup>1</sup> (D)	5	Adjusted operating costs (E/B)	(29.42)
Adjusted revenue (A)	\$ 136	Operating netback (C\$/barrel)	\$ 6.95
<b>Cost of sales as reported</b>	<b>\$ 217</b>	<b>Blended Bitumen Price Realized Reconciliation</b>	
Less:		Revenue as reported	\$ 212
Depreciation and amortization	(27)	Less: non-proprietary product revenue	(8)
<b>Cash cost of sales</b>	<b>190</b>	Add back: crown royalties <sup>1</sup>	3
Less:		Blended bitumen revenue (F)	\$ 209
Cost of diluent for blending	(73)		
Cost of non-proprietary product purchased	(9)	Blended bitumen barrels sold (000s of barrels) (G)	3,725
Transportation for non-proprietary product purchased	3	Blended bitumen price realized — (CAD\$/barrel) (F/G) = H	\$ 55.99
Transportation costs for FRB (C)	(29)	Average exchange rate (I)	1.33
Adjusted operating costs (E)	\$ 82	Blended bitumen price realized — (US\$/barrel) (H/I)	\$ 42.12
Blended bitumen barrels sold (000s of barrels)	3,725		
Less: diluent barrels included in blended bitumen (000s of barrels)	(925)		
Bitumen barrels sold (000s of barrels) (B)	2,800		

# Energy Gross Profit – Q1 2019

## From Revenue and Gross Profit Table Q1 2019 news release; page 35

CAD\$ in millions	Three months ended March 31, 2019
Revenue (A)	\$212
Gross profit (loss) (B)	\$(5)

## From Cost of Sales Summary Table Q1 2019 news release; pages 36-37

CAD\$ in millions	Three months ended March 31, 2019
Operating costs (C)	\$82
Transportation costs (D)	\$26
Concentrate and diluent purchases (E)	\$82
Depreciation and amortization (F)	\$27

## Blended Bitumen Revenue Calculation

CAD\$ in millions	Three months ended March 31, 2019
Revenue, as reported (A)	\$212
Less: non-proprietary product revenue (G) – from Q1 2019 news release; page 52	(8)
Add back: crown royalty (H) – from Q1 2019 news release; page 52	5
Blended bitumen revenue, calculated (H)	<u>\$209</u>

## Energy Business Unit Operating Statement

CAD\$ in millions	Three months ended March 31, 2019
Revenue:	
Blend sales (H)	\$209
Add: non-proprietary product sales (G)	8
Less: crown royalty (H)	(5)
Revenue (A)	<u>\$212</u>
Less: Cost of sales:	
Cost of diluent for blending (E)	\$82
Operating expenses (C)	82
Transportation (D)	26
Depreciation and amortization (F)	27
Cost of sales, calculated	<u>\$217</u>
Gross profit (B)	<u>\$(5)</u>



# Modelling Bitumen Price Realized – Q1 2019

## Non-GAAP Financial Measure

$$\text{Bitumen price realized} = (\text{blend sales}^A - \text{diluent expense}^B) / \text{bitumen bbls sold}^C$$

- A. Blend sales = blend sales @ Hardisty + blend sales @ U.S. Gulf Coast (USGC)  
= \$209 per “Blended Bitumen Price Realized Reconciliation” and “Reconciliation of Energy Gross Profit”
- Blend sales @ Hardisty = [(WTI – **WTI/WCS differential @ Hardisty** – negotiated differential) x F/X rate] x # of barrels sold at Hardisty
  - Blend sales @ USGC = [(WTI – **WTI/WCS differential @ USGC** – negotiated differential) x F/X rate] x # of barrels sold at USGC

\*\*\***WTI/WCS differentials are not the same at Hardisty vs. USGC**

- B. Cost of diluent for blending:  
= Cost of diluent product + diluent transportation/storage + blending cost  
= \$73 per “Cost of Sales Summary Table” and “Reconciliation of Energy Gross Profit”
- Cost of diluent product = [(WTI +/- condensate premium/discount) x # of diluent barrels sold in blend] x F/X rate
- \*\*\***Diluent contained in a barrel of blend ranges from approximately 20% to 25% depending on the quality of blend and season (temperature)**
- Diluent transportation and blending cost includes tolls on the Norlite pipeline, East Tank Farm blending facility and diluent storage at Fort Saskatchewan

- C. Bitumen barrels sold – as provided on the “Operating Netback Reconciliation”

# Energy EBITDA Simplified Model

## Illustrative EBITDA Calculation - Teck Attributable @ 21.3% (14 Mbpd)<sup>1</sup>

	Assumption Per Barrel	Total
WTI price	US\$70.00	
Less: Weighted average WTI-WCS differential	(US\$10.00)	
Multiplied by: C\$/US\$ exchange rate @ \$1.25		
WCS price (WTI price less WTI-WCS differential x C\$/US\$ exchange rate @ \$1.25)	C\$75.00	
Less: Operating costs	(C\$20.00)	
Diluent cost (includes product, diluent transportation and blending costs)	(C\$10.00)	
Transportation (pipelines & terminalling downstream of ETF)	(C\$7.00)	
Crown royalties	(C\$3.00)	
Total cost	(C\$40.00)	
EBITDA	C\$35.00	
EBITDA potential (14 Mbpd x cash margin)		~C\$500M

# Notes: Appendix – Energy Business Unit Modelling

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## **Slide 149: Energy EBITDA Simplified Model**

1. EBITDA is a non-GAAP financial measure. This model is being provided to illustrate how Teck calculates EBITDA for its Energy business unit. The figures included are not forecasts of projected figures of Teck's Energy EBITDA. See "Non-GAAP Financial Measures" slides.

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# Non-GAAP Financial Measures

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# Non-GAAP Financial Measures

EBITDA is profit attributable to shareholders before net finance expense, income and resource taxes, and depreciation and amortization. Adjusted EBITDA is EBITDA before the pre-tax effect of certain types of transactions that in our judgment are not indicative of our normal operating activities or do not necessarily occur on a regular basis. These adjustments to EBITDA highlight items and allow us and readers to analyze the rest of our results more clearly. EBITDA Margin for our operations as business units is EBITDA (as described above) for those operations and business units, divided by the revenue for the relevant operation or business unit for the year-to-date. For adjusted profit, we adjust profit attributable to shareholders as reported to remove the after-tax effect of certain types of transactions that in our judgment are not indicative of our normal operating activities or do not necessarily occur on a regular basis. Adjusted basic earnings per share is adjusted profit divided by average number of shares outstanding in the period. Adjusted diluted earnings per share is adjusted profit divided by average number of fully diluted shares in a period. We believe that disclosing these measures assist readers in understanding the ongoing cash generating potential of our business in order to provide liquidity to fund working capital needs, service outstanding debt, fund future capital expenditures and investment opportunities, and pay dividends. Free cash flow is presented to provide a means to evaluate shareholder returns. Other non-GAAP financial measures, including those comparing our results to our diversified and North American peers, are presented to help the reader compare our performance with others in our industry. The measures described above do not have standardized meanings under IFRS, may differ from those used by other issuers, and may not be comparable to such measures as reported by others. These measures should not be considered in isolation or used in substitute for other measures of performance prepared in accordance with IFRS.

## Reconciliation of EBITDA Margin

(C\$ in millions)

	Three months ended March 31, 2019				
	Coal	Copper	Red Dog	Other <sup>1</sup>	Teck
Earnings before taxes per segmented note	687	157	177	(38)	983
Adjust non-controlling interest (NCI) for earnings attributable to shareholder	(14)	-	-	-	(14)
Depreciation & amortization	183	113	29	48	373
Net finance expense	14	12	9	19	54
<b>EBITDA (A)</b>	<b>870</b>	<b>282</b>	<b>215</b>	<b>29</b>	<b>1,396</b>
Revenue (B)	1,552	630	346	578	3,106
<b>EBITDA Margin (A/B)</b>	<b>56%</b>	<b>45%</b>	<b>62%</b>	<b>5%</b>	<b>45%</b>

# Non-GAAP Financial Measures

## Reconciliation of Profit and Adjusted Profit

(C\$ in millions)	Three months ended March 31, 2019
<b>Profit attributable to shareholders</b>	<b>\$ 630</b>
Add (deduct):	
Debt prepayment option loss (gain)	(51)
Other	(11)
<b>Adjusted profit</b>	<b>\$ 568</b>

## Reconciliation of Basic Earnings Per Share to Adjusted Basic Earnings Per Share

(C\$ in millions)	Three months ended March 31, 2019
<b>Basic earnings per share</b>	<b>\$ 1.11</b>
Add (deduct):	
Debt prepayment option loss (gain)	(0.09)
Other	(0.02)
<b>Adjusted basic earnings per share</b>	<b>\$ 1.00</b>

## Reconciliation of Diluted Earnings Per Share to Adjusted Diluted Earnings Per Share

(C\$ in millions)	Three months ended March 31, 2019
<b>Diluted earnings per share</b>	<b>\$ 1.10</b>
Add (deduct):	
Debt prepayment option loss (gain)	(0.09)
Other	(0.02)
<b>Adjusted diluted earnings per share</b>	<b>\$ 0.99</b>

# Non-GAAP Financial Measures

## Reconciliation of Net Debt-to-Adjusted EBITDA Ratio & Net Debt-to-Debt-Plus-Equity Ratio

(C\$ in millions)	(A) Twelve months ended December 31, 2018	(B) Three months ended March 31, 2018	(C) Three months ended March 31, 2019	(A-B+C) Twelve months ended March 31, 2019
EBITDA	\$ 6,174	\$ 1,555	\$ 1,396	(D) \$ 6,015
Adjusted EBITDA	\$ 5,390	\$ 1,552	\$ 1,319	(E) \$ 5,157
Total debt at period end	\$ 5,519			(F) \$ 5,752
Less: cash and cash equivalents at period end	(1,734)			(2,446)
Net debt	\$ 3,785			(G) \$ 3,306
Equity				(H) 24,019
Debt to EBITDA ratio				(F/D) 1.0
Net debt to EBITDA ratio				(G/D) 0.5
Net debt to adjusted EBITDA ratio				(G/E) 0.6
Net debt to net debt-plus-equity				(G/(G+H)) 12%

# Non-GAAP Financial Measures

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## Reconciliation of EBITDA and Adjusted EBITDA

	Three months ended March 31, 2019
(C\$ in millions)	
Profit attributable to shareholders	\$ 630
Finance expense net of finance income	54
Provision for income taxes	339
Depreciation and amortization	373
<b>EBITDA</b>	<b>\$ 1,396</b>
Add (deduct):	
Debt prepayment option loss (gain)	(70)
Other	(7)
<b>Adjusted EBITDA</b>	<b>\$ 1,319</b>

## Reconciliation of Free Cash Flow

	2003 to Q1 2019
(C\$ in millions)	
<b>Cash Flow from Operations</b>	<b>\$43,623</b>
Debt interest and finance charges paid	(5,189)
Capital expenditures, including capitalized stripping costs	(22,187)
Payments to non-controlling interests (NCI)	(622)
<b>Free Cash Flow</b>	<b>\$15,625</b>
Dividends paid	\$4,298
Payout ratio	28%



# Non-GAAP Financial Measures

## Reconciliation of Gross Profit Before Depreciation and Amortization

(C\$ in millions)	Three months ended March 31, 2019
Gross profit	\$ 1,042
Depreciation and amortization	373
<b>Gross profit before depreciation and amortization</b>	<b>\$ 1,415</b>
Reported as:	
Steelmaking coal (A)	\$ 909
Copper (B)	283
Zinc (C)	201
Energy (D)	22
<b>Gross profit before depreciation and amortization</b>	<b>\$ 1,415</b>

## Reconciliation of Gross Profit Margins Before Depreciation

(C\$ in millions)	Three months ended March 31, 2019
Revenue	
Steelmaking coal (E)	\$ 1,552
Copper (F)	630
Zinc (G)	712
Energy (H)	212
Total	\$ 3,106
Gross profit margins before depreciation	
Steelmaking coal (A/E)	59%
Copper (B/F)	45%
Zinc (C/G)	28%
Energy (D/H) <sup>1</sup>	10%

# Non-GAAP Financial Measures

## Steelmaking Coal Unit Cost Reconciliation

(C\$ in millions, except where noted)	Three months ended March 31, 2019	Twelve months ended December 31, 2018
<b>Cost of sales as reported</b>	<b>\$ 826</b>	<b>\$ 3,309</b>
Less:		
Transportation	(240)	(975)
Depreciation and amortization	(183)	(730)
Adjusted cash cost of sales	\$ 403	\$ 1,604
 Tonnes sold (millions)	 6.2	 26.0
 Per unit amounts (C\$/t)		
Adjusted cash cost of sales	\$ 65	\$ 62
Transportation	39	37
Cash unit costs (C\$/t)	\$ 104	\$ 99
 <b>US\$ AMOUNTS</b>		
Average exchange rate (C\$/US\$)	\$ 1.33	\$ 1.30
Per unit amounts (US\$/t) <sup>1</sup>		
Adjusted cash cost of sales	\$ 49	\$ 47
Transportation	29	29
Unit costs (US\$/t)	\$ 78	\$ 76

## Reconciliation of Coal Business Unit Adjusted EBITDA

(C\$ in millions)	October 1, 2008 to March 31, 2019
<b>Gross Profit</b>	<b>\$ 17,765</b>
Add back: Depreciation and amortization	6,528
<b>Gross profit, before depreciation and amortization</b>	<b>\$ 24,293</b>
Deduct: Other costs	(507)
<b>Adjusted EBITDA</b>	<b>\$ 23,786</b>

# Non-GAAP Financial Measures

## Copper Unit Cost Reconciliation

	Three months ended March 31, 2019	Twelve months ended December 31, 2018		Three months ended March 31, 2019	Twelve months ended December 31, 2018
(C\$ in millions, except where noted)					
<b>Revenue as reported</b>	\$ 630	\$ 2,714	<b>US\$ AMOUNTS<sup>1</sup></b>		
By-product revenue (A)	(74)	(472)	Average exchange rate (C\$/US\$)	\$ 1.33	\$ 1.30
Smelter processing charges (B)	43	157	Per unit amounts (US\$/lb)		
Adjusted revenue	\$ 599	\$ 2,399	Adjusted cash cost of sales	\$ 1.65	\$ 1.55
			Smelter processing charges	0.20	0.19
<b>Cost of sales as reported</b>	\$ 460	\$ 1,837	Total cash unit costs (US\$/lb)	\$ 1.85	\$ 1.74
Less:			Cash margin for by-products (US\$/lb)	(0.30)	(0.51)
Depreciation and amortization	(113)	(478)	Net cash unit costs (US\$/lb)	\$1.55	\$1.23
Inventory (write-downs) provision reversal	11	(44)			
Collective agreement charges	-	(5)			
By-product cost of sales (C)	(11)	(61)			
Adjusted cash cost of sales (D)	\$ 347	\$ 1,249			
Payable pounds sold (millions) (E)	158.4	622.9			
Per unit amounts (C\$/lb)					
Adjusted cash cost of sales (D/E)	\$ 2.19	\$2.01			
Smelter processing charges (B/E)	0.27	0.25			
Total cash unit costs (C\$/lb)	\$ 2.46	\$2.26			
Cash margin for by-products (C\$/lb) ((A-C)/E)	(0.40)	(0.66)			
Net cash unit costs (C\$/lb)	\$ 2.06	\$1.60			

# Non-GAAP Financial Measures

## Zinc Unit Cost Reconciliation (Mining Operations)<sup>1</sup>

	Three months ended March 31, 2019	Twelve months ended December 31, 2018		Three months ended March 31, 2019	Twelve months ended December 31, 2018
(C\$ in millions, except where noted)			(C\$ in millions, except where noted)		
<b>Revenue as reported</b>	\$ 712	\$ 3,094	Payable pounds sold (millions) (E)	259.9	1,035.5
Less:					
Trail Operations revenues as reported	(471)	(1,942)	Per unit amounts (C\$/lb)		
Other revenues as reported	(2)	(8)	Adjusted cash cost of sales (D/E)	\$ 0.41	\$ 0.40
Add back: Intra-segment revenues as reported	132	650	Smelter processing charges (B/E)	0.22	0.25
	\$ 371	\$ 1,794	Total cash unit costs (C\$/lb)	\$ 0.63	\$ 0.65
By-product revenue (A)	(10)	(316)	Cash margin for by-products (C\$/lb) ((A-C)/B)	(0.04)	(0.24)
Smelter processing charges (B)	57	255	Net cash unit costs (C\$/lb) <sup>3</sup>	\$ 0.59	\$ 0.41
Adjusted revenue	\$ 418	\$ 1,733			
<b>Cost of sales as reported</b>	\$ 561	\$ 2,225	<b>US\$ AMOUNTS<sup>2</sup></b>		
Less:			Average exchange rate (C\$/US\$)	\$ 1.33	\$ 1.30
Trail Operations cost of sales as reported	(482)	(1,926)	Per unit amounts (US\$/lb)		
Other costs of sales as reported	9	1	Adjusted cash cost of sales	\$ 0.31	\$ 0.30
Add back: Intra-segment as reported	132	650	Smelter processing charges	0.16	0.19
	\$ 220	\$ 950	Total cash unit costs (US\$/lb)	\$ 0.47	\$ 0.49
Less:			Cash margin for by-products (US\$/lb)	(0.03)	(0.18)
Depreciation and amortization	(30)	(141)	Net cash unit costs (US\$/lb)	\$0.44	\$0.31
Royalty costs	(84)	(328)			
By-product cost of sales (C)	-	(70)			
Adjusted cash cost of sales (D)	\$ 106	\$ 411			

1. Red Dog and Pend Oreille.

2. Average period exchange rates are used to convert to US\$ per pound equivalent.

# Non-GAAP Financial Measures

## Energy Operating Netback, Bitumen and Blended Bitumen Price Realized Reconciliations<sup>1</sup>

	Three months ended March 31, 2019	Twelve months ended December 31, 2018		Three months ended March 31, 2019	Twelve months ended December 31, 2018
(C\$ in millions, except where noted)					
<b>Revenue as reported</b>	<b>\$ 212</b>	<b>\$ 407</b>	Blended bitumen barrels sold (000's)	3,725	8,746
Less:			Less: diluent barrels included in blended bitumen (000's)	(925)	(1,965)
Cost of diluent for blending	(73)	(181)	Bitumen barrels sold (000's) (B)	2,800	6,781
Non-proprietary product revenue	(8)	(18)			
Add back: Crown royalties (D)	5	14	Per barrel amounts (C\$)		
Adjusted revenue (A)	\$ 136	\$ 222	Bitumen price realized (A/B)	\$ 48.42	\$ 32.81
			Crown royalties (D/B)	(1.75)	(2.04)
<b>Cost of sales as reported</b>	<b>\$ 217</b>	<b>\$ 572</b>	Transportation costs for FRB (C/B)	(10.30)	(8.83)
Less:			Adjusted operating costs (E/B)	(29.42)	(32.89)
Depreciation and amortization	(27)	(59)	<b>Operating netback (C\$/barrel)</b>	<b>\$ 6.95</b>	<b>\$ (10.95)</b>
Inventory write-downs		(34)			
<b>Cash cost of sales</b>	<b>\$ 190</b>	<b>\$ 479</b>			
Less:					
Cost of diluent for blending	(73)	(181)			
Cost of non-proprietary product purchased	(9)	(12)			
Transportation for non-proprietary product purchased	3	(3)			
Transportation costs for FRB (C)	(29)	(60)			
Adjusted operating costs (E)	\$ 82	\$ 223			

# Non-GAAP Financial Measures

## Blended Bitumen Price Realized Reconciliation

	Three months ended March 31, 2019	Twelve months ended December 31, 2018
(C\$ in millions, except where noted)		
<b>Revenue as reported</b>	<b>\$ 212</b>	<b>\$ 407</b>
Less: Non-proprietary product revenue	(8)	(18)
Add back: Crown royalties	5	14
Blended bitumen revenue (A)	\$ 209	\$ 403
Blended bitumen barrels sold (000s) (B)	3,725	8,746
Blended bitumen price realized (C\$) (A/B)=D <sup>1</sup>	\$ 55.99	\$ 46.14
Average exchange rate (C\$ per US\$1) (C)	1.33	1.31
Blended bitumen price realized (US\$/barrel) (D/C) <sup>1</sup>	\$ 42.12	\$ 35.12

1. Bitumen price realized represents the realized petroleum revenue (blended bitumen sales revenue) net of diluent expense, expressed on a per barrel basis. Blended bitumen sales revenue represents revenue from our share of the heavy crude oil blend known as Fort Hills Reduced Carbon Life Cycle Dilbit Blend (FRB), sold at the Hardisty and U.S. Gulf Coast market hubs. FRB is comprised of bitumen produced from the Fort Hills oil sands mining and processing operations blended with purchased diluent. The cost of blending is affected by the amount of diluent required and the cost of purchasing, transporting and blending the diluent. A portion of diluent expense is effectively recovered in the sales price of the blended product. Diluent expense is also affected by Canadian and U.S. benchmark pricing and changes in the value of the Canadian dollar relative to the U.S. dollar. Calculated per unit amounts may differ due to rounding.

We include unit cost information as it is frequently requested by investors and investment analysts who use it to assess our cost structure and margins and compare it to similar information provided by many companies in our industry.