

# Teck

## Global Metals & Mining Conference

November 29, 2017



## Forward Looking Information



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) (collectively referred to herein as forward-looking statements). 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 our long-term strategies and priorities, statements regarding the long-life of our assets and positioning on the cost curve and low risk of the jurisdictions in which they are located, potential coal EBITDA and free cash flow potential, Elk Valley Water Quality Plan cost and spending guidance, expected timing of first oil from the Fort Hills project, the potential production, costs, mine life (including potential optionality for expansion or much longer mine life) and capital intensity of Quebrada Blanca 2, potential to realize value relating to our Project Satellite and timing to surface value, Teck's potential copper production growth and timing and amount of potential copper production at our various development projects, timing of Waneta Dam sale, amount and timing of dividends, dividend sustainability, and the potential for payment of base and supplemental dividends to be paid in the future, potential Fort Hills contribution to gross profit, our production guidance, cost guidance, sales guidance, capital expenditure guidance, estimated profit and estimated EBITDA and the sensitivity of estimated profit and estimated EBITDA to foreign exchange and commodity prices, objectives of our coal five-year plan, port capacity increases, estimated future cash flow and cash flow potential, our expectations regarding market supply, demand and price in the commodities we produce, including our expectations regarding factors which may impact supply or demand in key markets, the expected timing and amount of production at the Fort Hills oil sands project, all projections for our Quebrada Blanca 2 project, including those on the slides titled "QB2: Robust Economics & Expansion Optionality"QB2: Bottom Half of C1+Sustaining Cost Curve", "QB2: Competitive Capital Intensity" and including our statement that Quebrada Blanca 2 is a potential tier 1 asset and expected to generate significant economic returns, the statements made regarding the potential mine life, capital costs, mine life extension and expansion optionality and production for our Quebrada Blanca Phase 2 project, Quebrada Blanca 2 projected economics, including net present value, internal rate of return payback and EBITDA, competitiveness and ranking of the Quebrada Blanca 2 project, our statements regarding our Project Satellite, including, statements regarding the value, mine-life and potential of these projects, our growth/value pipeline, our statements regarding expected strip ratios, statements relating to the "Five Year Plan: Sustain 27 Million Tonnes" slide, our statements regarding potential increases in port capacity, expectation of future copper and other commodity deficits, all projections for NuevaUnión, including statements made on the "NuevaUnión: Project Overview" slide, projections and expectations regarding our Project Satellite including those on the "Project Satellite: 5 Quality Base Metal Assets" slide, our predictions regarding zinc supply and demand, expectations for our Aktigirug exploration target, our projected zinc grade through 2020, projected copper and zinc production at Antamina through 2020, Trail production through the end of 2017, Fort Hills project indicative NPV and life, financial projections and other statements regarding the Fort Hills project, including those made on the "The Real Value of Long-Life Assets" slide, transportation capacity and our ability to secure transport for our Fort Hills production, expectations regarding Fort Hills product quality, energy sales and logistics strategy and our expectations regarding that strategy, expected Fort Hills net back and the quantum of the components of the net back calculation, statements regarding our sustainability goals, and management's expectations with respect to production, demand and outlook regarding coal, copper, zinc and energy.

These forward-looking statements involve numerous assumptions, risks and uncertainties and actual results may vary materially, which are described in Teck's public filings available on SEDAR (<a href="www.sedar.com">www.sedar.com</a>) and EDGAR (<a href="www.sedar.com">www.sec.gov</a>). In addition, the forward-looking statements in these slides and accompanying oral presentation are based on assumptions regarding, including, but not limited to, 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 timing of the receipt of regulatory and governmental approvals for our development projects and other operations, our costs of production and production and productivity levels, as well as those of our competitors, power prices, continuing availability of water and power resources for our operations, market competition, the accuracy of our reserve 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, the future financial performance of the company, our ability to attract and retain skilled staff, our ability to procure equipment and operations supplies, positive results from the studies on our expansion projects, our coal and other 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 venturers. 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.

2

## Forward Looking Information



Management's expectations of mine life are based on the current planned production rates and assume that all resources described in this presentation are developed. Certain forward-looking statements are based on assumptions disclosed in footnotes to the relevant slides. Our estimated profit and EBITDA and EBITDA sensitivity estimates are based on the commodity price and currency exchange assumptions stated on the relevant slide. Cost statements are based on assumptions noted in the relevant slide. Assumptions regarding Fort Hills also include the assumption that project development and funding proceed as planned, assumptions of costs as set out in the sanction decision as well as assumptions noted on the relevant slides discussing Fort Hills. 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. Statements regarding future production are based on the assumption of project sanctions and mine production. Statements regarding Quebrada Blanca Phase 2 assume the project is developed in accordance with its feasibility study. Payment of dividends is in the discretion of the board of directors. Our assumptions regarding Fort Hills netback include exchange rates, transportation costs and other matters noted on the relevant slide. Our Elk Valley Water Quality Plan statements are based on assumptions regarding the effectiveness of current technology, and that it will perform as expected. The foregoing list of assumptions is not exhaustive.

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 governments and the outcome of legal proceedings, inaccurate geological and metallurgical assumptions (including with respect to the size, grade and recoverability of mineral 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), union labour disputes, political risk, social unrest, failure of customers or counterparties 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, 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 and construction and production schedules may be adjusted by our partners. NuevaUnión is jointly owned. Unanticipated technology or environmental interactions could affect the effectiveness of our Elk Valley Water Quality Plan strategy. The effect of the price of oil on operating costs will be affected by the exchange rate between Canadian and U.S. dollars.

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.

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, all filed under our profile on SEDAR (<a href="https://www.sedar.com">www.sedar.com</a>) and on EDGAR (<a href="https://www.sedar.com">www.sedar.com</a>) and on EDGAR (<a href="https://www.sedar.com">www.sedar.com</a>)

## Consistent Long-Term Strategy

## **Teck**

Diversification

Long life assets

Low cost

Appropriate scale

Low risk jurisdictions

Organic growth

### Record Cash Flow Over Past 12 Months



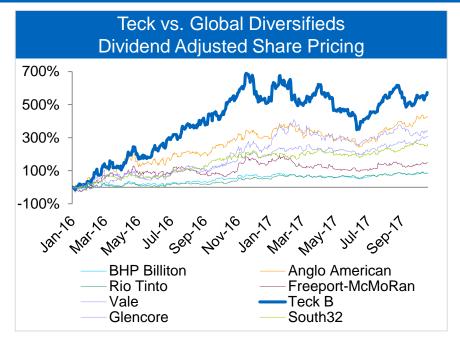
	Q3 2017
Revenue	\$ 3.1 billion
Gross profit before depreciation & amortization*	\$ 1.5 billion
Adjusted Profit attributable to shareholders	\$ 621 million
Adjusted EBITDA*	\$ 1.4 billion

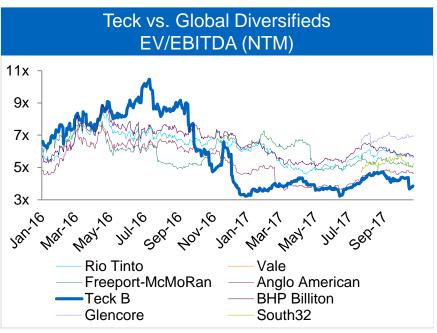


Generated \$6.1 billion in Adjusted EBITDA over the past 12 months<sup>1</sup>, with an average realized price for steelmaking coal of US\$185 per tonne, a copper price of US\$2.62 per pound, and a zinc price of US\$1.23 per pound.

## **Outstanding Valuation Thesis**



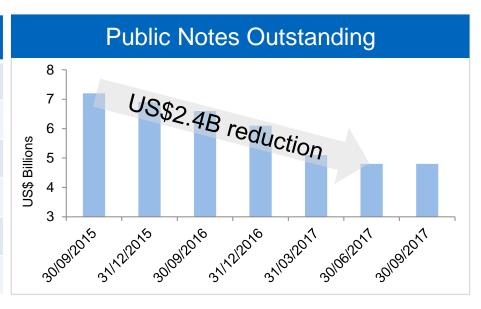




- Valuation hasn't kept pace with EBITDA increase
  - EV/EBITDA multiple trailing Global Diversified comparables

## Strong Financial Position

Current Debt Portfolio <sup>1</sup>					
Public notes outstanding	US\$4.8B				
Average coupon	5.7%				
Weighted average term to maturity	~15 years				
Debt to debt-plus-equity ratio <sup>2,4</sup>	24%				
Net debt to debt-plus-equity ratio <sup>4</sup> 21%					
Net debt to EBITDA (LTM) 0.9x					



- Liquidity of ~\$4.9B<sup>3</sup>, including >\$1B cash & undrawn US\$3B committed credit facility
- Waneta transaction expected to close 1H 2018: C\$1.2B cash
- No substantial debt maturities until 2021
  - As at September 30,2017
  - 2. Our revolving credit facility requires a debt to debt-plus-equity ratio of <50%.
  - 3. As at October 25, 2017.
  - Non-GAAP financial measures. See "Use of Non-GAAP Financial Measures" section of our quarterly news releases for further information.

## Returning Cash to Shareholders

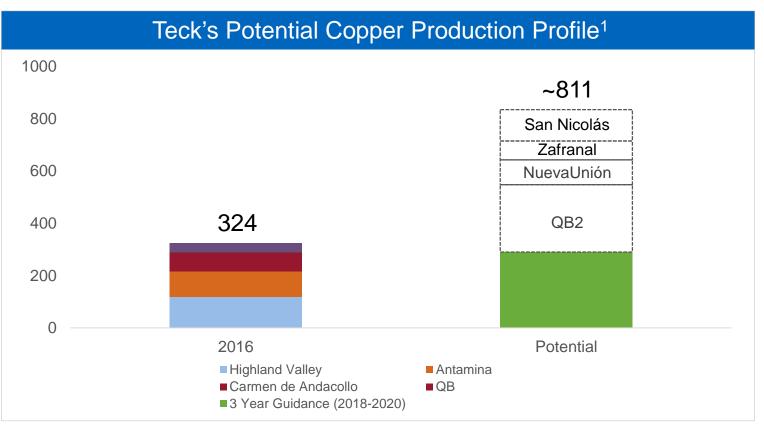
## **Teck**

- Increased the dividend
  - Annualized dividend of \$0.20/share
  - Payment quarterly
- Shift in dividend policy to align with cyclical nature of our business
  - Variable component, at the Board's discretion
- Received approval for Normal Course Issuer Bid for up to 20M shares until October 9, 2018



### Significant Potential Copper Production Growth





<sup>1.</sup> Illustrative production profile. Quebrada Blanca 2 is based on the first full ten years and 100% of the project's production is included. NuevaUnión is based on the average of first full ten years and 50% of the project's production is included. San Nicolas is based on the annual life of mine average and 100% of the project's production is included. Zafranal is based on the average of the first full five years and 80% of production is included.

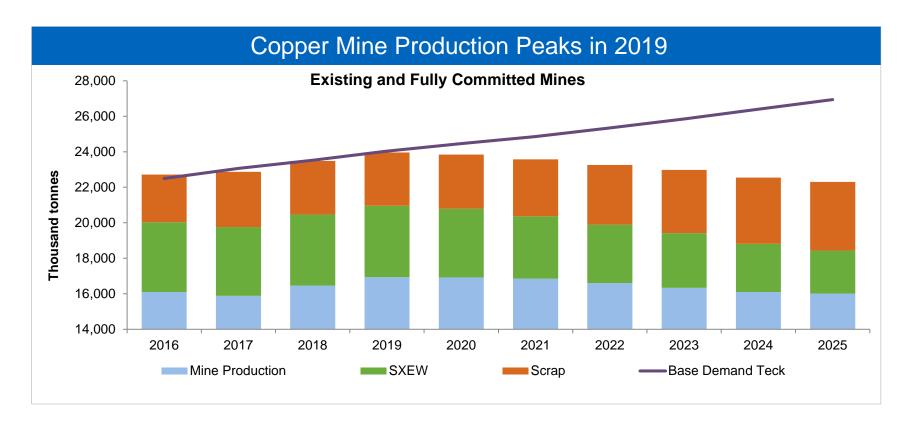
#### Quebrada Blanca 2: Potential Tier 1 Asset



- ✓ Potential top 15 copper producer globally
  - 300 ktpa copper equivalent production in first 5 years
- ✓ Well in the low half of the cost curve (C1 cash cost of US\$1.33/lb and AISC of US\$1.37/lb)¹
  - Exceptionally low strip ratio of 0.54:11
- ✓ Initial mine life 25 years with ~25% of reserves & resources
  - Optionality for expansion or much longer life
- Attractive capital intensity
  - Development capital costs reduced significantly
- ✓ Familiar, mining-friendly jurisdiction

## Insufficient Copper Projects to Fill Gap

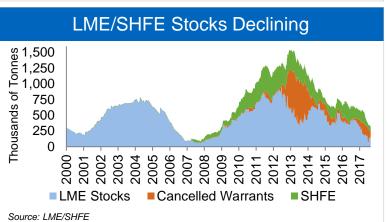


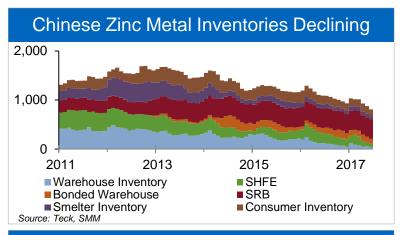


## Multiple Signs of Tightness in Zinc Market





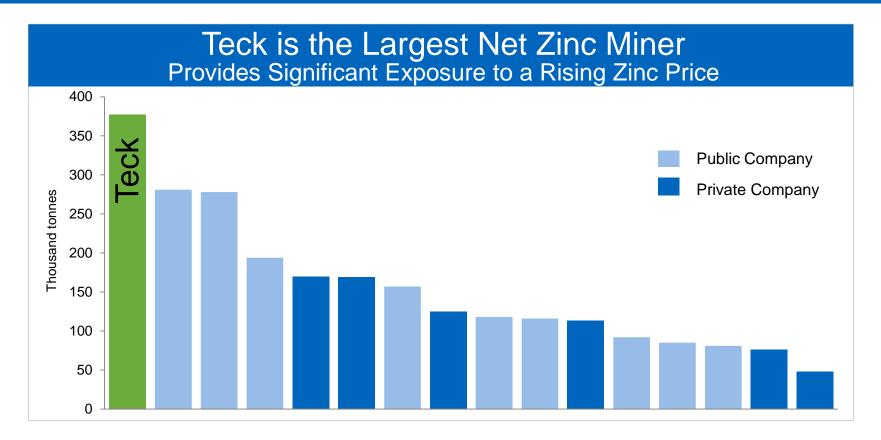






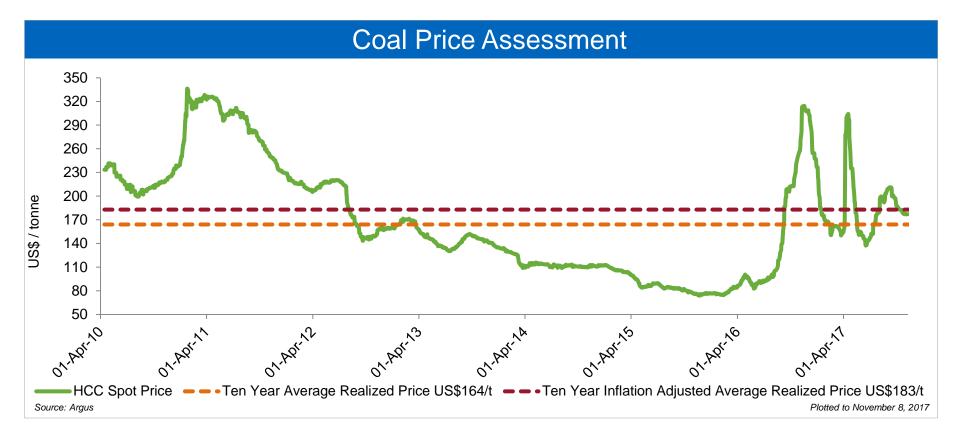
## Largest Global Net Zinc Mining Companies





# 10-Year Inflation-Adjusted Average Realized Steelmaking Coal Price of US\$183/t





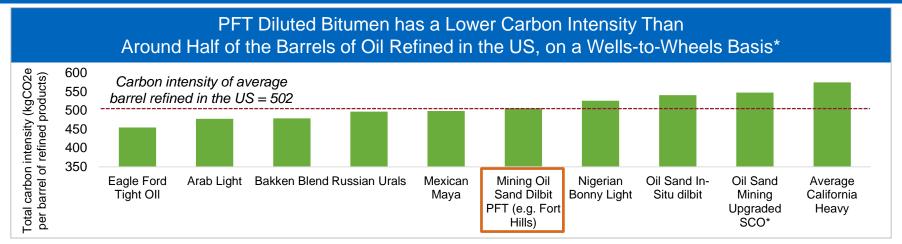
## Fort Hills – Preparing for First Oil





## Lower Carbon Intensity Product





#### 'Fort Hills Reduced Carbon Dilbit Blend'

- Utilizes Paraffinic Froth Treatment (PFT) solvent based secondary extraction process
  - Removes fines & asphaltines
  - Used by Kearl and Albian mining projects
- Result:
  - A product with a lower carbon intensity than around half of the oil refined in the US
  - A superior refinery feedstock
  - Lower pipeline diluent requirements





Pipelines:	
10 kbpd	Contracted capacity on existing Keystone pipeline
	to the US Gulf Coast
+12 kbpd	Contracted capacity on proposed TransMountain
	(TMX) pipeline to the west coast of Canada
+25 kbpd	Remainder at Hardisty via customer contracted
	pipeline capacity, or common carrier pipelines
=47 kbpd b	lended bitumen <sup>1</sup>

#### Additional options available include:

- Increasing capacity on Keystone / Keystone XL pipelines
- Selling additional product at Hardisty
- Shipping by rail, if required

Summary Teck

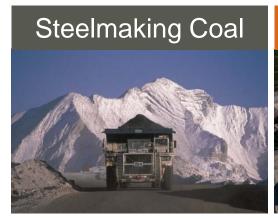
- Generating strong free cash flow
  - Benefiting from the right commodity mix at the right time
- Preparing for first oil at Fort Hills by year end
- Organic growth options
- Solid financial position

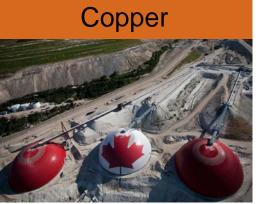


## Appendix

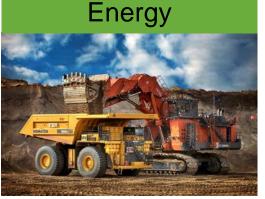
# Attractive Portfolio of Long-Life Assets In Low Risk Jurisdictions

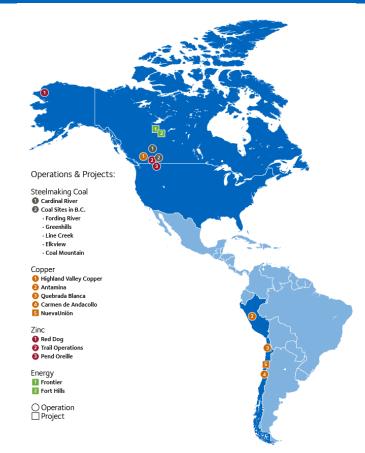








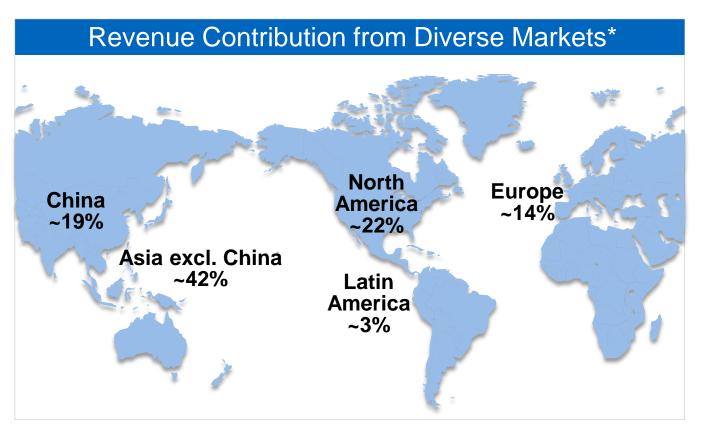




#### **Global Customer Base**



Exposure to Growing Emerging Markets & Recovery in Developed Markets



#### **Production Guidance**



		2016 Results	2017	3 Year (2018-2020)
Steelmaking Coal		27.6 Mt	Low end 27-27.5 Mt	27-28 Mt <sup>1</sup>
Copper	Concentrate	324 kt	275-290 kt	280-300 kt
Highland Valley	Concentrate	119.3 kt	95-100 kt	115-135 kt <sup>2</sup>
Antamina <sup>3</sup>	Concentrate	97 kt	88-92 kt	95-100 kt
Carmen de Andecollo <sup>4</sup>	Concentrate	69.5 kt	68-72 kt	65-70 kt
	Cathode	3.7 kt	3-4 kt	
Quebrada Blanca <sup>4</sup>	Cathode	23 kt	20-24 kt	
Zinc	Concentrate <sup>5</sup>	662 kt	645-665 kt	580-605 kt <sup>6</sup>
	Refined	312 kt	300-305 kt	
Red Dog	Concentrate	583 kt	525-550 kt	475-550 kt <sup>7</sup>
Pend Oreille <sup>4</sup>	Concentrate	34.1 kt	34-40 kt	
Antamina <sup>3</sup>	Concentrate	44.6 kt	75-80 kt	80 kt <sup>4</sup>
Trail	Refined	311.6 kt	300-305 kt	
Moly				
Highland Valley	Concentrate	5.4 kt	7.5-8.0 Mlbs	~7 Mlbs
Antamina <sup>3</sup>	Concentrate	2.3 Mlbs	~ 2 Mlbs	2.5-3.0 Mlbs
Lead				
Red Dog	Concentrate	122.3 kt	110-115 kt	85-115 kt
Trail	Refined	99.2 kt	~95 kt	
Silver				
Trail	Refined	24.2 Moz	20-22 Moz	

<sup>\*</sup> As at October 25, 2017.

Five year guidance (2018-2022).

Expect similar levels to 2017.

<sup>2.</sup> Highland Valley above life of mine averages of 140 kt from 2012 to end of current mine plan in 2026.

Teck 22.5% share of production.
 From 2018-2020: Antamina 80 kt average but fluctuates. Cathode production at Carmen de Andecollo is uncertain beyond 2018 but there is potential for extension.
 Quebrada Blanca production from 2018 depends; we anticipate cathode production to mid-2019.

 Including co-product zinc production from our Copper business unit.

Excludes Pend Oreille.

## Sales Guidance



	Q3 2017 Results	Q4 2017
Steelmaking Coal	7.54 Mt	~6.5 Mt
Zinc		
Red Dog - Zinc in Concentrate	163.6 kt	180 kt

#### **Cost Guidance**



	2016 Results	2017 Guidance*
Steelmaking Coal		
Site costs	\$43/t	High end \$49-53/t
Capitalized stripping	\$10/t	\$16/t <sup>1</sup>
Transportation costs	\$34/t	\$35-37/t
Total cash costs <sup>2, 3</sup>	<b>\$89/t</b> US\$67/t	\$100-106/t US\$80-85/t
Copper		
C1 unit costs <sup>4</sup>	US\$1.35/lb	US\$1.30-1.40/lb
Capitalized stripping	US\$0.17/lb	US\$0.18/lb <sup>1</sup>
Total cash costs <sup>4</sup>	US\$1.52/lb	US\$1.58-1.68/lb

<sup>\*</sup> As at October 25, 2017.

<sup>1.</sup> Approximate, based on capitalized stripping guidance and mid-point of production guidance range.

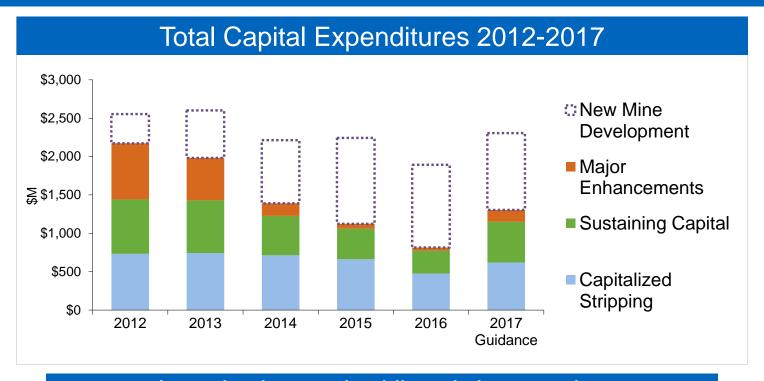
<sup>2.</sup> Average C\$/U\$\$ exchange rate of 1.33 in 2016. Assumes C\$/U\$\$ exchange rate of 1.25 in 2017.

Steelmaking coal unit cost of sales include site costs, inventory adjustments, collective agreement charges and transport costs. Total cash costs are unit cost of sales
plus capitalized stripping.

Net of by-product credits. Copper total cash costs Include cash C1 unit costs (after by-product margins) and capitalized stripping.

## Capital Expenditure History & Guidance





Investing in growth while strictly managing sustaining & development capital expenditures

## Capital Expenditures Guidance



2017	(\$M)	Sustaining	Major Enhancement	New Mine Development	Sub-total	Capitalized Stripping	Total
Steelmak	ing						
Coal		140	120	-	260	430	690
Copper		130	20	200	350	140	490
Zinc		210	15	20	245	50	295
Energy		50	-	780	830	-	830
TOTAL		530	155	1,000	1,685	620	2,305
Total capex of ~\$1.7B, plus capitalized stripping in 2017							

## Capital Expenditures Year-To-Date



2017	(\$M)	Sustaining	Major Enhancement	New Mine Development	Sub-total	Capitalized Stripping	Total
Steelmaki Coal	ing	65	30	-	95	374	469
Copper		66	4	109	179	105	284
Zinc		10	5	30	137	21	158
Energy		22	-	639	661	-	661
Corporate	)	3	0	0	3	0	3
TOTAL		258	39	778	1,075	500	1,575

## Staged Growth/Value Pipeline

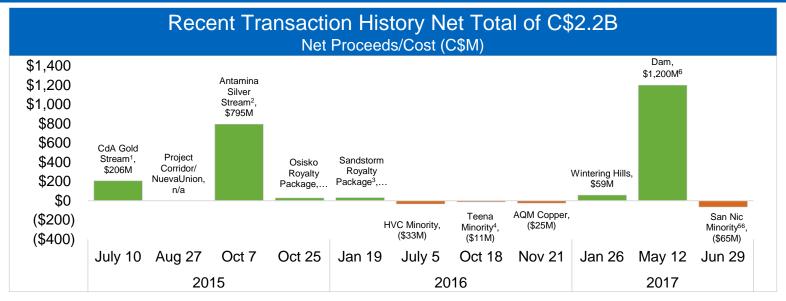


	In Construction	Pre-Sanction	Medium-Term Growth Options	Future Options
			NuevaUnión	Galore Creek
Copper Strong platform	HVC D3 Project	QB2	HVC Brownfield	Schaft Creek
with substantial			Zafranal	Mesaba
growth options			San Nicolás (Cu-Zn)	
Zinc	Trail #2 Acid Plant		Antamina Brownfield	Teena
World-class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

Strong platform combined with diverse portfolio of options allows us to be selective for risk/reward opportunity and timing

## Disciplined Approach to M&A





- Balance sheet strengthened by divestment of non-core assets at high EBITDA 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
- Carmen de Andacollo gold stream transaction occurred in USD at US\$162M.
- Antamina silver stream transaction occurred in USD at US\$610M.
- 3. Sandstorm royalty transaction occurred in USD at US\$22M.
- Teena transaction occurred in AUD at A\$10.6M.
- 5. San Nicolàs transaction occurred in USD at US\$50M.
- Waneta & San Nicolas transactions have not yet closed. Closing is subject to customary conditions.

## Commodity Price Leverage



 $C$12M / $0.01\Delta$ 

Leverage to Strong Steelmaking Coal & Zinc Markets in 2017					
	Mid-Point of Production Guidance	Unit of Change	Effect on Annual Estimated Profit <sup>3</sup>	Effect on Annual Estimated EBITDA <sup>1</sup>	
\$C/\$US		C\$0.01	C\$42M /\$0.01∆	C\$68M /\$0.01∆	
Coal	27.25 Mt	US\$1/tonne <sup>2</sup>	C\$20M /\$1∆	C\$31M /\$1∆	
Copper	282 kt	US\$0.01/lb	C\$5M /\$0.01∆	C\$7M /\$0.01∆	

C\$8M /\$0.01\(\Delta\)

US\$0.01/lb

904 kt

Zinc

<sup>1.</sup> Non-GAAP financial measure. See "Use of Non-GAAP Financial Measures" section of our quarterly news releases for further information. Annual effect based on commodity prices and our balance sheet as of August 2, 2017 and a C\$/US\$ exchange rate of 1.25. Assumes the midpoint of 2017 guidance ranges.

<sup>2.</sup> Based on a US\$1/tonne change in benchmark premium steelmaking coal price.

## Tax Efficient Earnings in Canada



#### ~\$6 billion in available tax pools<sup>1</sup>, including:

- \$4.6B in loss carryforwards
- \$1.3B in Canadian Development Expenses

#### **Applies to:**

Cash income taxes in Canada

#### Does not apply to:

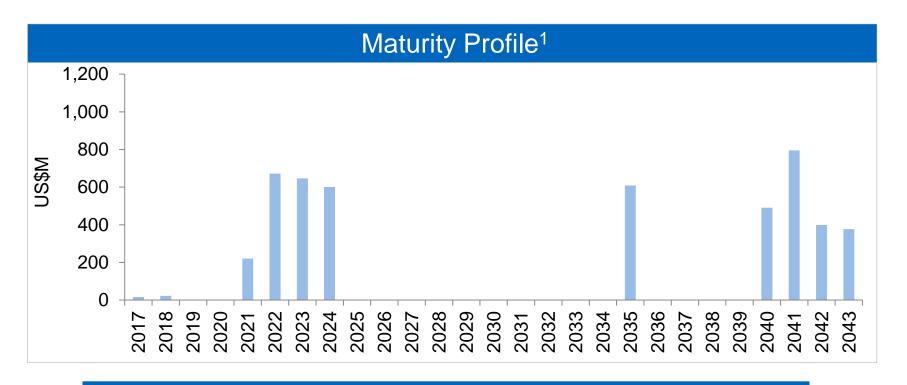
- Resource taxes in Canada
- Cash taxes in foreign jurisdictions



Multiples should reflect tax efficiency of earnings

#### No Substantial Maturities for Five Years





Few maturities through potential QB2 construction period

### Waneta Dam Sale for \$1.2B Cash

## Teck

#### **Deal Highlights**

- Sale of Teck's 2/3<sup>rd</sup> interest to BC Hydro, following exercise of right of first offer
- Commercial terms unchanged:
  - C\$1.2 billion cash
  - C\$75 million annual payment (~C\$40 MWh)
  - 20 year term with 10 year extension option

#### Teck Impact

- 16x EBITDA multiple
- Closing now expected 1H 2018
- No cash tax payable on sale
- Trail a globally competitive zinc/lead producer

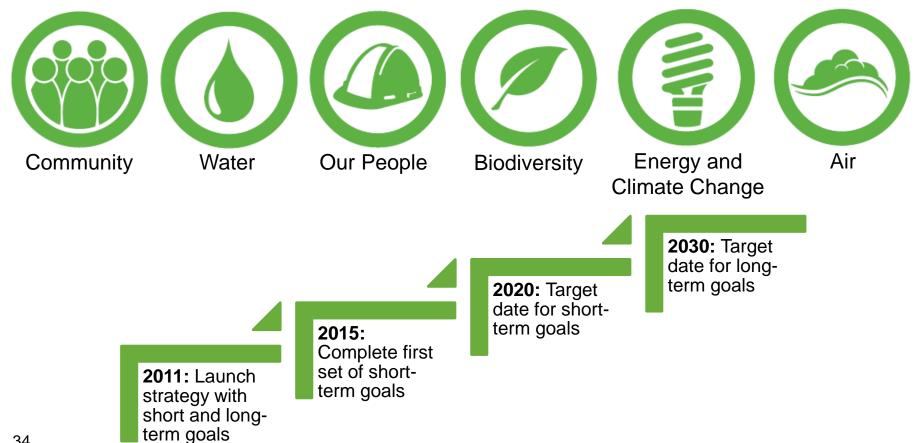
#### **Asset Overview**

- 496 MW capacity
- 2,750 GWh annual energy
- 1,880 GWh Trail energy use
- BC Hydro 1/3 owner currently
- No hydrology risk under Canal Plant Agreement



## Our Sustainability Strategy

## Teck



## Our External Recognition





Best 50 Corporate Citizens in Canada 2017



Top 50 Socially Responsible Corporations in Canada

MEMBER OF

### Dow Jones Sustainability Indices

In Collaboration with RobecoSAM (

On the Dow Jones Sustainability World Index eight years in a row



Listed on FTSE4Good Index in 2015

## Share Structure & Principal Shareholders



#### **Teck Resources Limited**

September 5, 2017

	Shares Held	Percent	<b>Voting Rights</b>
Class A Shareholdings			
Temagami Mining Company Limited	4,300,000	55.3%	31.9%
SMM Resources Inc (Sumitomo)	1,469,000	18.9%	10.9%
Other	2,008,304	25.8%	14.9%
	7,777,304	100.0%	57.7%
Class B Shareholdings			
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	10.4%	4.4%
Other	510,180,715	89.4%	37.8%
	570,505,989	100.0%	42.3%
Total Shareholdings			
Temagami Mining Company Limited	5,025,000	0.9%	32.0%
SMM Resources Inc (Sumitomo)	1,764,800	0.3%	10.9%
China Investment Corporation (Fullbloom)	59,304,474	10.3%	4.4%
Other	512,189,019	88.6%	52.7%
	578,283,293	100.0%	100.0%

#### CIC Remains a Supportive Long-Term Partner



- July 2009: Acquires 101.3 million shares at ~C\$17.21/share for ~C\$1.7 billion
- September 2017: Divests 42 million shares at ~C\$28.97/share for ~C\$1.2 billion on a "Bought Block Trade" basis, through J.P. Morgan
- Currently: Holds 59.3 million shares, for 10.4% economic interest
  - Intends to continue to hold these shares as a long-term financial investor
  - Views fundamentals of the company as sound, and remains supportive of its strategic direction and its management

Relationship unchanged; ongoing close relationship

#### Collective Agreements



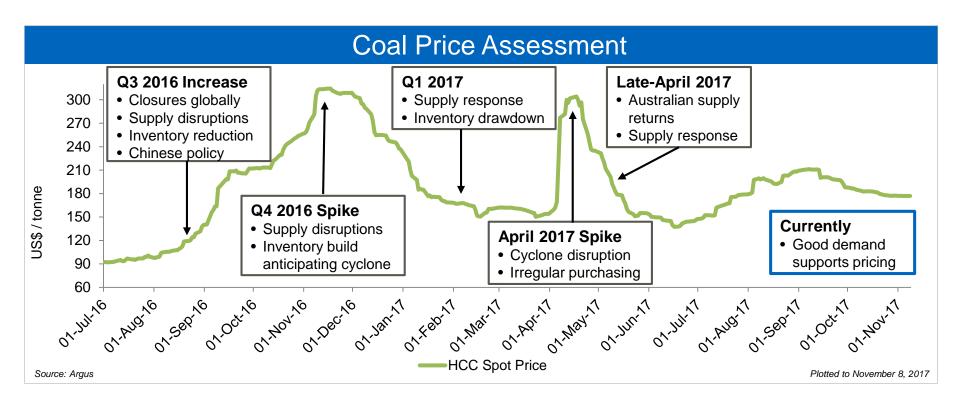
Operation	Expiry Dates
	November 30, 2017
Quebrada Blanca	January 31, 2019
	March 31, 2019
Quintette	April 30, 2018
Antamina	July 24, 2018
Coal Mountain	December 31, 2018
Line Creek	May 31, 2019
Carmen de Andacollo	September 30, 2019
	December 31, 2019
Elkview	October 31, 2020
Fording River	April 30, 2021
Highland Valley Copper	September 30, 2021
Trail Operations	May 31, 2022
Cardinal River	June 30, 2022

Long-term labour agreements in place at all of our North American operations



## Steelmaking Coal Business Unit & Markets

#### Good Demand & Healthy Steel Industry Supporting Pricing



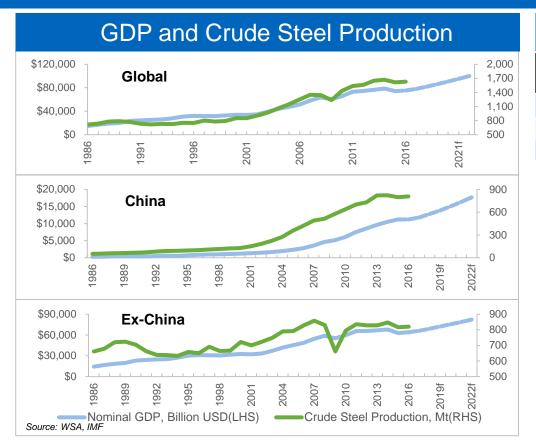
#### High Grade Hard Coking Coal Is A Niche Market





#### Improving Steel Output Globally





Crude Steel Production					
Crude Steel Production (Mt)	YTD Sep 2017 Annualized	YoY			
Global	1,695	4.0%			
China	854	5.6%			
Ex. China	840	2.3%			

Source: WSA

Strong YTD steel production and improved steel pricing

## Emerging Markets Growing Steel Production Teck



#### India

- NMDC: Nagarnar Greenfield project; Capacity: 3Mtpa
  - Status: Construction underway; Completion in H1 2018
- SAIL Expansion; Capacity: 21Mtpa from current 15Mtpa
  - Status: Construction underway
- RINL Expansion; Capacity: 7Mtpa from current 6Mtpa
  - Status: Construction underway
- **JSW: Dolvi -** Expansion; Capacity: 5Mtpa
  - Status: Approved; Completion in 2020

#### Vietnam

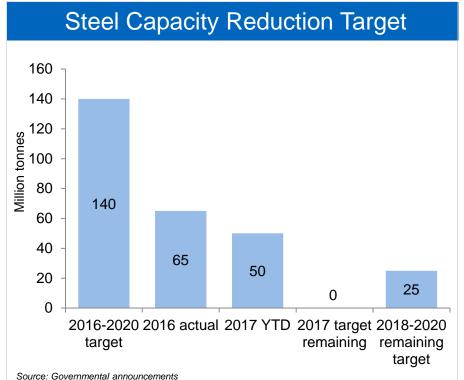
- Formosa Greenfield project; Capacity: 7Mt
  - Status: 1<sup>st</sup> BF lit in May 2017 and 2<sup>nd</sup> BF to be lit early 2018
- Hoa Phat Expansion; Capacity: 6Mtpa from current 2Mtpa
  - Status: Wait fro government approval; Completion in 2021
- Hoa Sen Greenfield project; Capacity: 16Mtpa in 3 phases
  - Status: Environmental evaluation

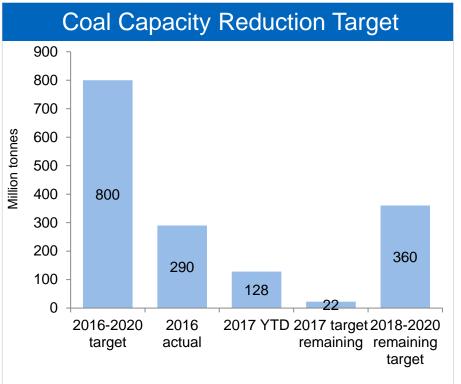
#### Malaysia

- Alliance Steel: Kuantan Industrial Park
  - Greenfield project; Capacity: 3.2Mtpa
  - Status: Construction underway; Completion in March 2018
- Integrated steel plant in Sarawak
  - Greenfield project; Capacity: 5Mtpa
  - Status: Signed MoU

#### Capacity Reductions Continue in China



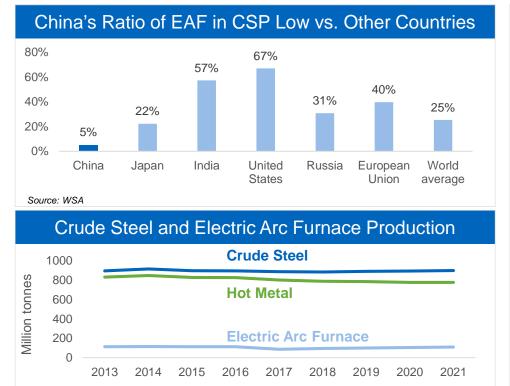


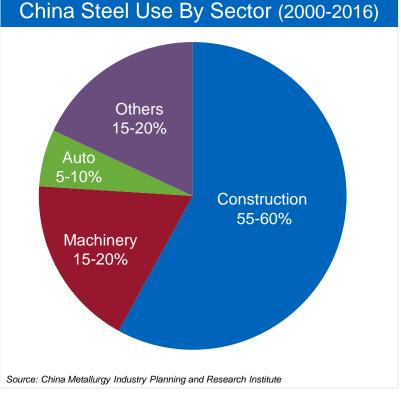


As of July, 100% of steel and 85% of coal 2017 targets achieved

#### China Scrap Use to Increase Slowly





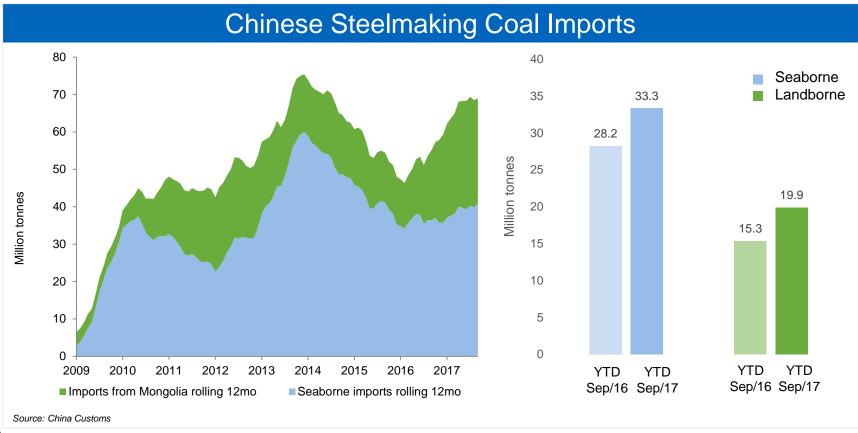


EAF share in crude steel production to recover only to 2015's level

Source: CRU

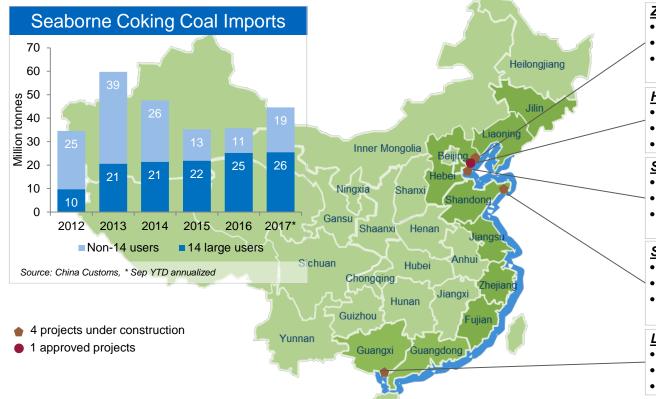
#### Chinese Seaborne Coal Imports Trending Upwards





### Large Users Increasing Seaborne Imports





#### Zongheng Fengnan Project

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

#### **HBIS Project**

- · Inland plant relocating to coastal area
- Capacity: crude steel 20Mt
- · Status: Timeline not announced

#### **Shougang Jingtang Plant**

- Expansion
- Capacity: crude steel 9.4Mt (phase 2)
- Status: Construction started in 2015; completion in 2018

#### Shandong Steel Rizhao Project

- Greenfield project
- · Capacity: crude steel 8.5Mt
- Status: Construction started in 2015; completion in 2017

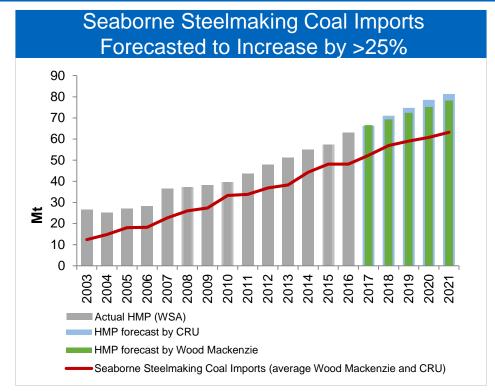
#### Liusteel Fangcheng Project

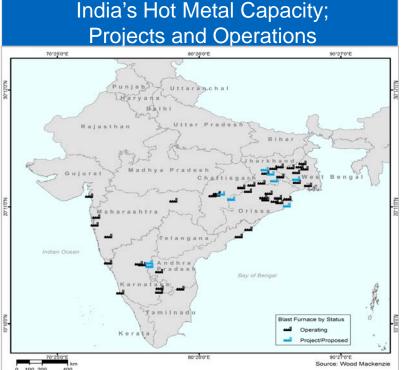
- · Greenfield project
- Capacity: Phase 1 crude steel ~10Mt
- Status: Construction underway

Over 2/3 of China crude steel produced in coastal provinces

#### Growing India Steelmaking Coal Imports



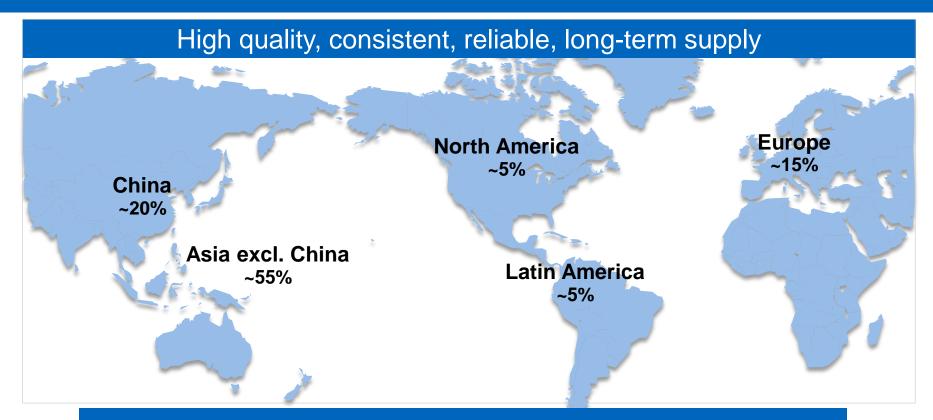




Teck's sales to India have nearly doubled in the last three years, to over 10% in 2017

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

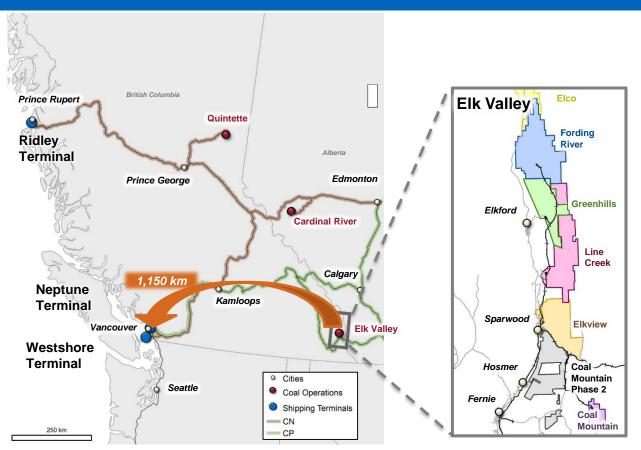




Competitively positioned to supply steel producers worldwide

#### An Integrated Long Life Coal Business

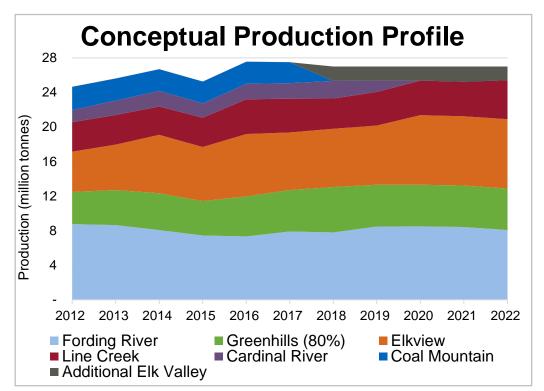




- >1 billion tonnes of reserves support ~27 Mt of production for many years
- Geographically concentrated in the Elk Valley
- Established infrastructure and capacity with mines, railways and terminals

#### Five Year Plan: Sustain 27 Million Tonnes<sup>1</sup>





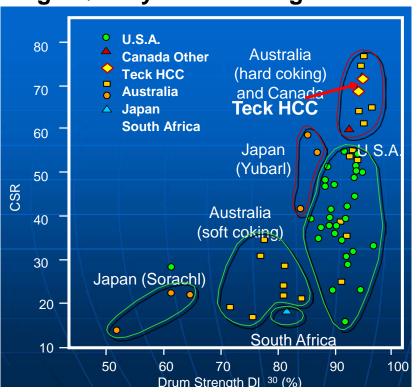
#### **Objectives**

- Manage transition from Coal Mountain
- Pursue incremental production capacity in remaining Valley mines
- Evaluate Cardinal River mine life extension
- Maintain optionality with Quintette
   & Coal Mountain Phase 2

## High Quality Product

## Teck

#### **High Quality Hard Coking Coal**



- Around the world, and especially in China, blast furnaces are getting larger and increasing PCI rates
- Coke requirements for stable blast furnace operation are becoming increasingly higher
- Teck coals with high hot and cold strength are ideally suited to ensure stable blast furnace operation
- Produce some of the highest hot strengths in the world

#### Average Realized Steelmaking Coal Prices

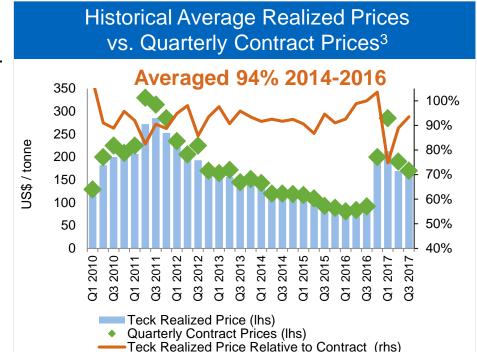


#### Sales Mix

- 60% Shorter than quarterly pricing mechanisms (incl. "spot")
- 40% Quarterly contract price
  - Index-linked pricing mechanism for premium steelmaking coal contracts from April 1, 2017
  - Majority based on average of key spot price assessments, on a trailing 3-month basis with a one month lag

#### **Average Realized Prices**

- Relativity to quarterly contract prices a function of product mix and timing of non-contract sales
  - Product mix weighted to hard coking coal



Average realized prices expected to remain similar to historical relationship with quarterly contract prices, in stable market conditions

#### Steelmaking Coal Cost Discipline Remains



- AISC down 28% from 2012 peak to 2016
- Expect higher costs in 2017
  - Efforts to maintain production after closure of Coal Mountain
  - Increased cost for inputs, e.g. diesel
  - Actions to maximize production and sales in current market environment
- AISC still expected to be 15% below 2012 peak in 2017

C\$/t	2012	2013	2014	2015	2016	2017¹
Site	\$57	\$50	\$51	\$45	\$43	\$51
Inventory Adjustments	\$0	\$1	\$3	\$2	\$0	\$0
Transportation	\$37	\$38	\$38	\$36	\$34	\$36
Unit Cost of Sales <sup>2</sup> (IFRS)	\$94	\$89	\$92	\$83	<b>\$79</b> <sup>3</sup>	\$87
Capitalized Stripping	\$19	\$18	\$17	\$16	\$10	\$16
Total Cash Unit Costs <sup>2</sup>	\$113	\$107	\$109	\$99	<b>\$89</b> <sup>3</sup>	\$103
Sustaining Capital	\$13	\$10	\$7	\$3	\$1	\$5
All In Sustaining Costs (AISC) <sup>2</sup>	\$126	\$117	\$115	\$101	<b>\$90</b> <sup>3</sup>	\$108
Average Realized Price	\$193	\$149	\$115	\$93	\$115	\$2334
Margin	\$67	\$32	\$0	(\$8)	\$25	\$125 <sup>4</sup>

<sup>1. 2017</sup> based on the mid-point of guidance. Please see slide titled 'Cost Guidance' for details.

<sup>2.</sup> Steelmaking coal unit cost of sales include site costs, inventory adjustments and transport costs. Total cash costs are unit cost of sales plus capitalized stripping. All in sustaining costs are total cash costs plus sustaining capital. Non-GAAP financial measure. See "Use of Non-GAAP Financial Measures" section of our quarterly press releases for further information.

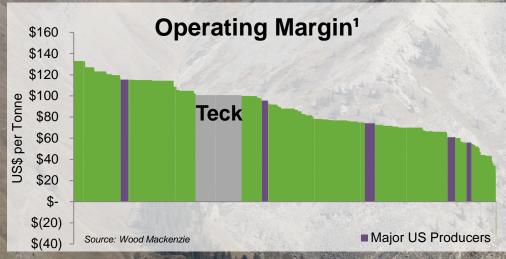
<sup>3.</sup> Includes one-time collective agreement settlement charges of ~US\$2 per tonne in 2016.

<sup>2017</sup> margin of C\$\$125 per tonne is based on year-to-date average realized price of C\$233 per tonne as at September 30, 2017.

### Competitive Margins in Steelmaking Coal

## **Teck**

- High quality hard coking coal & competitive operating costs yield strong margins
- Operations well positioned in a volatile market

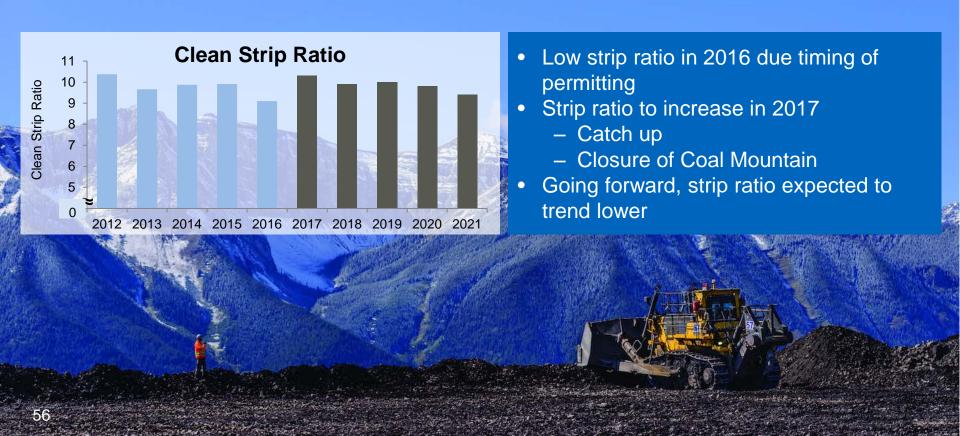




products. Assumes a Canadian dollar to US dollar exchange rate of 1.36 and an Australian dollar to US dollar exchange rate of 1.36.

## Coal Strip Ratio Up in 2017





#### Elk Valley Water Quality Plan Update



- Successfully tested an additional treatment step to address selenium compounds in effluent from West Line Creek facility
  - Plant modifications to be completed Q3 2018
- Fording River facility construction to start in 2018
- Spending plans on water treatment delayed as a result:
  - Previous capex guidance: \$600M from 2014-2018
  - Expected capex spend: ~\$200M from 2014-2017
  - Updated capex guidance: \$850-900M from 2018-2022, including ~\$90M in 2018
  - Estimated long-term costs<sup>1</sup>: \$6/tonne, up from \$4/tonne

Ongoing research & development of alternatives with potential to significantly reduce our costs

## >75 Mt of West Coast Port Capacity Planned Teck

Our Portion is >40 Mt



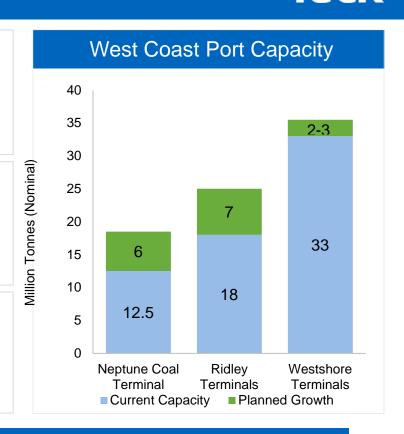
- Teck is largest customer at 19 Mt
- Large stockpile area
- Currently 33 Mt
- \$275M project for expansion to 35-36 Mt by 2019
- Contract expires March 2021



- Teck Canpotex Joint Venture
- Recently expanded to 12.5 Mt
- Planned growth to >18.5 Mt



- Current capacity: 18 Mt
- Expandable to 25 Mt
- Teck contracted at 3 Mt



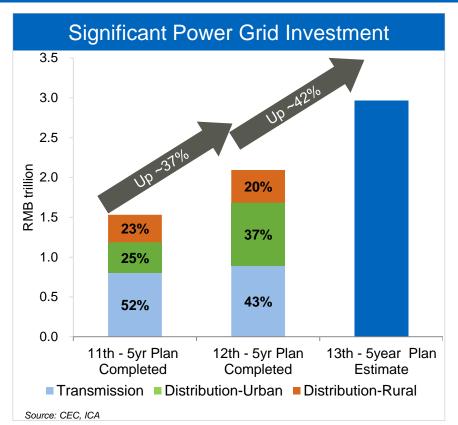
Our share of capacity exceeds current production plans, including Quintette

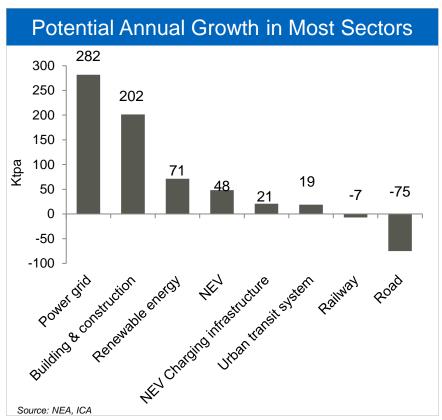


# Copper Business Unit & Markets

#### Chinese Copper Demand to Remain Strong

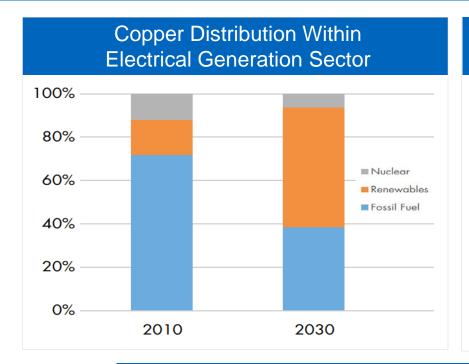
## Teck





## China Demand Supported by Renewable Energy & Environmental Protection





## De-Carbonization/ Renewables Positive for Copper Demand

- Copper intensity is 4–12 x higher in renewable over non-renewable energy
- Wind & solar require more copper per installed MW
- Current targets by India & China for solar PV alone could add 6.5 Mt of new copper
- Current targets by India & China alone could see an increase of 1200 GW of wind generation which would be 3.6 Mt of copper

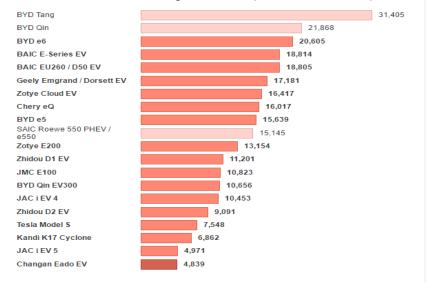
De-carbonization through the use of renewable energy could add >10 Mt of copper demand by 2030

#### China Electric Vehicle Demand Outpaces ROW



## China will Leap Frog US & Europe With Electric Vehicles

China Electric Car Registrations (December 2016)



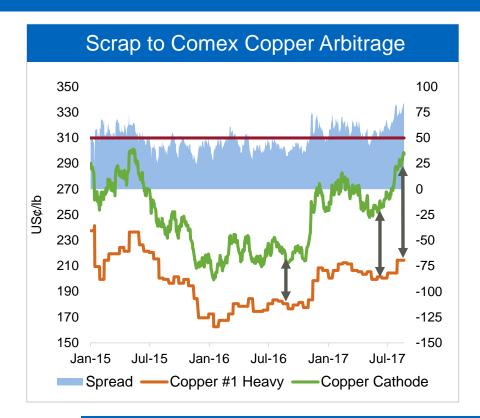
#### China Electric Car Sales 47% of World

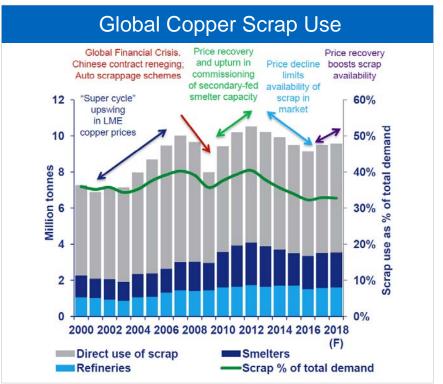
- China sold 351,800 electric cars in 2016, of which only 76,200 were sold by Tesla
- China will replace all 67,000 fossil-fueled taxis In Beijing with electric cars.
- IEA estimates that as battery technology improves average EV could contain 90-150 kg of copper vs 15 kg for ICE



Copper intensity of EV and hybrid vehicles 4-6x that of ICE; penetration could reach 50%

## Copper Scrap Spreads Incentivize Availability Teck

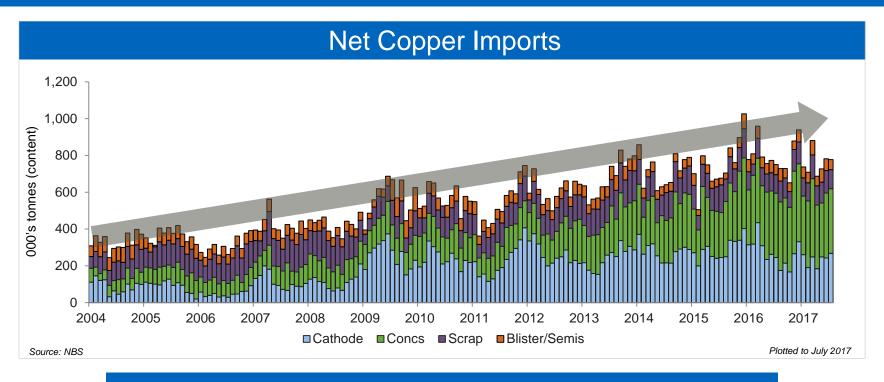




Scrap arbitrage has widened; scrap looking more attractive

#### China Switching to Copper Concentrates

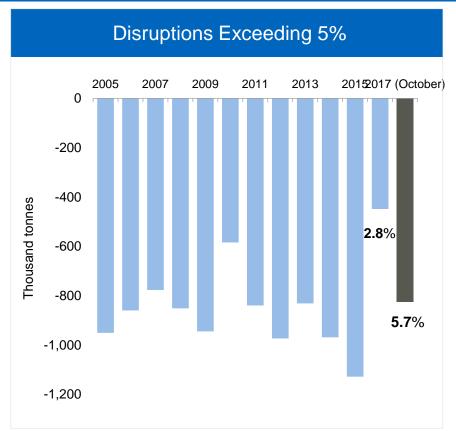


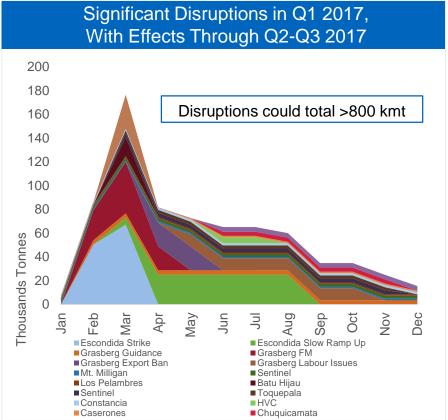


Total copper unit imports climb in 2015 & 2016, but lower YTD by 6% over same period last year

#### Copper Mine Production Disappoints

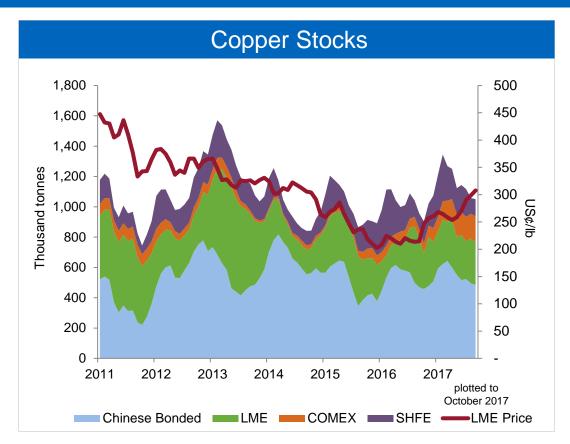






#### Copper Stock Decline Supports Price Increase



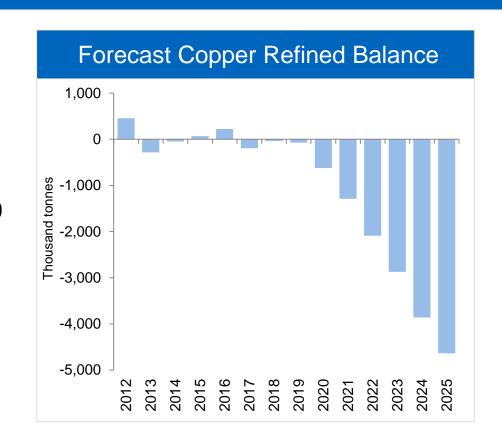


- Stocks falling since beginning of the year
- Total stocks (including bonded), in days of global consumption:
  - Today: 16.8 days
  - Early 2013: ~45 days
  - Average this decade~33 days

#### Long-Term Copper Mine Production Still Needed

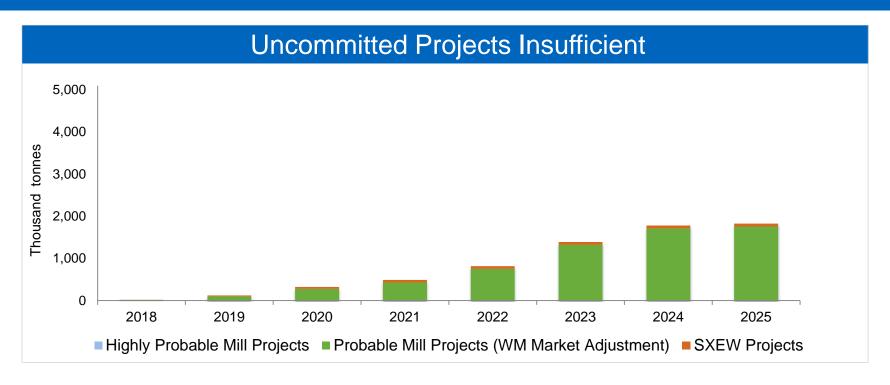


- At 2.0% global demand growth,
   515 kt new supply needed annually
- Mine production falls ~160 kt per year after 2019
- Market finely balanced through 2019
  - Could materially change with similar disruption level as 2017
- Structural deficit starts 2020
- Projects delayed today will not be available by 2019



#### Insufficient Copper Projects to Fill Gap





Less than 1.8 Mt likely to be delivered of the 4.6 Mt required by 2025

#### QB2: Robust Economics & Expansion Optionality



#### NI 43-101 Case

Copper Price (US\$ per pound)	\$2.75	\$3.00	\$3.25	\$3.50
Net present value at 8% (US\$ millions)	565	1,253	1,932	2,604
Internal rate of return (%)	9.7%	11.7%	13.5%	15.2%
Payback from first production (years)	6.8	5.8	5.0	4.4
Annual EBITDA				
First Full Five Years (US\$M pa)	856	1,002	1,148	1,294
First Full Ten Years (US\$M pa)	781	918	1,055	1,192
Life of Mine (US\$ million pa)	685	811	937	1,063

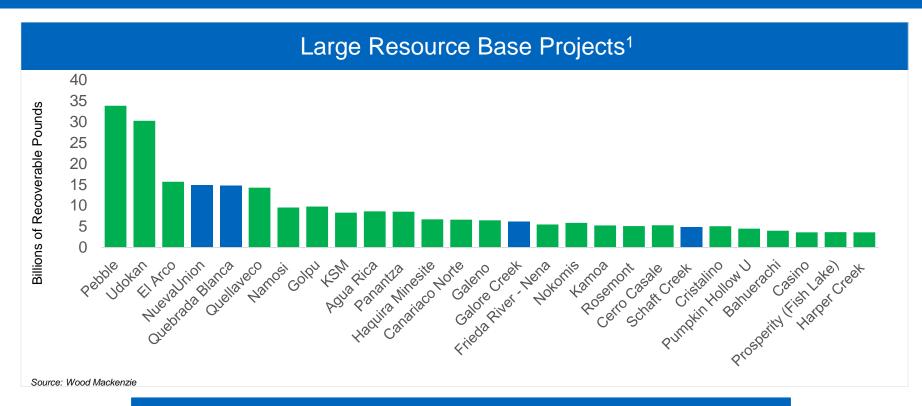
- ✓ Long initial life (25 years) plus life extension and expansion optionality
- ✓ Top 15 copper producer globally at 300,000 tonnes/year Cu equivalent production, including 7,700 tonnes/year Mo, in the first five years²
- ✓ Project capital of US\$4.7B¹; capital intensity of ~\$16k per tonne annual CuEq²
- ✓ Bottom half of the cost curve C1 cash cost of US\$1.33/lb and AISC of US\$1.37/lb in first 10 years<sup>3</sup>
- √ 140,000 tonnes per day throughput

Note: Based on Feasibility Study.

- 1. 100% basis, in constant first quarter of 2016 dollars, excluding working capital and interest during construction. Teck owns a 76.5% share.
- 2. Average production rates, copper equivalent production rates, and initial development capital are based on the first full five years of full production.
- 3. C1 cash costs and strip ratio are based on the first ten years of full production. C1 cash costs are net of by-product credits.

#### QB2: Large Resource Base

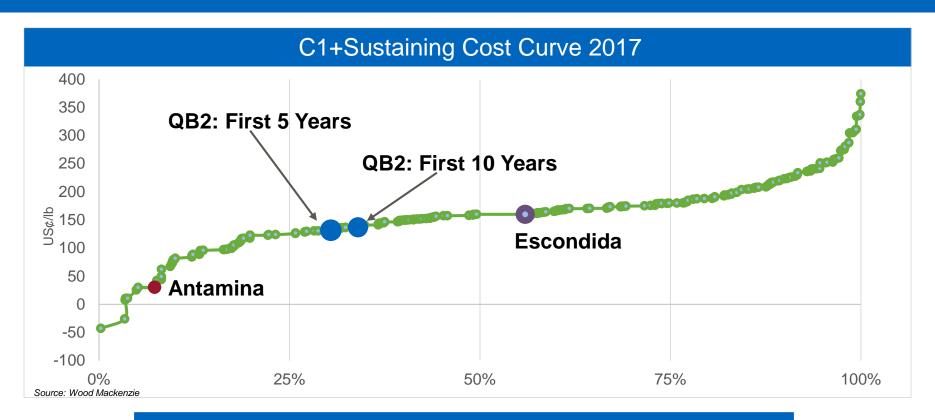




Great potential to significantly extend mine life

#### QB2: Bottom Half of C1+Sustaining Cost Curve

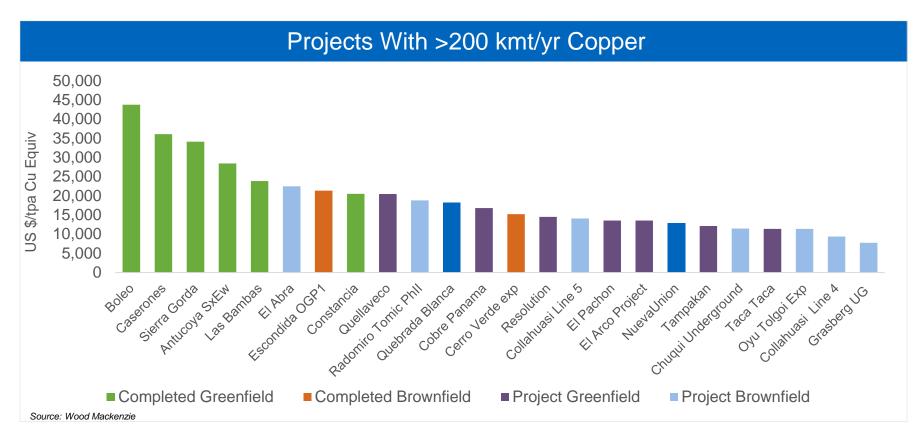




Expected to generate significant economic returns

#### QB2: Competitive Capital Intensity





#### NuevaUnión: A New Approach to Project Development



## Teck and Goldcorp have combined Relincho & El Morro projects and formed a 50/50 joint venture company

 Committed to building strong, mutually beneficial relationships with stakeholders & communities

#### **Capital smart partnership**

- Shared capital, common infrastructure
- Shared risk, shared rewards

#### Benefits of combining projects include:

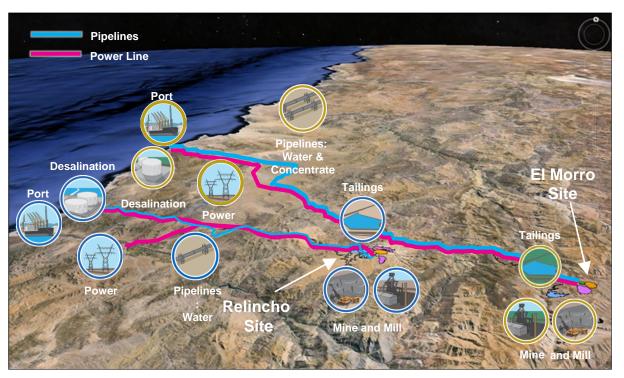
- Longer mine life
- Lower cost, improved capital efficiency
- Reduced environmental footprint
- Enhanced community benefits
- Greater returns over either standalone project





## NuevaUnión: Before (Duplicate infrastructure)





*Source*: "Project Location." -28.395839, -70.486738, 4679ft. **Google Earth.** February 8, 2015. April 23, 2015.

### NuevaUnión: After (Common infrastructure)





*Source*: "Project Location." -28.395839, -70.486738, 4679ft. **Google Earth.** February 8, 2015. April 23, 2015.

## NuevaUnión Project Overview



Initial Project Capital	Copper Production <sup>1</sup>	Gold Production <sup>1</sup>
US\$3.5	190,000	315,000
billion	tonnes per year	ounces per year
Mine Life	Copper in Reserves <sup>2</sup>	Gold in Reserves <sup>2</sup>
32+	16.6	8.9
years	billion pounds	million ounces

- Copper equivalent production of 250 kt per year
- Prefeasibility study completion expected at end Q3 2017
- Proactive & participatory community engagement approach

Note: Conceptual based on preliminary design from the PEA.

<sup>1.</sup> Average production rates and copper equivalent production are based on the first full ten years of operations.

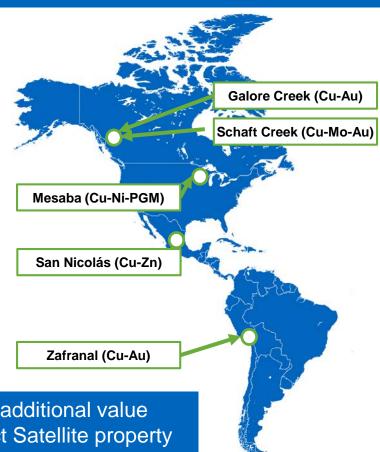
<sup>2.</sup> Total copper and gold contained in mineral reserves as reported separately by Teck and Goldcorp.

<sup>3.</sup> Capital estimate for Phase 1a based on preliminary design shown in 2015 dollars on an unescalated basis.

## Project Satellite: Overview

## **Teck**

- Five substantial base metal growth options largely invisible to the market. Objective is to surface value over the next 3-5 years
- Multiple potential routes to value realization at each property



Considering options to generate additional value for our shareholders at each Project Satellite property

# Project Satellite: Five Quality Base Metal Assets With Substantial Resources in Mining Friendly Jurisdictions Teck

#### Galore Creek (50%)

- Large high grade copper-gold-silver deposit in developing district
- Potential for first quartile C1 costs
- Substantial design, engineering and drilling completed between 2012-2016
- Compiling results into Integrated Planning Report

#### Schaft Creek (75%)

- · Large copper-molybdenum-gold-silver deposit
- Long mine life with potential for significant extensions
- Continue to conduct value-added engineering and optimization studies

#### San Nicolás (100%)

- High grade copper-zinc deposit
- Open pit operation with 3-4 year timeline to production
- Low first quartile C1 costs and low capital costs offers quick payback
- Advancing Prefeasibility and Environmental Impact Assessment work in 2017-2018



#### Mesaba (100%)

- Very large copper-nickel sulphide resource with platinum, palladium and cobalt credits
- In a district with long mining history
- Proximity to existing infrastructure with opportunities for development synergies
- Teck's proprietary value-added mineral processing technology

#### Zafranal (80%)

- Highly competitive mid-sized copper-gold deposit
- Pre-feasibility Study published June 2016 indicates robust economics
- Advancing Feasibility and Environmental Impact Assessment work in 2017-2018 targeting permit submission in H2 2018

Zafranal and San Nicolás have potential for 240kt copper equivalent production by 2023

## Project Satellite: Update



#### Zafranal

Feasibility and Environmental Impact Assessment Studies underway in support of submitting a permit application in Q3
2018. Substantial field program, including >36,000m drilling, detailed water and environmental studies, and community
roundtable discussions, well-underway.

#### San Nicolás

Prefeasibility and Environmental Impact Assessment Studies commenced in September 2017 in support of submitting a
permit application in Q1 2019. Hydrogeological and environmental studies and community engagement work started.
Definition drilling program planned to start in Q4 2017.

#### **Galore Creek**

• Compiling substantial engineering, design and drilling work completed between 2012-2016 into an Integrated Plan on goforward development options. Maintaining our strong working relationship with the Tahltan Central Government and working on a renewal of the existing Participation Agreement. Supporting NOVAGOLD's efforts to sell their interest.

#### Mesaba

 Completing an Advanced Scoping Study which will be used to inform development alternatives, including potential synergies with other projects in the Duluth District, and will meet updated permitting requirements in the State of Minnesota.

#### **Schaft Creek**

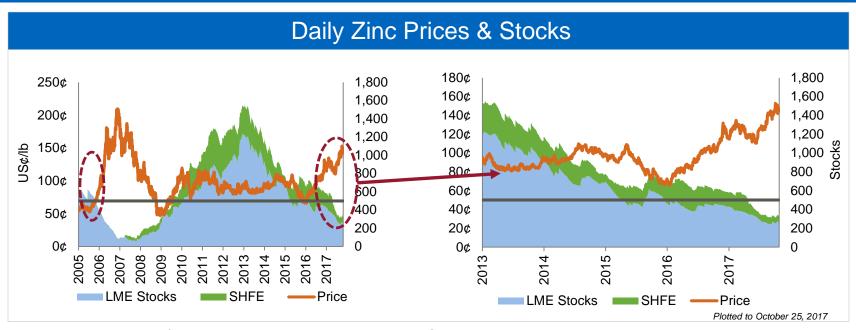
Completed a thorough update of the resource model and attendant resource calculation in Q2 2017 which will underpin
desk-top engineering studies planned for 2018 that are focused on surfacing value-enhancing development options.



# Zinc Business Unit & Markets

#### Metal Inventories Close to Historical Lows

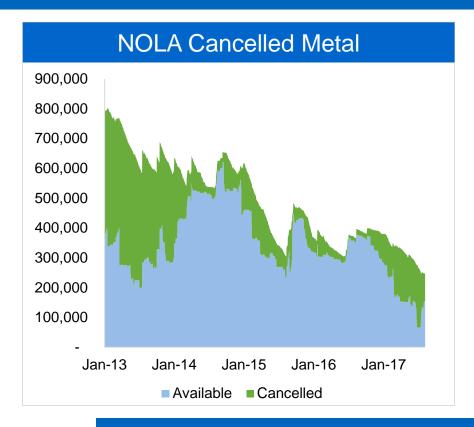




- Below 2005/2006 levels, with LME and SHFE down 249 kt in 2017
- SHFE down 135 kt since March peak
- Price is now reacting
- May be more hidden stocks available, with some en route to Asia

Source: LME/SHFE

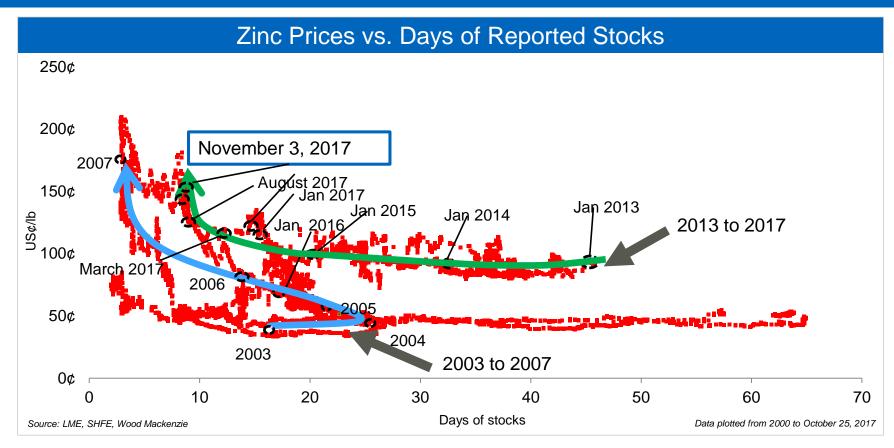
#### Available LME Zinc Stocks Almost Exhausted **Teck**



- 88% of LME stocks in New Orleans (NOLA)
- LME metal is slab zinc
  - 70% of US demand is from steel mills demanding customized jumbos
- Majority of NOLA zinc is:
  - European origin
  - Duty unpaid (1.2%): 1.6¢ premium on \$3,000/t zinc
- Majority of zinc from ~2008-2010
  - Concerns about condition
  - Has white rust, which causes high dross
- Customers rejecting NOLA material

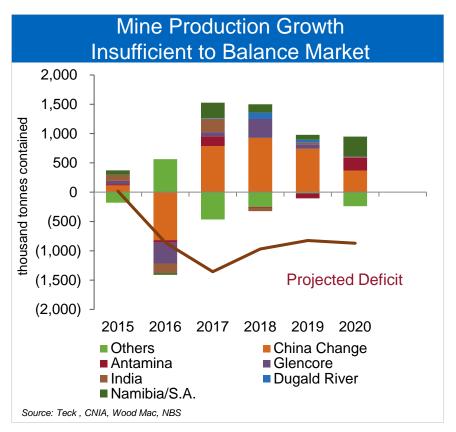
#### Pinch Point Reached in Zinc

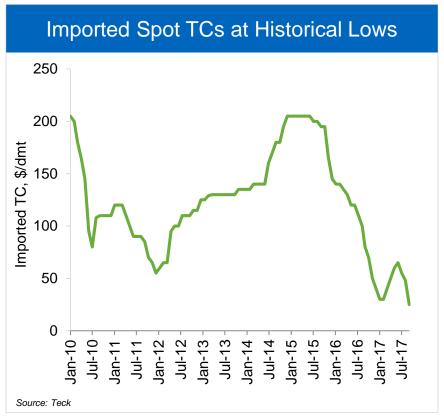




#### Zinc Concentrate Deficit Since 2015

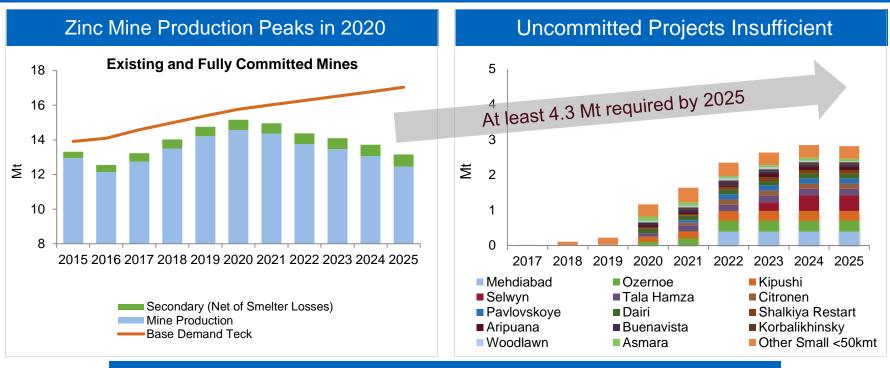






#### Planned Zinc Projects Won't Meet Long-Term Demand





#### **Demand Scenarios**

- Low Growth (2.3%): 4.3 Mt of uncommitted projects needed by 2025
- High Growth (3.0%): 5.2 Mt of uncommitted projects needed by 2025

## China is Important to the Zinc Market

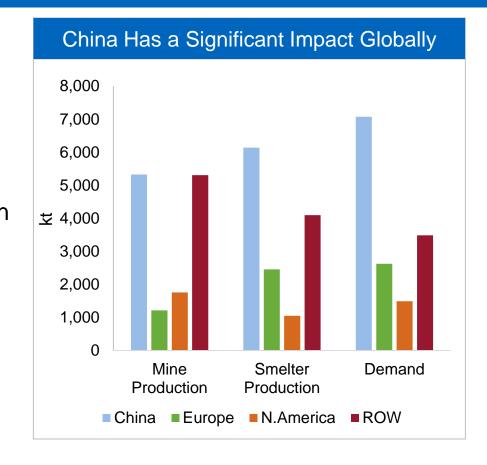


#### **Supply**

- 40% of global mine production
- 45% of global smelter production
- 32% of global coated sheet production
  - Grew from 20% in 2010

#### **Demand**

48% of global refined demand



#### Chinese Mined Zinc Production at 5-Year Low





Down 10% m/m in August 2017 & down 6% y/y YTD

#### Limited Chinese Response to Higher Zinc Prices

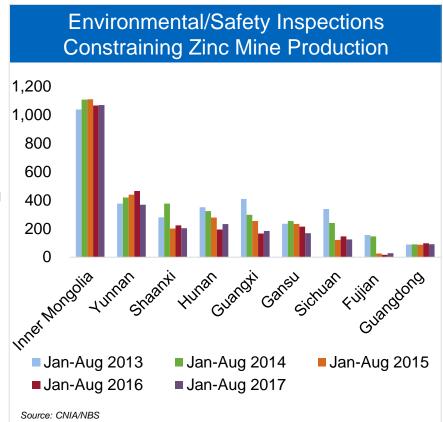
Adjusted estimate





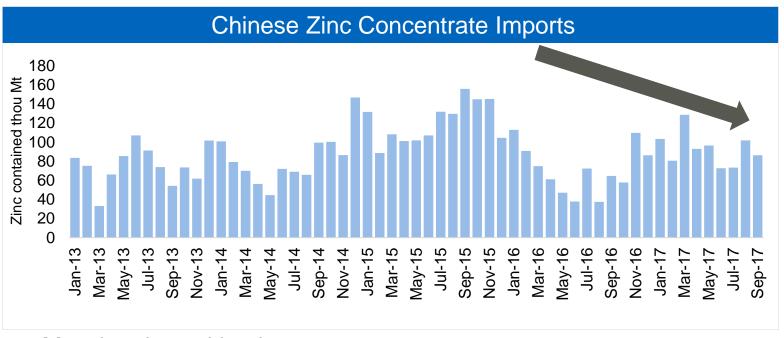
Early-year estimate

Source: Antaike, BGRIMM, Teck



#### Chinese Zinc Concentrate Imports Below Previous Highs

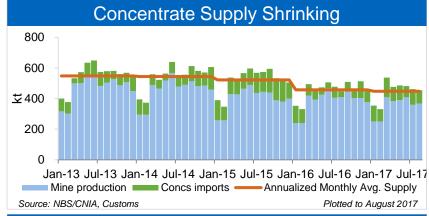


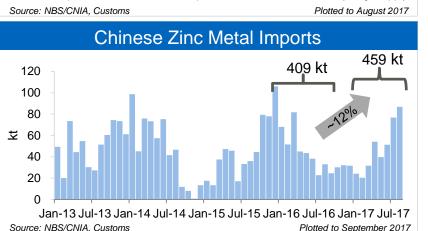


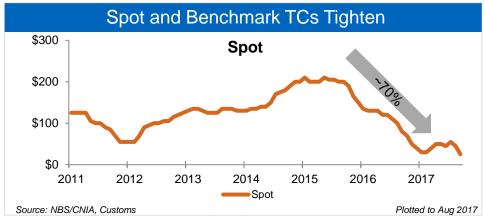
- Massive destocking in 2016
- Year-to-date to September 2017, imports risen 42%
- Concentrate inventories currently at historic lows

## Chinese Zinc Concentrate Supply Declining





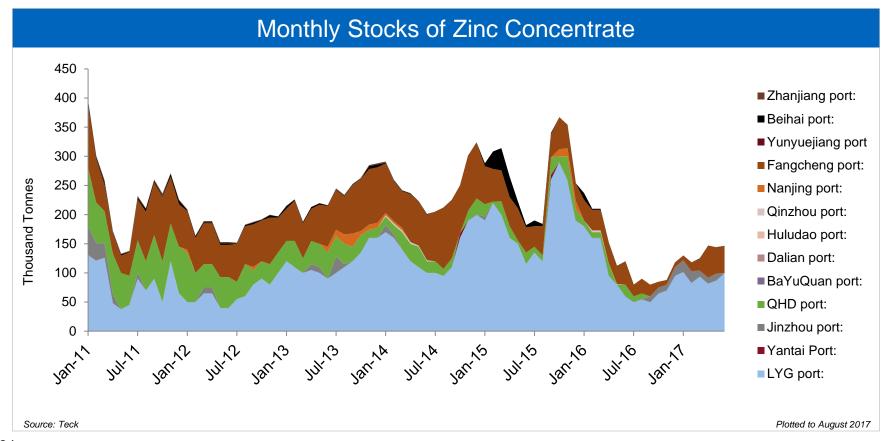




- Domestic concentrate production plus imports ~550 kt/month in 2013; Currently ~450 kt/month
- Domestic mine production averaged ~445 kt/month 2013 to 2015; 2017 averaging ~350 kt/month
- Reduction in supply forcing metal production cuts
- Tightness has driven metal imports to increase 252% MoM in August and 12% YTD
- Continued tightness is evidenced by the TCs remaining low

## Zinc Concentrate Stocks at Chinese Ports Near Historical Lows **ECK**





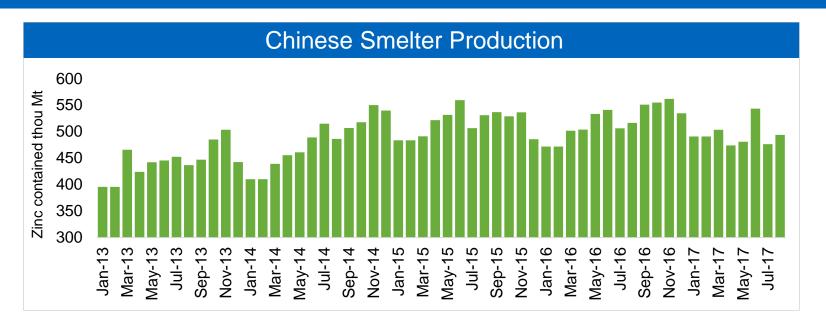
#### Chinese Zinc Metal Inventories Also Declining





#### Chinese Smelter Production Constrained

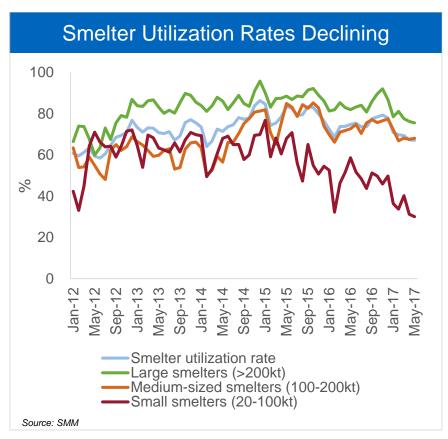




- Down 2% y/y YTD July Down 4% MoM
- Cuts to Chinese refined production March-June (~200 kmt)
- Expect concentrate stock draw down as winter inventory not built

#### Chinese Smelter Constraints Increasing Demand for Imports

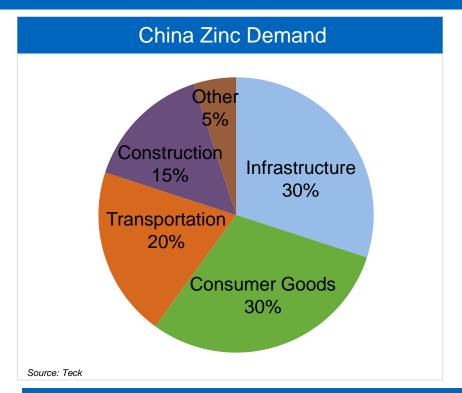


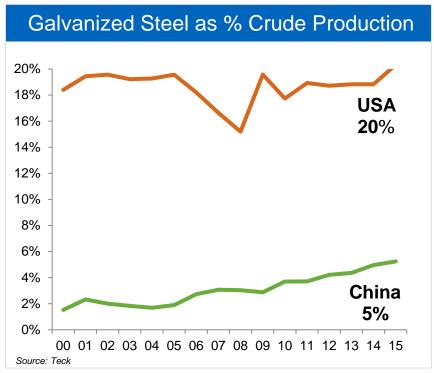




## Chinese Zinc Demand to Remain Strong



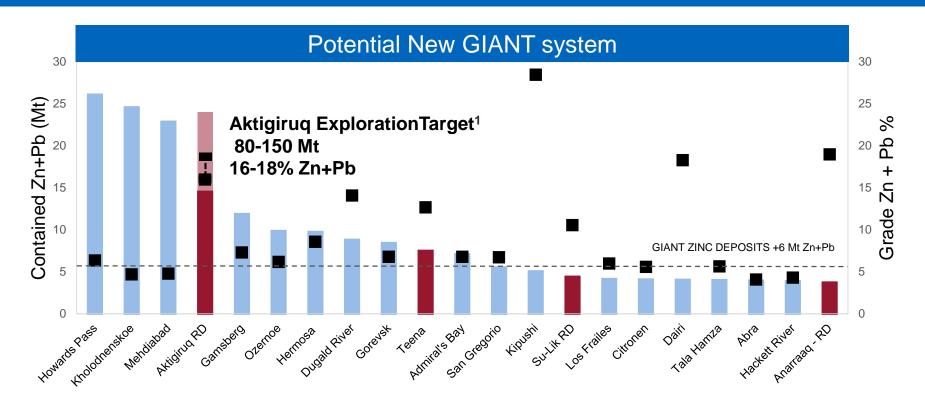




If China were to galvanize crude steel at <a href="https://her.new.google.com/her.2.1">half</a> the rate of the US using the same amount of zinc/tonne, a further 2.1 Mt would be added to global zinc consumption

## Building a Quality Zinc Inventory



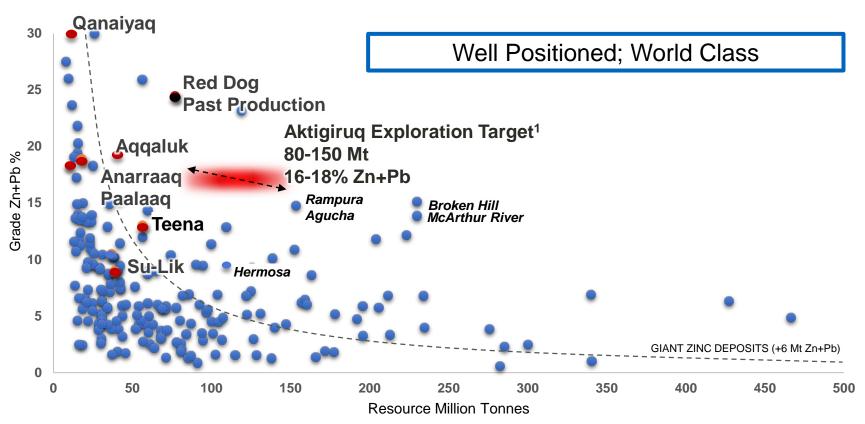


Sources: S&P Global Market Intelligence, SNL Metals & Mining Database, Teck Public Disclosures.

<sup>1.</sup> Aktigiruq 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.

#### Global Context of Teck's Zinc Resources





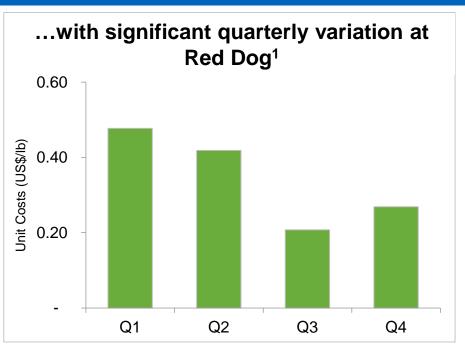
Sources: S&P Global Market Intelligence, SNL Metals & Mining Database, Teck Public Disclosures.

<sup>1.</sup> Aktigiruq 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.

#### Very Competitive Zinc Cost Position







- Seasonality of 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

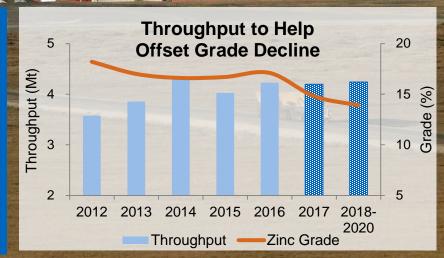
By-product credits significantly reduce unit costs

## Red Dog is a Consistent Performer

## **Teck**



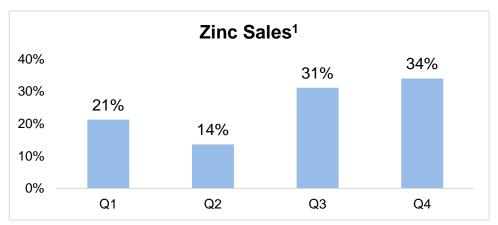
- 2017 guidance updated to 525-550 kt zinc metal contained in concentrate
  - Mine sequencing changes at Aqqaluk
  - Additional feed of higher grade but complex Qanaiyaq ore
- Improvement and extension projects
  - VIP2 Project to increase mill throughput by ~15%
  - Drilling program at Aktigiruq

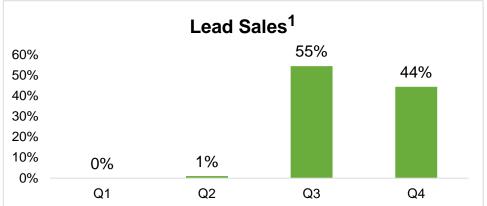


## Red Dog Seasonality

## **Teck**

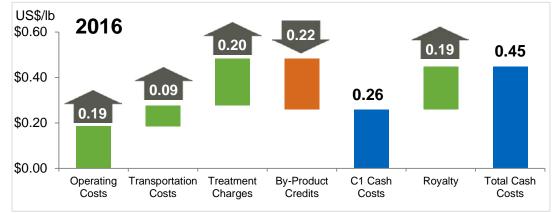
- Operates 12 months
- Ships ~ 4 months
- Shipments to inventory in Canada and Europe; Direct sales to Asia
- ~65% of zinc sales in second half of year
- ~100% of lead sales in second half of year

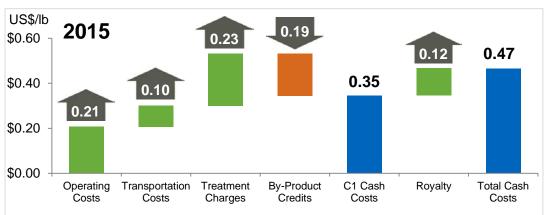




## Stable Operating Costs at Red Dog



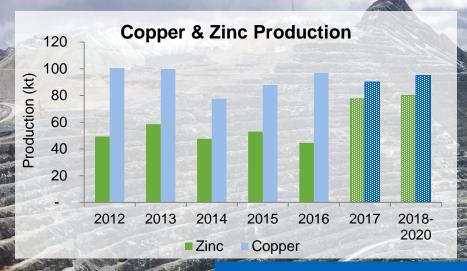


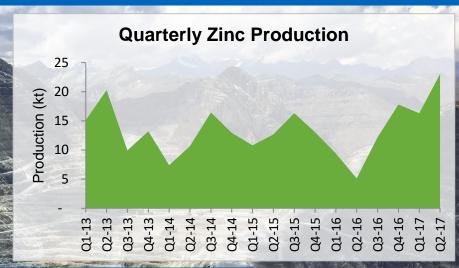


- Low total cash costs, at US\$0.45/lb in 2016
- C1 cash costs down
   US\$0.09/lb in 2016 vs. 2015
  - Operating cost reductions
  - Treatment charges lower
  - Higher lead price
- Royalty costs are up as a function of higher zinc prices
  - NANA royalty to 35% in October 2017

#### Rising Zinc Production at Antamina





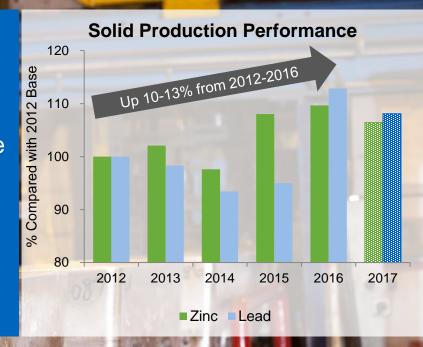


- Large zinc production increase
  - >50% in 2017 vs. the last 5 years
  - Quarterly zinc production profile varies based on mine sequencing
- Mine life extension studies progressing

## **Driving Continuous Improvement at Trail**



- Annual production records set in 2016
  - Zinc: 312 kt
  - Lead: 99 kt
  - Silver: 24 Moz
- Red Dog is an important long term feed source
- Investing in second new acid plant
  - Improved reliability and stability
- Margin improvement programs:
  - Focus on cost management
  - Improve efficiency
  - Introduce value-added products



## Teena: Significant Undeveloped Resource



In Construction		Tr	ail #2 Aci	d Plant	-11°00 Arafura Sea	2
Pre-Sanction Red Dog VIP2		- Charlish	7			
Medium-Term Growth Options					Walker Trough Gulf of Carpentaria	30
Future Options		Sai	Teena San Nicolás (Cu-Zn) Cirque		Batten Fault Zone  McArthur River  Batten  Trough	
Lens	Tonnes (Mt)	Zn (%)	Pb (%)	Zn+Pb (%)	TEENA Walford Cree  Bluebu  Carrara  Trough  Rlatfor	sh I
Main	45	12.0	1.8	13.7	Century Lady Loretta	Dug Riv
Lower	14	8.2	1.2	9.4	Zn-Pb Mine  Hilton & George Fisher	CI
Total <sup>1</sup>	58	11.1	1.6	12.7	Zn-Pb Prospect  250  22*30  Mt Isa Isa Belt	anning

#### San Nicolás: Near Term Development Potential



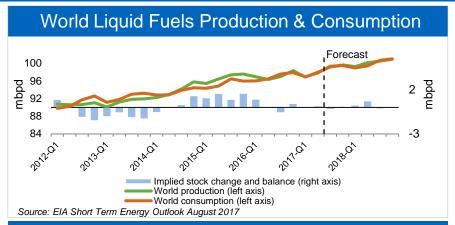
In Construction	Tra	il #2 Acid	Plant	-100000 100000		
Pre-Sanction	R	Red Dog VIP2		Red Dog VIP2		Santa Barbara 500 km
Medium-Term Growth Options		Red Dog Satellite Deposits		Pitarrilla Platosa  Torreon  Facilic Ocean		
Growth Options	Anta	mina Bro Teena		Velardena Nuestra Senora		
Future Options	San	Nicolás ( Cirque		Penasquito  Del Toro  Charcas		
Resources <sup>1</sup>	Tonnes (Mt)	Zn (%)	Cu (%)	Francisco Cozamin		
Indicated	92	1.7	1.2	Madero Madero SAN NICOLAS		
Inferred	11	1.0	1.2	Zn/Pb mine Real de Angeles San Luis		
<ul> <li>High grade, low C1 cost Cu-Zn mine</li> <li>Competitive capital cost</li> <li>EIA and permit submission for Q1 2019</li> <li>Top 10 zinc producer in early years</li> </ul>				Zn mine Zn/Pb project Cu/Zn project Pb/Zn smelter  Zn/Pb project Cu/Zn project Date of the control of the contr		

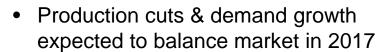


# Energy Business Unit & Markets

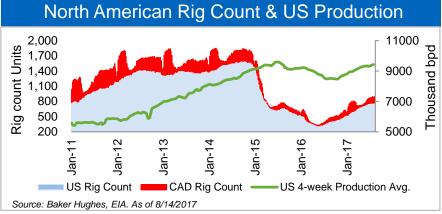
#### **Energy Market Moving Towards Balance**







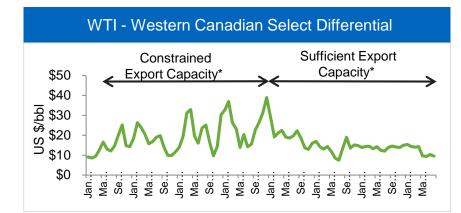
- Price upside limited by US production growth in short term
- Expectations for US\$75/bbl WTI by 2025

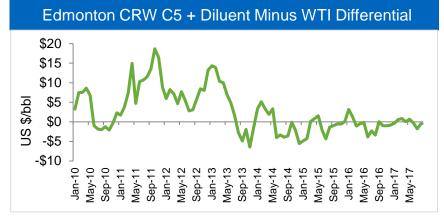




#### Heavy Oil Benchmark Differentials







#### Western Canadian Select (WCS) Is The Benchmark Price For Canadian Heavy Oil At Hardisty, Alberta

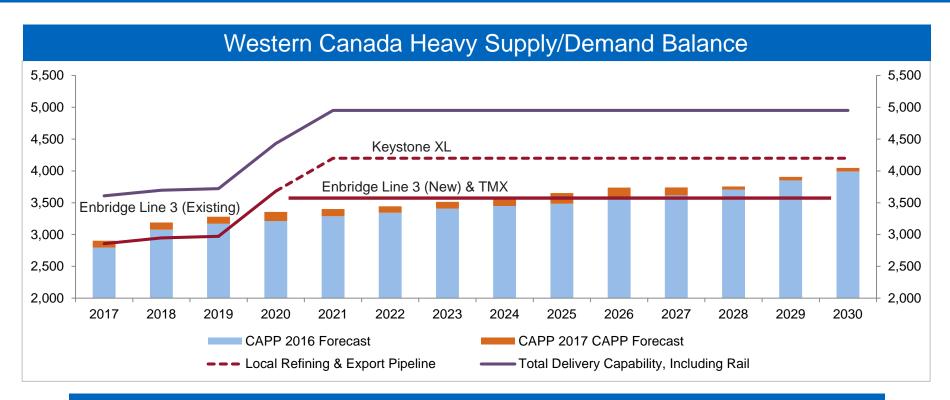
- Contract settled monthly as a differential to Nymex WTI
- Based on heavy/light differential, supply/demand, alternate feedstock accessibility, refinery outages and export capability
- Year to date differential: \$12.00 US/bbl
- Narrower short-term heavy differentials supported by:
  - OPEC production curtailments of heavy sour crudes
  - Strong regional demand for heavy supply
  - Planned/Unplanned production outages
- Differentials forecasted to widen post 2018
  - Increased oil sands production
  - Constrained export pipeline capacity
  - Revised IMO bunker fuel oil sulphur specifications

## Diluent (C5+) at Edmonton, Alberta Is the benchmark contract for diluent supply for oil sands

- Contract settled monthly as differential to Nymex WTI
- Long-term diluent (C5+) differential of Nymex WTI +/- \$5 US/bbl
- Based on supply/demand, seasonal demand and quality
- Supply forecasted to exceed demand
  - Growing local production,
  - Contract carriage import pipelines

#### Recent Pipeline Announcements Constructive





WTI-WCS differentials forecast to improve with export pipeline capacity

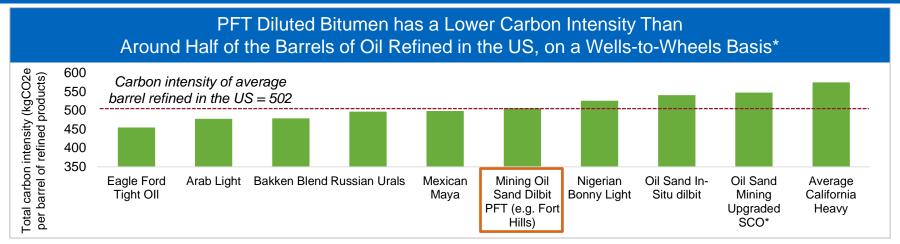
# Comprehensive Sales & Logistics Strategy In Place For Blended Bitumen





#### Lower Carbon Intensity Product





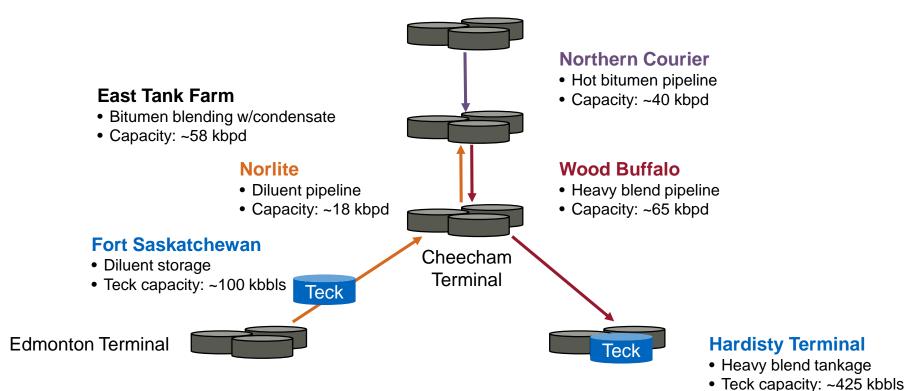
#### 'Fort Hills Reduced Carbon Dilbit Blend'

- Utilizes Paraffinic Froth Treatment (PFT) solvent based secondary extraction process
  - Removes fines & asphaltines
  - Used by Kearl and Albian mining projects
- Result:
  - A product with a lower carbon intensity than around half of the oil refined in the US
  - A superior refinery feedstock
  - Lower pipeline diluent requirements

## Alberta Distribution Network Ready to Receive Product

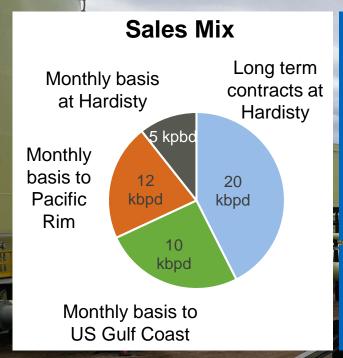


#### **Fort Hills Mine Terminal**



## Energy Sales & Logistics Strategy Based on Diverse Market Access & Risk Mitigation





#### **Market Profile**

**Pipelines:** 

10 kbpd Contracted capacity on existing Keystone pipeline

to the US Gulf Coast

+12 kbpd Contracted capacity on proposed TransMountain

(TMX) pipeline to the west coast of Canada

+25 kbpd Remainder at Hardisty via customer contracted

pipeline capacity, or common carrier pipelines

=47 kbpd blended bitumen<sup>1</sup>

#### Additional options available include:

- Increasing capacity on Keystone / Keystone XL pipelines
- Selling additional product at Hardisty
- Shipping by rail, if required