# Teck

### Innovation

April 3, 2019 Andrew Milner, Senior Vice President, Technology and Innovation



## 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 variation of such words and phrases or state that certain actions, events or results "may", "could", "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 our technology and innovation strategy, the anticipated benefits of our focus on innovation, the potential benefits and savings associated with an expansion in analytics, automation, and digital tools, including the value of autonomous haul trucks, smart shovels, predictive maintenance, and artificial intelligence at our operations, our expectations that the projects discussed in this presentation or other efforts will result in shareholder value, growth and safety benefits, our ability to attract and retain a skilled workforce.

These forward-looking statements involve numerous assumptions, risks and uncertainties and actual results may vary materially. These statements are based on a number of assumptions, including, but not limited to, our ability to successfully implement our technology strategy, the performance of new technologies in accordance with our expectations, assumptions regarding general business and economic conditions, interest rates, the supply and demand for, inventories and deliveries of, and the level and volatility of prices of steelmaking coal, zinc, copper, blended bitumen and other primary metals and minerals produced by Teck, as well as steel, oil, natural gas and petroleum 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 mineral and oil and gas reserve and resource 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 operating 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, assumptions regarding returns of cash to shareholders include assumptions regarding our future business and prospects, other uses for cash or retaining cash. Mineral reserve and resource life estimates assume the mine life of longest lived resource in the relevant commodity is achieved, assumes prod

Factors that may cause actual results to vary materially include, but are not limited to, our ability to successfully implement our technology and innovation strategy, underperformance of new technologies implemented, 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 (including but not limited to rail, port 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, and changes or deterioration in general economic conditions.

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 our management's discussion and analysis of quarterly results and other subsequent filings, all filed under our profile on SEDAR (www.sedar.com) and on EDGAR (www.sec.gov).



## 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**<sup>™</sup> with some elements already underway

# Teck is Actively Pursuing a Transformation Of Our Business Called RACE21<sup>TM</sup>

#### 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



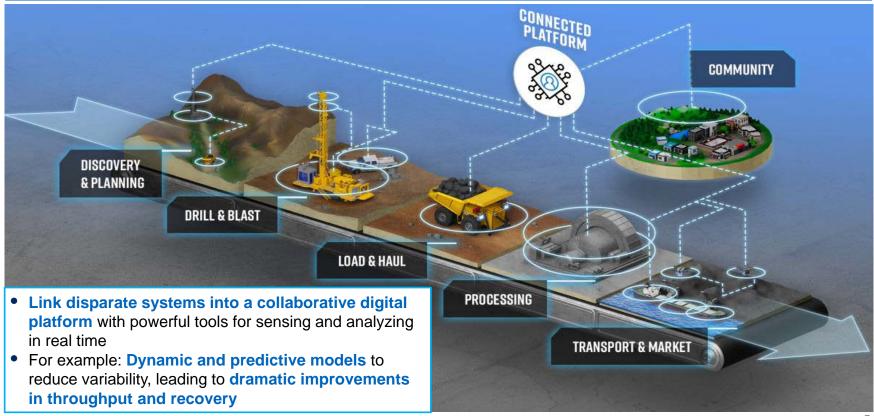
### R – Renew



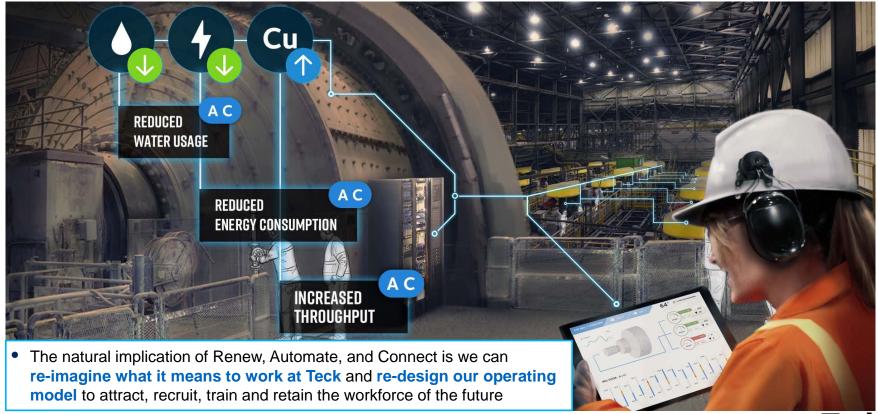
### A – Automate



### C - Connect

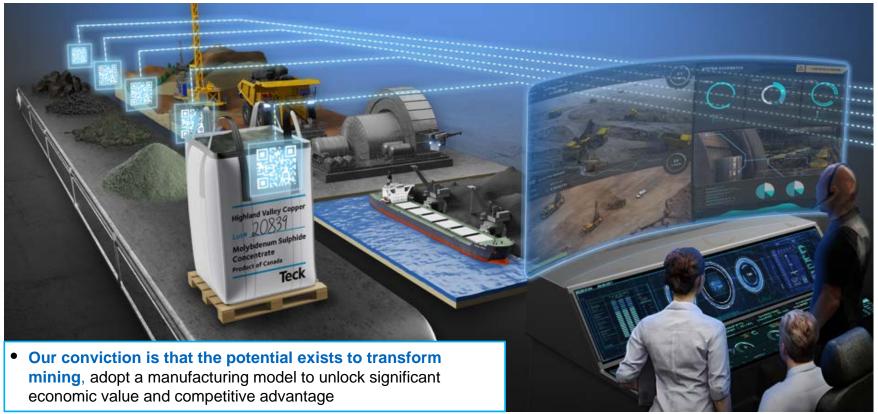


### E – Empower



RACE21<sup>TM</sup> INNOVATION

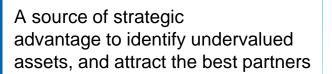
### Moving to a manufacturing model



# Why Pursue a Technology Transformation?

Technology leadership could create multiple opportunities







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



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



## 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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