

# Teck's Technology Transformation Programs Enhance Performance, Safety and Sustainability; Expected to Generate \$1.1 billion in Annualized Benefits

28.04.2022 | [GlobeNewswire](#)

VANCOUVER, April 28, 2022 - [Teck Resources Ltd.](#) (TSX: TECK.A and TECK.B, NYSE: TECK) ("Teck") announced today that initiatives deployed through its technology transformation programs, highlighted by the signature RACE21 program, are expected to generate approximately \$1.1 billion in recurring, annualized benefits through enhanced operational performance, safety and sustainability.

"From advanced analytics to machine learning to automation, our RACE21 program has built on our long-standing focus on technology and innovation to generate significant new benefit through improved operational performance, safety and sustainability, helping to solidify Teck's position as a technology leader in our industry," said Don Lindsay, President and CEO. "As we look to the future, we will continue to leverage digital innovation to more efficiently and sustainably produce the metals and materials needed for a low-carbon world."

## RACE21; Benefits Creation

RACE, which stands for Renew, Automate, Connect and Empower, has been a catalyst for transformative change across Teck and was a contributor to our record-setting performance in 2021. Between 2019-2021, RACE21 delivered initiatives expected to generate approximately \$900 million in recurring annualized benefits using long-range planning price assumptions. Anticipated benefits build on the estimated \$200 million of recurring annualized benefits generated through earlier technology initiatives. Assuming spot prices as of March 31, 2022 and planned production and sales, Teck estimates that anticipated benefits could be up to approximately \$1.7 billion annually.

RACE21; enhanced operational performance in the following core areas:

**Mine Optimization - \$450 Million:** Leveraging data, machine learning and digital applications across Teck's mining equipment has increased truck productivity by up to 10% at certain operations, reduced drilling and fuel costs, and optimized the quality of material going to processing plants. For example, at our Fording River Operations, machine learning models use real-time information such as truck speed and location to quickly identify road maintenance tasks and the optimal allocation of trucks to maximize production. At our Red Dog Operations, visualization and 3D modelling applications are used to accurately predict the movement of material during a blast, improving the zinc grade delivered to the plant by about 5%. Similar approaches at our Elkview Operations reduced ash variability of material in the plant, increasing plant yield by approximately 0.5% starting in December 2021.

**Processing Improvements - \$300 Million:** Automation and machine learning models within Teck's processing plants increased throughput capacity by up to 9%, and recovery by up to 3% at certain sites. For example, at our Red Dog Operations, automation has been used to improve stability of grinding mill processes, increasing production rates by 9%. At our Highland Valley Copper Operations, automation and machine learning models that use real-time information from flotation processes - such as chemical addition and equipment settings - resulted in a 3% increase in copper recovery. Combined with simulation models that track ore characteristics through our grinding mills, process control enhancements and data analytics that support more informed blasting decisions, the site has realized a 15% increase in mill throughput capacity.

**Integrated Operations and Maintenance - \$150 Million:** Digital planning applications that better connect operations with logistics teams have reduced costs and maximized throughput between Teck's steelmaking coal operations and the recently upgraded Neptune Bulk Terminals. Automated train loading at our Fording River Operations has increased loading per car by 2% and loading speed by 40%. Predictive maintenance enabled by equipment sensors has reduced equipment downtime and operational interruptions across all

sites.

*Reducing Health & Safety Risk:* Safety initiatives at various Teck operations, including light vehicle monitoring systems, collision and proximity detection and autonomous haulage systems, have reduced the overall risk associated with vehicle interactions and contributed to a 38% reduction in Teck's high-potential incident frequency in 2021 compared to the previous year.

*Enhancing Sustainability:* Digital technology is being implemented across Teck operations to improve decision making in the areas of water use, air quality and energy consumption. For example, at our Trail Operations various automation initiatives increased throughput of the KIVCET dryer and at the same time reduced sulphur dioxide emissions by 19% in 2021 compared to the previous year. At our Fording River Operations, we are developing machine learning using weather and water quality data to provide enhanced operational recommendations for water storage and movement within the mine.

These RACE21&#8482; initiatives follow Teck's other successful technology programs, including our previously announced adoption of saturated rock fill technology for our Elk Valley Water Quality Program, which has accelerated the implementation of water treatment in the Elk Valley and offers a sustainable long term alternative to conventional tank-based treatment plants.

"RACE21&#8482; represents the latest advancement in a long history of technology and innovation at Teck," said Andrew Milner, Senior Vice President and Chief Transformation Officer. "Teams of developers, data engineers, data scientists, and user experience designers are leveraging data and knowledge, while collaborating with our operations, to solve complex problems in real-time. The work we have done is embedded across the organization, helping to offset increasing haulage profiles, declining ore grades, and significant inflationary impacts that Teck and the rest of the global mining industry are experiencing."

Expected annualized benefits are measured by the average of current and estimated future pre-tax cash flow impacts of the various initiatives, based on a number of assumptions, including assumptions regarding the ramp-up of the initiatives, production, commodity price, exchange rate and sales and other assumptions, and aggregating those estimated impacts to estimate expected future benefits. Some benefits are not expected to be fully realized until future periods, and the expected impact of these initiatives is taken into account in our existing guidance.

#### Forward-Looking Statements

This news release contains certain forward-looking information and forward-looking statements as defined in applicable securities laws (collectively referred to as forward-looking statements). These statements relate to future events or our future performance. All statements other than statements of historical fact are forward-looking statements. The use of any of the words "anticipate", "plan", "continue", "estimate", "expect", "may", "will", "project", "predict", "potential", "should", "believe" and similar expressions is intended to identify forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements. These statements speak only as of the date of this presentation.

The forward-looking statements in this news release include but are not limited to: the statements of the benefit expected to be generated by RACE21&#8482; and Teck's other technology initiatives; and the improvements expected to be delivered, or continuation of improvements already delivered, by those initiatives, including but not limited to increased truck productivity, production rates, copper recovery, increased mill throughput. Anticipated benefits to be generated are not a guarantee of any level of future financial, operational, or other results.

These statements are based on a number of assumptions, including, but not limited to: assumptions regarding future commodity prices and the prices we will achieve for our products and that all production is sold at these assumed prices; foreign exchange rate assumptions; assumptions regarding future production, and the improvements to future production associated with the RACE21&#8482; and other technology initiatives; assumptions regarding our ability to sell all production; assumptions the RACE21&#8482; and other initiatives are further implemented and scaled in accordance with current plans; assumptions that future implementation and scaling will achieve the benefits expected; assumptions regarding general business and economic conditions and the supply and demand for, deliveries of our products. The foregoing list of assumptions is not exhaustive. Events or circumstances could cause actual results to vary materially.

Factors that may cause actual results to vary materially include, but are not limited to: actual commodity prices and the prices that we achieve for our products; difficulties or inability to implement or scale technology initiatives; changes in demand for our product; actual production and our ability to sell all production as assumed; changes in currency exchange rates; unanticipated operational and construction difficulties that result in Teck not achieving its anticipated sales, production or other targets; changes at our operations, including but not limited to grades, that impact the expected benefits of our initiatives; unanticipated difficulties in realizing or continuing to realize the benefits of our initiatives; and other factors that impact our business generally. The foregoing list of factors is not exhaustive.

We assume no obligation to update forward-looking statements except as required under securities laws. Further information concerning risks and uncertainties associated with these forward-looking statements and our business can be found in our Annual Information Form for the year ended December 31, 2021, filed under our profile on SEDAR ([www.sedar.com](http://www.sedar.com)) and on EDGAR ([www.sec.gov](http://www.sec.gov)) under cover of Form 40-F, as well as subsequent filings that can also be found under our profile.

#### About Teck

As one of Canada's leading mining companies, Teck is committed to responsible mining and mineral development with major business units focused on copper, zinc, and steelmaking coal, as well as investments in energy assets. Copper, zinc and high-quality steelmaking coal are required for the transition to a low-carbon world. Headquartered in Vancouver, Canada, Teck's shares are listed on the Toronto Stock Exchange under the symbols TECK.A and TECK.B and the New York Stock Exchange under the symbol TECK. Learn more about Teck at [www.teck.com](http://www.teck.com) or follow @TeckResources.

#### Teck Media Contact:

Chris Stannell  
Public Relations Manager  
604.699.4368  
[chris.stannell@teck.com](mailto:chris.stannell@teck.com)

#### Teck Investor Contact:

Fraser Phillips  
Senior Vice President, Investor Relations and Strategic Analysis  
604.699.4621  
[fraser.phillips@teck.com](mailto:fraser.phillips@teck.com)

---

Dieser Artikel stammt von [Rohstoff-Welt.de](http://Rohstoff-Welt.de)

Die URL für diesen Artikel lautet:

<https://www.rohstoff-welt.de/news/413788--Tecks-Technology-Transformation-Programs-Enhance-Performance-Safety-and-Sustainability-Expected-to-Generate-Value>

Für den Inhalt des Beitrages ist allein der Autor verantwortlich bzw. die aufgeführte Quelle. Bild- oder Filmrechte liegen beim Autor/Quelle bzw. bei der vom ihm benannten Quelle. Bei Übersetzungen können Fehler nicht ausgeschlossen werden. Der vertretene Standpunkt eines Autors spiegelt generell nicht die Meinung des Webseiten-Betreibers wieder. Mittels der Veröffentlichung will dieser lediglich ein pluralistisches Meinungsbild darstellen. Direkte oder indirekte Aussagen in einem Beitrag stellen keinerlei Aufforderung zum Kauf-/Verkauf von Wertpapieren dar. Wir wehren uns gegen jede Form von Hass, Diskriminierung und Verletzung der Menschenwürde. Beachten Sie bitte auch unsere [AGB/Disclaimer!](#)

---

Die Reproduktion, Modifikation oder Verwendung der Inhalte ganz oder teilweise ohne schriftliche Genehmigung ist untersagt!  
Alle Angaben ohne Gewähr! Copyright © by Rohstoff-Welt.de -1999-2025. Es gelten unsere [AGB](#) und [Datenschutzrichtlinien](#).