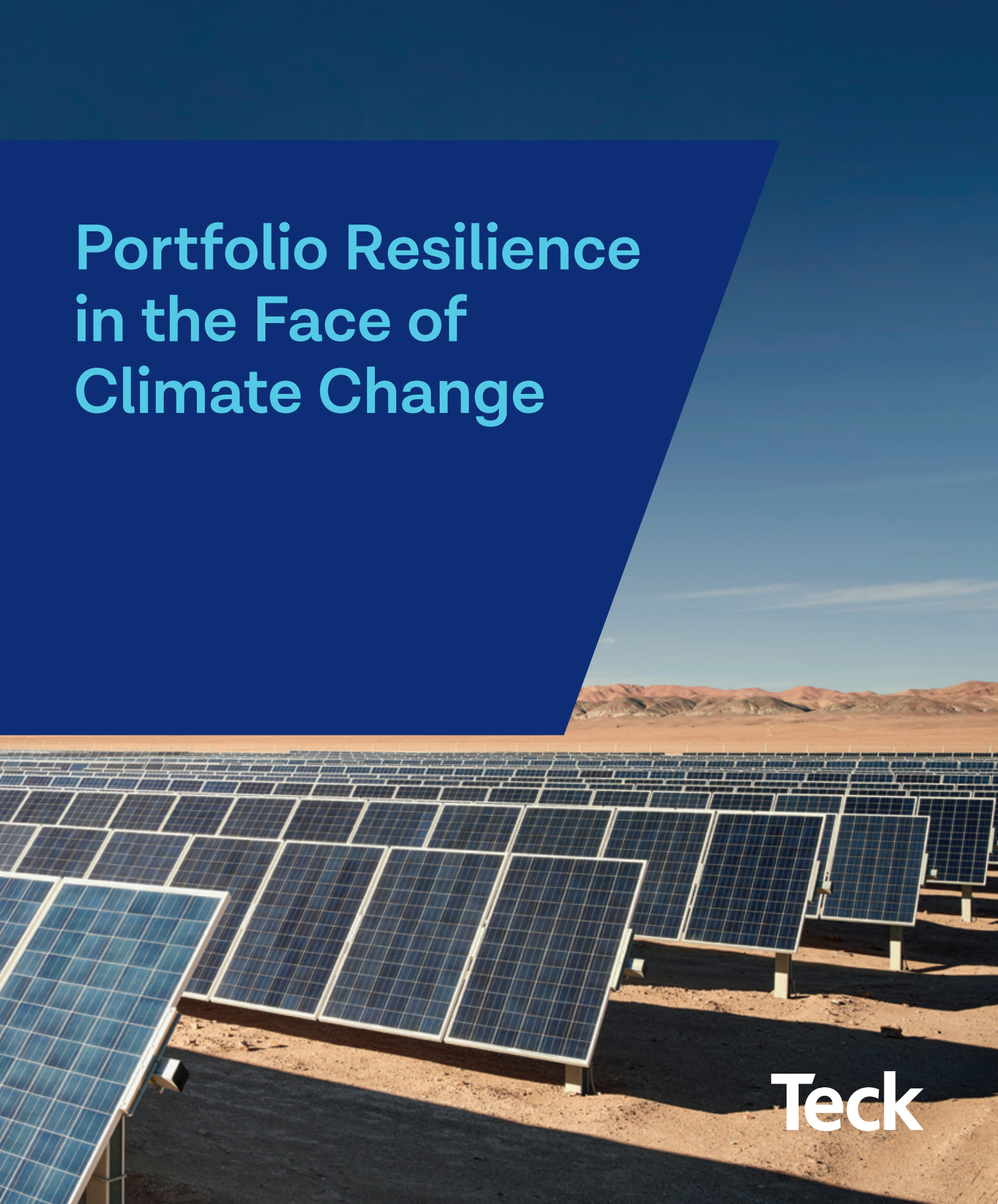
Portfolio Resilience in the Face of Climate Change



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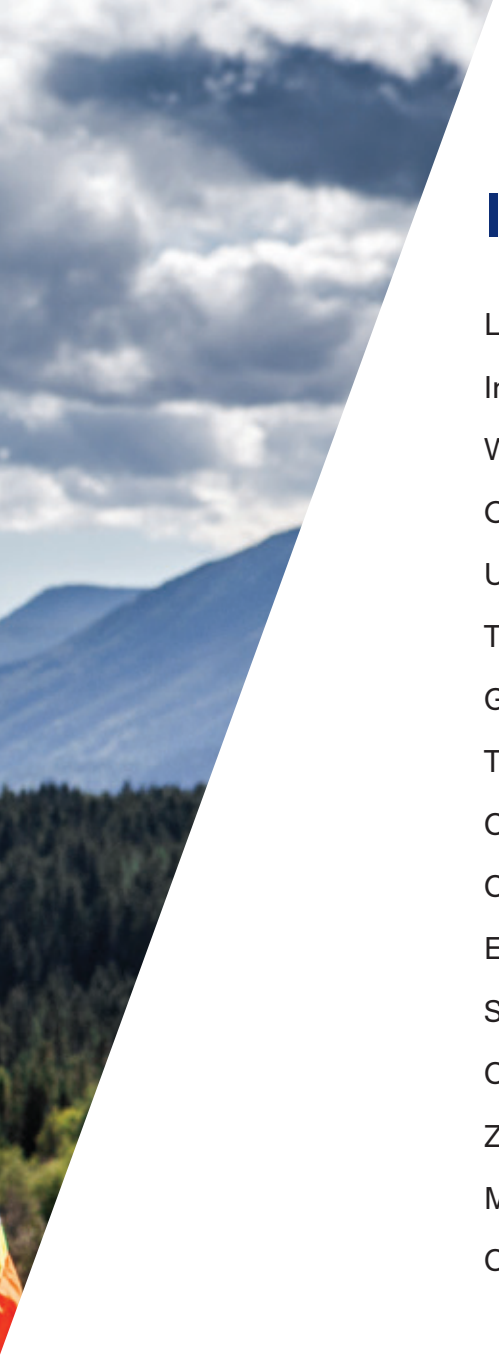


In This Report

Letter from the CEO

At Teck, we recognize that climate change is impacting our ecosystems, our societies and our economies, that it is directly influenced by human activities, and that addressing it requires decisive global action.

Today, governments and organizations around the world are committed to minimizing the potential impacts of climate change and achieving the objectives of the Paris Agreement—the most critical of which is keeping the global temperature rise to 1.5°C.

We know climate change presents a broad set of transitional and physical risks and opportunities to Teck and we are working to ensure that our business remains resilient in the face of these impacts. We understand that investors, lenders and other users of climate-related financial disclosures are interested in understanding the risks and opportunities posed by climate change, and the governance and management practices that companies are taking to deliver value.

Aligned with our commitment to transparency and sustainability, we support the desire for consistency and transparency embodied in the Task Force on Climate-related Financial Disclosure (TCFD) recommendations, and have signed on as a supporter of the TCFD recommendations. This report, Portfolio Resilience in the Face of Climate Change, provides an analysis of how Teck will continue to be competitive and create value in a low-carbon future.

We believe the transition to a low-carbon economy is an opportunity for our business, as the minerals, metals and energy we produce are a critical part of its development. Whether it's solar panels, wind turbines or electric cars, they all require metals, minerals and energy, and lots of it.

Each solar panel requires 19 different mineral products and metals, including indium, copper and silver. The average wind turbine requires up to 4 tonnes of copper and 260 tonnes of steel, which in turn requires 170 tonnes of steelmaking coal. Electric cars require four times as much copper as standard internal combustion cars. In a low-carbon world, metals are the fuel of the future.

Energy is another important contributor to the transition to a low-carbon economy. The International Energy Agency forecasts that, in all energy use scenarios, oil and gas will continue to be an important part of the world's energy mix for the foreseeable future. Responsible production to meet this demand is an important consideration for our oil sands assets.

We also recognize that our activities generate significant greenhouse gas (GHG) emissions, and we are constantly making efforts to improve our performance. We have a strong track record in these areas, including improving energy efficiency, reducing GHGs and lowering the carbon intensity of our products. Both our steelmaking coal and copper production are among the lowest carbon intensity in the world. Bitumen from our Fort Hills oil sands mining and processing operation has one of the lowest carbon intensities among Canadian oil sands producers, and the GHG life cycle emissions are in line with the average barrel refined in the U.S.

Our work in these areas continues, and across our operations we have reduced greenhouse gas emissions by 289,000 tonnes since 2011. We are fortunate to operate in jurisdictions where 81% of our total electricity consumption in 2018 was from renewable energy sources, the majority of which is hydroelectricity.

While the world has started to take action to limit global warming, there is still a great deal that needs to be done. We support further action, and we believe that industry, governments and society all have a role to play. We continue to support the pursuit of climate change policies by governments and we believe that broad-based pricing of carbon is one of the most effective ways to encourage real reductions in GHG emissions by ensuring that all emitters contribute to the solution.

With the majority of our business already covered by carbon taxes, we have extensive experience managing carbon pricing policies, and we know that carbon pricing acts as an additional financial incentive to reduce the amount of carbon we emit. We will continue to assess the potential implications of updated policies on our operations and projects, and we will continue to support progressive policy actions.

While we continue to take steps to capitalize on opportunities presented by the low-carbon economy and guard against the future impacts of climate change, we recognize that our analysis remains uncertain. To manage this uncertainty, we are committed to tracking signposts—like the growth in the zero emissions vehicle market—to identify which trends are more or less likely to become a reality, and to respond accordingly.

While the future is uncertain, at Teck we believe in controlling the controllable. We remain confident that we have the management practices in place and the commodities that will be needed to ensure that Teck contributes to, and prospers in, a low-carbon future.

Donald R. Lindsay
President and Chief Executive Officer
Vancouver, B.C., Canada

July, 2019

Introduction

At Teck, we believe that climate change is a key global risk, that it is directly influenced by human activity and that it requires decisive global action. Failure to act will expose the world to climate change impacts that will be costly for global ecosystems and for society as a whole.

We believe we have a responsibility to help address this global challenge by reducing emissions at our operations and by sustainably producing the metals, minerals and energy that are essential for building the technologies and infrastructure needed to transition to a low-carbon economy.

Our responsibility also includes accounting for climate-related risks and opportunities in our business strategies and at our operations. Our Board of Directors is responsible for the stewardship of our company and ensures that appropriate corporate governance structures and systems are in place. Both our Board and senior management are involved in assessing climate-related risks and opportunities to ensure that Teck remains resilient to these business and market forces. This includes considering climate-related issues and risks in strategic planning across our business units.

In addition to strong sustainability performance, timely and transparent disclosures are also of importance to Teck and our communities of interest. With respect to disclosures pertaining to climate change, the Task Force on Climate-related Financial Disclosures (TCFD) of the Financial Stability Board made several recommendations in June 2017 for how companies can improve climate-related disclosures.[1] We support the desire for consistency and transparency reflected in the TCFD recommendations, and we signed on as a supporter of the TCFD recommendations.

In 2018, building on more than a decade of public reporting on sustainability and climate change issues, we completed our first report aimed at aligning with the disclosure recommendations of the TCFD. In this year's report, we look to build on our previous work and to incorporate the feedback received from external parties. Two of the key updates we have made as a result of input from stakeholders are the updating of our risk definitions to better align with those of the TCFD and the introduction of a third scenario: a business-as-usual scenario meant to aid readers by providing a baseline against which they can contrast the other two scenarios.

The use of scenarios can aide our decision-making and strategic planning across our business units.[2] These scenarios—while not forecasts—offer greater insight to key stakeholders, including investors, on how Teck considers and is preparing for the risks and opportunities that may emerge as the global community combats climate change and moves to a lower-carbon future. It should be noted that our scenario analysis and risk assessment work are ongoing, and the details and conclusions are subject to change over time. Please refer to the cautionary statement on forward-looking statements found at the conclusion of this report.

In this report, we:

1. Summarize Teck's governance approach to managing our business in the context of climate change.

2. Summarize Teck's climate action strategy, goals and performance.

3. Consider the potential implications for Teck of three commonly used climate-related scenarios and discuss key climate-related risks and opportunities for our business units: steelmaking coal, copper, zinc and energy.

1 *Recommendations of the Task Force on Climate-related Disclosures (June 2017).* Task Force on Climate-related Financial Disclosures.

2 Readers should note that our use of scenarios does not equate to performance commitments, and that it does not preclude investment decisions that grow our business in a responsible manner.

Who We Are and Where We Operate

Teck is a diversified resource company committed to responsible mining and mineral development with business units focused on steelmaking coal, copper, zinc and energy.

Headquartered in Vancouver, British Columbia (B.C.), Canada, we own or have an interest in 12 operating mines, one large metallurgical complex, and several major development projects in Canada, the United States, Chile and Peru. We have expertise across a wide range of activities related to exploration, development, mining and minerals processing, including smelting and refining, safety, environmental protection, materials stewardship, recycling and research.

Our Business Units

Steelmaking Coal

We are the world's second-largest seaborne exporter of steelmaking coal, with six operations in Western Canada with significant high-quality steelmaking coal reserves.

Copper

We are a significant copper producer in the Americas, with four operating mines in Canada, Chile and Peru, and copper development projects in North and South America.

Zinc

We are the world's third-largest producer of mined zinc, and operate one of the world's largest fully integrated zinc and lead smelting and refining facilities.

Energy

We are building an energy business through the development of Canadian oil sands projects with the potential to generate long-term value.

Our Values

Safety

We ensure our own safety and the safety of our colleagues. We believe it is possible to work without serious injuries and that we can achieve our vision of everyone going home safe and healthy every day.

Sustainability

We act responsibly and strive to make a positive contribution to the environment and communities through our activities. Being welcomed where we operate demands responsible social, economic and environmental performance in everything we do.

Integrity

We are honest, ethical and fair in our words and our actions. We honour our commitments and work to maintain our reputation as a partner of choice in mining and exploration.

Respect

We value diversity and treat everyone with respect. We listen to each other and our communities of interest and incorporate feedback into the approaches we take. We respect human rights and the rights of Indigenous Peoples, including their unique interests and aspirations.

Excellence

We achieve excellent performance through teamwork, diligence and innovation. We are relentless in our pursuit of doing better and focus our resources, time and effort to achieve maximum efficiency and productivity.

Courage

We are true to our convictions and have the courage to speak up, challenge assumptions and take action on opportunities to be better.

Our Approach

World class, long-life assets

We explore for, acquire, develop and operate world class, long-life assets in stable jurisdictions.

Balance sheet strength

We aim for strong liquidity and access to capital on competitive terms.

Nimble response to opportunity

We actively seek opportunities to enhance our portfolio.

Operating excellence

We maximize value from our operations and activities by being disciplined in our approach to safety and productivity, and by controlling costs.

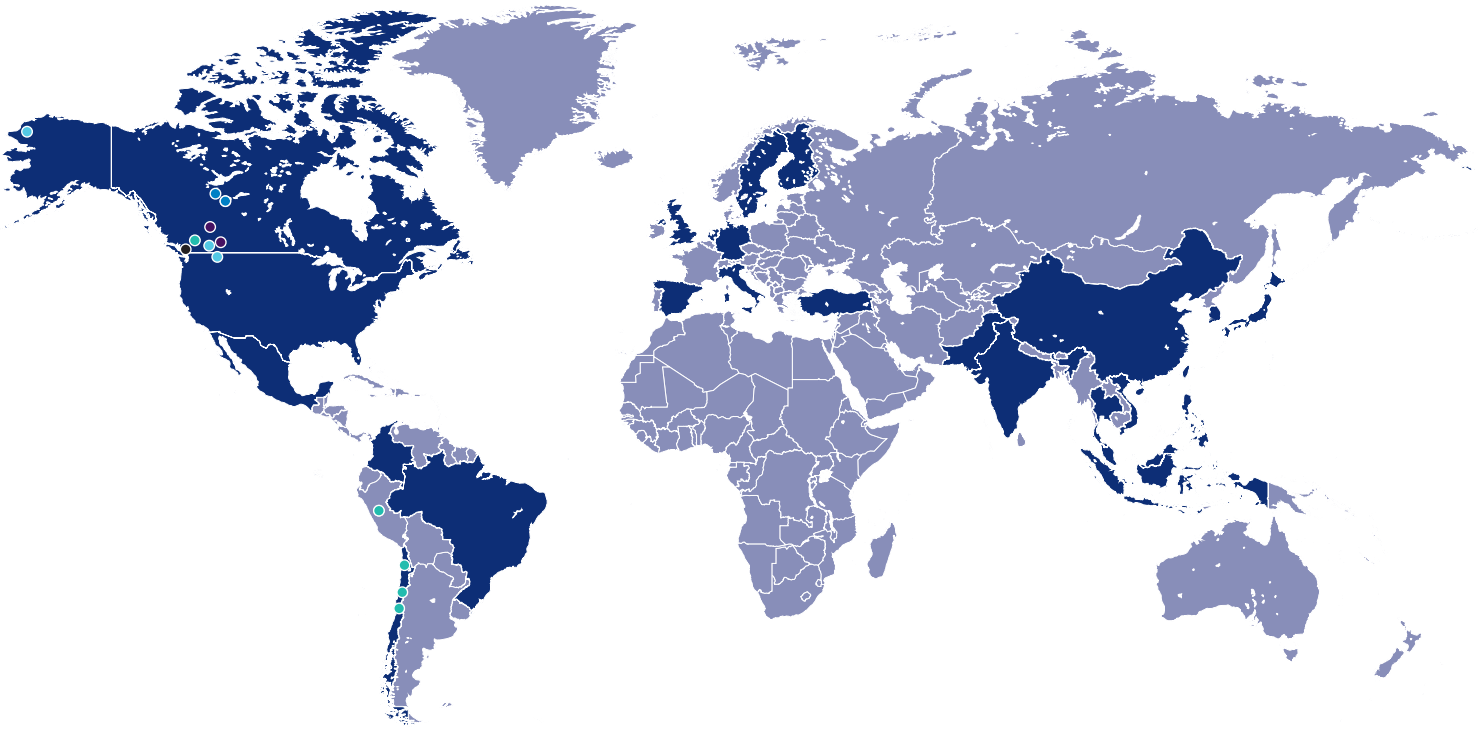
Sustainability

We focus on making the environment and communities better off as a result of our activities so that we are a welcome neighbour in the areas where we operate.

Best people

We recruit, retain and develop exceptional people and provide them with a safe, diverse, rewarding and respectful work environment.

Our Business



Operations and Major Projects

- **Steelmaking Coal**
  Cardinal River
  Steelmaking coal sites in B.C.
    - Fording River
    - Greenhills
    - Line Creek
    - Elkview
    - Coal Mountain
- **Copper**
  Highland Valley Copper
  Antamina
  Quebrada Blanca (including Quebrada Blanca Phase 2 project)
  Carmen de Andacollo
  NuevaUnión
- **Zinc**
  Red Dog
  Trail Operations
  Pend Oreille
- **Energy**
  Fort Hills
  Frontier

Corporate Head Office

- Vancouver

End Users

Brazil
Canada
Chile
China
Colombia
Finland
Germany
India
Indonesia
Italy
Japan
Malaysia
Mexico
Netherlands
Pakistan
Philippines
South Korea
Spain
Sweden
Taiwan
Thailand
Turkey
United Kingdom
United States
Vietnam

Copper is...

an essential part of people's lives. Today, copper is the material of choice in our modern world as a vital component in everything from power generation to hybrid vehicles to computers and smartphones. Copper's superior electrical and thermal conductivity is critical in driving energy efficiency and reducing GHG emissions associated with energy consumption.

Zinc...

protects steel by improving its durability. The primary uses of zinc are for galvanizing steel to protect against corrosion, producing brass and bronze, and in die-casting to produce a wide range of metal products. Zinc can also increase crop yields and crop quality. And, as an essential nutrient in human development and disease prevention, zinc saves lives.

Steelmaking coal is...

an essential ingredient in the production of steel. Today, there is no viable alternative that can substantially reduce the demand for steelmaking coal in the steelmaking process. Also called metallurgical or coking coal, it is necessary for building infrastructure such as rail, bridges and schools, and for improving the quality of life for people around the world. Steel, and the steelmaking coal used to make it, are also required for everything from clean energy projects like wind or solar power to transportation alternatives like rapid transit, buses and hybrid vehicles.

Energy is...

essential to our lives. We all rely on energy to keep the lights on, to travel, and to heat or cool our homes. As populations around the globe—particularly in developing nations—grow and become increasingly urbanized, the demand for energy is increasing.

Understanding the Climate Challenge

The climate is changing. The Intergovernmental Panel on Climate Change estimates that human activities have already caused approximately 1°C of global warming above pre-industrial levels, and says that "Global warming is likely to reach 1.5°C [above pre-industrial levels] between 2030 and 2052 if it continues to increase at the current rate."[3] This projected change is expected to result in increases in mean temperature in most land and ocean regions, hotter extremes in most inhabited regions, heavy precipitation in several regions, and the increased likelihood of drought and precipitation deficits in some regions.

At Teck, we recognize that climate change is largely the result of human activities such as the burning of fossil fuels and deforestation. In order to minimize the potential impacts of climate change and to keep global warming to 1.5°C, it is critical that coordinated global action be taken to reduce GHG emissions.

2011

Carbon Budget

Given the relationship between greenhouse gas emissions and climate change, in order to limit global temperature increases to 2°C or less, policymakers are focused on limiting anthropogenic—or human-generated—GHG emissions. The important questions are by how much and by whom? A useful way of understanding the extent to which emissions must be limited is to think about managing our emissions like a budget: a global carbon budget.

The global carbon budget is the estimated amount of CO_2 that the world can emit while still limiting global temperature rise to 2°C[4], as stated in the Paris agreement. The carbon budget is approximately one trillion tonnes of carbon (1,000 PgC)[5] as estimated by the scientific community.[6] As of 2011, approximately 52% of the global budget had been consumed. Exceeding the carbon budget will result in a significant increase in the risk of detrimental climate events on a global scale.

2045

3 *Global Warming of 1.5°C.* Summary for Policymakers. Intergovernmental Panel on Climate Change. 2018.

4 Readers should note that, in the context of this discussion and later analysis, while we support ambitions to achieve GHG emissions reductions to maintain global warming at 1.5°C, for the purposes of our scenario analysis, we have encountered a greater set of external data sources and analyses that use 2°C scenarios as their analytical backbone. For this reason, we feel that we are able to complete a more robust analysis using 2°C scenarios, rather than 1.5°C scenarios; therefore, we will commonly reference 2°C throughout this report.

5 *The Carbon Budget.* World Resources Institute. 2014.

6 The precise value of the global carbon budget to maintain global warming is constantly revised by the scientific community. The use of the values and references here is meant primarily to be illustrative and provide readers with general context.

Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC)

On December 12, 2015, a landmark agreement was reached with the 195 UNFCCC members to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low-carbon future. The Paris Agreement's central goal is to keep a global temperature rise this century below 2°C above pre-industrial levels and to strive towards limiting the temperature increase even further to 1.5°C. To accomplish the goal, the agreement outlines a global action plan, backed by state-level commitments, that focuses on climate change mitigation, adaptation and the transparent reporting of progress. Meeting the goal will require a significant departure in how governments, businesses and communities operate around the world, including the management of their carbon emissions.

2018 United Nations Climate Change Conference, Katowice, Poland

The 2018 United Nations Climate Change Conference was the 24th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP24), also known as the Katowice Climate Change Conference. It was held December 2–15, 2018 in Katowice, Poland. The conference agreed on rules to implement the 2015 Paris Agreement.

The Sustainable Development Goals

The United Nations Development Programme developed the Sustainable Development Goals (SDGs), a collection of 17 global goals to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity. Sustainable Development Goal 13: Climate Action sets global targets around climate change, from improving education and awareness to strengthening resilience and adaptive capacity. The effects of climate change are being experienced by every country, and the consequences of a warming climate are becoming more apparent with each year. Identifying and addressing climate change risks and opportunities is a crucial part of tackling the climate challenge.

Transitioning to a Low-Carbon Economy: Allocating the Carbon Budget

With an understanding of what limits the world needs to stay within for the carbon budget, the next question is how to stay within this budget. Not only is this a critical question to answer, but it is also one that has many potential answers, given the complex nature of where GHG emissions occur, what actions can be taken to reduce them, and the economic, social and political implications of various mitigation measures. To help identify how the global carbon budget could be allocated, various organizations have developed scenarios for pathways to achieving 2°C or less of warming. These scenarios vary depending on the assumptions that underlie them, including assumptions regarding parameters such as population growth, technological change, and political and government action.

As an example, the International Energy Agency has developed a Sustainable Development Scenario that outlines a pathway to limiting climate change to below 2°C of warming. Underpinning this scenario are three objectives from the UN Sustainable Development Goals[7]:

- To achieve universal access to modern energy by 2030
- To take urgent action to combat climate change
- To dramatically reduce the pollutant emissions that cause poor air quality.

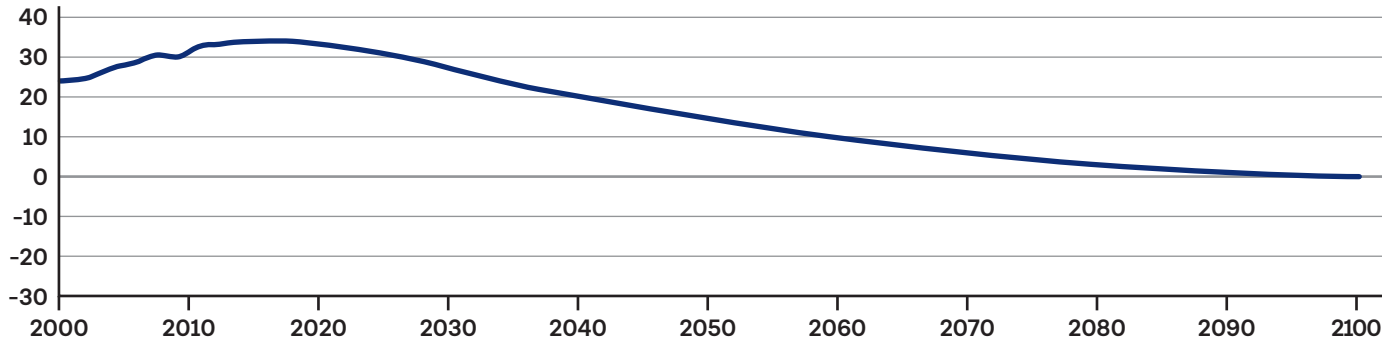
Given the range of possible pathways to keep global warming to 2°C or less, our approach is to maintain awareness of, and to track, the different ways in which this 2°C pathway could be achieved. Understanding where there are commonalities, where there is divergence and what signposts we need to monitor will allow us to understand which scenarios are more likely.

As a starting point, we believe there are some common global trends that will apply in most scenarios we considered.

7 *World Energy Outlook 2018*. International Energy Agency. 2018.

The Sustainable Development Scenario

Relative to other recent decarbonization scenarios ($GtCO_2$)



Emissions from scenarios projecting global temperature rise of around 1.7–1.8°C

Population Growth and the Rise of the Middle Class

The global population will continue to grow, with some estimates projecting a global population of 9.1 billion by 2040. Within this growth, 2.5 billion people will be lifted out of low incomes and poverty into the middle class.

Increasing Energy Demand

With rapid population growth and a growing middle class comes increasing global energy demand. While energy-efficiency measures will be employed to curb demand, they will not offset the growth in overall demand and the need for diverse sources of energy.

Energy Economics in Developing Economies

Developing economies will also increase the global energy demand while favouring low-cost energy options, creating a challenging environment for achieving emissions reductions. While the use of renewable energy will grow substantially, fossil fuels will remain an important energy resource as the population in the developing world increases and the trend towards urbanization continues.

Low-Carbon Technology Development and Adoption

Some regions may consider net-zero emissions as an objective for the 2050s, in part to balance countries that arrive at this point much later in the century. But net-zero emissions in almost any industrial economy will entail significant costs, in part due to the current lack of low-carbon substitutes for steel manufacturing, aviation, shipping, road freight, cement manufacturing, some chemicals processes, smelting and glass manufacturing, etc.. Low-carbon technologies such as carbon capture and storage and advanced biofuels will require a significant ramp-up in development and adoption in order to achieve net-zero emissions.

The Low-Carbon Economy: A Vision for 2040

1. By 2040, between 7 and 17% of global electricity generation will be from solar power.

Renewable energy systems can require up to 12 times more copper compared to traditional energy systems.

2. By 2040, between 9 and 21% of global electricity generation will be from wind power.

Approximately 170 tonnes of steelmaking coal and 10 tonnes of zinc are needed to produce and galvanize the steel in an average wind turbine.

3. By 2040, there will be more than 900 million electric cars worldwide, accounting for over 50% of the global fleet.

Zero-emission electric vehicles require about three times as much copper as an internal combustion vehicle.

4. By 2040, cars that rely solely on gasoline and diesel are 40% more efficient than today.

As the world transitions to a low-carbon economy, oil will continue to play a necessary role in the global energy mix. We believe that the remaining demand should be met by low-carbon, responsible producers.

5. Zero-Emissions Haul Trucks could reduce GHG emissions by 2,750 tonnes of CO_2e per truck per year.

This equates to removing roughly 600 cars off the road per haul truck per year.

Governance: Board and Executive Leadership in Climate Change

At Teck, we understand that investors, lenders and other users of climate-related financial disclosures are interested in understanding the role an organization's board plays in overseeing climate-related issues, as well as management's role in assessing and managing those issues. We work to ensure that climate-related issues receive appropriate Board and management attention—our Board and senior management consider climate-related issues and risks in strategic planning across our business units. Teck's climate-related disclosures are reviewed using similar governance processes and disclosure procedures as those used for financial disclosures.

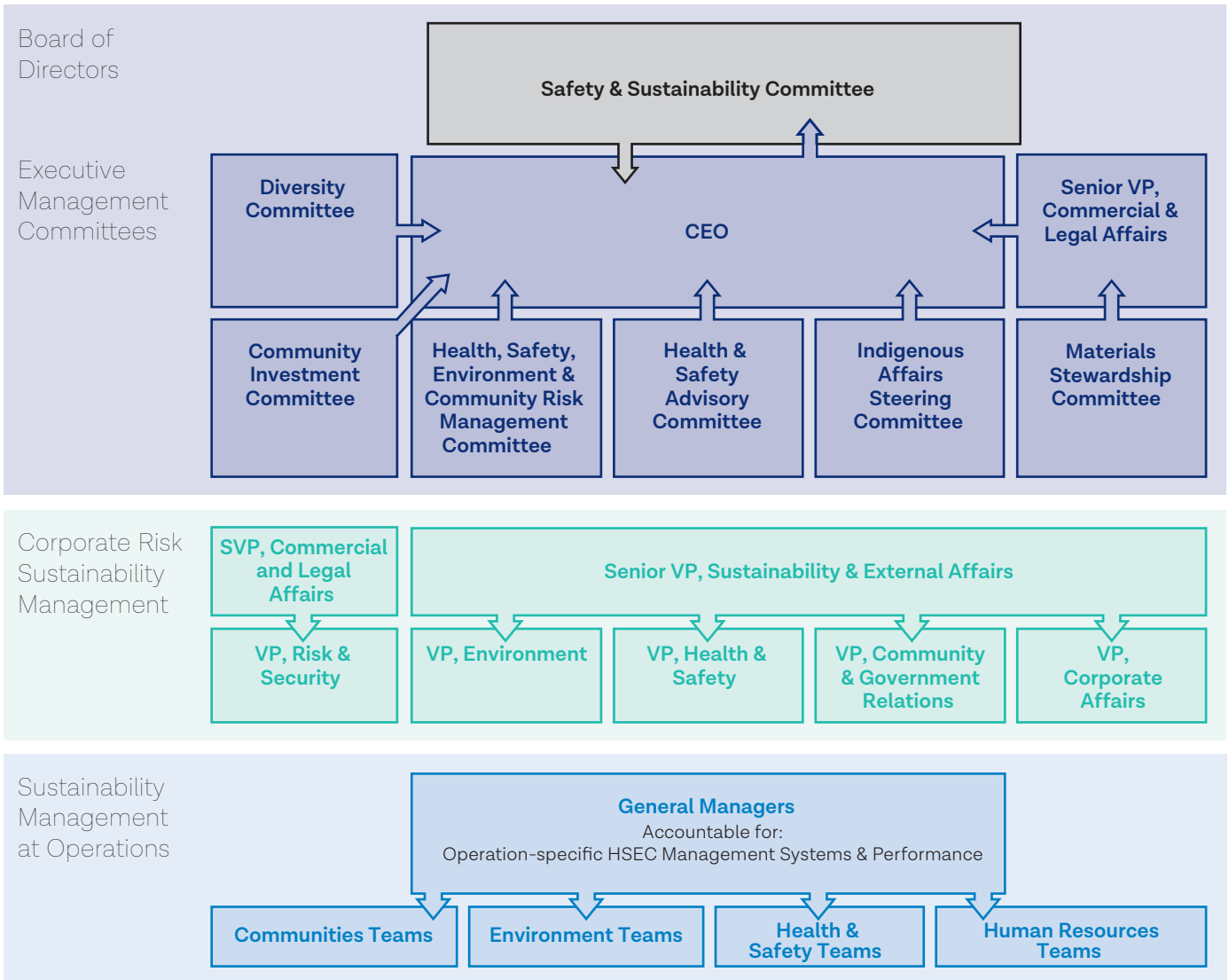
Teck's Board of Directors is responsible for the stewardship of our company and for ensuring that appropriate corporate governance structures and systems are in place. Board members provide ultimate oversight on all strategic matters, including the risks to and opportunities for our business related to climate change. Our key governance practices are described in detail in our Management Proxy Circular. The Board has established a Safety and Sustainability Committee (SSC), chaired by a member of the Board. The SSC meets and reports to the company's Board of Directors quarterly and has responsibility for reviewing and, where appropriate, recommending approval for significant climate-related policies, strategy and other information to the Board of Directors, such as Teck's Climate Action Strategy and Climate Action and Portfolio Resilience publications. The SSC also reviews and monitors environmental performance—including climate-related performance—and makes recommendations to the Board of Directors. The underlying information and control systems used to prepare climate-related information to the Board use both internal and external subject matter expertise. Over the last two years, SSC discussions have included reducing the carbon footprint of our business, understanding the risks and opportunities of physical climate change on the mining sector, understanding the implications of a low-carbon economy for Teck's products, and a review of carbon pricing impacts on our business. More detail on Teck's Board of Directors, including their skills, training and expertise, can be found in Teck's 2019 Proxy Circular.

With respect to Teck's senior management, the Health, Safety, Environment and Community Risk Management Committee (HSEC RMC) consists of corporate officers who establish priorities and direction for environmental programs, including climate change, and monitor climate-related issues and progress against targets. Teck's climate-related policies and strategies are reviewed and approved by this committee and, as appropriate, by Teck's Board. During HSEC RMC meetings, climate change management may be raised as an individual item. Recent meeting discussions have included understanding the risks and opportunities of physical climate change on the mining sector, understanding the implications of a low-carbon economy for Teck's products, reviewing and approving Teck's Climate Action and Portfolio Resilience publication, updates on carbon pricing policies in Teck's operating jurisdictions, the approval of Teck's Climate Action Strategy, and a review of carbon pricing impacts on our business.

Functionally, at the corporate level, the management of climate-related issues is led or supported by the department managed by Teck's Senior Vice President of Sustainability and External Affairs, who reports directly to the CEO. This department is responsible for developing and either facilitating or executing both the assessment and management of climate-related risks and opportunities; individual and department compensation can be tied to these management practices. Accountabilities for these actions are embedded within the job descriptions and performance evaluations of members of the Sustainability and External Affairs department, including the Vice President, Environment; the Vice President, Community and Government Relations; the Head, Government Relations; the Director, Water; and the Manager, Sustainability and Climate Change, all of whom have subject matter expertise on climate-change related issues.

Throughout the remainder of the organization, our objective for sustainability issues like climate change is to work within the social, economic and environmental contexts in a way that ensures positive outcomes for our business and our stakeholders in the short and long term. Our process for integrating risk management throughout the business includes identifying, evaluating and addressing economic, social and environmental risks and opportunities on a regular basis. The risks and impacts associated with our business are multi-faceted and require effective collaboration among departments, business units and external stakeholders.

Globally, governance practices related to climate issues are evolving. Moving forward, Teck will continue to identify and assess opportunities to strengthen our practices in this area.



Greenhills Operations, British Columbia, Canada

Teck's Climate Change Strategy

In 2017, we released our climate action strategy, which summarizes a four-pillar approach to tackling climate change and managing the risks and opportunities that climate change poses to our business. These four pillars are:

1. Positioning Teck for a Low-Carbon Economy
We produce metals, minerals and energy that will be required for the transition to a low-carbon economy. Our diversified mix of products and focus on efficient, low-cost operations will ensure Teck remains competitive throughout the shift to a low-carbon economy.

2. Reducing the Carbon Footprint of our Operations
We have set long-term targets to reduce greenhouse gas (GHG) emissions from our operations and are working to achieve them through innovation, research, improved efficiency and adoption of low-carbon technologies.

3. Support for Appropriate Carbon Pricing Policies
We support broad-based, effective carbon pricing, which we believe is the best method of encouraging coordinated global action on climate change.

4. Adapting to the Physical Impacts
We are adapting to the physical impacts of climate change and increasing the resilience of our operations by incorporating climate scenarios into project design and mine closure planning.

We continue to utilize these four pillars, and believe they align with the risks and opportunities presented later in this report. As the risks and opportunities related to climate change evolve over time, we will adjust our strategy accordingly.

Positioning Teck for a Low-Carbon Economy

As the world transitions to a lower-carbon economy, there may be shifts in demand for certain commodities; demand for those required for low-carbon technologies may increase, while others may decrease. Our diversified mix of products all have a role to play in the low-carbon economy of the future. The minerals, metals and energy we produce—including diluted bitumen, steelmaking coal, copper and zinc—are some of the basic building blocks of low-carbon technology and infrastructure. For example, as we explore further in the Copper section, the trends of growth in renewable energy generation and electric vehicles suggest additional growth in global copper demand.

Our diversified mix of products enables us to respond to changing market dynamics. This increases our ability to weather potential carbon-related costs and shifts in demand while remaining competitive. Teck takes climate change issues into consideration in our strategic planning processes that shape our overall portfolio mix.

Greater detail on our portfolio resilience is presented in the latter portions of this report, including our scenario analyses and discussions of risks and opportunities.

Reducing the Carbon Footprint of Our Operations[8]

We have set targets to reduce GHG emissions and to improve energy efficiency at our existing operations. Since 2011, Teck has implemented projects that have reduced GHG emissions by over 289,000 tonnes, which exceeds our 2020 goal of achieving a total reduction of 275,000 tonnes. Our longer-term target is to reduce our emissions from existing operations by 450,000 tonnes by 2030—equivalent to taking over 95,000 cars off the road. More detail on our progress can be found in our 2018 Sustainability Report.

We set goals in 2010 with respect to our asset base at the time. By their very nature, the mining, metals and energy sectors contains companies that change their portfolios over time. This presents the challenge of ensuring that the goals guiding a company's behaviour remain appropriately stringent as portfolios change. For example, when a mine goes into closure, the result is reduced energy consumption and GHG emissions. If Teck were to count these reductions towards our goals, it could undermine the intent of emissions reduction targets, as the lost production would be made up elsewhere in the world. Similarly, a company's total GHG emissions could be decreased because of the divestment of an asset, which only results in reductions to the company's portfolio of emissions—actual GHG emissions may remain the same if the acquiring company continues to operate the asset.

For these and other reasons, in parallel to establishing targets to drive down our GHG emissions, we believe that a key principle is to reduce the GHG intensity of our production. As we discuss throughout this report, in a low-carbon economy, demand will continue for the products we produce. Our position is that, in light of climate change considerations, those products that are produced with a low-carbon intensity should receive preferential treatment in the market. Our Highland Valley Copper (HVC) mine can help illustrate the GHG benefits that a low-carbon-intensity market preference can yield. Each tonne of copper in concentrate that we produce at HVC is approximately 1,100 kg of CO_2e lower than the global average.[9] This means that, in a year like 2018, where HVC produced 101,000 tonnes of copper in concentrate, 111,100 fewer tonnes of CO_2e were emitted than had that copper in concentrate been produced by a copper producer with average GHG emissions intensity.

Based on analysis of publicly available information, we believe Teck's operations are among the lowest GHG-emissions-intensity mining operations in the world.[10] Carbon intensity is a measure of the GHG emissions generated during production of a given unit of a commodity, e.g., the amount of carbon dioxide (CO_2) generated per tonne of copper or steelmaking coal produced. According to the International Council on Mining and Metals' (ICMM) comparison of emissions intensities stemming from Scope 1 and Scope 2 emissions, our steelmaking coal and copper production rank among the lowest for carbon intensity, compared to the global mining industry. The paraffinic froth treating process used at our new Fort Hills oil sands mine has about half the upstream GHG intensity of older oil sands mining operations.[11] Moving forward, our goal is to continue to improve the carbon intensity of our existing and future operations.

Compared to our competitors, one carbon and cost disadvantage we face is the distance we must ship some of our products—i.e., from operation to port to market. This factors most prominently in our steelmaking coal business, which must transport its product by rail to the coast of British Columbia from the southeast of the province and from the western part of Alberta. When we include the emissions from the rail transportation of our steelmaking coal[12]—a Scope 3 emissions source—we estimate between 250,000 and 450,000 tonnes of CO_2e,

8 Reducing our carbon footprint pertains to implementing projects that reduce our GHG emissions from business-as-usual at our existing and planned operations. It is possible that the total absolute carbon emissions of our assets may increase as we grow our business.

9 Teck analysis based on data from the International Copper Association.

10 While the work of the ICMM offers a reasonable and credible analysis of the GHG performance of the mining and metals sectors, it is challenging at this time to definitively assess the GHG emissions intensities of our competitors on a commodity-by-commodity basis. This is because i) there is limited publicly accessible data (particularly at a commodity and operational level), ii) there are inconsistencies in GHG quantification methodologies between jurisdictions and companies, and iii) there are uncertainties in emissions inventories, some of which are also applicable to Teck. At this time, the estimation of emissions from fugitive methane provides the greatest uncertainty in our estimates. To learn more about the challenges in estimating methane emissions within the industry, we recommend reading *Fugitive Methane Emissions in Coal Mining*, produced by ICMM. Teck is committed to monitoring the performance of our peers and to continually refining and improving our own GHG quantification methodologies over time.

11 *Greenhouse gas intensity of oil sands production.* IHS Markit. 2018.

12 Because of the differences in total tonnage shipped between our metal products and our steelmaking coal, the emissions implications of rail are significant only for steelmaking coal.

or a 15–30% increase in emissions per tonne of product. However, even when we include these emissions in our intensity calculations, Teck is still among the lowest GHG-intensity steelmaking coal miners in the world.

We believe that there is an opportunity to continue to improve the breadth and availability of GHG emissions data that can support analysis and decision-making for investors and government. Towards that end, we advocate for transparent and comprehensive GHG emissions accounting to ensure that customers and consumers have the ability to choose low-carbon products.

Our Climate and Energy Targets and Commitments for Existing Operations

Since 2011, Teck has established climate and energy targets. Below is a snapshot of those goals.

2020 Goals

- *Implement projects that reduce energy consumption by 2,500 terajoules (TJ)*
- *Implement projects that reduce GHG emissions by 275 kilotonnes (kt) of CO_2-equivalent*
- *Assess opportunities and identify potential project partners towards achieving our 2030 alternative-energy goal*
- *Engage with governments to advocate for effective and efficient carbon pricing*

2030 Goals

- *Implement projects that reduce energy consumption by 6,000 TJ*
- *Implement projects that reduce GHG emissions by 450 kt of CO_2-equivalent*
- *Commit to 100 megawatts (MW) of alternative-energy generation*

Alternative and Optimized Energy Generation

Five of our operating mines and our zinc and lead smelting and refining facility are located in British Columbia, where 93% of the grid electricity comes from clean and renewable sources. In other jurisdictions where we operate—such as Alberta and Chile—the electricity grids are more heavily based on fossil fuels. Alberta is reducing the carbon content in its grid electricity by moving to eliminate coal-fired generation and requiring 30% renewables, both by 2030. While alternate energy generation is increasing, it will be necessary to generate energy using optimized fossil fuel processes for the foreseeable future. One example of optimization is cogeneration of heat and power, which is used by our Fort Hills mine.

Teck has a goal to commit to 100 megawatts (MW) of new alternative-energy generation by 2030 and we are investing in research and increasing our sourcing of alternative power generation. For example, we are sourcing 30% of our total electricity needs for our Quebrada Blanca operation in Chile from solar power and are assessing renewable energy opportunities at other mine sites, including closed mines. We are also partners in a community solar facility in Kimberley, B.C., on the site of Teck's former Sullivan Mine.

Moving forward, Teck is exploring opportunities for solar, wind and other low-carbon technologies across our portfolio. We are prioritizing these opportunities based on factors such as i) proximity to areas where we operate or have operated, ii) unique opportunities where we may be able to gain further expertise in renewables, iii) opportunities to further explore specific technologies of interest to Teck, such as the use of zinc or lead batteries for energy storage and iv) the ability of projects to provide other sustainability benefits, such as low-carbon power for local communities.

Building a Smarter Shovel

Most people think of a shovel as a pretty basic tool—you use it to move stuff from one place to another. But what if the shovel was smart? What if it could analyze and know exactly what it was carrying? That's the idea behind a new mining technology Teck is pioneering to improve productivity and sustainability at our operations.

To make a shovel smart, sensors are mounted on the shovel bucket and use x-rays to tell the difference between waste rock and valuable ore, one shovel load at a time. The sensors, combined with analytics, provide real time information to determine whether the load is worth sending to the mill for processing, or for handling as waste rock. Decisions that were once a matter of informed estimates can instead be based on real-time data, leading to improved mill productivity, reduced energy use, and less water consumption.

"We're sorting the wheat from the chaff with more precision than ever before with these smarter shovels," said Bryan Rairdan, Technical Services Manager at Highland Valley Copper Operations. "This technology helps us to use less energy, create fewer emissions and improve productivity. In fact, smart shovels have the potential to create hundreds of millions of dollars in value.

Teck partnered with MineSense for the first full scale trial of the bucket-mounted ShovelSenseTM technology in 2017 at our Highland Valley Copper Operations in British Columbia. The sensors are now in use on one shovel, and additional shovels could be considered for later in 2018.

Innovating for a Low-Carbon Future

Since developing our goals in 2010, we've made progress towards minimizing our emissions. We recognize that to achieve the levels of reductions required in the long term, significant changes to our energy sources and our processes will be required. This type of change will require that we continue to drive efficiency gains while also looking to innovate and maintain a view towards longer-term step changes in low-carbon technologies and mining practices.

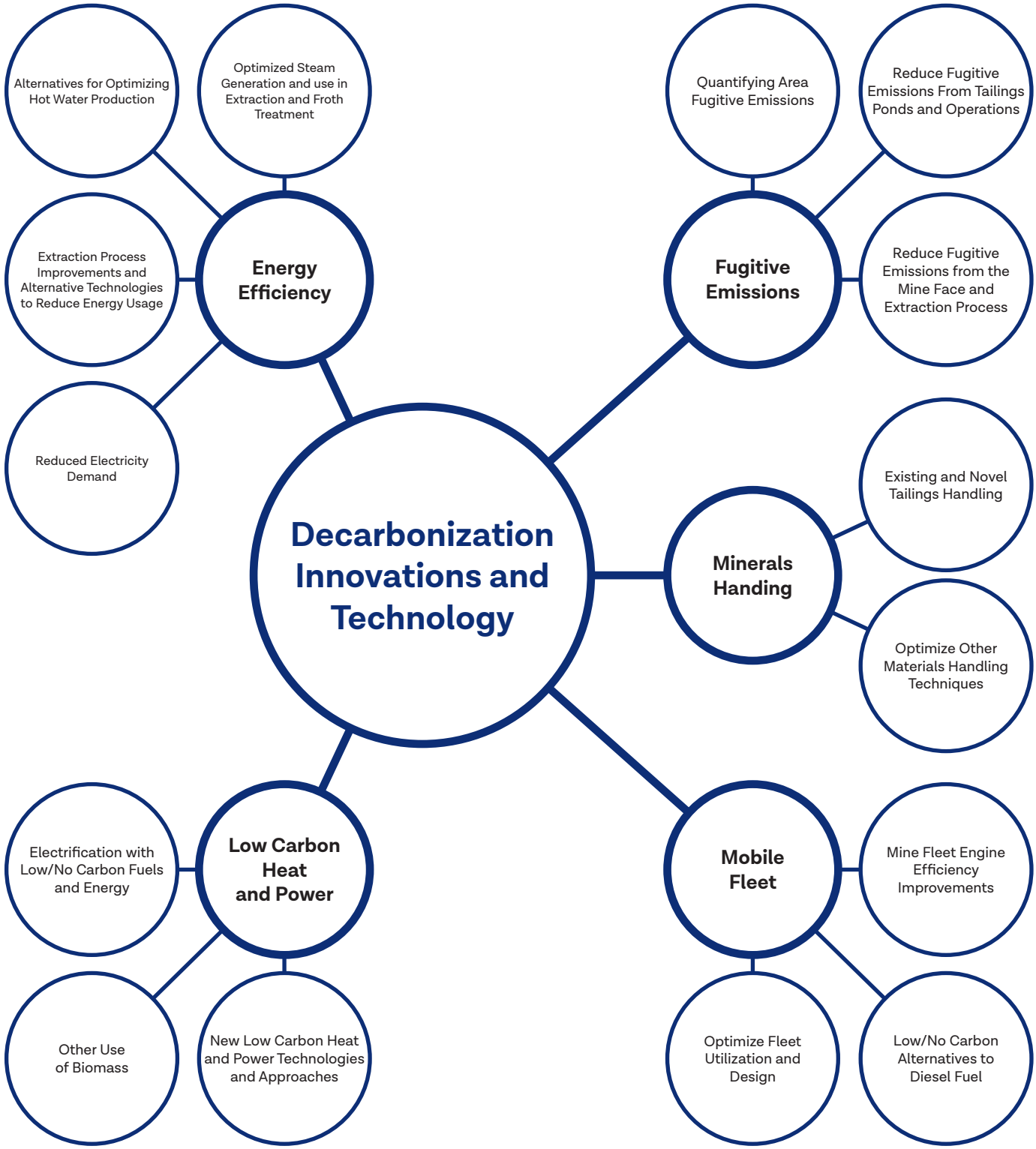
In 2018, we launched a new Innovation and Technology program. Our focus is to identify those ideas that have the greatest potential to improve our business. We then put those ideas to work to strengthen safety, enhance sustainability performance, improve productivity, and help grow our business and create new markets for our products. One of the areas we're highlighting is our focus on reducing our energy requirements and our GHG emissions.

Towards that end, we've started to map out how to further decarbonize our operations. Part of our approach to decarbonization is recognizing that technologies continue to evolve and, in many cases, it may be too early to "pick a winner". For that reason, we're tracking and evaluating multiple technologies within each of our businesses.

We've also learned that we can accelerate innovation by working with others facing similar challenges. We're working with industry groups like Canada's Oil Sands Innovation Alliance (COSIA) and the International Council on Mining and Metals (ICMM). Teck is a founding member of COSIA; to date, COSIA members have spent over $200 million to evaluate and develop GHG reduction technologies. In 2017, ICMM launched an initiative to engage with original equipment manufacturers (OEMs) to work collaboratively towards reducing GHG emissions from large mobile mining equipment (e.g., haul trucks). This engagement—including the world's largest mining and metals companies and our key OEMs—brings together the key suppliers and purchasers of mining equipment to tackle one of our most material sources of GHG emissions.

Working with these partners reflects our commitment to deploying emerging carbon abatement technology at appropriate points in the life cycle of our operations, and also to undertaking research and development of new emission abatement technology. Innovation is part of Teck's history, and we believe it will play an even larger role in our future as we look for newer and better ways to reduce our GHG emissions.

Select COSIA Opportunity Areas for Decarbonization



Source: Adapted from the Canadian Oil Sands Innovation Alliance

Partnering with Communities: Supporting The Transition to Electric Vehicles

As the world transitions to a low-carbon economy, mobility—or the way people move—is expected to be a key point of evolution and opportunities for GHG reductions. Across the numerous 2°C scenarios we've analyzed, while fossil fuels remain a key transportation fuel for the foreseeable future, we see increases in electric vehicles, hybrid vehicles and hydrogen-fuelled vehicles.

When charged with clean electricity, electric vehicles (EVs) have the ability to reduce GHG emissions significantly. While the market for EVs has grown, broader adoption still remains challenging, especially in more rural and northern areas, due to the distance between communities and the limited inter-community public transit options.

In 2018, we were approached by Accelerate Kootenays, Canada's first community-driven collaborative strategy, to build a clean transportation network in the Kootenay region of British Columbia. The project, facilitated by the Community Energy Association, is creating an EV charging station network so that EV travel to and within the region is convenient and reliable. This network is also located in the heart of one of the regions in which we operate.

Accelerate Kootenays will pilot a comprehensive and collaborative approach to closing the EV station gap in rural areas, and to accelerating uptake of EVs.

Recognizing the critical role that EV charging stations play in driving EV adoption, we were proud to support the initiative, providing funding for three fast-charging stations. The stations will help local communities and the province transition towards a low-carbon economy. At the same time, we believe this also supports Teck, as the average electric vehicle consumes three to four times as much copper as a traditional internal combustion engine vehicle, and the associated infrastructure required for charging stations is also expected to add to copper demand.

We are proud to have partnered with Accelerate Kootenays, and we will continue to look for similar opportunities where our investments can contribute to climate action, community investment and support for our commodities.

Support for Appropriate Carbon Pricing Policies

We believe that action must be taken across all areas of society and the economy to combat climate change, and that broad-based, effective carbon pricing can play a vital role in reducing GHG emissions. We support the outcome of the Katowice Climate Change Conference and, in particular, the rules on how governments will measure and report on their emission reduction efforts under the Paris Agreement.

Teck has partnered with several organizations worldwide to work together on the challenge of climate change. For example, Teck is a signatory to the Paris Pledge for Action, which supports reducing emissions and achieving the objectives of the Paris Agreement. Teck also plays a key leadership role and was the first Canadian resource company to join the Carbon Pricing Leadership Coalition, a partnership of national and sub-national governments, businesses and organizations working towards integrating carbon pricing into the global economy.

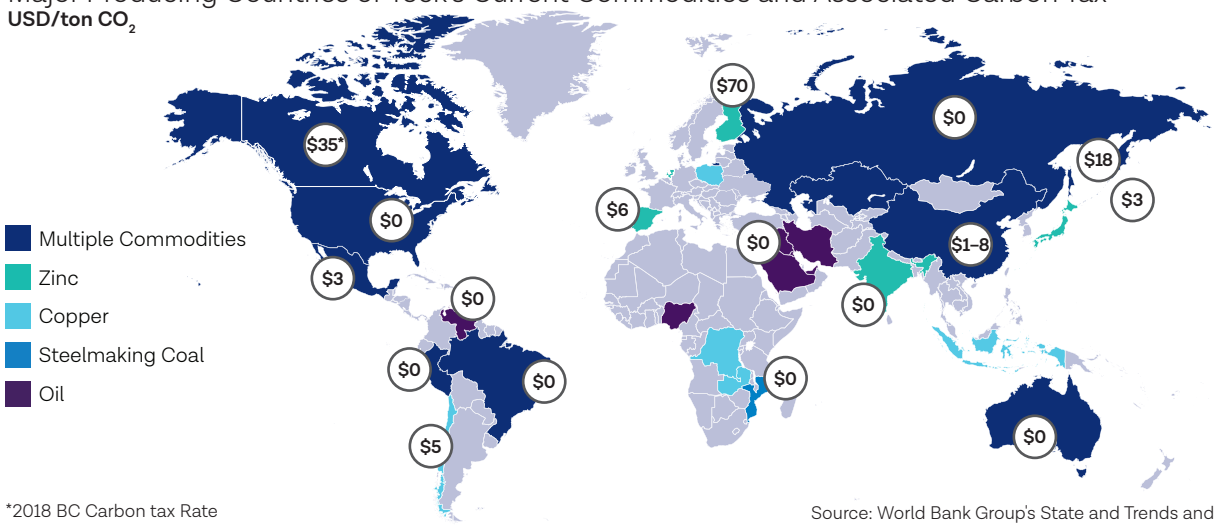
Uniting Thought Leaders to Tackle Climate Change

Climate change impacts every part of the world, every community and every person. The sheer scale of the challenges makes it too big and too complex to tackle alone. That's why, in 2017, Teck began working with a unique group of organizations—industry, environmental groups and academia—to accomplish a shared goal: finding real, effective solutions to climate policy challenges for the extractives industry.

This collaboration, including Teck, Pembina Institute, Clean Energy Canada, academia and members of the resource industry, were first brought together for an informal discussion over dinner hosted by Marcia Smith, Teck's Senior Vice President of Sustainability and External Affairs, and Merran Smith, Executive Director of Clean Energy Canada. They quickly discovered that, despite their diverse backgrounds, they all had a common desire to ensure that the carbon pricing system in B.C. delivered on its intended objective: to reduce industrial emissions without having unintended negative economic impacts.

Major Producing Countries of Teck's Current Commodities and Associated Carbon Tax

USD/ton CO_2



*2018 BC Carbon tax Rate

Source: World Bank Group's State and Trends and Carbon Pricing 2017

In particular, the group focused on the value of carbon taxes as an effective way to reduce carbon emissions when coupled with measures to prevent carbon leakage for emissions-intensive trade-exposed (EITE) industries. Carbon leakage occurs when industry activities and associated emissions shift from one jurisdiction to another because of a difference in the stringency of climate policies, resulting in no net reduction to global greenhouse gas (GHG) emissions, or even a potential increase.

The group collaboratively developed and endorsed a policy based on GHG emissions output that featured a pricing incentive to reduce GHG emissions from industrial activities while also preventing carbon leakage. They took this proposal to the B.C. and Canadian governments, who have both expressed their support and commitment towards pursuing output-based policy mechanisms under their respective carbon pricing policies

"Canada and B.C. have the opportunity to act as leaders in the world's transition to a low-carbon economy while also continuing to strengthen our economy and support healthy communities," said Marcia Smith. "We believe that the broad-based pricing of carbon is one of the most effective ways to incentivize real reductions in GHG emissions by ensuring that all emitters contribute to the solution. An appropriately developed output-based carbon pricing solution provides an effective incentive for big emitters to reduce emissions while also ensuring they stay competitive with jurisdictions that have less progressive climate policies."

Following this success, six members of the group were appointed to British Columbia's Climate Solutions and Clean Growth Advisory Council, with Marcia Smith of Teck and Merran Smith of Clean Energy Canada appointed as council chairs.

Designing Carbon Prices to Ensure Competitiveness and Prevent Carbon Leakage

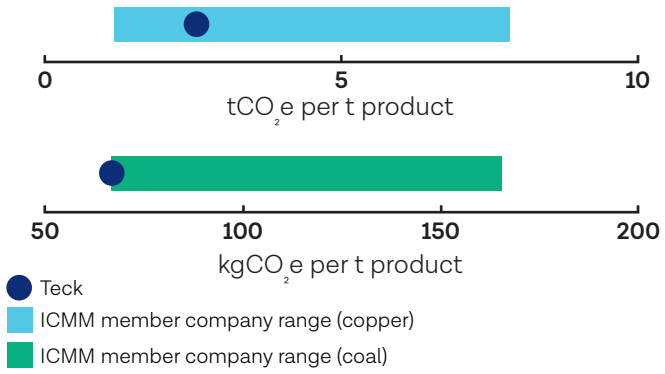
Teck has significant experience when it comes to managing the impacts of carbon pricing; we have been managing the impacts of carbon pricing policies since 2008. Currently, all of our steelmaking coal operations, half of our copper business, and all of our metals refining and diluted bitumen businesses are covered by carbon pricing.

Getting carbon pricing right means ensuring that the competitiveness of facilities in emissions-intensive trade-exposed (EITE) sectors is not impacted unfairly when competing against jurisdictions with no or lower carbon prices. These are sectors like mining, forestry, oil and gas, and cement that sell commodities at a fixed global price, no matter where they are produced. If a mine in Canada pays a carbon tax while a mine in Australia does not, the Canadian mine and its workers face a competitive disadvantage. This is not simply an economic problem. It can create environmental problems too. If a lower-carbon mine in one jurisdiction shuts down as a consequence of its higher carbon costs while a higher-carbon mine elsewhere continues to operate to meet global demand, the result may be a net increase in global GHG emissions. This unintended consequence of poorly designed climate policies—carbon leakage—means production and economic benefits, like jobs and tax revenue for governments, may shift from jurisdictions that are taking climate action to those that are not.

To provide a specific and tangible example, Teck's six steelmaking coal operations (one of which is in Alberta) produced steelmaking coal with a cumulative GHG intensity of 60–68 kg of CO2e per tonne of product from 2014 to 2018. Based on a 2013 report from the

International Council on Mining and Metals, this ranks Teck as having one of the lowest—if not the lowest—carbon intensities in the world for the production of steelmaking coal. As production shifts to other jurisdictions that have less stringent carbon policies, the emissions shift to those jurisdictions, and emissions per unit of production increase, resulting in increased emissions globally.

GHG Emissions Intensity Ranges Among ICMM Member Companies[13]



The good news is that there are sound public policy solutions to avoid this challenge—solutions that encourage emissions reductions, ensure competitiveness and guard against carbon leakage. A solution we support is an output-based allocation (OBA) system, whereby the amount of carbon tax paid is influenced by the risks of carbon leakage to a specific sector and the carbon performance of a facility relative to its peers. In other words, a mine, mill or factory gets a certain amount of free emissions allowances per unit of production, but it has to pay for any emissions over that amount. This helps to level the playing field with competitors in jurisdictions with no or lower carbon prices, and can act as an interim measure that can enable a coordinated global response to GHG reductions while reducing the potential for unintended consequences (i.e., carbon leakage). Just as important, it creates a race to the top among local facilities. The highest-emitting operation in a sector pays the most carbon fees, while lower carbon operations are rewarded with lower carbon costs. This creates an incentive—in the form of a competitive advantage—to attain lower emissions.

As more jurisdictions adopt carbon pricing as part of a coordinated global response to climate change, the need for such tools will diminish. We continue to advocate for carbon pricing policies that maintain the global competitiveness of trade-exposed industries to prevent carbon leakage. Teck has joined other industry groups and leading civil society organizations in calling for the implementation of output-based allocations in Canada. Both the Government of Alberta and Government of Canada are advancing this policy solution. The Government of British Columbia, in 2017, also made a commitment to addressing the competitiveness of EITE sectors in light of the absence of comparable carbon pricing in competing jurisdictions. As the world moves increasingly towards broader carbon pricing, it will help to reduce emissions and contribute to a more level playing field for companies that already pay significant carbon costs, including Teck.

Internationally Transferable Mitigation Outcomes

One of the key policy levers contained within the Paris Agreement is contained in Article 6 that discusses internationally transferable mitigation outcomes or ITMOs, also commonly referred to as carbon credits or carbon offsets. Although we do not currently use ITMOs or carbon offsets as a means of achieving our corporate GHG reduction goals, Teck supports their use to reduce greenhouse gas emissions. Towards that end, we support Article 6 of the Paris Agreement and the use of ITMOs.

ITMOs provide an important tool to achieve emissions reductions at a low cost. The use of offsets not only provides greater flexibility and liquidity within carbon markets, but also promotes the economic benefit of developing a low-carbon industry and economy. Teck believes it is also critical that a rigorous assurance system be adopted to ensure that carbon offsets are credible and of the highest quality and integrity.

Building Carbon Pricing into Business Decisions

In 2018, we began a review of our current practices and we are currently in the process of evaluating potential updates to our guidance and requirements. While there is uncertainty in forecasting potential future financial implications of carbon costs, we assume that carbon prices will be increasingly adopted around the globe and will increase over time. Where a clear and certain carbon price is present, we incorporate that price and any known or planned changes to the carbon price. Where uncertainty exists, we may conduct sensitivity analyses to better understand what our exposures and risks are under different carbon pricing and regulatory scenarios, such as those described later in this document for the three climate scenarios considered.

For example, using prices from $35 per tonne (the 2018 carbon tax rate in British Columbia) to $50 per tonne (the proposed Pan-Canadian floor price) suggests our carbon costs in 2023 could range from approximately $45 million to $80 million annually for our B.C. operations. Some of the uncertainty in our current estimates pertains to a lack of clarity at this time as to how the province will implement its Clean Growth Program for Industry, which will include an output-based allocations (OBA) approach to addressing emissions-intensive trade-exposed (EITE) industry competitiveness risks for the carbon tax above the threshold of $30 per tonne of CO_2e. In Alberta, the Climate Change and Emissions Management Act uses the Carbon Competitiveness Incentive Regulation (CCIR) to maintain the competitiveness of trade-exposed sectors using OBAs. Both steelmaking coal and bitumen have been identified as EITE sectors under this regulation. The use of OBAs tempers the effect of the planned $30 per tonne cost of carbon that may increase to $50 per tonne by 2020.[13] Over the next decade, initial estimates suggested that our carbon costs in Alberta could range annually from $0.08 per barrel (bbl)[14] to $0.39 per bbl.

These forecasts are based on our current understanding of regulations being developed by B.C. and Alberta governments.[15] We will continue to update our forecasts as these policies, and their implications for carbon prices, become clearer and evolve as part of the requisite global response to climate change.

We are also monitoring carbon pricing actions in two other jurisdictions in which we have operations: Chile and the United States. To date, neither jurisdiction has announced carbon pricing policies that place a carbon cost directly onto our operations. While the Chilean government has established renewable energy requirements for power generation and is implementing a carbon tax on power generation, we do not anticipate material cost impacts from these policies in the short term.

Adapting to the Physical Impacts

In addition to the action we're taking to reduce the effects of climate change by lowering emissions and advocating for progressive climate action strategies, we are also focused on managing the potential physical risks and opportunities that may result from the ongoing changes to our climate. Acute and chronic physical impacts, resulting directly or indirectly from climate change, can have both adverse and advantageous effects on an organization's operation, supply chain and customers. These risks and opportunities can stem from changes in temperatures, precipitation, levels of fresh water or the occurrence of extreme events such as droughts, floods or storms, and may have consequences that include direct effects such as damage to assets from severe weather events, interruptions to the supply chain, adjusted customer demand (e.g., a customer may curtail production as a result of climate impacts on its operations) or the opening of new shipping routes in the Arctic.

Over the past decade, we have been monitoring the development of climate change risk management practices, during which we have seen continued improvement in the quality and accessibility of climate change data and modelling, the understanding of the interaction between climate change and our assets, and best management practices to increase the resilience of the mining sector.

13 The Government of Alberta has retracted its commitment to $50 per tonne pending resolution of the Trans Mountain pipeline project delay.

14 Depending on the facility performance, Fort Hills could generate saleable credits if the GHG intensity of the operation is less than the prescribed output allocation benchmark.

15 On April 16, 2019, the United Conservative Party (UCP) won the Alberta general election to form a majority government. Preliminary details on the UCP approach to industrial carbon pricing demonstrate a departure from the current carbon pricing regime. While we are monitoring these developments, it is too early to determine with reasonable certainty the cost implications of a new policy.

While we are taking action today, we are also committed to continuous improvement. In 2017, the ICMM held a climate resilience and adaptation workshop for its membership. The workshop and its outcomes are among the leading global practices on climate change risk management by the mining industry, and were used to inform similar work at Teck in 2018.

Digging Deeper into Physical Climate Risks

In 2018, we engaged Acclimatise, a global leading provider of climate change risk and adaptation services, to support us in conducting a workshop to assess climate change risks and opportunities across our business and to begin to identify leading processes and tools that we could adopt. The workshop pulled together 30 people from across the company with expertise in areas such as mine planning, tailings management, water management, risk management, provisioning and bonding, transportation and logistics, health and safety, environment and communities.

In the workshop, participants worked through a step-wise process for how to integrate climate data and knowledge to improve the resilience of our mining and metal assets and their value chains, and how to build capacity on climate risk assessment and adaptation planning. There were a number of key conclusions from this workshop, including the importance of supporting such assessments with robust climate change data. From the preliminary assessment completed in the workshop, initial findings suggest that our Red Dog Operation has the greatest projected change in climate, given its northern latitude. The workshop is the first step in a longer process to comprehensively identifying climate change risks to and opportunities for our business. Lessons from the workshop will serve to support Teck in not only managing the risks associated with climate change, but also in positioning ourselves to take advantage of the opportunities.

Climate Change and Water Supply and Management

In the mining industry, water supply and management is a critically important issue because processing mined materials can require large volumes of water. Mining can also affect water quality and availability, which in turn can affect other water users. For these reasons, the management of water has been a long-standing focus

within the mining industry, including the use of climate data for design and operating considerations across the mine life cycle.

Given our experience with water management and the inclusion of water as one of Teck's sustainability focus areas, we are well positioned to manage water risks related to climate change.

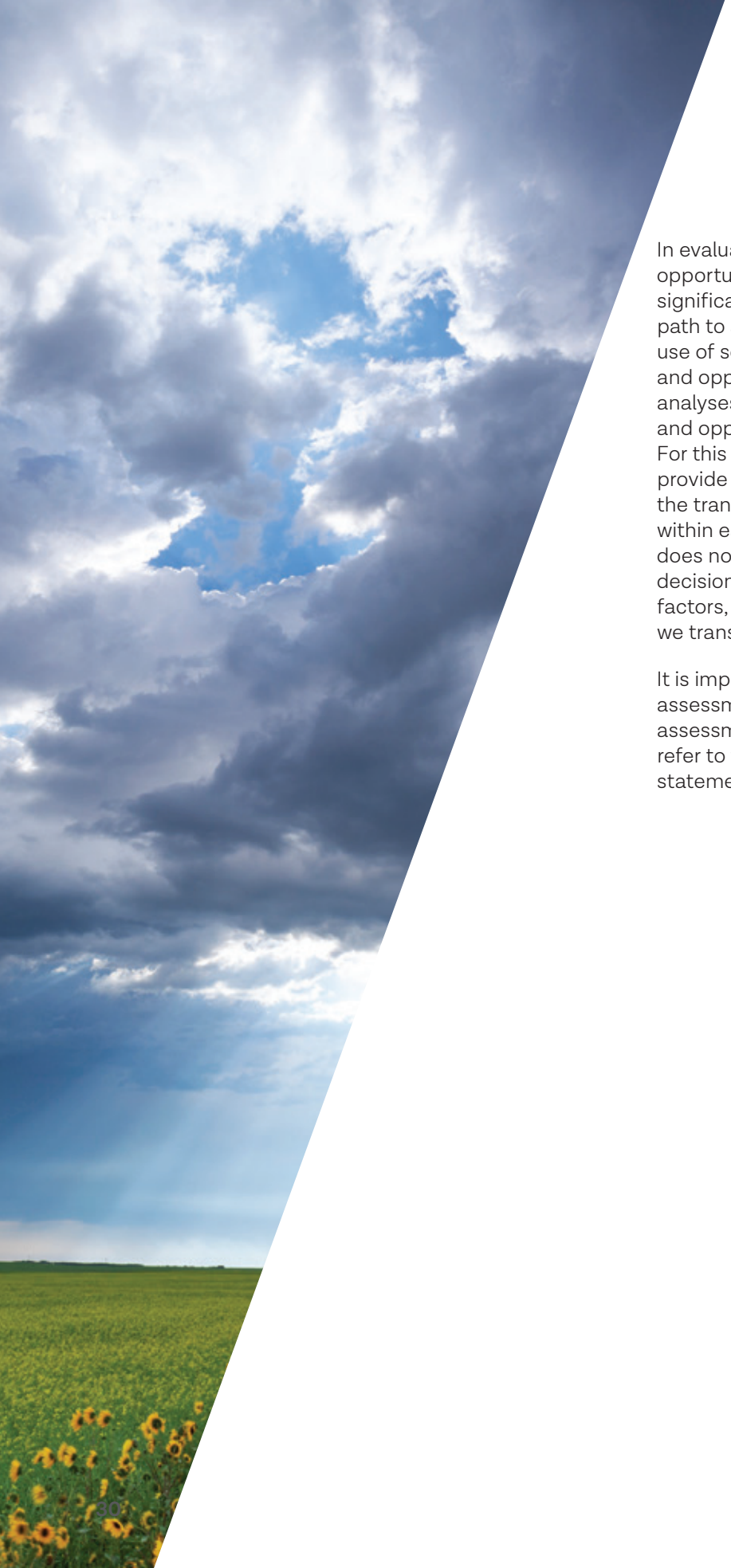
Climate-Related Risks and Opportunities

For the remainder of this report, we turn our attention to the risks and opportunities related to climate change as they relate to three scenarios. The Task Force on Climate-related Financial Disclosures (TCFD) provides a helpful framework for identifying and assessing risks and opportunities. For this year's report, we used the TCFD framework when updating our assessment, and adopted the following risk and opportunity definitions.

Source: Adapted from the Task Force on Climate-related Financial Disclosures

Transition Risks	Summary of TCFD Guidance[16]
Policy and Legal Risks	Policy actions that attempt to constrain actions that contribute to the adverse effects of climate change and that seek to promote adaptation to climate change. Climate-related litigation claims brought before the courts by property owners, municipalities, states, insurers, shareholders and public interest organizations.
Technology Risk	Technological improvements or innovations that support the transition to a lower-carbon, energy-efficient economic system can have a significant impact on organizations.
Market Risk	Shifts in supply and demand for certain commodities, products and services as climate-related risks and opportunities are increasingly taken into account.
Reputation Risk	Reputational risks are tied to changing customer or community perceptions of an organization's contribution to or detraction from the transition to a lower-carbon economy.
Physical Risks	**Summary of TCFD Guidance**
Acute Risk	Acute physical risks refer to those that are event-driven, including increased severity of extreme weather events, such as cyclones, hurricanes, forest fires or floods.
Chronic Risk	Chronic physical risks refer to longer-term shifts in climate patterns (e.g., sustained higher temperatures) that may cause impacts such as level rise or chronic heat waves.
Opportunities	**Summary of TCFD Guidance**
Resource Efficiency	Reducing operating costs by improving efficiency across production and distribution processes, buildings, machinery/appliances and transport/mobility, resulting in direct cost savings to organizations' operations and contributing to the global efforts to curb emissions.
Energy Source	Transitioning a major percentage of energy generation to low emission sources to meet climate goals. Trends toward decentralized clean energy sources, declining costs, improved storage capabilities and subsequent global adoption of new technologies are significant.
Products and Services	Organizations that innovate and develop new low-emission products and services may improve their competitive position and capitalize on shifting consumer and producer preferences.
Markets	Organizations that proactively seek opportunities in new markets or types of assets may be able to diversify their activities and better position themselves for the transition to a lower-carbon economy.
Resilience	The concept of climate resilience involves organizations developing adaptive capacity to respond to climate change to better manage the associated risks and seize opportunities, including the ability to respond to transition risks and physical risks.

16 Recommendations of the Task Force on Climate-related Financial Disclosures—June 2017



In evaluating Teck's climate-related risks and opportunities, it is important to reiterate that there are significant challenges in accurately predicting how the path to a low-carbon future will actually unfold. The use of scenarios can help highlight the breadth of risks and opportunities that climate change will pose. In our analyses, we recognized that the assessment of risks and opportunities differed greatly by climate scenario. For this reason, we have adjusted our report this year to provide the summary of our qualitative assessment of the transition and the physical risks and opportunities within each climate scenario below. Our assessment does not consider other future capital allocation decisions that may be influenced by, among other factors, our assessment of investment attractiveness as we transition to a low-carbon economy.

It is important for readers to note that our risk assessment work is ongoing, and that the details and assessments are subject to change over time. Please refer to the cautionary statement on forward-looking statements found at the conclusion of this report.

Climate-Related Scenarios

Building upon the analysis completed in our initial Climate Action and Portfolio Resilience Report, released in 2018, in this section we present updated scenarios and the accompanying analyses. Stemming from input we received from stakeholders regarding our first report, we introduce a third scenario: a business-as-usual scenario so that readers have a baseline against which they can contrast the other two scenarios. While not forecasts, these scenarios illustrate three conceivable futures looking forward to 2040.

As with all scenarios, the projections of each scenario should be treated with caution. We expect that actual outcomes will differ substantially from those implied by the scenarios. For this reason, scenarios such as those produced by the International Energy Agency (IEA) are considered, along with a broader suite of inputs, for business planning purposes.

Using the IEA's widely available data sets in accordance with the TCFD recommendations is intended to help enable the comparability of climate-related risk assessments across organizations. The IEA World Energy Outlook data benefits from being publicly available, peer reviewed and generally used/referenced, and it is supported by publicly available data sets providing data at global, regional and national levels. Our use of the IEA scenarios for purposes of this report should not be taken as an indication that our internal forecasts for business planning purposes are consistent with the price or demand outlook for various commodities reflected in the IEA scenarios.

There are limitations on the usefulness of the IEA data. In some cases, our internal proprietary analyses suggest that demand for our commodities may differ from those discussed in the IEA scenarios. For example, because the IEA aggregates coking coal as a whole (as opposed to subtypes such as hard coking coal, semi-hard coking coal and semi-soft coking coal), its analysis does not reflect the potential higher demand for the hard coking coal that we produce in certain scenarios. For all three scenarios, while the IEA scenarios acted as a starting point for our analysis, we have supplemented the IEA's quantitative analysis with our own qualitative assessments, particularly for copper and zinc, as these commodities are not analyzed in the IEA models.

According to the Task Force on Climate-related Financial Disclosures (TCFD):

"A scenario describes a path of development leading to a particular outcome. Scenarios are not intended to represent a full description of the future, but rather to highlight central elements of a possible future and to draw attention to the key factors that will drive future developments. It is important to remember that scenarios are hypothetical constructs; they are not forecasts or predictions nor are they sensitivity analyses."

More detail regarding scenarios and their difference from techniques such as sensitivity analysis, forecast or value at risk analyses can be found in the Technical Supplement provided by the TCFD.

The first scenario, called 3.5°C: A Story of Inaction, uses the Current Policies Scenario outlined by the IEA in its World Energy Outlook 2018 as its primary quantitative foundation. This scenario describes a world that shows little movement away from today's global energy and GHG emissions profile, resulting in the most extreme case of global warming, with the average increase in global temperatures rising to an estimated 3.5°C above pre-industrial levels by 2100.

The second scenario, called 2.7°C: A Story of Transition, uses the IEA's New Policies Scenario as its primary quantitative foundation. This scenario considers current and pledged policy directions as of mid-2017, including the Nationally Determined Contributions made under the Paris Agreement. The scenario foresees a world that has started to reduce emissions, with a global temperature rise estimated to reach 2.7°C above pre-industrial levels by 2100.

The third scenario, called Below 2°C: A Story of Transformation, uses the IEA's most recent Sustainable Development Scenario as its quantitative backbone. As a 2°C scenario, it sets out one possible pathway to transform global energy systems and lower carbon emissions. It is important to acknowledge that the IEA itself suggests that this scenario is ambitious. Moreover, the path to achieving a 2°C scenario is uncertain with respect to factors that will shape energy demand, energy mix and pricing. That said, the IEA Sustainable Development

Scenario offers valuable perspective and directional guidance in considering climate-related risks and opportunities. It is also acknowledged that, while the Paris Agreement seeks to limit global temperature rise to 2°C above pre-industrial levels, it also agrees to pursue efforts to limit the temperature increase even further to 1.5°C.

Last, we flag that the reliability of any scenario analysis or forecast decreases as the forecast period increases. While the IEA's World Energy Outlook 2018 provides scenario data out to 2040, in many cases these are timelines that we consider to be beyond those which can be reasonably relied on for business planning purposes. Nonetheless, we recognize the merits in considering these long-term scenarios, given the pace of change expected and the long-term commitment required to address climate change.

Underlying Assumptions and Major Drivers of Change in Scenarios

While all three scenarios present different visions of the future, five broad assumptions underpin them all, influencing, to varying degrees, changes in global resource and energy demand and in emissions between now and 2040.

1. The global population grows by 1.65 billion to reach 9.17 billion in 2040.

2. A continued shift towards urbanization increases the global percentage of people living in urbanized areas from 55% to 64%.

3. The world economy grows at a compound average annual rate of 3.4%, driven by population growth, urbanization and improved living standards.

4. Technology and policy unlock energy and resource-efficiency gains across all sectors.

5. Low-cost and low-carbon increasingly go hand in hand, spurring growth in renewables and shifting the overall global energy mix.

Source: GDP and population assumptions from IEA World Energy Outlook 2018.

3.5°C: A Story of Inaction

The IEA Current Policies scenario describes a world where no additional action is taken beyond those laws and regulations implemented by mid-2018. This scenario excludes the ambitions and targets that have been declared by governments around the world. Continued growth among existing sources of fossil fuel-based energy outcompetes renewables, and marginal improvements in the fuel efficiency of internal combustion engine (ICE) vehicles see oil demand climb by 25% by 2040.

Scenario Highlights:

- Under this IEA scenario, oil demand climbs from 94.8 million barrels a day (mb/d) in 2017 to 120.5 mb/d in 2040.
- Under this IEA scenario, the steelmaking coal trade[17] is expected to increase from 302 million tonnes of coal equivalent (Mtce) in 2017 to 378 Mtce in 2040[18].
- Carbon pricing is slowly adopted by more jurisdictions around the world, but pricing levels remain modest, with average carbon prices ranging from $0 to $40 a tonne in 2040.
- Increased demand for renewables, consumer electronics and urbanization drives strong demand for copper.
- Demand for zinc grows modestly as the world uses more galvanized products to improve the longevity of infrastructure. Zinc is also used in a wider array of commercial-scale applications, including in agriculture.
- The average global temperature increases by 3.5°C above pre-industrial levels by the end of the century. All climate-related parameters see the most extreme deviations from today's climate, relative to the other scenarios.

Source: IEA World Energy Outlook 2018 Current Policies Scenario for projections for oil, steelmaking coal, carbon pricing and electric vehicles.

17 The steelmaking coal trade referenced here corresponds with the IEA's category of coking coal trade.

18 Readers should note that the category the IEA defines as coal trade includes both seaborne and landborne trade markets. That seaborne trade is the best indicator for market for Teck's steelmaking coal; however, since IEA does not publish data to that level of specificity, we reference the coal trade data as a proxy.

3.5°C Scenario Risks and Opportunities

	Transition	Physical	Commentary
Energy			Demand for oil products remains robust, increasing out to and beyond 2040, while carbon-related costs remain low. The climate continues to change significantly, requiring active management and potential investment to mitigate potential risks.
Steelmaking Coal			Demand for steelmaking coal remains robust, while carbon-related costs remain low. The climate continues to change significantly, requiring active management and potential investment to mitigate potential risks.
Copper			Demand for copper remains attractive and carbon-related costs remain low. The climate continues to change significantly, requiring active management and potential investment to mitigate potential risks.
Zinc			Demand for zinc remains attractive and carbon-related costs remain low. The climate continues to change significantly, requiring active management and potential investment to mitigate potential risks.

Legend:

- climate-related opportunities outweigh climate-related risks
- climate-related risks, while manageable, are likely to increase over time
- climate-related risks are likely to impair the product market

Implications for Teck:

- Existing long-life assets in energy, steelmaking coal, zinc and copper remain attractive beyond 2040. No existing developed assets are at risk of being stranded.
- A continued focus on cost- and carbon-competitiveness across all business units delivers attractive financial returns.
- Continuing climate change may cause an increase in the frequency of severe weather conditions and associated mitigation costs. Additional action—including capital expenditures—may be required to adapt our business to ensure that we are resilient.

2.7°C: A Story of Transition

The IEA 2.7°C scenario describes a world in transition as the global community strives, but falls short, in meeting the goals of the Paris Agreement. Rising global population, increased urbanization in developing nations and improved living standards drive up energy demand by 30% between now and 2040. Even with significant advancements in energy efficiency and the accelerated deployment of low-carbon solutions, carbon emissions associated with this energy use are 10% higher in 2040 than in 2017.

Scenario Highlights:

- Under this IEA scenario, oil demand climbs modestly from 94.8 million barrels a day (mb/d) in 2017 to 106.3 mb/d in 2040.
- Under this IEA scenario, steelmaking coal trade[19] is expected to increase from 302 Mtce in 2017 to 346 Mtce in 2040[20].
- Electric vehicles see steady growth, with 304 million on the road by 2040, compared to just 3 million today.
- Carbon pricing is slowly adopted by more jurisdictions around the world, but pricing levels remain modest, with average carbon prices ranging from $20 to $45 a tonne in 2040.
- Increased demand for renewables, consumer electronics and urbanization drives strong demand for copper.

19 The steelmaking coal trade referenced here corresponds with the IEA's category of coking coal trade.

20 Readers should note that the category the IEA defines as coal trade includes both seaborne and landborne trade markets. That seaborne trade is the best indicator for market for Teck's steelmaking coal; however, since IEA does not publish data to that level of specificity, we reference the coal trade data as a proxy.

- Demand for zinc grows modestly as the world uses more galvanized products to improve the longevity of infrastructure. Zinc is also used in a wider array of commercial-scale applications, including in agriculture.

- The average global temperature increases by 2.7°C above pre-industrial levels by the end of the century. Climate-related parameters increase in severity significantly, relative to today's climate.

Source: IEA World Energy Outlook 2018 New Policies Scenario for projections for oil, steelmaking coal, carbon pricing and electric vehicles.

2.7°C Scenario Risks and Opportunities

	Transition	Physical	Commentary
Energy			While growth is constrained compared to the 3.5°C scenario, oil demand continues to grow out to 2040. Carbon pricing policies continue to be implemented, with growing stringency, and include appropriate mechanisms to prevent carbon leakage. The climate continues to change beyond what the world is committed to, but has the potential to be managed within our current management practices.
Steelmaking Coal			Demand for steelmaking coal remains strong, increasing to 2040. Carbon pricing policies continue to be implemented, with growing stringency, and include appropriate mechanisms to prevent carbon leakage. The climate continues to change beyond what the world is committed to, but has the potential to be managed within our current management practices.
Copper			Demand for copper increases in response to growth in renewable energy technologies and the adoption of electric vehicles. Carbon pricing policies continue to be implemented, with growing stringency, and include appropriate mechanisms to prevent carbon leakage. The climate continues to change beyond what the world is committed to, but has the potential to be managed within our current management practices.
Zinc			Demand for zinc remains attractive. Carbon pricing policies continue to be implemented, with growing stringency, and include appropriate mechanisms to prevent carbon leakage. The climate continues to change beyond what the world is committed to, but has the potential to be managed within our current management practices. Given its northern latitude, Red Dog may experience greater impacts relative to our other operations.

Legend:

- climate-related opportunities outweigh climate-related risks
- climate-related risks, while manageable, are likely to increase over time
- climate-related risks are likely to impair the product market

Implications for Teck:

- Existing long-life assets in energy, steelmaking coal, zinc and copper remain attractive out to at least 2040. No existing developed assets are at risk of being stranded.
- The transition to a low-carbon economy is anticipated to support additional growth opportunities for our copper business.
- Strong market fundamentals for specific metals may present diversification opportunities beyond the company's existing four business units.
- A continued focus on cost- and carbon-competitiveness across all business units continues to be the key to delivering attractive financial returns and minimizing risk.
- Continuing climate change may cause an increase in the frequency of severe weather conditions and associated mitigation costs. Additional action—including capital expenditures—may be required to adapt our business to ensure that we are resilient to the increasing severity of climate change.

Below 2°C Scenario: A Story of Transformation

The IEA 2°C scenario describes a world transformed and on track to limit global warming to 2°C by the end of the century. Policy, technology and capital investment align to rapidly and effectively advance low-carbon solutions, reshaping the global economy. A shifting energy mix, which favours renewables combined with breakthrough energy-efficiency efforts, creates a world where economic growth is decoupled from energy demand. This allows carbon emissions to peak in 2020 before declining by more than 40% by 2040, even with a 2% increase in primary energy demand over the period.

While the 2.7°C scenario sees growth in renewables, electric vehicles and improved resource efficiency, the 2°C scenario is a story of the accelerated adoption of these trends. From our homes, offices and factories to how we travel and move goods, the 2°C scenario sees the global economy recast to drive resource efficiency and eliminate waste.

Scenario Highlights:

- Under this IEA scenario, oil demand peaks before 2020. By 2040, oil demand is nearly 25 mb/d lower than today at 69.9 mb/d.
- Under this IEA scenario, steelmaking coal trade[21] decreases from 302 Mtce in 2017 to 250 Mtce in 2040[22].
- Mobility is transformed, with autonomous vehicles, ride-sharing and 933 million electric cars on the road by 2040.
- Carbon pricing rapidly becomes mainstream globally, with average carbon prices rising from $63 a tonne in 2025 to a high of $140 in 2040 in advanced economies, and rising from $43 a tonne in 2025 to $125 in 2040 in selected developing economies.
- Even with greater recycling and material substitution, copper demand accelerates in tandem with the growing market share of electric vehicles, renewables and electronics.
- Demand for zinc remains attractive overall, while low-carbon applications, such as the galvanizing of steel in alternative-energy infrastructure, present opportunities.

- The average global temperature increases by 2°C above pre-industrial levels by the end of the century. Climate-related parameters increase in severity relative to today's climate, though at a much slower pace and severity than in the other scenarios.

Source: IEA World Energy Outlook 2018 Sustainable Development Scenario for projections for oil, steelmaking coal, carbon pricing and electric vehicles.

21 The steelmaking coal trade referenced here corresponds with the IEA's category of coking coal trade.

22 Readers should note the category the IEA defines as coal trade includes both seaborne and landborne trade markets. That seaborne trade is the best indicator for market for Teck's steelmaking coal; however, since IEA does not publish data to that level of specificity, we reference the coal trade data as a proxy.

2°C Scenario Risks and Opportunities

	Transition	Physical	Commentary
Energy			Oil demand is constrained, with peak oil demand being reached prior to 2020. Carbon pricing policies are implemented globally, with growing stringency, helping to balance competitiveness and reward low-carbon producers supplying lower global oil demand. Climate change is limited to 2°C, reducing its impacts and the associated risks.
Steelmaking Coal			While total coking coal trade declines, demand for seaborne hard coking coal remains strong.[23] Carbon pricing policies are implemented globally, with growing stringency, helping to balance competitiveness and reward low-carbon producers. Climate change is limited to 2°C, reducing its impacts and the associated risks.
Copper			Demand for copper increases in response to growth in renewable energy technologies and the adoption of electric vehicles. Carbon pricing policies are implemented globally, with growing stringency, helping to balance competitiveness and reward low-carbon producers. Climate change is limited to 2°C, reducing its impacts and the associated risks.
Zinc			Demand for zinc remains attractive. Carbon pricing policies continue to be implemented, with growing stringency. Climate change is limited to 2°C, reducing its impacts and the associated risks.

Legend:

- climate-related opportunities outweigh climate-related risks
- climate-related risks, while manageable, are likely to increase over time
- climate-related risks are likely to impair the product market

Implications for Teck:

- No existing developed assets are stranded, including Fort Hills, which produced first oil on January 27, 2018.
- Development of other oil sands assets would depend heavily on market conditions, including oil price and operating costs.
- Expansion opportunities in copper may be significant, adding to the long-term attractiveness of Quebrada Blanca Phase 2 and other potential copper projects.
- Steelmaking coal remains an important part of the company's commodity mix, but long-term production growth is likely achieved elsewhere in the portfolio.
- Strong market fundamentals for specific metals may present diversification opportunities beyond Teck's existing business units.
- Continuing climate change may cause an increase in the frequency of severe weather conditions and associated mitigation costs. Mitigation costs would be expected to be lower than other scenarios, with a possibility that standard adaptive management practices would be sufficient to ensure resilience.

23 Third-party analysis suggests that the heavy focus by integrated mills on productivity improvement should drive the rates of Pulverized Coal Injection (PCI) usage up and accelerate the preference for higher CSR (coke strength after reaction) cokes. Demand falls will not be consistent across coal types, with premium hard coking coals increasing their share of the coke blend.

Energy

Overview of Teck's Energy Business

Teck is focused on the sustainable development of reliable sources of energy to meet long-term global demand. Located in the Athabasca oil sands region of northeastern Alberta, our energy assets include a 21.3%[24] interest in the Fort Hills oil sands mine, a 100% interest in the Frontier oil sands project and a 50% interest in various other oil sands assets in the exploration phase.

Fort Hills

- Fort Hills produced first oil on January 27, 2018.
- Mine life of over 44 years.
- Nameplate production capacity of 194,000 barrels per day. Since first oil in January 2018, Fort Hills has produced 46 million barrels of bitumen, or 125,000 barrels per day, during 2018. Our share of production was 9.7 million barrels, or 27,000 barrels per day.
- Greenhouse gas intensity is predicted to be 37.5 kilograms (kg) CO_2-equivalent per bbl, which will be among the lowest life cycle carbon intensity of any Canadian oil sands production, with a lower carbon intensity than about half of the oil currently refined in the U.S.
- Teck's share of Scope 1 emissions is predicted to add 518,000 tonnes of CO_2 annually to our GHG emissions profile.

Frontier

- Frontier is a proposed truck-and-shovel mine located in the Athabasca oil region of northeastern Alberta.
- The projected mine life would be about 41 years.
- The first production phase would have a capacity of 170,000 barrels of partially de-asphalted bitumen per day, increasing to 260,000 barrels per day at full production.
- The current project capital costs are estimated at $20.6 billion.
- Greenhouse gas intensity is predicted to be about 38.4 kg CO_2-equivalent per bbl, which will be among the lowest life cycle carbon intensity of any Canadian oil sands production, with a lower carbon intensity than about half of the oil currently refined in the U.S.
- It is predicted to add 3.879 million tonnes of Scope 1 CO_2e to our GHG emissions profile at full production[25].

24 Teck's ownership interest as of December 31, 2018.

25 This estimate includes the potential to exceed the nominal full production rate of 260,000 barrels per day.

Canada's oil sands are vast, with 169 billion barrels of recoverable reserves, of which only about 5% has been produced over the last 50 years. The size of the resource and its presence in a progressive jurisdiction resulted in Teck making its first major investment in the energy business in 2005 when it acquired an interest in the Fort Hills oil sands project. Since then, global oil demand has climbed from 84 million barrels a day in 2005 to 95 million in 2017. Of course, our understanding—as a society and as a company—of climate change and the urgency to address it has also deepened over this period.

Fort Hills, operated by Suncor, produced first bitumen in January of 2018 and has among the lowest life cycle carbon intensity of any Canadian oil sands production. Building on our success as one of the most carbon-efficient miners in the world, our goal as an energy business is to advance carbon-competitive mining operations, like Fort Hills, that will help deliver the oil the world needs throughout the transition to a low-carbon future.

We believe that bitumen produced from Canadian oil sands mining has a vital role to play in the transition to a low-carbon economy for the reasons explored in the remainder of this section.

How do the 3.5°C, 2.7°C and 2°C scenarios differ when it comes to the future of oil?[26]

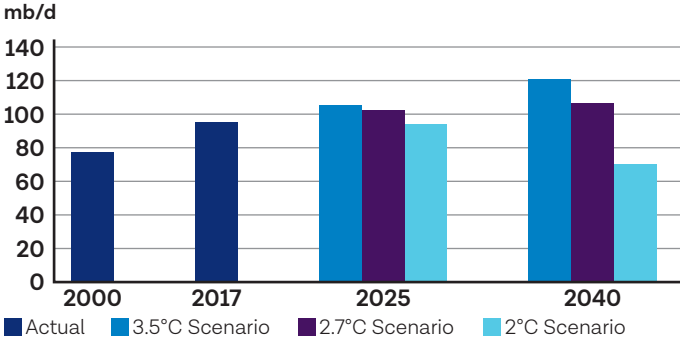
Scenario data provided by the IEA offers some insights into potential future oil demand.

In the 3.5°C scenario, global oil demand rises by 1.1 million barrels per day (mb/d) on average every year and shows no discernible slowdown to 2040. No new policy action is taken to target improved fuel efficiency or the increased use of alternative fuels. In this scenario, continued growth in supply is seen in the oil sands, rising from 2.7 mb/d in 2017 to 3.8 mb/d in 2040.

The 2.7°C scenario sees a future in which oil demand grows to 106.3 million barrels per day by 2040, an estimate that has increased by more than 1 mb/d compared with last year's outlook and that is an increase of 12% from 2017 levels. The IEA suggests that supply shortfalls and upward pressure on oil prices may arise in the near term if today's depressed levels of upstream investment persist much longer.

In the 2°C scenario, global oil demand peaks around 2020 at 97 mb/d. By 2040, internal combustion engine (ICE) vehicles are 40% more efficient than today and there are 930 million electric cars on the road, comprising approximately half of the global car fleet. Buses and trucks become increasingly electric as well, with one-quarter of buses and nearly one-fifth of trucks becoming low or zero carbon. The result is a reduction in oil demand from road transport in 2040 by more than 18 mb/d compared to today. In this scenario, oil demand grows in the petrochemicals sector by 3.3 mb/d by 2040, despite the increase in plastics recycling, which restricts demand growth by 1.5 mb/d.

Global Oil Demand



Oil Assets in a Low-Carbon Economy: Does operating in the oil sands and producing oil contradict Teck's commitment to manage our business in the context of climate change?

We recognize the imperative to decouple economic growth from oil use if the world is to successfully achieve the climate objective of restricting global warming to 1.5°C. That said, as the world transitions to a low-carbon economy, oil will continue to play a necessary role in the global energy mix. Actions like improved efficiency of ICE vehicles and the adoption of electric vehicles will lead towards some reductions in demand for oil; however, oil will be required for the foreseeable future to maintain and improve the standard of living for an increasing world population.

26 Data presented in this section is sourced from the IEA World Energy Outlook 2018.

The continued use of oil and other fossil fuels can be compatible with a 2°C or 1.5°C scenario; although global oil demand and supply will need to be reduced from current levels. In these scenarios, where demand and supply are curtailed, we believe that the remaining demand should be met by responsible low-carbon producers.

We believe that we can deliver the oil that the world will need in a responsible, low-carbon manner while simultaneously providing value to our shareholders.

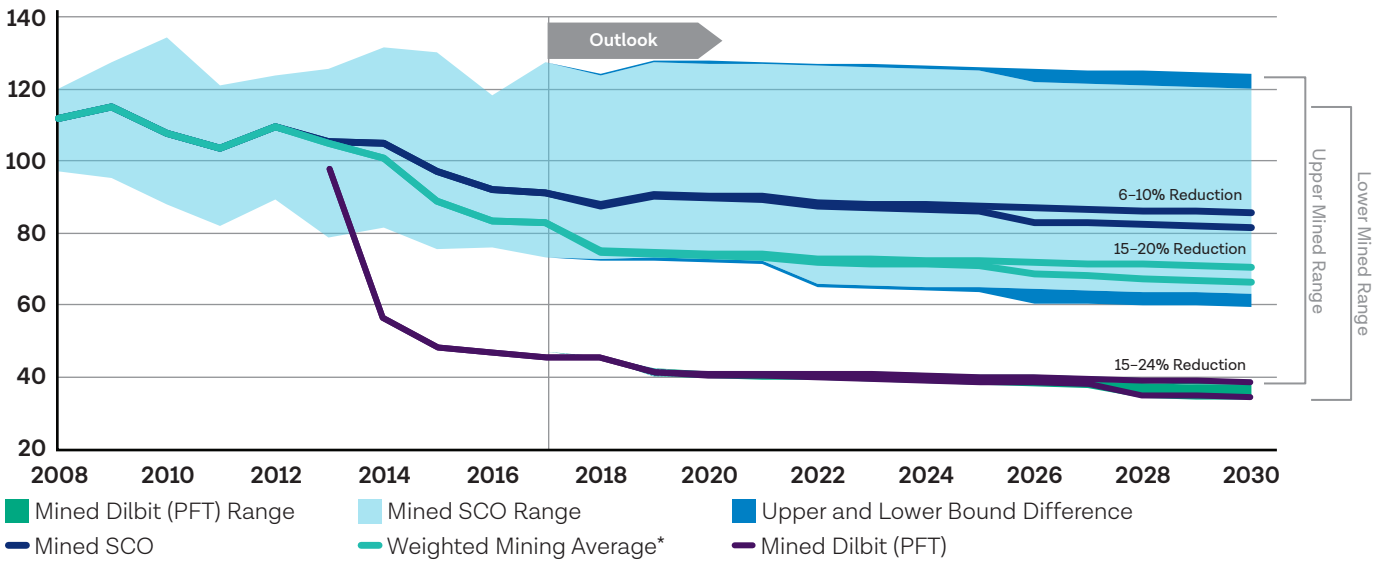
Canada's oil sands benefit from being located in a progressive jurisdiction with a transparent and robust regulatory process. Alberta and Canada's policies include an absolute limit on sector emissions and taxation that drives investment in the development and deployment of emission abatement technology.

New oil sands mine projects in Canada today are carbon-competitive with alternative sources in North America and elsewhere in the world. The bitumen extraction technology used by Fort Hills, and potentially by Teck's proposed Frontier mine, already has a greenhouse gas intensity that is among the lowest of any Canadian oil sands production. To improve carbon and economic performance, Fort Hills uses a process called Paraffinic Froth Treatment. This process produces better-quality bitumen that needs less diluent for transportation, compared to other recovery methods in the oil sands. The product does not require upgrading, only refining, helping to minimize GHG life cycle emissions and place them in line with the average barrel refined in the U.S. An added benefit is this higher-quality product can be processed by a wider range of refineries.

Given Canada's globally leading climate policies and the opportunity for technological advancement, further gains in the carbon-competitiveness of Canadian oil sands production are expected to occur. The intensity of emissions from Canada's oil sands has declined 21% since 2009 and is forecast to decrease further, due to increased production from newer mines and the deployment of emerging technology. IHS Markit predicts that "By 2030, the GHG intensity of oil sands extraction could be 16–23% below 2017 levels—more than one-third less than in 2009."[27] With few exceptions, this outlook does not include transformational changes in extraction technology, although such advancements are possible. Teck is participating in research and development of incremental and transformational oil sands technology to reduce greenhouse gas emissions independently and through its membership in COSIA.

GHG Intensity of Oil Sands Mining by Marketed Product (Synthetic Crude Oil (SCO) and Dilbit), 2008–30

$kgCO_2e$/bbl of Marketed Product (SCO and Dilbit)



*Estimate of total oil sands average includes mined SCO and mined dilbit.

Source: IHS Markit

27 *Greenhouse gas intensity of oil sands production.* IHS Markit. 2018.

Fort Hills operation, Alberta, Canada

We believe that our presence in the Canadian oil sands and our associated company values can positively contribute to this needed change in the industry. We are a developer of choice in the sector because we are progressive and committed to reducing the intensity of GHG emissions through research, targeted design and continual improvement.

What are the key climate policies that affect the oil sands, and how will this influence carbon-competitiveness?

Canada and Alberta's climate policies are among the most progressive and stringent of any oil-producing region in the world. These policies will spur innovation—lowering emissions and improving economic performance—positioning the industry for long-term cost- and carbon-competitiveness. Alberta's new oil sands projects are technologically advanced and are carbon-competitive with oil produced in many other jurisdictions; collaboration through groups like COSIA will continue to deliver the technologies and innovation required to further reduce GHG emissions.

With respect to federal policies, in 2016, the Government of Canada launched the Pan-Canadian Framework on Clean Growth and Climate Change (PCF), which includes the creation of a national floor price on carbon that will rise to $50 per tonne by 2022. The PCF is structured in a manner that enables provincial policies to be deemed equivalent with the PCF, thereby having provincial policies—not federal policies—apply to an operation. As of early 2019, policies in Alberta are deemed to be sufficiently meeting the requirements of the PCF with respect to the national floor price, and as such, industrial facilities in Alberta are not expected to be regulated by federal carbon pricing regulations. It is noted that provincial and federal policies are aligned with respect to the need to maintain the competitiveness of trade-exposed sectors such as oil, and that both jurisdictions use output-based allowances to prevent carbon leakage to less progressive jurisdictions.

Given this equivalency with federal policies, the policies with the greatest impact on our operations and projects are those of the Government of Alberta. In 2015, the Government of Alberta announced its Climate Leadership Plan. The plan included the following items that are identified as Alberta's Key Actions:

- A 100 megatonne (MT) annual limit on GHG emissions from the oil sands
- An economy-wide carbon tax that rises over time
- A 45% mandated reduction in methane emissions from the oil and gas sector by 2025
- A commitment to expand renewables and eliminate coal-generated electricity by 2030

Most relevant to our operations and projects are the 100 MT annual emissions limit on the oil sands and the industrial carbon pricing regulations related to the economy-wide carbon tax.

With respect to the annual emissions limit—or emissions "cap"—it's important to note that Alberta is the only energy-producing jurisdiction globally to implement a GHG emissions limit on oil production. Agreed to by Canadian and international environmental organizations as well as some industry leaders, this "carbon budget" is designed to spur innovation to reduce GHG emissions per barrel.

Based on our understanding of the approach to the emissions limit and industry response to regulation, we do not believe that our existing or future oil sands assets are at risk due to the cap. We believe that our assets should actually be preferred in relation to other common methods of oil sands production because they are or will be amongst the lowest GHG emissions intensity developments.

On April 16, 2019, the United Conservative Party (UCP) won the Alberta general election to form a majority government. Preliminary details on the UCP approach to industrial carbon pricing demonstrate a departure from the current carbon pricing regime. While we are monitoring these developments, it is too early to determine with reasonable certainty the cost implications of a new policy.

Steelmaking Coal

Overview of Teck's Steelmaking Coal Business:

- Teck is the world's second-largest exporter of seaborne steelmaking coal, an essential ingredient in the production of steel, which is necessary for building infrastructure and improving the quality of life for people around the world.
- Our steelmaking coal business consists of six mines[28]: five in British Columbia and one in Alberta.
- Steelmaking coal sales were 26.0 million tonnes in 2018.
- In 2018, our steelmaking coal business unit accounted for 50% of revenue and 62% of gross profit before depreciation and amortization.
- Our steelmaking coal operations are low-GHG-intensity producers.
- All of our steelmaking coal mines are covered by carbon pricing at approximately $35 per tonne of CO_2.

28 In 2018, Coal Mountain Operations production declined as it reached the end of its mine reserve. However, favourable geology at Coal Mountain will allow for the mining and processing of a small amount of coal in the first quarter of 2019. In addition, throughout 2018, we hauled a portion of raw coal from the Elkview Operations to Coal Mountain Operations for processing and we anticipate that practice to continue through at least the first quarter of 2019.

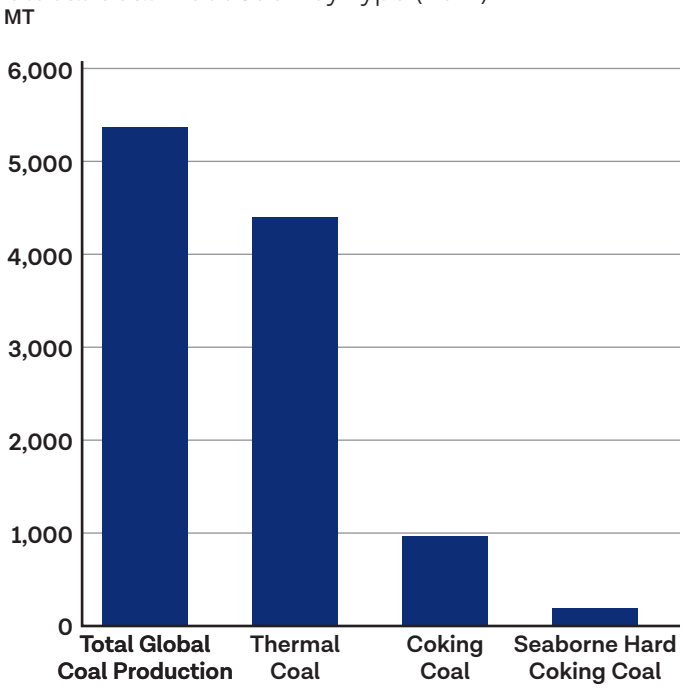
First, it's important to distinguish between the steelmaking coal that Teck produces and thermal coal.

Thermal coal[29] is used primarily to generate electricity to power homes, factories and businesses; combined, this accounts for over 80% of total global coal production. Steelmaking coal, sometimes called metallurgical coal, is a vital ingredient in the production of steel[30] and is essential to ensuring the world has a sufficient supply of steel to build out the infrastructure required to transition to a low-carbon economy. From building wind turbines and energy-efficient buildings to deploying electric vehicles, hybrid buses and rapid transit lines, steel is an essential building block of modern life. Today, steel production accounts for approximately 5% of global greenhouse gas emissions.

A subtype of steelmaking coal called coking coal is a higher-grade coal used to produce an intermediary product—coke—which is then used in the chemical, thermal and mechanical processes that transform iron ore into hot metal. About 700 kilograms of steelmaking coal are required to produce 1 tonne of hot metal (or pig iron). Once created, hot metal can be processed into steel using either the blast furnace-basic oxygen furnace (BF-BOF) or the electric arc furnace (EAF) process. According to the World Steel Association, today, about 72% of steel is produced using the BF-BOF process, and 28% is produced using the EAF process.[31]

In the coming decades, it is reasonable to expect that new steelmaking technologies may advance that have lower emissions. While technological advancements and material substitution from other products have the potential to lower demand for steelmaking coal, impacting steelmaking coal markets, there is a great deal of uncertainty as to the pace and extent to which the proportion of steelmaking routes (i.e., BF-BOF and EAF) will change. As of today, BF-BOF and blast furnace carbon capture and storage (BF-CCS) are anticipated to be the dominant steel making processes for the foreseeable future, with BF-CCS offering the potential for significant emissions reductions, which may negate the low-carbon benefits of EAF routes. In parallel, the additional steel demand tied to the growing needs for power, infrastructure and less costly abatement options are likely to reinforce the value of BF-BOF steel production.

Global Coal Production by Type (2017)



Sources: IEA and CRU.

"Thermal Coal Production includes Steam Coal and Lignite as defined in the IEA WEO 2018"

"Coking Coal is identified here specifically as a subset of steelmaking coals, and to align with definition in the IEA WEO 2018"

While all three climate-related scenarios suggest that steelmaking coal will remain an integral resource in a lower-carbon future, Teck will continue to monitor climate-related market, technology and policy trends that may influence capital allocation decisions related to our steelmaking coal business. Today, we anticipate that the continued competitive landscape in the steelmaking sector and a rising price for carbon emissions will drive blast furnace operators to incorporate carbon costs into their "value-in-use" analyses, where Teck's steelmaking coal is expected to remain competitive due to its inherent attributes and low-carbon-intensity production.

29 Thermal coal in this context includes steam coal and lignite, as defined by the IEA.

30 The use of our coking coal is primarily to create pig iron, which is subsequently used as an input to the production of steel.

31 World Steel Association. https://www.worldsteel.org/about-steel/steel-facts.html.

How do the 3.5°C, 2.7°C and 2°C scenarios differ when it comes to the future of steelmaking coal?

The figure to the right shows shows the changes in steelmaking coal trade across the three scenarios, and compared to 2000 and 2017 actual values.

Under the 3.5°C scenario, the IEA suggests that coking coal trade is expected to increase from 302 Mtce in 2017 to 378 Mtce in 2040. Limited details for the trends in this scenario are provided by the IEA.

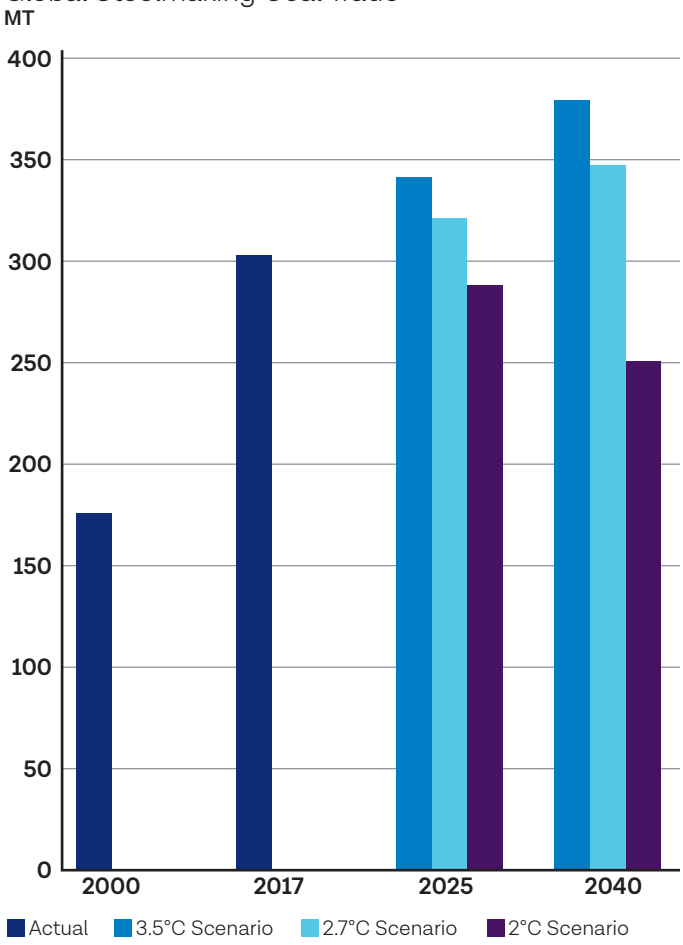
Under the 2.7°C scenario, the IEA suggests that coking coal trade is expected to increase from 302 Mtce in 2017 to 346 Mtce in 2040. The IEA expands further in the 2.7°C scenario to describe some of the key changes. First, China sees a decline of about 40% in coking coal production by 2040. This is attributed to a decrease in domestic steel manufacturing and a move towards electric arc furnaces. At the same time, countries like India grow in their dependence on coking coal imports, due to limitations on the quality of their domestic coking coal supply. As a result, the coking coal trade increases at an annual average of 0.6% to 2040, including growth in Canadian production and exports.

Under the 2°C scenario, the IEA suggests that the coking coal trade is expected to decrease from 302 Mtce in 2017 to 250 Mtce in 2040. Compared to the 2.7°C scenario, the 2°C scenario follows a similar but accelerated path of increased recycling, substitution and deployment of alternative steel production technologies. Under this 2°C scenario, exporters of high-quality steelmaking coal, such as Teck, benefit from relatively strong demand out to 2040. The impact of these demand changes will depend on the global supply response.

Teck's Competitive Advantage in a Low-Carbon Economy

A key factor influencing our overall competitiveness in a carbon-constrained world is the quality of the steelmaking coal we produce. The quality of raw materials, including steelmaking coal and iron ore, is an important factor in the energy consumption and emissions performance of the steelmaking process.

Global Steelmaking Coal Trade



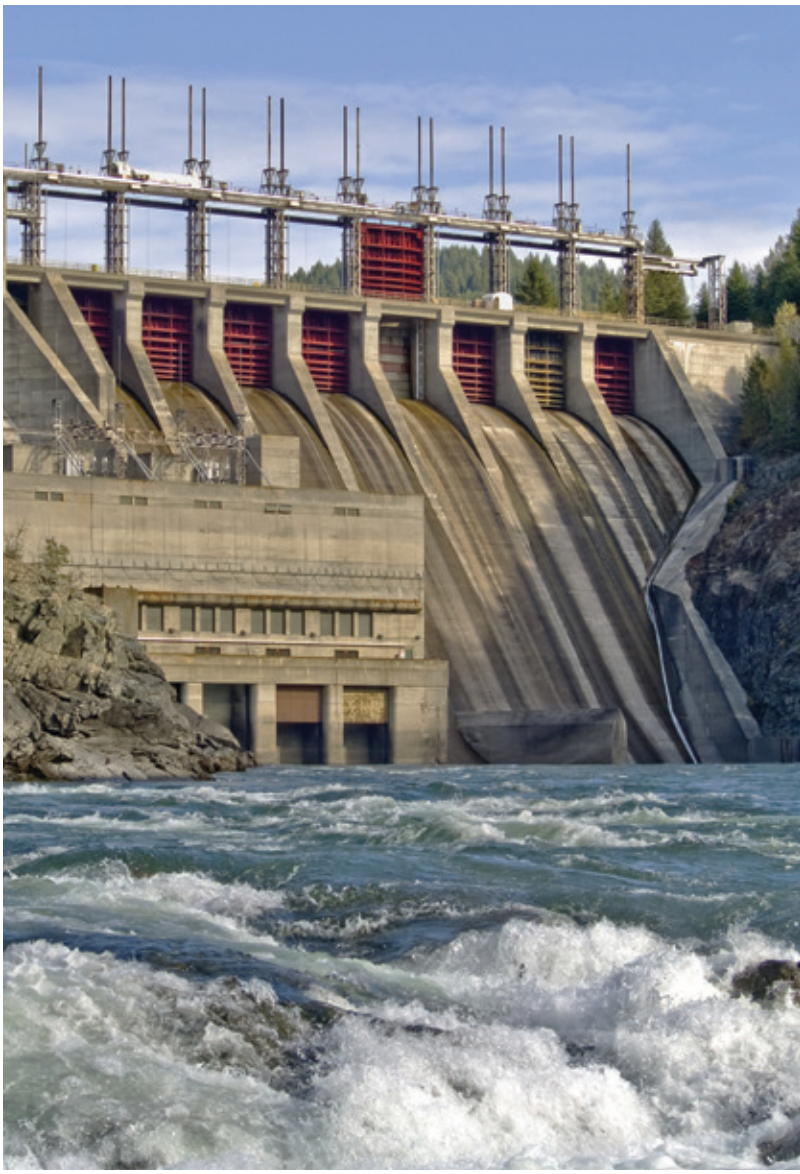
Teck's steelmaking coal contributes to high coke strength properties that help to ensure stable and efficient blast furnace operations for its steelmaking customers and allows for higher injection rates. This results in lower carbon emissions in the steel production process on a unit-of-production basis. As steel producers look to reduce the GHG emissions intensity of their production and/or begin to face rising carbon prices, we believe that our steelmaking coal will be a preferred product for steel producers and may receive a larger price premium over lower grade coals[32]. Even in scenarios where overall steelmaking coal demand may be decreasing, we believe demand for Teck's steelmaking coal will remain strong because of the carbon advantage it will provide to steel producers.

32 It is challenging to determine the magnitude and/or duration of such premiums due to uncertainty around commercial responses that may arise in such a price environment.

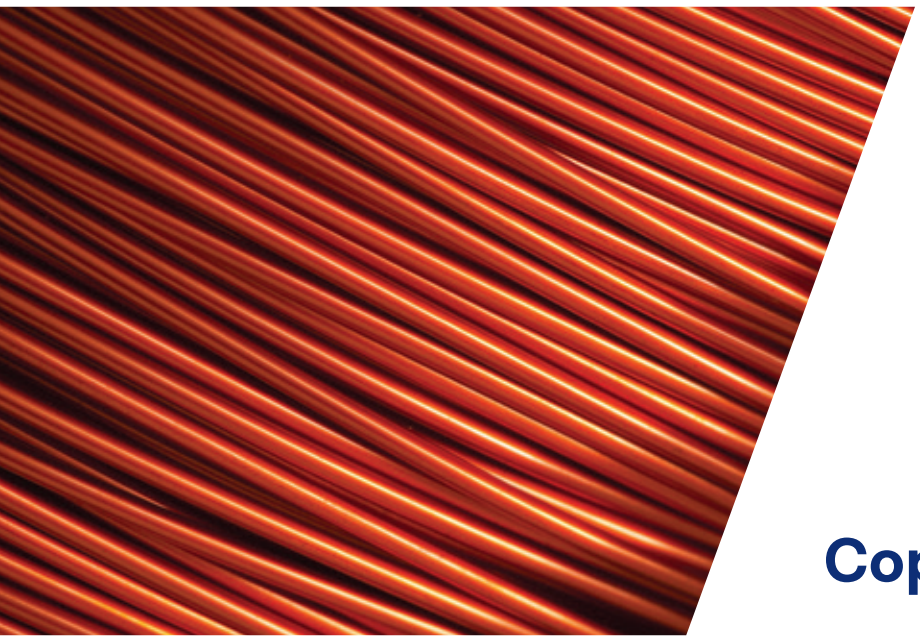
When it comes to carbon-competitiveness, based on data reported by the ICMM, our steelmaking coal business has among the lowest carbon intensities in the world for the production of steelmaking coal.[33] In addition to Teck's ongoing efforts to further improve operating efficiencies and reduce emissions intensity at our steelmaking coal mines, our carbon performance benefits from access to low-carbon sources of electricity. In B.C., where five of our six steelmaking coal mines are located, 93% of the grid electricity is clean and renewable energy, and it is almost entirely generated by hydro sources. Teck's operations also rely on rail to transport our product from mine to port and then the use of ocean transportation to get our product to our customers. Our preliminary analysis suggests that, even when incorporating these additional emissions associated with the supply chain, Teck's steelmaking coal business remains carbon-competitive.

Over time, the more widespread adoption of carbon pricing (e.g., carbon taxes) envisioned under the 2°C scenario will also contribute to a more level playing field for companies like Teck that already pay carbon taxes. Today, all of our steelmaking coal operations are covered by a carbon price, while many of our steelmaking coal competitors do not currently pay carbon costs. As carbon prices are applied more universally, the operating costs of our competitors will increase, thereby improving Teck's overall competitiveness.

Over the mid and long term, we believe Teck's steelmaking coal operations are well positioned to compete in a 2°C world defined by higher carbon prices and moderated product demand. We will continue to focus on improving our cost- and carbon-competitiveness to ensure the resilience of our steelmaking coal business.



33 While the work of the ICMM offers a reasonable and credible analysis of the GHG performance of the mining and metals sectors, it is challenging at this time to definitively assess the GHG emissions intensities of our competitors on a commodity-by-commodity basis. This is because i) there is limited publicly accessible data (particularly at a commodity and operational level), ii) there are inconsistencies in GHG quantification methodologies between jurisdictions and companies, and iii) there are uncertainties in emissions inventories, some of which are also applicable to Teck. At this time, the primary source of uncertainty in our estimated emissions is that arising from estimated fugitive methane emissions. To learn more about the challenges in estimating methane emissions within the industry, we recommend reading *Fugitive Methane Emissions in Coal Mining*, produced by ICMM. Teck is committed to monitoring the performance of our peers and to continually refining and improving our own GHG quantification methodologies over time.



Copper

Overview of Teck's Copper Business

We are a significant copper producer in the Americas, with four operating mines in Canada, Chile and Peru, and copper development projects in North and South America. In 2018, we produced 293,900 tonnes of copper from our Highland Valley Copper Operations in B.C., our 22.5% interest in Antamina in Peru, and our Carmen de Andacollo and Quebrada Blanca operations in Chile. Our copper operations accounted for 22% of our revenue and 22% of our gross profit before depreciation and amortization in 2018. Our copper business includes:

Highland Valley Copper

- Highland Valley's primary product is copper concentrate; it also produces molybdenum in concentrate.
- The mine is an open-pit operation.
- The processing plant has the capacity to process up to 145,000 tonnes of ore per day, depending on ore hardness.

Antamina

- We have a 22.5% share interest in Antamina, a copper-zinc mine in Peru.
- The mine is an open-pit, truck/shovel operation.
- The mill has the capacity to process approximately 145,000 tonnes per day, depending on ore hardness.

Carmen de Andacollo

- We have a 90% interest in the Carmen de Andacollo mine.
- The Carmen de Andacollo mine is an open-pit mine.
- Copper concentrate is produced by processing hypogene ore through semi-autogenous grinding and a flotation plant with the capacity to process up to 55,000 tonnes of ore per day, depending on ore hardness. Some supergene ore is also mined, which is transported to heap leach pads. Copper-bearing solutions are processed in an SX-EW plant to produce grade A copper cathode.

Quebrada Blanca and Quebrada Blanca Phase 2

- We have a 60% interest in Quebrada Blanca.
- Quebrada Blanca is an open-pit mine producing ore that, since the first quarter of 2017, has been sent directly to the dump leach circuit. Prior to the first quarter of 2017, ore was sent for both heap leach and dump leach production. Copper-bearing solutions are collected from the heap and dump leach pads for processing in an SX EW plant that produces copper cathode. Mining operations in the open pit were suspended in the fourth quarter of 2018, as the supergene ore was exhausted. Copper cathode production is expected to continue through early 2020.

- Quebrada Blanca Phase 2 (QB2) is expected to extend the life of the existing mine as a large-scale concentrate-producing operation.
- The QB2 project is one of the world's largest undeveloped copper resources. When complete, QB2 will be a premier asset, with low operating costs, an initial mine life of 28 years and significant potential for further growth. The project scope includes the construction of a 140,000-tonne-per-day concentrator and related facilities connected to a new port facility and desalination plant by 165-kilometre long concentrate and desalinated water pipelines. Annual production capacity is expected to be 316,000 tonnes of copper equivalent per year for the first five years of mine life.
- Teck holds an indirect 60% interest in Compañía Minera Teck Quebrada Blanca SA (QBSA), which owns QB2. Sumitomo Metal Mining Co., Ltd. and Sumitomo Corporation together have a collective 30% indirect interest in QBSA. ENAMI, a Chilean state agency, has a 10% non-funding interest in QBS.
- Construction of QB2 was sanctioned by the project partners in December 2018. First copper production is planned for the second half of 2021.

NuevaUnión

- In November 2015 we combined Goldcorp's La Fortuna (formerly El Morro) project and Teck's Relincho project, located approximately 40 kilometres apart in the Huasco Province in the Atacama region of Chile, into a single copper-gold-molybdenum project called NuevaUnión.
- We hold a 50% interest in NuevaUnión

Project Satellite

- In 2018, we continued to advance our Project Satellite initiative to surface value from five substantial base metals assets located in stable jurisdictions in the Americas: Zafranal in Peru, San Nicolás in Mexico, Galore Creek and Schaft Creek in British Columbia, Canada, and Mesaba in Minnesota, U.S.

What does a low-carbon economy mean for copper?

First, it's important to understand the uses of copper today, and where they may grow to in a low-carbon economy.

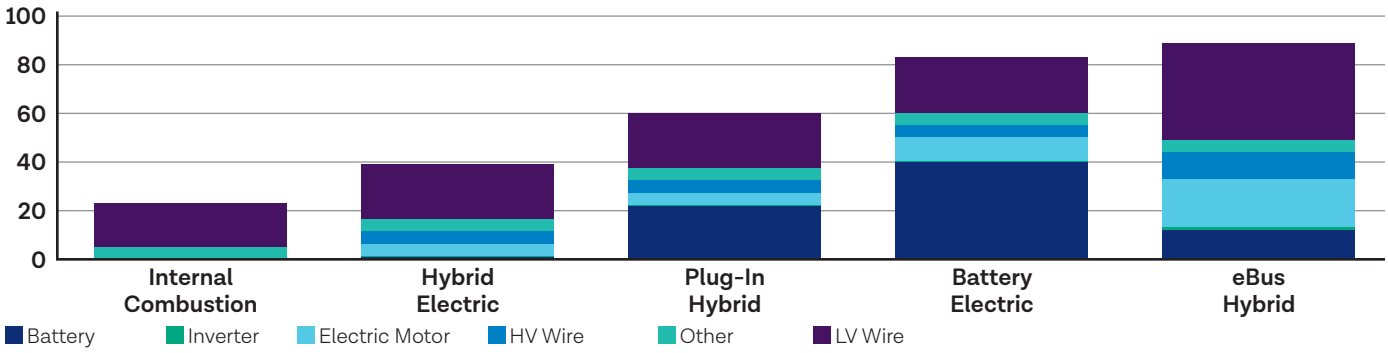
Copper is an integral part of our modern economies. It has various features that make it attractive: it is an excellent thermal and electrical conductor, it is durable and malleable, it is antibacterial and corrosion resistant, and it is 100% recyclable. In light of these beneficial attributes, according to the International Copper Association, the primary end uses of copper in many applications today are in:

- Power generation and transmission
- Construction
- Appliances and electronics
- Transport

These uses result in an annual demand of approximately 30 million tonnes of copper, with 35% of this demand met via the recycling/reuse of copper, while 65% comes from newly mined copper. It is estimated that two-thirds

Copper Usage Across Vehicle Types

Kgs of Copper per Vehicle



Source: ICA, Navigant Research, IDTechEx. Photo source: ICA, IDTechEx for ICA.

of the 550 million tonnes of copper mined since 1900 is still in productive use.[34]

With respect to a low-carbon economy, copper's superior electrical and thermal conductivity is critical in driving energy efficiency and reducing GHG emissions associated with energy consumption.

Based on recent and emerging research[35], preliminary analyses are suggesting that a global transition to a low-carbon economy may have a material impact on global copper demand. For example, electric vehicles require three to four times as much copper as traditional combustion vehicles, while solar and wind power generation are more copper intensive than traditional thermal power.

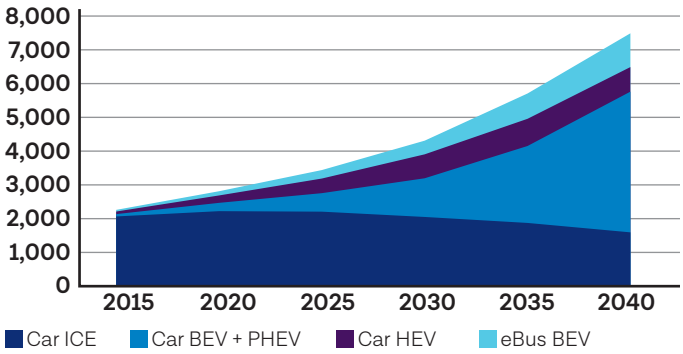
BMO Global Markets released a report in 2018 that stated that copper use in solar and wind installations is "...set to grow at a double-digit CAGR [compound annual growth rate] over the coming years, with the former set to add 2.5 mtpa [million tonnes per annum] to global copper demand by 2025 and the latter 1.85 mtpa." The same report suggests that the "...automotive sector could add 1.5 mtpa of copper demand growth by 2025, with this dominated by electric vehicle growth."[36]

With respect to renewable energy technologies, in June 2017, the World Bank published a report that analyzed the role of minerals and metals in a low-carbon future.[37] In that study—using wind, solar and energy-storage batteries as proxies—they examined the impact of a carbon-constrained future on metal demand. In their analysis, not only did they find an increased demand in copper in response to growth in renewables, but their research also demonstrated that the more aggressive the world is in adopting renewables (i.e., the closer we are to meeting the 2°C scenario), the greater the demand pressure for these metals.

With respect to electric vehicles, the majority of third-party analyses we have reviewed project growth in demand. And not only the use of copper in the vehicles themselves contributes to the growth, but also the associated infrastructure required for EV charging stations.

Electric Vehicles Copper Demand

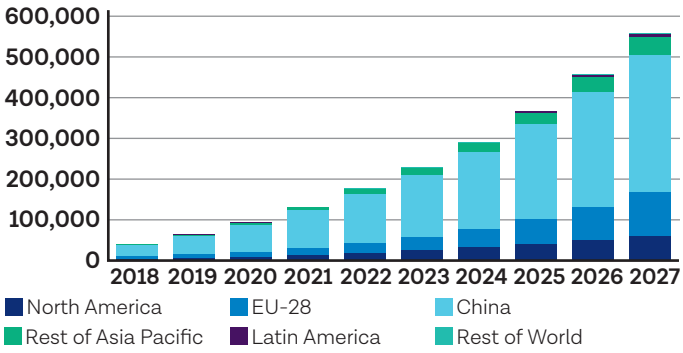
Thousands of Tonnes of Copper Contained



Source: ID Tech and Wood Mackenzie

Additional Copper Demand Charging Equipment

Tonnes of Copper Contained



As a significant copper producer in the Americas, with four operating mines in Canada, Chile and Peru, and copper development projects in North and South America, we believe we are well positioned to benefit from this potential additional demand. Our operations are also well positioned to compete from both a cost and a carbon perspective.

We recognize that there is still a great deal of uncertainty as to how the transition will unfold. In response to this uncertainty, we will continue to monitor and assess the implications of low-carbon applications for copper on long-term copper demand.

34 International Copper Alliance. https://copperalliance.org/benefits-of-copper/recycling-circular-economy/.

35 Readers should note that there is a great deal of uncertainty around the scenarios and forecasts being shared herein. These estimates are produced by third parties, and Teck's reference to such materials does not indicate our reliance on these forecasts and scenarios developing as described.

36 *Renewable Energy: A Green Light to Copper Demand.* BMO Capital Markets. 2018.

37 *The Growing Role of Mineral and Metals for a Low Carbon Future.* The World Bank Group. 2017.

Zinc

Overview of Teck's Zinc Business

We are one of the world's largest producers of mined zinc, and we operate one of the world's largest fully integrated zinc and lead smelting and refining facilities. In 2018, we produced 705,000 tonnes of zinc in concentrate, while our Trail Operations produced 302,900 tonnes of refined zinc. Our zinc business unit accounted for 25% of revenue and 18% of gross profit before depreciation and amortization in 2018. Our zinc business includes:

Red Dog

- The Red Dog mine is operated by Teck Alaska Incorporated on lands owned by, and leased from, the NANA Regional Corporation.
- The mining method employed is conventional open-pit drill, and blast and truck and shovel technology. The mineral processing facilities employ conventional grinding and sulphide flotation methods to produce zinc and lead concentrates.

Pend Oreille

- The Pend Oreille mine is an underground mine. The mineral processing facilities employ conventional grinding and sulphide flotation methods to produce high-quality zinc and lead concentrates.
- The mine is exhausting its current reserves, and mining and concentrate production will be suspended on July 31, 2019.

Trail

- Teck Metals owns and operates the integrated smelting and refining complex at Trail, British Columbia. The complex's major products are refined zinc, lead and silver. It also produces a variety of precious and specialty metals, chemicals and fertilizer products.
- The zinc refinery consists of six major metallurgical plants, one fertilizer plant and two specialty metal plants. Depending on the mix of feeds, the facility has an annual capacity of approximately 300,000 to 310,000 tonnes of refined zinc

The primary end uses of zinc are:

- Galvanized steel
- Alloys such as brass and zinc die-castings used in automobiles, electrical components and household fixtures.
- Zinc oxide, used for rubber manufacturing and skin protection.

The total annual use of zinc is approximately 16 million tonnes. Worldwide, 70% of the zinc used is from mined ores, while 30% comes from end-of-life, recycled or secondary zinc. The level of recycling is increasing each year.

Based on these current uses, zinc presents a number of benefits that help to minimize global GHG emissions, such as the benefits of zinc-coated steel. Zinc-coated steel typically lasts five to 10 times longer than bare or painted steel, thus greatly reducing the overall life cycle carbon impacts, and saving money on maintenance and replacement of buildings and structures over a 75-year installation. The use of zinc-coated steel rebar in concrete infrastructure could result in a twofold to threefold increase in a building's lifespan. Teck has fostered innovation in this continuous galvanized rebar process technology.

In terms of quantified GHG emissions reductions, according to the International Zinc Association[38], "The main use of zinc metal is in the galvanizing of steel to prevent corrosion, significantly extending the lifetime of steel products. Therefore, zinc also contributes to reducing CO_2 emissions by extending the useful life of infrastructure and vehicles. When comparing for instance a galvanized steel structure with a painted steel structure, the Life Cycle Analysis [LCA] shows that for the galvanized structure the total energy consumption is only 40% of the one for the painted structure. The energy savings translate to lower CO_2 emissions. For instance, LCA studies showed that a galvanized steel structure of 500 tonnes saves ~57 Tonnes CO_2 emissions compared with an 'equivalent' paint system."

Zinc saves valuable resources and reduces CO_2 emissions by protecting steel from corrosion. Once the steel construction comes to the end of its useful life, steel and zinc are recycled and used over and over again.

What does a low-carbon economy mean for zinc demand?

Similar to copper, zinc has multiple applications in the renewable energy and transportation sectors.

There are also some benefits specific to galvanized steel in a low-carbon economy. For example, galvanizing has long protected the steel transmission towers that are essential in the world's electricity grids. With the growth in renewable energy and alternative fuels, the longevity and reliability of these technologies is a critical factor in their economic viability. Zinc coatings significantly extend the service life of wind turbines and also greatly reduce costly maintenance and downtime caused by corrosion, especially in hostile near-shore and offshore environments.

One study that has taken a zinc-specific focus is the World Bank report referenced in the Copper section, which analyzed the role of minerals and metals in a low-carbon future.[39] The study—using wind, solar, and energy-storage batteries as proxies—examined "...which metals will likely rise in demand to be able to deliver on a carbon-constrained future." In their analysis, not only did they find an increased demand in zinc in response to growth in renewables, but their research demonstrated that the more aggressive the world is in adopting renewables (i.e., the closer we are to meeting the 2°C scenario), the greater the demand pressure for zinc. To provide some specific examples, galvanized steel is utilized in the structures that support and align solar panels, while zinc is also a component of the solar cells themselves.

One of the critical elements required for an increased uptake of renewable energy is the further development of energy storage technologies. This is an area where zinc has many opportunities. According to the International Zinc Association:[40]:

- Increased use of fuel cells would also result in increased demand for metal catalysts such as zinc and platinum. With regard to fuel cells, zinc's very high energy potential has made it a leading candidate in a range of fuel cell and battery designs under development for grid storage and micro-grid generation.
- Zinc-based energy storage systems have tremendous advantages including high specific energy, recyclability, safety, low cost and zero emissions. As a result, zinc

38 *Sectoral Roadmap Zinc 2050.* International Zinc Association. https://eurometaux.eu/media/1907/sectoral-roadmap-zinc-2050.pdf. 2012.

39 *The Growing Role of Mineral and Metals for a Low Carbon Future.* The World Bank Group. 2017.

40 *Zinc: A Sustainable Material Essential for Modern Life.* International Zinc Association. https://www.zinc.org/wp-content/uploads/sites/4/2015/01/SD_Brochure_Update_Final_web.pdf. 2017.

is used in the manufacture of a variety of battery chemistries, both primary and rechargeable, consumer and industrial. The most familiar of these chemistries are the primary zinc-carbon and alkaline batteries.

- Zinc-air and zinc-silver "button cell" batteries are widely used in the electronics industry to power items such as hearing aids, watches and calculators. Industrial zinc-silver, nickel-zinc and zinc-air batteries are of critical importance in a variety of marine, aeronautic and military applications. Nickel-zinc batteries have been developed for motive power applications, while stationary zinc-air and zinc bromide batteries are being studied for Remote Area Power Supply (RAPS) installations.

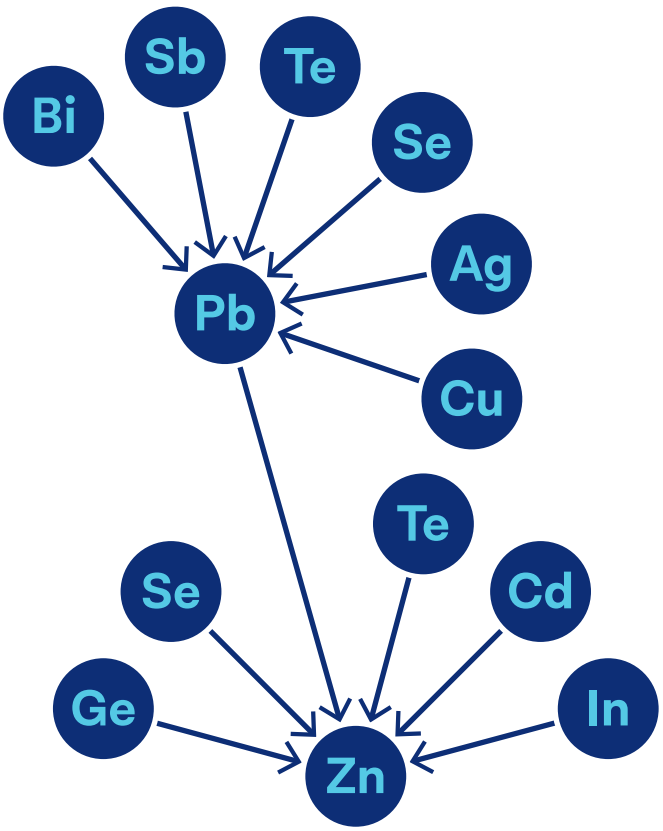
Similar to the other commodities, we recognize that there is still a great deal of uncertainty as to how the transition will unfold. In response to this uncertainty, we will continue to monitor and assess the implications of low-carbon applications for zinc on long-term zinc demand.

The low-carbon co-benefits of zinc (and lead) mining and refining

Zinc deposits commonly contain significant amounts of lead. In smaller amounts, zinc and lead also often find a number of other minor elements, such as indium, germanium and cadmium, many of which have applications in low-carbon technologies. Our Trail Operations, which is an integrated operation that is primarily a producer of zinc and lead (by volume), has a unique capability to extract many of these additional elements within our standard processes. The production of these additional elements positions Teck to fill the growing demand for materials that are needed in a low-carbon economy. From a life cycle perspective, we believe this introduces a level of efficiency that can help minimize the GHG emissions associated with the production of these elements.

Below are some of the elements that we produce at our Trail Operations, and some of their applications in a low-carbon economy.

- The primary use of lead is in batteries, which has a very well-organized recycling system and the highest recycling rate of all metals. Batteries will be essential in global energy systems and in electric vehicles.



- Lead is used increasingly in start-stop hybrid vehicle batteries and e-bike batteries. Start-stop technology—which is made possible by advanced lead batteries—stops the engine when a car idles, keeps accessories powered, and seamlessly restarts when the driver is ready. By 2020, start-stop technology is estimated to eliminate 2 million tonnes of vehicle GHG emissions annually in the U.S.[41] These innovations are estimated to result in 5-8% lower CO_2 emissions compared to conventional combustion engines.
- Indium, silver, germanium and cadmium are key materials for higher efficiency, lower-cost thin-film solar panel technologies.

41 *Start-stop vehicles reduce emissions & boost fuel economy.* Essential Energy Everyday. https://essentialenergyeveryday.com/resources/#section-infographics. 2019.

Moving Forward—What We're Watching For

Teck understands the importance of embedding the realities of climate change into our business strategy and decision-making. We are committed to working to reduce our own emissions as well as to advocating for policies that support the global effort to combat climate change. We will continue to track and refine key metrics that influence the strength and resilience of our assets in a low-carbon world. While this analysis focuses primarily on our existing assets, as mentioned, we will factor in the various risks and opportunities identified in this document as we make broader business considerations (e.g., acquisitions, divestments, project sanctioning) in the future.

There is a great degree of uncertainty as to how the future will unfold. Not only is there variation across scenarios, but there is also variation across sources within scenarios depending on which assumptions one makes. To manage this uncertainty, we believe that identifying, tracking and constantly evaluating the appropriateness of different signposts will help us to identify and monitor trends. Today, six of the key signposts we're tracking are:

1) Material substitutions commercialized as a response to climate concerns—such as fundamental shifts in steelmaking technologies or alternative materials to steel

2) Renewable energy and energy storage trends

3) Growth in the zero emissions vehicle market and the associated charging infrastructure.

4) Transition towards greater electrification

5) Physical changes in the climate

6) Evolving global climate policies

This report is Teck's second effort at using and disclosing climate-related scenarios to assess the overall resilience of our portfolio. The climate change scenarios described in this report, and their implications for Teck, are inherently speculative and future events will likely differ. Please see "Cautionary Statement on Forward-Looking Statements" in this report for further information regarding the assumptions and risks relating to the disclosure in this report. Taken together with our Sustainability Report and our Climate Action Strategy, we see this document as an important step forward in fostering transparency around our climate-related risks and opportunities. We look forward to building on this effort in future years.

Cautionary Statement on Forward-Looking Statements

This report contains certain forward-looking information and forward-looking statements as defined in applicable securities laws (collectively referred to as "forward-looking statements"). All statements other than statements of historical fact are forward-looking statements. Some forward-looking statements may be identified by words like "expect", "anticipate", "plan", "estimate", "potential", "may", "will", "should", "believe", "focus" and similar expressions. 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. Forward-looking statements in this document include, but are not limited to, statements relating to our sustainability and climate action strategy and goals, our expectation that we will remain competitive through the shift to a low-carbon economy, expectation that Teck will prosper in a low-carbon future, emission reduction goals, alternative-energy goals, GHG emission and intensity expectations and projections relating to Teck and our operations and projects, anticipated increased resilience of our operations through the incorporation of climate change scenarios into project design and mine closure planning, belief that our diversified mix of products increases our ability to weather potential carbon-related costs and shifts in demand while remaining competitive, 2020 and 2030 climate and energy targets and commitments, projected carbon costs, potential climate-related drivers of business performance, implications for Teck in respect of the climate-related scenarios described in this document, including but not limited to statements concerning competitiveness, capital expenditures and development of assets, and all assumptions and projections related to those scenarios, statement that Teck is well positioned to manage water risks related to climate change, the mine lives of our Fort Hills and Frontier operations, projected production of Fort Hills and Frontier projects, projected Frontier project costs, projections regarding demand and supply of our commodities in the future and the competitiveness of our operations in the future, expected Fort Hills carbon tax, the expectation that our existing or future oil sands assets are not at risk due to annual emission limits, expectation that Teck's steelmaking coal business has a competitive advantage in a low-carbon economy and is well positioned to compete, QB2 projected mine life and timing of first production, and projections regarding future events under impacts of a rise in global temperatures.

The forward-looking statements in this report are based on current estimates, projections, beliefs, estimates and assumptions that are described in this report, although it is inherently difficult to predict the consequences of climate change and impact it may have on Teck and the consequences described herein are speculative and provided as an illustration of potential impacts of climate change. Assumptions regarding our Fort Hills and Frontier projects include that the projects are completed and operated as designed. Assumptions regarding the QB2 project are based on current project plans and assumptions. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance, experience or achievements of Teck to be materially different from those expressed or implied by the forward-looking statements. Risks and uncertainties that could influence actual results include, but are not limited to: actual climate-change consequences, including any increases in temperature, changes in laws and governmental regulations or enforcement thereof, development and use of new technology, alternatives to our commodity products displacing our products, natural disasters and adverse weather conditions, changes in commodity prices, general business and economic conditions, and the future operation and financial performance of the company generally. Fort Hills is not controlled by us and schedules and costs may be adjusted by our partners, and timing of spending and continued development is not in our control.

Certain of these risks and other additional risk factors are described in more detail in Teck's Annual Information Form and its Management's Discussion and Analysis and other documents available at www.sedar.com and in public filings with the United States Securities and Exchange Commission at www.sec.gov. These statements speak only as of the date of this report. Teck does not assume the obligation to revise or update these forward-looking statements after the date of this document or to revise them to reflect the occurrence of future unanticipated events, except as may be required under applicable securities laws.

For More Information

More information on our approach to climate change, our projects to reduce our emissions, and our annual GHG emissions reporting is available at:
www.teck.com/responsibility

If you have any questions about this report, email us at sustainability@teck.com or contact:

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