Climate Action and Portfolio Resilience





Diversified portfolio of metals and minerals—steelmaking coal, copper and zinc—that are the building blocks of our low-carbon future.

Cut total GHG emissions by 7 percent since 2011.

Implemented projects that have avoided 217,000 tonnes of GHG emissions since 2011.

Working to cut emissions from existing operations by 450,000 tonnes by 2030—equal to taking over 95,000 cars off the road.

One of the world's lowest GHGintensity miners of steelmaking coal and copper.

Emerging energy business with a lower carbon intensity than about half of the oil currently refined in the U.S.

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Introduction

At Teck, we believe climate change is directly influenced by human activity and it requires decisive global action to address it. The metals and minerals we produce are essential to building the technologies and infrastructure needed to reduce greenhouse gas emissions (GHGs). And we have a responsibility to help tackle this global challenge by reducing our own emissions and advocating for policies that support the transition to a low-carbon economy.

This responsibility 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. Our Board and senior management are actively involved in assessing climate-related risks and opportunities. This includes incorporating climate-related considerations into corporate-level strategies and capital investment decisions.

In addition to strong sustainability performance itself, transparent disclosure on our sustainability performance is 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 (FSB) made several recommendations in June 2017 for how companies can improve climate-related disclosures¹. This report on Climate Action and Portfolio Resilience is structured to align with the TCFD's recommendations. In this report, we:

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

2. Discuss key climate-related risks and opportunities for our businesses—steelmaking coal, copper, zinc and energy. This includes a discussion on Teck's governance of climate-related considerations.

3. Consider the potential implications for Teck of two commonly used climate-related scenarios. While not forecasts, these scenarios describe two possible futures looking forward to 2040.

Building on our existing climate-related work and disclosures, Teck has analyzed and disclosed the potential implications of various climate-related scenarios for our business, including a scenario that limits climate change to 2° Celsius (C) above pre-industrial levels. The use of scenarios aids our decision-making and strategic planning. These scenarios also 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. We will build on this report in future years to better communicate Teck's approach to climate action and our potential climate-related risks and opportunities.

¹TCFD Report: Recommendations of the Task Force on Climate-Related Disclosures (June 2017).

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.

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Zn	

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

Frontier Fort Hills

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

Teck's Climate Action Strategy

Our strategy to contribute to global climate action, adapt to a low-carbon economy and continue to responsibly produce the materials essential for society is built around four pillars:



1. Positioning Teck for the Low-Carbon Economy

We produce minerals and metals 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 Our Carbon Footprint

We have set long-term targets to reduce greenhouse gas (GHG) emissions and are working to achieve them through innovation, research, improved efficiency and adoption of low-carbon technologies.



3. Advocating for Climate Action

We support action at all levels to combat climate change and are actively advocating for broadbased, effective carbon pricing.



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.

Positioning Teck for the Low-Carbon Economy

As the world transitions to a lower-carbon economy, there will naturally 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 and metals we produce—including steelmaking coal, copper and zinc—are some of the basic building blocks of low-carbon technology and infrastructure. And we are developing a cost- and carbon-competitive energy business, based in Alberta, Canada, home to some of the most progressive climate action policies of any oil-producing jurisdiction globally.

To ensure we remain competitive through the shift to a low carbon economy, Teck's operations must continue to be efficient and low cost. In addition, 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. In some cases, cost reduction is also supporting carbon reduction at Teck. Measures to improve the efficiency of our operations often also lead to further reductions in the carbon intensity of our activities.

Teck accounts for climate change considerations in individual investment decisions and in our strategic planning processes that shape our overall portfolio mix. These considerations include factors related to markets, technology and policy, as well as the potential physical impacts of climate change, and are further described later in this report.

Reducing our Carbon Footprint

We have set ambitious 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 217,000 tonnes which equates to a seven percent reduction in our overall GHG emissions. By 2020, we aim to achieve 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.

Based on analysis of publicly available information, we believe Teck's operations are among the lowest GHG emissions-intensity mining operations in the world. 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 (CO2) 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. Moving forward, our goal is to continue to improve the carbon intensity of our operations and future projects.

²At this time, it is challenging to definitively assess the GHG emission-intensities of our competitors on a commodity-by-commodity basis. This is because: i) there is limited publically 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 provide 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 continuously refining and improving our own GHG quantification methodologies over time.

Compared to our competitors, one carbon and cost disadvantage we face is the distance we must ship some of our products—i.e., from mine to port. This factors in most prominently for 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 coal³—a Scope 3 emissions source—we estimate between 250,000 and 450,000 tonnes of CO_2e , or a 15–30 percent 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 miners in the world.

Alternative Energy Generation

Six of our twelve operating mines and our zinc and lead smelting and refining facility are located in British Columbia, where 93 percent of the grid electricity is 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. That said, Alberta is reducing the carbon content in its grid electricity by moving to eliminate coal-fired generation and requiring 30 percent renewables, both by 2030. Teck has a goal to commit to 100 megawatts of new alternative energy generation by 2030 and is investing in research and building alternative power generation technology. For example, we are sourcing 30 percent of our 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 on the site of Teck's former Sullivan Mine.

In 2011, in partnership with Suncor, we developed a large-scale wind power facility in Alberta called Wintering Hills. Our investment in Wintering Hills helped us source non-carbon emitting electrical energy. It also provided an opportunity to develop our understanding of wind power generation and evaluate other opportunities to develop wind projects near our operations. In March 2017, Teck sold its 49 percent interest in Wintering Hills to IKEA Canada, facilitating the continued production of clean energy under new ownership.

In 2017, we also announced the sale of our two-thirds interest in the Waneta Dam and related transmission assets in British Columbia. The Waneta Dam, located on the Pend d'Oreille River, has a total capacity of 496 MW of renewable power and generates an average of 2,750 gigawatt hours (GWh) of energy per year. Teck's Trail Operations uses approximately 1,880 GWh of energy per year from Waneta. Under the agreement, Teck's Trail Operations will be granted a 20-year lease to use the two-thirds interest in power produced by Waneta for its operations, and there is an option to extend the lease for a further 10 years.

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 batteries for power storage, and iv) the ability of projects to provide other sustainability benefits, such as low-carbon power for local communities.

Learn More: For detailed information on Teck's GHG emissions performance, see our 2016 Sustainability Report, Page 121. We also annually report our carbon performance through our participation with Carbon Disclosure Project, now known as CDP.



Teck GHG Emissions (Scope 1 + 2) Actual (2010–2016) and Estimates (2017–2020) in Tonnes of CO₂e

³Because of the differences in total tonnage shipped between our metal products and our steelmaking coal, the emissions implications of rail are only significant for steelmaking coal.

Our Climate and Energy Targets and Commitments

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 CO₂-equivalent.
- •Assess opportunities and identify potential project partners toward 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.

Advocating for Climate Action

We support action across all areas of society and the economy to combat climate change and are actively advocating for broad-based, effective carbon pricing. 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.

As part of this advocacy, Teck plays a key leadership role in 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.

Teck is also one of the most experienced mining companies globally when it comes to incorporating carbon pricing into our business while remaining competitive. Currently, all of our steelmaking coal operations are covered by carbon pricing, as is half of our copper business and all of our metals refining business.

Designing Carbon Prices to Ensure Competitiveness and Prevent Carbon Leakage

Getting carbon pricing right means ensuring that the competitiveness of facilities in emissions-intensive, tradeexposed 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 then 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 schools and hospitals, may shift from jurisdictions taking climate action to those that are not.

The good news is 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 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. 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, 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 outputbased allocations in Canada. Both the Government of Alberta and Government of Canada are proposing to advance this policy solution. The Government of British Columbia, in 2017, also made a commitment to addressing the competitiveness of emissions-intensive, trade-exposed 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 like Teck, which already pay significant carbon costs.

Building Carbon Pricing into Business Decisions

We build carbon pricing into our business planning, capital planning and risk-management processes. While there is uncertainty in forecasting potential future financial implications of carbon costs, we start with the assumptions that carbon prices will be increasingly adopted around the globe and will increase over time.

Carbon pricing is integrated into a variety of decisionmaking processes, ranging from annual operating budgets developed at the site level, to corporate decision-making for large capital investments. We also calculate and consider our carbon exposure in terms of absolute costs incurred on an annual basis and projected out for at least five years. Teck has used an internal price on carbon for a decade.

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 typically 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 two climate scenarios considered.

For example, using prices from \$30/tonne (the current Carbon Tax in British Columbia) to \$50/tonne (the proposed Pan-Canadian floor price), suggests our carbon costs in 2022 could range from approximately \$45 million to \$80 million annually for our B.C. operations. In Alberta, regulations for the Climate Leadership Implementation Act and the Oil Sands Emission Limit Act are being developed. Current guidance indicates that the trade-exposed nature of steelmaking coal and bitumen will be considered. Over the next decade, we estimate that our carbon costs in Alberta could range annually from -\$0.08/bbl⁴ to \$0.39/bbl.

These forecasts are based on preliminary information from the B.C and Alberta governments regarding possible future changes to the carbon regimes in those provinces. We will continue to update our forecasts as details of these policies, and their implications for carbon prices, become clearer.

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

While our primary focus is on taking action now to limit climate change by reducing emissions and advocating for climate action strategies we also recognize that ongoing changes to climate could pose a potential physical risk to our mining operations and to related infrastructure such as transportation systems. These risks could be in the form of changes in temperatures, precipitation, levels of fresh water, or the occurrence of extreme events such as droughts, floods or storms.

In response, we are incorporating a range of climate parameters into our project designs and ongoing mine planning processes—including closure and reclamation planning—to minimize our vulnerability to climate variability and to ensure robustness.

From 2010 to 2012, we worked with technical experts in the field of climate modelling and forecasting from the Pacific Climate Impacts Consortium (PCIC) to better understand potential changes in climate-related conditions at some of our sites in British Columbia. This project helped us to assess how climate change modelling could be integrated into our decision-making and risk management practices. We factor climate variability into project development, mine planning and closure planning, and have done so for many years. For example, variability and trends in permafrost advance and retreat, precipitation patterns, sea levels and storm intensity impacts on operations and transportation are considered where relevant. We continue to be involved with PCIC, providing input on how their climate and hydrology modelling research can best be utilized by the mining sector.

Climate Change and Water Management

In the mining industry, water management is a critically important issue because processing mined materials typically uses 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 is a longstanding focus within the mining industry, including the use of climate data for design and operating considerations across the mine life cycle.

One example of how we monitor—and, in turn, manage water is through the use of water balances, such as that shown in the figure on the following page. 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.

⁴Depending on the final details of Alberta's Carbon Competitiveness Incentive Regulation, Fort Hills could generate saleable credits if the GHG intensity of the operation is less than the prescribed output allocation benchmark.

Company-Wide 2016 Water Balance in million cubic metres^{(5),(6),(7)}



How to Read a Water Balance

Water inputs:

Water that is received, extracted or managed (i.e., collected and conveyed through an operation's infrastructure). Water inputs can come from:

- •Surface water
- Groundwater
- Seawater
- Third-party sources

Water inputs exclude water diverted away from operational areas.

Water use:

Water used for mining or operational processes, such as for mineral processing, cooling, dust control or truck washing. Water use includes:

- •New water: water that is used for the first time
- •Reused water: water that is reused without being
- treated between uses •Recycled water: water that is reused and is
- treated prior to reuse

Water discharged

without use: Water that enters the site, is not used in any processes and is released to the receiving environment.

Water outputs:

Water that is returned to the environment or is not available for further use after it has been collected, used, treated or stored. The destinations for water outputs include:

- Surface water
- Groundwater
- Seawater
- Third-party entities
- Other, which includes any other destination, such as water losses through evaporation

Water accumulated:

The difference between water inputs and water outputs. This is indicative of the change in the stored water volume at our operations.

⁵Surface water includes water from precipitation and runoff that is not diverted around the operation, and water inputs from surface waterbodies that may or may not be within the boundaries of our operations. While we do not actively collect rainwater for use in our operations, the quantities of rainwater and runoff inputs to our operations constitute the majority of our surface water inputs, except at Trail Operations.

⁶Third-party water is water supplied by an entity external to the operation, such as from a municipality. We do not use wastewater from other organizations.

⁷Other includes water that has evaporated and/or is not recoverable (e.g., contained in ore concentrate or tailings).



Summary of Climate-Related Risks and Opportunities

In evaluating Teck's climate-related risks and opportunities, it is important to acknowledge the challenges in accurately predicting how the path to a low-carbon future will unfold. That is why it is important to highlight some of the key uncertainties that may impact our business and strategy along the way. The table below provides a qualitative assessment of our portfolio resilience measured against major transition-related risks and opportunities and the potential implications of the physical impacts of climate change. The table also notes key uncertainties that we will continue to monitor and assess to better inform our future actions. The table addresses climate-related risks and opportunities in four major categories:

1. Market covers climate-related issues that may positively or negatively influence shifts in supply and demand for our key commodities. For example, demand for lower carbon products is expected to spur growth in electric vehicles to the benefit of our copper business but to the potential detriment of our energy business. Market shifts may also create diversification opportunities beyond Teck's four existing business units.

2. Technology speaks to how emerging technologies from battery storage to artificial intelligence — aimed at lowering carbon emissions may disrupt or enhance competitiveness. For example, digitization and automation will help drive resource efficiency in our operations, resulting in lower costs and lower emissions. Likewise, technology advancements may enable product substitution and other changes in end user behaviour that either lower or increase demand for our products. **3. Policy** accounts for how government actions related to climate change, including carbon pricing and new environmental standards, may impact our business. This includes the legal and reputational risks and opportunities that emerge from shifting societal expectations for climate action.

4. Physical considers the potential operational and financial implications resulting from direct climate change impacts. This may include, for example, the risk of damage to mining operations and infrastructure or impacts to our value chain that disrupt access to needed inputs or markets. By mitigating these risks better than our competitors, Teck can establish a competitive advantage in bringing our products to market.

For each of these factors, we provide a qualitative assessment of the resilience of each of our four business units out to 2040 based on the 2°C scenario described later in this report. This assessment is based on our existing steelmaking coal, copper and zinc operations, and Fort Hills oil sands operation. It 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.

Portfolio Resilience: Climate-Related Risks and Opportunities for Teck's Business Units

Commodity	Market	Technology	Policy	Physical	Potential Climate-Related Drivers of Business Performance
Steelmaking Coal					 Substitution risks for steel (e.g. aluminum, wood) Increased rate of steel scrap collection and recycling Low carbon intensity of production relative to competitors High quality coal relative to peers means lower CO₂ emissions in steelmaking process. As carbon pricing is adopted, this reduces carbon compliance costs for customers Assets in jurisdictions with globally leading climate policies Physical asset resilience relative to competitors (e.g. Australian competitors face climate-related flooding) Policies that may reduce production from competitors (e.g. China limiting mining activity to address air pollution) Technology breakthroughs in coke and steel production (e.g. Carbon capture and storage) Technology breakthroughs in steel production (e.g. use of other reductants such as methane or hydrogen)
Copper					 Rate of adoption of copper-intensive electric vehicles, renewables, and other low carbon technologies and products Low carbon intensity of production relative to competitors Increased rate of copper recycling
Zinc					 Efforts to enhance longevity of product-use may increase demand for galvanized steel, rolled zinc and other zinc products Growing markets for zinc micro-nutrients in agriculture Development and deployment of zinc battery technologies
Energy					 Fuel efficiency standards and carbon pricing Adoption rate of electric vehicles Autonomous vehicles, ridesharing and shifting mobility trends Assets in jurisdictions with globally-leading climate policies Competitive carbon performance with North American producers R&D investment to reduce emissions intensity

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

Governance of Climate-Related Issues

Our Board of Directors is responsible for the stewardship of our company and ensures that appropriate corporate governance structures and systems are in place. The Board approved our Climate Action Strategy as well as this report.

Our Board and senior management are actively involved in assessing climate-related risks and opportunities. This includes incorporating climate-related considerations into corporate-level strategies and capital investment decisions. At the asset level, risks and opportunities are identified throughout the project planning phases. For example, projects above \$50 million typically conduct assessments of risks associated with energy use, GHG emissions and climate change. Climate-related risks and opportunities are identified using risk management tools internal to Teck and rely on both internal and external expertise on climate change aspects. These risks and opportunities are then prioritized based on their likelihood of impacting our business and the estimated severity of impact.

The Board approves our Climate Action Strategy and regularly assesses performance against climate and energy goals. The use of climate-related scenarios aids the Board and senior management in factoring climate-related considerations into our overall corporate governance and strategic planning.

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.

Climate-Related Scenarios

This section of the report illustrates two climate-related scenarios and the potential implications for Teck. While not forecasts, these scenarios describe two possible futures casting forward to 2040.

Most scenario planning exercises use a business-as-usual scenario as the starting point. This, however, is inconsistent with Teck's own commitment to climate action and fails to account for the accelerating deployment of low-carbon technologies and the potential for additional global climate policy action. Therefore, we see potential business and climate risk in focusing on any climate-related scenario that assumes business-as-usual.

Consistent with this decision, we have also elected to go deeper, rather than broader, in our approach and analysis, focusing on two scenarios. Our focus is on scenarios that account for today's starting point, the complexity of change and also what is possible, given emerging global trends that may accelerate or hinder broader shifts in the transition to a global low-carbon economy. 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. As a result, we have a limited degree of confidence in the price or demand forecasts in the International Energy Agency (IEA) scenarios, and we do not place great reliance on them for business planning purposes.

Using the IEA's widely available data sets in accordance with the TCFD recommendations is intended to help enable comparability of climate-related risk assessments across organizations. The IEA World Energy Outlook (WEO) 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. Having said this, 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 demand for our commodities may differ from those discussed in the IEA scenarios. For both scenarios, while the IEA scenarios acted as a starting point of 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 analysed in the IEA models.

Our first scenario, called the 2.7°C scenario, uses the New Policies Scenario outlined by the IEA in its World Energy Outlook 2017⁸ as its primary quantitative foundation. This

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.

scenario considers current and pledged policy directions as of mid-2017, including the Nationally Determined Contributions (NDCs) 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 by 2100.

The second scenario, which we have called the 2°C scenario, 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, including factors that will shape energy demand, energy mix and pricing. That said, the IEA Sustainable Development Scenario offers valuable 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, it also agrees to pursue efforts to limit the temperature increase even further to 1.5°C. This may need to be considered in future scenario planning.

Lastly, we flag to the reader that the reliability of any scenario analysis or forecast decreases as the forecast period increases. While the IEA World Energy Outlook 2017 provides scenario data out to 2040, in many cases these are timelines beyond those which can be reasonably relied on for business planning purposes. Nonetheless, we recognize the merits in considering their long-term scenarios given the pace of change expected and the longterm commitment required to address climate change.



Underlying Assumptions and Major Drivers of Change in Scenarios

The 2.7°C and 2°C scenarios present different visions of the future, but four broad assumptions underpin both scenarios, influencing, to varying degrees, changes in global resource and energy demand and emissions between now and 2040.

1. The global population grows by 2 billion to reach 9.1 billion in 2040

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

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

4. 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 2017

Scenario Summaries

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 percent 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 11 percent higher in 2040 than in 2016.

Scenario Highlights:

•Under this IEA scenario, oil demand climbs modestly from 94 million barrels a day (mb/d) in 2016 to 104.9 mb/d in 2040.

•Electric vehicles see steady growth with 280 million on the road by 2040, compared to just 2 million today.

•Carbon pricing is slowly adopted by more jurisdictions around the world. But pricing levels remain modest, with average carbon prices ranging from \$24 to \$48 a tonne by 2040.

•The 2016 version of the IEA World Energy Outlook report noted that global steel production expands by 20 percent, reaching nearly 2 billion tonnes in 2040.⁹

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.

Source: IEA World Energy Outlook 2017 New Policies Scenario for projections for oil, coal, carbon pricing and electric vehicles

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.

⁹While the 2017 version of the IEA World Energy Outlook report does not include an equivalent statement we feel it is important to note this aspect of the 2.7°C scenario given its relevance to our steelmaking coal business.



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 energyefficiency 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 percent by 2040, even with a 2 percent 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 more than 20 mb/d lower than today at 72.9 mb/d.
- •Mobility is transformed with autonomous vehicles, ride sharing and 875 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.
- •Steel recycling accelerates and steelmaking coal demand declines by 40 percent by 2040.
- •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 declines slightly by 2040 as increased demand for zinc in agriculture, batteries and alternative alloys is offset by reduced demand from global steel markets.

Source: IEA World Energy Outlook 2017 Sustainable Development Scenario for projections for oil, steelmaking coal, carbon pricing and electric vehicles.

Implications For Teck:

•No existing developed assets are stranded, including Fort Hills, which produced first oil on January 27, 2018.

- •While uncertainty regarding oil prices in this scenario would make it more difficult to make a decision to construct a project like the Frontier oil sands project, once built, Frontier would have relatively low 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.

Energy

Overview of Teck's Energy Business:

Teck is focused on the sustainable development of new sources of energy to meet long-term global demand. Our energy business includes a 20.89 percent interest in the Fort Hills oil sands project as of December 31, 2017 (with Suncor as the contract operator) and full ownership of the Frontier oil sands mine project, as well as other interests in oil sands leases in the Athabasca region of northeastern Alberta.

Fort Hills

- •Fort Hills produced first oil on January 27, 2018.
- •Teck owns 20.89 percent of the project.¹⁰
- Mine life of over 44 years.
- •Nameplate production capacity of 194,000 barrels per day.
- •Teck's share of production will be approximately 14 million barrels a year.

 Greenhouse gas intensity is predicted to be 37.5 kg CO₂-equivalent/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 CO₂ annually to our GHG emissions profile.

Frontier

- · Proposed truck-and-shovel mine located in the Athabasca oil region of northeastern Alberta.
- •The projected mine life is about 41 years.
- •The first production phase is planned to have a capacity of 170,000 barrels of partially de-asphalted bitumen per day, increasing to 260,000 barrels per day at full production.
- Current project costs are estimated at \$20.6 billion.
- •Greenhouse gas intensity is predicted to be about 38.4 kg CO₂-equivalent/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
- •Predicted to add 3.879 million tonnes of Scope 1 CO₂e to our GHG emissions profile at full production.¹¹



Comparing GHG Intensity of the Oil Sands and Other Crude Oils on a Well-to-Wheels Basis kg CO₂e per barrel of refined products

Carbon intensity due to production, transport and refining

Carbon intensity of average barrel refined in U.S.

Source: "Comparing GHG Intensity of the Oil Sands and the Average US Crude Oil, May 2014" published by IHS Energy

Oil Sands Carbon-Competitiveness

This chart compares the projected emission intensity—the amount of GHG emissions produced to extract one barrel of bitumen—of Fort Hills and Frontier with other oil sands projects and oil produced in other jurisdictions. This intensity indicator is influenced by a number of factors, such as the quality of the resource and the processes involved in the hydrocarbon recovery. While oil producers have an important role in improving emissions intensity it is important to put these efforts into context, as 70-80 percent of total emissions on a lifecycle, or well to wheels basis come from combustion of the oil, for example, at the vehicle tailpipe.

¹⁰Teck's ownership interest as of December 31, 2017.

¹¹This estimate includes the potential to exceed the nominal full production rate of 260,000 barrels per day.

In 2005, Teck made its first major investment in the energy business, acquiring an interest in the Fort Hills oil sands project in Alberta's Athabasca region. Since then, global oil demand has climbed higher, from 84 million barrels a day in 2005 to 96 million in 2016. 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.

First oil from Fort Hills was produced on January 27, 2018. Fort Hills, operated by Suncor, has 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. Building on our success as one of the most carbon-efficient miners in the world, our goal is to advance a cost- and carbon-competitive energy business that will help deliver the world the oil it needs throughout the transition to a low-carbon future.

How do the 2.7°C and 2°C scenarios differ when it comes to the future of oil?

The 2.7°C scenario sees a future in which oil demand grows to 104.9 million barrels per day by 2040, an increase of 12 percent from 2016 levels. Under this scenario, the bulk of future investment, some 85 percent, goes to offset declining production from existing fields. But incremental upstream investment is also needed to meet growing oil demand. While oil demand declines in OECD nations, it is more than offset by rising demand from developing nations, such as India. The IEA suggests supply shortfalls may arise in the 2020s, putting upward pressure on oil prices, if today's depressed levels of upstream investment persist much longer.

In contrast, the 2°C scenario sees oil demand peaking by 2020 and then steadily declining to less than 75 mb/d by 2040. The result is a lower average oil price relative to the 2.7°C scenario out to 2040. Under this scenario, the focus of upstream oil investment is purely on replacing declining production from existing fields. This scenario also assumes widespread adoption of rising carbon prices, giving the competitive advantage to low-cost and low-carbon oil producers and energy-producing regions that are early adopters of robust climate policies.

Global Oil Demand and Observed Decline in Current Supply in the 2° Scenario



The observed decline from today's producing fields is much greater than the anticipated decline in oil demand in the $2\,^\circ$ scenario

Source: "World Energy Outlook 2016" published by the International Energy Agency

The difference in oil demand between the two scenarios is largely driven by the transportation sector. Under the 2°C scenario, the world has adopted more stringent fuel efficiency regulations. Advances in technology, policy and consumer demand accelerate the adoption of electric vehicles, displacing more than 9.2 million barrels per day of oil demand by 2040.

In the 2°C scenario, the IEA does not foresee existing oil fields to be at risk of being stranded, as significant capital investment in new fields will be required to replace declining production from existing oil fields. That said, under such a scenario, not all known reserves will be required. For Teck, and other companies with known but undeveloped reserves, this means giving careful consideration to climate change and cost factors in assessing longer-term development opportunities.

Teck's energy business is based in the Canadian oil sands. With lower oil demand and lower average oil prices, can the oil sands compete in a 2°C scenario?

We believe Canada's oil sands will continue to play an important role in meeting global energy demand for decades to come. This is because oil sands projects can be cost- and carbon-competitive. When it comes to costs, oil sands economics are often misunderstood. Oil sands projects, particularly mining projects, do require a high upfront capital investment compared to tight oil projects. But when evaluated on a life cycle basis, oil sands mining projects provide competitive economics.

A key advantage is that oil sands mining projects have low geological risks and will maintain consistent production levels for 40 to 50 years. This results in limited sustaining capital and low operating costs once the significant upfront capital is invested. In contrast, production from shale wells declines rapidly, requiring constant reinvestment to simply maintain production levels, which increases the risk profile over time.

To improve carbon and economic performance, Fort Hills uses a process called Paraffinic Froth Treatment. This treatment produces better quality bitumen that needs less diluent for transportation and less energy and hydrogen to upgrade and refine. An added benefit is this higher quality product can be processed by a wider range of refineries. Other advancements that will foster lower carbon performance include improved use of thermal energy in recovery processes, cogeneration of heat and power and enhanced haul truck fleet maintenance and dispatch systems.

New oil sands projects today are carbon-competitive with alternative sources in North America and elsewhere in the world. Given Canada's globally leading climate policies and the opportunity for technological advancement, we expect further gains in the carbon-competitiveness of oil sands production.

Teck recognizes that global oil market dynamics are changing, including cost structures. Technology has lowered extraction costs in some areas. Yet, many deposits globally will be increasingly expensive to develop as the world works to replace declining production from existing oil fields. Disciplined investment means focusing on oil sands projects in areas with proven reserves and active development that can compete under moderated oil prices and robust carbon prices.

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

Alberta's and Canada's new climate policies are among the most 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.

In terms of the major policies, in 2015, the Government of Alberta announced its Climate Leadership Plan. The plan included:

•A 100 megatonne (MT) annual limit on greenhouse gas emissions from the oil sands.

•An economy-wide carbon tax that rises over time.

•A 45 percent mandated reduction in methane emissions from the oil and gas sector by 2025.

•A commitment to expand renewables and eliminate coalgenerated electricity by 2030.

Alberta is the only energy-producing jurisdiction globally to implement a GHG emissions-cap on oil production. Agreed to by both Canadian and international environmental organizations and some industry leaders, this "carbon budget" is designed to spur innovation to reduce GHG emissions per barrel.

In addition, oil sands operations in Alberta have been covered by a \$15/tonne carbon price since 2007, under the Specified Gas Emitters Regulation. This price was increased to \$20/tonne in 2016, and again to \$30/tonne in 2017. Similar carbon pricing will continue into 2018, though the province is moving to a carbon pricing policy that is based on output-based allocations. Clarity on how Alberta's Climate Leadership Plan will be regulated is expected soon. Given that Alberta is one of few major oil producing jurisdictions with a carbon price, policies are being designed to protect industry competitiveness and guard against carbon leakage. Alberta's new carbon pricing system is being designed to encourage meaningful emissions reductions, while also lowering the average cost of compliance and ensuring that high-performing facilities are rewarded for better climate performance.

The Government of Canada is also implementing policies to ensure a national floor price on carbon that will rise to \$50/tonne by 2022. As Alberta is a signatory to the Pan-Canadian Framework on Clean Growth and Climate Change, we anticipate that they may increase their carbon price to align with the national standard.

Today, Alberta's new oil sands projects are technologically advanced and are carbon-competitive with oil produced in many other jurisdictions. Recent policy changes in Canada will further incentivize oil sands proponents to reduce the carbon footprint of operations, thereby positioning leading oil sands projects to build and sustain a low-carbon advantage.

Based on our current understanding of Alberta regulations being designed for 2018, we anticipate that Fort Hills will pay a \$30/tonne carbon tax in 2018 on the portion of emissions not covered by its output-based allocation. While the Government of Alberta has not finalized the policy implementation details, we expect Fort Hills carbon tax costs will be approximately \$0.28/bbl in 2018.

A 2°C scenario sees carbon prices rising to \$63 a tonne in 2025 and \$140 a tonne in 2040. Under such a scenario, the total carbon costs to Teck for Fort Hills are difficult to predict, as they will fluctuate based on a number of variables, including potentially performance against the sector benchmark and percentage of emissions covered by the output allocation. However, based on its anticipated cost and carbon performance, even with moderated oil prices and robust carbon prices, we expect Fort Hills to remain an attractive and resilient asset in the 2°C scenario.

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: five in British Columbia and one in Alberta.

•Steelmaking coal sales were 26.8 million tonnes in 2017, which accounted for 62 percent of our 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 \$30 per tonne of CO₂.

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

Thermal coal is used to generate electricity to power homes, factories and businesses. Steelmaking coal, sometimes called coking coal or metallurgical coal, is a vital ingredient in the production of steel. Steelmaking coal 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.

About 77 percent of all coal produced globally is thermal coal. While thermal coal will continue to be a part of the energy-mix, readily available alternatives exist today. As a result, under the more ambitious 2°C scenario, thermal coal production is cut in half by 2040 as renewables and natural gas become more dominant sources for power generation. **Unlike thermal coal, there are no large-scale technologies currently available to replace steelmaking coal in the production of virgin steel.** Steelmaking coal is a higher-grade coal used to produce an intermediary product—coke—which is then used in the chemical processes that transform iron ore into steel.

Steel production is currently responsible for 6 to 7 percent of global greenhouse gas emissions. Yet there are limited opportunities for the steel industry to substantially reduce these emissions with currently available technologies. In the coming decades, it is reasonable to expect that new steelmaking technologies may advance that have lower emissions. In addition, other technological advancements may ultimately lower demand for steelmaking coal. Material substitution from other products may drive down steel demand, impacting steelmaking coal markets. At present, few, if any, technologies are emerging to supplant traditional steelmaking processes. Today, about 75 percent of the world's steel is produced in blast furnaces, and about 700 kilograms of steelmaking coal is required to produce one tonne of steel. Electric arc furnaces produce the majority of the rest of the world's steel. These furnaces can be used only to recycle scrap steel and do not use steelmaking coal. A significant portion of the world's steel is already recycled. The World Steel Association estimates global recovery rates at 85 percent for construction, 85 percent for automotive, 90 percent for machinery and 50 percent for electrical and domestic appliances. However, there are significant differences in recycling rates between some global regions. Over the coming decades, the amount of steel available for recycling will increase as more infrastructure, buildings, machines and cars across major economies come to the end of their useful life. At the same time, recycled and virgin steel will be used to build out or replace new infrastructure, buildings, machines and cars, in turn locking up that steel for decades (i.e., limiting it as a supply of recyclable product).

As the steel industry works to advance lower-carbon steel-manufacturing production technologies, our role is to improve the greenhouse gas intensity of the steelmaking coal we produce. While both 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.

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. Teck's steelmaking coal has high strength properties that help to ensure stable and efficient blast furnace operations for its steelmaking customers. 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, potentially commanding a larger price premium over lower grade coals. 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.

Teck is also continually working to ensure the climate resilience of our steelmaking coal assets by enhancing the cost- and carbon-competitiveness of our mines. On the cost side, the cash costs of our steelmaking coal mines have been reduced by 30 percent since 2012.

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.¹² 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 percent 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. We are working to refine our understanding of the emissions associated with rail and ocean transportation. 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 envisioned under the 2°C scenario will also contribute to a more level playing field for companies like Teck who already pay carbon taxes. Today, all of our steelmaking coal operations are covered by a carbon price. The B.C. Carbon Tax covers emissions associated with the production of our steelmaking coal, e.g. for the diesel fuel we consume at our coal mines. Set at \$30 a tonne, it is the highest carbon price paid by a producer of steelmaking coal for any of the major international producers. In 2017, Teck's steelmaking coal business paid a total of \$31.4 million dollars in carbon taxes in B.C. In addition, we paid approximately \$7.7 million in carbon taxes related to the transportation of our product from mine to port. We expect the carbon tax paid by our steelmaking coal operations in both B.C. and Alberta may rise to \$50 a tonne by 2022, in line with Canada's minimum national carbon price. All of these costs are absorbed by our business, with no ability to pass them on to our customers. Many of our steelmaking coal competitors, for example, those in Australia, 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.

Teck believes carbon pricing is the most efficient and effective policy to materially reduce GHG emissions. We are supportive of the efforts of the governments of B.C. and Alberta as they work to refine carbon pricing policies that encourage emissions reductions while also maintaining the global competitiveness of trade-exposed industries to prevent carbon leakage. These efforts are important to ensure Teck's short-term cost-competitiveness relative to other producers operating in jurisdictions with no or lower carbon prices.

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.



Global Coal Production by Type (2016) Million Tonnes

Source: International Energy Agency, CRU

Global Steelmaking Coal Production



Source: World Energy Outlook 2016 published by the International Energy Agency

¹²At this time, it is challenging 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 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.

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

Under the 2.7°C scenario while total demand for steel increases the percentage produced in blast furnaces drops to just over 50 percent according to the IEA, putting downward pressure on the demand for steelmaking coal. The net overall change is a projected 15 percent decline in demand in steelmaking coal by 2040 compared to 2014 levels.

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, steelmaking coal production declines from about 1,000 million tonnes of coal equivalent (Mtce) in 2015 to 600 Mtce in 2040, according to the IEA. Despite this 40 percent overall decline, trade in steelmaking coal remains robust. China sees the largest drop in the share of steelmaking coal mining as it transitions from an industrial to a services economy.

While Chinese steelmaking coal mining and steel production slows, there is growth in steel demand from India, Brazil and parts of Southeast Asia and Africa that lack domestic supplies of steelmaking coal. As a result, even under the 2°C scenario, exporters of high-quality steelmaking coal, such as Teck, benefit from relatively strong demand out to 2040, with an eventual decline of 20 percent off recent peak volumes. The impact of these demand changes will depend on the global supply response.



Copper and Zinc

Teck's Base Metals business delivered just under half of our annual revenues in 2017. 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. Teck is also the world's thirdlargest producer of mined zinc and operates one of the world's largest fully integrated zinc and lead smelting and refining facilities.

Unlike for our Steelmaking Coal and Energy business units, we have not built out detailed scenarios for copper and zinc beyond the high-level considerations outlined in the Climate Related Risks and Opportunities section of this report and in the summaries of our two scenarios. This is because the current scenarios developed by the IEA and other credible third-party organizations do not include sufficient information on potential changes in demand for copper and zinc. Moreover, we felt for the purposes of our own business planning and risk management—and the credibility of our climate-related disclosures—that our initial priority should be on providing a deeper analysis of steelmaking coal and energy.

Despite the lack of information for these commodities within the scenarios, we are actively monitoring research pertaining to copper and zinc demand in a low-carbon economy. With respect to our Base Metals business, our preliminary analysis suggests that a low carbon economy may contribute to greater demand for our metal commodities.

For example, the World Bank published a report in June, 2017, analysing the role of minerals and metals in a low carbon future. In that study—using wind, solar, and energy storage batteries as proxies—they examined "which metals will likely rise in demand to be able to deliver on a carbon-constrained future."¹³ In their analysis, not only did they find an increased demand in copper and 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 these metals.

While this analysis is more limited for copper and zinc, it is clear that both of these metals are key building blocks of our lower-carbon future, both as a company and as a society.

Reducing the Carbon Footprint of Copper Refining

CESL, one of Teck's technology centres, oversees the development of our proprietary hydrometallurgical technology, the CESL Process. Based in Richmond, British Columbia, CESL offers an advanced method for processing copper, copper-gold, nickel-copper, and nickel concentrates, and is especially suited to treat concentrates with complex challenges related to mineralogy and deleterious elements which cannot be processed through conventional treatment routes.

The CESL Process presents an environmentally superior hydrometallurgical alternative to the traditional pyrometallurgical treatment of concentrates (i.e. smelting). Since all of the solution streams are recycled, there are no liquid effluents, and there are greatly reduced emissions of particulates and gasses. As part of funding received for Sustainable Refining Technology from Sustainable Development Technology Canada in 2016, an assessment of the Environmental Benefits of the CESL Process versus traditional technologies was completed by a third party. Results indicated that the CESL Process is capable of producing a superior copper metal product while consuming less fresh water and emitting fewer GHG emissions and no particulates. In a low-carbon economy, the decreased water demands and GHG emissions of the CESL Process further increase the attractiveness of the process for sustainable resource development and materials processing.

¹³Source: The World Bank Group, The Growing Role of Mineral and Metals for a Low-Carbon Future.

Copper and Zinc: Building Blocks of a Low Carbon World

Copper

•Electric vehicles require three to four times as much copper as traditional combustion vehicles.

- •Solar and wind power generation are more copper intensive than traditional thermal power.
- •Technologies, like the internet-of-things, will drive demand for copper-consuming electronics and appliances.
- •Copper is a key element in higher efficiency electrical components that are projected to contribute to millions of metric tons of CO_2 reduction by 2030.

Zinc

- •The corrosion of buildings and infrastructure costs the world economy \$2.2 trillion annually. Zinc coated steel typically lasts 10-times longer than bare steel thus greatly reducing the life cycle carbon impacts and saving money on maintenance and replacement of buildings and structures.
- •The use of zinc coated steel rebar in concrete infrastructure could result in a 2 to 3 fold increase in its lifespan. Teck has fostered innovation in this Continuous Galvanized Rebar process technology.
- •Zinc fertilizer can help improve crop yields, thereby reducing pressures for deforestation, a contributor to climate change.
- •Zinc-air batteries may help accelerate the deployment of renewables by providing reliable energy storage for intermittent sources like wind and solar.
- •Co-products from Teck's zinc production, including indium, germanium and cadmium, are key materials for thin film solar panel technologies.
- •Teck's lead, produced in conjunction with zinc, is used increasingly in stop-start hybrid vehicle batteries and e-bike batteries.



Moving Forward

Teck understands the importance of embedding the realities of climate change into our business strategy and decision-making. And 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. In parallel, as we continue to evaluate the impacts of climate change on our portfolio, we will works towards refining a set of "sign posts" or key indicators—such as fundamental shifts in steelmaking technologies or alternative materials to steel in order to understand the likelihood of various scenarios coming to fruition, or the manner in which the scenarios themselves will change.

This report is Teck's first 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.

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

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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. Forwardlooking 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 forwardlooking 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 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, emission reduction goals, alternative energy goals, GHG emission expectations, 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, the expectation that our Waneta Dam transaction will close, 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, expectation that Teck's steelmaking coal business has a competitive advantage in a low-carbon economy and is well positioned to compete 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 the closing of the Waneta Dam transaction include an assumption that the conditions to closing are satisfied in a timely manner. Assumptions regarding our Fort Hills and Frontier projects include that the projects are completed and operated as designed. Further assumptions regarding those projects, and the risks associated with them, are described in Certain of these risks and other additional risk factors are described in more detail in Teck's Annual Information Form and its quarterly reports and Management's Discussion and Analysis available under Teck's profile at www.sedar.com and www.sec.gov, as well as Teck's website (www.teck.com).

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. 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.