# Our Strategy for Climate Action





# Introduction

# Climate change is real, it is directly influenced by human activity, and it requires decisive global action to address.

At Teck, we believe our company and our industry have an important role to play in helping tackle this global challenge. That includes working to reduce our own emissions as well as advocating for policies that support the world's transition to a low-carbon economy.

We recognize that our activities consume energy and generate significant greenhouse gas (GHG) emissions. This is why Teck has set ambitious targets to reduce our carbon footprint. To date, we have cut our GHG emissions by over 200,000 tonnes and our long-term target is to reduce GHGs by 450,000 tonnes by 2030. At the same time, we know that the metals and minerals we produce are essential to building the technologies and infrastructure necessary to reduce GHGs and adapt to the effects of climate change. For example, renewable energy systems can require up to 12 times more copper compared to traditional energy systems; and steel and the steelmaking coal required to make it is necessary for infrastructure that reduces emissions, such as rapid transit and wind turbines. Continued responsible production of these metal and mineral products is essential to the global effort to combat human-caused climate change.

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. Reducing Our Carbon Footprint

We have set long-term targets to reduce GHG emission and are working to achieve them through innovation, improved efficiency and adoption of low-carbon technologies.



#### 2. Positioning Teck for the 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.



#### 3. Advocating for Climate Action

We support action at all levels to combat climate change and are actively advocating for broad-based, 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 forecasted climate scenarios into project design and mine closure planning.

# **Reducing Our Carbon Footprint**

We are working to shrink our carbon footprint by reducing greenhouse gas emissions associated with our mining and processing activities.

We are focused on continually improving our energy efficiency and reducing emissions through new technologies and process innovations

Since 2011, Teck has reduced GHG emissions by over 200,000 tonnes—the equivalent of taking more than 40,000 cars off the road. We are focused on continuing to work to drive our emissions even lower and have set ambitious targets to further cut emissions and improve energy efficiency at our operations. Our target is to reduce our emissions by 450,000 tonnes by 2030, which would be the equivalent of taking over 95,000 cars off the road.

As a result of our work to date, Teck is now one of the lowest GHG emission-intensity miners in the world. According to data from the International Council of Mining and Metals (ICMM), our steelmaking coal and copper production rank among the lowest for carbon intensity compared to the global mining industry. Carbon intensity is a measure of the GHG emissions generated during production of a given unit of a commodity—eg: the amount of CO2 generated per tonne of copper or steelmaking coal produced.

#### **Climate Action Example:** Partnering for Innovation

Teck is a founding member of Canada's Oil Sands Innovation Alliance (COSIA), which brings together companies to share innovation and research to improve environmental performance in Canada's oil sands, including reducing GHG emissions.

To date, COSIA member companies have shared 814 distinct technologies and innovations that cost almost \$1.3 billion to develop.

Through COSIA, we are able to support improved climate performance in the oil sands, as well as tap into the latest research and advances in GHG reductions as we advance our own oil sands development projects.

#### GHG Emissions Intensity Ranges Among ICMM Member Companies<sup>1</sup>



<sup>1</sup> Source: ICMM Report: The cost of carbon pricing; Teck

#### **Climate Action Example:**

#### Testing lower-carbon LNG Fuel Technologies

As part of our ongoing work to reduce greenhouse gas (GHG) emissions and lower costs, Teck is studying the use of liquefied natural gas (LNG) as a fuel source for our haul trucks. That work has included conducting a recent pilot project with six trucks at our Fording River Operations in southeast BC, converted to use blended LNG/diesel fuel.

If a feasible technology option can be identified, the use of LNG-fueled haul trucks has the potential for significant environmental benefits. LNG produces virtually no particulate or Sulphur dioxide emissions and reduces GHG emissions by up to 20 percent compared to diesel alone.

The Fording River Operations pilot project marked the first use of LNG as a haul truck fuel at a Canadian mine site. Our continued work to explore options for the use of LNG fuel is just one example of our ongoing commitment to exploring new technologies to lower GHG emissions.

930E

Haul truck converted to use blended LNG/diesel fuel as part of a pilot project at Teck's Fording River Operations.

# Positioning Teck to Thrive in the Low Carbon Economy

We are taking steps to remain competitive as the world moves to a low-carbon economy.

Our approach to ensuring Teck remains competitive throughout the shift to a low-carbon economy is focused on ensuring our operations remain efficient and low cost, and having a diversified mix of products to enable us to respond to changing demand.

#### Meeting Changing Demand

As the world transitions to a low 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. At Teck, our diversified mix of products all have a role to play in the low-carbon economy of the future. This puts us in a strong position to adapt to meet changing market demand.

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.

#### Remaining Competitive

We are focused on continuing to reduce costs to ensure our mines remain efficient and low-cost. This gives us increased ability to weather potential carbon-related costs and shifts in demand, while remaining competitive. 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 mining activities.

#### Our mix of metal and mineral products are essential to a low-carbon future.



#### Copper

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



#### Steelmaking Coal

Each wind turbine built requires about 260 tonnes of steel made with 170 tonnes of steelmaking coal



#### Zinc

Zinc is used to protect steel from corrosion, greatly extending the life cycle of items like bridges and automobiles. Steel galvanized with zinc can last for over 100 years without corroding.



#### Energy

World energy consumption is projected to grow by 48% by 2040, with demand to be met by increased use of renewable energy as well as petroleum and natural gas.



# Advocating for Climate Action

# We believe that all sectors of the economy must play a role in tackling the challenge of climate change.

That is why Teck supports implementation of low-carbon technologies and advocates for measures that support society's transition to a lower-carbon economy.

Teck is a signatory of the 2015 Paris Pledge, in support of the Paris Agreement on Climate Change. The Paris Agreement provides a global framework for action on climate change, and targets to hold the increase in the global average temperature to well below 2°C above pre-industrial levels.

We are also actively advocating for policies that reduce emissions, including broad implementation of carbon pricing. We believe that 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.

As part of this advocacy, Teck 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 toward integrating carbon pricing into the global economy. We are also a member of the Council for Clean Capitalism.

### Climate Action Example:

Supporting Renewable Energy

Teck is supporting development of cleaner, alternative energy sources as part of our commitment to climate action. We have set a target of sourcing or developing 100 megawatts of alternative energy generation by 2030.

As part of that work, Teck supported development of the SunMine—Western Canada's largest solar power facility and the first owned and operated by a municipality. SunMine was built at the reclaimed site of the former Sullivan Mine, previously operated by Teck.

Teck provided use of the land and site infrastructure as well as a \$2 million contribution towards construction of the SunMine, which now provides enough clean electricity to power about 200 homes.

Teck also partnered to construct the Wintering Hills Wind Power Facility in Alberta, Canada. The 88-megawatt facility produces enough clean electricity to power about 35,000 homes.

#### Carbon Leakage

Teck advocates for carbon pricing policies that maintain the global competitiveness of trade-exposed industries in order to prevent 'carbon leakage'. Carbon leakage refers to when GHG emissions move from one jurisdiction to another as a result of differences in carbon prices. When a jurisdiction has a carbon price that is higher than others, the additional costs can reduce the competitiveness of emissions-intensive, trade-exposed industries. Industry activity—and the associated emissions—may then move to jurisdictions with a lower price on carbon as a result. Carbon leakage can have the double negative effect of rewarding countries that fail to take action on climate change with jobs and investment, while also increasing overall emissions. Most jurisdictions that have carbon pricing systems have also developed policies to address carbon leakage and ensure that domestic industries remain competitive.

#### **Climate Action Example:** Supporting Carbon Pricing

Teck is one of the most experienced mining companies globally when it comes to incorporating carbon pricing into our business and 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.

In British Columbia, Canada, our Highland Valley Copper and Trail operations and five Elk Valley Steelmaking Coal mines are all covered by the B.C. Carbon Tax—which has been described as one of the most comprehensive and progressive carbon tax systems in the world. This tax regime has been in place since 2008 and currently sets a price of \$30 per tonne of CO2.

Our sixth steelmaking coal operation is located in Alberta, Canada, and is covered under that province's intensitybased levy, currently at \$20 per tonne of CO2.

We believe that as the world increasingly moves towards broader carbon pricing, in addition to helping reduce emissions, it will contribute to a more "level" playing field for companies like Teck who already pay carbon tax. Further, it will provide a competitive advantage for companies that can produce the lowest carbon-intensity products, as global demand for materials with a lower carbon footprint increases.



#### Operations

- Copper
  Steelmaking Coal
- Zinc

Dark blue areas are covered by comprehensive carbon pricing mechanisms—and include eight of Teck's 12 operations.

#### End Use Emissions

We recognize that the end use of a number of our products by industry or consumers generate GHG emissions. For example, steelmaking coal is required to make steel which – while essential for building green infrastructure like transit—is an emissions-intensive process. We are also advancing projects that will produce oil, a fossil fuel.

We support efforts by governments and industry to improve efficiency and reduce emissions associated with the end use of products like steelmaking coal and oil. We believe policies such as broad-based carbon pricing are the most effective way to incentivize further reductions in end-use emissions.

We report on downstream GHG emissions as part of our annual Sustainability Report and through our participation in the Carbon Disclosure Project.

# Adapting to the Physical Impacts

#### We are taking steps to guard against the future impacts of climate change.

Our primary focus is on taking action now to limit climate change by reducing emissions and advocating for climate action strategies; however, we recognize that ongoing changes to climate could pose a potential physical risk to our mining operations and related infrastructure, such as transportation systems.

These risks could be in the form of increased temperatures, changes in precipitation, changes in freshwater levels or increases in 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—in order to ensure our sites remain resilient as the climate changes.

#### 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





Teck Resources Limited

For more information on Teck's approach to climate action, go to **www.teck.com/responsibility** 

**Teck Resources Limited** Suite 3300, 550 Burrard Street Vancouver, BC Canada V6C 0B3