

# Climate Change



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From wildfires to flooding to extreme heat events and droughts, the impacts of climate-related weather events were felt around the world in 2021. Calls for action on climate change continued to grow, with the World Economic Forum's 2021 Global Risks Report identifying climate action failure as the most impactful long-term risk facing the world.<sup>8</sup> Further, the sixth assessment report from the Intergovernmental Panel on Climate Change (IPCC) signals that climate change is widespread, rapid and intensifying, and predicts that, without drastic action, average global warming of 1.5°C will be reached before 2040.<sup>9</sup>

The International Energy Agency's Net Zero by 2050 report shows that the pathway to achieving a net-zero emissions energy grid is narrow but still achievable, requiring rapid deployment of clean energy technologies.<sup>10</sup> The metals and minerals that the mining industry produces are essential to these clean energy and decarbonization technologies, and therefore are a key part of the global transition to a low-carbon economy. For example, global copper demand for alternative energy sources is expected to jump from 2.1 million tonnes in 2020 to 4.3 million tonnes in 2030.<sup>11</sup> In 2021, many companies in the mining industry recognized this opportunity to not only contribute to clean technologies, but to also use these technologies to reduce their own emissions, and renewed their commitments and action towards decarbonizing their production processes.

In early 2022, we updated our climate strategy and goals. Our long-term strategic priority to achieve net-zero emissions at our operations by 2050 now includes a goal that focuses on achieving net-zero Scope 2 emissions by 2025, replacing our goal of achieving 100% clean

electricity in Chile by 2030. In addition, we announced our ambition to achieve net-zero Scope 3 emissions by 2050 with supporting short-term goals.<sup>12</sup> In 2021, we continued to work towards our goals, and made progress in several areas, including advancing our Carbon-Reduction Technology Roadmap, which will guide the creation of site-level net-zero plans. We also released our TCFD-aligned Climate Change Outlook 2021 Report to share our detailed approach to, and management of, climate change risks and opportunities.

Teck sites continued to experience the physical impacts of climate change through the past year. The record 2021 British Columbia wildfire season resulted in temporary impacts at our Highland Valley Copper and Trail operations. In the fall and winter seasons, heavy rain, flooding and mudslides disrupted the rail service between our steelmaking coal operations and west coast terminals.<sup>13,14,15</sup> We are taking into account the increased frequency of extreme weather events and working to incorporate climate change scenarios and vulnerability assessments into project design and evaluation, as well as at our existing operations.

## GRI Indicators and Topic Boundary

201-2, 302-103, 302-1, 302-3, 302-4, 305-103, 305-1, 305-2, 305-3, 305-4, 305-5

This topic is considered one of the most material by our shareholders, local communities, regulators and society in relation to Teck's sites, power providers, service providers and customers.

## How Does Teck Manage This Topic?

Information about how we manage greenhouse gas emissions and energy use, including relevant policies, management practices and systems, is available for [download on our website](#).

<sup>8</sup> The Global Risks Report, World Economic Forum, 2021. <sup>9</sup> IPCC News Release, Climate change widespread, rapid, and intensifying, IPCC, 2021. <sup>10</sup> Net Zero by 2050, International Energy Agency, 2021. <sup>11</sup> Bloomberg New Energy Finance, 2021. <sup>12</sup> Scope 1 (direct) GHG emissions are those that occur from energy sources that are owned or controlled by the company, Scope 2 (indirect) GHG emissions are those that occur from the generation of purchased electricity consumed by the company and that physically occur at the facility where electricity is generated, Scope 3 emissions are other emissions that arise from sources owned or controlled by other entities within our value chain, such as those arising from the use of our products and the transportation of materials that we purchase and sell. <sup>13</sup> Teck News Release: Temporary Suspension of Highland Valley Copper Operations Due to Evacuation Order, Teck, 2021. <sup>14</sup> Teck News Release: Teck Reports on Wildfire Smoke Impact on Trail Operations, Teck, 2021. <sup>15</sup> Teck News Release: Teck Provides Update on Heavy Rain Impacts in B.C., Teck, 2021.

## 2021 Highlights

Announced an agreement with Caterpillar Inc. to work towards deploying **30 zero-emissions large haul trucks** at Teck mining operations

Announced an agreement with shipping provider Oldendorff Carriers to use **energy-efficient eco-bulk carriers to ship a portion of our steelmaking coal** from Vancouver ports to international destinations

Adopted zero-emissions alternatives for transportation by displacing the equivalent of **32 internal combustion engine (ICE) vehicles**

Published the **Teck 2021 Climate Change Outlook Report** aligned to the [Task Force on Climate-related Financial Disclosures \(TCFD\)](#) recommendations

First full year of **100% renewable energy use at CdA** approximately 200,000 tonnes of greenhouse gas (GHG) emissions

**Decreased our carbon intensity by 5%**, in line with achieving our 2030 carbon intensity target

## Our Performance in Climate Change in 2021

**Our Targets and Commitments** Teck is committed to climate action, as outlined in our [Climate Change Policy](#). The following table summarizes our performance against our sustainability strategy and goals for climate change.

Sustainability Strategy Goals	Status	Summary of Progress in 2021
Strategic Priority: Achieve net-zero emissions across our operations by 2050.		
<b>Goal:</b> Reduce the carbon intensity of our operations by 33% by 2030.	On track	Advanced the development of a Carbon-Reduction Technology Roadmap, which will be used to inform site-level net-zero plans.
<b>Goal:</b> Achieve net-zero Scope 2 emissions by 2025.	On track	Progressed our Carbon Capture, Utilization and Storage (CCUS) workplan, including evaluating pilot project options. 92% of electricity procured in Chile was from renewable energy.
<b>Goal:</b> Accelerate the adoption of zero-emissions alternatives for transportation by displacing the equivalent of 1,000 internal combustion engine (ICE) vehicles by 2025.	On track	Participated as a patron in the Charge On Innovation Challenge, a global initiative for technology innovators to develop concepts for large-scale haul truck electrification systems.  Announced an agreement with Caterpillar Inc. to work towards deploying 30 zero-emissions large haul trucks at our mining operations.  Expanded our electric crew bus pilot at our Elk Valley Operations, and initiated an electric passenger bus pilot at Carmen de Andacollo Operations (CdA).  Evaluated multiple zero-emissions options for haulage, including battery-electric and hydrogen cell vehicles.

Sustainability Strategy Goals	Status	Summary of Progress in 2021
Strategic Priority: Ambition to achieve net-zero Scope 3 emissions by 2050.		
<p><b>Goal:</b> Support partners in advancing GHG reduction solutions capable of reducing the global carbon intensity of steelmaking by 30% by 2030</p>	On track	<p>Announced a partnership with MEDATech to pilot a fully electric on-highway transport truck to haul copper concentrate, marking the first use of a battery-electric truck to haul copper concentrate worldwide.</p>
<p><b>Goal:</b> Partner with our customers and transportation providers to establish low-emissions supply chain corridors for the transportation of our steelmaking coal and support a 40% reduction in shipping emission intensity by 2030 for shipping we contract.</p>		<p>Announced an agreement with shipping provider Oldendorff Carriers to use energy-efficient eco-bulk carriers to ship a portion of our steelmaking coal from Vancouver ports to international destinations.</p>

## Performance Metrics

### Indicator

Absolute Scope 1 and Scope 2 GHG emissions<sup>(1)</sup>



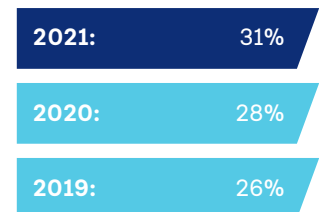
### Indicator

GHG/t copper equivalent<sup>(2)</sup>



### Indicator

Energy use from non-carbon-emitting sources



(1) See page 23 for definitions of Scope 1 and Scope 2 emissions.

(2) 2019–2021 performance values were determined by using average commodity prices from 2018–2020 to convert to copper equivalent. This approach is taken to allow for consistent evaluation against our performance in 2020, the baseline year for our carbon intensity target.

## Teck's Climate Strategy Framework

To achieve net-zero emissions across our operations by 2050, we have set out an initial roadmap — with corresponding 2025 and 2030 goals — to achieve net-zero by first avoiding emissions altogether where possible or, if not possible, eliminating or minimizing emissions. This will involve looking at alternative ways of moving materials at our mines, using cleaner power sources and implementing efficiency improvements, among other measures.

We identify and evaluate climate-related risks and establish management actions to minimize risks and maximize

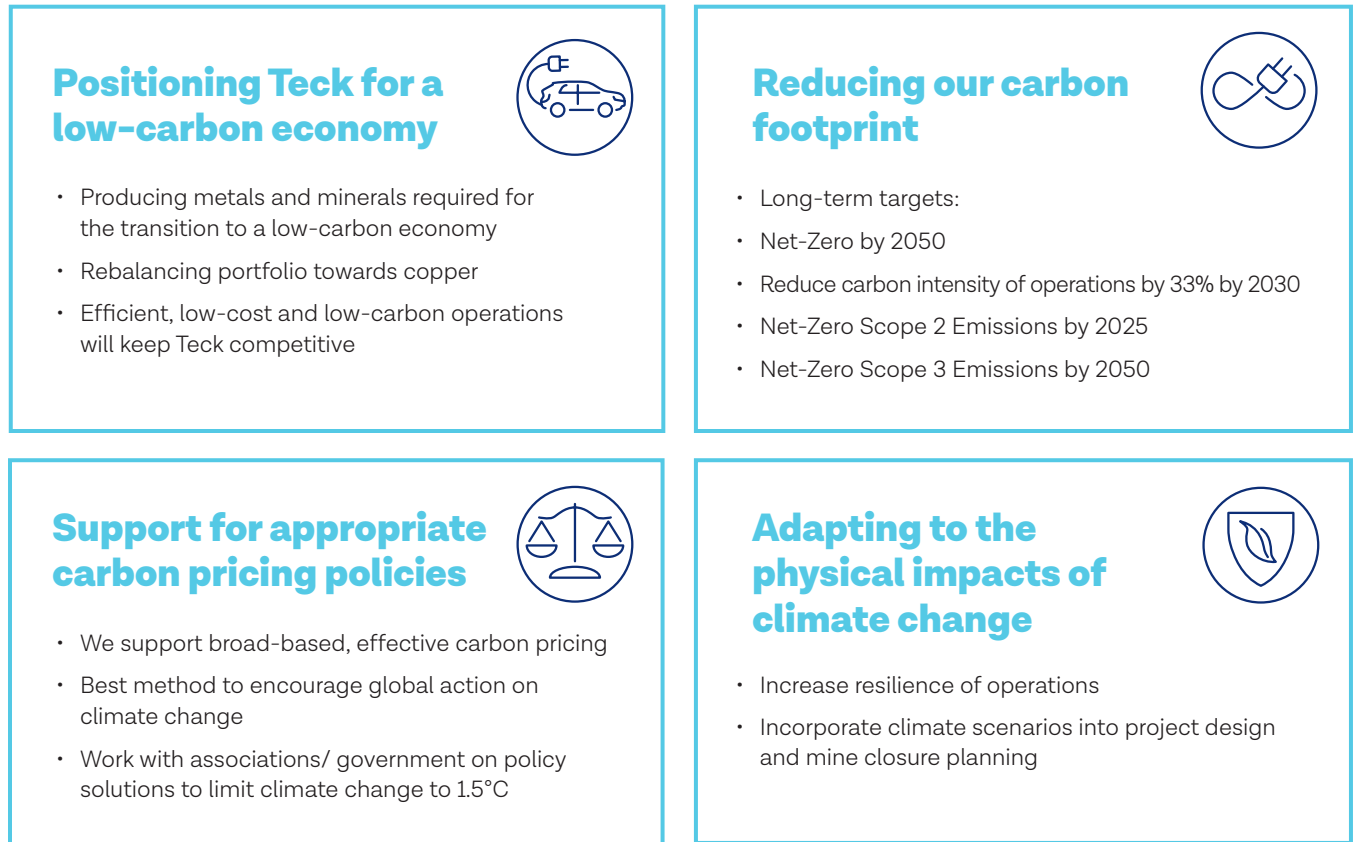
opportunities. To manage such risks and opportunities, we use a four-pillar framework to guide our strategy (Figure 3).

In early 2022, we updated our climate strategy and goals to encompass both our own operations and our value chain impacts. Steel will continue to be an essential building block in a low-carbon economy. New technologies, many of which are yet to be developed and commercialized, will be required to ensure that emissions from steel production remain low. More than 50% of our steelmaking coal sales are made to customers who have made public commitments to

be net-zero by 2050 or sooner, and we expect this trend to increase over time. While a clear path to net-zero emissions in the steel sector is not yet present, we believe we can support this transition. As such, we announced our ambition to achieve net-zero Scope 3 emissions by 2050 with supporting short-term goals. We also announced a new

broader goal that focuses on achieving net-zero Scope 2 emissions by 2025, which replaced our goal of achieving 100% clean electricity in Chile by 2030. This reflects our commitment to decarbonize at an accelerated pace across our operations.

**Figure 3: Teck’s Four-Pillar Climate Action Framework**



**Case Study: Bringing Mobile Charging to the East Kootenays**

Teck continues to work closely with partners on a range of sustainability initiatives to support local communities in the Elk Valley. In the summer of 2021, we worked with Portable Electric and Community Energy Association to launch Canada’s largest clean-energy, mobile electric charger unit in the East Kootenays. In addition to being able to charge multiple electric vehicles (EVs) simultaneously, the charger offers a range of unique features. It can power a broad range of applications,

including farmers’ markets, concerts, festivals, e-bikes and much more; it’s silent and emissions-free, making it ideal for closed spaces and natural settings; and it can be recharged in a number of innovative ways, including through an EV station or solar generation. Most importantly, it will provide an opportunity to deepen engagement with the public on the future of low-carbon transportation. Read the full case study at [teck.com/news/stories](https://teck.com/news/stories).

## Teck's Roadmap to Net Zero

We have a strong track record of taking action to reduce our carbon footprint and improving energy use at our operations. Teck's progress on reducing carbon emissions and supporting climate action to date includes:

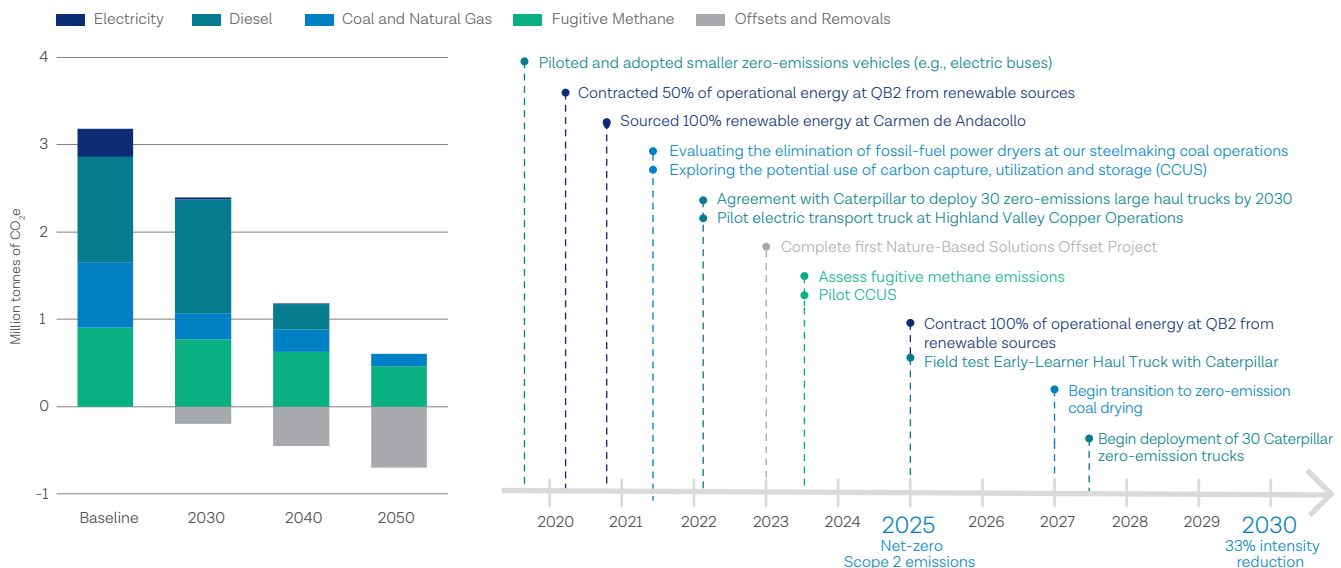
- 96% of all electricity use sourced from renewable, zero-carbon power sources
- Among the world's lowest carbon intensities for our steelmaking coal, copper, and refined zinc and lead production<sup>16</sup>
- Signatory to the Paris Pledge for Action and member of the Carbon Pricing Leadership Coalition, actively advocating for a global price on carbon
- Increasing transparency on climate disclosure by formally supporting the TCFD, reporting annually to the Carbon Disclosure Project (CDP) and engaging with investor organizations such as Climate Action 100+
- Sourcing 100% energy at CdA starting in 2020, which eliminates approximately 200,000 tonnes of GHG emissions annually
- Sourcing over 50% of operational energy at Quebrada Blanca Phase 2 (QB2) project from renewable sources,

starting in 2022, avoiding approximately 800,000 tonnes of GHG emissions annually

- Costing carbon pricing into the majority of our business since 2008 and managing carbon exposure; six of our nine active operations in 2021 were covered by carbon pricing
- Collaborating with industry partners, equipment manufacturers and other suppliers on zero-emission mining fleets
- Participated as a patron in the Charge On Innovation Challenge, a global initiative for technology innovators to develop concepts for large-scale haul truck electrification systems

For Teck, four major areas of emissions present opportunities for decarbonization: power supply, mobile equipment, stationary combustion and process emissions, and fugitive methane emissions. To decarbonize these emission sources and ultimately achieve our goal of net-zero, we are prioritizing activities to deliver cost-competitive reductions, setting ourselves on the path to tackle our most material sources of emissions first. We are actively evaluating existing solutions and monitoring emerging technologies to determine the current and future viability of the various options.

Figure 4: Our Pathway to Net-Zero by 2050<sup>(1)</sup>



(1) See Cautionary Note on Forward Looking Statements regarding uncertainties associated with future decarbonization actions.

In 2021, we progressed work in a number of areas. On mobile equipment emissions, in 2021 we continued to advance projects to assess the viability of multiple decarbonization technologies such as zero-emissions options for haulage, including battery-electric and hydrogen fuel cell vehicles. We initiated a new electric crew bus initiative at CdA and expanded our existing electric bus pilot in the Elk Valley. We also collaborated with industry partners, equipment manufacturers and other suppliers on zero-emission mining fleets, including announcing a zero-emissions haul truck partnership with equipment manufacturer Caterpillar. We plan to progress through a multi-phased approach that includes developing, piloting and deploying 30 zero-

emission vehicles, including Cat 794 ultra-class trucks, beginning in 2027. We anticipate initially deploying zero-emissions trucks in our Elk Valley steelmaking coal operations in B.C., Canada. Our operations in B.C. are already powered by a 98% clean electricity grid, making it an ideal location to introduce one of Canada's first zero-emissions large haul truck fleets, with options for trolley-assist technology.

On process emissions, we progressed a Carbon Capture, Utilization and Storage (CCUS) workplan, including expansion of our own internal capabilities and understanding of CCUS, engagement with customers and evaluation of a potential CCUS pilot at Trail Operations.

<sup>16</sup> Skarn Associates, 2019.

## Technology and Innovation

In 2019, with funding support from Teck's Ideas at Work innovation fund, Teck piloted two electric buses for crew transportation at our Greenhills and Fording River operations. In 2020, Teck purchased two more pit buses for our Elkview Operations, which were funded 50% by the Government of British Columbia's CleanBC program, with the remainder by the *Ideas at Work* fund. In 2021, Greenhills and Fording River were each awarded CleanBC funding for two additional buses each, to be received in 2022. We have also upgraded the electrical infrastructure at the Elkford Bus Depot, with partial funding from CleanBC, to accommodate four more buses in the north Elk Valley area. Through these initiatives, we are gaining a better understanding of the opportunities and challenges of converting our fleet to electric vehicles. The results to date are promising, showing that, despite the higher upfront cost, electric

buses result in significant cost and emissions savings over their operating life.

In 2021, Teck also participated in the Charge on Innovation Challenge — a global, collaborative initiative to identify and advance innovative charging solutions for battery-electric trucks of the future. The Challenge supports technology innovators to develop concepts for large-scale haul truck electrification systems to significantly reduce diesel consumption and emissions from surface mine vehicles.

Another step forward for fleet electrification in 2021 was the collaboration with Caterpillar to develop and test zero-emission haul trucks. We will field test their first pre-commercial haul trucks from 2024, with production units available from 2027.

## Our GHG Emissions in 2021

As shown in Figure 5, Scope 1 (direct) GHG emissions are those that occur from energy sources that are owned or controlled by the company. Scope 2 (indirect) GHG emissions are those that occur from the generation of purchased electricity consumed by the company and that physically occur at the facility where electricity is generated.

In 2021, our total GHG emissions (Scope 1 and Scope 2), as carbon dioxide equivalent (CO<sub>2</sub>e), were 2,938 kilotonnes (kt), compared to 2,861 kt in 2020. Of those totals, our direct (Scope 1) GHG emissions were 2,851 kt in 2021, compared to 2,639 kt in 2020. We estimate our indirect (Scope 2) GHG emissions associated with electricity use for 2021 to be 87 kt,

or approximately 3% of our total emissions, a 60% decrease compared to 2020.

Our largest source of Scope 1 emissions is from fuel consumed by mobile equipment. In the past, the majority of our Scope 2 emissions were from our CdA and Quebrada Blanca (QB) operations, as the electricity supply in Chile was historically based on higher proportions of fossil fuels. We have taken action to reduce these emissions by shifting towards renewable electricity, which reflects a significant decrease in our Scope 2 emissions. Elsewhere, our indirect emissions were relatively small, as our operations in B.C. obtain the majority of their electricity from hydroelectric generation.

**Table 9: Total Emissions (kilotonnes CO<sub>2</sub>e)<sup>(1),(2)</sup>**

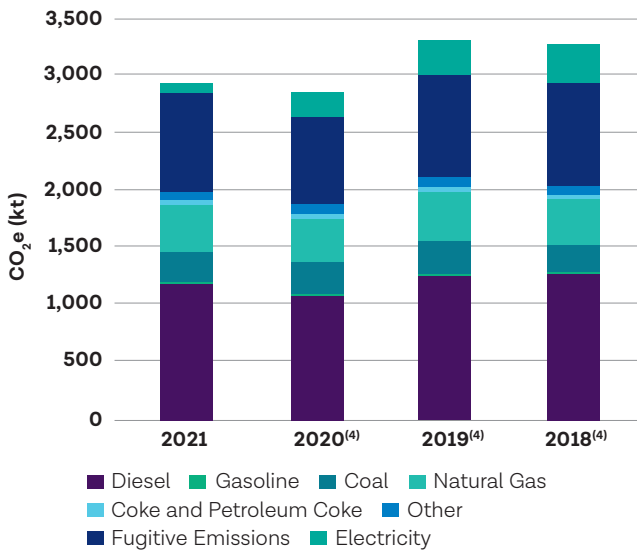
	2021	2020	2019	2018
Total Emissions — Direct (Scope 1)	2,851	2,639 <sup>(3)</sup>	3,011 <sup>(3)</sup>	2,935 <sup>(3)</sup>
Total Emissions — Indirect (Scope 2)	87	222 <sup>(3)</sup>	299 <sup>(3)</sup>	340 <sup>(3)</sup>
Total Emissions (Scope 1 + Scope 2)	2,938	2,861 <sup>(3)</sup>	3,310 <sup>(3)</sup>	3,275 <sup>(3)</sup>
Total Emissions — Scope 3 (Use of coal product sold)	69,000	64,000	73,000	76,000

(1) Teck's quantification methodology for our Scope 1 and Scope 2 emissions is aligned with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard.

(2) Emissions are stated on a CO<sub>2</sub>e basis, which is inclusive of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, PFCs, SF<sub>6</sub> and NF<sub>3</sub> as appropriate.

(3) Figures have been restated due to changes in third-party emission factors. See our [Sustainability Performance Data](#) Spreadsheet for the full data set.

**Figure 5: Scope 1 and Scope 2 GHG Emissions by Fuel Type<sup>(1),(2),(3)</sup>**



- (1) For electricity emissions in Canada, the emission factors are based on the most recent version of the Canadian National Inventory Report.
- (2) Fugitive emissions from our coal operations (i.e., estimated methane release) are captured as direct emissions. For fugitive emissions, the emission factors are based on the most recent version of the Canadian National Inventory Report.
- (3) Emissions are stated on a CO<sub>2</sub>e basis, which is inclusive of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, PFCs, SF<sub>6</sub> and NF<sub>3</sub> as appropriate.
- (4) Figures have been restated due to changes in third-party emission factors. See our Sustainability Performance Data Spreadsheet for the full data set.

### Scope 3 Emissions and Supporting Emissions Reductions in Our Value Chain

Scope 3 emissions are other emissions that arise from sources owned or controlled by other entities within our value chain, such as those arising from the use of our products and the transportation of materials that we

purchase and sell. In 2021, our most material Scope 3 emissions were 69,000 kt, which were from the use of our steelmaking coal product by our customers.

We recognize that, to achieve global GHG reductions that limit climate change to 1.5°C, action will be required not only by Teck but within our value chain as well. In early 2021, the Board approved an updated Climate Change Policy that established a commitment to work with our customers and transportation providers to reduce emissions downstream of our business. We are evaluating additional opportunities to support our value chain in reducing their emissions. Teck is currently in the process of setting a Scope 3 target aligned with the new position statement from the International Council on Mining and Metals (ICMM) on accelerating action on Scope 3 GHG emissions.

In 2021, we continued to support our transportation providers to reduce emissions, including advancing a pilot of an electric concentrate truck at our Highland Valley Copper Operations. See our case study on ‘Partnering to Reduce Greenhouse Gas Emissions in our Supply Chain’ for details on our partnership with shipping provider Oldendorff Carriers.

We are also a member of the ResponsibleSteel initiative, the steel industry’s first global multi-stakeholder standard and certification initiative. The standard incorporates considerations around the GHG emissions intensity of inputs to the steelmaking process and around the steelmaking process itself.

### Case Study: Partnering to Reduce Greenhouse Gas Emissions in our Supply Chain

Part of our climate strategy is our commitment to working with transportation providers to reduce emissions downstream of our business, which are also referred to as Scope 3 emissions. However, addressing those emissions can be a major challenge for businesses, as they occur outside of an organization’s management control. In 2021, Teck partnered with Oldendorff Carriers in an innovative initiative to use energy-efficient bulk carriers for shipments of Teck steelmaking coal from the Port of Vancouver to

international destinations, reducing CO<sub>2</sub> emissions in our steelmaking coal supply chain. This industry-leading initiative estimates a CO<sub>2</sub> emissions reduction of 30%–40% for shipments handled by Oldendorff. As Teck works to set a Scope 3 emissions reduction target, this project, along with a number of other initiatives with our customers, transportation providers and industry associations, helps us work towards our commitment to reducing value chain emissions. Read the full case study at [teck.com/news/stories](https://teck.com/news/stories).

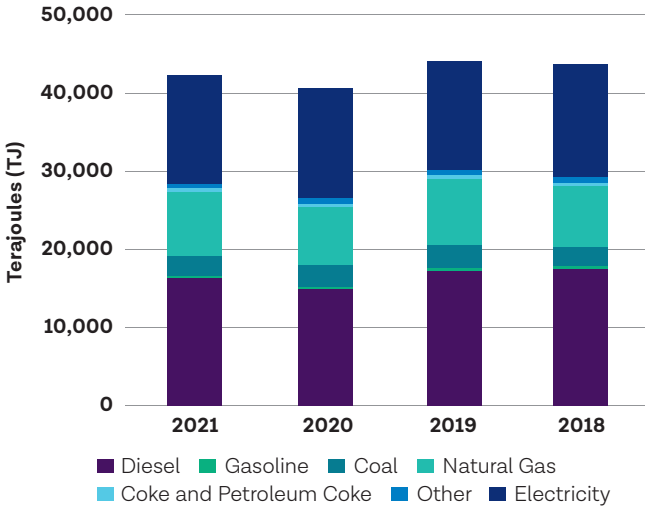


# Positioning Teck to Thrive in the Low-Carbon Economy

## Energy and Carbon Performance

In 2021, we consumed a total of 42,379 terajoules (TJ) of energy (i.e., electricity and fuels), as compared to 40,766 TJ in 2020, as shown in Figure 6.

**Figure 6: Energy Consumption by Type<sup>(1)</sup>**



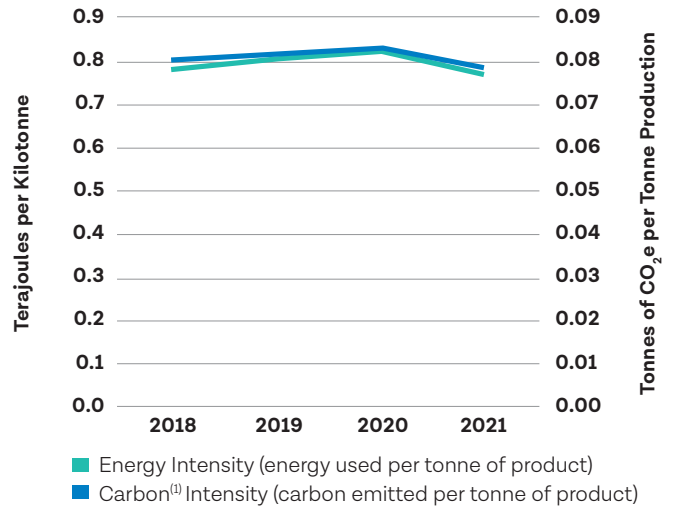
(1) Other includes propane, waste oil, fuel oils and other process fuels.

In 2021, approximately 31% of our energy requirements (i.e., electricity and fuels) were supplied by non-carbon-emitting sources, primarily hydroelectricity, compared to 28% in 2020. Of our total electricity consumption in 2021, 96%, or 13,318 TJ, was from renewable energy sources.

In Figures 7 to 13, we outline our energy intensity, or the amount of energy used per tonne of product, and the carbon intensity. We also present our carbon intensity per tonne of product in comparison to other producers, based on research by Skarn Associates. Per this research, we are among the world's lowest carbon intensities for our copper, refined zinc and lead, and steelmaking coal production.

Given the breadth of different commodities produced by diversified resource companies, GHG emissions performance may also be reported on a copper equivalent basis, where all products are converted to a copper equivalent to allow for comparability across companies. As shown in Figure 13, in 2021, Teck's carbon intensity was 2.5 t CO<sub>2</sub>e/t Cu Eq. Our goal is to continue to improve the carbon intensity of our operations and future projects.

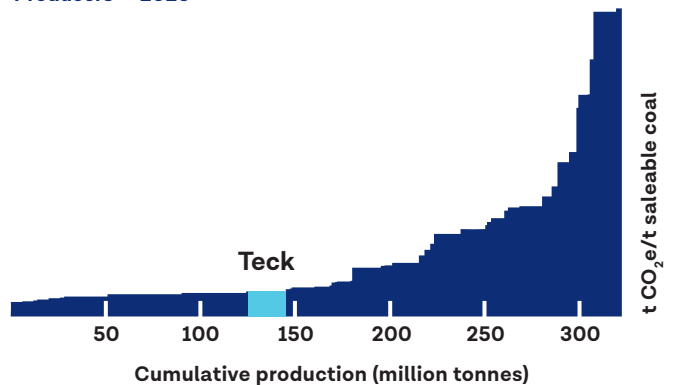
**Figure 7: Energy and Carbon Intensity for Steelmaking Coal Production**



(1) Carbon intensity includes Scope 1 and Scope 2 emissions and is stated on a CO<sub>2</sub>e basis, which is inclusive of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, PFCs, SF<sub>6</sub> and NF<sub>3</sub> as appropriate.

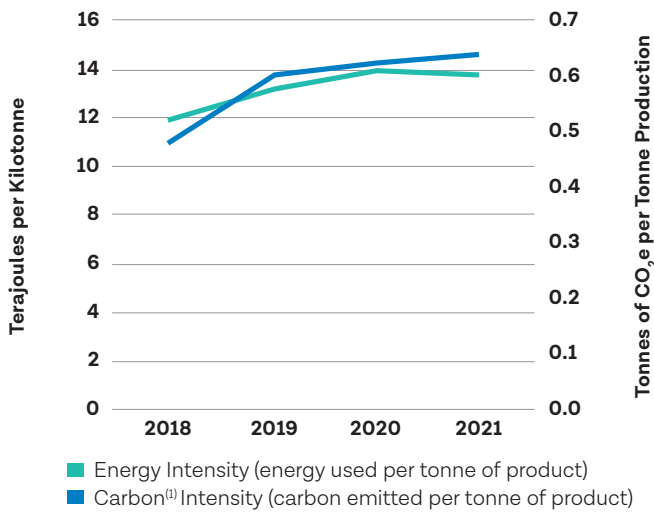
Energy intensity for the production of steelmaking coal decreased while carbon intensity did not change in 2021 (Figure 7). The change in energy intensity is primarily a result of increased efficiency in coal processing. Elkview Operations set a new production record in 2021, with its first full year of operations since its plant expansion to 9.0 million tonnes per annum.

**Figure 8: CO<sub>2</sub> Coal Intensity Curve — Teck Compared to Other Producers — 2020<sup>(1)</sup>**



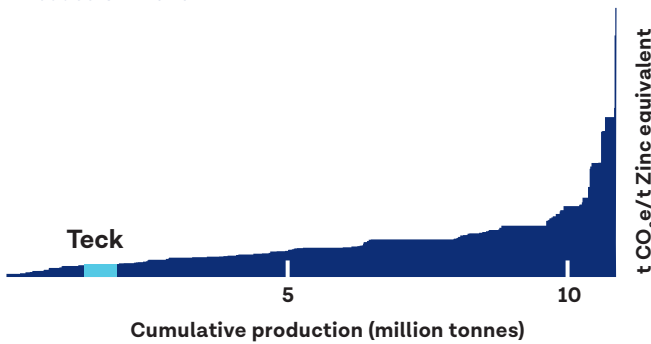
(1) Skarn Associates Limited, 2020.

**Figure 9: Energy and Carbon Intensity for Zinc and Lead Production**



(1) Carbon intensity includes Scope 1 and Scope 2 emissions and is stated on a CO<sub>2</sub>e basis, which is inclusive of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, PFCs, SF<sub>6</sub> and NF<sub>3</sub> as appropriate.

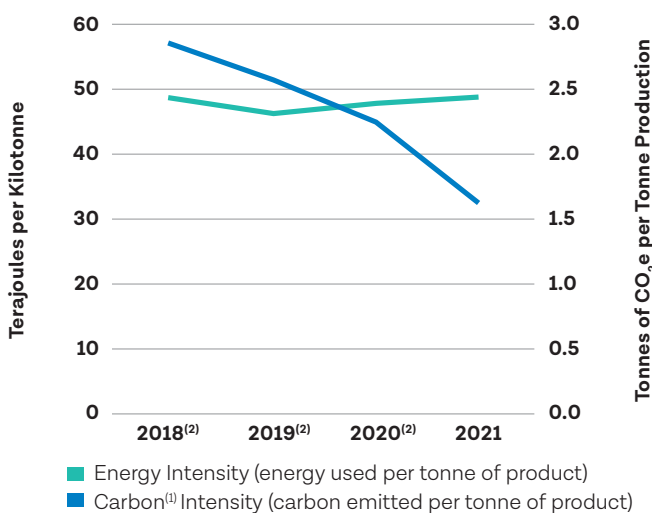
**Figure 10: CO<sub>2</sub> Zinc Intensity Curve – Teck Compared to Other Producers – 2020<sup>(1)</sup>**



(1) Skarn Associates Limited, 2020.

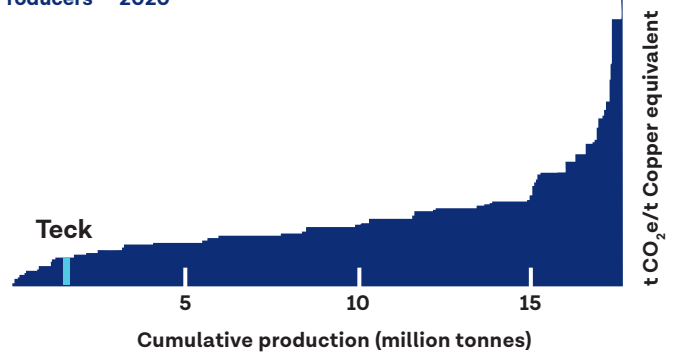
Energy intensity for the production of zinc and lead did not change significantly in 2021, while carbon intensity increased (Figure 9). This change is primarily due to a maintenance-related increase in Scope 2 emissions at Trail Operations.

**Figure 11: Energy and Carbon Intensity for Copper Production**



(1) Carbon intensity includes Scope 1 and Scope 2 emissions and is stated on a CO<sub>2</sub>e basis, which is inclusive of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, PFCs, SF<sub>6</sub> and NF<sub>3</sub> as appropriate.  
 (2) Figures have been restated due to changes in third-party emission factors.

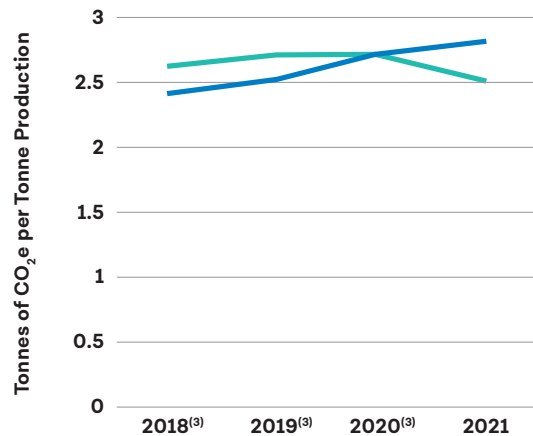
**Figure 12: CO<sub>2</sub> Copper Intensity Curve – Teck Compared to Other Producers – 2020<sup>(1)</sup>**



(1) Skarn Associates Limited, 2020.

Energy intensity for the production of copper increased in 2021, while the carbon intensity for the production of copper decreased (Figure 11). The increase in energy intensity is attributed to lower copper grades at CdA and at QB, which was operating in the final phase of production pending the start of QB2. The significant reduction in carbon intensity is due to an increase in the amount of renewable energy used in our Chilean operations.

**Figure 13: Teck Carbon Intensity on a Copper Equivalent<sup>(1)</sup> Production Basis**



■ Carbon<sup>(2)</sup> intensity (carbon emitted per tonne of copper equivalent) – three-year trailing average  
 ■ Carbon<sup>(2)</sup> intensity (carbon emitted per tonne of copper equivalent) – 2018–2020 average pricing

(1) Only the primary commodities we report on – i.e., steelmaking coal, copper and zinc – from Teck-operated mines are included within the equivalency calculation. Lead has been excluded.  
 (2) Carbon intensity on a copper equivalent basis is presented in two manners as shown in Figure. The three-year trailing average reflects our historical reporting practice and includes different commodity prices to convert each year's performance. For example, the 2021 value in the three-year trailing average would use 2019–2021 pricing averages, whereas the 2020 value would use 2018–2020 pricing averages. This reflects how some external groups assess carbon performance. We have also included carbon intensities using the 2018–2020 pricing averages across all performance years, as this is the pricing used to establish our 2020 baseline, against which our 2030 targets are being assessed. We have fixed the commodity pricing for the copper equivalent calculation to ensure consistent accounting over time (from our baseline year to our target year).  
 (3) Figures have been restated due to changes in third-party emission factors.

Figure 13 sets out Teck's carbon intensity, which includes total Scope 1 and 2 emissions as reported above against a tonne of copper equivalent. We have used this metric – intensity per tonne of copper equivalent – in order to provide a single carbon intensity metric for the organization as a whole. Carbon equivalency was calculated two ways; 1) using a three-year commodity price average and 2) using 2018–2020 pricing averages across all performance years as this is the pricing used to establish our 2020 baseline, against which our 2030 targets are being assessed.

## Carbon Pricing and Advocating for Climate Action

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. In 2021, we continued to advocate for carbon pricing policies that maintain the global competitiveness of trade-exposed industries to prevent carbon leakage – which is when GHG emissions move from one jurisdiction to another as a result of differences in carbon prices. Currently, all of our steelmaking coal operations are covered by carbon pricing; as is approximately one-third of our copper business; the Fort Hills oil sands mine operated by Suncor, in which we hold a joint venture interest; and all of our metals refining businesses. For 2021, our B.C.-based operations incurred \$81.7 million in British Columbia provincial carbon tax. In Alberta, Cardinal River Operations paid \$0.4 million in carbon costs. For more details, please see pages 47–48 of our Annual Report.

We continue to see a trend among governments to pursue climate change policies. Some of the most significant action has taken place in Canada, which has some of the highest carbon prices in the world and is where the majority of our operations are located.

The Government of Canada advanced climate action initiatives in 2021, such as enacting the *Canadian Net-Zero Emissions Accountability Act* to formalize Canada's target to achieve net-zero greenhouse gas emissions by 2050. The Government of Canada also progressed the *A Healthy Environment and a Healthy Economy* climate plan to advance actions to achieve Canada's climate goals, which includes the proposal to increase the federal price of carbon from \$20 per tonne of CO<sub>2</sub>e starting in 2019 to \$170 per tonne of CO<sub>2</sub>e by 2030. Finally, the Government of Canada formally submitted Canada's enhanced Nationally Determined Contribution to the United Nations, committing Canada to cut its greenhouse gas emissions by 40%–45% below 2005 levels by 2030.

B.C.'s *Carbon Tax Act* and the large industrial emitter provisions of the Alberta *Technology Innovation and Emissions Reduction* (TIER) system are considered substantially similar to the federal requirements, and therefore our B.C. and Alberta operations are not subject to those provisions of the federal *Greenhouse Gas Pollution Pricing Act*. However, the federal carbon tax on greenhouse gas emissions resulting from the combustion of fossil fuels for certain purposes applies to our Alberta operations.

In 2021, British Columbia's carbon tax under the *Carbon Tax Act* increased to \$45 per tonne of CO<sub>2</sub>e and is set to increase to \$50 per tonne of CO<sub>2</sub>e in 2022. British Columbia also continues to implement the CleanBC Program for Industry to address impacts on emissions-intensive, trade-exposed industries to ensure that B.C. operations maintain their competitiveness and that carbon leakage is avoided.

In October 2021, B.C. published the CleanBC Roadmap to 2030, which replaces the original CleanBC plan published in 2018. Key elements in the new roadmap include increasing carbon pricing to meet or exceed the federal benchmark of \$170 per tonne by 2030, eliminating methane emissions from mining by 2035 and increasing clean fuel requirements. A significant portion of the policy design will take place in 2022, so it is too early to understand specific outcomes, but Teck is closely monitoring and engaging in the process.

Alberta's TIER system implements carbon pricing for large industrial facilities in Alberta with CO<sub>2</sub>e emissions in excess of 100,000 tonnes per year, which includes our Fort Hills mine. Large industrial emitters are required to reduce emissions by 10% in 2020, with a further 1% reduction per year thereafter. Emissions above the target will be assessed at the then-prevailing carbon price. In 2021, the carbon price under the system increased from \$30 to \$40 per tonne of CO<sub>2</sub>e.

We engage policy-makers in all jurisdictions in which we operate and/or have major projects, as well as other jurisdictions through our membership in various industry associations, such as the ICMM and the Mining Association of Canada (MAC). We also review industry association positions on climate change and advocate for their alignment with the Paris Agreement. Across the associations of which Teck is a member, ICMM, MAC and the Mining Association of British Columbia (MABC) are the trade associations that have the greatest amount of engagement on climate action. All three associations have positions aligned to the Paris Agreement.

We have also been actively supporting action on climate change and carbon pricing through voluntary initiatives such as the Carbon Pricing Leadership Coalition. In June 2016, Teck became the first Canadian resources company to join the Carbon Pricing Leadership Coalition, a partnership of national and sub-national governments, businesses and organizations that agree to work toward integrating carbon pricing into the global economy.

In 2021, we continued to work with the MABC and the Business Council of British Columbia (BCBC) on carbon pricing policy, to provide both policy direction and technical input to the government, with a view to maintain the competitiveness of industry in the province. We also engage with the B.C. Government directly through our participation in the B.C. Climate Solutions Council, formerly the Clean Growth Advisory Council.

## Transparency on Climate Disclosure

In 2021, we released our [Climate Change Outlook 2021 Report](#). The report looks at how Teck is positioned for a low-carbon economy by analyzing potential business risks and opportunities under three different climate change scenarios. These scenarios provide information on how Teck is analyzing and preparing for the risks and opportunities that may emerge as the global community combats climate

change and moves to a lower-carbon future. This report builds on our 2018 and 2019 Portfolio Resilience in the Face of Climate Change reports, and aligns with recommendations from the [TCFD](#), which we support. We also report our emissions data annually to the [CDP](#) and we engage with Climate Action 100+ and other investor organizations. Teck's 2021 CDP response is available on [our website](#).

## Adapting to Physical Climate Risks

In addition to the actions we are taking to reduce the impacts of climate change by lowering emissions and advocating for progressive climate action strategies, we are focused on managing the potential physical risks and opportunities that may result from the ongoing changes to our climate. Over the past decade, we have been monitoring the development of climate change risk management practices, during which we have seen continued improvement in the quality and accessibility of climate change data and modelling, the understanding of the interaction between climate change and our assets, and best management practices to increase the resilience of the mining sector.

The ICMM has been a leader in bringing together our industry members to share best practices on managing climate risks. The ICMM continues to support practice improvement and makes learnings publicly available through reports, including [Adapting to a Changing Climate: Building resilience in the mining and metals industry](#).

We are taking into account the increased frequency of extreme weather events and we are working to incorporate climate change scenarios and vulnerability assessments into project design and evaluation, as well as at our existing operations. This work is becoming increasingly complex as the field of climate analysis evolves. At our operations, we regularly incorporate impacts from climate variability and climate change into our water modelling, and we assess potential

vulnerabilities and future risks to inform water management practices. As part of the environmental assessment of our development and expansion projects, we include the physical impacts of climate change in our water assessment and modelling to evaluate risks and opportunities, and to inform our mitigation planning.

In 2021, we implemented climate adaptation measures at several of our operations. Upstream from our Red Dog Operations, increased permafrost thaw has led to a rise in naturally occurring total dissolved solids (TDS) in the creeks draining the Red Dog and Ikalukrok watersheds, which has limited our ability to discharge mine-affected water from our tailings facility, due to the additional background load of TDS. We have implemented projects to improve site water storage and treatment to ensure every litre that is released can be safely discharged. At HVC, we continue to execute our spring runoff water management strategy to protect key infrastructure, and we completed climate change analyses to contribute to long-term adaptation plans for the mine. At our Fording River Operations, we continue to advance a flood mitigation project in response to erosion caused by high water levels in 2013. At our operations in Chile, we advanced projects to reduce our fresh water consumption in response to potential water availability constraints due to future climate conditions. See [Teck's Climate Change Outlook 2021 Report](#) for more information on how we are adapting to the physical impacts of climate change, and how we are managing climate-related risks and opportunities.