

# Every Day

2016 Sustainability Report



**Teck**

## About This Report

Teck's 2016 Sustainability Report marked our 16th year of annual reporting on the economic, social and environmental topics that are most material to our communities of interest (COIs) and to our business. Available in English and Spanish, our report is in Core accordance with the Global Reporting Initiative (GRI) Standards and G4 Mining and Metals Sector Disclosures, and is aligned with the principles of integrated reporting. Our 2016 [Annual Report](#) provides further detail on our financial and operational performance.

This report contains a comprehensive overview of our sustainability strategy, including a summary of progress towards achieving our short-term goals to 2020 in the areas of Community, Water, Our People, Biodiversity, Energy and Climate Change, and Air. This report also describes how sustainability is integrated into identifying and managing risks and opportunities in the course of our business activities. Written for a range of audiences, from investors to industry peers to residents near our operations, this report is focused on providing balanced and relevant information.

### Assurance

PricewaterhouseCoopers LLP independently reviewed our application of the GRI Standards and the alignment of our practices with the International Council on Mining and Metals (ICMM) Sustainable Development Framework Principles, guided by the ICMM Assurance Procedure. See pages 130–131 for their assurance letter. PricewaterhouseCoopers LLP, who began assuring our sustainability reporting this year, is also Teck's independent auditor. Assurance on Teck's sustainability reporting has previously been provided by Deloitte LLP.

### Learn More

Further information about the report structure, scope and topic boundaries can be found on the [About This Report page](#) of our website. In an effort to keep our report more reader-friendly, we have moved supplemental information about our sustainability strategy, governance and material topics to our website and have indicated links where readers can learn more. Content such as our GRI Index, Glossary and list of External Memberships and Partnerships is available exclusively online.

### Contact

If you have any questions about this report, email us at [sustainability@teck.com](mailto:sustainability@teck.com) or contact Katie Fedosenko, Senior Communications and Reporting Specialist at [katie.fedosenko@teck.com](mailto:katie.fedosenko@teck.com).

## Key Icons Used in This Report

Throughout the report, we have added icons to demonstrate how our material topics are interconnected and aligned with the United Nations Sustainable Development Goals (SDGs) and where readers can learn more about our material topics.



This icon denotes interconnections of the material topic with other material topics within this report.



This icon denotes how our activities are aligned with the UN SDGs. Learn more about our work towards the SDGs on page 15.



This icon denotes where readers can learn more about our material topics from internal and external publications.

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## Message from the CEO

Donald R. Lindsay  
President and Chief Executive Officer

There is no question that 2016 was a year of extremes for our company and our industry. The year began in the midst of one of the deepest and longest downturns in our industry's history, and then moved into a period of unprecedented price increases, particularly in steelmaking coal. These significant price swings demonstrate the kind of volatility that is becoming the "new normal" in the industry, with commodity cycles that have the potential to be both faster and larger in scale.

This volatile market environment challenges us to stay focused on controlling costs and maintaining productivity while at the same time continuing to uphold our commitment to responsible resource development. The theme of our 2016 Sustainability Report — Every Day — is meant to reflect how our core values guide the decisions we make every day, as individual employees and as a company, to meet the challenges of a changing world. By doing so, we know we will remain strong as a company, regardless of market cycles, and will continue to meet the expectations of our stakeholders and society.

### Our External Environment

We produce materials that are essential to a modern, sustainable society and that help improve the quality of life for people around the world. To do this responsibly, we focus on understanding and meeting the expectations of Indigenous Peoples, communities and other stakeholders while also taking into account the broader economic, social and environmental context in which we operate.

The volatility of commodity markets shaped the economic context in which we operated in 2016. This volatility affected jobs, wages, procurement and community investment across the entire mining industry and, in turn, affected the societal pressure on these factors. More broadly, we saw citizens around the world call for greater transparency on corporate revenues, taxes paid and investments made. In Canada, the *Extractive Sector Transparency Measures Act* will increase transparency around payments to governments as companies, including ours, disclose their 2016 data in 2017.

In terms of social context, across all industries, there is an increased focus on diversity within Boards, senior management teams and general employee populations. The movement towards reconciliation with Indigenous Peoples continued, notably in Canada with the Truth and Reconciliation Commission advancing its recommendations. Whether by engaging employees, Indigenous Peoples, communities or other stakeholders, maintaining strong relationships remained a critical component of operating as a responsible company in 2016.

One of the most significant environmental trends in 2016 was the continued global focus on climate action. Following the adoption of the Paris Agreement in 2015, the Government of Canada, where the majority of our operations are located,

announced a national Pan-Canadian Framework, which includes a national carbon pricing benchmark. All provinces will be given until 2018 to implement a carbon pricing policy, starting with a minimum price of \$10 per tonne in 2018, increasing by \$10 per year to \$50 per tonne by 2022. All of our Canadian operations have been covered under existing carbon pricing in B.C. and Alberta for a number of years. We believe that broad-based pricing of carbon is one of the most effective ways to incentivize real reductions in greenhouse gas (GHG) emissions by ensuring that all emitters contribute to the solution.

### Economic, Social and Environmental Performance Highlights

The tenet that has guided us through the downturn of the past few years has been "controlling the controllable", ensuring safety, remaining focused on sustainability, driving down costs, controlling capital spending and maintaining strong production.

Our operations continued to perform well in 2016, with 11 of our 13 operations increasing production while decreasing costs. Our gross profit before depreciation and amortization in 2016 was \$3.8 billion, compared with \$2.6 billion in 2015, with the increase due mainly to higher commodity prices in the latter half of the year. Our financial position and liquidity remained strong. At December 31, 2016, we had \$1.4 billion of cash and US\$3.0 billion of unused lines of credit, providing us with \$5.4 billion of liquidity. Looking ahead, we will continue to focus on our production and cost targets, improving operating excellence and considering opportunities to reduce debt. Teck's [2016 Annual Report](#) describes our financial performance in more detail.

We are close to adding a fourth major commodity to our business, with construction of the Fort Hills oil sands project now surpassing 83% completion and on schedule to produce first oil in late 2017.

We recognize that there are concerns over the potential environmental effects of developing oil sands projects. That's why we are researching methods to improve extraction and processing to enhance the sustainability of our projects. One such advancement is the Paraffinic Froth Treatment (PFT) process being utilized at Fort Hills. PFT improves bitumen quality, making the diluted bitumen produced about equivalent to the average GHG intensity per barrel of the oil consumed in the United States on a wells to wheels basis. We are proud to be one of the founding members of Canada's Oil Sands Innovation Alliance (COSIA) and are encouraged by the progress of the industry towards improving environmental performance, reducing water consumption, improving tailings management, and increasing land reclamation and revegetation.

No aspect of our performance is more important to Teck than the health and safety of our people. In 2016, we reduced Total Recordable Injury Frequency by approximately 13% compared

with 2015, and had zero fatalities. Lost-Time Injury Frequency fell by 11% and High-Potential Incidents by 12%. We continue to be vigilant in pursuing our vision of everyone going home safe and healthy every day. This past year, we rolled out the fourth phase of our Courageous Safety Leadership program, and we continue our focus on reducing High-Potential Incidents.

In 2016, we continued to work towards strengthening diversity across our company. We believe that a range of backgrounds and perspectives allows for more informed decision-making and, ultimately, a stronger company. As part of our commitment to supporting an inclusive and diverse workplace that recognizes and values difference, we established a formal Inclusion and Diversity Policy in 2016. Guided by this policy, we are implementing initiatives and training programs to further enhance inclusion and diversity at Teck, including working towards increasing the number of women and Indigenous Peoples in our workforce to better reflect the communities in which we operate.

To strengthen our relationships with Indigenous Peoples near our operations and projects in 2016, we signed an Impact Management and Benefits Agreement with the Ktunaxa Nation Council that will create numerous long-term benefits for the Ktunaxa people and increase certainty around future sustainable mining development in the region. Spanning approximately 40 years and all five of our steelmaking coal operations in the Elk Valley region of British Columbia, it is one of the most comprehensive agreements of its kind in place in Canada. We were also engaged in agreement negotiations related to our Frontier project with Indigenous Peoples in the Athabasca region of northeastern Alberta in 2016, and to date have signed agreements with Fort Chipewyan Métis Local 125, Fort McKay First Nation and Fort McKay Métis. We are proud to have reached these groundbreaking arrangements with Métis people.

We enhanced our environmental performance and management practices in 2016. For example, we reduced GHG emissions by 17,000 tonnes, adding to our 217,000 tonnes of reductions in GHG emissions since 2011. We are working towards understanding and monitoring our releases to air more broadly and their associated impacts on people, communities and the environment, with a company-wide emissions inventory well underway. Our Elk Valley Water Quality Plan implementation also continues, which guides our approach to managing selenium, nitrate, sulphate and cadmium, as well as calcite formations in the watersheds near our steelmaking coal operations in the Elk Valley region of British Columbia. In 2016, we completed commissioning of a water treatment facility at our Line Creek Operations as part of the Plan.

In 2016, our progress in sustainability was recognized by a number of prominent international ranking institutes. We were named to the Dow Jones Sustainability World Index (DJSI) for the seventh consecutive year and ranked as one of the Best 50

Corporate Citizens in Canada by media and investment research firm Corporate Knights.

## Our Sustainability Strategy, Governance and Partnerships

At Teck, sustainability is one of our values and a part of our overall approach to business. Sustainability is embedded at every level of our organization, from front-line employees to senior management to our Board of Directors, because we know being welcomed in the areas where we operate demands responsible social, economic and environmental performance in everything we do.

Our approach to responsible resource development is guided by our sustainability strategy, which sets out short- and long-term goals in six focus areas: Community, Water, Our People, Biodiversity, Energy and Climate Change, and Air. Following the successful completion in 2015 of our first set of short-term goals in our Sustainability Strategy, we are now pursuing our next set of short-term goals that will guide our progress through to 2020 and, ultimately, to achieving our long-term 2030 goals.

Through our membership and involvement with external organizations, we are able to contribute to, and engage with, others on the development of best practice in sustainability performance and global sustainability trends. This includes the United Nations Global Compact, the International Council on Mining and Metals Sustainable Development Framework, the Mining Association of Canada's Towards Sustainable Mining initiative and the United Nations Sustainable Development Goals (SDGs). Throughout this report, we have included case studies and examples of how our activities align with the SDGs.

## Our Outlook

As we operate within the "new normal" of volatile commodity markets to produce the materials essential to society, we will continue to be guided every day by our core values, including safety, sustainability and excellence. In 2017, we will focus on working towards our 2020 goals, managing emerging risks and embracing opportunities created by developing issues — such as the transition to a low-carbon economy — and supporting sustainable development on the world stage through the SDGs and other frameworks.



Donald R. Lindsay  
President and Chief Executive Officer  
Vancouver, B.C., Canada  
April 27, 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.



### 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

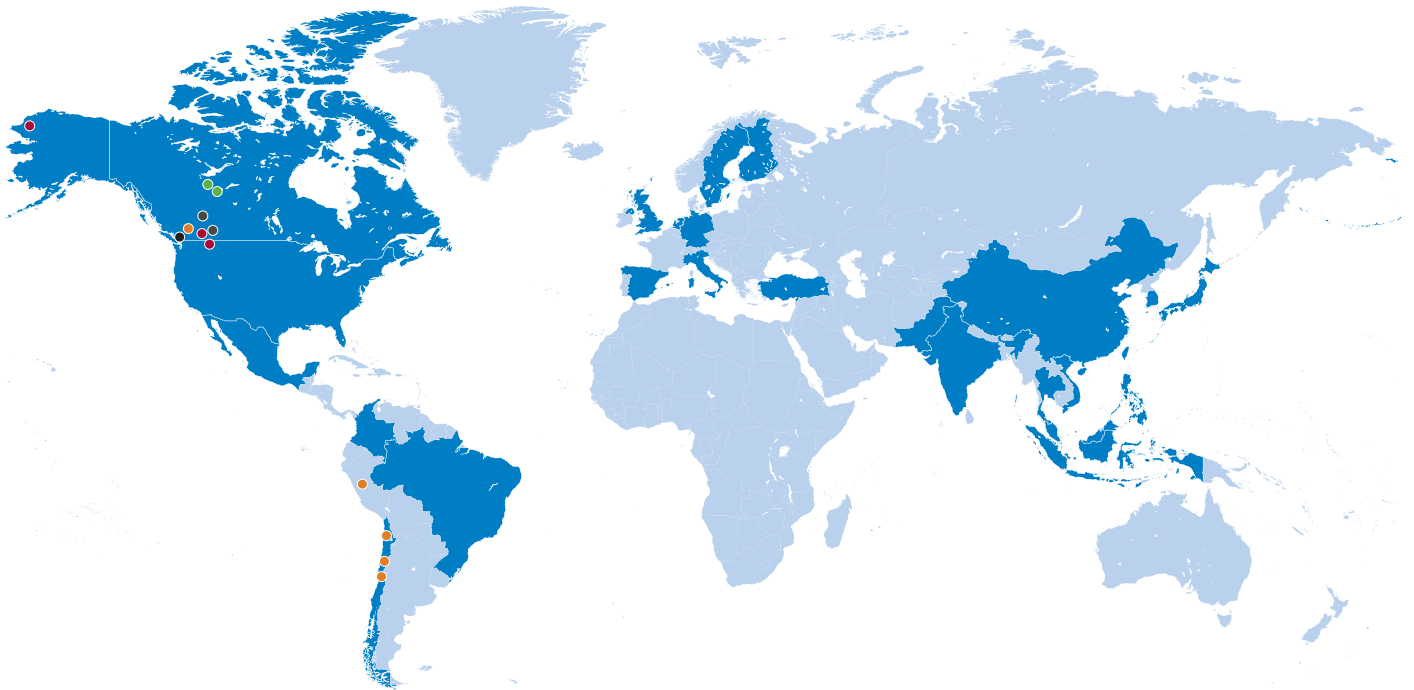
We are building an energy business through the development of Canadian oil sands projects with the potential to generate long-term value.

## Our Values

| Safety                                                                                                                                                                                                      | Sustainability                                                                                                                                                                                                                                   | Integrity                                                                                                                                                                     | Respect                                                                                                                                                                                                                                                                           | Excellence                                                                                                                                                                                                             | Courage                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 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. | 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. | 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. | 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. | 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. | 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                                                                       | Balance sheet strength                                                  | Nimble response to opportunity                           | Operating excellence                                                                                                                            | Sustainability                                                                                                                                                | Best people                                                                                                                         |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| We explore for, acquire, develop and operate world class, long-life assets in stable jurisdictions. | We aim for strong liquidity and access to capital on competitive terms. | We actively seek opportunities to enhance our portfolio. | We maximize value from our operations and activities by being disciplined in our approach to safety and productivity, and by controlling costs. | 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. | We recruit, retain and develop exceptional people and provide them with a safe, diverse, rewarding and respectful work environment. |



### 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

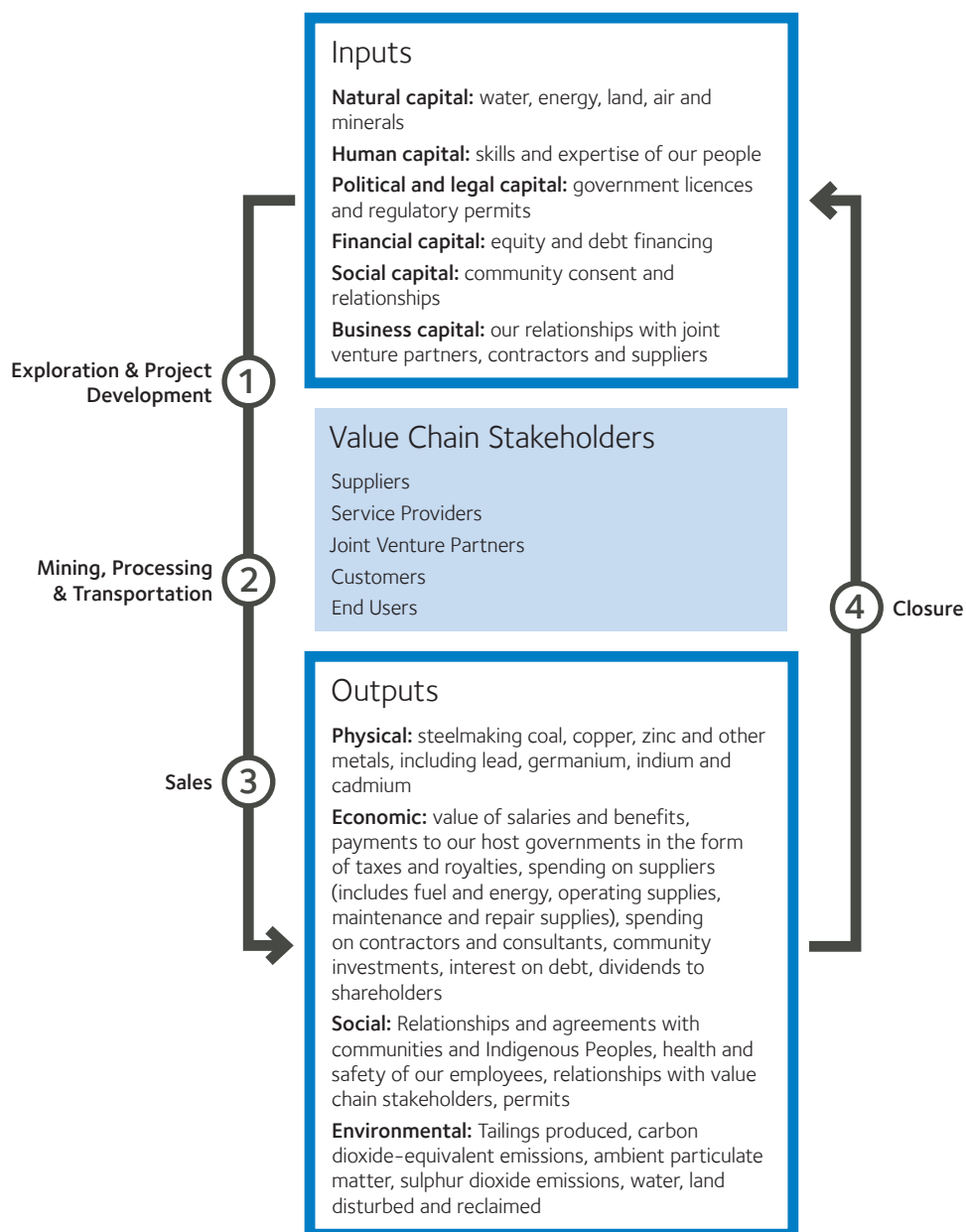
### ■ End Users

- 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

# Managing Risks and Creating Value throughout the Product Life Cycle

With strong sustainability governance, we manage social, economic and environmental risks and create value throughout the life cycle of our products. As part of our commitment to responsibility throughout the value chain, Teck works to understand a broad scope of issues — ranging from the origins of the goods that we buy to the ultimate post-sale impacts of our products — through integrated risk management. More information about our value chain stakeholders, as well as our inputs and outputs in 2016, see the [Life Cycle Approach to Providing Value](#) page on our website.

Figure 1: **Inputs and Outputs of the Mining Life Cycle**

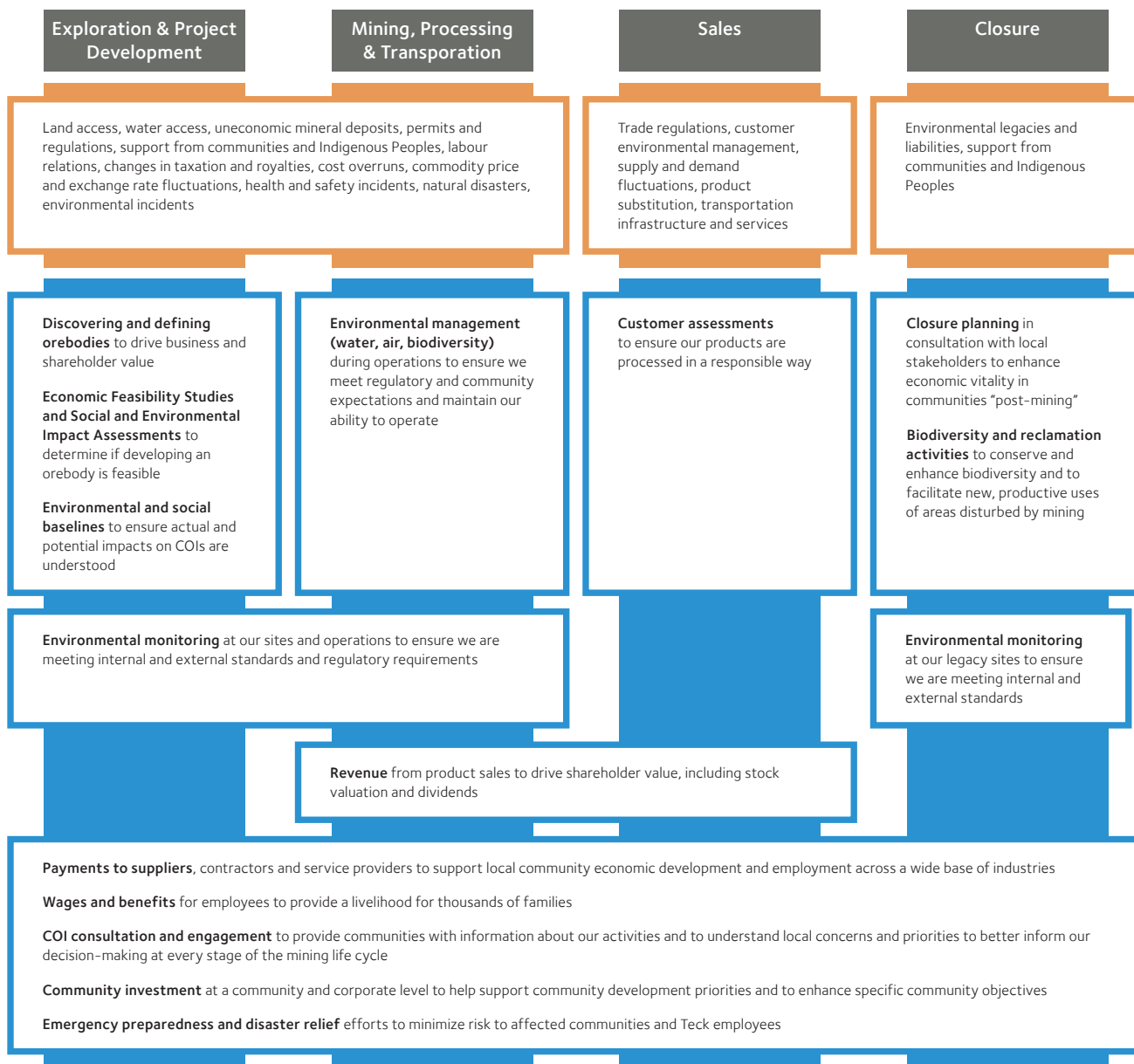




In Figure 2 we outline how we provide economic, social and environmental value for communities of interest (COIs), from exploration through to closure, through integrated risk management. Our COIs include investors, local communities in areas where we operate, Indigenous Peoples, employees, governments, contractors and suppliers. In order to provide value through the mining life cycle, we work to understand the actual and potential impacts of our activities on our COIs. Each of our exploration, development, operating sites and legacy

sites possess unique characteristics that demand unique impact and risk assessment processes. These yield the nuanced knowledge necessary to manage sustainability-related risks and capitalize on opportunities to make a positive impact. With this knowledge in hand, we develop tailored management approaches that are based on established best practices and are informed by consultation with the affected COIs themselves.

Figure 2: **Managing Risks and Creating Value throughout the Mining Life Cycle**



■ Major Business Risks  
■ Approach to Providing Value

# Our Approach to Business and Sustainability

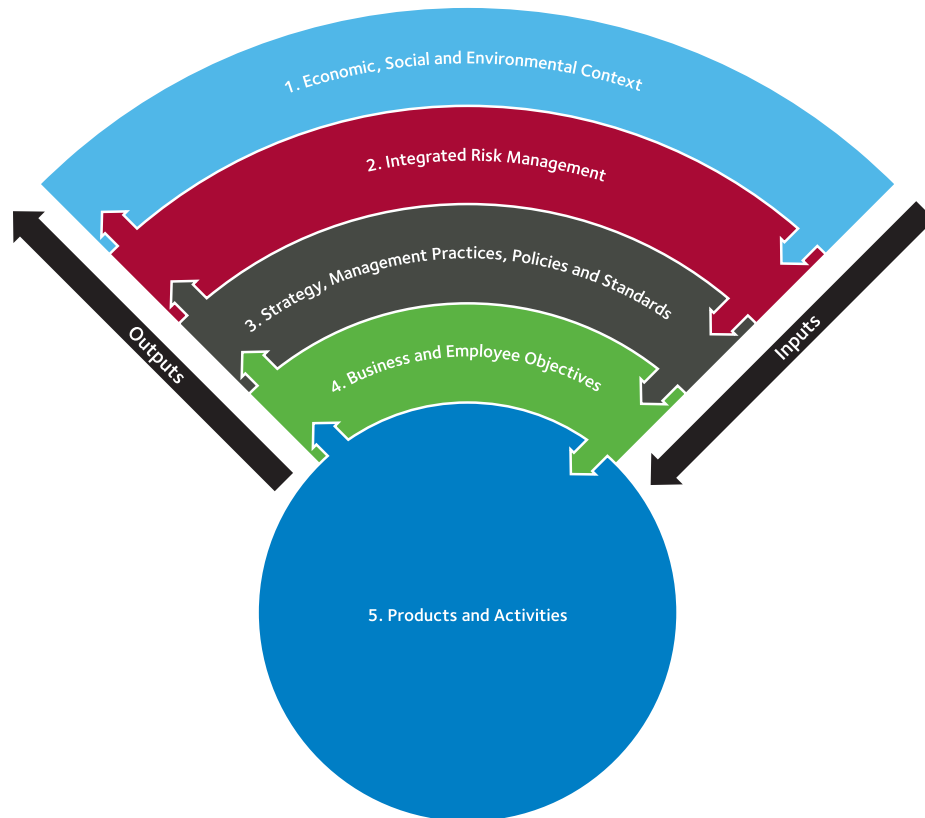
Our corporate strategy is focused on exploring for, developing, acquiring and operating world-class, long-life assets in stable jurisdictions that operate through multiple commodity price cycles. We maximize productivity and efficiency at our existing operations, aim to maintain a strong balance sheet, and are nimble in recognizing and acting on opportunities.

In everything we do, from where and how we operate, Teck is led by our values of safety, sustainability, integrity, respect, excellence and courage. In particular, the pursuit of sustainability guides our approach to business. With more than 100 years of history, we recognize that our success depends on our ability to establish safe workplaces for our people, collaborative

relationships with communities, and maintenance of healthy environments.

The following framework and descriptions below outline how we integrate key social, economic and environmental risks and opportunities into our business.

Figure 3: **Integrated Business Sustainability Framework**



## 1 Economic, Social and Environmental Context

We produce materials that help improve the quality of life for people around the world and that are essential to a modern, sustainable society. To do this responsibly, we focus on meeting the expectations of communities, Indigenous Peoples and stakeholders, and on managing and mitigating our impacts in a comprehensive and proactive way while also taking into account the broader environmental, social and economic context in which we operate. Through engagement with our COIs — including local residents, Indigenous Peoples and investors — and our own internal analysis of trends affecting the mining and metals industry, Teck continuously identifies areas of risk and opportunity, and evaluates which topics are material, based on their potential and actual impact on our business and COIs.

## 2 Integrated Risk Management

Our management objective is to work within the social, economic and environmental contexts in a way that ensures positive outcomes for our business and our COIs in the short- and long-term. We use feedback mechanisms, incident reporting and investigation, and frequent internal reporting to ensure our approach to risk management remains relevant.

Our process for integrating risk management throughout the business starts with identifying, evaluating and addressing economic, social and environmental risks and opportunities on a regular basis. The risks and impacts associated with our business are multi-faceted and require effective collaboration among departments, business units and external stakeholders.

For example, when we develop projects, we establish Social Environmental and Regulatory Approval (SERA) committees with internal experts on issues ranging from tailings management to wildlife protection. These committees engage technical project teams as well as senior management, to discuss and support development of integrated management plans that reflect our values and mitigate risks. At the other end of the mining life cycle, mine closure not only requires sound planning and engineering to reclaim lands affected by mining, but also effective engagement with local communities, businesses and Indigenous Peoples to manage the social, economic and environmental impacts that result when operations end.

While certain sustainability issues remain constant from year to year, we regularly evaluate changes in the regulatory, societal and environmental landscape to inform the continual improvement of our management approach.

Information on emerging risks can be found in the material topic sections throughout this report, and further information on current risks can be found in our Annual Information Form (pages 69–84) on the [Public Filings Archive page](#) of our website.

## 3 Strategy, Management Practices, Policies and Standards

Risk management is informed by our strategies, policies, management practices and standards. Our sustainability strategy sets short-term goals to 2020 and long-term goals to 2030 in six focus areas representing the most significant sustainability issues and opportunities facing our company: Community, Water, Our People, Biodiversity, Energy and Climate Change, and Air. For more information on our strategy, management practices, policies and standards, visit the [Our Commitments page](#) on our website.

Our focus areas are often interrelated. For example, in the Water focus area, our vision is to contribute to the balance between the social, economic, recreational and cultural benefits of water resources, within ecologically sustainable limits. This is connected to the work we do as part of the Community focus area, where we are working to build strong relationships and create lasting mutual benefits, based on respect for what communities value. As a result, the sustainability experts at our sites and corporate office engage and plan together on a regular basis to ensure our approach achieves both outcomes.

## 4 Business and Employee Objectives

Our approach to integrating sustainability into business is embedded company-wide through our five-year business planning and our objective-setting process, which is conducted on an annual basis. For example, risks and opportunities related to health and safety, environmental management, and relationships with Indigenous Peoples and local communities are reflected in the long-term plans for each business unit and operation.

At an employee level, business objectives inform individual objectives to ensure our efforts are aligned. Our compensation program is linked to safety and sustainability through individual, department and company-wide objectives. Hundreds of employees across our operations are engaged in implementing specific projects and practices related to our goals, and sustainability performance is integrated into their compensation program. All employees are engaged in our sustainability strategy to help us achieve our goals through internal communications and day-to-day activities.

## 5 Products and Activities

When successfully executed, our integrated framework allows us to deliver products and activities essential to modern society while minimizing negative impacts and maximizing benefits to both our business and our communities of interest.

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# Sustainability Strategy

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Teck's sustainability strategy is organized around six focus areas: Community, Water, Our People, Biodiversity, Energy and Climate Change, and Air. A focus area is a topic that has a material impact on our business and communities of interest, represents an area of significant opportunity and/or risk, and requires company-wide internal engagement.

## History of the Strategy

Teck has a long history of responsible resource development. Since our company was founded in 1913, we have been committed to practices that strengthen the sustainability of our company and the regions where we operate. In 2010, we formalized a sustainability strategy to address the greatest sustainability risks and opportunities facing our business in six focus areas: Community, Water, Our People, Biodiversity, Energy, and Materials Stewardship.

For each focus area, we established a vision, long-term goals to 2030 and short-term goals to 2015 that were coordinated across Teck by corporate and site leads. Our strategy was integrated into decision-making by embedding it into our Health, Safety, Environment and Community (HSEC) Management Standards, into remuneration and into corporate, site and employee annual plans and objectives. Corporate, site and employee objective-setting and evaluation processes were also updated to reflect the broader performance objectives set out in our strategy to align priorities at all levels of the company.

## Evolution of the Strategy

2015 marked the end of our first set of short-term goals and the first major milestone in the path to achieving our longer-term goals to 2030. At that stage, we evaluated the scope of our strategy, engaged external subject matter experts, and brought together employees from across our operations into working groups to examine the internal and external sustainability risks and opportunities and to determine actual or potential impacts on our business. Based on this analysis, there were three major changes to our sustainability strategy:

- 1) Adding Air as a focus area to reflect increasing concern around potential health issues associated with exposure to particulates, combined with growing regulatory requirements and the wide breadth of relevance to our operations.
- 2) Renaming the Energy focus area Energy and Climate Change to reflect our increasing focus on climate action.
- 3) Withdrawing Materials Stewardship as a focus area. As our sustainability strategy is intended to be focused on the areas that represent the greatest risk and opportunities facing our business, the increasing importance of air resulted in Materials Stewardship being replaced by Air. However, our management of materials and product stewardship will continue through our Materials Stewardship Committee.

As part of this review, the focus area teams also updated the visions and 2030 goals, and created new short-term goals to 2020 with internal plans that outline the key steps for implementation. A summary of our progress towards achieving the 2020 goals is included on pages 11–13.

Our senior management team and the Safety and Sustainability Committee of the Board reviewed and approved the changes to the sustainability strategy. As we move forward, we are focused on achieving our sustainability goals while managing emerging risks and embracing opportunities that increase our competitiveness and contribution to sustainable development.

## Our Sustainability Visions

To guide our approach to responsible resource development, our sustainability strategy is designed to guide Teck towards achieving the visions, as outlined below, specific to our six focus areas.



Community: we build strong relationships and create lasting mutual benefits, based on respect for what communities value.



Water: we contribute to the balance between the social, economic, recreational and cultural benefits of water resources, within ecologically sustainable limits.



Our People: we engage and develop our people, and ensure everyone goes home safe and healthy every day.



Biodiversity: we achieve a net positive impact on biodiversity in areas affected by our activities.



Energy and Climate Change: we take action to reduce GHG emissions by improving our energy efficiency and implementing low-carbon technologies.



Air: we continually improve air quality for the benefit of workers, communities and the environment in areas affected by our activities.

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To learn about how our sustainability focus areas connect to our material topics, visit the [Sustainability Strategy page](#) on our website.

## Progress Towards Our 2020 Sustainability Goals

The following tables summarize performance against our 2020 Sustainability Goals. For more detail on each of our focus areas, including our 2030 goals, visit [our website](#).



Table 3: **2020 Community Goals Progress Report**



Achieved



On Track



Behind Schedule

| 2020 Goals                                                                                                                                                                    | Status | Progress Summary                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Refine our business policies and practices based on results of our social risk assessments, our work in human rights and developments in the rights of Indigenous Peoples. |        | Continued improvements to risk assessment and performance reporting practices across all operations. In particular, we introduced a social incident reporting procedure, early improvements to feedback and engagement management, and further integrated human rights aspects into our Exploration Policy, supplier expectations and corporate risk register.                                     |
| 2. Engage with communities to identify social, economic and environmental priorities and to mutually define outcomes and measures of success.                                 |        | Implemented improved community investment tracking and reporting at our operations, supporting \$11.8 million in community investment. Continued to integrate Social Management and Responsibility at Teck (SMART) COI engagement and planning practices into exploration and closure planning activities. Advanced significant engagement activities in operations and key permitting activities. |
| 3. Work with Indigenous Peoples to identify and participate in initiatives to support the self-defined goals of Indigenous communities.                                       |        | Completed Indigenous community of interest mapping at a corporate level.                                                                                                                                                                                                                                                                                                                           |
| 4. Develop metrics for monitoring Indigenous training, employment and procurement to establish baselines and drive progress.                                                  |        | Completed company-wide review of Teck's objectives and specific commitments regarding Indigenous employment, training and procurement to inform metrics development.                                                                                                                                                                                                                               |

For more information on our work towards achieving goals in this focus area, see the Community Engagement section on page 69.



Table 4: **2020 Water Goals Progress Report**

| 2020 Goals                                                                                                                                                                                          | Status | Progress Summary                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Contribute to watershed management in water-stressed regions through water use efficiency projects, use of alternative water sources, water quality improvement measures, and capacity building. |        | In the Elk Valley, full operations began at Teck's first water treatment facility, located at our Line Creek Operations.                                                                                                                                                                             |
| 2. Increase our understanding of groundwater and proactively assess groundwater risks.                                                                                                              |        | Collected and compiled groundwater information from our operations in 2016. A plan has been set for 2017 to analyze the data gaps and groundwater risks/opportunities at all operations to identify operations that need to add focus on groundwater in the coming years in order to meet our goals. |
| 3. Collaborate in developing innovative water technology and practice.                                                                                                                              |        | Implementation of full-scale trial of saturated fill technology to help address selenium in areas of the Elk Valley.                                                                                                                                                                                 |

For more information on our work towards achieving goals in this focus area, see the Water Management section on page 89.

# Progress Towards 2020 Sustainability Goals



Table 5: **2020 Our People Goals Progress Report**

| 2020 Goals                                                                                                                                                        | Status | Progress Summary                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Reduce serious injuries and eliminate fatalities by ensuring our high-potential risks have effective controls in place and by enhancing our culture of safety. |        | Implemented High-Potential Risk Control strategy, which is progressing as planned, and on track to meet work team risk assessment and effectiveness review targets.             |
| 2. Implement improved occupational health and hygiene monitoring and exposure control to protect the longer-term health of workers.                               |        | Completed exposure risk assessments for 10 of our operations to improve our understanding of our exposure risk profile.                                                         |
| 3. Build a diverse workforce that includes more women and Indigenous Peoples.                                                                                     |        | Launched Teck's Inclusion and Diversity Policy to support an inclusive and diverse workplace that recognizes and values difference.                                             |
| 4. Develop leaders who can confidently and efficiently manage safe, respectful and productive operations.                                                         |        | Continued leadership development programs with follow-up activities confirming the program's progress. Specifically, 258 leaders completed and 114 have commenced the programs. |

For more information on our work towards achieving goals in this focus area, see the Our Workforce section and the Health and Safety of Our Workforce section on pages 44 and 54, respectively.



Table 6: **2020 Biodiversity Goals Progress Report**

| 2020 Goals                                                                                                                         | Status | Progress Summary                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Implement biodiversity management plans for each of our operations.                                                             |        | Based on engagements with stakeholders and improved alignment with biodiversity objectives, and refined mine site end land use objectives at Highland Valley Copper and steelmaking coal operations.                                          |
| 2. Integrate the consideration of biodiversity into the exploration, construction and closure stages of the mining life cycle.     |        | Integrated biodiversity benefits strategy into the detailed closure plan developed for Coal Mountain Operations. In 2017, the environment and exploration teams will begin planning for net positive impact strategies for all closure plans. |
| 3. Enhance our contributions to biodiversity conservation knowledge through collaboration in research, education and conservation. |        | Continued research collaborations with fRI Institute, a non-profit organization focused on sustainable land and resource management, on studies with grizzly bears and harlequin ducks in areas near our Coal Mountain Operations.            |

For more information on our work towards achieving goals in this focus area, see the Biodiversity section on page 122.

Table 7: **2020 Energy and Climate Change Goals Progress Report**

| 2020 Goals                                                                                                                 | Status | Progress Summary                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Implement projects that reduce energy consumption by 2,500 terajoules (TJ).                                             |        | Reduced 350 TJ of energy consumption as a result of projects implemented in 2016. Over 40 projects identified for consideration in 2017–2018.                                                                                                  |
| 2. Implement projects that reduce GHG emissions by 275 kilotonnes (kt) of CO <sub>2</sub> -equivalent (CO <sub>2</sub> e). |        | Reduced 17,000 tonnes in GHG emissions as a result of projects implemented in 2016, with additional projects identified for consideration in 2017–2018.                                                                                        |
| 3. Assess opportunities and identify potential project partners toward achieving our 2030 alternative energy goal.         |        | Awarded the “Best Use of Renewables at a Reclaimed Mine Site” for the SunMine at the Energy and Mines Renewables and Mining Awards in 2016.                                                                                                    |
| 4. Engage with governments to advocate for effective and efficient carbon pricing.                                         |        | Advanced advocacy efforts supporting carbon pricing through engagements with the British Columbia, Alberta and Canadian governments. Teck was also the first Canadian resource sector company to join the Carbon Pricing Leadership Coalition. |

For more information on our work towards achieving goals in this focus area, see the Energy and Climate Change section on page 114.

Table 8: **2020 Air Goals Progress Report**

| 2020 Goals                                                                                                                                              | Status | Progress Summary                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Improve monitoring and understanding of our releases to air and the potential impacts on people, communities and the environment.                    |        | Nominated and engaged experts for the Air focus area at each of our operations and began developing a company-wide inventory of emissions.                                                          |
| 2. In consultation with communities, governments and other organizations, set air quality goals and establish risk-based action plans to achieve goals. |        | Incorporated ambient air quality measures of PM <sub>10</sub> and PM <sub>2.5</sub> into data collection for the 2016 Sustainability Report.                                                        |
| 3. Strengthen the integration of air quality considerations into early-stage project development.                                                       |        | Developed a list of Air Quality Considerations for incorporation into early project planning stages; this work will continue to determine how best to integrate these considerations into projects. |

For more information on our work towards achieving goals in this focus area, see the Air Quality section on page 108.

# Sustainability Governance

Our Board of Directors is responsible for the stewardship of our company and ensures that an appropriate corporate governance structure and system are in place. Our key governance practices are described in detail in our 2016 [Management Proxy Circular](#), available on our website.

We take measures to develop and enhance the Board of Directors' understanding of economic, environmental and social topics at regular meetings, strategy sessions and site visits. For example, we hosted external speakers on the current global economic climate for our Board of Directors and held special presentations for the Safety and Sustainability Committee, including presentations on the following topics in 2016: sustainability strategy, Indigenous agreements, mine closure, legacy properties, permitting, tailings management, water quality topics, climate change, climate actions and carbon pricing, safety, occupational health and hygiene, and other topics of importance to COIs.

For more information about how the board provides oversight and delegates responsibility for sustainability issues, and how shareholders and employees can provide feedback to the Board, visit the [Sustainability Governance page](#) on our website.

## Management Committees and Corporate Functions

Our Senior Vice President of Sustainability and External Affairs reports directly to our CEO and is responsible for sustainability, health and safety, environment, community, and Indigenous affairs, among other areas. Her direct reports include the:

- Vice President, Community and Government Relations, who leads the corporate sustainability strategy and activities related to social responsibility, community engagement and investment, government relations and Indigenous affairs
- Vice President, Environment, who oversees compliance with environmental standards for projects, operations and our legacy properties, and regularly reviews environmental performance risks and strategic issues, including tailings, biodiversity, water, air and energy
- Vice President, Health and Safety, who provides strategic guidance in the development of a culture of safety, and assists with the development and monitoring of health and safety strategies
- Vice President, Corporate Affairs, who is responsible for managing the company's public affairs, sustainability reporting, brand management and employee communications

For more information about other members of the senior team and their role in sustainability, visit the [Sustainability Governance page](#) on our website.

## Board Diversity, Qualifications and Expertise

The Corporate Governance and Nominating Committee believes that a Board with directors from diverse backgrounds and different experiences benefits the company by enabling the Board to consider issues from a variety of perspectives. When

assessing potential candidates for nomination to the Board, corporate governance, corporate responsibility and sustainable development experience are part of the selection criteria for Board members. The Board also considers gender, ethnicity and national origin, in addition to business skills, qualifications and career history when assessing potential candidates. As of the report publication date, 14% of the Board, or two out of 14 directors, are women; a third woman was nominated to the Board at our 2017 annual meeting. Please view our [2016 Management Proxy Circular](#), pages 20–29, for further details on Teck's Board qualifications, experience and diversity practices.

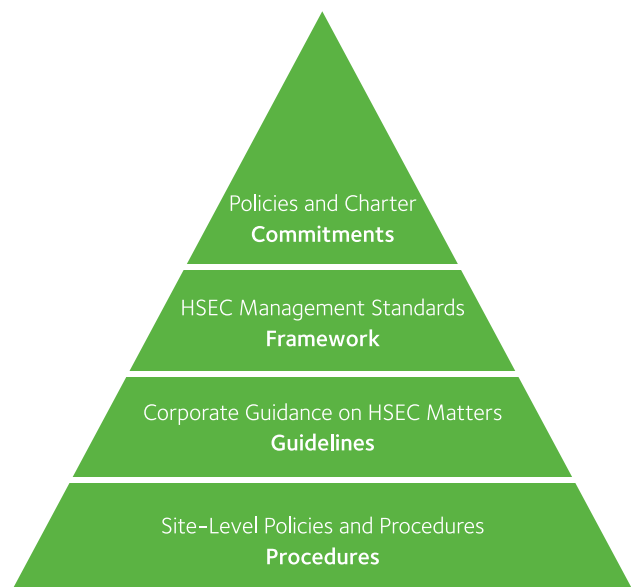
## How We Manage Sustainability

Our [sustainability strategy](#) sets out our overall goals and visions for our work in sustainability, and is supported by our company-wide commitments. These commitments are outlined in the following policy documents: [Charter of Corporate Responsibility](#), [Code of Ethics](#), [Anti-Corruption Policy](#), [Code of Sustainable Conduct](#), [Health and Safety Policy](#), [Human Rights Policy](#), [Indigenous Peoples Policy](#), [Inclusion and Diversity Policy](#), [Teck's Expectations for Suppliers and Contractors](#).

## Health, Safety, Environment and Community (HSEC) Management

Our HSEC Management Standards include overarching corporate policies and guidelines, and site-level policies and procedures.

Figure 5: **Health, Safety, Environment and Community Management System Structure**





Our HSEC Management Standards provide a framework for implementing HSEC management systems at our company, in addition to our sustainability strategy. These Standards outline a set of consistent and systematic practices for the identification and effective management of HSEC issues and risks to support continual improvement in HSEC programs and performance. The Standards also provide auditable criteria for evaluating suitability and effectiveness of our HSEC management systems and set out minimum expectations for managing the HSEC-related aspects of our day-to-day activities. More information on [the Standards](#) is available on our website.

### Executive and Employee Remuneration Related to Sustainability

Incentive compensation of the CEO and senior officers is performance-based. Financial performance and the accomplishment of company annual objectives, as well as HSEC performance, are taken into consideration in the annual bonus review. For all executives, the bonus weighting for HSEC ranges from 15% to 20% of their overall bonus. In addition, the personal component of executive bonus ratings often includes specific objectives related to HSEC matters. Executive remuneration, including detailed information about annual objectives, is fully disclosed in our 2016 Management Proxy Circular, on pages 38-51. For more information on employee remuneration, visit the [Sustainability Governance page](#) on our website.

### External Commitments and Partnerships

We take into consideration external standards and best practices in our governance of sustainability. Through our membership and involvement with several external organizations, including the United Nations Global Compact, the United Nations Sustainable Development Goals (SDGs), the International Council on Mining and Metals (ICMM) Sustainable Development Framework and the Mining Association of Canada's (MAC) Towards Sustainable Mining initiative, we are able to contribute to and engage with others on the development of best practice in areas of sustainability performance and global sustainability trends. We also make commitments that guide and inform our sustainability performance. A full list of [Teck's memberships and partnerships](#) related to sustainability is available on our website.

Key activities in 2016 related to our memberships and partnerships included:

- Supporting the ICMM's [water position statement](#) and [position statement on preventing catastrophic failure of tailings storage facilities](#).
- Participation in 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.
- Joining the Council for Clean Capitalism, a group of executives from companies who work to fully incorporate social, economic and ecological benefits and costs, and know the impacts of

their marketplace actions. The Council seeks to create an economic model in which what is good for business is good for the environment and society.

Teck is also working to support progress on the SDGs. We recognize that the mining industry has an opportunity to positively contribute to all 17 of the SDGs. Teck has chosen to focus on four goals in particular: Goal 3, ensure healthy lives and promote well-being for all at all ages; Goal 5, achieve gender equality and empower all women and girls; Goal 8, promote sustainable and inclusive economies; and Goal 13, take urgent action to combat climate change and its impacts. An overview of the work Teck is doing to address each of the 17 [Sustainable Development Goals](#) is available on our website. Throughout this report, we describe how our activities are related to the SDGs in the SDG Spotlight found in the sidebar of several material topic sections.

Figure 6: **Teck's Activities and Partnerships Related to the SDGs**





## SDG Spotlight: Promoting Use of Antimicrobial Copper in Health Care

### The Issue

Harmful bacteria and viruses exist on commonly touched surfaces in health-care facilities across Canada and the world. As a result, patients, health-care workers and visitors to facilities are at risk of becoming infected with serious healthcare associated infections (HAIs).

According to Infection Prevention and Control Canada, more than 200,000 patients (one in nine patients) annually will contract an infection while receiving care in Canada, and approximately 12,000 of these patients will die as a result. HAIs are the fourth-leading cause of premature death in Canada, and they cost the Canadian health-care system more than \$1 billion annually.

### The Solution

Copper has been identified as one solution to this significant health-care challenge, given its unique antimicrobial properties. When installed on high-touch surfaces such as door handles, hospital bed rails and intravenous poles, copper can continuously eliminate 99.9% of harmful bacteria. While there is a higher upfront cost to install the copper surfaces, the returns can be extraordinary: an investigation by the York Health Economics Consortium in the United Kingdom found that the cost to install antimicrobial copper components in hospitals would be recouped in less than two months, due to the reduction in patient infections.

To date, antimicrobial copper has been installed in more than 90 health-care facilities in 26 countries in Europe, South America, Africa and Asia. Earlier this year, Poland's Health Authority became the first in Europe to officially recommend that antimicrobial copper be incorporated as an infection and control measure in hospitals. Despite the evidence base and global developments, Canada lags in adopting



this innovative solution to reduce the spread of HAIs.

### Working with Partners

As a major copper producer, and with a solid and growing evidence base around the antimicrobial properties of copper, Teck believes it can play an important role in the fight against the spread of HAIs. With Teck's financial support, Vancouver General Hospital (VGH) recently opened its newly expanded Intensive Care Unit, which included the installation of antimicrobial copper on horizontal surfaces — the first such use of copper in a Canadian hospital.

Separately, under the leadership of VGH's Dr. Elizabeth Bryce, the hospital is also conducting a research pilot on copper's antimicrobial effectiveness in the Bone Marrow Transplant Unit. This study is evaluating the bacterial levels

of bone marrow transplant patients, in addition to hospital staff and their environment, when placed in two different rooms: a regular patient room and a room re-engineered with copper nickel alloys on 14 high-touch surfaces. With results expected in 2017, the study aims to improve infection control practice and ultimately reduce HAIs at VGH. We are exploring opportunities to work with partners to scale up the type of groundbreaking work happening at VGH and are advancing a Canadian study to assess the use of copper in reducing HAIs in hospitals across the country.



An overview of the work Teck is doing to address each Sustainable Development Goal is available on our [website](#).

# Managing Sustainability throughout the Value Chain

We procure goods and services that support large-scale mining and refining operations such as heavy equipment, large trucks, chemicals, fuel and lubricants, explosives, and a range of other products and services.

Through responsible supply management, our objective is to ensure that we minimize our potential impacts on people and on the environment, and that we manage business and reputation risks. Our Supply Chain Risk Management Strategy integrates supply chain risks into our established risk management processes, which provide a framework for mitigating or avoiding sustainability risks in, and impacts on, our supply chain. As we operate in low-risk jurisdictions that have strong legal frameworks and high standards of performance, we expect and have a good level of assurance that our suppliers' and contractors' business conduct is aligned with robust environmental and labour legislation and regulation. In addition, we expect our suppliers and contractors to demonstrate strong practices in areas of Health, Safety, Environment and Community (HSEC).

## Identifying HSEC Risks in the Supply Chain

Inbound supply chain risks are initially identified as part of the analysis and identification of critical suppliers by our Supply Management group. Outbound supply chain risks are identified by the transportation group as well as by the Materials Stewardship working group, which advises and develops active risk management processes to reduce the impacts of our products and to ensure products satisfy or exceed regulatory and societal needs. For example, as we are heavily reliant on third parties to transport our products, we conduct a risk-based screening of our transportation providers based on the volume and commodity transported. This screening enables us to select transportation providers who will handle our products safely and who share our commitment to safe and responsible supply chain management.

## Communicating Expectations

We articulate our expectations for suppliers and contractors through our [Expectations for Suppliers and Contractors](#), which includes our expectations that suppliers and service providers will address issues relating to ethics, health and safety, environmental stewardship, and human rights, including numerous labour law requirements. We have integrated the Expectations into our procurement and contract processes.

In 2016, we updated our Expectations to ensure they clearly reference our codes and policies related to sustainable development, namely our Code of Ethics, our Code of Sustainable Conduct and our HSEC Management Standards. The Expectations, previously called the Recommended Protocols for Suppliers and Service providers, are fundamental in how we award contracts at Teck.

## Supplier and Contractor Qualifications

As part of the selection process for certain large contracts, formal tender Request for Information and Request for Proposal processes allow us to evaluate suppliers on their HSEC and

labour policies and practices. We have an online qualification program for contractors and suppliers to ensure that our requirements such as HSEC, quality management, sustainability, and anti-corruption/bribery compliance have been communicated and that they meet our standards.

As a condition of doing business with us, each on-site supplier/contractor of a high-risk product must:

- Register and maintain an online account in good standing with our supplier database
- If determined to be necessary, register and maintain an account in good standing with our Anti-Corruption Compliance program
- Comply with our policies, procedures and protocols communicated through our systems
- Participate in mandatory site-specific orientation and induction training

For more information about our supplier due diligence process, visit the [Sustainability Governance page](#) on our website.

## Supplier and Contractor Assessments

We select key suppliers to screen for HSEC risks based on a number of criteria, such as the type of product they supply, the supply spend, and the potential impacts of the activities they conduct. Suppliers are asked to self-assess their performance against the focus areas set out in our Expectations for Suppliers and Contractors. The objective of this evaluation is to help us understand each company's sustainability management, determine how it aligns with our guidelines and identify specific areas for improvement. Where a potential risk is identified, the process calls for gathering additional information on the supplier. This process may involve the use of third-party consultants to gather and review additional information. Our Supply Management Best Practices Implementation Manual supports supply management teams across our company. The implementation of best practices supports improvements with our suppliers and service providers toward achieving expectations for sustainability performance and responsible business practices.

## On-Site Contractor Assessments

We maintain an online system for managing on-site contractors, through which we require contractors to complete a comprehensive questionnaire about their practices, including those related to anti-corruption and health and safety. In early 2017, the questionnaire was updated to include additional information about ethics, human rights, environmental management and other sustainability topics. Contractors also acknowledge our Expectations through the questionnaire.

For more information on supply chain and human rights, and evaluating the environmental management practice of our suppliers, visit the [Sustainability Governance page](#) on our website.

## Engaging with Communities of Interest

We engage with our communities of interest (COIs) throughout the mining life cycle. Our direct engagement of COIs is organized into three broad levels: information disclosure, dialogue and participation.

Table 9: **Examples of Key Communities of Interest, Issues and Responses**

| COI Type                     | Specific COI                                       | Example Key Issue in 2016                                                                                 | Teck Response in 2016                                                                                                                                                                                                     |
|------------------------------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Industry                     | International Council on Mining and Metals (ICMM)  | Tailings storage facility management                                                                      | Collaborated with industry partners through ICMM to review tailings storage facility standards and critical controls                                                                                                      |
| Workforce                    | Teck employees and contractors                     | Employee safety                                                                                           | Conducted a safety survey, with more than 5,600 employees and contractors participating                                                                                                                                   |
| Governments                  | Provincial and federal governments of Canada       | Climate change                                                                                            | Advocated for effective and efficient climate change policies, including carbon pricing regimes that avoid carbon leakage and addressing the competitiveness of emission-intensive trade-exposed (EITE) industries        |
| Civil Society and Government | UNICEF, the Government of Canada                   | Zinc & Health in India                                                                                    | UNICEF-Teck partnership to strengthen health-care systems in Odisha, Madhya Pradesh and Uttar Pradesh, India, and to improve zinc and oral rehydration salt (ORS) coverage to prevent child deaths from diarrheal disease |
| Communities                  | Communities surrounding Quebrada Blanca Operations | Quebrada Blanca Phase 2 project                                                                           | With the near closure of Quebrada Blanca Operations, Teck is developing a new project, Quebrada Blanca Phase 2, and conducting early engagement with local communities                                                    |
| Indigenous Peoples           | Ktunaxa Nation Council in the Elk Valley           | Economic and job opportunities connected with mining and framework for input on environmental stewardship | Signing of an Impact Management and Benefits Agreement (IMBA) with the Ktunaxa Nation Council                                                                                                                             |
| Investors                    | Current and potential shareholders and lenders     | Volatility in commodity prices and profits                                                                | Communicated our efforts to strengthen our financial position, with a focus on debt reduction and building on our successful cost reduction program                                                                       |

For more information about COI engagement, visit our website. Our engagement with COIs and the outcomes are reported to the Safety and Sustainability Committee of our Board of Directors and/or to our Health, Safety, Environment and Community (HSEC) Risk Management Committee.

| Frequency, Format and Type of Engagement                                                                                                                                                                             | Outcome                                                                                                                                                                                                                                                      | Page |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| Annual reporting and ongoing engagement, with additional engagement scheduled as frequently as monthly with our senior management team, in particular with our VP, Environment                                       | We played an active role in a global tailings management review focused on surface tailings management including a review of standards, critical control strategies, governance and emergency preparedness                                                   | 97   |
| Led by the VP, Health and Safety, a survey conducted in person and online with employees at our sites and corporate offices                                                                                          | Analyzed survey results and used findings to inform the fourth series of our Courageous Safety Leadership program                                                                                                                                            | 56   |
| Our Community and Government Affairs team engaged in person and online through 2016                                                                                                                                  | Established and participated in a civil society-industry working group, through which we discussed the B.C. Carbon Tax policy, and explored and developed policy options for the development of competitiveness Framework on Clean Growth and Climate Change | 42   |
| Annual reporting and ongoing engagement with UNICEF to ensure program objectives and activities are on track                                                                                                         | Training of health-care providers, education of caregivers, and better access to zinc and ORS treatments helped save the lives of more than 20,000 children with diarrheal disease in 2016                                                                   | 33   |
| Submitted public proposals for the development of an Environmental Impact Assessment and collaborated with community organizations to collect new social and environmental data for the design of community projects | Provided funding for technical and legal support to members of four fishermen's and seaweed collectors' trade unions within the region                                                                                                                       | 74   |
| Staff from our operations and offices in the Elk Valley and our corporate head office participated in regularized engagement as defined by a schedule created together with the Ktunaxa Nation Council               | The IMBA will create numerous long-term benefits for the Ktunaxa people and increased certainty around future sustainable mining development in the region                                                                                                   | 66   |
| Ongoing engagement by our corporate Investor Relations team, in particular through our quarterly results releases and webcasts                                                                                       | Shareholders were informed about our main activities to strengthen our financial position, namely the continued implementation of our cost reduction program as well as the repurchase of \$1 billion of debt                                                | 27   |



## In This Section

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In our report, a 'material topic' is one that reflects our company's significant economic, environmental and social impacts, or that could substantively influence the assessments and decisions of our stakeholders, per guidance from the Global Reporting Initiative.

In the sections that follow, we describe our annual materiality process and provide a summary of our 2016 material topics on pages 22–25, outlining what is included in each topic, a performance highlight from the topic and a description of how the topics align with both our sustainability strategy and the United Nations Sustainable Development Goals.

For each of our 16 material topics, you will find a section that outlines why the topic was material in 2016, Teck's approach to managing risks and opportunities associated with that topic, our performance in those areas, and our outlook for 2017.

# Annual Materiality Process

For the purpose of our annual sustainability reporting, Teck engages internal and external resources, consults with our communities of interest (COIs) and reviews our operating environment to identify the most material topics that faced our business and our communities in the past year. This process is guided by the Global Reporting Initiative (GRI) Standards.

## 2016 Materiality Assessment

In preparing for our 2016 annual materiality assessment, we first reviewed the GRI disclosures grouped under each of our 16 material topics, as identified through our 2014 and 2015 materiality assessments, and determined that these material topics are still the most relevant for this year's report. Moreover, the material topics and their associated boundaries remained the same as those identified in 2015. Following this review, we conducted a five-step process to prioritize and rank the materiality of each topic.

A detailed description of our materiality process and a breakdown of the boundaries for each material topic are available on the [Annual Materiality Process page](#) on our website.

## External COI Panel

We host an annual external COI panel with representatives from local communities near our operations, Indigenous Peoples, public/private institutions, government, investment analysts, industry and NGOs, with moderation by an independent third party. The panel reviews our materiality assessment to provide feedback on the relevance of the topics selected and their prioritization, and offers their perspective on emerging sustainability issues.

In January 2017, we convened our seventh external COI Panel. Feedback from the Panel was integrated into our assessment and into the materiality matrix. The COI Panel indicated that topics such as water management, tailings and mine waste management, relationships with Indigenous Peoples, and emergency preparedness have high concern or potential impact on stakeholders, followed closely by health and safety of workers, and business ethics. In addition to providing feedback on the ranking of our material topics, the panel indicated that we should consider and demonstrate how our topics are interconnected.

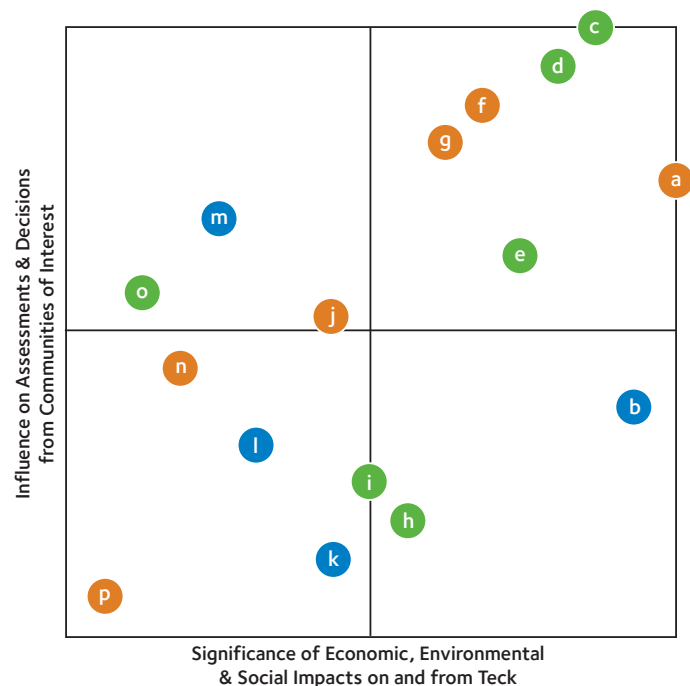
For example, the topic of water management is closely related to other topics such as mine closure and relationships with Indigenous Peoples. We articulate those connections in the sidebar of each material topic section under a Material Topic Interconnections heading.

In addition to commenting on our material topics, we also asked participants to identify emerging sustainability risks and opportunities and key issues of concern to help inform our future management of sustainability and reporting. Key issues highlighted by participants included: cumulative impacts and Indigenous engagement in assessment related to those impacts, impacts on wildlife such as caribou in the potential reopening of our Quintette project in northern British Columbia, cybersecurity, and reporting on the outcomes associated with community investments.

Feedback from the panel on our 2015 Sustainability Report, 2016 material topics and emerging sustainability issues was consolidated and shared with internal subject matter experts and decision-makers, who incorporated panel input into activities related to both our sustainability and our corporate strategy.

## 2016 Materiality Assessment

The materiality matrix below represents the combined results of internal and external consultation and prioritization of the material topics that are included in this report.



### Economic

- b. Economic Performance and Contributions
- l. Mine Closure
- o. Business Ethics
- k. Our Workforce

### Social

- a. Health and Safety of Our Workforce
- f. Relationships with Indigenous Peoples
- j. Community Engagement
- g. Emergency Preparedness
- m. Human Rights
- p. Product Impacts

### Environmental

- c. Water Management
- d. Tailings and Mine Waste Management
- e. Environmental Management
- h. Air Quality
- i. Energy and Climate Change
- n. Biodiversity

# 2016 Material Topics Summary

## Economic Performance and Contributions

### What is in this topic?

Economic performance, direct and indirect economic impacts, generating economic value, payments to government, local hiring and procurement practices, and community investment.

Revenue of **\$9.3**

billion and gross profit before depreciation and amortization of \$3.8 billion

### Sustainability Strategy Focus Area

Community



### Sustainable Development Goals



Page 27

## Mine Closure

### What is in this topic?

Planned or actual closure and related impacts on workers, local communities and the environment.

**97**

hectares of land have been reclaimed by Teck in 2016

### Sustainability Strategy Focus Areas

Community, Biodiversity, Our People



### Sustainable Development Goal



Page 34

## Business Ethics

### What is in this topic?

Anti-corruption, public policy, compliance with laws and regulation (non-environmental), Code of Ethics.

**98%**

of non-union, non-hourly employees completed Code of Ethics certification to refresh and enhance awareness of the Code, including issues such as insider trading, conflicts of interest and harassment

### Sustainability Strategy Focus Areas

Community, Our People



### Sustainable Development Goal



Page 39

## Our Workforce

### What is in this topic?

Employee demographic profile, benefits, talent attraction, labour relations, retention, training and development, inclusion, diversity, equal opportunity, non-discrimination, freedom of association, and collective bargaining.

Women make up

**15%**

of our total workforce, and there was a 21% increase in female technical or operational employees

### Sustainability Strategy Focus Area

Our People



### Sustainable Development Goals



Page 44



## Health and Safety of Our Workforce

### What is in this topic?

Management approach and performance in health and safety, including occupational health and hygiene.

Reduced Total Recordable Incident Frequency by

**13%** in 2016

#### Sustainability Strategy Focus Area

Our People



#### Sustainable Development Goal



Page 54

## Relationships with Indigenous Peoples

### What is in this topic?

Management approach and performance related to our work with Indigenous Peoples, including engagement, agreements, benefits and disputes.

**25** new agreements were reached with Indigenous Peoples in 2016

#### Sustainability Strategy Focus Area

Community



#### Sustainable Development Goals



Page 62

## Community Engagement

### What is in this topic?

Local community engagement, impact assessments, and development programs; actual and potential impacts on local communities; disputes related to land or resource use of local communities; grievance mechanisms.

**\$11.8**

million disbursed through community investment in 2016

#### Sustainability Strategy Focus Area

Community



#### Sustainable Development Goals



Page 69

## Emergency Preparedness

### What is in this topic?

Preventing and being prepared to respond to emergencies.

**190**

drills and emergency response scenarios conducted in 2016

#### Sustainability Strategy Focus Areas

Community, Our People



#### Sustainable Development Goal



Page 77

# 2016 Material Topics Summary

## Human Rights

### What is in this topic?

Anticipating and preventing impacts on the human rights of the people foreseeably touched by our activities, particularly people in our supply chain and living near our operations.

# 0

human rights complaints in 2016

#### Sustainability Strategy Focus Area

Community



#### Sustainable Development Goals



Page 81

## Product Impacts

### What is in this topic?

Managing the actual and potential impacts of our products through product and materials stewardship.

# 7

visits to our customers' sites conducted in 2016 as part of our ongoing assessment of the impacts of our products

#### Sustainability Strategy Focus Areas

Community, Our People



#### Sustainable Development Goals



Page 85

## Water Management

### What is in this topic?

Approach to water management, water-related risks, and performance related to our water balance (total water withdrawal and discharge by source); water uses and proportion of reuse and recycle.

# 4

The approximate number of times water was reused and recycled at our operations in 2016

#### Sustainability Strategy Focus Area

Water



#### Sustainable Development Goal



Page 89

## Tailings and Mine Waste Management

### What is in this topic?

Management approach and performance related to tailings and mine waste management, including the construction, operation and ongoing monitoring of the various health, safety and environmental risks and impacts associated with tailings storage facilities and waste rock facilities.

Verified

# AAA

level awarded to Highland Valley Copper and Elkview operations for their tailings management practices under the MAC TSM initiative

#### Sustainability Strategy Focus Areas

Water, Community



#### Sustainable Development Goal



Page 97

## Environmental Management

### What is in this topic?

Overall day-to-day environmental management, compliance with environmental regulations, compliance with permits, supplier environmental assessments, and transportation.

Decreased our number of permit non-compliances by

**11%** in 2016

#### Sustainability Strategy Focus Areas

Water, Air, Energy and Climate Change, Biodiversity



#### Sustainable Development Goals



Page 103

## Air Quality

### What is in this topic?

Emissions and air quality control at our operations and in the transportation of our products; includes ambient air quality and emissions of sulphur dioxide (SO<sub>2</sub>).

Trail Operations invested \$35 million into a Smelter Recycle Building that will reduce fugitive dust emissions by up to

**25%**

#### Sustainability Strategy Focus Area

Air



#### Sustainable Development Goals



Page 108

## Energy and Climate Change

### What is in this topic?

Energy (fuel and electricity consumption and costs, energy intensity, energy-efficiency initiatives), climate change-related risks (carbon pricing, societal concerns), and emissions (greenhouse gas emissions and other gas emissions).

**350**

TJ of reduced energy consumption from efficiency projects implemented in 2016

#### Sustainability Strategy Focus Area

Energy and Climate Change



#### Sustainable Development Goal



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## Biodiversity

### What is in this topic?

Anticipating and minimizing impacts on species and ecosystems, as well as our approach and performance regarding remediation.

**2x**

the population of grizzly bears has been recorded in the foothills of Alberta over the past 10 years, thanks in part to our partnership with fRI Research

#### Sustainability Strategy Focus Area

Biodiversity



#### Sustainable Development Goals



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## Material Topics

### Economic Performance and Contributions

Economic performance, direct and indirect economic impacts, generating economic value, payments to governments, local hiring and procurement practices, community investment.

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### Mine Closure

Planned or actual closure and related impacts on workers, local communities and the environment.

34

### Business Ethics

Anti-corruption, public policy, compliance with laws and regulation (non-environmental), Code of Ethics.

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### Our Workforce

Employee demographic profile, benefits, talent attraction, labour relations, retention, training and development, inclusion, diversity, equal opportunity, non-discrimination, freedom of association, and collective bargaining.

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# Economic Performance and Contributions

## Why was Economic Performance and Contributions a Material Topic in 2016?

In 2016, citizens around the world continued to express a desire for greater transparency on corporate revenues, taxes and investments. While companies and governments began to align themselves with the UN Sustainable Development Goal 8 — sustained, inclusive and sustainable economic growth as well as full and productive employment and decent work for all — by 2030, societal pressure related to job creations and wages increased, especially as commodity markets improved in the latter half of the year.

After a sustained downturn in global commodity markets since 2011, prices for many products, including steelmaking coal and zinc, increased in the second half of 2016. The rise in steelmaking coal prices was due to a number of supply-side factors, including production curtailments at seaborne supplier mines since the start of 2014, due to the low price environment, supply-side reform in the Chinese domestic coal sector, and supply disruptions in Australia and China.

### Industry Context

While some steelmaking coal mines reopened this year due to improved market conditions, many mining companies remained focused on measures to maintain economic viability, including asset sales, project cancellations and deferrals, closures and employee reductions throughout 2016. Mining-dependent communities and countries continued to feel the effects of low commodity prices through reduced employment, lower tax revenues and reduced community investment.

As the market improved, communities continue to be concerned about the potential impacts of volatile market cycles. As a result, many mining companies are increasingly focused on demonstrating long-term mutual benefits and increasing transparency about their economic contributions. All Canadian companies in the extractives industry will begin to publicly report on payments to governments under the *Extractive Sector Transparency Measures Act* (ESTMA) in May 2017.

While impacts may vary due to changes in commodity markets, direct economic impacts from mining activities may include wages and benefits paid to employees and payments to suppliers, payments to providers of capital, income and resource taxes paid, and community investments. Indirect economic impacts may include the development of infrastructure, changes to local government, impacts on other businesses in the region and changes to local demographics.

### Teck Context

In the first half of 2016, we remained focused on measures to ensure the long-term viability of our business. This included reducing our debt and the continued implementation of cost reduction measures. As prices for most of our principal products improved in the second half of 2016, we increased spending in selected areas to increase coal production to capitalize on the upturn.

Throughout 2016, we continued to concentrate on local employment, investment and procurement as we engaged with local communities to maintain trust, mitigate impacts where possible and create mutual benefits for the long term.



### What is in this topic?

Economic performance, direct and indirect economic impacts, generating economic value, payments to government, local hiring and procurement practices, community investment.

### GRI Indicators and Topic Boundary

201-103, 201-1, 202-103, 202-2, 203-103, 203-1, 203-2, 204-103, 204-1

This topic is considered most material by our shareholders, local communities, regulators and society in the context of all Teck sites, contractor and supplier selection, and direct/indirect impacts on communities.

### Performance Highlights

Revenue of

**\$9.3 billion**

and gross profit before depreciation and amortization of \$3.8 billion

**\$11.8 million**

in community investments

# How Does Teck Manage Economic Performance and Contributions?

## Our Targets and Commitments

We are committed to providing long-term economic opportunities through local hiring and procurement, coupled with strategic community investments, to encourage lasting positive benefits for the communities in which we operate.

It is our long-term sustainability goal to create lasting mutual benefits through collaboration on social, economic and environmental initiatives by 2030.

Our annual community investment budget is at least 1% of average annual earnings before taxes for the preceding five-year period. With a budget tied to earnings, our success as a company directly impacts our ability to invest in the communities where we operate.

### \* Material Topic Interconnections

Mine Closure: page 34

Business Ethics: page 39

Community Engagement: page 69

Human Rights: page 81

In the section below, we outline how Teck generates economic value, and our approach to tax, local hiring and procurement, and community investment.

## Generating Economic Value

Teck works to generate value from the extraction, processing and sale of mineral, coal and metal resources. This requires our operations to be economically viable across a range of commodity prices. We achieve this by focusing on maximizing the cost-efficiency of our operations and ensuring we receive full value for our products. This in turn helps to ensure the longer-term sustainability of our operations and their economic contributions to communities, including employment, procurement, capital investment, revenues to governments and Indigenous Peoples, and dividends to shareholders.

We also recognize that our ability to operate depends on the support of local communities and that economic development needs to be managed responsibly so that it does not lead to dependence. As such, we focus on facilitating long-term economic opportunities through local hiring and procurement, coupled with strategic community investments, to encourage lasting positive benefits for the communities in which we operate.

## Approach to Tax

Our approach to taxation is aligned with our [Code of Ethics](#) and our approach to business and sustainability. We are, in all tax matters, compliant, transparent, cooperative and ethical. We disclose our taxes accrued and paid in our published financial results in accordance with applicable accounting standards and supplement this with additional voluntary disclosure, working to ensure that our disclosure is accessible, practical and reported in a way that is easily understood. We believe that transparency can help communities to understand the revenue generated by mining activity, and how this is distributed to governments for local, regional and national economic and social development.

Many companies, including Teck, have joined the [Extractive Industries Transparency Initiative](#) (EITI), which is a

voluntary global initiative that promotes transparency in payments to government and revenues for extractive industries. We voluntarily provide information on our tax payments in our principal operating countries on a country-by-country basis in our sustainability report and have done so since 2011. Our payments to governments will be reported to the Canadian government by country and on a project-by-project basis, as required under the *Extractive Sector Transparency Measures Act*.

A summary of our [principles for tax](#) are available on our website.

## Approach to Local Hiring and Procurement

We contribute to the long-term employability of the people near our operations by providing a range of career opportunities. This builds the economic resilience of communities and ensures that we leave a positive legacy. Sourcing local goods and services and hiring people locally helps gain community support for our activities, enhances our local knowledge, builds capacity, and mitigates business and social risks.

Local hiring is a priority at Teck operations. For local procurement, we consider each operation's definition of local, and we work to weight this positive criterion with other criteria such as the ability to meet our needs, health and safety performance, and competitiveness. Whenever possible, sites look for opportunities to utilize local suppliers, providing that they meet our standards and provide cost-competitive goods and services. At some of our sites, local suppliers also include those who self-identify as Indigenous Peoples. Commitments regarding procurement and hiring practices may be included in agreements between Teck and Indigenous communities.

For more information on our continuous improvement in procurement practices, visit the [Economic Performance and Contributions page](#) on our website.

## Approach to Community Investment

Community investment is a key pillar of our company's overall commitment to communities where we live and work. We contribute to community organizations to help build strong relationships and create lasting mutual benefits. Through community investment, we support local development priorities.

Our community investment program is guided by best practices from the

International Finance Corporation, the London Benchmarking Group and Imagine Canada. We aim to contribute at least 1% of our pre-tax earnings on a five-year rolling average basis to community investment. With our target tied to earnings, our success as a company directly impacts our ability to invest in the communities where we operate.

For more information, visit the [Economic Performance and Contributions page](#) on our website.



### SDG Spotlight

## Supporting SDG 8: Creating Opportunities in Alaska's Northwest Arctic



Red Dog Operations, one of the world's largest producers of zinc concentrate, is located about 170 kilometres north of the Arctic Circle in Northwest Alaska. For more than 25 years, Red Dog and the people of the Northwest Arctic region have worked together to create jobs and opportunities to make the region stronger. Red Dog was developed under an innovative operating agreement between the landowner NANA, a Regional Alaska Native corporation, and Teck.

We work to engage with the local villages and continuously demonstrate

our ability to effectively manage environmental and social impacts while providing opportunities and mutually defined benefits throughout the mining life cycle. We recognize that the strength of our community relationships is vital to how we create long-term sustainable benefits for the local population.

### Building Careers, Building Communities

Over \$5 billion in benefits have been realized by the region in the form of payments such as wages, taxes, royalties and community investments since the operation began. More than 715 jobs are directly supported by Red Dog, making the mine the largest source of non-government jobs in the entire region.

In addition to job creation, Red Dog undertakes a number of other projects to support the community, such as a scholarship program. Maggie Dunleavy has been working at Red Dog Operations for the past two years and has a long family history of working at the mine. Maggie began her employment as a college student and upon receiving a scholarship, is now free of student debt.

In addition to scholarships, Red Dog has partnered with local schools to support job development. Dr. Annmarie O'Brien, Superintendent of the Northwest Arctic Borough School District, recognizes the impact of Red Dog on educational opportunities in the Northwest Arctic. "Teck is instrumental in supporting the school's Career Technical Education Program, which has seen the second-highest increase in the high school graduation rate in the past five years for the entire state," said Dr. O'Brien. "My assistant's daughter and her son work at Red Dog, so I see first-hand the lives they're able to lead as a result of being able to get high-paying and high-quality jobs."

### Future Operations at Red Dog

As the mine life is expected to continue to 2031, Red Dog and local governments are working together to build on a solid track record, one that supports both the mine and the communities of the region.



An overview of the work Teck is doing to address each Sustainable Development Goal is available on our [website](#).

## What Was Our Performance in Economic Contributions in 2016?

In this section, we report on economic value generated and distributed, taxes and other payments to government, local hiring and procurement, and community investment.

### Economic Value Generated and Distributed in 2016

We contribute to the wealth and prosperity of the countries, regions and communities where we operate by

generating economic value that includes tax and royalty payments, local hiring and procurement, and community investments. We work to improve efficiency of our activities and reduce our operating costs to maximize economic value generated.

Table 13: **2016 Breakdown of Economic Value Generated and Distributed (millions)<sup>(1)</sup>**

| Economic Value Generated                 | Economic Value Distributed |                                     |                      |                                            |                      |                                                 |                                          | Economic Value Retained |                                      |               |
|------------------------------------------|----------------------------|-------------------------------------|----------------------|--------------------------------------------|----------------------|-------------------------------------------------|------------------------------------------|-------------------------|--------------------------------------|---------------|
|                                          | Revenues <sup>(2)</sup>    | Payment to Suppliers <sup>(3)</sup> |                      | Employee Wages and Benefits <sup>(4)</sup> |                      | Payments to providers of capital <sup>(5)</sup> | Income and Resource Taxes <sup>(6)</sup> |                         | Community Investments <sup>(7)</sup> | Total         |
|                                          |                            | Operating Costs                     | Capital Expenditures | Operating Costs                            | Capital Expenditures |                                                 |                                          |                         |                                      |               |
| USA                                      | \$ 1,527                   | \$ 732                              | \$ 56                | \$ 158                                     | \$ 5                 | –                                               | \$ 120                                   | \$ 1                    | \$ 1,072                             | \$ 455        |
| Canada                                   | \$ 6,982                   | \$ 3,967                            | \$ 1,178             | \$ 1,056                                   | \$ 9                 | \$ 629                                          | \$ 124                                   | \$ 5                    | \$ 6,968                             | \$ 14         |
| Chile                                    | \$ 630                     | \$ 430                              | \$ 94                | \$ 81                                      | \$ 11                | –                                               | \$ (60)                                  | \$ 4                    | \$ 560                               | \$ 70         |
| Peru                                     | \$ 591                     | \$ 228                              | \$ 63                | \$ 85                                      | –                    | –                                               | \$ 88                                    | –                       | \$ 464                               | \$ 127        |
| Other                                    | –                          | \$ 4                                | –                    | \$ 2                                       | –                    | –                                               | –                                        | \$ 2                    | \$ 8                                 | \$ (8)        |
| Inter-segment elimination <sup>(2)</sup> | \$ (430)                   | \$ (430)                            | –                    | –                                          | –                    | –                                               | –                                        | –                       | \$ (430)                             | –             |
| <b>Total</b>                             | <b>\$ 9,300</b>            | <b>\$ 4,931</b>                     | <b>\$ 1,391</b>      | <b>\$ 1,382</b>                            | <b>\$ 25</b>         | <b>\$ 629</b>                                   | <b>\$ 272</b>                            | <b>\$ 12</b>            | <b>\$ 8,642</b>                      | <b>\$ 658</b> |

(1) Payments to suppliers made for materials, product components, facilities and services purchases comprises operating expenses and capital expenditures. Historical data that did not include capital expenditures has not been restated.

(2) Revenues are presented based on an accrual basis. Internal cross-border sales are eliminated as shown.

(3) Payments to suppliers and contractors for materials and services include operating costs and capital expenditures. Operating costs include operating expenses at our mining and processing operations and our general and administration, exploration and research and development expenses and costs relating to production stripping. Operating costs excludes depreciation, and employee wages and benefits, which are specified separately. Capital expenditures are payments for purchases of property, plant and equipment, excluding the component relating to capitalized wages and benefits, which is specified separately.

(4) Wages and Benefits reflects total amounts paid to employees relating to wages and benefits, including payroll taxes. In addition to the employee wages and benefits recognized in expenses on the financial statements, wages and benefits that have been capitalized to property, plant and equipment is also presented.

(5) Payments to providers of capital includes dividends paid to shareholders and interest paid to debt holders.

(6) Income and resource taxes include amounts paid in the year.

(7) Community investments include voluntary donations paid during the year.

In 2016, we achieved a profit attributable to shareholders of \$1.0 billion or \$1.80 per share. This compares with a loss attributable to shareholders of \$2.5 billion or \$4.29 per share in 2015, a profit of \$362 million or \$0.63 per share in 2014, and a profit of \$961 million or \$1.66 per share in 2013. See our [Annual Report](#) for more detailed information on our financial performance.

### Reporting on Payments to Governments

In May 2017, Teck will publicly report on payments to governments in the countries

where we operate, as required under the Canadian *Extractive Sector Transparency Measures Act*, known as ESTMA. ESTMA introduces new reporting and transparency obligations for the Canadian extractive sector in support of global efforts to enhance transparency and prevent corruption.

ESTMA requires businesses to publicly report on payments to governments, including Indigenous governments outside of Canada. These payments include taxes,



royalties and other payment types, by country and on a project-by-project basis, in relation to the commercial development of oil, gas and minerals. The requirement for extractive companies to report payments to Indigenous governments in Canada was deferred until 2018. The Canadian government continues its engagement with Indigenous Peoples on the implementation of ESTMA.

Teck works to ensure that our disclosure is transparent, accessible, practical and reported in a way that is easily understood. As such, Teck will also publish a voluntary Economic Contributions Report in June 2017 to complement and enhance our ESTMA disclosure. This report will demonstrate our overall value generation in the areas where we operate through wages and benefits, payments to contractors and suppliers, community investment and other payments.

### Significant Tax Issues — Negotiating Resolutions to the Severance Tax in Alaska

In January 2016, Teck Alaska filed a complaint in the Superior Court for the State of Alaska seeking to enjoin the enforcement

of a new severance tax levied against Teck by the Northwest Arctic Borough (NAB).

At the time of this report's release, Red Dog and NAB reached an agreement on key terms that provide a substantially increased payment in lieu of taxes to the NAB as compared to previous payments, and that includes the establishment of a Village Improvement Fund to support infrastructure and programs in the region. The tentative agreement still requires approvals from the NAB and Teck in order to become effective.

### Local Hiring and Procurement in 2016

The tables below reflect our approach to tracking local employees and local procurement until the end of 2016. Increases and decreases in this data are influenced primarily by site-level construction and maintenance activity, as well as by the availability of suppliers in the local area. Historical data related to local hiring can be found on the [2016 Sustainability Performance Data page](#) on our website.

Table 14: **Local Employment in 2016**<sup>(1),(2)</sup>

| Operation              | Number and Percentage of Local Employees |    | % of Senior Management Roles Filled by Locals <sup>(4)</sup> |
|------------------------|------------------------------------------|----|--------------------------------------------------------------|
|                        | #                                        | %  | %                                                            |
| Cardinal River         | 323                                      | 94 | 75                                                           |
| Carmen de Andacollo    | 383                                      | 28 | 0                                                            |
| Coal Mountain          | 145                                      | 71 | 86                                                           |
| Elkview                | 617                                      | 66 | 91                                                           |
| Fording River          | 687                                      | 63 | 92                                                           |
| Greenhills             | 417                                      | 69 | 93                                                           |
| Highland Valley Copper | 1,021                                    | 95 | 26                                                           |
| Line Creek             | 313                                      | 65 | 87                                                           |
| Pend Oreille           | 173                                      | 68 | 6                                                            |
| Quebrada Blanca        | 290                                      | 52 | 0                                                            |
| Red Dog <sup>(3)</sup> | 64                                       | 14 | 0                                                            |
| Trail Operations       | 1,418                                    | 99 | 91                                                           |

(1) Data is not directly comparable between operations, as there are differences in how each operation defines "local" and tracks data.

(2) "Local" is defined as persons or groups of persons living and/or working in any areas that are economically, socially or environmentally impacted (positively or negatively) by an organization's operations. There may be fluctuations in data due to discrepancies in those who have been considered to be living in an "impacted" community. The community can range from persons living adjacent to operations to isolated settlements at a distance from operations, but are still likely to be affected by these operations.

(3) Red Dog Operations previously considered local as those within the state of Alaska, given the small population (approximately 750,000 people). In 2016, "local" was revised to contain those people within the 11 communities near the mine, to align with other operations' definitions.

(4) Senior management are defined by their compensation band, which is determined by job responsibilities.

## What Was Our Performance in Economic Contributions in 2016?

Table 15: **Percentage of Spending on Local Suppliers**

| Operation                                        | 2016 | 2015 | 2014 | 2013 |
|--------------------------------------------------|------|------|------|------|
| Cardinal River                                   | 9    | 8    | 8    | 6    |
| Carmen de Andacollo                              | 18   | 19   | 9    | 14   |
| Steelmaking Coal Operations<br>in the Elk Valley | 41   | 48   | 19   | 30   |
| Highland Valley Copper                           | 30   | 29   | 27   | 26   |
| Pend Oreille                                     | 20   | 12   | 13   | 25   |
| Quebrada Blanca                                  | 33   | 24   | 18   | 13   |
| Red Dog                                          | 59   | 55   | 59   | 60   |
| Trail Operations                                 | 27   | 24   | 33   | 29   |

### Community Investment in 2016

We continue to meet our target of donating at least 1% of our pre-tax earnings on a five-year rolling average basis. Our community investment expenditures in

2016 were \$11.8 million.

Information on our [community investment reporting framework](#) and details of our [2016 contributions](#) are available on our website.

Table 16: **Community Investment by Site<sup>(1),(2),(3),(4)</sup>**

| Operation                                     | 2016      | 2015       | 2014       | 2013       |
|-----------------------------------------------|-----------|------------|------------|------------|
| Carmen de Andacollo                           | 1,929,000 | 2,310,000  | 2,157,000  | 2,217,000  |
| Steelmaking Coal operations <sup>(1)</sup>    | 679,000   | 672,000    | 1,970,000  | 1,654,000  |
| Duck Pond                                     | 263,000   | 309,000    | 297,000    | 468,000    |
| Highland Valley Copper                        | 410,000   | 456,000    | 579,000    | 663,000    |
| Pend Oreille                                  | 25,000    | 18,000     | 8,000      | 36,000     |
| Quebrada Blanca                               | 368,000   | 513,000    | 623,000    | 532,000    |
| Red Dog <sup>(2)</sup>                        | 948,000   | 1,284,000  | 556,000    | 586,000    |
| Trail Operations                              | 339,000   | 480,000    | 334,000    | 370,000    |
| Corporate Offices and Projects <sup>(3)</sup> | 6,844,000 | 10,602,000 | 12,755,000 | 15,846,000 |
| Exploration                                   | 35,000    | 89,000     | 69,000     | 212,000    |

(1) Steelmaking coal operations include Cardinal River, Coal Mountain, Elkview, Greenhills, Fording River and Line Creek Operations.

(2) The 2012–2014 Red Dog numbers were recalculated to include investments that Vancouver Head Office made in the Northwest Arctic Borough.

(3) Includes Calgary, Santiago, Spokane, Toronto and Vancouver offices as well as resource development projects.

(4) The numbers represent Teck's portion of ownership only (Carmen de Andacollo 90% and Quebrada Blanca 76.5%).

Given that our community investment budget is tied to earnings on a five-year rolling average, the budget continued to decrease in 2016.



## SDG Spotlight Supporting SDG 3: Health Extension Workers in India



Teck is supporting improved health and well-being at the global level through our [Zinc & Health](#) program. As one of the world's largest producers of zinc, Teck is committed to helping solve the global health issue of zinc deficiency through therapeutic zinc, zinc supplementation, food fortification, crop nutrition, and awareness and advocacy. To date, this program has reached more than 140 million people worldwide.

One of our key programs is the Zinc Alliance for Child Health (ZACH), a partnership that includes UNICEF, Nutrition International and the Government of Canada. Since 2011, ZACH has helped provide millions of children with access to zinc and oral rehydration salts for the treatment of diarrhea, the world's second leading cause of death in children under the age of five. This has been accomplished by training more than 60,000 health-care workers in India, Senegal, Burkina Faso, Ethiopia and Kenya on diarrhea prevention and on management to promote positive health outcomes. These efforts have been focused in countries that have particularly high numbers of child deaths caused by diarrhea.

As part of the ZACH partnership, Teck worked with UNICEF and local partners to train health-care providers in Odisha, India, on diarrhea prevention and management. Odisha has one of the highest infant mortality rates in India, at 51 per 1,000 live births, compared to the national average of 40. The state's integrated health policy aims to make health care available to all, but many families rely on traditional healers for health-care services.

In the tribal village of Falkunkonda, in the Malkangiri district of Odisha, citizens depend on the local 'Wade', a traditional healer, for all of their health-care needs. Most citizens do not have the resources to seek other health-care services or information.

UNICEF and Teck established a way to help ensure this village's children receive appropriate treatment for diarrheal disease by equipping PARIVARTAN, a local civil society organization, with the resources to train Wades in current health-care practices and, when necessary, provide information on referring patients to other medical facilities. This approach allows the community to continue receiving health care from a trusted source while also receiving improved treatment and information. Local Wades are now better prepared to meet Odisha's health-care needs and are successfully referring mothers to community health centres, where their children receive lifesaving zinc and oral rehydration salts.



An overview of the work Teck is doing to address each Sustainable Development Goal is available on our [website](#).

## Outlook for Economic Performance and Contributions

Volatility in commodity prices is expected to continue to affect Teck and the broader mining industry in both the near and long term. We will work to ensure our operations are well-positioned to respond to various market scenarios in the future by remaining focused on productivity and cost discipline across our business.

Looking ahead, we will remain focused on our production and cost targets for our steelmaking coal and base metals business units in 2017. We will also concentrate on improving operating excellence to take advantage of the current positive price environment — particularly in steelmaking coal.

We work collaboratively with communities of interest to keep them informed of any potential challenges and the actions we are taking. Wherever possible, we will continue to work to mitigate impacts and create mutual long-term benefits.

In 2017, we will be examining opportunities to pursue improvements to our community investment policies and guidance to enhance the quality of decision-making, investment performance and public reporting. Actions determined through this process will be in place and reported upon in 2018.

### Learn More

[Role of mining in national economies: third edition, ICMM](#)



# Mine Closure



## What is in this topic?

Planned or actual closure and related impacts on workers, local communities and the environment.

## GRI Indicators and Topic Boundary

203-1, G4-MM1, G4-MM10

This topic is considered most material by our shareholders, employees, contractors and suppliers, local communities, and regulators in the context of Teck's mature production and processing sites.

## Performance Highlights

**97** hectares

of land were reclaimed and 421 hectares were disturbed by our activities in 2016.

## Why was Mine Closure a Material Topic in 2016?

There is an increasing global expectation that companies fully understand and manage the long-term economic, social and environmental impacts throughout the entire life cycle of their activities and products. Planning for the completion of activities and the effective implementation of those plans in consultation and collaboration with COIs is a critical part of life cycle management.

## Industry Context

As a result of the downturn in commodity prices, many companies in the industry announced the sale or temporary closure of mines, or the acceleration of permanent closure of mines. Closure of an operation leads to a decline in employment, local procurement, community investment and infrastructure development. If managed improperly, closed mine sites can also pose safety and environmental risks due to the equipment, tailings and other mine waste facilities, and any infrastructure facilities left following the activities of mining. Companies must plan effectively to mitigate these risks, and implement those plans diligently to support local communities and protect ecosystems.

## Teck Context

Being in business for over 100 years, we have a large diverse portfolio of legacy properties and a number of existing operations that are progressing towards closure. Responsibly closing our sites and managing our legacy properties is an essential element of our sustainability performance.

We focus on responsibly ending mining operations by developing viable, long-term and appropriately diverse post-closure land uses and supporting communities, including former employees, in their "post-mine" transition.

In 2016 we advanced closure planning for our Coal Mountain Operations, which will reach the end of its mine life in the fourth quarter of 2017, and continued to implement our closure plan for our Duck Pond Operations, which ceased operating in 2015.

## How Does Teck Manage Mine Closure?

There are three phases of mine closure that span the life cycle of an operation until a mine is permanently closed: closure planning, closure, and post-closure management.

### Closure Planning

Given the long life of many of our mines, and to ensure that closure plans are relevant at the time that an operation ultimately closes, closure planning is a phased activity conducted in collaboration with our communities of interest. Closure plans are developed with corporate input following industry best practice guidance.

Mine closure is supported by corporate staff and managed at a site level by a cross-functional group that typically includes experts in mine planning, community engagement including engagement with Indigenous Peoples, water and biodiversity. Closure planning begins early in a mine's life, typically as part of permitting processes with the development of a conceptual closure plan relevant to the particular operation. This plan is periodically updated over the life of the operation, as research into reclamation and other closure issues is conducted. Closure planning intensifies as a mine begins to near the end of its life, when all conditions of the operation and its effect on the environment, local economies and government are known.

Each closure plan is developed to address unique characteristics of the site and regulatory requirements of the particular jurisdiction. At the same time, we apply a "best practices" approach if the regulatory requirements are less stringent than those best practices. We engage with COIs in the planning process to ensure the concerns and priorities of local communities and Indigenous Peoples are taken into consideration. Through closure and into post-closure management, our teams focus on achieving and maintaining the commitments outlined in the closure plan.

For more information about closure planning, including what a closure plan consists of, how communities are engaged throughout the stages of mine closure and how we determine the social impacts of closure with a planning tool, visit the [Mine Closure page](#) on our website.

### Closure

After operations end permanently, a site enters the closure phase and teams that manage reclamation are activated and community engagement continues.

#### Reclamation

Our objectives for reclamation are to conserve and enhance biodiversity and to facilitate new, productive uses of areas disturbed by mining. At closure, reclamation activities return the remaining disturbed land to a stable state for post-mining land uses (e.g., wetlands, various wildlife habitats, outdoor recreation and alternative industrial use).

Through reclamation, we can replace much of the structural and compositional diversity of the natural habitats that existed before we developed our mines. We implement leading reclamation practices and have created an internal community of practice to share this knowledge across our operations. We have won awards for our reclamation practices at numerous operations, including all of our steelmaking coal operations, Highland Valley Copper and legacy properties, including Pinchi Lake, Sä Dena Hes, Sullivan and McCracken.

For more information about reclamation and our approach to biodiversity, see page 126 of the Biodiversity section. For additional information about closure activities and to watch videos about our reclamation practices, see the [Mine Closure page](#) on our website.

#### Reclamation Security

Many jurisdictions require mining companies to post financial security for all or part of the remaining costs associated with the mine reclamation and environmental protection. This is a precautionary measure to ensure that governments will not have to unreasonably contribute to the costs of reclamation and environmental protection of a mine site if a company is unable to meet its obligation to fully close and reclaim the site.

### Our Targets and Commitments

We are committed to responsibly ending mining operations by developing and implementing closure plans with our stakeholders.

#### Material Topic Interconnections

Relationships with Indigenous Peoples: page 62

Community Engagement: page 69

Environmental Management: page 103

Biodiversity: page 122

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## How Does Teck Manage Mine Closure?

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At Teck, we take our responsibility to fully close and remediate sites very seriously. We meet all government requirements for security, and currently have approximately \$1.6 billion in security in place for our active and closed sites. Importantly, we are committed to ensuring that this financial security never needs to be accessed, as we responsibly close and reclaim our mine sites and meet all of our environmental obligations, at no cost to government or taxpayers. Teck has a long and proven track record in this regard, with award-winning mine reclamation at a number of sites.

In 2016, the British Columbia Auditor General raised concerns over the level of financial security in place for the reclamation of mines across B.C. Teck has significant financial security with the B.C. government for our active and closed sites in the province — over half a billion dollars at the end of 2016. We will continue to focus on putting the necessary resources in place to meet our obligations to responsibly close and reclaim sites, in addition to fully meeting all requirements for financial security as directed by government. We will also continue to engage with the provincial government as they review and evolve their reclamation security policies.

### **Post-Closure Management**

Once our operating sites are closed, they are monitored and managed as required on a long-term basis by our Legacy Properties team, who have expertise in contaminated sites assessment and remediation, tailings and mine waste storage facility management, reclamation, project management and water treatment. Their role is to ensure that our closure actions remain successful in achieving key objectives, including landform stability, habitat rehabilitation, public safety, water quality protection, monitoring of structures such as dams and rock piles, water treatment, and access controls over portions of the site. We track and maintain more than 100 legacy properties, actively monitor 29 of these properties, and carry out ongoing management actions on 23 sites, including the Sullivan mine in Kimberley, B.C., Louvicourt in Quebec, and Sä Dena Hes in the Yukon.

Over our 100-year history of mining, some of our historical properties were closed during eras when the long-term risks associated with mining and industrial sites were not well understood. Consequently, the closure methods used at these sites did not always conform to currently accepted practices.

Therefore, we have developed a centralized legacy properties database for closed properties that helps us to better understand, prioritize and manage these sites. We assign priorities for assessment and management and, in many cases, we implement additional and current closure practices at these properties.

## What Was Our Performance in Mine Closure in 2016?

We report on the annual area of land disturbed, reclaimed and yet to be reclaimed, total area of land reclaimed and our total footprint in 2016. We also provide a summary of provisions and closure plans.

### Closure Planning in 2016

As part of the closure process for Duck Pond Operations, detailed site assessments were completed in several areas impacted by the operation. These assessments are being used to guide final remediation activities.

In 2016, Coal Mountain Operations, which is scheduled for closure at the end of 2017, developed a detailed closure plan after extensive consultation with stakeholders. For full-time staff at this operation, we have set a target to offer them positions at one of our other steelmaking coal operations in the Elk Valley upon the end of active operations at Coal Mountain. We have also committed to establishing a task group following closure to facilitate ongoing engagement between Teck and communities. The plan has been submitted for review by the provincial government. The process to develop a detailed closure plan for Cardinal River Operations began in 2017, which is scheduled to reach the end of its current mine life in 2019.

Three of our steelmaking coal operations — Fording River, Line Creek and Greenhills — completed periodic updates to their closure plans. Those plans, along with details of reclamation activities planned for

the next five years, were submitted for review by the provincial government.

An updated closure plan for Highland Valley Copper Operations was completed in late 2016 and has been circulated for stakeholder review and comment before being submitted to the B.C. government in 2017.

### Updates to Reclamation Security

In 2016, Teck adjusted the financial security provided for a number of sites to reflect changes in regulatory requirements and conditions. For example, Red Dog Operations saw the most significant change to financial security in 2016 as a result of the renewed approval of the Waste Management Plan and the associated Reclamation and Closure Plan. The approval resulted in an increase to Red Dog's financial assurance in the amount of US\$558 million, up from US\$423 million.

### Closure in 2016

At the end of 2016, Teck had a total footprint of 29,577 hectares (ha), of which 22,872 ha are yet to be reclaimed and 6,705 ha have been reclaimed. As this data relates to active operations, the area of land yet to be reclaimed will generally increase over time until the mining areas are closed and become available for reclamation.

### Outlook for Closure Planning

Addressing mine closure issues, including early engagement with stakeholders on closure planning, is helping us to better align Teck's business interests with local priorities; while we are proud of our closure history, we anticipate that this enhanced alignment will bring more effective outcomes. We will continue to ensure that our mine closure activities — from closure planning to progressive reclamation to post-closure management — effectively manage risk and meet or exceed our commitments. Our preparation for the closure of Coal Mountain Operations is ongoing in 2017, and we will begin detailed closure planning for Cardinal River Operations and continue to conduct life cycle planning during project development.

### Learn More

[ICMM Planning for Integrated Mine Closure](#)

[Responsible Mine Closure & Reclamation at Teck](#)



Table 17: **Area Reclaimed and Disturbed** <sup>(1),(2),(3)</sup>

|                                             | 2016   | 2015   | 2014   | 2013   |
|---------------------------------------------|--------|--------|--------|--------|
| Area reclaimed during the current year (ha) | 97     | 250    | 77     | 434    |
| Area disturbed during the current year (ha) | 421    | 508    | 908    | 310    |
| Area of land yet to be reclaimed (ha)       | 22,872 | 22,692 | 22,414 | 20,791 |
| Total area of land reclaimed (ha)           | 6,705  | 6,493  | 6,438  | 6,357  |
| Total footprint (ha)                        | 29,577 | 29,301 | 28,852 | 27,148 |

(1) The area of land disturbed in the current year may include land that was previously reclaimed and has been re-disturbed. The total area of land reclaimed may decrease in a year due to unsuccessful reclamation attempts or the mining of a previously reclaimed area. Total footprint is the sum of total area of land yet to be reclaimed and total area of land reclaimed.

(2) Data has been restated due to changes in our accounting approach for our footprint.

(3) This data only applies to active operations, with the exception of Duck Pond Operations, which closed in June 2015.

# What Was Our Performance in Mine Closure in 2016?

## Case Study

### Engaging Communities to Prepare for Closure of Coal Mountain Operations



Closing a mining operation, especially one that has been active for several decades, requires careful planning and consultation. Our Coal Mountain Operations in southeast British Columbia started as an underground mine in the early 1900s and transitioned to a large-scale open pit operation in the 1940s. In 2008, Teck acquired Coal Mountain as part of our acquisition of the assets of the Fording Canadian Coal Trust; mining at this operation will be completed around the end of 2017.

To prepare for closure, we sought feedback from employees, local Indigenous Peoples, nearby communities, municipal governments, recreational and hunting groups, other impacted groups and individuals to inform planning, including how the land will be used after mining. We are committed to working to minimize the impacts of closure on local communities,

and feedback will help us understand what steps may need to be taken to manage impacts from closure. That work includes identifying opportunities for existing Coal Mountain employees to transition to other Teck operations.

#### Seeking Feedback from Stakeholders and Indigenous Peoples

A key tool for seeking input into Coal Mountain's closure planning was through a survey sent to local stakeholders, including members of the Ktunaxa Nation, environmental organizations and various outdoor recreation groups, as well as local residents and businesses. The survey was available on our website, distributed to employees at Coal Mountain, and provided at community open houses. Responses concluded that:

- 72% of respondents indicated the future use of lands is important to them
- 43% of respondents indicated wildlife conservation is a priority
- 30% of employees were concerned about employment changes

This feedback provides valuable input into our closure planning, which will also help us to be responsive to issues of importance to the Ktunaxa Nation and other stakeholders. "The engagement

on our closure planning will strengthen our relationships at Coal Mountain and build support for closure and other activities in the Elk Valley," said Ed Morash, General Manager, Coal Mountain Operations.

#### Creating a Closure Plan

The closure plan for Coal Mountain was supported and managed at a site level by a cross-functional group that included experts in mine operations, community, Indigenous Peoples, water reclamation and biodiversity, as well as corporate subject matter experts. In addition to incorporating feedback from Indigenous Peoples and stakeholders, we ensure our closure plans include consideration of water management, stability of landforms and watercourses; socio-economic impacts on local communities; biodiversity; possible post-closure uses; post-closure management requirements; and cost-effective execution.

#### Mitigating Impacts

In preparation for closure at Coal Mountain, we will focus on finalizing and implementing our closure plan, based on input from the Ktunaxa Nation and stakeholders, as well as on minimizing the effect on the workforce and other potential local and regional impacts.

## Post-Closure in 2016

In 2016, all of our legacy sites remained in good standing and had no significant environmental incidents. We continue to manage long-term water requirements at many of our legacy sites; this includes our active water treatment facility at our Sullivan Mine legacy property.

At the former McCracken Mine in Arizona, one of our legacy properties, our project to remove tailings from federal lands adjacent to the site and place them in a repository constructed on-site was completed in accordance with the Memorandum of Understanding negotiated with the U.S. Bureau of Land Management in 2014.

At our Sullivan Mine legacy property, a Failure Modes and Effects Analysis workshop was conducted for the tailings facilities, to ensure that they continue to be well maintained. This workshop, which was an update to a similar undertaking carried out just prior to the mine closing, confirmed that all of the facilities are being well managed from a risk perspective and that no major issues exist. It was also a good management tool to gauge closure and reclamation efforts over the past 20 years, and serves as an example of the value of such for our other legacy sites, where we will do similar risk updates.



# Business Ethics

## Why was Business Ethics a Material Topic in 2016?

Strong business ethics help prevent corruption, which, if unchecked, can lead to resource misallocation, lower employment and exacerbated poverty.<sup>(1)</sup> Domestic and international laws have been established to promote stronger business ethics and to increase transparency of payments to governments in order to fight bribery and corruption. There is also increasing public pressure for, and regulation requiring, greater transparency around how companies engage with and lobby or influence governments. As a result, businesses are experiencing increasing legal requirements associated with anti-corruption and tax transparency.

### Industry Context

As a global industry that operates in a wide range of jurisdictions including underdeveloped and developing countries, business ethics and anti-corruption are a major focus for the mining industry. The importance of business ethics is reflected in the International Council on Mining and Metals (ICMM) Principles. ICMM Principle 1, to “implement and maintain ethical business practices”, states that companies must implement policies and practices that seek to prevent bribery and corruption.

Anti-corruption efforts and complying with local laws and regulations remained key activities within the mining industry, and were an essential component of gaining and maintaining a social licence to operate in 2016.

### Teck Context

Teck operates primarily in relatively low-risk jurisdictions that are characterized by stable political and economic conditions and robust legal systems. We sell our products in countries around the world that have varying degrees of political and social development.

We focus on being a collaborative, solutions-based partner with governments in the jurisdictions where we work, and we regularly engage with government on public policy initiatives primarily focused on maintaining and enhancing the competitiveness and the social, environmental and economic sustainability of our industry. In 2016, our public policy engagement focused on climate change, water management, tax competitiveness and Indigenous Peoples, among other topics.

The primary countries we operate in (Canada, United States, Peru and Chile) have well-established anti-corruption laws. In addition, Teck has comprehensive management systems in place, guided by our Code of Ethics, that are designed to ensure Teck upholds high moral and ethical principles in everything we do.



### What is in this topic?

Anti-corruption, public policy, compliance with laws and regulation (non-environmental), Code of Ethics

### GRI Indicators and Topic Boundary

102-17, 203-2, 205-103, 205-1, 205-2, 406-103, 415-103, 415-1, 419-103

This topic is considered most material by our shareholders, employees, contractors and suppliers, local communities and regulators in the context of all Teck sites and contractor selection/management.

### Performance Highlights

# 98%

of non-union, non-hourly employees completed Code of Ethics certification through a web-based compliance and ethics training program to refresh and enhance awareness of the Code of Ethics, including issues such as insider trading, conflicts of interest and harassment.

# How Does Teck Manage Business Ethics?

## Our Targets and Commitments

We are committed to upholding high moral and ethical principles as affirmed in our [Code of Ethics](#). While Teck's business practices must be consistent with the business and social practices of the communities in which we operate, we believe that honesty is the essential standard of integrity in any locale. Thus, although local customs may vary, Teck's activities are based on honesty, integrity and respect.

### \* Material Topic Interconnections

Economic Performance and Contributions: page 27  
Our Workforce: page 44  
Human Rights: page 81

In this section, we outline our approach to business ethics, our *Doing What's Right* program, conflicts of interest, and public policy.

## Our Approach to Business Ethics

We conduct our business in an honest and ethical manner. We expect our employees to deal with everyone in a fair and open manner and to conform to the spirit and intent, as well as the technical requirements, of all contracts and agreements that we enter into, and with all laws, regulations and rules that govern us. Our approach to business ethics is guided by our Code of Ethics, which is implemented through our *Doing What's Right* program, supported by our Anti-Corruption Policy, and has provisions for conflicts of interest. We maintain and implement a tax policy and disclose our engagement in the development of public policy.

### Doing What's Right Program

*Doing What's Right*, our program designed to maintain an ethical workplace, is overseen by our Senior Vice President, Commercial and Legal Affairs. We have a Code of Ethics available in English, Spanish, Chinese and Turkish for our employees and contractors located at our operations, sites and offices worldwide. Through this code, we affirm our commitment to uphold high moral and ethical principles. It specifies the basic norms and behaviours for those conducting business on our behalf. For more information, visit the [Business Ethics page](#) on our website.

### Anti-Corruption

We engage in and support the work being done to fight corruption by supporting international frameworks such as the United Nations Global Compact (UNGC) and the Extractive Industries Transparency Initiative (EITI). We participate in the EITI through our ICMM membership; more information can be found in the [Sustainability Governance page](#) on our website.

Our Code of Ethics requires that we conduct global business in a moral and ethical manner, and that employees comply with all applicable laws. Under our anti-corruption compliance policy, available in English and Spanish with additional overviews available in Chinese and Turkish, payments, charitable donations, travel expenses, gifts and entertainment may not be made to government officials or customers to assist us in obtaining or retaining business, nor can employees provide payments, gifts or entertainment that are prohibited by applicable country or local laws.

For more information, visit the [Business Ethics page](#) on our website.

### Conflicts of Interest

Our Code of Ethics contains provisions regarding conflicts of interest for employees. As a Canadian company, we are subject to the *Canada Business Corporations Act*. As such, directors of the Board are required to disclose a material interest in any transaction or opportunity that the company is considering. To ensure the exercise of independent judgment, directors who have disclosed such an interest are prohibited from participating in the Board discussion or voting on the transaction.

### Public Policy

Our corporate Government Affairs team guides Teck's approach to public policy. Teck focuses on being collaborative and transparent, with a solutions-based approach in our engagements with governments in the jurisdictions in which we operate. We take a systemic approach to monitoring and identifying political, legislative and regulatory developments in order to identify public policy opportunities and risks in areas pertaining to our business. For more information, visit the [Business Ethics page](#) on our website.

## What Was Our Performance in Business Ethics in 2016?

Our performance in business ethics includes reporting on alleged violations against our Code of Ethics through our *Doing What's Right* program, auditing of our anti-corruption policies, compliance with laws and regulations, public policy initiatives and political contributions.

### Doing What's Right Program

Through this program, we received 15 reports of alleged violations of our Code of Ethics in 2016 (one report contained two types of alleged violations). The most common case types were bribery/corruption (19%) and employee relations (19%), followed by a range of other matters, including allegations regarding fraud and substance abuse. By the end of 2016, 13 of the 15 cases were closed following investigation, of which six resulted in management action, such as discipline or amendments to practices or policies. No criminal cases regarding bribery were brought against Teck or any of its affiliates in 2016 or 2015.

### Anti-Corruption

All operations and business activities are assessed for risks related to corruption, and internal audits are conducted on a periodic basis to assess compliance with the Anti-Corruption Policy. Annually, our Internal Audit department evaluates the effectiveness of our system of internal control over financial reporting (ICFR). This includes a consideration of the company's vulnerability to fraud, as well as an evaluation of the design and operating effectiveness of those internal controls intended to prevent and/or detect fraudulent activities at a significant level. One deficiency in ICFR was identified in 2016. The Internal Audit department also reports to the Audit Committee on a quarterly basis on any frauds identified, other than those reported through the whistle-blower hotline; no instances of fraud were reported to the Audit Committee through normal channels during 2016.

Our internal audit for anti-corruption is one component of our anti-fraud program, which is reported annually from our Risk Group to our CEO and other members of the senior management team.

### Public Policy Initiatives

In 2016, we engaged directly and indirectly (i.e., through industry associations) with governments on several public policy and regulatory initiatives of relevance to Teck, including:

- **Advancing reconciliation with Indigenous Peoples in Canada:** In 2016, we supported efforts to advance reconciliation with Indigenous Peoples in Canada by supporting the ongoing work of Reconciliation Canada and the recommendations flowing from the Truth and Reconciliation Commission final report; advancing and being a signatory to a Memorandum of Understanding between the BC Assembly of First Nations and the Business Council of British Columbia — “Recognizing and Accelerating the Opportunities and Economic Reconciliation between First Nations and the Business Community in British Columbia”; advocating for the advancement and strengthening of consultation frameworks; supporting dialogue and the development of mutually beneficial mechanisms for implementing the United Nations Declaration on the Rights of Indigenous Peoples; and investing in Indigenous education, skills training and capacity building. We will continue these efforts through 2017.
- **Partnering with UN Women to empower Indigenous women in Chile:** In 2016, we began working with UN Women and the Government of Chile on a collaborative project to promote the empowerment, leadership, and economic and social participation of Indigenous women in northern Chile. The project is scheduled to continue to 2018.
- **Participating in the Government of Canada's review of environmental assessment processes:** In 2016, Teck made several recommendations to the Expert Panel reviewing environmental assessment processes in Canada. Our recommendations are in alignment with

## What Was Our Performance in Business Ethics in 2016?

the Government of Canada's intent to ensure that environmental processes are robust and that they incorporate science, protect the environment, respect the rights of Indigenous Peoples and support economic growth. Please see Teck's submissions on the [Expert Panel's website](#).

**Ensuring there is adequate resourcing, capacity, and cross-ministry and jurisdictional coordination mechanisms in place to facilitate the effective and efficient implementation of processes, legislation and regulation related to project reviews:** We

continuously seek enhancements to permitting and consultation frameworks across jurisdictions where we have operations and projects.

**Providing input into the Government of Canada's Metal Mining Effluent Regulations (MMER) Review and supporting the development of a steelmaking coal mining regulation under Canada's Fisheries Act:** We engaged on the continued development of these regulations through 2016 and will continue to do so in 2017. We view the conclusion of this work as vital to the future of Canada's mining industry and as a significant opportunity for the federal government to both improve regulatory certainty and strengthen environmental protection. For Teck, this is important to the future of our steelmaking coal mines in Canada.

**Advocating for tax competitiveness and Provincial Sales Tax (PST) modernization in British Columbia:** In 2016, Teck submitted detailed recommendations to the B.C. Commission on Tax Competitiveness and to the B.C. government on how to address tax competitiveness challenges, with a specific focus on modernizing the PST and addressing the risks of carbon leakage and competitiveness challenges in the B.C. Carbon Tax policy framework for emission-intensive trade-exposed (EITE) industries, as well as other business taxes in order to support mining competitiveness in the province. Please view Teck's recommendations on the [Government of B.C.'s website](#).

**Advocating for effective and efficient climate change policies, including carbon pricing regimes that avoid carbon leakage and address the competitiveness of EITE industries:**

We support the development of effective and efficient carbon pricing regimes in jurisdictions around the world. Teck is a Paris Pledge signatory and, in 2016, we were proud to be the first Canadian natural resource company to join the World Bank's Carbon Pricing Leadership Coalition. In Canada, we established and participated in a civil society-industry working group through which we discussed the B.C. Carbon Tax policy framework, and explored and developed policy options for the development of competitiveness mechanisms for EITE industries. As the federal and provincial governments in Canada continue to advance the Pan-Canadian Framework agreement, we will continue to share our insights and the outcome of our working group process. We have also participated directly with the Alberta government as they work toward implementing the jurisdiction's first comprehensive carbon tax regime, including the development of an EITE mechanism and an output-based allocation system for large emitters. In other jurisdictions, we continue to advocate for climate change policies and carbon pricing regimes that support the world's transition to a lower-carbon economy while ensuring a level playing field for EITE industries. For more details about carbon policies, see the Energy and Climate Change section on page 114.

**Participating in various public-private mining working groups in several regions of Chile:** To support ongoing activities at our Quebrada Blanca and Carmen de Andacollo operations, as well as other projects and exploration activities across Chile, we actively participate in these working groups to ensure key issues such as water scarcity and economic development are addressed. In 2016, we participated in a panel at the CRU World Copper Conference on the topic of "International benchmarks and productivity gaps," relating to recent studies prepared by Chile's National Commission on Productivity. We will continue this work

in 2017 with local partners, including the Pro Investment Committee and SERNAGEOMIN, Chile's National Geology and Mining Service.

**Advocating for changes to the *Canada Transportation Act (CTA)*:** In 2016, Teck continued to advocate for changes to the CTA that support a reliable supply chain, and trade and economic growth across all sectors. As a major Canadian transportation stakeholder and the country's largest rail shipper, Teck advanced recommendations aimed at enhancing the performance, reliability and transparency of Canada's rail system and balancing the railway-shipper relationship. In 2017, we will continue to engage the Government of Canada on these recommendations and how they might be reflected as part of its proposed Transportation 2030 strategy.

**Encouraging Canada to meaningfully enhance diplomatic and economic ties with key markets in Asia, with a focus on China:** As a major exporter to China, in 2016, we continued to advocate for Canada to advance an economic dialogue with China in a timely fashion. In 2017, we will continue to support the advancement of discussions on launching Canada-China free trade negotiations.

**Advocating for a comprehensive approach to address the fiscal (deficit) challenge in Alaska:** As the Alaskan state legislature continued to look at both revenue and spending solutions to address a significant budget deficit, Teck Alaska worked closely with association and state legislators to support a comprehensive approach that did not look to any one sector for new revenue measures. In 2017, we will continue to advance this approach as the state undertakes a review of mining sector taxation.

### Political Contributions

From time to time, we make political contributions in the province of British Columbia. All contributions are made in accordance with applicable laws. We did not make political contributions outside of British Columbia in 2016. In 2016, our contributions totalled \$148,550:

Table 19: **Political Contributions**

| Political group         | Donation amount |
|-------------------------|-----------------|
| BC Liberal Party        | \$ 147,900      |
| BC New Democratic Party | \$ 650          |

### Compliance with Laws and Regulations

In May 2017, Teck will report on payments to governments in our principal operating countries, including taxes and other payment types, by country and on a project-by-project basis, as required under the *Canadian Extractive Sector Transparency Measures Act (ESTMA)*. The Act, which came into force on June 1, 2015, introduces new reporting and transparency obligations for the Canadian extractive sector and contributes to global efforts against corruption in the sector. To learn more about Teck's work with regards to ESTMA, see page 30 in our Economic Performance and Contributions section.

### Outlook for Business Ethics

Teck remains committed to upholding high moral and ethical principles as affirmed in our Code of Ethics. In 2017, we will continue to deliver our *Doing What's Right* and anti-corruption programs and engage in public policy initiatives. We will continue to ensure we are compliant, transparent, cooperative and ethical in all matters and meet our reporting requirements.

#### Learn More

[Extractive Industries Transparency Initiative](#)



# Our Workforce



## What is in this topic?

Employee demographic profile, benefits, talent attraction, labour relations, retention, training and development, diversity and equal opportunity, non-discrimination, freedom of association, and collective bargaining.

## GRI Indicators and Topic Boundary

102-8, 102-41, 202-1, 401-103, 401-1, 401-3, 402-103, 402-1, 403-1, 403-4, 404-103, 404-2, 405-103, 405-1, 406-1

This topic is considered most material by our employees and local communities in the context of all Teck sites and the direct or indirect impacts on communities.

## Performance Highlights

Nearly

**\$16 million**

was invested into employee training programs this year.

## Why was Our Workforce a Material Topic in 2016?

The world is becoming more interconnected and the population more mobile, which influences the job market. Competition for workers is increasing and, at the same time, the nature of employment is changing. Jobs increasingly require more complex skills and training, and leading companies recognize that a high-performing workforce is linked to business value. Therefore, they are investing in the development of employee skills, and working to attract and retain a diverse workforce to maximize performance.

A diverse workforce, which integrates a wider range of people, backgrounds and perspectives, not only helps enhance corporate performance, but it also makes local economies more resilient. The United Nations has prioritized diversity in SDG 5, as well as full and productive employment for all in SDG 8.

## Industry Context

In light of the market conditions in 2016, companies are now working to improve their balance sheets and make their business more resilient in the face of volatile markets. At the same time, an aging workforce, ongoing competition for talent and the need to increase productivity have continued to make training, development and succession planning a major focus for many in the industry.

Diversity is also becoming a more significant priority for the mining industry, where women, Indigenous Peoples and other minorities have typically been under-represented.

## Teck Context

In 2016, we worked to improve productivity and employee relations by maintaining constructive labour relations as we worked through contract negotiations at our Elkview and Fording River operations. We also conducted planning for short- and long-term changes in our workforce and advanced diversity initiatives across the company.

Employee health and safety is a core value and remained an important focus through 2016. To learn more about our approach and performance in this regard, see the Health and Safety of Our Workforce section on page 54.

## How Does Teck Manage Our Workforce?

In this section, we outline how we manage, build and support our workforce, including our approach to employee benefits; our approach to talent attraction; labour relations; retention, training and development; diversity and equal opportunity; and our commitment to non-discrimination.

### Workforce Profile

Our nearly 10,000 employees worldwide have expertise across a wide range of activities related to mining and mineral processing, including exploration, development, smelting, refining, safety, environmental protection, product stewardship, recycling and research.

Our Vice President, Human Resources, who reports to the CEO, is responsible for human resources management and our global people strategy, which is implemented by human resource and management teams at each of our operations and by the corporate human resources department. Our work in human resources is informed by external best practices and standards, including the standards set by the International Labour Organization and the Mining Industry Human Resources Council, and by our internal commitments as outlined in our Charter of Corporate Responsibility, Code of Ethics, Human Rights Policy, Health and Safety Policy, and Inclusion and Diversity Policy.

### Talent Attraction

Teck continues to focus on recruitment to ensure we have the right people with the right skills to meet our business requirements. To that end, recruiting practices and processes are continuously reviewed and improved upon to guide recruiters, operations leaders and human resources leaders. Skill shortages across various competing industries and an aging workforce will result in high competition for labour in coming years. Accurate and timely workforce planning is essential to ensure Teck is well positioned to proactively respond to demographic challenges.

### Labour Relations

Mining is a heavily unionized industry, and we aim to develop our relationships with unions and our unionized employees at both the local and national levels. Approximately 60% of our employees are unionized. We engage with our unions on a regular basis across our operations on all aspects of business. In 2016, this included a focus on health and safety and community concerns. We engage with unions on grievances and labour relations on a site-by-site basis and we formally engage unions through negotiations on collective agreements. There were no strikes in 2016.

We fully recognize the rights of employees to freely associate and join trade unions, and we have embedded the principle in our Health, Safety, Environment and Community Management Standards. All unionized operations have employee committees with representation from their respective unions. For instance, 100% of locations have an Occupational Health and Safety Committee. Examples of other committees at our operations include Labour/Management, Training, Apprenticeship, Grievance, and Contracting Out committees. We ensure that our minimum notice periods meet or exceed those stipulated by applicable employment standards. Minimum notice periods may also be specified in collective agreements. Whenever possible, we also work collaboratively with unions to engage our hourly employees.

### Our Targets and Commitments

We are committed to being a diverse workforce, representative of communities in which we operate.

Teck is committed to supporting an inclusive and diverse workplace that recognizes and values difference. We recognize that our diversity — the many different and unique things we individually and collectively bring to work each day — contributes to building a stronger workforce and a better company.

A full list of commitments is set out in our new [Inclusion and Diversity Policy](#).

### \* Material Topic Interconnections

Business Ethics: page 39

Health and Safety of Our Workforce: page 54

Community Engagement: page 69

Human Rights: page 81

# How Does Teck Manage Our Workforce?

## **Retention, Training and Development**

As we operate in market conditions that require us to enhance productivity, employee engagement remains integral to our business. We focus on enhancing engagement across Teck through employee remuneration, performance review processes, employee development opportunities and labour relations practices.

### **Employee Remuneration**

High-quality employment is one of the most important benefits we provide to the communities where we operate. This is not only due to the economic benefits that we distribute in the form of salaries and local spending, but also because of the valuable skills and experience that our employees are able to accumulate through their work and training. We monitor the employment market to ensure we maintain a cost-effective total compensation offering while attracting and retaining the employees needed to be successful now and in the future. This includes an annual analysis of salary ratios by gender, to assess whether there is a gender pay gap.

### **Performance Reviews — Building Strength with People**

Over 94% of our regular full-time, active salaried employees received formal performance development and career reviews in 2016. The results of the program's annual effectiveness survey show significant improvements in each of the three areas surveyed: performance, development and career. We concentrate on improving the quality of conversations, specifically on development and career conversations and on the connection between compensation and performance. In addition, we are in various stages of implementation and execution of annual performance and development reviews, including career conversations, for our hourly employees. To read a case study on the evaluation of our *Building Strength with People* program, visit [the Stories page](#) on our website.

## **Employee Development**

Through employee development, leadership development, knowledge transfer and succession planning, we work to ensure that our people have the capacity, competency and opportunity to grow individually and contribute to Teck's success. Employee development is important to Teck, particularly developing skills and knowledge through on-the-job application to meet future business needs and an individual's career interests.

Teck is committed to the ongoing development of our people, with a focus on leadership development and technical skills. We provide employees with a variety of training opportunities that include first aid, mine rescue, maintenance training for apprentices and tradespeople, operator training for our equipment, confined spaces information, and a variety of environment and safety programs.

### **Leadership Development**

Teck's approach to leadership development is primarily focused on three programs: Leading for the Future, Leading for Excellence, and Emerging Leaders. These programs and development of our leaders are critical to the future success of our company, as many of our current leaders will retire in the coming years.

For more information about our development programs, visit the [Our Workforce page](#) on our website.

### **Knowledge Transfer and Succession Planning**

Every employee has a unique set of experiences, skills and knowledge, which is crucial to retain as employees move into different roles or exit the organization. Our demographics related to retirements make this an important business imperative. We conduct reviews of knowledge transfer systems to understand operationally how we are approaching this problem, what systems are in place, how to share best practices, and areas for improvement.

In addition to knowledge transfer, Teck conducts semi-annual succession and development planning meetings designed to identify skills at all levels and to ensure that they are developed in time to achieve business objectives.



## Case Study

### Employee Recognition through the Excellence Awards



A commitment to excellence, achieved through teamwork, diligence and innovation, is a core value at Teck and part of who we are. Our employees worldwide share this commitment and have expertise across a wide range of activities related to mining and minerals processing. To recognize the accomplishments of individuals and teams, promote our core values and improve employee engagement, we established an Excellence Awards program.

#### About the Excellence Awards

The program was established in 2008 and inspired by our sponsorship of the Vancouver 2010 Olympic and Paralympic Winter Games. From hourly workers to senior executives, the Excellence Awards are open to all employees at Teck. In 2016, employees nominated colleagues or teams to recognize their contributions in one of five categories: Safety in the Workplace;

Environment and Sustainability; Cost Reduction, Productivity and Innovation; Unsung Hero; and Mentor. More than 680 nominations were submitted this year, and 38 Excellence Awards were granted across the company. The winners included 27 individual award recipients and 11 members of three teams recognized for their outstanding achievements, leadership and innovations across Teck.

“Our company’s strength has always been its people and, as demonstrated by the Excellence Award winners and the hard work of employees across the company, I believe Teck is stronger than ever today,” said Don Lindsay, President and CEO.

#### Excellence Awards and Sustainability

Like excellence, sustainability is one of Teck’s core values. While the Environment and Sustainability award category recognizes employees for their peer leadership and volunteerism in the

community, workplace and environment, the Cost Reduction, Productivity and Innovation category also has a sustainability connection. This award recognizes employees who are efficient and reliable, and whose critical thinking leads to innovative solutions in the workplace.

One of our winners was Bob Cave, a Cyclone Operator at our Highland Valley Copper Operations in British Columbia. When Highland Valley Copper launched Bright Ideas, a new campaign seeking input from employees on how to reduce energy consumption and improve energy efficiency, Bob Cave was ready to accept the challenge.

Bob offered two ideas about a sump pump: creating an alarm that alerts operators when the sump is in an overflow state, and changing out one of the pumps on a reclaim barge. After Bob’s suggestions were evaluated, both were implemented. Together, these innovations reduce energy costs by about \$150,000 per year and contributed to our vision of improving energy efficiency and implementing lower-carbon technologies. The Excellence Award celebrated Bob’s attention to detail and drive to continually improve operations.

#### The Value of our People

Bob’s story is one of many examples across the company of teamwork, diligence and innovation recognized in the Excellence Awards program. The Excellence Awards program not only rewards employee performance and improves engagement, but also acts as a tool to encourage future innovation.

# How Does Teck Manage Our Workforce?

## Diversity and Equal Opportunity

We believe our workforce should reflect the diversity of the communities where we operate and that an inclusive and diverse workforce allows for more informed decision-making. We track the percentage of women hired at Teck, with a focus on women who work in technical and operational roles, two areas that have historically been under-represented in our industry. In 2016, we developed and released an Inclusion and Diversity Policy, endorsed by our Board of Directors and senior management team, and aligned with our values and existing corporate charters and policies. The full [Inclusion and Diversity Policy](#) can be found in the snapshot that follows and on our website.

Teck supports several industry initiatives on inclusion and diversity, such as the Gender Equity in Mining (GEM) Works Initiative, the Women in Canadian Mining

National Action Plan, and the Engendering Success in Science, Technology, Engineering and Math (STEM) study to understand and combat the various ways that cultural biases stand in the way of creating inclusive cultures for women in STEM. To learn more about these initiatives and others, visit the [Memberships and Partnerships page](#) on our website.

## Non-Discrimination

Discriminatory practices are unacceptable and are not tolerated in our company. We are committed to the proper treatment of all employees and to providing a procedure for employees to report incidents of discrimination or harassment, whether they involve a co-worker, a supervisor or any other person. We comply with all local laws that address discrimination and harassment, and we investigate all allegations.

### Snapshot

#### Inclusion and Diversity Policy

Teck is committed to supporting an inclusive and diverse workplace that recognizes and values difference. We recognize that our diversity — the many different and unique things we individually and collectively bring to work each day — contributes to building a stronger workforce and a better company.

Teck respects and appreciates differences in age, ethnicity, Indigenous origin or heritage, gender, physical attributes, beliefs, language, sexual orientation, education, nationality, social background and culture, or other personal characteristics.

We know that making the most of the wealth of ideas, talents, skills, backgrounds and perspectives all around us helps us to do more and be more, together. As such, we consciously work to create an environment that respects and values the diversity of the people and world around us.

Teck promotes and fosters an inclusive and diverse workforce in order to:

- Contribute to innovation and better decision-making through exposure to increased perspectives and ideas
- Attract a broader pool of candidates and improved employee retention
- Build a strong workforce that is engaged and contributing to Teck's social and economic goals

- Better reflect the diversity of the communities in which we operate

Our commitment to inclusion and diversity is reflected in all levels of our company, beginning with our Board of Directors, which considers diversity in the selection criteria for new board members and senior management team appointments. An Executive Diversity Committee chaired by the Vice President of Human Resources, with representation from senior management, guides development of Teck's inclusion and diversity strategy, and reviews progress.

Teck's focus on inclusion and diversity aligns with our company's core values of integrity and respect. It is also explicitly reflected in our Charter of Corporate Responsibility, our Code of Ethics and our Code of Sustainable Conduct.

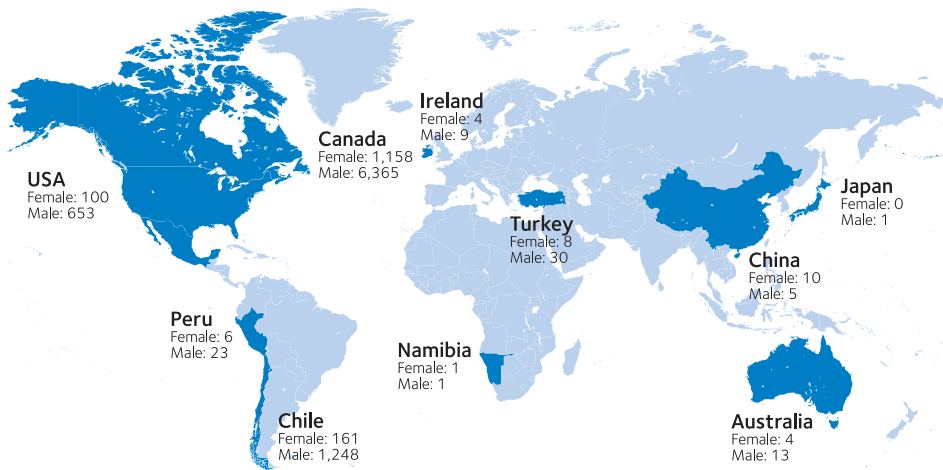
# What Was Our Performance in Our Workforce in 2016?

In this section, we report on our global workforce demographic profile and progress in labour relations, talent attraction, retention, training and development, diversity and equal opportunity, and non-discrimination.

## Our Global Workforce Demographic Profile

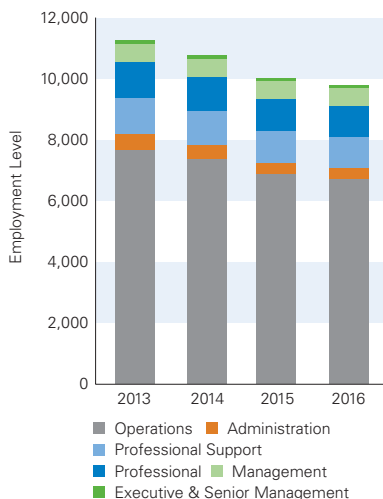
At the end of 2016, there were 9,799 employees<sup>(2),(3)</sup> working at Teck-operated mining and metallurgical operations and offices.

Figure 11: Global Workforce by Geographic Location and Gender



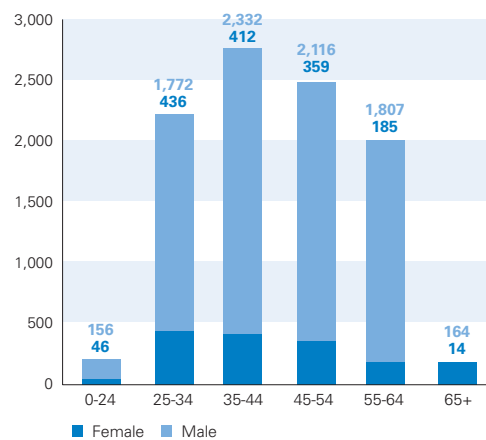
Total Female: 1,452  
Total Male: 8,347

Figure 12: Global Workforce by Employment Level (as at year-end)<sup>(1)</sup>



(1) 2013 values have been restated due to updates in our human resources information system.

Figure 13: Global Workforce by Age and Gender



(2) Historical human resources-related data throughout this report has been restated due to continual enhancement of human resource reporting systems to improve data integrity and the implementation of standard definitions. (3) The data in this section includes both temporary and permanent employees.

# What Was Our Performance in Our Workforce in 2016?

## Sustainability Strategy Spotlight

In 2016, as part of our 2020 goal to build a diverse workforce that includes more women and Indigenous Peoples, we launched Teck's [Inclusion and Diversity Policy](#), updated our Maternity and Parental Leave Policies, and commenced the second cohort of the Mining and Refining for Women program, which focuses on hourly employees at our Trail Operations.

For more detail, see our full goals progress report on page 12.

## Labour Relations

Collective bargaining was completed at our Fording River, Coal Mountain and Elkview operations in 2016 and, at the time this report was being prepared, continues at Highland Valley Copper Operations.

In 2017, two agreements were extended at Quebrada Blanca Operations. Collective agreements at Trail, Quebrada Blanca and Cardinal River operations will expire in 2017.

## Talent Attraction in 2016

In 2016, the Global Talent Attraction team initiated the implementation of a new Applicant Tracking System (ATS) for Teck. This ATS will integrate with our existing programs to increase productivity, efficiency and reporting capability for recruiters, human resources, hiring managers, and leadership. New web-based marketing functionality that integrates with this ATS will also be implemented to increase our ability to attract an inclusive and diversified pipeline of new talent. For a full breakdown of our new hires in 2016 by age, gender and country, see the [2016 Sustainability Performance Data page](#) on our website.

## Retention, Training and Development

### Employee Turnover

For overall understanding of workforce dynamics and changes, we track employee

turnover, including voluntary resignations, involuntary layoffs and retirements. In 2016, total turnover was 7%, compared to 10% in 2015, 12% in 2014 and 8% in 2013. Our voluntary turnover rate was 6% in 2016. For a full breakdown of our voluntary turnover by age, gender and country, as well as retention rates after parental leave, see the [2016 Sustainability Performance Data page](#) on our website.

### Leadership Development

Four Leading for the Future program cohorts, two Leading for Excellence cohorts, nine Leadership Challenges, and the commencement of cohort six of our Emerging Leader Program were achieved in 2016. In the Leadership Challenge, past Leading for Excellence graduates act as group coaches, while Leading for the Future graduates work with both their supervisors and coaches to identify a development area and practice a leadership competency for a 10-week period following a three-day on-site workshop.

In a joint evaluation assessment, each participant and his or her supervisor evaluated the participant's level of effectiveness and found a 58% increase in capability and effectiveness in leadership development, as well as sustained improvement six months later.

Teck is committed to the ongoing development of our people, with a focus on leadership development and technical skills.

Table 24: **Dollars Spent on Training across the Company**<sup>(4)</sup>

|                                              | 2016          | 2015         |
|----------------------------------------------|---------------|--------------|
| Dollars spent on training across the company | \$ 15,968,055 | \$ 9,367,827 |

Based on information available, we have begun reporting on training expenditures across the company; moving forward, we will continue reporting on this metric. We are also working to ensure training hours are documented completely and consistently across our operations.

## Diversity and Equal Opportunity

There were 1,452 women working at Teck at the end of 2016, which represents 15% of the total workforce. The number of women in technical or operational roles

has increased from 619 in 2012 to 748 at the end of 2016, which represents a 20.8% increase over a five-year period. As part of our commitment to building a more diverse workforce, we will continue to place a focus on increasing the number of women at Teck.

We also recognize the importance of increasing the number of women in leadership roles, particularly at the site level. Of employees in technical and operations roles, 8% are women; this is a 43% increase over the past five years.

Table 25: **Women in Operational or Technical Positions**

|                                                                        | <b>% Change Since 2012</b> | <b>2016</b> | <b>2015</b> | <b>2014</b> | <b>2013</b> | <b>2012</b> |
|------------------------------------------------------------------------|----------------------------|-------------|-------------|-------------|-------------|-------------|
| Labourer, Operator, Loss Prevention                                    | 39.6%                      | <b>388</b>  | 321         | 339         | 327         | 278         |
| Technical                                                              | 10.8%                      | <b>184</b>  | 191         | 174         | 183         | 166         |
| Engineer in Training (EIT)                                             | 50.0%                      | <b>3</b>    | 3           | 3           | 2           | 2           |
| Engineer                                                               | (2.8%)                     | <b>70</b>   | 72          | 71          | 72          | 72          |
| Geoscience                                                             | (12.5%)                    | <b>49</b>   | 46          | 49          | 51          | 56          |
| Apprentice                                                             | (54.5%)                    | <b>5</b>    | 7           | 10          | 12          | 11          |
| Trade                                                                  | 30.0%                      | <b>26</b>   | 26          | 27          | 25          | 20          |
| Superintendent                                                         | 55.6%                      | <b>14</b>   | 14          | 14          | 13          | 9           |
| Supervisor                                                             | 40.0%                      | <b>7</b>    | 6           | 5           | 6           | 5           |
| <b>Total</b>                                                           | <b>20.8%</b>               | <b>748</b>  | <b>686</b>  | <b>692</b>  | <b>691</b>  | <b>619</b>  |
| As a percentage of all employees in operational or technical roles (%) | 42.9%                      | <b>8.0%</b> | 7.2%        | 6.4%        | 6.2%        | 5.6%        |

Table 26: **Women in Operational or Technical Leadership Positions<sup>(1)</sup>**

|                                                                                      | <b>% Change Since 2012</b> | <b>2016</b> | <b>2015</b> | <b>2014</b> | <b>2013</b> | <b>2012</b> |
|--------------------------------------------------------------------------------------|----------------------------|-------------|-------------|-------------|-------------|-------------|
| Of the women listed in Table 25, the percentage of those who are in leadership roles | 23.1%                      | 16%         | 19%         | 16%         | 14%         | 13%         |

(1) Leadership positions in technical or operational roles are defined as someone in a senior operator, supervisor or lead role.

Table 27: **Ratios of Entry Level Wage by Gender Compared to Local Minimum Wage<sup>(1)</sup>**

| <b>Countries</b> | <b>Female</b> | <b>Male</b> |
|------------------|---------------|-------------|
| Canada           | 2.7:1         | 2.7:1       |
| United States    | 1.7:1         | 1.7:1       |
| Chile            | 2.8:1         | 2.8:1       |

(1) The figures represented in this table are for hourly employees, which make up approximately 65% of our workforce. This does not include contractors.

For Canada, Teck wages are compared against the B.C. minimum wage. In Washington state and Alaska, they are compared against the Washington state and Alaska minimum wages respectively. In Chile they are compared against the national minimum wage. Teck provides competitive wages that are above the local minimum for all significant areas of operation.

### Non-Discrimination

In 2016, while we dealt with individual reports of harassment through our human resource procedures, we received one allegation of discrimination through our whistle-blower hotline related to receiving support for training in a new position. Following the complaint, interviews were conducted with all concerned and the issue was cooperatively resolved.

# What Was Our Performance in Our Workforce in 2016?

## Outlook for Our Workforce

We will continue to implement our global people strategy to attract, engage, retain and develop the best people to meet our current and future business needs. In 2017, this will include focusing on achieving diversity in all roles across our operations and implementing our Inclusion and Diversity Policy. We will also work towards new collective agreements at our Highland Valley Copper, Trail, Quebrada Blanca and Cardinal River operations.

### Learn More

World Economic Forum, [The Global Gender Gap Report, 2016](#)



## SDG Spotlight: Supporting SDG 5: Focusing Community Investment on the Empowerment of Women



Through our community investment program, Teck contributes to charitable organizations, institutions and initiatives that strengthen communities. One of our focuses in community investment is the empowerment of women, and we have numerous programs and partnerships in place to support this goal.

### Strengthening Indigenous Communities in North Chile

In 2016, UN Women and Teck entered into a US\$1 million partnership to promote the empowerment of Indigenous women in the northern regions of Chile, where the mining sector is a major economic driver. UN Women, Teck, local partners and communities will develop an action plan to address barriers to Indigenous women's active political and economic participation and to promote leadership competency development and capacity building.

### Advocating for Entrepreneurs

Since 2013, Teck has supported the Forum for Women Entrepreneurs

(FWE), who are dedicated to providing visionary women with education, empowerment and support networks to help them become the successful entrepreneurs they aspire to be. As part of FWE, Teck is a major sponsor of the E-Series program, which provides bursaries to help women from our Canadian operations attend the program in Vancouver.

### UNICEF and The 25th Team

Teck is proud to partner with UNICEF Canada and the Government of Canada to support the recruitment and development of The 25th Team. In the summer of 2015, 24 nations came to Canada to compete in the largest, most important sporting event for women in history: the Women's World Cup. The 25th Team is a network of 60 Canadian women who have mobilized \$12 million to save the lives of women and children in Cambodia, Ethiopia, Indonesia, Namibia and Peru. This small group of Canadian women will help UNICEF reach more than 3.8 million women and children by 2020.

These organizations are a select few of the many memberships and partnerships we have in place in support of female empowerment. To learn more, visit the [Inclusion and Diversity page](#) on our website.



An overview of the work Teck is doing to address each Sustainable Development Goal is available on our [website](#).

**Material Topics**

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Health and Safety of Our Workforce

Management approach and performance in health and safety, including occupational health and hygiene.

54

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Relationships with Indigenous Peoples

Management approach and performance related to our work with Indigenous Peoples, including engagement, agreements, benefits and disputes.

62

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Community Engagement

Local community engagement; impact assessments and development programs; actual and potential impacts on local communities; disputes related to land or resource use of local communities; grievance mechanisms.

69

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Emergency Preparedness

Preventing and being prepared to respond to emergencies.

77

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Human Rights

Anticipating and preventing impacts on the human rights of the people foreseeably touched by our activities, particularly people in our supply chain and living near our operations.

81

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Product Impacts

Managing the actual and potential impacts of our products through product and materials stewardship.

85

# Health and Safety of Our Workforce



## What is in this topic?

Management approach and performance of health and safety including occupational health and hygiene.

## GRI Indicators and Topic Boundary

403-103, 403-1, 403-2, 403-3, 403-4

This topic is considered most material by our employees, contractors and regulators in the context of all Teck sites and in contractor selection and management.

## Performance Highlights

Achieved year-over-year reductions in Total Recordable Injury Frequency by approximately

# 13%

Lost-Time Injury Frequency by 11% and High-Potential Incident Frequency by 12%. We had no fatalities.

Completed comprehensive occupational exposure risk assessments at

# 10 operations

and developed a company-wide standard for hygiene programs.

## Why was Health and Safety of Our Workforce a Material Topic in 2016?

Every day, 6,300 people die as a result of occupational accidents or work-related diseases — more than 2.3 million deaths per year — and 317 million accidents occur on the job annually, many of these resulting in extended absences from work.<sup>(5)</sup> Many of these tragedies are preventable through the implementation of sound prevention and management practices. The International Labour Organization (ILO) has created occupational safety and health standards to provide tools for governments, employers and workers to enhance workplace safety. The United Nations prioritized improvements in health and safety worldwide with the establishment in 2015 of Goal 3 of their Sustainable Development Goals (SDGs): “good health and well-being.”

## Industry Context

Mining and processing involves the handling of large volumes of materials, the use of heavy equipment, and potentially hazardous production processes. The potential health risks associated with mining can affect the advancement of SDG 3. These include occupational hazards and increased risk factors for cardiovascular, respiratory and mental illness.

The importance of health and safety is reflected in the International Council on Mining and Metals (ICMM) 10 Principles. ICMM Principle 5, to “seek continual improvement of our health and safety performance,” states that member companies must implement management systems focused on continual improvement of health and safety performance and take all practical and reasonable measures to eliminate workplace fatalities, injuries and diseases among employees and contractors. Among ICMM members, there was an overall increase in the number of fatalities and injuries in 2015 compared to 2014.<sup>(6)</sup> The majority of fatalities were attributed to machinery, transportation or a fall of ground in underground mines. We believe the mining industry has a responsibility to ensure that hazards associated with operations are controlled to ensure the safety and longer-term health of workers.

Poor occupational health and safety performance can significantly impact the lives of our employees, their families and the greater communities. Moreover, low performance in health and safety can negatively impact labour costs, productivity, morale and reputation, in addition to resulting in fines and other liabilities.

## Teck Context

Safety is a core value and strategic priority at Teck; nothing is more important than the health and safety of our people. We recognize our responsibility to identify and mitigate health and safety risks, and we believe it is possible for our people to work without serious injuries and illnesses.

In 2016, there were no fatalities, and we continued to build on our efforts to improve safety performance and reducing incident frequency. While we are pleased with our improvements, we must remain diligent as we work to reach our ultimate goal of everyone going home safe and healthy every day.

In 2016, we continued to improve the quality of our High-Potential Risk Control strategy implementation, completed development and commenced implementation of the next phase of Courageous Safety Leadership, and built on our Occupational Health and Hygiene Strategy.

Pictured on page 53: Chris Dewar, 4th Year Heavy Duty Mechanic Apprentice at Greenhills Operations. Pictured above: Stuart Marcus, Mill Operator III, Highland Valley Copper Operations.

(5) 'International Labour Standards on Occupational Safety and Health'

(6) 'Benchmarking 2015 safety data: progress of ICMM members' June 2016.



# How Does Teck Manage Health and Safety?

In the section below, we outline our governance and management systems and our three-pillar approach to managing safety.

## Governance and Management Systems

Accountability and oversight of health and safety performance rests at the highest level of our company. Health and safety incidents are reported as they occur, in monthly company-wide performance reports and on a quarterly basis to the Health, Safety, Environment and Community (HSEC) Risk Management Committee, which is made up of several members of our executive management team.

The HSEC Risk Management Committee also plays an oversight and governance role in monitoring health and safety at Teck. We have an executive Health and Safety Advisory Committee to inform our five-year health and safety plan and to provide additional oversight of performance, as well as to evaluate emerging health and safety trends and initiatives.

Our [Health and Safety Policy](#) defines our corporate commitment to providing leadership and resources for entrenching core values of health and safety across our company.

## Three-Pillar Approach

We have a three-pillar approach — embedding a culture of safety, learning from High-Potential Incidents, and operating with excellence — that drives continual improvement and supports our vision of everyone going home safe and healthy every day. Our strategy is to continue to strengthen and achieve a balance between the cultural and technical aspects of our health and safety program, and to ensure that these two streams are complementary with one another.

We believe that a safe operation is an efficient operation. Applying strong operating standards informed by ILO, ICMM and global best practice helps us to optimize our production and avoid potential injuries.

To learn more about our Three-Pillar Approach to Health and Safety, visit the [Health and Safety of Our Workforce page](#) on our website.

## Our Targets and Commitments

Reduce serious injuries and eliminate fatalities by ensuring our high-potential risks have effective controls in place and by enhancing our culture of safety by 2020.

Implement improved occupational health and hygiene monitoring and exposure control to protect the longer-term health of workers by 2020.

Eliminate serious injuries, illnesses and fatalities through effective high-potential risk management by 2030.

### \* Material Topic Interconnections

Our Workforce: page 44  
Human Rights: page 81

Figure 14: **Three-Pillar Approach**



# How Does Teck Manage Health and Safety?

## Values-Based Organization

We believe that employee engagement through leadership and commitment is the key to achieving our health and safety vision, and we have implemented a major initiative to foster a culture of safety at Teck: Courageous Safety Leadership (CSL).

Launched in 2009, CSL focuses on challenging existing values, beliefs and attitudes towards safety, and builds commitment from individuals to work safely and foster safe practices at our operations. The program, rolled out in a series of phases, seeks to empower every employee to be a safety leader by playing an active role in his or her own safety as well as the safety of those around them. Since its inception, more than 16,000 people have participated in CSL training. In 2015, we engaged a cross-section of Teck employees to help determine the direction of the next phase of CSL. Development of the fourth phase (CSL4) was completed and implementation commenced in 2016.

We completed our first company-wide safety culture survey in 2016. Participation in the survey was very strong. Over 5,600 employees and contractors completed the survey to provide us with their views on the many facets of health and safety management, culture, performance and improvement opportunities. The outcomes of the survey were communicated across the company and were used in the development of CSL4.

## Courageous Safety Leadership Principles

We developed and released six principles for our CSL program in 2016 to our employees and contractors. We believe that these principles and the overall CSL program will help us to achieve our vision of everyone going home safe and healthy every day:

1. I am responsible for my safety and for the safety of those around me.
2. I am empowered to be courageous. I must speak up if my safety or the safety of those around me is affected or can be improved.
3. My values, beliefs, attitudes, behaviours and actions have an impact on me and on others, both at work and at home.
4. A safe operation is a productive operation.
5. We achieve excellence in safety through a positive culture of safety and strong technical programs.

6. Safety is a core value at Teck and will not be compromised for any reason.

## Learning Organization

We foster a culture of continuous learning and improvement in safety performance by analyzing High-Potential Incidents (HPIs), sharing best practices in safety through employee training and development, and participating with our peers in mine safety working groups, including the Mining Safety Roundtable and the ICMM.

We track all safety incidents and classify significant incidents as HPIs, Serious HPIs or Potentially Fatal Occurrences (PFOs). Analyzing and learning from these incidents allows us to identify and target actions for high-risk tasks. Once we identify the root causes of PFOs, our operations also conduct a gap analysis and implement corrective actions to help prevent incidents from occurring elsewhere in the company.

We are committed to investigating all HPIs to comprehensively understand root causes and key contributing factors, and we take actions to prevent HPI recurrences. Using the Incident Cause Analysis Method (ICAM), we consider the contributing factors at the individual, team and organizational levels that led to each incident. Throughout 2016, we applied ICAM to approximately 87 incidents.

## High-Potential Risk Control

To proactively identify and mitigate High-Potential Risks, we continued to implement our High-Potential Risk Control (HPRC) strategy in 2016, which has now been implemented at all our operations. This program focuses on improving the way we identify, implement and evaluate the controls that will most effectively prevent serious injury or loss of life.

The HPRC strategy aims to improve our ability to answer three key questions:

1. What are our high-potential risks and how do we know?
2. What critical controls — measures that, when implemented, are more effective in preventing an unwanted event — do we have in place to manage these risks?
3. What processes do we have in place to give ourselves the confidence that our controls are effective?

Employees across the business are undertaking Work Team Risk Assessments to help answer these questions, look for gaps and work together to close them. All operations met or exceeded our 2016 requirements for undertaking Work Team Risk Assessments. Follow-up effectiveness reviews are helping to validate that changes from risk assessments are being put into practice.

### Operating with Excellence

Operating with excellence in safety means that we focus on implementing supporting systems and standards that continually improve our safety performance. These include the identification of high-potential risks and associated critical controls, as well as standards, auditing, reporting on leading and lagging indicators, technological tools, and ongoing communications and training. As part of our work to manage high-potential risks and improve health and safety performance, we are implementing an occupational health and hygiene program, an employee health and wellness program, and drug and alcohol policies.

#### Occupational Health and Hygiene

The occupational hygiene programs and procedures at our operations help prevent occupational exposures that could give rise to occupational illnesses. These programs and procedures are designed to limit worker exposure to potentially harmful substances and other sources of occupational illness or disease. This includes exposure to dust, noise, vibration and hazardous chemicals.

In 2016, the Occupational Health & Hygiene Committee continued its work by developing a Teck-wide standard — Requirements for Occupational Hygiene Programs — and a process to assess gaps against the requirements.

The Requirements for Occupational Hygiene Programs apply to all Teck-controlled operations and activities. The purpose of the Requirements is to help us achieve occupational health and hygiene principles as listed below:

- The long-term health of employees and contractors is not compromised at work.
- Suitable protection shall be provided for exposures above accepted occupational exposure limits

- Occupational exposures to chemical, physical and biological agents are understood and controlled.
- New development design is assessed to mitigate health exposures prior to construction
- Resources to manage occupational health and hygiene risk are based on one or more of the following: risk assessments, health and hygiene professional assessment, quality monitoring results, and regulatory requirements.

The document provides guidance on the effectiveness of occupational hygiene programs, which includes the anticipation, identification, evaluation and control of exposures, and the verification of controls. The requirements document also provides guidance on the minimum training and competency requirements for individuals performing occupational hygiene-related duties at Teck's operations.

In 2016, we completed comprehensive assessments of long-term exposure risks at all of our operations, with the exception of two operations that are near closure. Gap assessments and exposure risk assessments will now be used as the basis for exposure control planning priorities going forward. The assessments identified silica, coal dust, diesel engine exhaust emissions, lead, welding fumes, and noise as the most commonly encountered and potentially harmful exposure agents in our workplaces. We will use the outcomes of our risk assessments to refine our control strategies for these exposures.

We also commenced reporting of occupational disease cases (see page 60) and frequency; draft Fitness for Work Requirements have also been developed, which will be completed in 2017.

#### Employee Health and Wellness

Our company-wide Health and Wellness strategy, which focuses on improving physical and mental well-being, continued to be implemented in 2016. The strategy brings together initiatives and resources across the company and builds on work already underway at sites and offices. One of the most successful initiatives under the program is our Know Your Numbers Campaign, a voluntary health testing program to help employees identify

# How Does Teck Manage Health and Safety?

potential health concerns. Know Your Numbers clinics provide free cardiovascular health screening that measures several indicators, including blood pressure, cholesterol, casual glucose and body mass index. In 2016, we conducted these clinics at our Line Creek Operations, CESL Facility, and in the Toronto, Vancouver and Calgary offices, with 388 employees attending.

## Drug and Alcohol Policies

We take our obligation to provide the safest possible workplace for our employees very seriously. We strongly believe that taking measures to eliminate

misuse of drugs and alcohol that can affect at-work performance and safety is an important way we can achieve our vision of everyone going home safe and healthy every day. Teck's drug and alcohol policies, which include post-incident and reasonable cause testing, have been in place at our steelmaking coal operations for over 10 years, and at our Trail and Highland Valley Copper operations since 2015. Outside of Canada, all of our operations have drug and alcohol policies that allow for testing, including random testing as permitted under local laws.

## Case Study

### Safety Innovation at Coal Mountain Operations in support of our High-Potential Risk Control Strategy



Strengthening our safety performance requires us to ask questions such as what are the risks that can cause serious and fatal injuries? What controls need to be put in place? And are our controls effective?

When the High-Potential Risk Control (HPRC) strategy was introduced at Teck in 2014, Coal Mountain Operations (CMO) in southeastern B.C. began team-based reviews with a focus on the processing plant.

"Throughout the development of the HPRC strategy, we continued to stress that, although a number of critical controls may exist to manage a risk, it is individual employees who are the key to implementing them," says Lawrence Watkins, Vice President, Health and Safety. "It is the women and men on the job every day who have to understand the risks associated

with each task, so they can ensure the right controls are in place to stay safe."

## Employees Across the Operation

While their work started in one location, the team at CMO knew that broadening their critical review to all parts of the operation was the next important step toward creating a safer, healthier work environment.

"We engaged all our employees and asked them those big safety questions," said Craig Bishop, Superintendent, Processing, CMO. "And from the feedback we gathered, and as an example, the number one concern in the processing plant was working around moving conveyors."

A team with representatives from various parts of the operation — plant operators, maintenance, labourers, training, health and safety — was assembled to go through the process of identifying the high-potential risks associated with the conveyors, and what measures were currently in place to control those risks.

## Minimizing the Risks Associated with Conveyors

CMO's processing plant uses belt-type conveyors that move at high speeds;

the review determined that the largest risks were associated with serious injury and fatalities resulting from the movement of the conveyors, employees' proximity to them when working, and a lack of guarding around most areas of the equipment.

After evaluating options to determine what type of guarding would work best — including looking at fabricating it at CMO — the most effective and cost-efficient choice decided on was the purchase of a lightweight guarding material that could be installed by pairs of operators and welders from CMO.

Installation work then began and, to date, more than 75% of the conveyors in the plant are now guarded, totalling more than 850 metres of protection in the highest priority areas.

"The feedback about the project has been incredibly positive," said Craig. "It's reinforced the understanding that it's so important to speak up when it comes to safety, and that we're listening to those concerns and taking action on them with real, practical solutions."

While CMO is nearing the end of active mining, they continue to be focused on improving their safety performance and sharing learnings from this initiative with other operations.

## What Was Our Performance in Health and Safety in 2016?

In the section below, we report on our progress in 2016 against the three pillars of our safety program: values-based organization, learning organization and operating with excellence. We also report on our safety performance against leading and lagging indicators.

### Values-Based Organization

#### Implementing Courageous Safety Leadership (CSL) 4

In 2016, we developed and commenced implementation of the fourth phase of our Courageous Safety Leadership (CSL) program. Based on input and feedback from a survey of employees across the company, we created a new one-day training program that builds on CSL 1, 2 and 3, a series of training programs that have been delivered since 2009 to employees and contractors.

### Learning Organization

#### Implementing new controls as part of our High-Potential Risk Control strategy

As part of our emphasis on eliminating fatalities and serious injuries by reducing HPIs and effectively managing high-potential risk, in 2016, we required all operations to complete a target number of Work Team Risk Assessments. All operations met or exceeded these requirements.

### Operating with Excellence

#### Implementing occupational health and hygiene practices

In 2016, we worked to enhance our occupational health and hygiene risk assessments, monitoring, and exposure

controls to protect the long-term health of employees. We also began to develop leading and lagging indicators for occupational health and hygiene reporting, and began to incorporate these indicators into health and safety performance reporting.

### Safety Performance

In 2016, we continued to build on our safety performance in areas of greatest risk. There were no fatalities and we improved our Total Recordable Injury Frequency (TRIF) by approximately 13% compared to 2015. High-Potential Incident Frequency was 12% lower than in 2015; our Lost-Time Injury Frequency decreased by 11%. Medical Aid Frequency was also reduced by 23%.

Teck's TRIF is slightly above the average compared to the ICMM, which is made up of many of the world's largest mining companies. Companies vary in terms of how they define "injury" under TRIF, as does each company's individual culture of reporting, which means that a direct comparison may not be completely accurate. Our safety performance is summarized in Table 28. For more detail on the safety performance of employees and contractors by country of operation, go to the [Health and Safety of Our Workforce page](#) on our website.

### Sustainability Strategy Spotlight

In 2016, as part of our 2020 goal to implement improved occupational health and hygiene monitoring and exposure control to protect the longer-term health of workers, we completed detailed occupational exposure risk assessments at all operations, excluding Quebrada Blanca and Coal Mountain operations as these sites are approaching closure.

For more detail, see our full goals progress report on page 12.

## What Was Our Performance in Health and Safety in 2016?

Table 28: **Health and Safety Performance**<sup>(1),(2)</sup>

|                                   | 2016        | 2015 | 2014 | 2013 |
|-----------------------------------|-------------|------|------|------|
| Total Recordable Injury Frequency | <b>1.11</b> | 1.27 | 1.03 | 1.27 |
| Lost-Time Injuries                | <b>73</b>   | 84   | 74   | 69   |
| Lost-Time Injury Frequency        | <b>0.42</b> | 0.47 | 0.41 | 0.34 |
| Disabling Injury Frequency        | <b>0.28</b> | 0.27 | 0.26 | –    |
| Lost-Time Injury Severity         | <b>28.4</b> | 18.6 | 80.9 | 19   |
| Number of Fatalities              | <b>0</b>    | 0    | 2    | 0    |

(1) Our safety statistics include both employees and contractors at all of our locations (operations, projects, exploration sites, and offices). For sites where Teck owns more than 50%, safety statistics are weighted 100%; for sites where Teck owns 50% or less, safety statistics are weighted according to Teck's ownership of the operation. This includes the Antamina mine, in which we have a 22.5% interest. We define incidents according to the requirements of the U.S. Department of Labor's Mine Safety and Health Administration. Frequencies are based on 200,000 hours worked. Severity is calculated as the number of days missed due to Lost-Time Injuries per 200,000 hours worked. New information or a reclassification of injuries may cause a change in historical data. [See our Glossary](#) for definitions of these safety indicators.

(2) Increase in severity in 2014 is a consequence of the two fatalities, which are automatically counted as 6,000 lost days.

### Approach to Reporting Occupational Diseases

We report the incidence of occupational diseases at Teck, based on accepted workers' compensation claims from each jurisdiction in which we work, for the following disease categories:

- Respiratory disorders
- Hearing loss/impairment
- Musculoskeletal illnesses
- Cancer
- Other medical disorders

The tables below summarize the accepted claims for the years 2012–2016.

Table 29: **Number of Occupational Diseases by Year**<sup>(1)</sup>

|                             | 2016      | 2015 | 2014 | 2013 | 2012 |
|-----------------------------|-----------|------|------|------|------|
| Respiratory Disorders       | <b>1</b>  | 3    | 2    | 0    | 1    |
| Hearing Loss <sup>(1)</sup> | <b>9</b>  | 12   | 9    | 6    | 14   |
| Musculoskeletal Disorders   | <b>9</b>  | 9    | 14   | 4    | 5    |
| Cancer                      | <b>0</b>  | 1    | 3    | 2    | 0    |
| Other                       | <b>2</b>  | 1    | 0    | 2    | 2    |
| <b>Annual Total</b>         | <b>21</b> | 26   | 28   | 14   | 22   |

(1) The reporting for hearing loss may be under-reported, due to limited data availability. We are working to achieve improved access to this data for 2017.

Table 30: Occupational Disease Cases by Year and Gender

|              | 2016      | 2015 | 2014 | 2013 |
|--------------|-----------|------|------|------|
| Female       | 0         | 1    | 5    | 1    |
| Male         | 21        | 25   | 23   | 13   |
| <b>Total</b> | <b>21</b> | 26   | 28   | 14   |

Table 31: Occupational Disease Rate by Year

|                                                       | 2016 | 2015 | 2014 | 2013 |
|-------------------------------------------------------|------|------|------|------|
| Total Occupational Disease Rate (per 200,000 hours)   | 0.12 | 0.15 | 0.15 | 0.07 |
| Total Occupational Disease Rate (per 1,000,000 hours) | 0.61 | 0.73 | 0.75 | 0.35 |

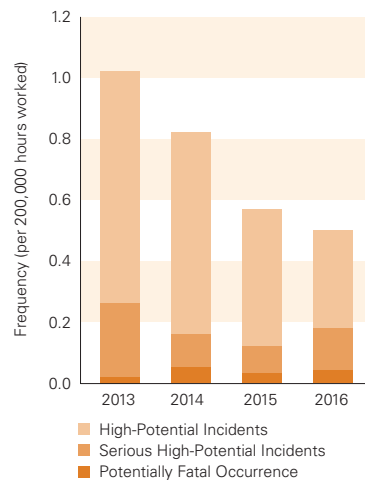
For Tables 29, 30 and 31, workers' compensation claims data are for employees only; contractor data is not included. At the time of reporting, limited data was available from our South American operations. Additional work will be completed in 2017 to improve our understanding of occupational diseases in this part of our business.

Since tracking of HPIs commenced in 2010, we have seen an overall decrease in HPI frequency (Figure 15). This improvement has been driven by our focus on learning from past incidents, and on sharing lessons learned and associated best practices across our company. Equally, while HPI frequency has declined, our operations continue to generate HPIs every year that could have seriously or fatally injured one or more of our employees or contractors, and we continue to focus on improving performance.

In 2016, there were six PFOs reported at Teck-controlled locations, which were

investigated and corrective actions were developed. The results are shared with all of our operations in order to facilitate a local gap analysis against the findings to prevent similar occurrences.

Figure 15: High-Potential Incident Performance



## Outlook for Health and Safety of Our Workforce

Safety is a core value at Teck and we are committed to continuously improving our performance. In 2017, we will continue to focus on reducing serious injuries and eliminating fatalities by ensuring our high-potential risks have effective controls in place and by enhancing our culture of safety. We will also continue the implementation of the fourth version of our Courageous Safety Leadership program, improve occupational health and hygiene monitoring, and improve exposure controls to protect the longer-term health of workers. On a global stage, we will collaborate with organizations such as ICMM to improve worker health and safety and advance SDG 3 on health and well-being.

### Learn More

- [Benchmarking 2015 Safety Data: Progress of ICMM Members](#)
- [Health and Safety Critical Control Management: Good Practice Guide, ICMM](#)
- [ICMM: New Guidance on Health Impact Assessment](#)



# Relationships with Indigenous Peoples



## Why was Relationships with Indigenous Peoples a Material Topic in 2016?

There are more than 370 million Indigenous Peoples living around the world in 90 countries,<sup>(7)</sup> who have unique rights, cultures and connection to the land. Historically, many Indigenous Peoples have suffered abuse, discrimination and marginalization through colonial and post-colonial eras. As a result, many Indigenous Peoples face systemic challenges and may live in poverty with their cultural rights and traditions threatened. Consequently, Indigenous Peoples are particularly vulnerable to the impacts of commercial development and business activities.

### What is in this topic?

Management approach and performance related to our work with Indigenous Peoples including engagement, agreements, benefits and disputes.

### GRI Indicators and Topic Boundary

204-103, 411-103, 411-1, G4-MM5

This topic is considered most material by Indigenous Peoples, regulators, and society in the context of all Teck sites located within or adjacent to Indigenous Peoples' territories.

### Performance Highlights

# 25

new agreements were reached with Indigenous Peoples in 2016, taking our total number of active<sup>(9)</sup> agreements in place to 54.

The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the International Labour Organization Convention No. 169 (ILO No.169) and the International Finance Corporation (IFC) Performance Standard 7 provides guidance for government and private sector interaction with Indigenous Peoples. Reconciliation with Indigenous Peoples is an important societal process taking place around the world. This process of addressing the negative legacies of past colonial eras in countries such as Canada, the United States, Chile and Australia involves governments, Indigenous communities, non-Indigenous communities and the business community. While UNDRIP and ILO No. 169 provide an important framework and guidance for reconciliation, every post-colonial nation with Indigenous populations has unique circumstances that require a unique path forward.

### Industry Context

In many cases, mining activity is often located within or adjacent to the traditional territories of Indigenous Peoples. Mining-related activities can have positive and negative impacts that can be uniquely felt by Indigenous Peoples due to their inherent connection to the land and proximity to mining projects. Positive impacts can include employment creation, opportunities for education and training, local economic development, such as procurement from Indigenous sources, and valuable community investment projects. Negative impacts can include

environmental impacts, economic volatility and changes to social dynamics and well-being.

Member companies of the International Council on Mining and Metals (ICMM) are required to meet the expectations outlined in the [Indigenous Peoples and Mining Position Statement](#), which sets out an obligation for companies to work to obtain the consent of Indigenous Peoples for new projects and changes to existing projects that are located on lands traditionally owned by or under customary use of Indigenous Peoples. In particular, the position statement outlines ICMM's view of free, prior and informed consent (FPIC) as a process based on good faith negotiation, through which Indigenous Peoples can give or withhold their consent to a project.

### Teck Context

Ten of our 12 operations<sup>(8)</sup> in Canada, Chile and the United States and the majority of our exploration and development projects are located within or adjacent to Indigenous Peoples' territories. As such, we recognize that respecting the rights, cultures, interests and aspirations of Indigenous Peoples is fundamental to our business and to meeting our commitment to responsible resource development. We work to ensure that Indigenous communities are true partners in the sharing of the benefits of resource development. We believe that stable, constructive and mutually beneficial relationships with Indigenous Peoples are typically reflected through the development of clear and predictable benefit agreements.

Pictured above: Ktunaxa Nation Council.

(7) Business Reference Guide: United Nations Declaration on the Rights of Indigenous Peoples. (8) Includes Cardinal River, Highland Valley Copper, Quebrada Blanca, Red Dog, Trail and steelmaking coal operations in the Elk Valley. Does not include operations in which Teck has/had an ownership interest but is not the operator, e.g., Antamina and Fort Hills.

(9) Active agreements are defined as agreements that have come into effect and are currently in force.



## How Does Teck Manage its Relationships with Indigenous Peoples?

In this section, we outline our approach to recognizing and respecting the interests and rights of Indigenous Peoples; governance and management systems; our commitment to international Indigenous standards and laws; Teck's Indigenous Peoples Policy and approach to FPIC; our approach to consultation, grievances, and cultural awareness training; and negotiating agreements. In addition, we discuss our approach to sharing economic benefits through resource revenue sharing and procurement, hiring practices with Indigenous Peoples, sharing traditional knowledge and supporting land use studies.

### Recognizing and Respecting the Interests and Rights of Indigenous Peoples

Our approach is to engage with Indigenous Peoples early in our planning processes, and work to achieve their free, prior and informed consent when proposing new or substantially modified projects. It is our aim to integrate the perspectives of Indigenous Peoples into company decision-making throughout the mining life cycle and to create lasting benefits that respect their unique interests and aspirations. Not only is early and meaningful engagement with Indigenous Peoples a matter of international law and governance, but it also helps Teck advance projects in a timely, cost-effective manner.

### Governance and Management Systems

Our engagement with Indigenous Peoples is conducted by Communities staff at each of our operations, project or exploration sites and is supported by our corporate Indigenous Affairs team. Our Vice President, Community and Government Relations and Senior Vice President, Sustainability and External Affairs provide guidance and oversight on our engagement with Indigenous Peoples. We also have an executive Indigenous Affairs steering committee that includes our CEO and senior management representing our business units, our projects and our exploration groups, which provides oversight and guidance on major initiatives with Indigenous Peoples, including the negotiation of agreements.

### Commitment to International Standards and Laws

We acknowledge and respect Indigenous People's rights and interests as enshrined in regional, national and international law, and we understand that the extent to which Indigenous People's rights are legally recognized varies by jurisdiction. In Canada, for example, certain Indigenous People's rights regarding access to land have been articulated in treaties, while other historical or traditional rights are generally not documented or clearly defined. The law related to Aboriginal title in Canada, as elsewhere, continues to evolve. In Chile, the federal government intends to establish a Ministry of Indigenous Communities to define a national policy to implement and strengthen the rights of Indigenous Peoples and their socio-economic, political and cultural development. International law continues to shape requirements related to working with Indigenous Peoples.

### Teck's Indigenous Peoples Policy and Approach to FPIC

In 2015, Teck established an [Indigenous Peoples Policy](#) that reaffirms our commitment to working with Indigenous Peoples to ensure that Indigenous rights, cultural heritage and traditional land use are respected. The policy was developed with input and guidance from Indigenous Peoples in our local communities as well as from leading international and local groups with expertise in Indigenous and mining policy.

### Our Targets and Commitments

Teck respects the rights, cultures, interests and aspirations of Indigenous Peoples and is committed to building strong and lasting relationships that help us understand each other's perspectives and priorities as outlined in our [Indigenous Peoples Policy](#).

In particular, we are committed to:

- Work with Indigenous Peoples to identify and participate in initiatives to support the self-defined goals of Indigenous communities by 2020.
- Develop metrics for monitoring Indigenous training, employment and procurement to establish baselines and drive progress by 2020.
- Collaborate with Indigenous communities to consistently create lasting benefits that respect their unique interests and aspirations by 2030.

### \* Material Topic Interconnections

Economic Performance and Contributions: page 27

Community Engagement: page 69

Human Rights: page 81

# How Does Teck Manage its Relationships with Indigenous Peoples?

## Consultation

Consultation plays an important role in regulatory approval processes and project development. As required by international conventions and typically by domestic law, many governments recognize various duties to consult with Indigenous Peoples. In certain situations, some or all aspects of consultation activities may be delegated to us. When our activities have the potential to affect Indigenous People's rights or traditional access to land, we seek opportunities for meaningful consultation, including sharing information on our activities, understanding the interests of Indigenous Peoples and developing measures to address impacts on those interests.

## Grievances

There are a number of processes through which our COIs can inform us of concerns, including formal grievance mechanisms, dispute resolution clauses in agreements, and ongoing engagement. Agreements with Indigenous Peoples often establish processes to work through grievances and other challenges, and help to fulfill our commitment to improving community well-being in self-defined ways while gaining the broad support of Indigenous communities.

## Cultural Awareness Training

To enhance our capacity to engage with Indigenous communities, one of the goals in our sustainability strategy was to deliver training on Indigenous People's rights and cultural awareness for key exploration, operations and management staff. Since 2011, we have conducted dialogue training and cultural awareness training for Communities teams at our operations, with a focus on Red Dog, Quebrada Blanca and Carmen de Andacollo operations.

## Negotiating Agreements

Agreements create a framework for greater cooperation and clarity on topics such as consultation and engagement, the environment and land stewardship, employment and business opportunities, and typically include a financial component. Our agreements with Indigenous Peoples traditionally address the full range of our activities, from early stages of exploration through to closure. Agreements can cover short-term, seasonal work as well as long-term operations and projects.

Our approach in negotiating agreements focuses on:

- Recognizing the importance of building trust, mutual respect, cooperation and open communication of interests and concerns

## Snapshot

### Recommendations of the Truth and Reconciliation Commission of Canada

From 2008 to 2015, the Truth and Reconciliation Commission of Canada was part of a holistic and comprehensive response to the negative impacts of the Indian Residential Schools system on Indigenous Peoples. The Commission delivered its [final report in December 2015](#), which identified 94 recommendations to redress the legacy of residential schools and advance the process of

reconciliation with Indigenous People in Canada. One of these calls to action, in recommendation 92, is addressed specifically to the business community: "We call upon the corporate sector in Canada to adopt the United Nations Declaration on the Rights of Indigenous Peoples as a reconciliation framework and to apply its principles, norms, and standards to corporate policy and core operational activities involving Indigenous Peoples and their lands and resources."

Teck is guided by the work of the UN Declaration of the Rights of Indigenous Peoples and supports the work undertaken by the Truth and

Reconciliation Commission and the Government of Canada's decision to implement all of the recommendations of the Commission's final report. We see this as a key step in renewing the relationship between the Crown and Indigenous Peoples, based on recognition of rights, respect, cooperation and partnership.

We also recognize our role in reconciliation and are working to build strong relationships and enhance respect between Indigenous and non-Indigenous Peoples, organizations and communities in the areas where we operate.

- Improving community well-being
- Working with Indigenous Peoples in innovative and collaborative ways
- Reducing business risk through effective consultation and other processes
- Increasing project and operational certainty

Although we recognize that agreements are important milestones, a strong and positive relationship itself is the true indicator of success.

### Sharing Economic Benefits

Most of our agreements with Indigenous Peoples include principles and goals related to employment, such as agreement on the principle that Indigenous citizens should have a standard of living comparable to the non-Indigenous population. In addition, agreements often include commitments to training and employment processes.

One example of an agreement at Teck with provisions related to employment and benefit sharing is at our Red Dog Operations. Over 25 years ago, Red Dog Operations was developed through an innovative operating agreement between the operator Teck and the landowner NANA Regional Corporation Inc. (NANA), a Regional Alaska Native corporation owned by the Iñupiat people of northwest Alaska. Since mining began, NANA has received approximately US\$1.53 billion from the mine. Under Alaskan regulation, it has retained approximately US\$554 million, sharing the balance with other Indigenous communities in the state.

Red Dog Mine directly creates more than 600 full-time, family-supporting jobs at the mine site, in an area of Alaska where good-paying jobs are scarce. Since 1989, NANA shareholders have received more than US\$507 million in wages by working at Red Dog. In 2016, approximately 638 NANA shareholders (employees and contractors) worked at the mine, earning US\$37.55 million in wages.

In British Columbia, in addition to resource revenue sharing established directly through agreements with Teck, the province negotiates Economic and Community Development Agreements (ECDAs) with Indigenous Peoples for sharing the direct mineral tax revenue on new mines and major mine expansions.

Specific to Teck's operations, the Ktunaxa Nation have entered into an ECDA regarding Teck's Elk Valley steelmaking coal operations, and Nlaka'pamux communities have entered into an ECDA regarding Teck's Highland Valley Copper Operations.

### Procurement and Hiring Practices with Indigenous Peoples

We are developing initiatives aimed at increasing procurement from Indigenous suppliers. For example, where we have formal agreements with Indigenous Peoples, we identify local Indigenous suppliers and develop processes to share information on procurement opportunities and our supplier qualification requirements. In some situations, we work directly with Indigenous suppliers to help them meet our requirements, or provide them with training and business development support.

### Community Investment and Indigenous Peoples

To support our relationships with Indigenous Peoples, Teck invests in a wide range of initiatives and programs that benefit Indigenous Peoples at a local, regional and national scale. This includes investments that support Indigenous language and cultural training, youth education and development, health and wellness programs, and various environmental initiatives. Our aim is to ensure these community investments align with needs and opportunities identified in collaboration with Indigenous Peoples.

### Sharing Traditional Knowledge and Supporting Land Use Studies

For Indigenous communities, the landscape and its features provide sustenance and spiritual attachment. To minimize impacts on Indigenous heritage and culture, Teck consults with Indigenous Peoples to promote mutual understanding and cooperation. At our operations and resource development projects and, where appropriate, at our exploration and development projects, we support the development of traditional land use studies and other community-based traditional knowledge studies to help us better understand the interests of Indigenous Peoples and our potential impacts on those interests.

# How Does Teck Manage its Relationships with Indigenous Peoples?

## Case Study

### Ktunaxa Nation Council and Teck Discuss Impact Management and Benefits Agreement



In May 2016, the Ktunaxa Nation Council and Teck formally signed a comprehensive Impact Management and Benefits Agreement (IMBA). The IMBA sets out commitments for both parties that will support environmental and cultural stewardship within the Ktunaxa ʔamakʔis (Ktunaxa Nation Territory), an area that encompasses Teck's five steelmaking coal operations in the Elk Valley, B.C. The Ktunaxa-Teck IMBA is one of the most comprehensive agreements of its kind in Canada.

Denine Milner, Manager of Strategic Initiatives for the Ktunaxa Nation Council, and Nic Milligan, Manager, Community & Aboriginal Affairs for Teck, discuss the history of the relationship, the importance of the agreement and the expected mutual benefits.

#### 1. Tell us about the relationship between Teck and the Ktunaxa.

**Denine Milner:** The Ktunaxa National Council (KNC) and Teck began working together in 2007 with the establishment of a Protocol Agreement and, soon after that, a Consultation Agreement. With increased activity and proposed mine expansions, KNC and Teck decided to more fully formalize the relationship and embarked on the comprehensive Impact Management and Benefits Agreement.

**Nic Milligan:** The Ktunaxa-Teck relationship dates back many years and has enjoyed a formal framework since the signing of the Working Protocol Agreement in 2007. From 2009 to 2014, the Ktunaxa and Teck had been

intensively working through permitting of Line Creek Phase 2 as well as issues related to water quality in the Elk Valley. This led us to discussions around an IMBA and also Ktunaxa's significant involvement in the development and implementation of the Elk Valley Water Quality Plan.

While we initially focused on an agreement specific to our Line Creek extension, from the beginning we discussed frameworks that would include other projects. Very soon, the scope had expanded, and from 2012 through 2016 we ended up negotiating a valley-wide agreement that covers all five of our existing mines and is unique in Canada.

#### 2. Why is the Impact Management and Benefits Agreement important?

**Denine Milner:** The IMBA marks a commitment by the Ktunaxa Nation and Teck to work together. While, on the one hand, it is a natural step from the Protocol and Consultation Agreements, it is also a wise agreement in that it fully sets out processes for us to work through a number of issues and topics associated with mining in Qukin ʔamakʔis (the Ktunaxa traditional district in which Teck operates), and it more fully enhances the relationship in a positive manner, which can only come as a result of feeling recognized. In this way, the IMBA is a landmark agreement. Our hope is that one day, industry, other governments and other First Nation governments can point to this relationship and say: "Yes, it can work — look what they're doing."

**Nic Milligan:** The agreement marks an important milestone, but the relationship itself is the true measure of success. The name Impact Management and Benefits Agreement was chosen to highlight the importance of managing impacts in addition to the provision of benefits.

#### 3. What kind of benefits are expected for both parties?

**Denine Milner:** IMBAs/IBAs are often associated with jobs, training and procurement. While the Ktunaxa-Teck IMBA certainly includes those elements, in a governance context, the IMBA also provides clarity and predictability for both Teck and the Ktunaxa Nation on what matters most to Ktunaxa Nation and to Teck. While the IMBA includes tangible benefits, it also is a mature agreement between a government (Ktunaxa Nation) and industry (Teck); unlike what many associate with IBAs, it sets out decision-making, dispute resolution and significant collaboration processes on a full range of topics, with benefits integrated throughout.

**Nic Milligan:** The agreement provides clarity on topics including consultation and engagement, the environment and land stewardship, and employment and business opportunities for Ktunaxa citizens. For example, the IMBA adopts the long-standing Procurement and Employment Operational Working Group (PEOWG) established under 2007's Working Protocol Agreement with the goal of increasing Ktunaxa participation, both in employment and through Ktunaxa business opportunities in Teck projects in the Elk Valley.

As part of the IMBA, two additional working groups, one for environmental management and another for the recognition and management of cultural impacts, were also established. These groups are made up of representatives from both Teck and Ktunaxa who will meet regularly to discuss new and ongoing projects and issues of shared interest. The IMBA increases certainty for all parties, which, over time and with the implementation of the processes in the IMBA, is intended to apply to our current mine extension projects and contribute to the overall longevity of our operations.

## What Was Our Performance in Relationships with Indigenous Peoples in 2016?

In this section, we report on our activities in 2016 related to recognizing and respecting the interests and rights of Indigenous Peoples, such as cultural awareness training and responding to grievances, negotiating agreements, procurement, and community investment. We also provide an update on working towards our 2020 Community goals related to Indigenous Peoples.

### Recognizing and Respecting the Interests and Rights of Indigenous Peoples

We continue to engage with Indigenous Peoples early in our planning processes and work to achieve their free, prior and informed consent when proposing new or substantially modified projects, as outlined in our Indigenous Peoples Policy.

#### Consultation

In 2016, our consultation activities were focused on:

- An extension project at Cardinal River Operations
- The proposed Frontier project in Alberta
- Quebrada Blanca Phase 2 (QB2) project in Chile. To support the advancement of QB2, we established 12 working tables to facilitate our engagement with local COIs. Each working table is generally composed of COIs and Teck employees, although some may include other private companies and public institutions. Each working table selects and awards projects that the communities want to develop, allowing for collaboration in the decision-making process. Some of the projects that have originated from the working tables include rescue equipment for the fire department in Pozo Almonte, additional kindergarten classes in Pozo Almonte, social infrastructure projects in Chañavayita, and the Caramucho Renewable and Non-Conventional Energy Project in Chiclla.

#### Grievances and Litigation

In 2016, there was one grievance involving Indigenous Peoples and five in 2015. The 2016 grievance involved a concern regarding the conduct of an employee at our Red Dog operation. See page 76 for more detail.

For more information on the continuing environmental litigation regarding the Upper Columbia River and involving the Confederated Colville Tribes and the Spokane Tribe of Indians, visit [our website](#) or the [Upper Columbia River project website](#).

### Negotiating Agreements

In 2016, there were 54 active agreements in place with Indigenous Peoples, including 25 new agreements ranging from exploration agreements to impact benefit agreements. We focused on advancing agreements for our steelmaking coal operations, Quebrada Blanca Phase 2 and Frontier projects.

In May 2016, we signed an Impact Management and Benefits Agreement with the Ktunaxa Nation Council that will create numerous long-term benefits for the Ktunaxa people and increased certainty around future sustainable mining development in the region. Spanning approximately 40 years and all five of our steelmaking coal operations in the Elk Valley region of British Columbia, it is one of the most comprehensive agreements of its kind in place in Canada.

Throughout the year, we were engaged in agreement negotiations related to our Frontier oil sands project with Indigenous Peoples in the Athabasca region of northeastern Alberta. In 2016, we signed agreements with Fort Chipewyan Métis Local 125, Fort McKay First Nation and Fort McKay Métis. The agreements provide a range of social and economic benefits and create opportunities for meaningful engagement and communication. A framework for items such as contracting opportunities, skills development and environmental stewardship related to the project is also included in the agreements.

To date, Teck has negotiated agreements with Indigenous Peoples in countries such as Canada, Chile, Peru, Australia and the United States. These agreements range from general memoranda of understanding to more comprehensive long-term agreements such as those noted in Table 33. The total number of agreements varies from year to year, as shorter-term agreements, common at the exploration stage, may expire or evolve into more comprehensive agreements.

### Sustainability Strategy Spotlight

In 2016, we completed reviews of current Indigenous employment, training, and procurement objectives, as well as related Impact Benefit Agreement commitments at Highland Valley Copper, Red Dog, Cardinal River, Greenhills, Line Creek, Fording River, Elkview and Coal Mountain operations. This information supports our 2020 goal of developing metrics for monitoring Indigenous training, employment and procurement.

For more detail, see our full goals progress report on page 11.

# What Was Our Performance in Relationships with Indigenous Peoples in 2016?

## Outlook for our Relationships with Indigenous Peoples

As Teck moves forward with the implementation and negotiation of agreements with Indigenous Peoples, we will continue to engage early and at all stages on the mining life cycle. In 2017, we will focus on working with Indigenous Peoples to identify and participate in initiatives that support the self-defined goals of Indigenous communities, related to areas such as economic opportunities and environmental stewardship.

Teck is committed to playing a role in reconciliation with Aboriginal Peoples in Canada and is working in partnership with Reconciliation Canada to support their vision of revitalizing the relationships among Indigenous Peoples and all Canadians. As part of this effort in British Columbia, Teck is working on the implementation of the B.C. Business Council – B.C. Assembly of First Nations Memorandum of Understanding on economic reconciliation. Additionally, we are continuing to proactively engage in government led initiatives to improve the lives of Indigenous Peoples in Canada through their participation in mining-related activities.

### Learn More

[Indigenous Peoples and Mining Good Practice Guide, ICMM](#)



Table 33: **Active<sup>(1)</sup> Agreements with Indigenous Groups at our Operations**

| Operations Within or Adjacent to Indigenous People's Territory | Name of Indigenous Group                     | Formal Agreements with Indigenous Groups |
|----------------------------------------------------------------|----------------------------------------------|------------------------------------------|
| Cardinal River                                                 | Alexis Nakota Sioux                          | Impact Benefit Agreement                 |
|                                                                | Whitefish Lake First Nation                  | Impact Benefit Agreement                 |
|                                                                | Sucker Creek First Nation                    | Memorandum of Understanding              |
|                                                                | Ermineskin First Nation                      | Impact Benefit Agreement                 |
| Elk Valley                                                     | Ktunaxa Nation Council                       | Impact Management and Benefits Agreement |
|                                                                | Shuswap Indian Band                          | Memorandum of Understanding              |
| Highland Valley Copper                                         | Nlaka'pamux Nation Tribal Council (NNTC)     | Joint Relationship Agreement             |
|                                                                | Nlaka'pamux Participating Bands (CNA)        | Participation Agreement                  |
|                                                                | Lower Nicola Indian Band                     | Relationship Agreement                   |
|                                                                | Stk'emlupsemc te Secwepemc Nation            | Funding Agreement                        |
| Quebrada Blanca                                                | Tamentica and Copaquire                      | Working Protocol Agreement               |
|                                                                | Ecozona Matilla                              | Framework Agreement                      |
|                                                                | Quechua Indigenous Community from Huatacondo | Benefits and Protocol Agreement          |
| Red Dog                                                        | Iñupiat of Northwest Alaska                  | Development and Operating Agreement      |

## Procurement from Indigenous Suppliers

In 2016, our operations spent approximately \$128 million on suppliers who self-identified as Indigenous; this represents an overall decrease of 11%. The vast majority of this spending is at our Red Dog Operations, where Indigenous Peoples' procurement is one of the cornerstones of our operating

agreement, which governs the operation and development of the mine. In 2016, 42% (\$113 million) of Red Dog's spending was with Indigenous suppliers. Despite our commitment to working with Indigenous suppliers, challenging market conditions and a focus on cost containment led to a lower proportion of our total spending on Indigenous suppliers in 2016 at several of our operations.

Table 34: **Company-Wide Procurement Spend on Suppliers who Self-Identified as Indigenous (millions)**

|               | 2016   | 2015   | 2014   | 2013   |
|---------------|--------|--------|--------|--------|
| Dollars spent | \$ 128 | \$ 142 | \$ 161 | \$ 127 |

## Community Investment Focused on Indigenous Peoples

In 2016, 37% (\$4.6 million) of our total community investment went towards Indigenous-specific investments, compared to 17% in 2015 (\$2.7 million).

One of our more significant investments in this area was our support for a program with UN Women and the Government of Chile on a collaborative project to promote the empowerment, leadership, and economic and social participation of Indigenous women in northern Chile.

# Community Engagement

## Why was Community Engagement a Material Topic in 2016?

While industrial activity typically brings economic growth and opportunity to communities, their expectations are growing with respect to business involvement in addressing global challenges such as climate change and access to water. Communities increasingly question business activities and, at times, withhold support. In addition, technology and connectivity are reshaping how communities engage with the broader world, which creates new risks and opportunities. Through technology, communities can readily organize and respond to business activities, and they are often faster than government or civil society in effecting change. As such, it is increasingly important that businesses and communities work closely together to maximize the benefits of industrial development while also minimizing the actual or perceived impacts.

### Industry Context

While community engagement can be considered a normal part of doing business for mining companies, the importance of building trust and support for projects and operations continues to increase and evolve. Conflicting interests between communities and companies can result in project delays, operational disruption and increased costs.

Communities may be affected by the potential environmental and social impacts of mining such as competition for water and energy, emissions to air, and stress on public services. At the same time, there can be significant opportunities, such as local economic benefits, when these impacts are understood and well managed in collaboration with communities. Relationships that are built upon trust, transparency and mutual benefits are fundamental for mining companies to secure access to land during exploration and to attain regulatory approvals throughout the mining life cycle.

In recognition of these risks and opportunities, the International Council on Mining and Metals (ICMM) established stakeholder engagement as one of their 10 Principles. ICMM members are expected to proactively engage key stakeholders on sustainable development challenges and opportunities in an open and transparent manner.

Maintaining trust and conducting effective community engagement is a critical component of managing and mitigating impacts on communities and, ultimately,

maintaining social licence to operate, which was ranked by Ernst & Young as one of the top business risks facing the mining and metals sector in 2016/17.

### Teck Context

Many of our operations are located immediately adjacent to local communities, such as our Carmen de Andacollo Operations, Trail Operations and Elkview Operations, which are located next to Andacollo, Trail and Sparwood, respectively. Even our operations that are located a significant distance from communities, such as Red Dog Operations in the northwest Arctic, have the potential to both positively and negatively impact communities across the region. While specific opportunities and concerns about the impacts of our activities vary among communities in the areas where we operate, one of the common expectations of communities is meaningful engagement throughout the mining life cycle.

Community engagement continued to be a strategic business priority across all of our operations in 2016. Engagement was focused on exploring and advancing shared benefit opportunities as well as managing and mitigating potential impacts on the environment and on human health and, in particular, issues related to air, water, tailings and biodiversity. Due to persistent challenging market conditions in the mining industry, engagement was also focused on managing and mitigating impacts on communities and local economies.



### What is in this topic?

Local community engagement, impact assessments, and development programs; actual and potential impacts on local communities; disputes related to land or resource use of local communities; grievance mechanisms.

### GRI Indicators and Topic Boundary

102-34, 201-103, 203-103, 203-1, 205-1, 413-103, 413-1, G4-MM6, G4-MM7

This topic is considered most material by our shareholders, employees, contractors, suppliers, regulators and society in the context of all Teck sites, contractor selection/management and supplier selection.

### Performance Highlights

# 1,006

responses of feedback received through our feedback mechanism.

# How Does Teck Manage Community Engagement?

## Our Targets and Commitments

Our goal is to engage with communities to identify social, economic and environmental priorities, and to mutually define outcomes and measures of success.

In particular, we are focused on:

- Refining our business policies and practices based on results of our social risk assessments, our work in human rights, and developments in the rights of Indigenous Peoples by 2020.
- Engaging with communities to identify social, economic and environmental priorities and to mutually define outcomes and measures of success by 2020.
- Fully integrating social risk and opportunity, human rights, and the rights of Indigenous Peoples into how we do business and our individual actions and behaviours by 2030.
- Creating lasting mutual benefits through collaboration on social, economic and environmental initiatives by 2030.

## Material Topic Interconnections

- Mine Closure: page 34
- Relationships with Indigenous Peoples: page 62
- Water Management: page 89
- Tailings and Mine Waste Management: page 97
- Environmental Management: page 103
- Air Quality: page 108
- Biodiversity: page 122

In this section, we outline our governance and management systems related to community engagement, our Social Management and Responsibility at Teck (SMART) Framework, and feedback management.

## Governance and Management Systems

At Teck, we begin engagement with communities at the earliest phase of the mining life cycle. We work to engage communities and continuously demonstrate our ability to effectively manage environmental and social impacts while providing opportunities and mutually defined benefits. Engagement to develop an understanding and earn early support for our activities has the potential to reduce costs, increase the predictability of project development timelines and budgets, and generally strengthen long-term relationships with COIs. As such, at every operation and project<sup>(10)</sup>, engagement is completed with the intention of both sharing information from our sites and gathering input from our COIs.

## Social Management and Responsibility at Teck (SMART) Framework

Teck's HSEC Management Standards require sites to regularly engage with, and put in place mechanisms to receive feedback from, COIs as a means to manage key social risks, respond to public concerns,

effectively manage long-term relationships and support ongoing decision-making.

Teck's SMART framework is supported by tools/guides, ongoing training and subject-matter expert support that examines social risks and management from a number of approaches:

- **Thematic approaches:** viewing social management through the lens of relevant themes throughout the mining life cycle; these themes include human rights, the rights of Indigenous Peoples, inclusion and diversity, and vulnerable groups
- **Process approaches:** providing direction on understanding and managing the social impacts of our activities as a management system and ongoing process through a Plan-Do-Check-Act cycle to drive continual improvement
- **Phase-specific approaches:** pursuing thematic and process activities specific to a phase in the mining life cycle, such as during the exploration or closure stage.

Learn more about our approach to managing community engagement through SMART on the [Community Engagement section](#) of our website.

Figure 16: **Managing Community Engagement**





## Feedback, Grievances and Disputes

In order to build strong relationships with communities based on trust and mutual respect, it is essential that the interests of communities are heard and that their concerns are addressed. Teck staff at all sites undertake frequent and, at times significant, engagement activities with communities to bring these interests and concerns to light. These activities include regular disclosure about site activities, direct consultation on significant changes in mining activities, and the creation of formal processes with community members to address issues in an ongoing and cooperative way.

Teck also provides direct feedback mechanisms at every operation, project and exploration region to specifically ensure that those who want to submit feedback — whether it's a comment, question, concern, complaint or compliment — are able to do so easily and, if they choose, anonymously. Our HSEC

Management Standards involves investigating all grievance-type feedback to determine the root cause and to implement appropriate actions, and to communicate this information in a timely manner back to the complainant. Our SMART Feedback Mechanism Tool guides the process of developing and implementing a feedback mechanism at each operation in a manner that is appropriate to the scale of our activity.

These mechanisms may include dedicated phone lines and in-person or online platforms to provide feedback. Feedback items that are received are recorded using a database system called TrackLine and categorized by subject and severity. Higher-level feedback items are regarded as "significant grievances," recognizing that they are often specific issues of concern to community members that require a response and potential further action from the company. A focus for 2016 was on reviewing effectiveness of our grievance mechanism.

## What Was Our Performance in Community Engagement in 2016?

In the section below, we report on our engagement on actual or potential impacts, on our progress in implementing the SMART Framework and feedback, and on grievances and disputes.

### Engagement on Actual or Potential Impacts

All operations, projects and exploration sites continue to demonstrate a high level of performance on engagement with COIs to address current and emerging issues and to maximize opportunities that provide strategic value for both Teck and those communities. We demonstrate our performance in community engagement by reporting on impact management, general feedback received, grievances and disputes.

Activities across the mining life cycle may result in a range of social, economic and environmental impacts, both positive and negative. Examples of specific impacts experienced at our operations in 2016 and how we responded are discussed in Table 36. Please refer to the [Engaging with Communities of Interest](#) page on our website for a detailed discussion on how we engage our COIs to understand their concerns and avoid, minimize and mitigate issues.

Table 36: **Selected Actual and Potential Impacts from Our Activities and Major Engagement Activities in 2016**

| Actual or Potential Impacts on Communities from Our Activities                                                                             | Sites                     | Major Engagement Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Community: concerns about Red Dog Operations (RDO) activities related to subsistence resources, traditional land use, and community health | Red Dog Operations        | <p>We established a working group and developed a Memorandum of Agreement with the community of Kivalina. The objective of the Memorandum of Agreement was to establish clear expectations and activities related to community health and promotion of traditional land use and subsistence.</p> <p>We worked with the Subsistence Committee, which has representatives from NANA, local residents and the mine, to create a safety communication plan for hunting caribou on the haul road, and hired NANA security to improve safety and communications on the road between the port and operation.</p> |
| Socio-economic: activities related to local taxation                                                                                       |                           | We met with the Northwest Arctic Borough to advance negotiations around a new taxation agreement that supports both the region and the mine.                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Environmental: impacts on land and recreational regions                                                                                    | Cardinal River Operations | We hosted an annual meeting with recreational trail users and shared key messages related to proposed reclamation activities, certification plans for the Sphinx Lake area, and progress towards an alternate route to Cadomin Mountain.                                                                                                                                                                                                                                                                                                                                                                  |
| Socio-economic/<br>Environmental: impacts associated with exploration activities                                                           |                           | We communicated with First Nations and high-priority stakeholders that the company is submitting a Coal Exploration Program for the Mackenzie and Redcap areas of the Cheviot Mine. As Teck consults and engages with Indigenous Peoples and COIs about the exploration program, we will better understand how the program impacts their rights and interests, and how these impacts can be avoided, managed or mitigated.                                                                                                                                                                                |
| Socio-economic: impacts associated with closure.                                                                                           | Coal Mountain Operations  | We continued to engage with the local community to assess social risks associated with planned closure in late 2017 and we incorporated social considerations into the site closure plan.                                                                                                                                                                                                                                                                                                                                                                                                                 |

Table 36: **Selected Actual and Potential Impacts from Our Activities and Major Engagement Activities in 2016 (continued)**

| Actual or Potential Impacts on Communities from Our Activities                                                                        | Sites                           | Major Engagement Activities                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental/Socio-economic: actual and potential impacts on livelihoods and community well-being due to dust from mining activities | Elkview Operations              | We held discussions with individual residents on feedback related to dust, provided information about actions taken to mitigate and manage dust, and established a process for various departments to record all activities that potentially influence dust generation and conditions, or non-operational dust controls.                                      |
| Socio-economic: impacts associated with expanding operations at Quebrada Blanca                                                       | Quebrada Blanca Phase 2 Project | We held discussions with local fishing unions to avoid and mitigate the impacts of our proposed port development. We also held discussions regarding a proposed road bypass with potentially affected communities near the Coposa region.                                                                                                                     |
| Environmental/Socio-economic: actual and potential impacts associated with expanding operations at Quebrada Blanca                    |                                 | After submitting the regulatory application for Quebrada Blanca Phase 2 in September 2016, we initiated a public consultation process, building on the pre-submission consultation already conducted.                                                                                                                                                         |
| Socio-economic/<br>Environmental: actual or potential impacts associated with developing a new copper-gold-molybdenum mine            | NuevaUnión Project              | In collaboration with our joint venture partner Goldcorp, we engaged Diaguita community leaders to establish a process for dialogue on the project and strengthen Indigenous People's participation in the consultation process. Additionally, we continued engagement with local stakeholders on the environmental impact assessment and associated studies. |
| Environmental/Socio-economic: actual and potential impacts on Indigenous Peoples                                                      | Frontier Project                | We signed a participation agreement with the Fort Chipewyan Métis Local 125, Fort McKay Métis and Fort McKay First Nation. We also advanced negotiations with other Indigenous Peoples near our Frontier project.                                                                                                                                             |
| Environmental: actual and potential impacts on the environment                                                                        |                                 | We held workshops in Fort McMurray in July 2016 to introduce Teck's biodiversity management process and to advance the fisheries offset plan, the wildlife mitigation and monitoring plan, and the land access management plan for Frontier.                                                                                                                  |
| Environmental: impacts on land and water                                                                                              | Exploration – Turkey            | We held meetings with local residents regarding our environmental impact assessment for exploration activities in Turkey.                                                                                                                                                                                                                                     |

# What Was Our Performance in Community Engagement in 2016?

## Case Study

### Finding Common Ground: Collaborating with Local Communities for Quebrada Blanca Phase 2



Teck's Quebrada Blanca Operation is located in the Tarapacá Region of northern Chile, about 1,500 kilometres north of the capital of Santiago. The current mine is approaching the end of its life. As such, Teck is developing a new project at the existing mine site, Quebrada Blanca Phase 2, and conducting engagement with local communities.

#### About Quebrada Blanca Phase 2

Quebrada Blanca Phase 2 (QB2) aims to develop a new resource at Quebrada Blanca (QB), which will substantially increase annual copper production and extend the mine's production life by 25 years. QB2 includes constructing a new concentrating plant, tailings facility, major infrastructure installations for transporting seawater to the mine,

and facilities to receive, filter and ship the copper concentrate.

#### Engaging Communities

Facilitating the expansion project for QB2 means that our area of influence in surrounding communities will change. Part of our approach to opening new operations includes reaching out to potentially affected communities even before activities begin. As such, project planners for QB2 began outreach projects with the surrounding Altiplano and La Pampa communities five years ago. We have engaged approximately 1,500 people in this region.

#### The Consultation Approach

To form strong and lasting relationships with local communities in the region, Teck is working to conduct transparent and inclusive public participation. This

involves submitting public proposals for the design and development of the QB2 Environmental Impact Assessment. We also collaborated with community organizations to collect new social and environmental data related to the operation and design of community projects.

Teck has responded to local capacity concerns by providing funding for technical and legal support to members of four fishermen's and seaweed collectors' trade unions within the region. Working with the unions allowed us to improve our approach for collecting marine and environmental data for setting long-term objectives.

#### Developing Commitments

Our community consultation resulted in modifications to the QB2 project plan. For example, we modified the diffusion system for the planned desalination plant, and incorporated a new access road to the coastal border. In addition, Teck has voluntarily committed to undertake further studies to assess other potential economic, social and environmental impacts.

Joint planning sessions with local communities will continue throughout the life cycle of QB2, from opening through to closure. The goal of these sessions will be to establish agreements of mutual benefit, consolidate direct relationships, and design long- and short-term goals for community involvement.

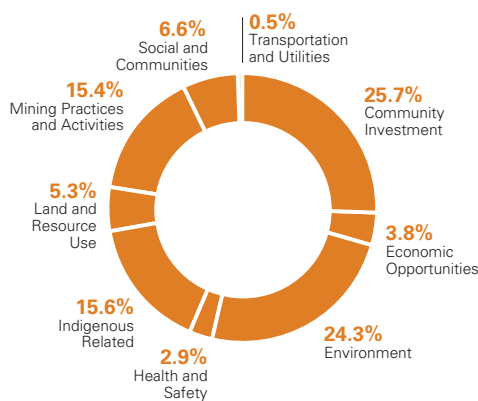
## Feedback, Grievances, Incidents and Disputes

Feedback and grievances are a key source of social information for our sites and corporate teams. In the same way our environment teams monitor environmental outcomes, our community teams monitor positive and negative feedback from our COIs. Having a widely accessible feedback mechanism, and providing effective remedies through this mechanism, is an important way for us to understand our impacts on communities, which in turn allows us to work to minimize negative impacts and maximize positive impacts. In 2016, we completed a company-wide review of feedback mechanisms and began introducing social incident reporting procedures.

### Feedback in 2016

In 2016, we received 1,006 instances of feedback through direct feedback mechanisms established across our sites. Figure 17 illustrates a breakdown of feedback received through those mechanisms, categorized into environmental questions and concerns, Indigenous-related concerns, opportunities related to community investment, and our mining activities.

Figure 17: 2016 Total Feedback Received through Feedback Mechanism by Topic Category



In 2016, we received more community feedback through our mechanisms than we did in 2015 and less than we did in 2014. Feedback levels will vary from year to year for several reasons, including the level of permitting or project activity, which tend to increase the amount of feedback, and community utilization of feedback mechanisms. As practices at our sites improve, this will also improve the extent to which feedback mechanisms are utilized and therefore the amount of feedback received.

We believe that continued proactive engagement with our communities has created more opportunities for COIs and individuals to provide feedback directly to company representatives, which has complemented formal feedback mechanisms. Teck will continue to monitor the performance of feedback mechanisms and engagement processes to ensure that communities continue to have diverse opportunities to engage with and provide feedback to all of our operations, major projects and key exploration projects.

### Grievances in 2016

In 2016, of the total feedback received, 140 were considered grievances (classified as level 3 or level 4 feedback). Examples of our feedback management for some of these grievances can be found on the [Community Engagement page](#) on our website.

It is important to note that grievances are reflective of perceived or actual events taking place as a result of company activities, and therefore do not necessarily constitute an actual negative impact or non-conformance event by the company. Teck's practice is that all feedback is acknowledged, assessed and a response is communicated to the complainant, with the goal of providing a satisfactory reply or resolution in a timely manner.

In 2016, our corporate community team worked with sites to review their feedback/grievance management practices. The purpose of the review was to enhance the internal identification, tracking, resolution and reporting of feedback as part of a unified approach to improving social performance across the company.

## Sustainability Strategy Spotlight

In 2016, as part of our 2020 goal to engage with communities to identify social, economic and environmental priorities and to mutually define outcomes and measures of success, our Social Management and Responsibility at Teck (SMART) engagement activities were reviewed. We also implemented improved community investment tracking and reporting at our operations, which supported the \$11.8 million we contributed in various community investment initiatives.

For more detail, see our full goals progress report on page 11.

# What Was Our Performance in Community Engagement in 2016?

## Outlook for Community Engagement

In 2017, we will continue to engage communities of interest at our sites and work towards maintaining or increasing community support for our activities. In particular, we will focus on engaging local communities in preparation for the closure of Coal Mountain Operations in British Columbia, engaging Indigenous Peoples and other stakeholders as we advance our Frontier, Quebrada Blanca Phase 2 and NuevaUnión projects. Through integrating community engagement in all phases of the mining life cycle, by identifying social, economic and environmental priorities, and by defining outcomes together, we will work towards our vision of building strong relationships with communities and creating lasting mutual benefits.

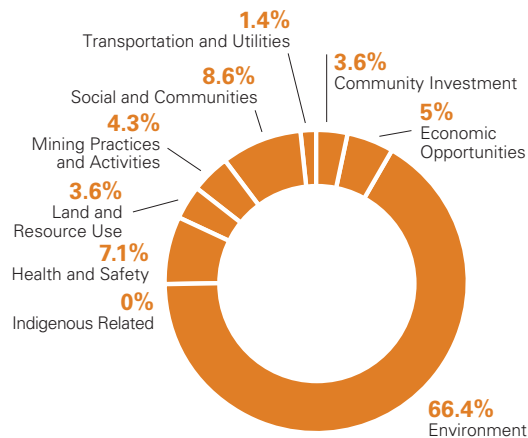
Using our SMART Framework, we will also improve our social management approach by further implementing guidance and procedures for feedback management, updating our information management systems for tracking and reporting, and better integrating social incident reporting and management into existing systems. These improvement activities will be undertaken to further strengthen consideration of human rights and Indigenous rights in Teck's social management activities.

### Learn More

[Understanding Company-Community Relations Toolkit, ICMM](#)



Figure 18: **2016 Total Grievances Received through Feedback Mechanisms by Topic Category**



### Disputes in 2016

Disputes are considered significant when they cannot be resolved jointly with the complainant, are repeated or widespread, are breaches of law or company policy, are accusations related to human rights or the rights of Indigenous Peoples, or are related to death or serious illness. In 2016, three of Teck's operations experienced significant disputes, which are summarized below.

#### Red Dog Operations (RDO)

The Northwest Arctic Borough (NAB) severance tax dispute with RDO continued in 2016. RDO continued to work on strengthening the relationship and encourage negotiations. A payment in lieu of taxes (PILT) proposal was collaboratively developed by the NAB and Teck. As of the end of 2016, parties continued to advance discussions on the long-term status of the severance tax ordinance and a potential negotiated solution.

An employee of a Red Dog contractor, NANA/Lynden, was reported to have made insensitive remarks regarding the Kivalina residents' caribou hunt that resulted in significant community concern. RDO community and human resources collaborated with NANA/Lynden and, following an investigation, removed the employee, and issued letters of apology to impacted employees. RDO also expanded training to include more employees and contractors.

### Quebrada Blanca

In October 2016, a group of approximately 30 people from a nearby community illegally entered the Quebrada Blanca property to draw attention to local concerns about perceived impacts of the Quebrada Blanca Phase 2 project. The project team is continuing to engage with community members to identify and respond to community issues.

### Carmen de Andacollo

In August 2016, residents of Andacollo marched in the street and occupied land owned by Teck, although not actively in use, to raise awareness of housing issues. In response to heightened community concerns, CdA will seek to strengthen its engagement with the community through participation in a local housing commission that has been created to address the issue.

### Internal Reporting of Community Incidents

To ensure we are capturing and responding to all community concerns in addition to those raised through our usual feedback mechanisms, we piloted a community incident reporting system with selected sites in 2016. The identification and rapid internal reporting of significant community incidents supports the timely resolution of community concerns, and assists with post-incident analysis and efforts to prevent future recurrence. We expect to continue to roll out the internal reporting system to all sites in 2017.

# Emergency Preparedness

## Why was Emergency Preparedness a Material Topic in 2016?

Over the past few years, a number of high-profile incidents have significantly impacted companies and communities, which underscores the importance of emergency planning and management systems. These incidents can result from external factors such as natural disasters and pandemics, or from business activities such as spills and dam failures. While governments and companies must work with communities to mitigate risks whenever possible, equally important is the ability to respond and recover from these extreme events when they arise.

### Industry Context

Mining can pose significant health, safety and environmental risks to employees and communities. Certain risks, such as the health and safety of our workforce and tailings management, have the potential to become emergencies if not managed properly. Recent tailings facility incidents at other companies, in particular, have reinforced the need for comprehensive emergency planning.

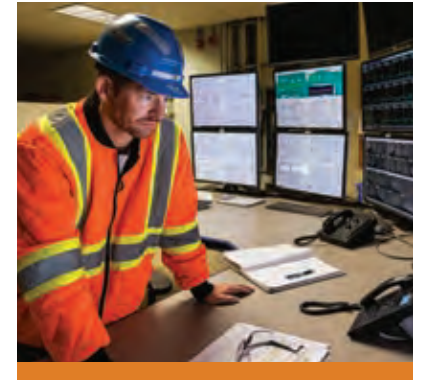
The importance of emergency preparedness is reflected in the International Council on Mining and Metals (ICMM) 10 Principles, one of which is to “implement risk management strategies based on valid data and sound science.” This also states that member companies must develop, maintain and test effective emergency response procedures in collaboration with potentially affected parties.

### Teck Context

The safety of our people, the environment and neighbouring communities is critical. We take our responsibility seriously to ensure that measures are taken to mitigate risks.

**We recognize that maintaining strong relationships with our communities of interest and ensuring business continuity depend on our ability to effectively manage risks and to be prepared to respond in a timely and appropriate manner, should an emergency occur.**

Recent tailings incidents at other companies have underscored for Teck the importance of continued focus on emergency planning and management systems.



### What is in this topic?

Preventing and being prepared to respond to emergencies.

### GRI Indicators and Topic Boundary

G4-DMA

This topic is considered most material by our shareholders, employees, contractors, local communities, regulators and society in the context of all Teck sites, contractor selection/management and supplier selection.

### Performance Highlights

# 190

the number of drills/scenarios conducted in 2016.

# How Does Teck Manage Emergency Preparedness?

## Our Targets and Commitments

We are committed to effective crisis management and emergency preparedness at all of our operations. All Teck operations meet or exceed the Mining Association of Canada's Towards Sustainability Mining (TSM) protocol requirements for tailings management.

### \* Material Topic Interconnections

Health and Safety of Our Workforce: page 54  
 Community Engagement: page 69  
 Product Impacts: page 85

In this section, we outline Teck's approach to emergency planning practices, risk identification, emergency response plans and associated components.

## Governance and Management

We identify a comprehensive range of potential emergencies and ensure we are prepared to respond to, and recover from, these situations as quickly and effectively as possible. The vast majority of potential hazards are prevented through robust risk management measures, including

emergency response planning. Annual reviews of the emergency preparedness of our operations ensure the necessary resources are available to effectively respond if such a situation occurs. Emergency preparedness and planning is conducted at a corporate and site level as well as within the communities near our operations, as outlined in Figure 19.

Figure 19: **Emergency Preparedness at Corporate, Sites and Communities**

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Corporate Risk Group</b> | <ul style="list-style-type: none"> <li>· Made up of four subject matter experts, including Crisis Management Team</li> <li>· Responsible for setting Teck's overall approach to risk, including annual review and oversight of sites' emergency preparedness plans</li> <li>· Provides risk correlation and analysis support for individual sites</li> <li>· Coordinates additional training, capacity building, and simulations as necessary</li> </ul>           |
| <b>Individual Sites</b>     | <ul style="list-style-type: none"> <li>· Responsible for developing emergency preparedness plans, tailored to site-specific risks</li> <li>· Work closely with the Corporate Risk Group to ensure alignment with Teck's overall risk approach</li> <li>· Conduct training and simulations to ensure readiness and capabilities of workers and managers</li> <li>· Coordinate with local stakeholders (government, communities, etc.) as described below</li> </ul> |
| <b>Local Communities</b>    | <ul style="list-style-type: none"> <li>· Develop their own emergency preparedness and response plans</li> <li>· May collaborate and conduct joint simulations with adjacent Teck sites</li> <li>· May exchange information and best practices with adjacent and non-adjacent Teck sites</li> </ul>                                                                                                                                                                 |

## Risk Identification

Our framework within Teck's Global Risk Management Program guides the process of:

- Identifying hazards
- Assessing the risks associated with those hazards
- Applying relevant controls to minimize the potential of risks
- Ensuring appropriate plans and resources

are put in place to respond to emergencies that may occur

Standards for emergency preparedness, which were originally established in 1984 through our Corporate Loss Prevention Guidelines, are updated on a regular basis as required. With the support and guidance of our Risk Group, each operation develops site-specific emergency preparedness and response plans based upon those



requirements. As such, emergency response plans and preparations are appropriate for site-specific conditions and are based on a range of credible — although extremely unlikely — incident scenarios.

Each of our operations develops, implements and maintains various components of emergency response plans, visit the [Emergency Planning section](#) on our website to learn more.

### Emergency Preparedness Related to Tailings Storage Facilities

Our Emergency Preparedness and Response planning is focused on addressing scenarios based on site-specific event risk and probability. One of the key risks in environment and safety is related to tailings storage facilities. For example, our emergency preparedness activities for tailings storage facilities include the following:

- Warning systems
- Defined alert levels for instrumentation
- Stockpiled materials for emergency berms/buttresses
- Mutual aid agreements with local emergency responders, where relevant
- Hazard tracking (e.g., storm warnings)
- Training for operators and mine management
- Contingency plans for upset conditions
- Business continuity and business recovery plans
- Consultation and public communications plan
- Testing of response plan

Ongoing tabletop reviews and live simulations are conducted on a regular basis for a variety of scenarios and occasionally with participation of external stakeholders.

### Snapshot

#### Mine Rescue Training Across our Operations and Performance in Competitions

Mine rescue training is a critical part of emergency preparedness at Teck's operations. Our mine rescue teams often compete in regional and national competitions as a way to hone skills and share best practices.

In June 2016, Teams from Teck's B.C. operations took home several awards at the Annual Provincial Mine Rescue and First Aid competition in Kimberley, B.C., as follows:

- Greenhills Operations won the Overall Surface Mine Rescue Trophy, Three-Person First Aid Trophy, Levitt Fire Safety Trophy and HVC Highest Non-Aggregate Points Trophy

- Elkview Operations won the Ron Brow Memorial (Best Surface Extrication), Maurice Boisse Memorial Trophy (Best Practical Bench Skills) and East Kootenay Mines Industrial Safety Association Trophy (Best Written)
- The team from the former Sullivan Mine won Best Bench Technician Trophy (David Heathfield), Best Underground Performance in Smoke, and Best Obstacle and Recovery (Keith Bracewell Memorial)

The competition also awarded individuals for their performance. Gerry Wong from our Highland Valley Copper Operations won the Chief Inspectors Award, and Amanda Cunliffe from Greenhills won the Kathy Lofstrom Memorial Trophy for Best Three-Person First Aid Coach.

Learn more about the Annual Provincial Mine Rescue and First Aid competition on the [Mining Association of British Columbia](#) website.

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# What Was Our Performance in Emergency Preparedness in 2016?

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## Outlook for Emergency Preparedness

Moving forward, we will continue to identify a comprehensive range of potential emergencies and ensure we are prepared to respond to, and recover from, emergency situations as quickly and as effectively as possible. In 2017, all operations and sites will continue with emergency training as outlined by corporate and area-specific requirements, and the corporate risk group will continue to provide company-wide support with various tabletop exercises and field simulation training events.

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### Learn More

[Good Practice in Emergency Preparedness and Response, ICMM](#)



While emergency preparedness is an ongoing effort, we undertook several notable simulations in 2016 as outlined below. These examples are in addition to our ongoing emergency preparedness planning and training held across our operations.

Table 38: **2016 Emergency Preparedness Performance Highlights**

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| Category                           | Examples of Site-Specific Simulations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Natural Disasters                  | Simulation of two employees at the Santiago Exploration office in Chile being washed away in flash floods.                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Transportation-Related Emergencies | Simulation of a collision between a railcar and a light-duty vehicle, and the responding emergency plan at Trail Operations. Multi-jurisdictional exercise involving Teck personnel, community stakeholders and Tadanac residents to successfully rescue victims and mitigate collision impacts.<br><br>Simulation of a concentrate truck accident at Carmen de Andacollo Operations. Teck personnel successfully worked with the local Andacollo Emergency Response Brigade to overcome several additional challenges and contain the incident. |

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# Human Rights

## Why was Human Rights a Material Topic in 2016?

Companies have the potential to impact human rights both positively and negatively wherever they operate. As businesses are becoming increasingly globalized, they may operate in areas with higher risks to human rights or where economic and political conditions make rights more difficult to protect. The United Nations Guiding Principles on Business and Human Rights were created in 2011 to provide clarity on the responsibilities of companies and duties of governments to uphold and protect human rights. According to the Guiding Principles, businesses must refrain from violating human rights, wherever and however they do business. Companies must know their human rights impacts and take steps to improve them through due diligence, even if governments do not fulfill their own duties. In addition, companies must have processes that allow for communities to file grievances and allow them to participate in remedies.

### Industry Context

Mining requires access to a variety of resources; therefore, there is a risk that companies can potentially infringe on a broad range of human rights such as those related to water, land access, Indigenous Peoples, local communities, health and safety, and security. Activities that have the highest likelihood of impact on human rights are referred to as salient issues. In recent years, ensuring alignment with human rights has been a significant objective for the mining sector as a key aspect of sustainable development. Organizations such as the International Council on Mining and Metals (ICMM) are fully supportive of the UN Guiding Principles, and were deeply involved in the consultations that led to their development.

Industry associations have also come together to advance key initiatives that are aligned with human rights objectives, such as the Mining Association of Canada who has worked with all members, including Teck, to develop a common approach to aligning with the Voluntary Principles on Security and Human Rights, which was approved and announced in early 2017.

### Teck Context

While Teck operates in jurisdictions that are characterized by stable political and economic conditions, we recognize that the potential for our activities to impact human rights remains. We are committed to improving systems for managing human rights-related incidents, impacts and grievances. We are improving our reporting to align with the United Nations Guiding Principles by providing more information on how our activities may impact human rights and how issues with relevant human rights aspects are being addressed.



### What is in this topic?

Anticipating and preventing impacts on the human rights of the people foreseeably touched by our activities, particularly people in our supply chain and living near our operations.

### GRI Indicators and Topic Boundary

412-103, 412-1

This topic is considered most material by our shareholders, employees, local communities, regulators, society and contractors in the context of all Teck sites, contractor selection/management and supplier selection.

### Performance Highlights

Improved awareness and tracking of potential human rights impacts in our social risk assessment and social incident reporting guidelines.

# How Does Teck Manage Human Rights?

## Our Targets and Commitments

As a responsible company operating globally, we are committed to respecting and observing all human rights, as articulated in the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights, and the ILO Core Conventions.

In addition, we are committed to Principles 1 and 2 of the UN Global Compact, meaning we actively support and respect the protection of human rights and avoid complicity in human rights abuses.

To demonstrate these commitments, Teck has increased its disclosure in this area and will move towards improved reporting against the UN Guiding Principles in the 2017 Sustainability Report.

We are committed to engaging with our communities of interest on our human rights impacts and to reporting on our performance.

### \* Material Topic Interconnections

Economic Performance and Contributions: page 27

Our Workforce: page 44

Health and Safety of Our Workforce: page 54

Relationships with Indigenous Peoples: page 62

In this section we outline our commitment to respecting human rights, governance and management systems related to human rights, alignment with international frameworks, salient human rights issues, and social and human rights assessments.

## Our Commitment to Respecting Human Rights

We are committed to respecting the rights of our employees, the communities in which we operate, and others affected by our activities through the life cycle of our products and operations. Furthermore, we work to advance human rights values in the areas where we operate in collaboration with communities of interest.

We put special emphasis on the rights of vulnerable groups that may be impacted by our activities and operations, including Indigenous Peoples, women and children.

## Governance and Management Systems

At the highest level, we are guided by our Charter of Corporate Responsibility, Code of Ethics and Code of Sustainable Conduct. Our policies on Human Rights, Human Resources, Security, Materials Stewardship and Supply Chain outline our commitments. Our Health, Safety, Environment and Community Management Standards frame how the policies, codes and charters are applied.

Our [Human Rights Policy](#) outlines our commitment to respecting the rights of our employees, the communities in which

we operate, and others affected by our activities. Our management of human rights is guided by this policy and supported by company-wide codes, charters and standards as outlined above. Our due diligence processes with respect to human rights, and compliance with the Human Rights Policy, are overseen by our Senior Vice President, Commercial and Legal Affairs and are managed by our Communities team and through a Human Rights Working Group consisting of senior members of our corporate management teams. Training on the Human Rights Policy is provided to key staff as required, and we maintain a risk register that incorporates the assessment of human rights impacts.

Our Social Management and Responsibility at Teck (SMART) Framework, social risk assessments and several other tools guide our corporate and operational implementation of the Human Rights Policy. Through training, we ensure our people have the skills they need to use these tools. Finally, we report our performance in respecting human rights internally and externally. Information on our social risk and human rights assessments can be found on the [Human Rights page](#) on our website.

Figure 20: Human Rights Management Framework



### Integration in Feedback Mechanism and Grievance Reporting

As part of our Human Rights Policy implementation and our sustainability strategy, all operations developed and implemented site-based feedback mechanisms. Our feedback mechanisms allow for the identification of grievances with human rights relevancy and help our sites systematically respond in a time-bound manner and report out on human rights-related feedback. For more information about our feedback mechanism, see the Community Engagement section on page 71.

### Alignment with International Frameworks

As part of our efforts to fulfill our duties under the United Nations Protect, Respect and Remedy Framework, commonly known as the Ruggie Framework, our Human Rights Policy is consistent with [UN Guiding Principles on Business and Human Rights](#). Learn more on the [Human Rights page](#) on our website.

These require us to respect human rights and, where relevant, address human rights grievances. This includes carrying out due diligence with respect to those potential and actual human rights impacts relating both to our business activities and to our business relationships. In addition, we are committed to Principles 1 and 2 of the United Nations Global Compact, meaning we actively support and respect the protection of human rights and avoid complicity in human rights abuses.

### Salient Human Rights Issues

As part of the UN Guiding Principles on Business and Human Rights, companies are required to determine and report on their most significant or salient human rights issues. A company's salient human rights issues are those human rights that represent the most significant impact through the company's activities or business relationships.

Table 39: **Human Rights Issues that are Salient to Teck<sup>(1)</sup>**

| Salient Issues Category | Associated Rights                                                                                                                                                                                                                                                                                                                     |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Labour                  | Freedom of association, assembly and collective bargaining <sup>(2)</sup><br>Right to safe and healthy working conditions <sup>(3)</sup><br>Right to not be subjected to slavery, servitude or forced labour (specific to supply chains) <sup>(4)</sup><br>Right to work <sup>(5)</sup><br>Right to non-discrimination <sup>(6)</sup> |
| Environment             | Right to clean water and sanitation <sup>(7)</sup><br>Right to health <sup>(8)</sup>                                                                                                                                                                                                                                                  |
| Land and Livelihoods    | Right to land <sup>(9)</sup><br>Right to work <sup>(10)</sup><br>Right to take part in cultural life <sup>(11)</sup>                                                                                                                                                                                                                  |
| Personal Security       | Right not to be subjected to torture and the right to liberty and security of person <sup>(12)</sup><br>Freedom of association and right to protest, speech and expression <sup>(12)</sup>                                                                                                                                            |

(1) In addition to the protection of all human rights, Indigenous Peoples also hold a unique set of group rights called Indigenous rights. This means that, in practice as well as being a human right for Teck to respect, there may be further collective rights for Teck to uphold and respect in regard to Indigenous Rights.

(2) The Universal Declaration of Human Rights (UDHR), International Covenant on Civil and Political Rights (ICCPR), International Covenant on Economic, Social and Cultural Rights (ICESCR), International Labour Organization Core Conventions (ILO)

(3) ICESCR, ILO (4) ICCPR, ILO (5) UDHR, ICESCR (6) UDHR, ICCPR, ICESCR, ILO (7) UDHR, ICESCR, ILO (8) ICESCR

(9) UDHR (privacy and property), ICCPR (no forced eviction), ICESCR (no forced eviction) (10) UDHR, ICESCR (11) ICESCR (12) ICCPR

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# What Was Our Performance in Human Rights in 2016?

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## Outlook for Human Rights

In all of our activities, Teck remains committed to respecting and observing human rights, and to more closely aligning our practices with the UN Guiding Principles. In 2017, we will work to further embed the principles in our Human Rights Policy into our procedures and practices such as social risk assessments, feedback/grievance management and incident management. We will also advance implementation of key improvements in areas such as exploration and project development. In 2017, through the Human Rights Working Group, we will identify opportunities to advance human rights values in the areas where we operate, as identified in collaboration with communities of interest.

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## Learn More

For more information, see a brief video introduction on the [UN Guiding Principles on Business and Human Rights](#).



In 2016, Teck worked to demonstrate our ongoing commitment to respecting and observing human rights, actively supporting and respecting the protection of human rights, avoiding complicity in human rights abuses, engaging with our communities of interest on our human rights impacts, and reporting on our performance.

## Updates to Human Rights Management Practices

In 2016, we continued to review procedures and policies across the organization to ensure conformance with our Human Rights Policy. With respect to our suppliers and service providers, we updated our [Expectations for Suppliers and Contractors](#) to integrate stipulations to ensure respect for human rights such as fair working conditions, non-discrimination and the abolition of child labour.

In our Exploration teams, we introduced a dedicated Communities Policy that specifically sets expectations related to human rights performance at all exploration sites and assists with prioritization of exploration activities. In our management of major projects, we further integrated human rights aspects into Teck's project delivery framework to ensure best practices are used during their development.

We also piloted a social risk assessment that encouraged greater evaluation and analysis of the likely impact of our activities on human rights. This assessment increased our understanding of potential human rights impacts and, in some cases, appropriate remedies. We also undertook a review of site feedback/grievance mechanisms and associated reporting to identify potential areas of improvement related to human rights. Finally, we introduced social incident reporting procedures, which provides initial guidelines for the reporting of incidents with potential human rights impacts.

## Progress on Human Rights Management

We had no human rights grievances identified by complainants or incidents in 2016. In 2017 and beyond, our reporting on grievances will consider a wider scope in terms of classifying human rights issues. This change in reporting is in our effort to improve alignment with the UN Guiding Principles Reporting Framework.

# Product Impacts

## Why was Product Impacts a Material Topic in 2016?

There is persistent societal concern over the impacts that materials and their production can have on people and the environment, due to the waste, emissions and accumulation of hazardous by-products. Producers are expected to take responsibility for their products, making it more important than ever to fully understand product life cycles in order to maximize value while minimizing impacts.<sup>(11)</sup>

### Industry Context

In the mining industry, there is consistent recognition of shared responsibility across the supply chain for the sustainable production, use, reuse, recycling and disposal of minerals and metals. Specifically, the products of mining can have naturally occurring deleterious impurities associated with them, as well as valuable co-products like lead, cadmium and indium. From a stewardship perspective, we believe the mining industry is obliged to ensure these impurities and products are safely managed for employees, communities and the environment.

### Teck Context

In accordance with the International Council on Mining and Metals (ICMM) guidance on materials stewardship, we recognize that the value of minerals and metals to society are maximized when the various stakeholders along the value chain undertake activities that minimize risks, improve efficiency and optimize the life cycle of these products. We know our products have the potential to impact employees, communities and the environment; that's why we remain committed to stringent product and materials stewardship, and transparency on product impacts.

Teck is a producer of materials essential to the quality of life of people around the world. In addition to its key products — copper, zinc, steelmaking coal, and energy, Teck is a world leader in the production of lead, a significant producer of specialty metals such as germanium, indium and cadmium, and a producer of gold doré and silver. In addition, Teck produces a range of industrial products and fertilizers, which are recovered from our zinc and lead smelting operations. We recognize that our products have the potential to impact employees, communities and the environment. For example, our activities and products can both contribute to, and reduce, GHG emissions.

As external expectations increase around the safety of our products, Teck is receiving more information requests from customers on our management practices and how we minimize product impacts. In order to maintain strong business relationships and customer trust, we remain committed to stringent product and materials stewardship and transparency on product impacts. Managing the impacts of our products requires a thorough understanding of the properties of our products and our supply chain, which allows us to more effectively minimize impacts, engage with our communities of interest and gain market access.



### What is in this topic?

Managing the actual and potential impacts of our products through product stewardship and materials stewardship.

### GRI Indicators and Topic Boundary

G4-DMA

This topic is considered most material by our customers, regulators and society in the context of Teck's sites, transport, customers and end users.

### Performance Highlights

**7** customer site visits conducted as part of our ongoing assessment of the impacts of our products.

# How Does Teck Manage Product Impacts?

## Our Targets and Commitments

We seek to maximize the value of our products by using our technology and expertise to support and advocate for the responsible use, reuse, recycling, recovery and disposal of materials.

### \* Material Topic Interconnections

Economic Performance and Contributions: page 27

Community Engagement: page 69

Environmental Management: page 103

In this section, we outline our approach to the governance and management of product impacts, advocacy, and our recycling policies and practices.

## Governance and Management

### Managing Product Impacts through Materials Stewardship

Materials stewardship at Teck is a risk management process to minimize the impact of our products throughout their life cycle on employees, communities and the environment, and to ensure our products satisfy or exceed regulatory and societal needs. This work is conducted primarily by our Materials Stewardship Committee, who defines and oversees our efforts and is responsible for:

- Understanding the actual or potential risks and impacts of our products
- Making recommendations on approving new product applications
- Managing labelling and packaging requirements
- Monitoring product regulations and technical, transportation and legal issues
- Establishing and evaluating policies and procedures related to materials stewardship

We employ life cycle thinking to understand the potential risks and impacts of our products, beginning with the extraction of raw material from the earth, through to processing, transportation and customer use.

We manage a master product list and conduct customer assessment to ensure our products are used safely, as some products may cause harm if handled unsafely by smelters or end users. As part of our commitment to upholding business ethics, regulatory requirements and external expectations, we work to ensure that smelters, including ours and those downstream, have sufficient environmental management practices.

We draw on ecotoxicity expertise developed by the various commodity associations to bring sound science into our management approaches and decisions. Our materials stewardship program is also actively engaged with collective industry efforts, including those of the ICMM, towards continuously improving materials stewardship.

### Responding to Regulatory Requirements

Our materials stewardship efforts have expanded in recent years to meet growing regulatory pressures on mineral concentrates. These are manifested, for example, in the International Maritime Organization (IMO) bulk cargo requirements, Chinese import restrictions, and the Minamata Convention for Mercury. These requirements and restrictions now affect mining companies and smelters globally, and Teck specifically, in the same way that Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulations have defined chemical management programs for refined metals, alloys and compounds in the European Union since 2006.

### Recycling

Recycling is an important aspect of our everyday lives, as it conserves scarce natural resources, reduces the amount of waste that must be burned or buried, and helps to sustain the environment for future generations. We recycle in accordance with international, national, provincial and local requirements, and we aim to exceed these requirements. Continually improving recycling at our operations by identifying and sharing best practices throughout the company is our goal — including ongoing assessments of our recycling and reuse practices.

Table 40: Teck's Recycling Methods and Definitions

| Recycling Definition | Recycling for Value Recovery                                            | Industrial Waste Processing                                                             | Domestic Recycling                                                         |
|----------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Teck's Method        | Treating materials to create a renewed value for Teck in their new form | Treating end-of-life materials generated from our own operations and from other sources | Recycling of household items such as newspaper, bottles, cans and organics |



## What Was Our Performance in Managing Product Impacts in 2016?

Through our materials stewardship committee, Teck continuously evaluates actual and potential risks and impacts of our products. Further to our ongoing assessment of the impacts of our products, we conduct site visits with potential and existing customers to evaluate their capacity to handle our products responsibly.

We conducted seven customer site visits in 2016 and 11 in 2015. Visits in 2016 focused on our base metals business, in particular our copper and lead.

Management of the environmental and social impacts that may occur during the production and transportation of our products is guided by our HSEC Management Standards and sustainability strategy as well as activities associated with meeting permit and regulatory requirements. For totals of hazardous and

non-hazardous waste produced in 2016, see page 102.

### Recycling in 2016

At our Trail Operations, our focus remains on treating cathode ray tube glass, plus small quantities of zinc alkaline batteries and other post-consumer waste through our recycling program. Trail developed Canada’s first lead acid battery recycling program and through this program recycled 19,369 tonnes of lead in 2016, compared to 18,537 in 2015 and 18,955 in 2014.

### Outlook for Product Impacts

We expect that regulatory and community pressure on mining companies to manage the impacts of their products will continue to increase. Through our materials stewardship committee and activities, and collaboration with industry associations and peers, we will continue our work to ensure our products are handled responsibly throughout their life cycle. Throughout the year, we will also continue to collaborate with and support organizations such as the International Zinc Association, the International Copper Association and others in their studies and research on product impacts.

Table 41: **2016 Recycling Performance**

|                             | 2016   | 2015   | 2014   | 2013   |
|-----------------------------|--------|--------|--------|--------|
| Recycled tonnes of material | 45,500 | 40,800 | 41,200 | 43,200 |

### Learn More

[Maximizing Value: Guidance on implementing materials stewardship in the minerals and metals value chain, ICMIM](#)



## Material Topics

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### Water Management

Approach to water management, water-related risks, and performance related to our water balance (total water withdrawal and discharge by source); water uses and proportion of reuse and recycle.

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### Tailings and Mine Waste Management

Management approach and performance related to tailings and mine waste management, including the construction, operation, and ongoing monitoring of the various health, safety, and environmental risks and impacts associated with tailings storage facilities (TSFs) and waste rock facilities.

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### Environmental Management

Overall day-to-day environmental management, compliance with environmental regulations, compliance with permits, supplier environmental assessments, and transportation.

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### Air Quality

Emissions and air quality control at our operations and in the transportation of our products. Includes ambient air quality and emissions of sulphur dioxide (SO<sub>2</sub>).

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### Energy and Climate Change

Energy (fuel and electricity consumption and costs, energy intensity, energy-efficiency initiatives), climate change-related risks (carbon pricing, societal concerns) and emissions (greenhouse gas emissions and other gas emissions).

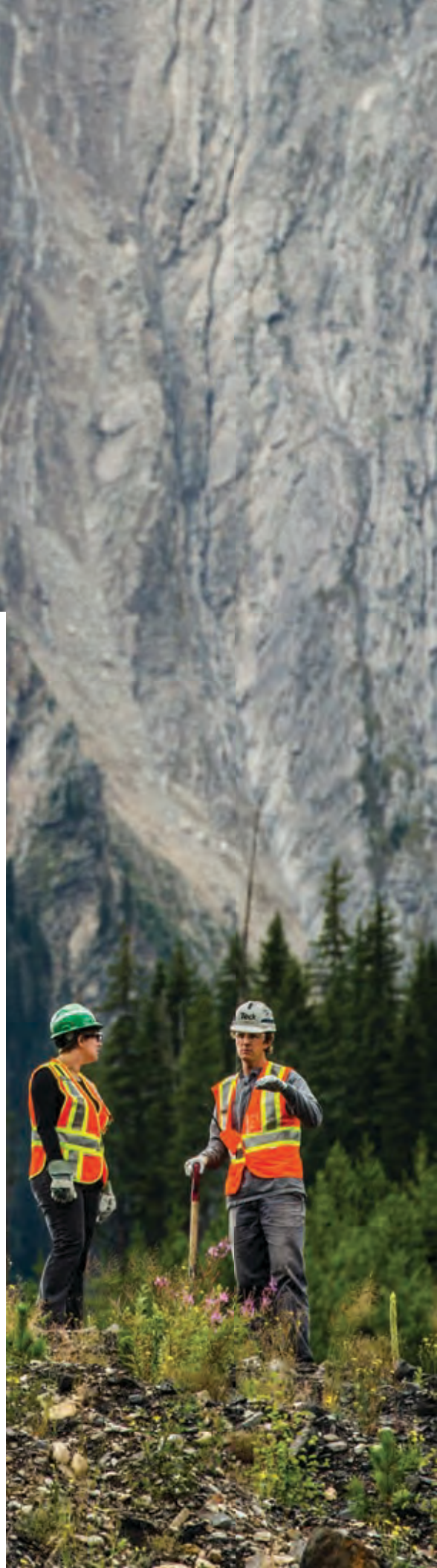
114

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### Biodiversity

Anticipating and minimizing impacts on species and ecosystems, as well as our approach and performance regarding remediation.

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# Water Management

## Why was Water Management a Material Topic in 2016?

Water is a precious shared resource with significant social, cultural, environmental and economic value, and it is fundamental for healthy, functional ecosystems. The United Nations sets sustainable water management as a worldwide priority with the establishment of SDG 6 — ensure access to water and sanitation for all — which builds upon the CEO Water Mandate set forth by the United Nations Global Compact.

### Industry Context

In the mining industry, water management is a critical issue because processing mined materials typically uses large volumes of water and can also potentially affect water quality, which in turn can affect other water users. As a result, the industry can affect, and is affected by, issues of water availability and quality. Mine operations can demonstrate leadership in water stewardship by using water efficiently, maintaining water quality, and engaging with communities to collaboratively manage a shared water resource through the mining life cycle.

Recognizing this, ICMM published a [position statement](#) defining a common approach to water stewardship in 2016. ICMM members, including Teck, recognize that they have a significant role to play in creating a safer and more sustainable mining and metals industry. This requires a commitment to apply strong and transparent water governance, effective water management, and collaboration to achieve responsible and sustainable water use.

### Teck Context

Communities with whom we share watersheds care about access to sufficient quantities of clean water for physical and spiritual health, quality of life, economic well-being and the maintenance of the local environment. We share those values, and our employees live in those same communities. Without adequate access to water, our operations could not function. Responsible water management is fundamental to maintaining the trust of our communities of interest.

We work to manage the amount of water we use and the quality of that water as it leaves our sites and legacy properties. Water management is also a major strategic priority across every business unit in terms of meeting regulatory requirements and obtaining or maintaining permits.

**Water-related risks can impact both our ability to operate and our communities of interest, which is why ongoing stakeholder engagement in water management is essential.**



### What is in this topic?

Approach to water management, water-related risks, and performance related to our water balance (total water withdrawal and discharge by source); water uses and proportion of reuse and recycle.

### GRI Indicators and Topic Boundary

303-103, 303-1, 303-3, 306-103, 306-1

This topic is considered most material by our shareholders, employees, local communities, regulators and society in the context of Teck's sites.

### Performance Highlights

# 4

The approximate number of times water was reused and recycled at our operations in 2016.

# How Does Teck Manage Water?

## Our Targets and Commitments

Our vision is to contribute to the balance between the social, economic, recreational and cultural benefits of water resources, within ecologically sustainable limits. We aim to be a leader in water stewardship by improving our understanding of the quantity and quality of water used at our mining operations, by achieving measurable improvements in water use and quality, and by engaging with other water users in our areas of influence.

Our targets include, in the short term (by 2020):

- Contribute to watershed management in water-stressed regions through water use efficiency projects, use of alternative water sources, water quality improvement measures and capacity building.
- Increase our understanding of groundwater and proactively assess groundwater risks.
- Collaborate in developing innovative water technology and practice.

By 2030, our long-term goals are to work within an informed understanding of ecological limits, regional issues, and demands on water resources to address:

- Water Quality: Keep clean water clean, minimize water quality deterioration, and take care of affected water resources.
- Water Quantity: Minimize water use per unit of production and transition to alternative water sources.
- Water Stewardship: Contribute to water use planning in our areas of influence.

## \* Material Topic Interconnections

- Mine Closure: page 34
- Relationships with Indigenous Peoples: page 62
- Community Engagement: page 69
- Human Rights: page 81
- Tailings and Mine Waste Management: page 97
- Environmental Management: page 103

In this section, we outline our policies and practices for protecting water quality, collaborating with communities to ensure fair allocation of water, and improving water efficiency.

We are working to be a leader in water stewardship by moving beyond compliance and towards collaborative water management practices that focus on sustaining and restoring water resources. Our approach to water management is based on three key elements: protecting water quality, collaborating with our communities of interest to ensure the fair allocation of water, and improving water use efficiency. Wherever possible, we work to “keep clean water clean” with our actions but we realize that impacts occur; our water management approach aims to limit and/or remediate those impacts. Our commitment to water stewardship is embodied in our HSEC Management Standards and our sustainability strategy. At a global level, Teck has endorsed the [UN Global Compact CEO Water Mandate](#). This means we have a commitment to adopt and implement the Mandate’s strategic framework and its six core elements for water management: direct operations, supply chain and watershed management, collective action, public policy, community engagement, and transparency.

## Understanding Groundwater Risks

Groundwater is a key component of the overall water cycle but one that is often the least appreciated and/or understood. We continue to work to increase our understanding of groundwater at our operations, to proactively assess risks and to minimize impacts on groundwater. In 2016, we collected and compiled groundwater information from our operations. A plan has been set for 2017 to analyze the data to evaluate knowledge gaps, identify groundwater issues and identify operations that need groundwater, and to increase focus on groundwater in order to meet our water goals set for 2020.

One example of our work to date in understanding groundwater risks is from our Trail Operations. As part of the Ecological Risk Assessment conducted at Trail, we identified an area of groundwater

affected by the site’s historical activities. Over the past decade, Teck has undertaken a series of studies to identify the scope and impact of the affected groundwater. This work led to the installation of several active capture wells and a water treatment plant that was commissioned in 2016. For more information on [Trail’s Groundwater Remediation Plan](#), visit our website.

## Protecting Water Quality

Protecting water quality is a key element of our sustainability strategy. A key contribution to how we manage water quality at each operation is to ensure compliance with applicable standards, regulations and permits. The other key contributions, beyond compliance, are additional actions that use science-based evaluations and projections for ecosystem health. Our practices include monitoring existing conditions and planning for future conditions so that we can address and mitigate current and future risks. As part of our practices, we report on water quality measurements and trends to relevant authorities.

## Managing Water Quality in the Elk Valley, British Columbia, Canada

Teck operates five steelmaking coal mines in the Elk Valley of British Columbia that employ over 4,000 people. These employees raise their families in the valley, fish and swim in the Elk River, and care deeply about ensuring the environment is protected. We proactively work to ensure that water quality is protected in the valley now and for generations to come.

On November 18, 2014, the B.C. Ministry of Environment approved an area-based management plan called the Elk Valley Water Quality Plan (the Plan) that was developed by Teck to address the management of water quality constituents released by mining activities throughout the Elk River watershed. Development of the Plan was informed by scientific advice received from a Technical Advisory Committee, chaired by the B.C. Ministry of Environment, that included

representatives from Teck, Environment Canada, the U.S. Environmental Protection Agency, the state of Montana, Ktunaxa Nation, other provincial ministries, and an independent scientist. Public input was received through three phases of consultation conducted in Elk Valley communities.

The Plan establishes short-, medium- and long-term water quality targets, which are protective of the environment and human health for selenium, nitrate, sulphate and cadmium, as well as a plan to manage calcite formation. The approved Plan is a public policy document that will guide future regulatory decision-making regarding water quality and mining in the Elk Valley.

Teck is implementing aquatic monitoring, water quality testing and various water quality management measures in order to achieve the target levels in the Plan. This work is expected to include construction of water diversions and water treatment facilities at a number of our Elk Valley operations, including:

- A water treatment facility at Line Creek Operations, which completed commissioning in February 2016
- Water treatment facilities at Fording River and Elkview operations

For more information on [The Plan](#), visit our website.

### Managing Water Quality in Chile

Our Chilean operations, Carmen de Andacollo (CdA) and Quebrada Blanca (QB), are located in regions where water is scarce, and it is particularly important for us to consider our neighbours' water needs at these locations. We are implementing various strategies to manage impacts on local water availability at CdA and QB, where, in total, only 15% of the water used at these operations is new water (water used for the first time). The remaining 85% is recycled or reused water. This means that every cubic metre of new water is reused approximately six times before being cleaned and discharged to the environment.

At CdA, we are working to reduce our intake of fresh water by increasing recovery of water from the thickener, by reducing water used for dust suppression, and by implementing other projects.

Through our experience at CdA, we have developed a greater appreciation of the importance of ongoing dialogue and engagement with our local partners and community members regarding water supply issues. This experience continues to influence our efforts in community engagement at our other operations, as well as the water supply considerations for our development projects.

We are also evaluating alternative approaches for meeting water needs in new development projects. At Quebrada Blanca Phase 2 (QB2) and NuevaUnión, which are both located in water-stressed regions of Chile, we are evaluating the use of desalinated seawater in order to protect and conserve local sources of fresh water for community and agricultural use. At the same time, using seawater is a significant investment, as it requires the construction of desalination plants and associated pipelines as well as additional energy to desalinate the water and pump it from the coast to our sites (approximately 170 kilometres to QB2 and 125 kilometres to NuevaUnión). For these two projects, we are focusing on the protection of local supplies of fresh water while simultaneously exploring opportunities to offset some of the emissions from the required electricity generation through using renewable sources.

### Collaborating with Communities on Water

Access to clean and sufficient water by users in our areas of influence is important to us and to our communities of interest. When implementing our water management practices, we consider and engage with other water users in the watersheds to promote water stewardship at all of our operations. We use the following criteria to evaluate whether our operation is in a water-stressed region:

- Limited availability of fresh water from surface or groundwater sources in the local area
- Broad community concerns over the use of water for purposes other than human consumption and agriculture
- Limited availability of other water sources such as brackish or saline water in the immediate local area

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## How Does Teck Manage Water?

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- Very low annual rainfall/precipitation
- Known impacts or stresses on existing surface water supplies and groundwater aquifers

### Improving Water Efficiency

We continuously work on optimizing our water use and thereby minimizing our impact. Each of our operations has completed an integrated water management plan and a site-wide water balance, which are central components of our water management strategy. Water balances consist of data on the volume of water input, use, reuse, recycling and outputs at each operation.

### Integrated Water Management Plans (IWMPs)

IWMPs were developed in 2013 at each of our operations and were central components of our water management strategy. Since then, the IWMPs have been updated annually in conjunction with the update of each operation's water balance. The plans describe how the operation fits into the local watershed and its associated regulatory context. IWMPs, which were developed as the framework to guide water management activities at each of our operations, describe how water is managed now and in the future. Specifically, they describe how water will be managed, in order to:

- Contribute to meeting our sustainability goals
- Provide direction and strategy to address water management risks and challenges
- Establish how water management infrastructure performance will be monitored and reviewed

### Water Balances

Site-wide water balances provide an understanding of water inputs, consumption, and reuse/recycle and discharge volumes at each operation. Water balances are used as a decision-making tool to assess water management alternatives, to evaluate an operation's water management performance and to provide water data for our company-wide reporting. The company-wide water balance is complex, due to the variability of natural factors such as rainfall, snowmelt and the diversity of the climates and geological conditions where we have our operations. These factors can affect the flows within aquifers and surface water. Understanding our water balance is key to improving water management practices and to enabling better decision-making.

## What Was Our Performance in Water Management in 2016?

In this section, we report on protection of water quality and improving water use efficiency.

### Protecting Water Quality

Throughout the year, we continued to identify risks to mitigate possible impacts and plan for potential changes in our water management strategy. For example, our Elk Valley operations modified blasting products and practices in order to reduce the potential for nitrate to enter the watershed.

We continue to implement the water quality management measures required by the Elk Valley Water Quality Plan, which was approved in the fourth quarter of 2014 by the B.C. Minister of Environment. We completed commissioning of our first water treatment facility under the Plan at our Line Creek Operations in early 2016. In 2016, we spent approximately \$40 million towards implementation of the Plan and, in 2017, we expect to spend approximately \$100 million.

In 2016, we identified an issue regarding selenium compounds in effluent from our water treatment facility at Line Creek Operations. This issue does not pose an immediate risk to aquatic or human health,

but we believe it affects the overall effectiveness of the facility. We are working to assess the potential implications of this issue and, if associated environmental effects are identified, modifications to operating parameters or facilities may be required. Design and construction of future water treatment facilities will incorporate the lessons learned.

### Improving Water Efficiency

We track water data for all our operations; however, we assess water reused/recycled both company-wide and for our mining operations only (excluding Trail Operations, which is our zinc and lead smelting and refining facility). Water reused and recycled, expressed as a percentage of new water use, was 150% at our operations. At our mining operations only, this percentage was 391%. This means that our mining operations recycled and reused the same water approximately four times on average before returning that water to the environment.

Table 42: **Water Used, Reused and Recycled in 2016**

|                                                            | 2016               | 2015 <sup>(2)</sup> | 2014        | 2013        |
|------------------------------------------------------------|--------------------|---------------------|-------------|-------------|
| Total water inputs (m <sup>3</sup> )                       | <b>346,462,000</b> | 333,150,000         | 391,637,000 | 442,839,000 |
| Total water outputs (m <sup>3</sup> )                      | <b>353,414,000</b> | 340,227,000         | 388,667,000 | 430,870,000 |
| Total water use (m <sup>3</sup> )                          | <b>294,287,000</b> | 293,988,000         | 334,601,000 | 329,923,000 |
| New water use (m <sup>3</sup> )                            | <b>117,930,000</b> | 115,466,000         | 128,355,000 | 132,629,000 |
| Water reused/recycled (m <sup>3</sup> )                    | <b>176,356,000</b> | 178,522,000         | 206,246,000 | 197,294,000 |
| Reused/recycled as % of total new water use <sup>(1)</sup> | <b>150</b>         | 155                 | 161         | 149         |

(1) The percentage calculation is based on the total volume of water reused/recycled divided by the total volume of new water used.

(2) 2015 figures have been restated due to availability of new data in the 2016 reporting period.

Trail Operations accounts for nearly 25% of our total water use and about 62% of our new water use. Almost all of the water used at our Trail Operation is for cooling purposes, meaning that it does not come into contact with chemicals or reagents, and the only change it undergoes is a slight increase in temperature before being returned to the environment within regulatory approved conditions. Therefore,

we track this water separately from the data for our mining operations.

Figure 21, shows the new water and total water use trend. In 2016, our total water use trend remained relatively constant compared to 2015, even as 11 of our operations increased their production. These results reflect our continued efforts to improve our water use intensity.

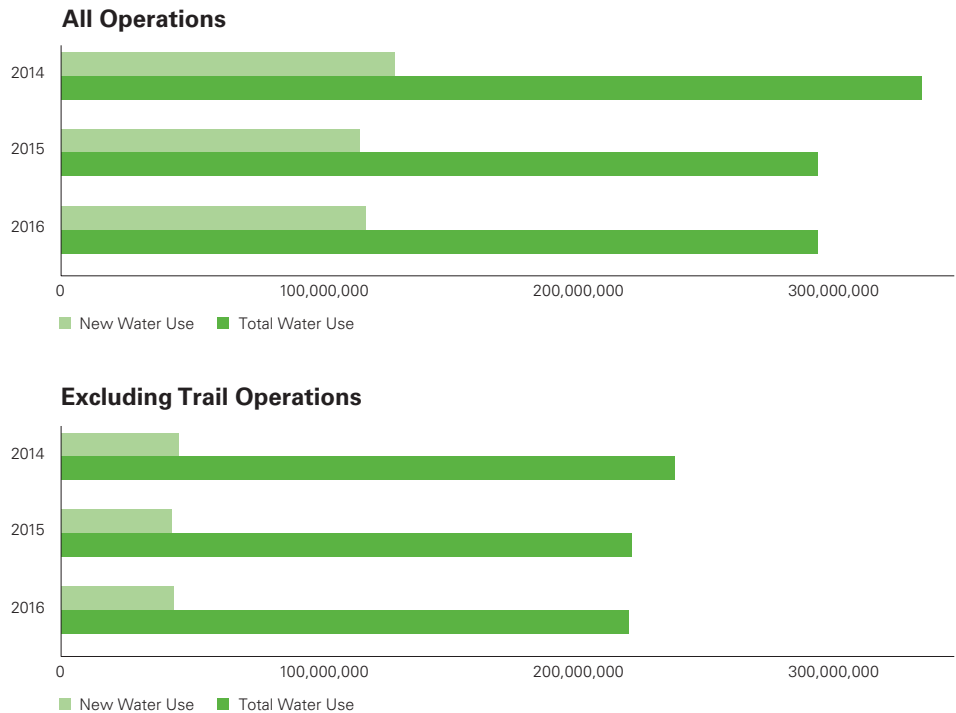
# What Was Our Performance in Water Management in 2016?

## Sustainability Strategy Spotlight

In 2016, as part of our 2020 goal to collaborate in developing innovative water technology and practice, we implemented a full-scale trial of saturated fill technology to help address the selenium issues in areas of the Elk Valley.

For more detail, see our full goals progress report on page 11.

Figure 21: **Water Used, Reused and Recycled in 2016 (m<sup>3</sup>)**



### Water Intensity

We benchmark our water performance on the basis of a new water use intensity metric, as shown in Table 43. Our new water use intensity is defined as the annual volume of new water used per unit of material processed by our steelmaking

coal and base metals, milling and flotation operations. These water metrics allow us to more consistently evaluate our water performance independent of variations in annual precipitation and ore grades. In addition, these metrics will allow us to inform water management decisions and improvement projects at our operations.

Table 43: **New Water Use Intensity**

|                                                          | Coal Operations <sup>(1)</sup>                             |                                                     |                                                     |                                                     | Milling and Flotation Operations <sup>(2)</sup>       |                                                |                                                |                                                |
|----------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|
|                                                          | 2016                                                       | 2015                                                | 2014                                                | 2013                                                | 2016                                                  | 2015                                           | 2014                                           | 2013                                           |
| New water use, in million cubic metres (m <sup>3</sup> ) | <b>15.5</b>                                                | 14.9                                                | 15.4                                                | 16.6                                                | <b>28.0</b>                                           | 27.2                                           | 29.4                                           | 30.7                                           |
| Quantity processed or produced                           | <b>38,871,000</b><br>tonnes of raw coal processed          | 35,302,000<br>tonnes of raw coal processed          | 40,424,000<br>tonnes of raw coal processed          | 38,941,000<br>tonnes of raw coal processed          | <b>72,262,000</b><br>tonnes of ore processed          | 69,186,000<br>tonnes of ore processed          | 72,565,000<br>tonnes of ore processed          | 67,357,000<br>tonnes of ore processed          |
| New water use intensity                                  | <b>0.40</b><br>m <sup>3</sup> /tonne of raw coal processed | 0.42<br>m <sup>3</sup> /tonne of raw coal processed | 0.38<br>m <sup>3</sup> /tonne of raw coal processed | 0.43<br>m <sup>3</sup> /tonne of raw coal processed | <b>0.39</b><br>m <sup>3</sup> /tonne of ore processed | 0.39<br>m <sup>3</sup> /tonne of ore processed | 0.41<br>m <sup>3</sup> /tonne of ore processed | 0.46<br>m <sup>3</sup> /tonne of ore processed |

(1) Includes Cardinal River, Coal Mountain, Elkview, Fording River, Greenhills and Line Creek operations.

(2) Includes Red Dog, Pend Oreille, Highland Valley Copper and Carmen de Andacollo operations.



Our 2016 new water use intensity metrics showed that our coal operations improved relative to 2015, and that the performance of our base metal milling and flotation operations remained constant relative to 2015. The improvements at our coal operations can be attributed to a continuous focus on reducing our water use intensity across the business unit.

For Quebrada Blanca and Trail operations, an intensity metric for new water is not meaningful because the volume of new water used at both operations is largely independent of the quantity of material processed or produced. Therefore, we assess our water performance at Quebrada Blanca Operations and Trail Operations based on the absolute amount of new water used.

Table 44: **New Water Use (in million m<sup>3</sup>) at Quebrada Blanca and Trail Operations**

|                                                                  | 2016 | 2015 | 2014 | 2013 |
|------------------------------------------------------------------|------|------|------|------|
| Quebrada Blanca (water used primarily in metal leaching process) | 1.6  | 1.7  | 1.7  | 1.9  |
| Trail (water used primarily for cooling)                         | 72.8 | 71.7 | 81.6 | 83.4 |

## Case Study

### A Fine Balance: Managing Water at Red Dog Operations in Northwest Alaska

What happens when there is too much water at a mine site? Our Red Dog Operations, one of the world's largest zinc mines, is located in a region where there is an average of 48 cm of precipitation each year, much of which falls as snow. While this amount of precipitation may sound modest in comparison to some regions, at Red Dog this translates into large volumes of precipitation and runoff accumulating into the Tailings Storage Facility (TSF) where we direct all of our contact water. The operation stores nearly five billion gallons (20 million cubic metres) of water on-site, which is roughly equivalent to 7,500 Olympic-sized swimming pools. All of this water must be monitored and managed, including treatment, before it can be discharged.

While a portion of water stored in the TSF is required for operating the mill, over half the water stored is not needed. Continually building higher dams to store water is not a preferred long-term solution. In addition, high costs of construction and additional permits are needed to expand dams. That's why finding ways to increase

Red Dog's ability to safely discharge water and reduce the volumes stored in the TSF is the most sustainable long-term solution.

#### Managing Water in the Long Term

To reduce the risks and costs associated with storing excess water, Red Dog has set a goal to reduce excess water from five to two billion gallons, which is the volume actually required for mill operation. To reach that goal, Red Dog began evaluating three different strategies in 2016. The strategies focused on preventing runoff water from entering the TSF and increasing the treatment of existing water. These strategies will be assessed and the most practical strategy is planned to be selected and implemented beginning in 2018.

#### Managing Water in the Short Term

In 2016, Red Dog also focused on achieving short-term goals related to water management, with engineers working to find innovative ways to optimize existing infrastructure. For example, the pump arrangement in the TSF was reconfigured to increase the

amount of water pumped through the sand filters by 10% while ensuring that water quality standards continued to be met before the water is discharged. This increase helped lower the amount of water stored in the TSF and reduced the risks associated with storage.

#### Ongoing Water Planning

Red Dog maintains an integrated water management plan and site-wide water balance, which are central components of the water management strategy. This plan is used as a decision-making tool to evaluate water management performance, provide water data for external reporting, and communicate our water stewardship practices to local communities.

"Red Dog's integrated water management plan and water balance are used as tools for collaboration between departments, preventing and being prepared for possible risks, and for helping us to meet Teck's sustainability goals of having a positive influence on water quality," says Chad Novotny, Tailings and Water Management Engineer, Red Dog Operations.

# What Was Our Performance in Water Management in 2016?

## Outlook for Water Management

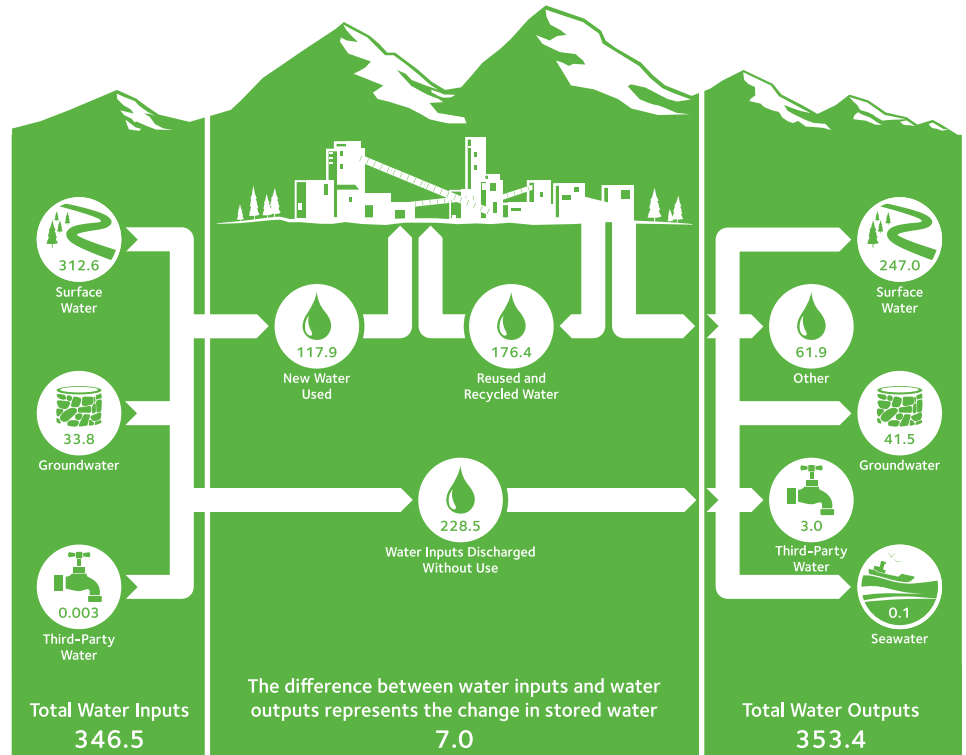
In 2017, Teck will continue to work towards protecting and improving water quality near our steelmaking coal operations in Canada, collaborate with communities to ensure equitable access to water in water-stressed regions near our operations in Chile, and advance our knowledge on the groundwater we use and potentially affect. To affirm our commitment to water management, we created a new role, Director of Water, to lead our efforts. In early 2017, we also established a cross-company water steering committee, chaired by the Director. As we move forward, we will focus on achieving our 2020 water goals and supporting SDG 6 to promote the availability and sustainable management of water and sanitation for all.

### Learn More

[The CEO Water Mandate, United Nations Global Compact](#)



Figure 22: **Company-Wide 2016 Water Balance in million cubic metres**<sup>(1),(2),(3)</sup>



- (1) Surface 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.
- (2) Third-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.
- (3) Other includes water that has evaporated and/or is not recoverable (e.g., contained in ore concentrate or tailings).

## 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.

# Tailings and Mine Waste Management

## Why was Tailings and Waste Management a Material Topic in 2016?

As the global population grows and demand for products and services increases, wastes and by-products from consumer and business activities increase in tandem. Both hazardous and non-hazardous wastes have the potential to significantly impact the environment and human health. To mitigate impacts, proper waste and material management is critical to ensuring that human health and the environment are protected. Responsible corporations are taking greater ownership of their role in managing waste across the life cycle of their products.

### Industry Context

Tailings and mine waste rock are common by-products of mining practice — and, increasingly, mining of lower grade deposits is generating greater volumes of these materials per unit of commodity produced. As such, responsible management of tailings and waste rock is increasingly critical for the mining industry.

Tailings facilities are typically well managed with very few incidents; however, a tailings incident has the potential to make a significant impact. Over the past few years, there have been several tailings incidents in the mining industry that illustrate the nature of those impacts. As such, many industry associations reviewed standards in relation to tailings in 2016. For example, the Mining Association of Canada (MAC), submitted its review of tailings management requirements and guidance under MAC's Towards Sustainable Mining (TSM) initiative.

### Teck Context

Teck operates seven mines with active tailings storage facilities<sup>(12)</sup>. Tailings storage facilities at all our operations meet or exceed regulatory requirements, and we are continually improving the management of our facilities by developing and incorporating best practice.

In 2016, Teck played an active role in promoting best practices for tailings facility management, both in our own operations and across the mining industry, through participation in the review of tailings management by MAC and ICMM. In addition, we reviewed the Samarco and Mount Polley investigation reports to determine any gaps in our own practices. During the year, performance of our tailings storage facilities was as intended and no significant incidents occurred. Coming out of the MAC and ICMM reviews and new policy guidance, the main focus during the year was to ensure a consistent and appropriate level of internal and independent external review for our facilities.



### What is in this topic?

Management approach and performance related to waste management, including the construction, operation and ongoing monitoring of the various health, safety and environmental risks and impacts associated with tailings storage facilities (TSFs) and waste rock facilities.

### GRI Indicators and Topic Boundary

306-103, 306-2, G4-MM3

This topic is considered most material by our employees, local communities, regulators and society in the context of all Teck sites.

### Performance Highlights

# 8

Independent tailings review boards in place for all major active tailings facilities (Carmen de Andacollo, Elkview, Fording River, Greenhills, Highland Valley Copper, and Red Dog) and major development projects with large tailings facilities in Chile (Quebrada Blanca Phase 2 and NuevaUnión).

Pictured above: Heather Larratt, Aquatic Biologist at Highland Valley Copper Operations.

(12) For purposes of reporting, "active tailings storage facilities" denotes a constructed impoundment involving one or more tailings dams in which tailings are currently being deposited. The seven operations with active TSFs include Carmen de Andacollo, Elkview, Fording River, Greenhills, Highland Valley Copper, Pend Oreille and Red Dog.

# How Does Teck Manage Tailings and Mine Waste?

## Our Targets and Commitments

We continually review our facilities and procedures, and are committed to maintaining the highest standard of safety and environmental protection at our operations, including standards set by MAC and ICMM.

### \* Material Topic Interconnections

Mine Closure: page 34

Emergency Preparedness: page 69

Water Management: page 89

In this section, we outline our governance and management systems for tailings, coarse coal refuse, waste rock and hazardous/non-hazardous waste.

## Governance and Management Systems

Mining generates mineral waste materials consisting of tailings and fine coal refuse, coarse coal refuse and waste rock, as well as much smaller amounts of non-mineral wastes, including hazardous and non-hazardous materials.

Teck's Health, Safety, Environment and Community Management Standards include general guidance on tailings and mine waste management. In addition to those standards, we also have specific guidance on tailings management and governance activities so that our roles and responsibilities are well-defined and understood for all of our facilities. These management standards, the associated guidance documents, and our adherence to them, are overseen by the Safety and Sustainability Committee of the Board of Directors.

Responsible tailings and waste management practices are a critical part of environmental management and operational integrity at Teck. For more information about mining waste categories, visit the [Tailings and Mine Waste Management page](#) on our website.

## Tailings Management

We are committed to the safe and environmentally responsible development, operation and management of tailings storage facilities. Planning, design, construction, operation, decommissioning and closure are carried out in a manner such that:

- Structures are stable
- Solids and water are managed within designated areas
- Facilities comply with regulatory requirements
- Facilities conform to applicable standards, internal policies, industry best practices and the technical guidelines of the jurisdictions in which we operate

The effective planning, design, construction, monitoring and maintenance

of our tailings facilities are built on good corporate governance, technology, systems and procedures, inspections and reviews, community of interest (COI) engagement, and reporting. We have multiple layers of system protection, as identified in our internal policies and guidelines.

We have comprehensive systems and procedures in place for the safe operation and monitoring of tailings facilities that follow best practices, organized around six levels of protection:

- **Surveillance Technology:** Our sites employ various systems such as GPS hubs, piezometers, inclinometers, pressure gauges, remote sensing and other technologies to monitor tailings dams, abutments, natural slopes and water levels.
- **Staff Inspections:** Tailings dams are inspected by trained operators and expert technical staff as frequently as several times daily, with formal staff inspections at least once per month.
- **Annual External Inspections:** Formal dam safety inspections are conducted at least annually by an external Engineer of Record. Independent qualified engineers also conduct periodic reviews, with timing dependent upon the consequence classification of the facility. For all facilities, the annual inspection reports are provided to the appropriate authority in each jurisdiction.
- **Internal Review:** On a rotation basis of every two to three years, we conduct two levels of internal management review of our tailings facilities. The first is a Tailings Governance Review, which evaluates each site's conformance of sites with our internal tailings guidance documents and policy. The second level of internal review is an audit by our HSEC management team of operations and legacy properties with tailings storage facilities that could create an off-site impact. These facilities are audited against Teck's Tailings and Water Retaining Structures guidance requirements.

- **Detailed Third-Party Reviews:**

Comprehensive third-party dam safety reviews are conducted by an independent tailings reviewer(s) every five to 10 years for active and inactive facilities. The frequency of inspection is based upon the consequence classification for each facility.

- **Independent Review Boards:** Our operations and projects with existing or planned major tailings storage facilities have Tailings Review Boards made up of independent experts from relevant fields such as geotechnical, hydrogeological, hydro-technical and geochemical. These boards meet from once to several times per year, depending upon the nature of the facility and the issues being considered by the board, to conduct a third-party review of design, operation, surveillance and maintenance of our storage facilities.

- **Dam Safety Inspection:** Annually, the Engineer of Record performs a detailed examination of the facility, its related infrastructure and the records relating to these, with the purpose of identifying any conditions or changes that might contribute to or signal the potential for a compromise to the safety and reliability of the structure.

For a summary of our management activities at active major tailings storage facilities, visit the [Tailings and Mine Waste page](#) on our website.

Each facility also has a detailed Operations, Maintenance and Surveillance manual and Emergency Preparedness and Response Plan, both of which are regularly updated. We maintain site-specific Tailings Management Systems that conform to or exceed industry standards of practice, that demonstrate responsibility and leadership through the commitment and actions of our employees, and that are developed through consultation with COIs. We continually review our facilities and procedures and are committed to maintaining the highest standard of safety at our operations.

In addition to internal assessments of performance against our own guidelines and practices noted as one of our six levels of protection, we assess our tailings management practices under the MAC TSM Tailings Management Protocol. Achieving a minimum of a Level A under TSM is a requirement of our HSEC Management Standards. A Level A rating indicates that tailings management practices that meet industry best practice, as defined by the MAC Tailings Guidelines, have been developed and implemented. All of our operations meet or exceed this standard. Several of our facilities reached a verified Level AAA, which indicates that excellence and leadership in tailings management are demonstrated through validation by an external, independent evaluation.

Information on our management of coarse coal refuse, waste rock, and hazardous and non-hazardous waste can be found on the [Tailings and Mine Waste Management page](#) on our website.

## What was our Performance in Tailings and Mine Waste Management in 2016?

In this section, we report on tailings management and waste management performance in 2016.

### Tailings Management Performance

We had no significant incidents at our tailings storage facilities in 2016, and all facilities performed as intended with their inspections and reviews conducted as scheduled. The main focus was to improve

performance management by ensuring that we had a consistent and appropriate level of internal review and independent external review for our facilities. Where warranted, we also adjusted organizational structure to allow for more for effective risk management.

Table 47: **Status of Major Tailings and Water Retaining Structures**

| Operation/<br>Site            | Annual<br>Dam Safety<br>Inspections <sup>(1)</sup> | Dam Safety<br>Reviews <sup>(2)</sup> |                                          | Independent<br>Review<br>Board<br>Activity <sup>(3)</sup> | Governance<br>Reviews                                                      |
|-------------------------------|----------------------------------------------------|--------------------------------------|------------------------------------------|-----------------------------------------------------------|----------------------------------------------------------------------------|
|                               | Up to Date                                         | Up to Date                           | Next<br>Scheduled                        |                                                           |                                                                            |
| <b>Carmen de Andacollo</b>    | ✓                                                  | ✓                                    | 2017                                     | ✓                                                         | Initial site tested against Teck guidelines in 2015, update review in 2017 |
| <b>Elkview</b>                | ✓                                                  | ✓                                    | 2018<br>(Lagoon D)<br>2020<br>(Lagoon C) | ✓                                                         | Initial review scheduled for 2017                                          |
| <b>Fording River</b>          | ✓                                                  | ✓                                    | 2021                                     | ✓                                                         | Initial review scheduled for 2017                                          |
| <b>Greenhills</b>             | ✓                                                  | ✓                                    | 2017                                     | ✓                                                         | Completed in 2016                                                          |
| <b>Highland Valley Copper</b> | ✓                                                  | ✓                                    | 2017                                     | ✓                                                         | Completed in 2016                                                          |
| <b>Red Dog</b>                | ✓                                                  | ✓                                    | 2017                                     | ✓                                                         | Initial review planned for 2017                                            |
| <b>Sullivan</b>               | ✓                                                  | ✓                                    | 2018                                     | ✓                                                         | Completed in 2015                                                          |
| <b>Louvicourt</b>             | ✓                                                  | ✓                                    | 2020                                     | ✓                                                         | Initial review scheduled for 2017                                          |

(1) Dam Safety Inspection (DSI): Annually, the Engineer of Record (EOR) performs a detailed examination of the facility, its related infrastructure and the records relating to these, with the purpose of identifying any conditions or changes that might contribute to or signal the potential for a compromise to the safety and reliability of the structure.

(2) Dam Safety Review (DSR): A facility review by an independent, third-party engineer (or team of engineers) not affiliated with the Engineer of Record (EOR) or the Tailings Review Board (TRB). The frequency on which DSRs are conducted for a particular facility depends upon the failure consequence risk-rating of that structure (i.e., the higher the consequence of facility failure, the more frequent the DSR is performed).

(3) Independent review process deemed equivalent best practice to our internal governance review, with Teck personnel fully involved in the process.

Tailings Governance Reviews to evaluate conformance with our internal tailings guidance documents and policy were conducted at two major tailings facilities: Highland Valley Copper and Greenhills. Reviews were carried out at Carmen de Andacollo and Sullivan in 2015.

### **Review and Update of Portfolio Risk Management**

Teck developed a new corporate tailings policy (Tailings and Water Retaining Structures Policy) and guidance documentation in 2013. The guidance document is based upon our HSEC Management Standards and has been used to provide a consistent company-wide approach to how we manage the risks inherent with tailings. In 2016, a cross-business and cross-functional Tailings Working Group (TWG) was established to track and support those risk management practices. During 2016, we finalized our Tailings and Water Retaining Structures governance framework, held regular TWG sessions, and completed internal governance reviews at Highland Valley Copper and Greenhills operations. We plan to have all major facilities reviewed against our internal policy and guidance documentation by the end of 2017. In addition, all of the dam safety inspections and reviews completed by our external Engineers of Record, as well as all Review Board activities, were reviewed for compliance with both our internal and applicable regulatory requirements. TWG members also participated in several significant industry association efforts in 2016.

### **Industry Association Activities**

2016 was an active year for industry association activity relative to tailings. We participated in reviews and took appropriate actions to update our guidance materials based on what we learned, including tracking where our internal guidance could be improved and confirming where no actions were required.

In November 2015, an independent task force commissioned by the Mining Association of Canada (MAC) submitted its review of tailings management requirements and guidance under MAC's Towards Sustainable Mining (TSM) initiative. In June 2016, the MAC Board approved several changes designed to implement the Task Force's 29 recommendations. Teck was a participant on the MAC task force.

MAC has a tailings working group that is responsible for responding to the above-noted task force recommendations. Teck chairs that working group and is a leading coordinator of the updated guidance documents being developed by MAC and due for release in 2017 and 2018.

The Association of Professional Engineers and Geoscientists of British Columbia, in response to a mandated initiative coming out of the 2014 failure of the Mount Polley dam, developed a guideline for the requirements of foundation investigations for dams. Teck was a member of the review team that developed the guideline.

### **Regulator Activities**

In response to the Mount Polley Mine tailings storage facility breach, the Province of British Columbia launched two inspections: an Independent Expert Engineering Investigation Panel and an investigation by the Chief Inspector of Mines. The panel and Chief Inspector made 26 recommendations in total, which the government is committed to implementing by the end of 2017.

The B.C. Ministry of Energy and Mines released an update to the Health, Safety and Reclamation Code (HSRC) for Mines in British Columbia in July 2016 with changes specific to tailings storage facilities, to address recommendations from the Independent Expert Engineering Panel report on the Mount Polley incident. Teck was an active participant on the joint industry/regulatory committee that prepared the updates to the HSRC.

# What was our Performance in Tailings and Mine Waste Management in 2016?

## Outlook for Tailings and Mine Waste Management

As the mining industry reviews and improves best practices for tailings management, Teck will continue to play an active role in collaborating with industry partners in 2017. At our operations and legacy properties, we will continue to review our facilities and procedures to maintain the highest standard of safety while meeting all environmental management objectives. We will also ensure our development projects, such as Quebrada Blanca Phase 2 and NuevaUnión, have their tailings and mine waste concepts based upon best practice guidelines, are designed with the full life cycle of the facility, and take into consideration the full involvement of potentially impacted communities. We will also update our internal guidance documents as required to reflect pending updates to industry best practice guidance from both MAC and ICMC, as well as findings based on our performance.

## Learn More

[Towards Sustainable Mining Tailings Management Protocol, Mining Association of Canada](#)

[Leading Mining Companies Adopt New Measures to Manage Tailings Dams](#)



## Waste Management Performance

In 2016, our operations generated approximately 841 million tonnes of mineral waste, with the vast majority being waste rock from the extraction of ore and coal. In 2016, we generated approximately:

- 73 million tonnes of tailings and fine coal refuse from processing ore and raw coal in 2016 (69 million tonnes in 2015)

- 10 million tonnes of coarse coal refuse (9 million tonnes in 2015)

- 759 million tonnes of waste rock (744 million tonnes in 2015)

We do not currently track office and construction waste, which are managed by licensed external waste service providers.

Table 48: **Hazardous and Non-Hazardous Waste in Tonnes<sup>(1)</sup>**

| Waste         |                                | 2016          | 2015   | 2014   | 2013    |
|---------------|--------------------------------|---------------|--------|--------|---------|
| Non-Hazardous | Sent off-site but not recycled | <b>6,248</b>  | 3,389  | 4,797  | 12,863  |
|               | Treated/disposed of on-site    | <b>39,799</b> | 35,519 | 27,286 | 100,798 |
|               | Recycled                       | <b>14,014</b> | 15,536 | 25,274 | 28,711  |
| Hazardous     | Sent off-site but not recycled | <b>5,195</b>  | 13,087 | 15,257 | 10,087  |
|               | Treated/disposed of on-site    | <b>34,409</b> | 36,021 | 37,309 | 22,659  |
|               | Recycled                       | <b>14,352</b> | 13,522 | 12,523 | 44,559  |

(1) Recycled waste includes waste that is diverted from the landfill through recycling and reuse. Waste sent off-site but not recycled includes waste disposed of at appropriate facilities, landfills and deep-well injections.



# Environmental Management

## Why was Environmental Management a Material Topic in 2016?

Comprehensive environmental management is essential for businesses to mitigate their impacts on the environment while enhancing economic and social development. Management systems and regulations are required to establish environmental practices and set the expectations for performance. Environmental management includes all of the policies, procedures and practices that a company uses to comply with environmental requirements, minimize environmental impacts and improve environmental performance. Several of the United Nations Sustainable Development Goals, such as Goal 6 on water management, Goal 13 on climate change and Goal 14 on biodiversity, outline activities and targets related to environmental management.

### Industry Context

Due to the physical disturbance of the land, generation of air- and water-based emissions, use of resources, and associated production processes, mining has the potential to adversely impact the environment. Many of these impacts can be mitigated or even avoided through proper management and planning. Effective management requires that mining companies recognize and address the interrelated nature of many environmental and social issues, the cumulative nature of many environmental impacts, the need to look at different impacts across the mining life cycle and value chain, and the potential vulnerability of ecosystems as a whole.

Proper environmental management is a major component of permitting and meeting regulatory requirements and, as legislation becomes more stringent, the cost to business is increasing. Mining and metals companies have also never faced so much regulation as today in multiple jurisdictions<sup>(13)</sup>.

### Teck Context

Responsible environmental management is an integral part of who we are as a company; it is embedded in Teck's values through our commitment to sustainability, as well as in our Code of Sustainable Conduct and Charter of Corporate

Responsibility. Beyond our core values, we also work in highly regulated jurisdictions with stringent and rigorously applied environmental legislation, which also makes environmental management a key compliance issue. Changes in environmental laws may have a material effect on our operations, both in terms of effort required to receive permits and investments required to achieve and maintain compliance.

Sound environmental management is an important component of regulatory compliance and permitting. This is particularly critical as permitting processes become more complex due to increased regulatory requirements, societal expectations, and interconnectivity of communities through technology. Successfully acquiring major regulatory approvals remained a key strategic priority across our business units in 2016.

Environmental management is also very important to our COIs. In 2016, the majority of our community grievances were related to environmental concerns. Demonstrating that we have robust environmental management can help build trust in local communities. Strong environmental management also allows us to avoid regulatory fines, project delays and/or material impacts on operations. For more information about community grievances, see page 71.



### What is in this topic?

Overall day-to-day environmental management, compliance with environmental regulations, compliance with permits, supplier environmental assessments, and transportation.

### GRI Indicators and Topic Boundary

102-34, 304-103, 305-103, 306-103, 306-3, 307-103, 307-1, 308-103, 308-1, 308-2

This topic is considered most material by our employees, local communities, regulators and society in the context of all Teck sites, contractor selection/management and supplier selection.

### Performance Highlights

In 2016, Elkview and Highland Valley Copper operations received the Towards Sustainable Mining Leadership Award from the Mining Association of Canada. This is an award for mining operations that demonstrate, through management actions and overall results, a strong commitment to excellence in environmental and community performance.

# What is Teck's Approach to Environmental Management?

## Our Targets and Commitments

We are committed to conducting regular audits of our sites on our environmental compliance. We develop corrective action plans based on findings, and we regularly assess the implementation of these plans.

We have set a target to have zero significant environmental spills each year.

### \* Material Topic Interconnections

Mine Closure: page 34

Community Engagement: page 69

Tailings and Mine Waste Management: page 97

Air Quality: page 108

Energy and Climate Change: page 114

Biodiversity: page 122

In this section, we outline our governance and management systems, status of external certification, approach to regulation, permitting and approvals, internal and external auditing processes, environmental monitoring and managing environmental incidents.

## HSEC Management Standards

Our HSEC Management Standards and our environmental audit program help drive continual improvement and assessment of compliance with environmental regulations. The standards provide a consistent and systematic methodology for the identification and effective management of HSEC issues and risks, and provide a platform to support continual improvement in HSEC programs and performance. The standards are supported by guidance documents specific to technical areas such as management and performance around tailings, water, biodiversity and a number of other key technical areas.

## External Certification

Since 2009, we have worked towards certification of environmental management systems to conform to the internationally recognized ISO 14001 standard. ISO 14001 certification requires external verification through third-party audits conducted by accredited certification service providers. To date, 10 of our 12 operations have attained and maintained certification. Pend Oreille and Quebrada Blanca operations are not yet certified.

## Permitting and Approvals

Our licence to operate depends on our ability to meet legal compliance requirements and demonstrate value to both shareholders and communities. We continually monitor and manage the social and environmental aspects of our activities in order to meet or exceed regulations and to ensure regulatory compliance and performance. This helps us obtain and maintain approvals to operate and to grow our business.

We engage directly and indirectly (through industry groups) with governments and regulators to help ensure that permitting processes are practical and effective in meeting their objective of protecting the

local environment and communities. Once permits are granted, our environmental assurance program verifies that we continue to meet all relevant requirements.

We track our environmental permits and requirements, and the management of those requirements, such as discharge monitoring, in our task management system called SiteLine. Teck is also obligated to respond to government orders such as the development and implementation of the Elk Valley Water Quality Plan (see more on page 90).

## Internal and External Audits

Our Health, Safety and Environment assurance program is designed to verify that requirements are met, as dictated by the applicable permits, legislation and regulations in each jurisdiction. We conduct compliance audits on a three-year rotational basis for all operations, and plans are developed to address the findings based on risk priority criteria. In 2016, we implemented a risk-based auditing approach and enhanced post-audit communication to focus on the most significant health, safety and environment risks.

Our expectation is that corrective actions on significant findings are to be completed promptly, but no later than two years after completion of the audit, as confirmed by a mid-term effectiveness check. We monitor and report to our HSEC Risk Management Committee on the progress of our assurance program on a quarterly basis. We also conduct external verification for the purpose of regulatory or external commitments. Table 49 provides an overview of the types of audits and evaluations that are conducted across our operations. We conduct third-party audits to assess regulatory compliance on a regular basis.

Table 49: **Internal and External Audits of Environmental Management**

| Type                                                          | What is audited?                                                                                 | For whom?                                         | Evaluation criteria                                |
|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------|----------------------------------------------------|
| <b>Internal</b>                                               |                                                                                                  |                                                   |                                                    |
| Risk-based Health, Safety and Environment audits at each site | Adherence to regulatory and permit requirements; effectiveness of controls based on risk profile | HSEC Risk Management Committee                    | Legal obligations, internal standards              |
| Follow-up effectiveness check                                 | Validate effectiveness of closure of findings two years after initial audit                      |                                                   | Action plans from past audit findings              |
| Risk reviews                                                  | Control of significant risks                                                                     |                                                   | Internal standards                                 |
| ISO 14001 internal audits                                     | Components of the environmental management system at each site                                   | Site Management                                   | ISO 14001 Environmental Management System Standard |
| <b>External</b>                                               |                                                                                                  |                                                   |                                                    |
| Towards Sustainable Mining (TSM) audit                        | External verification of site data reported to TSM                                               | Mining Association of Canada (MAC)                | TSM Protocols                                      |
| Sustainability Report assurance                               | External assurance of report, data and practices                                                 | International Council on Mining and Metals (ICMM) | ICMM Assurance Procedure                           |
| GHG Regulation Assurance                                      | Validation of GHG data reported and quantification of methodologies                              | Alberta and B.C. governments                      | Quantification methodologies defined by regulation |
| ISO 14001 external audits                                     | Components of the environmental management system at each site                                   | International Organization for Standardization    | ISO 14001 Environmental Management System Standard |

## Environmental Monitoring

We conduct a wide array of measurements to manage and evaluate our environmental performance. We monitor a range of environmental data, including:

- Emissions to air
- Ambient air quality, including particulate matter levels
- Noise levels
- Geotechnical information related to pit walls and water retention structures
- Environmental incidents
- Water quality (surface water, groundwater and permitted discharges to receiving water)
- Biodiversity (including land reclamation)
- Energy consumption and greenhouse gas emissions
- Material use and recycling information

As required, we develop corrective action plans based on findings from monitoring, and we regularly assess the implementation of these plans.

## Environmental Incidents

An incident is an unintended event that, in the vast majority of cases, is immediately managed and has no significant environmental implications. All our operations have control measures in place to minimize the likelihood of environmental incidents and to mitigate potential effects on the environment in case an incident does occur. Control measures include facility design considerations, spill containment measures, meters, alarms, standard operating procedures, training, regular inspections, and the identification of potential issues through internal risk assessments and audits. Significant environmental incidents are investigated to identify the root causes, and we implement remedial measures and corrective actions. We also share learnings across Teck from any significant environmental incidents to reduce the potential for future occurrences.

# What Was Our Performance in Environmental Management in 2016?

In this section, Teck reports on our environmental compliance and learnings from significant environmental incidents. We also disclose our involvement in environmental litigation, fines and penalties, and our progress on permits and approvals.

## Regulation, Permitting and Approvals

### Quebrada Blanca Phase 2 Project Social and Environmental Impact Assessment

In September 2016, Teck submitted, as part of the regulatory process, the Social and Environmental Impact Assessment (SEIA) for our Quebrada Blanca Phase 2 project (QB Phase 2) in northern Chile to the Region of Tarapacá Environmental Authority. The proposed QB Phase 2 project extends the life of the existing mine as a large-scale concentrate-producing operation. The updated feasibility study, including capital and operating cost estimates for the project, was completed in the first quarter of 2017. A decision to proceed with development is contingent upon market conditions and

receipt of regulatory approvals, among other considerations. Given the timeline of the regulatory process, such a decision is not expected before mid-2018.

### Elkview Operations

Our Elkview Operations was granted an environmental assessment certificate for the Baldy Ridge Extension project, which is expected to extend the life of the operation by 30 years. First steelmaking coal production is planned for early 2018.

## Environmental Compliance

Compliance across all our operations remained high in 2016. Our response to significant non-compliance incidents is discussed in the Significant Environmental Incidents section below.

Table 50: **Permit and Regulatory Non-Compliances**

|                            | 2016 | 2015 | 2014 | 2013 |
|----------------------------|------|------|------|------|
| Permit Non-Compliances     | 97   | 109  | 100  | 79   |
| Regulatory Non-Compliances | 13   | 2    | 6    | 5    |

The number of permit non-compliances has decreased due to more rigorous internal monitoring and measures in place to control total suspended solids (TSS) concentrations in the routine operation and maintenance of settling ponds and monitored streams, particularly during freshet and high-rainfall events. Regulatory non-compliances increased due to missed monitoring events, elevated TSS events associated with project commissioning, and improved internal modelling of effluent characteristics, which improved our ability to detect non-compliances. Despite the number of regulatory non-compliances increasing, the severity of environmental incidents has decreased.

## Significant Environmental Incidents

We assess the severity of environmental incidents based on their potential environmental, safety, legal, community, reputational and financial impacts. Based on our incident severity criteria, two environmental incidents across all our projects and operations occurred in 2016 that were of greater significance.

### Leachate Solution Release at Trail Operations

In April 2016, Trail Operations experienced a discharge of solution from a leachate collection system associated with a historic engineered landfill. An underground line conveying the leachate

was compromised at a welded joint, resulting in the release of approximately 100 cubic metres (m<sup>3</sup>) to the ground and to Stoney Creek via surface runoff. An assessment concluded that there was no long-term impact on aquatic life at Stoney Creek or on the Columbia River.

### **Concentrate Spill at Red Dog Operations**

In December 2016, a trailer carrying zinc concentrate at the Red Dog site left the haul road, resulting in the release of approximately 65 tonnes of concentrate to the tundra on NANA land. Cleanup was initiated with the permission of NANA. All work was undertaken with full approval of the regulator.

## **Environmental Litigation**

### **Upper Columbia River Litigation**

Environmental litigation regarding the Upper Columbia River and involving the Confederated Colville Tribes and the Spokane Tribe of Indians continues. For more information, see the [Upper Columbia River Project page](#) on our website.

### **Charges, Fines and Penalties**

In February 2016, Teck Metals was assessed a penalty for five charges under the *Fisheries Act* and the *Environmental Management Act* relating to 13 accidental discharge incidents at Teck's Trail Operations between November 2013 and February 2015. These incidents involved the discharge of effluent with elevated levels of copper, zinc, ammonia, chlorine and cadmium. Teck Metals was assessed a total penalty of \$3.4 million. All of the incidents were self-reported non-compliances, of which only one constituted an exceedance of our daily allowable permitted discharge limit. No impact on the Columbia River was measured or noted for any of the incidents. More detailed reviews conducted following each incident confirmed there was no human health risk and no indication of any long-term impact on fish or the environment. In addition to specific preventative measures implemented following each occurrence, Trail Operations has implemented enhanced training and processes, and is improving facilities to provide greater control over these kinds of incidents.

In March 2016, the Environmental Department of the Government of Chile issued the results of their investigation stemming from the findings associated with inspections conducted at Carmen de Andacollo Operations in 2013 and 2014. Three of the five charges previously laid were dismissed, while two charges resulted in a total penalty of US\$60,000. The site has since restructured its Environmental Department and is dedicated to making sure that environmental data is available, monitored for trends, and communicated to the authorities as appropriate. The site has also enhanced its tracking of legal requirements and voluntary commitments.

In the third quarter of 2016, Red Dog Operations accepted the state of Alaska's settlement offer of \$142,248 in relation to the December 2015 Notice of Violation for alleged air permit violations related to generator exhaust opacity and failure to test for carbon monoxide emissions.

In January 2017, Teck received three charges under the Fisheries Act in relation to the fish mortality incident that occurred in the area of the water treatment works at the West Line Creek Active Water Treatment Facility at our Line Creek Operations in October 2014. At the time of the incident, a detailed investigation was undertaken. This resulted in the implementation of extensive measures to prevent a reoccurrence, including improved monitoring and incident response programs, additional process controls, and creation of an effluent buffer pond to allow early identification and management of process upsets before discharge to the receiving environment.

## **Outlook for Environmental Management**

In 2017, we will continue to implement and evaluate the effectiveness of our environmental management practices through our assurance program, and will continue to address findings and amend practices as required. We will also continue to improve our environmental safeguards and prevent reoccurrence of environmental incidents on a site-by-site basis as required. We will also focus on enhancing our management systems to enable compliance with the many obligations under newly issued permits and commitments such as those related to the Baldy Ridge Expansion, Quebrada Blanca Phase 2 and the upcoming closure at Coal Mountain Operations. Finally, we will enhance our capacity to share learnings and identify best practice by further strengthening our internal Environmental Community of Practice.

### **Learn More**

[Health, Safety, Environment and Community Management at Teck](#)



# Air Quality



## What is in this topic?

Emissions and air quality control at our operations and in the transportation of our products. Includes ambient air quality and emissions of sulphur dioxide (SO<sub>2</sub>).

## GRI Indicators and Topic Boundary

305-103, 305-7

This topic is considered most material by our employees, local communities, regulators and society in the context of all of Teck's sites.

## Performance Highlights

# 100%

of selected community-based stations (Table 52) in 2016 with annual average ambient concentrations of particulate matter of size less than 2.5 microns within World Health Organization guidelines.<sup>(15)</sup>

## Why was Air Quality a Material Topic in 2016?

Air pollution is a major global health concern and communities are increasingly concerned about the quality of air. In some regions, increasing urbanization and growth of industrial development has created greater pressure on air quality through airborne emissions from sources such as personal and commercial transportation, manufacturing, energy generation and resource extraction.

Outdoor air pollution in both cities and rural areas was estimated by the World Health Organization (WHO) to cause 3.7 million premature deaths worldwide in 2012.<sup>(14)</sup> The WHO has called on governments to develop policies and implement measures to improve air quality. To address this global concern, governments set a common goal to reduce the number of deaths and illnesses from air pollution by 2030 in the UN Sustainable Development Goals.

Several governments, including the Canadian and American governments, already require companies to monitor and mitigate their impacts on air quality and disclose their emissions publicly through inventories such as the Toxic Release Inventory (TRI) in the United States and the National Pollutant Release Inventory (NPRI) in Canada.

## Industry Context

Air pollutants associated with mining and mineral processing can include particulate matter (e.g., fine and coarse dust that can include metals) and gases. Both of these may contribute to a range of potential health and environmental issues. Dust at operations is generated by a variety of sources such as vehicle traffic on mine roads, dumping rock onto waste piles, blasting and crushing. Dust can also be

generated during the transportation of mineral products along the supply chain. The release of these materials has the potential to create health and environmental issues if not appropriately managed, and can raise concerns associated with dust in communities.

## Teck Context

Our communities of interest have increasingly identified air quality as a key concern at many of our operations. For example, in the Elk Valley and at our Carmen de Andacollo Operations in Chile, residents have reported dust in relation to mine operations as a concern. Not only do we see increasing community concerns related to air emissions near many of our operations, but also along our supply chain through transportation of our products.

## How Does Teck Manage Air Quality?

In this section, we report on our governance and management systems related to air quality, our efforts to reduce emissions, our approach to monitoring and reporting, and how we collaborate with communities and partners to improve air quality.

### Governance and Management Systems

Managing air quality has been a part of the environmental management activities at our operations for many years. In light of increasing concern around potential health issues associated with exposure to particulate matter, combined with growing regulatory requirements and the relevance to our operations, 'Air' was added as a focus area to our sustainability strategy in 2015. Our short-term goals to 2020 and long-term goals to 2030 related to air are listed on our website, and a summary of progress against our 2020 goals is available on page 13.

### Reducing Emissions to Improve Air Quality at Our Operations

As part of our ongoing environmental management programs, we implement measures to minimize impacts on the local air quality within the vicinity of our operations. Depending on the activities at each operation, these measures may include:

- Wetting roads at operations
- Applying sealants and dust suppressants to material stockpiles, roadways and railcars
- Tailings management to minimize dust generation
- Using cover systems for trucks and railcars, where feasible
- Storing and handling materials indoors, where feasible
- Covering ore stockpiles with domes
- Using ventilation systems with particulate filtration for conveyors and buildings
- Modifying blasting practices to reduce dust

For example, we have extensive programs in place at our Red Dog Operations in Alaska, Trail Operations in British Columbia, and Carmen de Andacollo Operations in Chile to mitigate fugitive dust associated with transportation and refining.

### Monitoring and Reporting

We regularly monitor and report on sources of air emissions and ambient air quality at our operations. Monitoring methods include real-time particulate monitors and high-volume monitors programmed to sample air over a 24-hour period, as well as dust fall jars for assessing dust levels over longer periods of time.

Information collected from both on- and off-site weather stations, in conjunction with data collected from our air monitoring programs, allows us to determine relationships between dust levels, wind patterns and precipitation. In addition, these local weather stations facilitate timely responses to changes in weather patterns that may affect the surrounding air quality.

### Collaborating with Communities and Partners to Improve Air Quality

The transportation of our products can result in dust generation. For example, we work with our railway transportation partners in Alberta and British Columbia to prevent dust during the transportation of our steelmaking coal by managing load levels, creating a compacted surface and applying sealant sprays to materials in railcars. We also work with our port terminal suppliers to manage dust on-site, including the use of automated dust-suppression systems. Finally, we have programs in place, along with other partners in our supply chain, to monitor the performance of and continuously improve our dust management systems.

### Our Targets and Commitments

Improve monitoring and understanding of our releases to air and the potential impacts on people, communities and the environment by 2020.

In consultation with communities, governments and other organizations set air quality goals and establish risk-based action plans to achieve goals by 2020.

Strengthen the integration of air quality considerations into early-stage project development by 2020.

Partner with communities, governments and other organizations to facilitate action and the sharing of knowledge to continuously improve air quality by 2030.

Contribute to measurable and meaningful improvements in areas where our activities impact air quality by 2030.

### \* Material Topic Interconnections

Health and Safety of Our Workforce: page 54

Community Engagement: page 69

Environmental Management: page 103

Energy and Climate Change: page 114

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## What Was Our Performance in Air Quality in 2016?

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In this section, we report on changes to our governance and management systems related to air, efforts to reduce emissions at our operations, updates to monitoring and reporting on air quality, and progress in collaborating with communities and partners to improve air quality.

### **Reducing Emissions to Improve Air Quality at Our Operations**

In 2016, we implemented measures to minimize impacts on the local air quality within the vicinity of our activities at all operations.

#### **New Acid Plant at Trail Operations to Reduce Sulphur Dioxide Emissions**

In November 2016, we announced an investment of \$174 million for the installation of a new acid plant to improve efficiency and environmental performance at our Trail Operations. The new acid plant will enhance environmental performance and will also reduce downtime and maintenance costs. It will reduce SO<sub>2</sub> emissions by a further 5% in addition to the 15% reduction in emissions realized from the installation of the No. 1 Acid Plant in 2014. The new plant will replace an existing plant and will be a replica of the No. 1 Acid Plant, using the best commercially available technology. Construction began in the first quarter of 2017, and the plant will become operational in the summer of 2019. Over the last 20 years, Teck has made significant investments to improve Trail Operations' environmental performance, resulting in emissions of metal to air and water being reduced by over 95%.

#### **New Smelter Recycle Building at Trail Operations**

In December 2016, Trail Operations opened a Smelter Recycle Building, a \$35 million investment that will reduce fugitive dust emissions by up to 25% to improve

community air quality. The building contains concentrate and in-process materials that were previously stored outside. These materials will be stowed, mixed and loaded into trucks, all within the building. This will control air flow and ensure that all dust is captured and recycled into the processes. The Smelter Recycle Building is part of our fugitive dust reduction program, aimed at reducing sources of dust such as stockpiles, open mixing of materials, and vehicle traffic on- and off-site.

### **Monitoring and Reporting Air Quality in 2016**

In addition to monitoring sulphur dioxide and particulate matter, our operations monitor and report on other air emission parameters in accordance with permit and regulatory requirements.

Sulphur dioxide emissions from stacks and fossil fuel emissions in 2016 were approximately 4,710 tonnes, compared to 4,500 tonnes in 2015. The change in emissions from 2015 to 2016 was due in part to changes in estimation and monitoring methodologies, and the inclusion of emissions from mobile equipment. Our work to reduce SO<sub>2</sub> emissions continued in 2016. For example, Quebrada Blanca Operations started obtaining its energy from the Chilean North Energy System, which resulted in a reduction of SO<sub>2</sub> emissions generated at the site. Prior to that, the site generated its own power at an on-site powerhouse.



Table 51: **Sulphur Dioxide Emissions from Stacks, Stationary and Mobile Fossil Fuel Combustion (tonnes)<sup>(1),(2),(3),(4)</sup>**

| Operation                             | 2016  | 2015  | 2014   | 2013   |
|---------------------------------------|-------|-------|--------|--------|
| Cardinal River                        | 4.0   | 2.9   | 7.51   | 2.05   |
| Coal Mountain                         | 3.5   | 0.1   | 0.09   | 0.09   |
| Elkview                               | 3.5   | 0.6   | 0.05   | 1.89   |
| Fording River                         | 3.6   | 1.2   | 2.31   | 2.14   |
| Greenhills                            | 4.5   | 2.7   | 36.78  | 11.08  |
| Highland Valley Copper <sup>(1)</sup> | 1.6   | 36    | 36.96  | 31.5   |
| Line Creek                            | 1.1   | 0.3   | 0.33   | 0.29   |
| Pend Oreille                          | 4.4   | 3.8   | 0      | 0      |
| Quebrada Blanca                       | 18.8  | 385   | 178.13 | 178.34 |
| Red Dog                               | 1.9   | 2.7   | 1.72   | 1.7    |
| Trail                                 | 4,665 | 4,070 | 3,924  | 4,415  |

(1) From 2013 to 2015, Highland Valley Copper's SO<sub>2</sub> emissions included those from blasting.

(2) Information current at time of publication. However, values will be added (in the case of Carmen de Andacollo), confirmed and/or changed (for other sites) once regulatory reporting for the 2016 period is complete. For up-to-date values, see the [Air Quality page](#) on our website.

(3) Requirements and methods for determining air emissions can vary widely. Not all sites have monitoring equipment in place to measure releases from all sources and activities, and the frequency of sampling can vary.

(4) Our Canadian sites report annually to the National Pollutant Release Inventory (NPRI). Our Red Dog and Pend Oreille operations report a different scope of air emissions data to the Toxic Release Inventory (TRI), which has different reporting requirements and, in some cases, alternative calculation methods. Both the NPRI and TRI contain information on chemical releases and waste management activities reported annually by certain facilities. Information in this table may not reflect exactly the contents of NPRI and/or TRI reports, due to different reporting definitions concerning site boundaries as well as the inclusion of mobile equipment in the above table, which is not required in some regulatory reporting requirements.

As part of our ambient air quality monitoring program, we measure the concentration of particulate matter of a size less than 10 microns (PM<sub>10</sub>) and particulate matter of a size less than 2.5 microns (PM<sub>2.5</sub>) at monitoring stations. These monitoring stations use standardized equipment, per permit and regulatory requirements, and are located on our sites as well as in a number of community centres. At these monitoring stations, ambient air quality not only reflects the activities at our operations, but also reflects other activities in the area such as other industries, vehicular traffic, firewood burning, forest fires and waste burning. The information contained in the tables below summarizes the ambient air quality during 2016 as measured at a number of community-based monitoring stations that we manage. Two values are presented:

- The annual average concentration that is based on the daily 24-hour average concentrations; this value is used to capture prolonged or repeated exposures over longer periods
- The annual peak 24-hour indicator that is based on the 98th percentile of the daily 24-hour average concentrations; this value reflects immediate exposures

For each of the stations listed in Table 52 the annual average concentration of PM<sub>2.5</sub> was below the World Health Organization (WHO) Guideline value of 10µg/m<sup>3</sup>. For the annual average concentration of PM<sub>10</sub> at the stations listed in Table 53, three of the stations were below the WHO Guideline value of 20µg/m<sup>3</sup>, with the exception being Urmeneta station located in the Andacollo township. Our efforts to improve air quality at Andacollo are highlighted above.

# What Was Our Performance in Air Quality in 2016?

## Case Study

Collaborating to Improve Community Health and Local Environment in Trail, British Columbia



Teck's Trail Operations is one of the world's largest fully integrated zinc and lead smelting and refining complexes and has been operating in British Columbia for over 120 years.

Smelting and refining can result in emissions to air and water, which can affect the environment and the local community. To manage these impacts and identify opportunities for improvement, Teck participates as a member of the [Trail Area Health & Environment Committee](#) (THEC). THEC is an award-winning<sup>(16)</sup> example of how the community, working with industry and government as partners, can ensure a healthy community while supporting resource development.

### Multi-Stakeholder Committee Promotes a Healthy Environment

The committee promotes a healthy environment through a comprehensive integrated program that focuses on

improving air quality, supporting children's healthy development and reducing lead exposure. It is chaired by the Mayor of Trail with representatives from Teck, Interior Health, the B.C. Ministry of Environment, municipal councils and the local community.

The committee sets the direction for the Trail Area Health & Environment Program (THEP), which focuses on five aspects to improve health in the area: Family Health, Air Quality, Home & Garden, Property Development, and Parks & Wildlands. The program and partners protect the environment through air emissions reduction, environmental monitoring, reducing dust in the home environment and focusing on family health.

"The Trail Area Health & Environment Program is an integrated, comprehensive and inclusive program led by the community," says Mayor Mike Martin, Chair of the THEC.

"By working collectively with community stakeholders and having tremendous support from Trail Operations, the Ministry of Environment and the Interior Health Authority, the results achieved have been remarkable."

### Focusing on Continuous Improvements

The Committee has routinely set and achieved goals related to health and the environment since its inception over 25 years ago. Trail Operation's air quality improvements have played a significant part in achieving greater community health. With the installation of the KIVCET smelter in 1997 and subsequent operational improvements, stack lead emissions have been reduced by over 99%. The annual average lead and arsenic in community air was also reported as the lowest ever in 2016. This is a result of Trail Operations' focus on dust reduction, including the recent completion of a \$35 million Smelter Recycle Building that will reduce fugitive dust emissions by up to 25%.

### Community Health in Trail and Next Steps

In addition to improving air quality, THEP has undertaken an innovative approach to achieving wider community engagement. In 2016, a survey distributed in Trail showed high support for the next set of five-year goals, as well as overall satisfaction with the program offerings. Moving forward, THEP will continue to promote a healthy environment that focuses on improving air quality, supporting children's healthy development and reducing lead exposure.

Table 52: **Ambient Particulate Matter of Size Less Than 2.5 Microns in 2016 in micrograms per cubic metre ( $\mu\text{g}/\text{m}^3$ )**

| Station             | Nearest Operation   | Average Annual | 98 <sup>th</sup> Percentile |
|---------------------|---------------------|----------------|-----------------------------|
| Urmeneta            | Carmen de Andacollo | 9.67           | 15.58                       |
| Downtown Sparwood   | Elkview             | 4.69           | 14.46                       |
| Elkford High School | Greenhills          | 3.58           | 8.03                        |

Table 53: **Ambient Particulate Matter of Size Less Than 10 Microns in 2016 in micrograms per cubic metre ( $\mu\text{g}/\text{m}^3$ )**

| Station             | Nearest Operation   | Average Annual | 98 <sup>th</sup> Percentile |
|---------------------|---------------------|----------------|-----------------------------|
| Urmeneta            | Carmen de Andacollo | 37             | 70                          |
| Downtown Sparwood   | Elkview             | 10.79          | 32.07                       |
| Elkford High School | Greenhills          | 6.97           | 19.05                       |
| Butler Park         | Trail               | 18.21          | 38.35                       |

For more information about our emissions to air such as nitrous oxides, volatile organic compounds and mercury, visit [National Pollutant Release Inventory](#) for our Canadian operations, and [Toxic Release Inventory](#) for our American operations.

### Collaborating with Communities and Partners to Improve Air Quality

In 2016, community grievances reported through our feedback mechanisms regarding perceived or actual environmental impacts were largely related to air quality concerns in B.C. in Canada at Trail Operations and at our steelmaking coal operations in the Elk Valley region, and in Chile at our Carmen de Andacollo Operations.

All complainants' grievances have been responded to. For more information about our feedback mechanism and approach to resolving grievances, see the Community Engagement section on page 71.

### Sustainability Strategy Spotlight

In 2016, as part of our 2020 goal to set air quality targets and establish risk-based action plans to achieve goals in consultation with communities, governments and other organizations, we developed action plans coupled with emissions inventories at all operations.

For more detail, see our full goals progress report on page 13.

### Outlook for Air Quality

Managing air quality will continue to be an integral part of the environmental management activities at our operations. In 2017, Teck will continue to work towards achieving our goals set for 2020 on air quality, with an added attention on monitoring and reporting potential impacts on people, communities and the environment. We will also continue to evaluate mitigation strategies for acute dust events triggered by mine activities in dry or windy weather, most notably for our steelmaking coal operations.

#### Learn More

[National Pollutant Release Inventory, Environment Canada](#)

[Toxic Release Inventory, United States Environmental Protection Agency](#)



# Energy and Climate Change



## What is in this topic?

Energy (fuel and electricity consumption and costs, energy intensity, energy-efficiency initiatives), climate risks and emissions (greenhouse gas emissions and other gas emissions).

## GRI Indicators and Topic Boundary

302-103, 302-1, 302-3, 302-4, 305-103, 305-1, 305-2, 305-3, 305-4, 305-5, 305-7

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

## Performance Highlights

Implemented energy reduction projects resulting in

**1,550** terajoules

of energy reductions since our baseline year of 2011.

Implemented projects that have reduced greenhouse gas emissions by approximately

**217** kilotonnes

to the end of 2016.

## Why Was Energy and Climate Change a Material Topic in 2016?

Climate change is an increasingly important global challenge for businesses and communities, and is addressed in the United Nations Sustainable Development Goal 13 on climate action. In a carbon-constrained world, energy production and consumption needs to change in order to reduce greenhouse gas (GHG) emissions and transition to a lower-carbon economy. This will likely require significant change in the way we produce and consume energy.

2016 was another significant year for global action on climate change, with countries from around the world ratifying the Paris Agreement. Businesses are increasingly taking a role in climate action and advocating for fair and broad-based climate-related regulation, including carbon pricing.

## Industry Context

As society transitions to a lower-carbon economy, the transition will present risks and opportunities for the mining industry. Demand for commodities is likely to shift in response to a lower-carbon environment, and certain commodities may be more significantly affected than others. In response to the Paris Agreement and United Nations SDG 13, a number of major mining jurisdictions announced new climate change commitments; for example, in 2016, the Government of Canada announced its intention to establish a national framework on climate change that will include a national carbon price.

As mining operations require large amounts of energy to produce and transport their products, energy is one of their most material costs. As large energy consumers, mines also produce significant GHG emissions, which exposes them to potential new costs, both as a carbon price is introduced, and additional costs when the price increases.

## Teck Context

We recognize that our activities consume energy and generate significant GHG emissions. This is why Teck has set ambitious targets to reduce our carbon footprint and advocate for policies that support the world's transition to a lower-carbon economy.

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; 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 lower-carbon economy and continue to responsibly produce the materials essential for society is built around four pillars: reducing our carbon footprint, positioning Teck for the lower-carbon economy, advocating for climate action, and adapting to the physical impacts of climate change. This strategy is outlined in the section below and in our Climate Action Strategy, available at [www.teck.com/climateaction](http://www.teck.com/climateaction).

## How Does Teck Manage Energy and Climate Change?

In this section, we outline our strategy to contribute to global climate action and continue to responsibly produce the materials essential for society. We also outline our use of low-carbon energy, generation of alternative energy, and response to carbon pricing and regulation.

### Reducing our Carbon Footprint

We are taking action to minimize our contribution to global GHG emissions and to support broader efforts to combat climate change. We have set ambitious targets to reduce GHG emissions and to improve energy efficiency at our operations, and we are making significant progress towards achieving them.

The key sources for direct GHG emissions vary significantly by operation. For example, at our steelmaking coal operations, emissions are primarily associated with the drying of coal as well as our mobile equipment and the methane gas released from coal seams during mining. Emissions from Trail Operations are dominated by the use of coal in the furnaces and the use of natural gas to produce steam for heating process solutions. At Red Dog Operations, the diesel used to produce electricity and the fuel for mobile equipment are the key source of GHG emissions. The primary source at Highland Valley Copper Operations, which receives electricity from the hydroelectric grid, is the use of diesel for our mobile equipment. As such, the options for reducing emissions vary significantly across our different operations. Since 2011, Teck has reduced GHG emissions by over 217,000 tonnes, which is a 7% reduction in our overall GHG emissions.

We are focused on driving 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 annually.

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 — e.g., the amount of CO<sub>2</sub> generated per tonne of copper or steelmaking coal produced. At 60 kilograms of CO<sub>2</sub> per tonne, our steelmaking coal is less than half the industry average of over 150 kilograms of CO<sub>2</sub> per tonne. Our copper production averages 2.6 tonnes of CO<sub>2</sub> per tonne of copper, which is 35% below the industry average of 4 tonnes.

### Low-Carbon Energy

In addition to projects we have implemented to reduce our energy consumption and GHG emissions, many of our operations access low-carbon sources of electricity. In B.C., where seven of our operations are located, 92% of grid electricity is clean and renewable energy, and is almost entirely generated from hydro. Our Trail Operations, also located in B.C., includes one of the largest fully integrated zinc and lead smelting and refining complexes in the world, and is our largest consumer of electricity, accounting for 44% of our company's total electricity consumption. The electricity consumed at Trail Operations is provided by the Waneta hydroelectric dam and transmission system, in which Teck holds a two-thirds interest. This enables Trail Operations to produce refined zinc and lead at a lower GHG intensity compared to producers powered by fossil fuel-based electricity grids. In some of the other jurisdictions where we operate — such as Alberta and Chile — the electricity grids are more heavily based on fossil fuels. Recognizing this, one of our sustainability goals is to commit to 100 megawatts of alternative energy generation by 2030.

### Our Targets and Commitments

Implement projects that reduce energy consumption by 2,500 TJ by 2020.

Implement projects that reduce GHG emissions by 275 kilotonnes (kt) of CO<sub>2</sub>-equivalent by 2020.

Assess opportunities and identify potential project partners toward achieving our 2030 alternative energy goal by 2020.

Engage with governments to advocate for effective and efficient carbon pricing by 2020.

Implement projects that reduce energy consumption by 6,000 TJ by 2030.

Implement projects that reduce GHG emissions by 450 kilotonnes (kt) of CO<sub>2</sub>-equivalent by 2030.

Commit to 100 megawatts (MW) of alternative energy generation by 2030.

### \* Material Topic Interconnections

Environmental Management: page 103

Air Quality: page 108

# How Does Teck Manage Energy and Climate Change?



## SDG Spotlight Supporting SDG 13: Harnessing Solar Power at Quebrada Blanca Operations



As a company with more than 100 years of experience, we at Teck recognize the need to adapt to the limits of our environment and to implement activities that reduce our energy consumption, reduce greenhouse gas emissions and promote alternative energy generation. For years, Teck has worked to improve our energy efficiency, and since 2011, we have implemented projects that have reduced energy consumption by a total of 1,550 terajoules (TJ).

In addition to our long-term goals to reduce energy consumption and greenhouse gas emissions, it is our goal is to commit to 100 megawatts (MW) of alternative energy generation by 2030 and as part of that goal, we have evaluated and used alternative energy sources at our operations. For example, at our Quebrada Blanca Operations (QB) in northern Chile, solar power is one of our energy sources.

In 2013, QB partnered with AES Gener, a producer and distributor of electricity in Chile, to guarantee a supply of solar power for the next 20 years. This partnership is part of the strategic development of renewable energy sources for current activities at the operation as well as future activities at Quebrada Blanca Phase 2 (QB2), a project that will develop the hypogene resource at QB.

The solar power is delivered to QB from Andes Solar, a solar power plant that has a capacity of 21 MW and delivers hourly energy for a total of 55 gigawatt hours (GWh) per year. This amount of

solar energy is equivalent to 30% of the total energy consumed by Quebrada Blanca. To generate this quantity of energy, Andes Solar uses approximately 50,000 solar panels covering an area of 800,000 square metres, which is equivalent to the size of over 100 football fields.

“Sourcing Quebrada Blanca’s power through solar electricity has positioned the operation to be a leader in Chile for the production of clean and renewable energy”, said Marcos Cid, Senior Electrical Engineer, Teck. “Through this project, our goal is to contribute to global climate action, become more energy efficient and continue to responsibly produce the materials essential for society.”



An overview of the work Teck is doing to address each Sustainable Development Goal is available on our [website](#).

### Alternative Energy Generation

Teck is also investing in research and building alternative power generation technology. We are partners in a community solar farm in Kimberly, B.C., and are assessing other opportunities to build and source alternative power generation for our other sites.

From 2011 until 2017, we were partners in a large-scale wind power facility in Alberta called Wintering Hills. Our investment in Wintering Hills helped us advance our sustainability goal of developing or sourcing 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 around our operations to further support our sustainability goals.

In March 2017, Teck sold its 49% interest in Wintering Hills to IKEA Canada. Moving forward, we will continue to examine opportunities to enhance our renewable energy portfolio.

### Positioning Teck to Thrive in the 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.

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. 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.

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. 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 mining activities. To learn about our work in advocating for climate action, visit the [Energy and Climate Change page](#) on our website.

### Carbon Pricing and Regulation

At Teck, carbon pricing is integrated at multiple levels of decision-making, ranging from annual operating budgets developed at the site level to corporate decision-making for large capital investments. We incorporate a carbon price into our capital and risk decision processes where material, and we calculate and consider our carbon exposure in terms of absolute costs incurred on an annual basis and projected out to at least 2020. Where a clear and certain carbon price is present, we incorporate that price and any known and/or planned changes to the carbon price. Where uncertainty exists, we may conduct sensitivity analyses to better understand what our exposure and risks are under different carbon pricing and regulatory scenarios.

Over the past decade, carbon regulations have emerged across the globe. We recognize that current and future regulations may affect our business by placing direct costs on our operations and increase the costs of production. We already incur carbon costs in Canada as a result of provincial regulations in B.C. and Alberta. Our expectation is that this trend will continue, with new regulations being implemented and carbon costs increasing over time.

The Province of B.C. introduced a carbon tax on fossil fuels in 2008. The tax is imposed on various fossil fuels used in B.C. For 2016, our seven B.C.-based operations incurred \$48 million in provincial carbon tax, primarily from our use of coal, diesel fuel and natural gas. Our Cardinal River Operations meets Alberta GHG compliance requirements through efficiency improvements and the use of offsets previously generated from the Wintering Hills Wind Power Facility.

# How Does Teck Manage Energy and Climate Change?

## Snapshot

### 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 B.C., 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%, 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.

As of January 1, 2017, the ceiling price for compliance under Alberta's Specified Gas Emitters Regulation increased to \$30/tonne of CO<sub>2</sub>e. As such, Teck has integrated these levies into forecast cost estimates and future planning to meet these tax increases.

Forecasting using a variety of scenarios demonstrates an exposure in 2020 ranging from \$30 million to \$60 million for our B.C. operations. In Alberta, based on scenarios that include reduction requirements ranging from 12% to 40%, and carbon costs ranging from \$15 to \$40 per tonne of CO<sub>2</sub>e emissions, we estimated that our compliance costs could be \$0.5 million to \$4.5 million per year for our Cardinal River Operations. Assessing the same scenarios for our Fort Hills and Frontier projects, compliance costs could range from \$10 million to \$75 million per year if and when both of these projects start operations.

### Adapting to the Physical Impacts of Climate Change

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 to related infrastructure such as transportation systems.

These risks could be in the form of increased temperatures, changes in precipitation, changes in levels of fresh water, 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 — to minimize our vulnerability to climate variability and to ensure robustness.

In 2010, we began working with technical experts in the field of climate modelling and forecasting for the purpose of better understanding potential changes in climate-related conditions at some of our sites in British Columbia. This project has helped us to assess how climate change modelling could be integrated into our decision-making and risk management practices. We typically take into consideration climate modelling in project development, mine planning and closure planning, and have done so for many years. For example, trends in permafrost advance and retreat, precipitation patterns, tidal variations and storm intensity impacts on operations and transportation are all evaluated using climate analysis and modelling.



# What Was Our Performance in Energy and Climate Change in 2016?

In this section, we report on our energy use and reduction, energy intensity, alternative energy generation and GHG emissions, including Scope 1, Scope 2 and Scope 3.

## Energy Use and Reduction

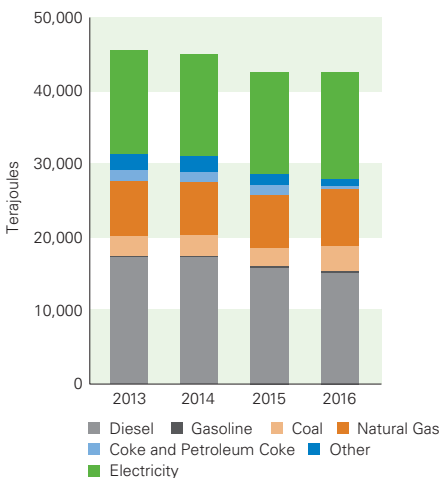
In 2016, we consumed a total of 42,538 TJ of energy (i.e., electricity and fuels), as compared to 42,521 TJ in 2015. Trends in fuel (diesel, gasoline, coal, natural gas, coke, petroleum coke and other fuels) and electricity consumption for the past three years are shown in Figure 23. In 2016, four of our operations reduced their absolute energy consumption from 2015.

In 2016, approximately 28% of our energy requirements (i.e., electricity and fuels) were supplied by non-carbon-emitting sources, primarily hydroelectricity. Of our total electricity consumption in 2016, 80%, or 11,760 TJ, was from renewable energy sources, the majority of which is hydroelectricity.

Collectively, projects implemented in 2016 have reduced annual energy consumption at our operations by 97 gigawatt hours (350 TJ) — enough power for 3,250 homes for a year. This represents a 1% decrease of our total annual energy consumption. Since 2011, our efforts have resulted in reduction projects totalling 1,550 TJ.

For a description of the primary uses of energy at our operations, visit the [Energy and Climate Change page](#) on our website.

Figure 23: **Energy Consumption by Type 2013–2016<sup>(1)</sup>**



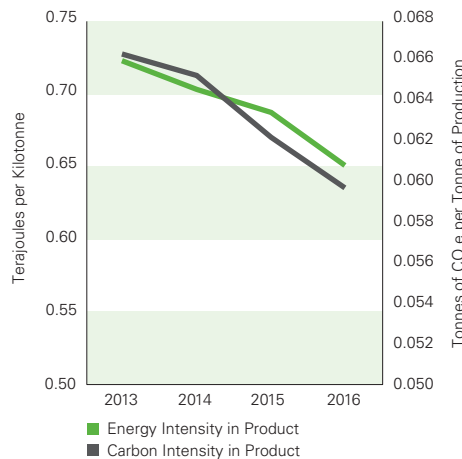
(1) Other includes propane, waste oil, fuel oils and other process fuels.

## Energy Intensity

In Figures 24 to 26, we outline our energy intensity, or the amount of energy used per tonne of product, which is a measure of efficiency that helps us to better manage our performance. The variability found in the data for these figures falls within the normal parameters of mining operations.

Energy and carbon intensity for the production of steelmaking coal continued to decrease (improve) in 2016 (Figure 24). This change is due to lower strip ratios, a continued focus on productivity improvements in mining, maintenance and processing operations, as well as the increased use of natural gas to displace coal in the product dewatering process.

Figure 24: **Energy and Carbon Intensity for Steelmaking Coal Production 2016–2013**



## Alternative Energy Generation

Our 49% share of power generation from Wintering Hills in 2016 was 138 GWh, enough power to provide 89,000 tonnes of CO<sub>2</sub>-equivalent credits.

# What Was Our Performance in Energy and Climate Change in 2016?

Figure 25: **Energy and Carbon Intensity for Zinc and Lead Production 2016–2013**

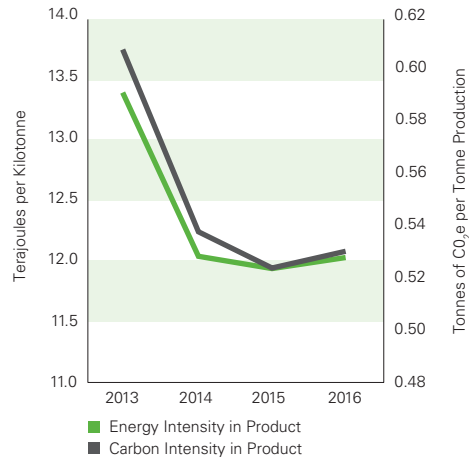
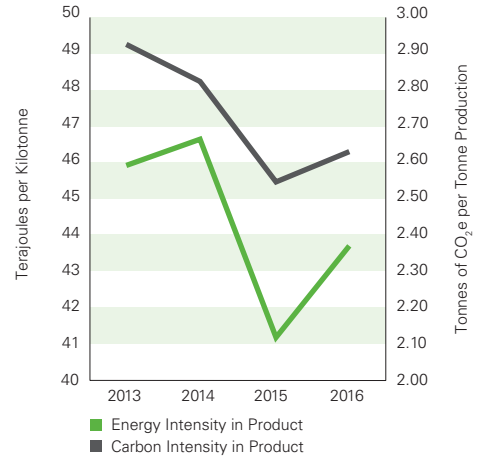


Figure 26: **Energy and Carbon Intensity for Copper Production 2016–2013**



## Snapshot

### Bringing Heating Systems to Local Residents Near our Carmen de Andacollo Operations

For several years, local residents near our Carmen de Andacollo Operations in central Chile have harnessed the power of the sun to do everything from cook food to heat water, thanks to a partnership between Teck, the local municipality and community organizations. In 2016, we expanded the program to include installation of solar water heating systems in the homes of residents in Chepiquilla, a suburb of Andacollo.

#### Identifying New Opportunities for Solar Power

As part of the ongoing dialogue between Teck and communities, Chepiquilla residents brought forward

the idea of installing solar water heating systems in their homes to reduce costs and the use of non-renewable energy. After evaluating the feasibility of the initiative, Teck's Communities of Andacollo committee funded and implemented the project.

#### Installing Solar Heating Systems in the Homes of Local Residents

In the first stage of the project, solar water heating systems were installed in 15 houses. This system is made up of roof panels with a set of pipes and tanks that capture heat, circulate and store water for use in bathrooms and kitchens. Without the solar system, residents rely on costly gas generators to heat water.

"It has been a very positive change for us because now we have hot water in our homes 24 hours a day and, most importantly, we generate savings to our home budgets," said Margarita Urquieta, local resident.

## Next Steps

The second phase of the project, which will take place in 2017, will see solar water heating systems installed in an additional 26 homes. After phase two is complete, the majority of homes in Chepiquilla will be using solar heating, which greatly reduces the costs and carbon footprint of the community.

"We recognized that communities needed to reduce the cost of living and that one of the most significant costs is energy used to heat water. Installing solar water heating systems was a great way to help communities and promote the use of renewable energy at the same time. Truly a win-win situation," said Javier Vega, Development Coordinator, External Relations, Carmen de Andacollo.

Teck will continue to investigate new opportunities to reduce energy use and promote renewable energy by engaging communities and maintaining an open dialogue with local residents.

## Greenhouse Gas Emissions<sup>(17)</sup>

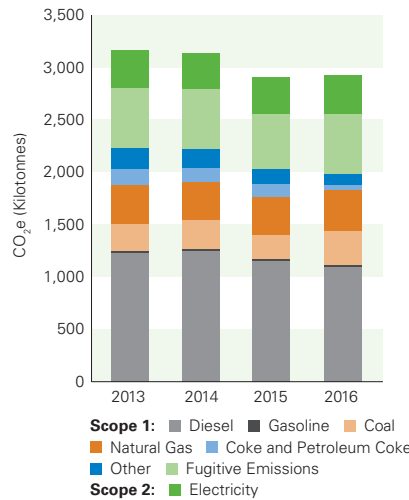
In 2016, our total GHG emissions (Scope 1 and Scope 2), as CO<sub>2</sub>e, were 2,925 kilotonnes (kt), compared to 2,908 kt in 2015. Of those totals, our direct (Scope 1) GHG emissions<sup>(18)</sup> were 2,552 kt in 2016, compared to 2,551 kt in 2015. Figure 27 shows a breakdown of our emissions by fuel type. We estimate our indirect (Scope 2) GHG emissions associated with electricity use for 2016 to be 374 kt, or approximately 13% of our total emissions. These emissions are associated primarily with our Cardinal River, Carmen de Andacollo and Quebrada Blanca operations, as their electricity power grids are based heavily on fossil fuels. Elsewhere, our indirect emissions were relatively small, as operations in B.C. and Washington state obtain a significant proportion of their electricity from hydroelectric generation.

### Reducing Greenhouse Gas Emissions

We implemented several energy and GHG reduction projects that contributed to our energy goals in 2016. We also identified reduction projects that were successful at a number of our sites, and worked to implement them at our other operations. In 2016, five of our operations reduced their GHG emissions.

We are working towards our 2020 GHG reduction target of 275 kt of CO<sub>2</sub>e emissions, with reductions estimated at approximately 217 kt of CO<sub>2</sub>e emissions at the end of 2016.

Figure 27: **Scope 1 and Scope 2 GHG Emissions by Fuel Type<sup>(1),(2)</sup>**



(1) Scope 1 (Direct) Greenhouse Gas Emissions: Emissions that occur from energy sources that are owned or controlled by the company.

(2) Scope 2 (Indirect) Greenhouse Gas Emissions: Emissions that occur from the generation of purchased electricity consumed by the company. Scope 2 emissions physically occur at the facility where electricity is generated.

## Scope 3 Emissions

While Scope 1 emissions occur from energy sources controlled by the company and Scope 2 emissions occur from electricity consumed by the company, Scope 3 emissions are other emissions that arise from sources owned or controlled by other entities within our value chain. For example, Scope 3 emissions include those arising from business travel by employees, the use of our products, and the transportation of materials that we purchase and sell. Consequently, Scope 3 emissions cover a wide spectrum. Our approach is to identify and quantify those that are material to Teck.

Our most material Scope 3 emissions are from the use of our steelmaking coal product by our customers. Unlike the vast majority of coal, which is burned to generate electricity, steelmaking coal has special properties that make it a suitable input for manufacturing steel. Based on our 2016 sales volumes, Scope 3 emissions from the use of our steelmaking coal are approximately 79,053 kt of CO<sub>2</sub>e, compared to 76,000 kt of CO<sub>2</sub>e in 2015 and 74,000 kt of CO<sub>2</sub>e in 2014.

## Sustainability Strategy Spotlight

In 2016, as part of our 2020 goal to engage with governments to advocate for effective and efficient carbon pricing, we met with the British Columbia, Alberta, and Canadian governments and became the first Canadian resource sector company to join the Carbon Pricing Leadership Coalition.

For more detail, see our full goals progress report on page 13.

## Outlook for Energy and Climate Change

Energy will continue to be one of the most significant costs in our business. As such, we will continue to focus on improving our efficiency and reducing our greenhouse gas emissions. In 2017, we will continue to advocate for broad-based, effective carbon pricing, reduce our emissions and support the development of alternative energy technologies: efforts that support United Nations Sustainable Development Goal 13, to take urgent action to combat climate change and its impacts. We will continue to evaluate opportunities for alternative energy at our operations, major projects and legacy properties.

### Learn More

[Teck's Climate Action Strategy](#)

[Carbon Pricing Leadership Coalition](#)



(17) In 2016, we updated the Global Warming Potential values for all of our GHG accounting to align with regulatory requirements. Global Warming Potentials are the factors that convert greenhouse gases – like methane (CH<sub>4</sub>) – to a carbon dioxide equivalent (CO<sub>2</sub>e), thereby standardizing the quantification of GHG emissions. As a result, historical values have been restated to ensure consistency of accounting practices. (18) Fugitive emissions from our coal operations (i.e., estimated methane release) are captured as direct emissions.

# Biodiversity



## What is in this topic?

Includes discussions of management approach and performance related to anticipating and minimizing impacts on species and ecosystems, as well as our approach and performance regarding remediation.

## GRI Indicators and Topic Boundary

304-103, 304-1, 304-2, 304-3, 304-4, G4-MM2

This topic is considered most material by local communities and society in the context of all Teck sites.

## Performance Highlights

Through implementation of our Grizzly Bear Management Plan and partnership with fRI Research, the population of grizzly bears near our Cardinal River Operations has doubled in the last decade.

## Why was Biodiversity a Material Topic in 2016?

Protecting and enhancing biodiversity, which is the abundance and variety of living organisms and ecosystems in nature, is integral to global sustainability. Many of the world's ecosystems are being altered, and loss of biodiversity is a concern. The United Nations has set government and business on a path towards addressing biodiversity on a global scale in their Sustainable Development Goal 15 on sustainably managing forests, combating desertification, halting and reversing land degradation, and halting biodiversity loss.

### Industry Context

Mining activities have the potential to impact biodiversity and to alter ecosystems in a significant and highly visible way. Direct impacts can result from any mining activity that involves land disturbance or discharges to waterbodies or the air. Indirect impacts can result from social or environmental changes that are induced by mining operations, particularly when mining opens up an area for other economic activities and increased habitation. In cases where mines are developed in landscapes where other pressures on biodiversity are present, the potential for cumulative impacts must also be considered. In 2016, the International Union for Conservation of Nature (IUCN) World Congress passed a resolution to call for governments and extractive resource industries to strengthen their avoidance of disturbances to legally protected conservation areas (i.e., parks). Since 2003, the International Council on Mining and Minerals (ICMM) has had a world-leading position statement on avoidance of World Heritage sites and respect for protected areas. ICMM continues to place biodiversity high on its agenda for member support and cross-sectoral collaboration.

### Teck Context

All our operations are adjacent to or within areas of high biodiversity value, including arid and arctic areas, boreal forests and deserts. Communities near our operations depend on the land, plants and animals around them for their quality of life, livelihoods and leisure activities. Indigenous Peoples rely on the land to maintain traditional ways of life. Stakeholders and Indigenous Peoples expect us to contribute to the conservation of biodiversity and to work collaboratively with them to develop integrated approaches to land use.

**Effectively managing biodiversity is integral to meeting regulatory and permit requirements and to maintaining community support for our activities.**

We recognize that our activities have the potential to impact biodiversity and to alter ecosystems in a significant way in the regions where we operate, which can affect both individual species and the provision of critical ecosystem services that communities rely on. It is therefore important for us to operate in a manner that minimizes and mitigates our impacts on biodiversity. Our goal is to have a net positive impact on biodiversity.

## How Does Teck Manage Biodiversity?

In this section, we outline our governance and management systems related to biodiversity, our approach to respecting protected and high biodiversity value areas, our efforts to achieve a net positive impact on biodiversity, our biodiversity management plans, our approach to mine reclamation, and our engagement with communities on biodiversity.

### Governance and Management Standards

Biodiversity is considered throughout all stages of our business; we put this into practice through comprehensive environmental management systems and tools such as our Health, Safety, Environment and Community (HSEC) Management Standards, which call for specific action with respect to biodiversity, land and water.

In line with our sustainability strategy and biodiversity goals, our approach is to first carefully assess how our activities can impact biodiversity prior to disturbance, to develop a biodiversity baseline, and to create and follow site-specific plans that minimize and rehabilitate our impacts, from exploration through to closure. The actions we use to achieve these steps include progressive reclamation, the use of native vegetation species (with seed from local sources where feasible), and the use of the most recent research and techniques. Where it is not possible to avoid or fully rehabilitate impacts, we design and implement biodiversity offsets to move towards a net positive impact on biodiversity.

We aim to minimize our footprint, mitigate our impacts, reclaim our lands for the use of future generations, and continually research and monitor our environments. Our work in biodiversity is integrated into company-wide strategies and standards, and informed by engagement with communities. We focus on respecting protected and high biodiversity value areas, achieving a net positive impact, developing biodiversity management plans, and reclamation.

### Respecting Protected and High Biodiversity Value Areas

Protected areas include those protected by national or regional law or designated by international organizations, including United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage sites and International Union for

Conservation of Nature (IUCN) category Ia, Ib, II, III or IV protected areas!<sup>19</sup> High biodiversity value areas have features that provide essential ecosystems relied on by humans and animals, and they have an abundance of rare, vulnerable or endemic species and/or large areas of relatively intact natural habitat.

As a member of the ICMM, we are committed to not explore or develop in UNESCO World Heritage sites. Currently, none of our operations or projects are located within areas protected by UNESCO or recognized by IUCN; however, the road between Red Dog Operations and the port facility, which is owned by the state-owned Alaska Industrial Development and Export Authority, passes through the Cape Krusenstern National Monument, an IUCN category III protected area.

We have identified protected areas, areas of high biodiversity value, and species at risk that occur within 25 kilometres of our operations and major development projects. We use this information as an input during the development of biodiversity management plans for each operation. A summary of the results of the proximity analysis, including those prioritized by international conservation initiatives such as Ramsar Convention on Wetlands, Key Biodiversity Areas, and World Wide Fund for Nature's Global 200 Priority Ecoregions can be found on the [Biodiversity page](#) on our website.

### Achieving a Net Positive Impact

As a responsible resource company, we create significant opportunities to achieve positive impacts on biodiversity, and on people's ability to benefit from and enjoy nature. Our vision for biodiversity management is to achieve a net positive impact (NPI) on biodiversity in areas affected by our activities.

At our sites, we implement the mitigation hierarchy, a key framework that we use to achieve our vision of NPI on biodiversity.

### Our Targets and Commitments

Implement biodiversity management plans for each of our operations by 2020.

Integrate the consideration of biodiversity into the exploration, construction and closure stages of the mining life cycle by 2020.

Enhance our contributions to biodiversity conservation knowledge through collaboration in research, education and conservation by 2020.

Achieve a net positive impact on biodiversity in regions where we operate through environmental management, reclamation and conservation by 2030.

### \* Material Topic Interconnections

Mine Closure: page 34

Relationships with Indigenous Peoples: page 62

Community Engagement: page 69

Environmental Management: page 103

(19) The IUCN categories are the global standard for classifying protected areas, with category Ia being the most strictly protected area (e.g., a nature reserve).

# How Does Teck Manage Biodiversity?

## Case Study

### Partnering to Maintain and Protect Outdoor Recreation Near Cardinal River Operations



The foothills near our Cardinal River Operations in Alberta are home to vast forested terrain, spectacular lakes and local wildlife. Rich in recreational opportunities such as camping, hiking and fishing, this natural habitat is greatly valued by locals and visitors alike.

The Foothills Recreation Management Association (FRMA), a group of companies and organizations, including Teck, assists in providing recreational opportunities in this region. The FRMA is committed to providing safe and affordable outdoor recreation opportunities through management of 15 campgrounds and eight trail systems in the foothills area near the communities of Hinton, Edson, Robb, Cadomin and Brule, Alberta. Teck has been a proud supporter of the FRMA for over a decade and in 2011 became a main partner through a multi-year community investment.

“Collaborating with Teck through the FRMA has helped to protect and

preserve an incredible region for everyone to enjoy,” said Aaron Jones, West Fraser Timber, founding company of FRMA. “The majority of campsites maintained through the FRMA are in provincial parks, and through some sites, visitors can access Jasper National Park.”

#### **Protecting our Natural Environments in Partnership with Indigenous Peoples**

The FRMA campgrounds and trails are managed by the Fox Creek Development Corporation, an Indigenous-owned and -operated not-for-profit company committed to creating and maintaining jobs for Indigenous Peoples (treaty, non-treaty and Métis) in the Hinton area. This group, which has been involved in environmental protection since the 1970s, has partnered with FRMA from its inception.

The Fox Creek Development Corporation ensures that the natural

environment is protected long into the future. A key mission of the group is to reduce unregistered camping in the Alberta foothills, which also reduces the risk of forest fires, outdoor waste and environmental damage.

Fox Creek is not only contributing to the area’s environmental stewardship, but is also a self-sustaining association, as they are not reliant on Teck’s support of FRMA to continue providing jobs and opportunities to its employees.

#### **Community Values are Teck’s Values**

FRMA provides a unique opportunity to promote environmental conservation that sustains recreational values and provides direct benefits through employment to local Indigenous Peoples. Teck’s support of initiatives such as these are essential activities for our business to be a welcome neighbour in the areas where we operate.

“Cardinal River Operations’ partnership with FRMA is natural. FRMA aligns with our values, including respecting the social values in the areas where we operate and providing benefits to Indigenous Peoples” said Lisa Jones, Senior Coordinator, Community and Aboriginal Affairs, Cardinal River Operations. “Protecting the environment, supporting community values and Indigenous Peoples are key components of our approach to sustainability — this program really represents sustainability in action.”

This region is highly valued for its recreational use and we recognize that we are using lands nearby to mine, which can present potential impacts. That’s why we work hard to mitigate those impacts and have a net positive impact in the region through our support of FRMA and other activities.

To track and demonstrate our net positive impacts, we develop a “ledger” to account for negative and positive impacts on biodiversity. We reduce our impacts on biodiversity through avoidance, minimization and rehabilitation. We then aim to achieve a net positive impact through the use of offsets. This approach is guided by the following principles:

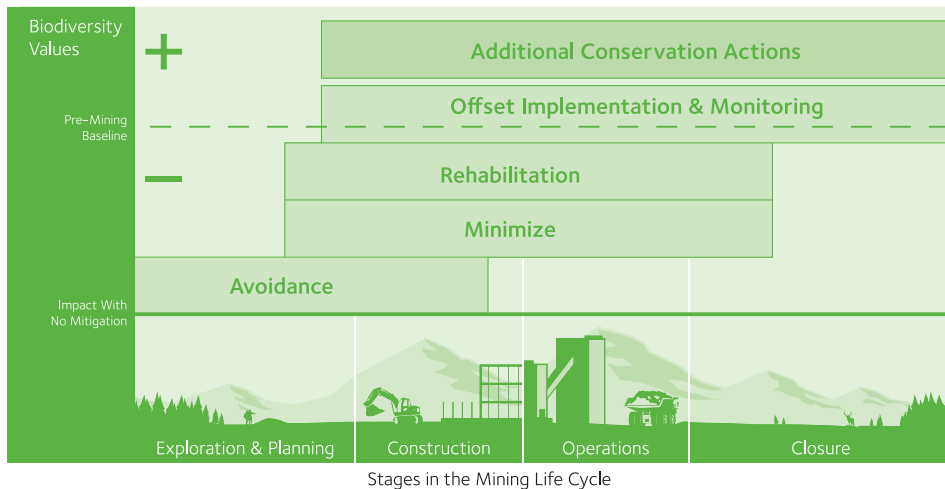
- **Avoid impacts where possible:** Whenever possible, we avoid biodiversity impacts. In some cases, biodiversity features are so valued and/or vulnerable that they may require significant changes in our plans in order to protect critical areas.
- **Minimize impacts that are unavoidable:** At all times, we minimize impacts that are unavoidable, adopting best practices in mine operations in order to reduce the severity of our impacts.
- **Rehabilitate affected areas:** On a progressive basis, we rehabilitate areas in order to re-create biodiversity values. Rehabilitating the land means returning it

to a stable ecological state that does not contribute substantially to environmental deterioration. Reclamation practices can replace much or most of the diversity of the natural habitats that existed prior to mining.

- **Offset any residual impacts:** Even with the best reclamation practices, there are limits to what can be achieved, and it may not be possible to replace all of the important biodiversity features that our mines impact. For these features, we design and implement biodiversity offsets to move towards a net positive impact on biodiversity.

Implementing our biodiversity mitigation hierarchy also requires the consideration of cumulative effects to ecosystems caused by other parties’ past, present and reasonably foreseeable future activities. We plan and implement protective or restorative actions based on our potential contributions to cumulative effects, and we adjust our actions based on the results of ongoing monitoring and scientific studies.

Figure 28: **Implementing our Biodiversity Mitigation Hierarchy to Achieve a Net Positive Impact**



**Biodiversity Management Plans**

In 2015, we accomplished our goal to develop biodiversity management plans at all of our current operations that set out how NPI would be achieved. Biodiversity management plans include:

- A list of ecosystems and biodiversity elements at the site
- A summary of the risks and impacts that the site and its activities pose to these elements

- A plan, developed using the biodiversity mitigation hierarchy, that demonstrates how the site will manage its impacts to achieve a net positive impact for each element
- A list of activities and resources required to implement the plan

In addition to meeting the commitments in our sustainability strategy, our biodiversity management plans also serve to meet aspects of our internal HSEC

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## How Does Teck Manage Biodiversity?

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Management Standards and the Mining Association of Canada's Towards Sustainable Mining Biodiversity Conservation Management Protocol.

To create the biodiversity management plans, operations and advanced projects collect biodiversity information, conduct a preliminary identification of risks and existing mitigation actions, conduct gap analyses and create work plans. We identify risks using a register that scores risks based on biodiversity, social/community, regulatory compliance and reputational factors. Some of the most significant risks identified across our company during biodiversity management planning include species at risk or of special concern, viability of subsistence activities, and our contribution to cumulative impacts on ecosystems such as old-growth forests. For more information on our biodiversity management plans, visit the [Biodiversity page](#) on our website.

Our biodiversity management plans are designed to mitigate these risks. We address the protection of species at risk and those species that may be more common, especially those that are highly valued due to other factors, such as subsistence use by Indigenous Peoples. For examples of some of our work in protecting species at risk, such as grizzly bears and caribou, visit the [Stories page](#) on our website.

### Reclamation

Responsibly closing our sites and managing our legacy properties plays an important role in protecting biodiversity on the lands where mining once took place. Through exemplary reclamation practices, we can replace much or most of the structural and compositional diversity of the natural habitats that existed before we developed our mines. As such, our reclamation activities are making a contribution towards achieving a net positive impact on biodiversity.

While we are still operating at a site, we progressively reclaim portions of the mine site that are no longer required for current or possible future mining purposes. We implement best practices in reclamation and have created an internal community of practice to share knowledge across our

operations. We apply the principle of "equivalent land capability" to reclaim land to the equivalent capability that will support species that live in the area, according to reclamation and land use objectives. We have also implemented research programs to help ensure that we adopt best practices. Our reclamation activities focus on conserving biodiversity and include the development of diverse wildlife habitats, annual wildlife surveys, documentation of wildlife using trail cameras, aerial seeding in mined-out pits, and the development of tracking databases to monitor rare and unusual wildlife sightings.

To plan for these future reclamation obligations, we ensure that we allocate sufficient resources for reclamation in our mine budgets. For more information about our approach to mine closure, see page 35.

During our reclamation planning, we consult local communities and Indigenous Peoples on post-mining land use objectives that can include wildlife and plant habitat as well as recreational and cultural use. In 2016, we updated post-mining land use objectives at our Highland Valley Copper Operations and our steelmaking coal operations in the Elk Valley region of British Columbia. These updated objectives reflect a greater focus on restoring the lands to the natural ecosystem types that existed pre-mining, to the extent feasible. In both locations, we reviewed with communities of interest the land ecosystem types such as dry forests, rock cliffs and wetlands, and other previously identified post-mining land uses. Their feedback was incorporated and we updated some land uses to reflect their perspectives.

### Engagement with Communities

Through engagement with our communities of interest (COIs), we integrate interests and partner with NGOs and government to inform our approach to biodiversity conservation. Biodiversity and land use/access is particularly important to Indigenous Peoples near our operations. For example, at Red Dog Operations, access to land/water during traditional hunting season is a priority that we support through our subsistence committee with NANA.



## What Was Our Performance in Biodiversity in 2016?

We are working to improve our reporting on the biodiversity risks and opportunities at each of our operations and our approach to managing the issues.

### Respecting Protected and High Biodiversity Value Areas, Achieving a Net Positive Impact (NPI) and Engaging with Communities

Table 56: **Key Activities and Accomplishments in Biodiversity in 2016**

| Operation                                     | Steps to Implement Biodiversity Mitigation Hierarchy                                                                                                         | Performance Highlight                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Steelmaking coal operations in the Elk Valley | Developed and tested new quantitative assessment procedure for vegetation/habitat quality                                                                    | An update to our biodiversity program was presented to and discussed with the Biodiversity Management Technical Advisory Group (TAG) in October 2016 in Cranbrook, B.C. Representatives from the Ministry of Forests, Lands and Natural Resource Operations, the Ministry of Environment and Ktunaxa National Council were in attendance. All feedback was supportive of the work completed to date and for the planned future work. In particular, there was support for the new vegetation quality assessment procedure. |
|                                               | Developed species-specific action plans for Parry's towsendia, whitebark pine, compact grimmia, Montana wildrye, American badger, and Gillette's checkerspot | These species-level action plans will provide quantifiable mitigation measures and will support environmental assessment commitments, permit conditions, and enable achievement of NPI at the species level.                                                                                                                                                                                                                                                                                                               |
|                                               | Developed revised end land use objectives                                                                                                                    | Demonstrated to regulators and stakeholders how these objectives relate to, and support the, human-centric land use objectives formerly stipulated.                                                                                                                                                                                                                                                                                                                                                                        |
| Highland Valley Copper                        | Developed revised end land use objectives through engagement with local Indigenous Peoples                                                                   | End land use planning involved a community engagement component and a technical component consisting of a series of ecosystem modelling and mapping tasks that were informed by community and technical meetings.                                                                                                                                                                                                                                                                                                          |

### Reclamation

For an overview of the area reclaimed and disturbed to date, see page 35 in the Mine Closure section.

### Sustainability Strategy Spotlight

In 2016, as part of our 2020 goal to implement biodiversity management plans for each of our operations, we refined end land use objectives at our Highland Valley Copper Operations and steelmaking coal operations based on feedback from stakeholders and improved alignment with corporate biodiversity objectives.

For more detail, see our full goals progress report on page 12.

### Outlook for Biodiversity

In 2017, we will continue to work towards reaching our biodiversity goals set for 2020, including advancing integration of biodiversity into the exploration, construction and closure stages of the mining life cycle. We will also continue to implement, improve and enhance the biodiversity management plans at all operations. For example, at our steelmaking coal operations in the Elk Valley, we will install wildlife cameras to collect and analyze data on wildlife use and movement patterns. At our Highland Valley Copper Operations, we will conduct new reclamation trials to test methods for rehabilitating lands in line with the end land use objectives determined in 2016, shifting from grasslands to forests, for example.

### Learn More

[A Cross-Sector Guide for Implementing the Mitigation Hierarchy, ICMM](#)



## Our Data and Assurance

### Key Performance Indicators Related to Our Material Topics

Starting in 2017, we began reporting a full data set of all of our indicators into a single spreadsheet available for download online, see the [2016 Sustainability Performance Data page](#) on our website.

Table 57: **Selected Performance Indicators**

| Material Topic                                    | Performance Indicators                                                                                   | Target                                                                                   | 2016          | 2015   | 2014   | 2013   |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------|--------|--------|--------|
| Economic Performance and Contributions            | Amount of funds disbursed through community investment (in millions)                                     | At least 1% of our average annual pre-tax earnings during the preceding five-year period | <b>\$12</b>   | \$17   | \$20   | \$22   |
| Our Workforce                                     | % of women working at Teck                                                                               | Increase % of women at Teck                                                              | <b>15%</b>    | 14%    | 14%    | 15%    |
| Our Workforce                                     | % of total turnover                                                                                      | –                                                                                        | <b>10%</b>    | 10%    | 12%    | 8%     |
| Mine Closure                                      | Hectares of land reclaimed                                                                               | –                                                                                        | <b>97</b>     | 250    | 77     | 434    |
| Health and Safety of Our Workforce                | Work-related fatal injuries                                                                              | Zero fatalities                                                                          | <b>0</b>      | 0      | 2      | 0      |
| Health and Safety of Our Workforce                | Total Recordable Injury Frequency Rate                                                                   | Reduce rate of overall total recordable injuries                                         | <b>1.11</b>   | 1.24   | 1.01   | 1.26   |
| Relationships with Indigenous Peoples             | Procurement from Indigenous suppliers (in millions)                                                      | –                                                                                        | <b>\$128</b>  | \$142  | \$161  | \$127  |
| Community Engagement                              | # of significant disputes                                                                                | Zero significant disputes                                                                | <b>4</b>      | 3      | 1      | 3      |
| Water Management                                  | % of water reused and recycled at our operations                                                         | –                                                                                        | <b>150</b>    | 155    | 161    | 149    |
| Water Management                                  | New water use intensity per tonne of raw coal processed at coal operations (in cubic metres)             | –                                                                                        | <b>0.40</b>   | 0.42   | 0.38   | 0.43   |
| Water Management                                  | New water use intensity per tonne of ore processed at milling and flotation operations (in cubic metres) | –                                                                                        | <b>0.39</b>   | 0.39   | 0.41   | 0.46   |
| Tailings and Mine Waste Management <sup>(1)</sup> | % of tailings review boards at active tailings storage facilities                                        | –                                                                                        | <b>100%</b>   | 100%   | –      | –      |
| Air Quality                                       | Sulphur dioxide emissions from stacks, stationary and mobile fossil fuel combustion                      | –                                                                                        | <b>4,710</b>  | 4,505  | 3,924  | 4,415  |
| Energy and Climate Change <sup>(2)</sup>          | Energy consumption in terajoules (TJ)                                                                    | 2,500 TJ reduction by 2020                                                               | <b>42,538</b> | 42,217 | 45,336 | 45,556 |
| Energy and Climate Change <sup>(2)</sup>          | GHG emissions by direct CO <sub>2</sub> e in kilotonnes (kt)                                             | 275 kt reduction by 2020                                                                 | <b>2,925</b>  | 2,805  | 3,066  | 2,722  |

(1) This indicator was tracked for the first time in the 2015 report and, as such, historical data is not available. However, tailings review boards have previously been active at a number of our sites.

(2) 2011 is our baseline year for these targets.

## Methodology and Restatements

The scope of this report covers all of the operations managed by Teck and also, where appropriate, key issues at exploration and development projects and at joint venture operations. Data for joint ventures not operated by Teck is not presented unless otherwise stated. Operations managed by Teck that are covered by this report are:

- Cardinal River
- Carmen de Andacollo
- Coal Mountain
- Elkview
- Fording River
- Greenhills
- Highland Valley Copper
- Line Creek
- Pend Oreille
- Quebrada Blanca
- Red Dog
- Trail Operations

Joint venture operations not managed by Teck, but covered in some areas of this report are:

- Antamina
- Wintering Hills Wind Power Facility  
(sold on March 1, 2017)
- NuevaUnión
- Fort Hills

This report discloses sustainability data for the fiscal year ending December 31, 2016. Assessment of material issues continued through the first quarter of 2017. The consolidated data for key indicators can be found in the Selected Performance Indicators table on page 128.

Unless otherwise stated, we report data for our operations on a 100% ownership basis (e.g., for a 97.5%-owned operation, we report 100% of the data). Data is reported using the metric system and Canadian dollars, unless otherwise stated. Unless otherwise stated, all workforce data is limited to permanent and temporary employees.

Where available, we include comparative historical data to demonstrate trends. Historical data is reported based on the scope of the report for the respective year. The scope of the report can change year to year, depending on acquisitions or sales of assets. In our efforts to continually improve and standardize our annual reporting process, the interpretation of data from year to year can often change. Certain comparative amounts for prior years have been reclassified or restated to conform to the presentation adopted for this reporting period.

### Cautionary Note on Forward-Looking Statements

Certain statements contained in this report constitute forward-looking statements within the meaning of the *United States Private Securities Litigation Reform Act of 1995* and forward-looking information within the meaning of the *Securities Act (Ontario)* and comparable legislation in other provinces (collectively, “forward-looking statements”), concerning our business, goals, operations and strategy. 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 report include, but are not limited to, statements relating to our sustainability goals and plans and our expectations regarding those goals and plans, as well as statements regarding planned capital investments and the life of certain of our operations. The forward-looking statements in this report are based on current estimates, projections, beliefs, estimates and assumptions of the management team and are believed to be reasonable, though inherently uncertain and difficult to predict. 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: operational problems, regulatory action, changes in laws and governmental regulations, development and use of new technology, 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](http://www.sedar.com) and in public filings with the United States Securities and Exchange Commission at [www.sec.gov](http://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.

# Independent Assurance Report

To the Board of Directors and management of  
Teck Resources Limited

## Scope

We have been engaged by Teck Resources Limited (Teck) to perform an independent limited assurance engagement on selected sustainability subject matter areas presented within the Teck 2016 Sustainability Report (the Report) for the year ended 31 December 2016.

### Selected subject matter

Our limited assurance engagement was performed on the following selected subject matter:

- Teck's assertion that it has incorporated the requirements of the 10 Sustainable development principles of the International Council on Mining and Metals (ICMM Subject Matter 1) into its own policies, strategies and standards.
- Teck's assertions regarding the approach that it has adopted to identify and prioritize its material sustainable development risks and opportunities (ICMM Subject Matter 2).
- Teck's assertions regarding the existence and status of implementation of systems and approaches used to manage the following selected sustainable development risk areas (ICMM Subject Matter 3):
  - Health and safety;
  - Energy and climate change;
  - Water;
  - Community and indigenous peoples;
  - Biodiversity;
  - Emergency preparedness; and
  - Air quality
- Teck's company-wide reported performance data for sustainable development risk areas identified under ICMM Subject Matter 3 (such reported performance data is referred to as ICMM Subject Matter 4); data for reviewed performance measures, listed below, is included in the addendum: "selected performance measures reviewed":
  - Number of work-related fatalities, number of lost-time injuries, and lost-time injury frequency;
  - Direct, indirect and total greenhouse gas (GHG) emissions by weight;
  - Total new water use (including groundwater, surface water and other sources);
  - Total number of significant disputes relating to land use;
  - Customary rights of local communities and Indigenous Peoples;
  - Area reclaimed during the current year, total disturbance to date;
  - Air quality – SO<sub>2</sub> emissions; and

- Air quality - Percentage of selected community-based air quality stations (three stations) with annual mean concentrations of ambient PM<sub>2.5</sub> within WHO guidelines
- Teck's self-declaration of reporting in accordance with the Global Reporting Standards (GRI Standards) Sustainability Reporting Guidelines.

### Reporting criteria

Teck has described its approach to reporting material sustainability issues, performance measures, statements and claims related to the subject matter in the "About our Report" section of the Sustainability Report. The subject matter areas above have been assessed against the definitions and approaches contained in the following standards and principles:

- ICMM principles and mandatory requirements set out in ICMM Position Statements; and Global Reporting Standards and the G4 Sector Disclosures for Mining and Metals.

### Independence and Quality Control

We have complied with relevant independence requirements and other ethical requirements of the *Code for Ethics for Professional Accountants* issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. PricewaterhouseCoopers applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### Responsibilities

#### Teck Resources Limited

The report has been prepared by management of Teck who are responsible for the collection and presentation of the subject matter in accordance with the Reporting criteria. Teck is a member of the ICMM and is therefore committed to obtaining assurance over specified subject matter in its Report in line with ICMM's Sustainable Development Framework: Assurance Procedure (the Framework).

#### PricewaterhouseCoopers LLP

Our responsibility is to express a limited assurance conclusion on the selected subject matter based on the limited assurance procedures we have performed and the evidence we have obtained.

We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements 3000 (ISAE 3000), "Assurance Engagements other than Audits or Reviews of Historical Financial Information" published by the International Federation of Accountants. This standard requires that we comply with independence requirements and plan the engagement so that it will be performed effectively.

The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures and agreeing or reconciling with underlying records. Given the circumstances of the engagement, our procedures included but were not limited to:

- Making enquiries of relevant management of Teck;
- Evaluating the design of the key processes and controls for managing and reporting the performance data within the selected subject matter;
- Limited testing of performance data, on a selective basis, substantively at both an operational and corporate level;
- Undertaking analytical procedures over the performance data; and
- Reviewing a sample of relevant management information and documentation supporting assertions made in the selected subject matter.

#### Limited assurance

This engagement is aimed at obtaining limited assurance for our conclusions. As a limited assurance engagement is restricted primarily to enquiries and analytical procedures and the work is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, and the procedures performed in response to the assessed risks.

#### Inherent limitations

Non-financial performance information is subject to more inherent limitations than financial information, given the characteristics of the information and the methods used for determining and

calculating such information. Qualitative interpretations of relevance, materiality and the accuracy of data are subject to individual assumptions and judgments. Furthermore, the nature and methods used to determine such information, as well the evaluation criteria and the precision thereof, may change over time. It is important to read our report in the context of evaluation criteria.

#### Restriction on use

Our responsibility in performing our limited assurance activities is to the management of Teck only and in accordance with the terms of engagement as agreed with them. We do not therefore accept or assume any responsibility for any other purpose or to any other person or organization. Any reliance any such third party may place on the Report is entirely at its own risk.

#### Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the selected subject matter for the year ended December 31, 2016 has not been prepared, in all material respects, in accordance with the Reporting criteria.



PricewaterhouseCoopers LLP  
Vancouver, B.C.  
Chartered Professional Accountants  
April 27, 2017

## Addendum: Selected Performance Measures Reviewed

The following corporate-wide performance measures were included in PwC's review of selected sustainability subject matter areas within Teck's Sustainability Report for the year ended December 31, 2016.

| Performance Measure                                                                                                                                                           | 2016        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Number of fatalities                                                                                                                                                          | 0           |
| Number of lost-time injuries (LTI)                                                                                                                                            | 73          |
| Lost-time injury frequency (LTIF)                                                                                                                                             | 0.42        |
| GHG emissions — direct scope 1 (CO <sub>2</sub> e kt)                                                                                                                         | 2,552       |
| GHG emissions — indirect scope 2 (CO <sub>2</sub> e kt)                                                                                                                       | 374         |
| GHG emissions — indirect scope 3 (use of sold products)(CO <sub>2</sub> e kt)                                                                                                 | 79,053      |
| New water use (m <sup>3</sup> )                                                                                                                                               | 117,930,000 |
| Area reclaimed during the current year (ha)                                                                                                                                   | 97          |
| Total land disturbed and yet to be rehabilitated (ha)                                                                                                                         | 22,872      |
| Total number of significant disputes relating to land use and the customary rights of local communities and Indigenous Peoples                                                | 4           |
| Air quality — SO <sub>2</sub> emissions (tonnes)                                                                                                                              | 4,710       |
| Air quality — Percentage of selected community-based air quality stations (three stations) with annual mean concentrations of ambient PM <sub>2.5</sub> within WHO guidelines | 100         |

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*Setting Possibilities in Motion*



[2016 Annual Report](#)



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