# Essentials

2015 Sustainability Report



### **About This Report**

The 15th annual Teck Sustainability Report covers the economic, social and environmental topics that were most important to our communities of interest (COIs) and to our business in 2015. In line with the fourth version of the Global Reporting Initiative (GRI) Guidelines, our report is structured around Teck's material topics as outlined on page 20 and is in accordance with G4 Core. This report is focused on demonstrating the connection between our sustainability performance and financial performance. Throughout the report, we have provided greater context about how our sustainability activities are integrated into our business and the outcomes of our activities in the communities and regions near our operations. Our 2015 Annual Report provides further detail on our financial and operational performance.

The scope of this report covers all of the operations managed by Teck and, where appropriate, key issues at exploration projects, development projects, joint venture operations and legacy properties. Data for joint ventures not operated by Teck is not presented unless otherwise stated. Our Duck Pond Operations closed in June 2015 and we have included relevant data from this site. Deloitte LLP independently reviewed our application of the GRI G4 Guidelines 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 page 130 for their assurance letter.

More detailed information can be found on our website <u>www.teck.com</u>, including the GRI G4 Index, policies and procedures, memberships and partnerships, and detailed information on our sustainability strategy and management practices. If you have any questions about this report, email us at <u>sustainability@teck.com</u>.

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# 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, Canada, we own or have an interest in 12 mines, one large metallurgical complex, a wind power facility, 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 corporate strategy is focused on exploring for, developing, acquiring and operating world-class, long-life assets that operate through multiple price cycles in stable jurisdictions. We maximize productivity and efficiency at our existing operations, maintain a strong balance sheet, and are nimble in recognizing and acting on opportunities. The pursuit of sustainability guides our approach to business and we recognize that our success depends on our ability to establish safe workplaces for our people and collaborative relationships with communities.

#### **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 unique interests and aspirations of Indigenous Peoples.	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 Business Units**

Steelmaking Coal	Copper	Zinc	Energy
We are the world's second-largest	We are a top 10 copper producer	We are the world's third-largest	We are building an energy
seaborne exporter of steelmaking	in the Americas, with four operating	producer of mined zinc, and	business through the development
coal, with six operations in Western	mines in Canada, Chile and Peru,	operate one of the world's largest	of Canadian oil sands projects
Canada and significant high-quality	and copper development projects	fully integrated zinc and lead	with the potential to generate
steelmaking coal reserves.	in North and South America.	smelting and refining facilities.	long-term value.





# Message from the CEO

Donald R. Lindsay President and Chief Executive Officer

As we reflect on 2015 and look to the year ahead, it is clear that the mining industry is facing increasing pressures across all facets of our business. Despite a prolonged and severe downturn in global commodities markets, Teck and its people maintain a dedicated and disciplined approach to managing economic, social and environmental risk. It is this dedication and discipline that defines who we are as a responsible resource company and, importantly, how we act in an ever-changing world.

# Economic, Social and Environmental Performance Highlights

No aspect of our performance is more important to Teck than the health and safety of our people. In 2015, we continued to build on our actions to improve safety performance, achieving a 25% reduction in our High-Potential Incident frequency compared to 2014 and we had no fatalities. However, our total reportable injury and lost-time injury frequency edged upwards, making it clear that we must remain diligent as we work to reach our ultimate goal of everyone going home safe and healthy every day.

Our operating performance in 2015 was very strong. All operations reduced production costs and all of our business units met or exceeded production guidance. As a result, despite record low commodity prices, all of our major operating mines remained cash flow positive over the year. Given the substantial decline in commodity prices, we continued to take action to maintain balance sheet strength and reduce costs. As part of our focus on cost reduction, we are reducing our workforce by a further 1,000 positions across Teck's offices and operations by the end of 2016.

Recognizing and respecting the rights of Indigenous Peoples remained a significant focus for Teck. In 2015, we instituted our Indigenous Peoples Policy, formalizing our commitment to working with Indigenous Peoples to ensure their rights, cultural heritage and traditional land use are respected. We also advanced a number of negotiations on agreements with Indigenous Peoples near our operations and projects.

We continued to strengthen our environmental performance and management practices in 2015. As part of this work, last year, we launched a project to pilot the use of liquefied natural gas (LNG) as a haul truck fuel at our Fording River steelmaking coal operation — the first such use of LNG fuel at a Canadian mine. Using LNG fuel has the potential to significantly cut  $CO_2$ emissions and reduce our fuel costs. We also achieved a major milestone in the implementation of the Elk Valley Water Quality Plan in southeastern British Columbia with the commissioning of our first full-scale water treatment facility at our Line Creek Operations. The facility is now successfully removing selenium and nitrate from mine-affected waters, helping us achieve the goals of our watershed-based plan to address water quality challenges in the region. As part of our ongoing efforts to improve air quality and reduce dust in the Andacollo region of Chile, Carmen de Andacollo Operations began implementing a detailed Atmospheric Decontamination Plan with Chile's Ministry of Environment and municipal government officials. Under the plan, we are targeting a 65% reduction in dust emissions over the next two years.

Our sustainability performance was recognized in 2015 by a number of prominent ranking institutes. We were named to the Dow Jones Sustainability World Index (DJSI) for the sixth consecutive year, the Global 100 Most Sustainable Corporations list by Corporate Knights for the fourth consecutive year, and the FTSE4Good Global Index for the first time.

### **Our External Environment**

We continually analyze the issues and trends shaping the world around us to help guide our approach to responsible resource development. We gather information and consult with our communities of interest to identify and prioritize the risks and opportunities that have the greatest potential to impact our business.

Like our industry peers, we continue to be affected by the ongoing downturn in commodity markets and low prices for mineral products, which impact all aspects of our business. Throughout 2016, we will continue to take steps to reduce costs and improve efficiency across our operations to ensure we emerge stronger from this challenging period.

The 21st Conference of the Parties (COP21) set out a global path forward to addressing the challenge of climate change and increased the industry's focus on the role of mining and metals in the transition to a low-carbon economy. We recognize that human activities are contributing to climate change and we are committed to reducing our own carbon footprint and supporting society's transition to a lower-carbon economy. With a significant portion of our energy use coming from renewable power sources, such as hydroelectricity, Teck is well positioned as the world transitions to a low-carbon future.

Breaches of tailings dams operated by other mining companies have reinforced the importance of health and safety, tailings management and emergency preparedness. We have further strengthened our existing high standards and are working with partner organizations such as the International Council on Mining and Metals (ICMM) to support improved tailings management practices across the industry.

### **Our Sustainability Strategy**

Our approach to responsible resource development is guided by our sustainability strategy, which sets out short- and longterm goals in six specific areas of focus: Community, Our People, Water, Energy and Climate Change, Air, and Biodiversity.

In 2015, we marked five years since the development of our strategy and the completion target date for our first set of short-term goals. Thanks to the hard work of employees across our operations, we achieved all 28 of our short-term goals on time and, in some cases, exceeded them. Achieving these goals has led to improvements in cost performance and efficiency at our sites, including reductions in energy use and greenhouse gas, strengthened water and biodiversity management, and improved safety performance.

Upon reaching this five-year mark of our strategy, we undertook a review to establish our next set of short-term sustainability goals that will take us further on the road to our long-term 2030 goals. Consistent with our desire to remain focused on the most important challenges and opportunities facing our company, we have elevated 'Air' to the status of a focus area and strengthened our emphasis on climate change.

## **Our Outlook**

We continue to participate in organizations that help guide sustainability practices in our industry, including ICMM, the Mining Association of Canada and the United Nations Global Compact. In September 2015, the United Nations adopted the Sustainable Development Goals (SDGs), a set of 17 ambitious goals and 169 targets that aim to shift the world onto a sustainable path. These goals include taking action on climate change, eliminating poverty, creating employment, reducing inequality, ending hunger and improving cities, among others. Through our interactions with communities, the products we produce and the economic activity we generate, the mining industry is well positioned to make a contribution toward achieving the SDGs. We believe that strong partnerships between the private sector, civil society, government and non-governmental organizations (NGOs) will be critical in advancing progress toward achieving the SDGs. This global effort will help to guide us as we work to sustainably and responsibly develop mineral resources while also contributing to creating a better future for people, communities and the world.

As we look ahead, we know that our continued success as a responsible resource company depends on our ability to anticipate and respond effectively to the risks and opportunities facing us. By staying focused on the essentials of our business — productivity, financial strength, safety and sustainability — Teck and its people will have the capacity to further enhance our performance and meet the challenges of an evolving world.

Donald R. Lindsay President and Chief Executive Officer Vancouver, B.C., Canada April 27, 2016

# Our Approach to Business and Sustainability

The success of our business is dependent on our ability to create value in a way that meets the needs of the company, our shareholders and our COIs while accounting for the broader environmental, social, and economic context in which Teck operates. This requires us to understand the evolving global environment and to take an integrated approach to identifying, prioritizing and managing risks and opportunities.

Through engagement with our communities of interest 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 those topics based on their potential and actual impact on our business and COIs. Our 2015 material topics are summarized on page 20. These topics, as well as broader issues, overlap and may require trade-offs. As such, they require effective collaboration among departments and business units. One example is water use and quality, which not only requires sound engineering and water management, but also effective engagement with local communities and Indigenous Peoples and comprehensive understanding of the energy intensity associated with water use.

Identification and prioritization of risks and opportunities is therefore integrated into every aspect of our business activities and guides the development and implementation of our strategies, policies, management practices and standards (detailed on page 11). That includes our sustainability strategy (detailed on page 14), which was recently updated to reflect emerging and evolving risks and opportunities in areas of air and energy and climate change. More information on emerging risks can be found in the material topic sections throughout the report.

Our integrated approach is further embedded on a companywide basis through our five-year business planning and objective setting process. At an employee level, business objectives inform individual objectives to ensure our efforts are aligned and focused on mitigating priority risks and taking advantage of the most beneficial opportunities. Our compensation program is linked to safety and sustainability through individual, department and company-wide objectives. Successfully executed, our integrated framework allows us to deliver products essential to people while minimizing negative impacts and maximizing benefits.

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

#### Figure 1: Integrated Business Sustainability Framework



# Life Cycle Approach to Managing Risks and Creating Value

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.

### Value Chain Stakeholders

Suppliers	We rely on an international network of suppliers to provide the products, materials and goods needed to support our operations. These include: heavy mining equipment, tires and spare parts, fuel and lubricants, electricity, materials (including grinding media, liners, and ground engaging tools), explosives and chemicals for processing.			
Service Providers	We outsource many operational activities to third-parties. This is typically due to their cost-effectiveness or technical capabilities, or for strategic reasons (e.g., where we see benefit in concentrating on our core business capabilities). Typical activities carried out by service providers and contractors include heavy mining equipment maintenance, transport and logistics, mechanical, electrical, construction work and general, exploration drilling and technical/engineering consultancy.			
Joint Venture Partners	Ownership of some of our assets is shared with joint venture partners. This includes, for example, our Antamina mine in Peru and the Fort Hills oil sands project in Alberta (BHP Billiton, Glencore and Mitsubishi Corporation; and Suncor Energy Inc. and Total E&P Canada Ltd., respectively) and Project Corridor with Goldcorp in Chile.			
Customers	Many of our products need to be further processed before they are marketable. As a result, we either carry out refining and processing ourselves, or we sell our unfinished products to third-party processors. Our key customers include third-party smelters and refineries of copper, zinc and other metals (including lead and silver); third-party steel mills producing steelmakin coal; and direct purchasers/traders of various metals and chemical by-products.			
End Users and their Geographic Locations	<ul> <li>End users that we encourage to use our products responsibly include the following:</li> <li>Engineering and construction industry: steel, zinc, copper</li> <li>Transportation, automobile and logistics industry: steel, zinc, copper</li> <li>Electronics and telecommunications industry: copper</li> <li>Power generation and transmission industry (including renewable energy): copper</li> <li>Domestic appliance industry: steel, copper</li> <li>Consumers (including consumer goods and nutritional supplements): steel, zinc and copper</li> <li>Agricultural industry: zinc</li> <li>Multiple users: energy</li> </ul>			

#### Inputs and Outputs of the Mining Life Cycle

Inputs	Outputs
Natural capital: including water,	Physical:
	Copper: 358 000 toppes in concentrate and refined
Human capital: including the skills and expertise of our workforce	· Zinc: 658,000 tonnes (in concentrate) and 307,000 tonnes (refined)
Political and legal capital: including government licences and regulatory permits	Economic: • Value of salaries and benefits: \$1.3 billion • Payments to our host governments in the form of taxes and royalties: \$255 million Spanding on sumpliary (includes fuel and assume associate sumplies, maintenance and repair sumplies), \$1.0 billion
Financial capital: including equity and debt financing	Spending on suppliers (includes rule and energy, operating supplies, maintenance and repair supplies). \$ 1.8 billion     Spending on contractors and consultants: \$482 million     Community investments: \$16.7 million
Social capital: including community consent and relationships	· Dividends to shareholders: \$374 million
<b>Business capital:</b> including our relationships with joint venture partners, contractors and suppliers	<ul> <li>Tailings produced: 69 million tonnes of tailings and fine coal refuse</li> <li>Carbon dioxide-equivalent emissions: 2,805 kilotonnes</li> <li>Water outputs: 326 million cubic metres (m<sup>3</sup>)</li> </ul>

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# Managing Risks and Creating Value Throughout the Mining Life Cycle

In the graphic below, we outline how we provide economic, social and environmental value for communities of interest from exploration through to closure through integrated risk management. Our communities of interest include investors, local communities in areas where operate, Indigenous Peoples, employees, government, contractors and suppliers. For more detail, <u>go to www.teck.com</u>. 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 and manage those impacts accordingly.



# Engaging Communities of Interest

We engage with COIs throughout the mining life cycle. Our direct engagement of COIs is organized into three broad levels: information disclosure, dialogue and participation. All such engagement is informed by the <u>AA1000 principles</u> of inclusivity, materiality and responsiveness. For more information <u>about direct and indirect COI engagement, visit our website</u>. Examples of the COIs we engaged in 2015, and the issues raised by and with them, are set out in Table 1. 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.

### Table 1: Examples of Key Communities of Interest, Issues and Responses

Category	Specific COI	Example key issue in 2015	Teck response in 2015	Outcome	Page
Investors	Current and potential shareholders and lenders	Decline in commodity prices and profits	Built on our successful cost reduction program and took steps to strengthen our balance sheet in response to the decline in prices of our core products	Engaged employees to achieve cost reduction program targets and announced a plan to further reduce costs by \$650 million in 2016; completed two precious metal streaming transactions generating approximately \$1.0 billion of cash	23
Government	Government of British Columbia, Canada	Economic impact of downturn in the mining industry	Worked with government to enhance the competitiveness of the industry with a focus on Provincial Sales Tax (PST) and electricity rates	In late 2015, the B.C. government announced it will allow mining companies to temporarily defer their electricity payments to support the mining industry and it will conduct a review of sales tax	47
Industry	Mining Association of Canada (MAC)	Impact of tailings dam incidents	Collaborated with industry partners through MAC to review tailings storage facility standards and critical controls	We played an active role in an independent task force commissioned by the MAC to review tailings management requirements and guidance under MAC's Towards Sustainable Mining (TSM) initiative	91
Civil Society	UNICEF, the Government of Canada	Zinc deficiency affects two billion people worldwide	Continued to build on our Zinc & Health program to raise awareness and contribute to short- and long-term solutions to zinc deficiency worldwide	Partnered with UNICEF and the Government of Canada to launch the 25th Team, a network of Canadian women committed to saving the lives of women and children in developing countries	Learn more on www. teck.com
People	Teck employees and contractors	Employee safety	Investigations into seven Potentially Fatal Occurrences in 2015	Developed corrective actions and shared investigation results with all operations in order to prevent similar occurrences	57

### Table 1: Examples of Key Communities of Interest, Issues and Responses (continued)

Category	Specific COI	Example key issue in 2015	Teck response in 2015	Outcome	Page
Communities	Communities and First Nations in the Elk Valley and regulators in B.C.	Increasing trend of mine-related water quality constituents in Elk River watershed	Implementing the Elk Valley Water Quality Plan to address selenium and other water quality constituents with input from COIs	Completed commissioning of the West Line Creek Active Water Treatment Facility; participated in the Environmental Monitoring Committee, which reviewed 19 reports and study designs	99
Communities	Community of Andacollo in Chile	Concerns regarding dust connected with local mining operations	Engaged with communities and government to create a plan to improve air quality	Implemented the Atmospheric Decontamination plan with measures to improve air quality	108
Indigenous Peoples	lñupiat people near Red Dog Operations	Concerns about the impact of dust on local ecosystems and subsistence foods	Ongoing monitoring and evaluation of our performance in reducing fugitive dust emissions	Continued dust suppression activities to protect air quality and reduce the impact on local ecosystems including subsistence foods	107

# 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 Management Proxy Circular, available on our website <u>www.teck.com</u>.

The Board provides oversight and delegates responsibility for sustainability issues to specific committees that meet at least quarterly. The following table outlines these key committees of the Board and their associated role in oversight of sustainability issues:

Committee of the Board	Responsibilities related to sustainability issues Oversees health, safety and sustainability policies, systems, performance and auditing, including our Health, Safety, Environment and Community Management Standards.		
Safety and Sustainability Committee			
Corporate Governance and Nominating Committee	Considers and recommends corporate governance programs to the Board, proposes nominees for Board and committee appointments, and assists with Board, committee and director evaluations to ensure that our governance practices are rigorous, relevant and appropriate to Teck.		
Audit Committee	Assists the Board in its oversight of a number of functions including financial reporting, disclosure practices and auditing, anti-fraud programs and controls, including management's identification of fraud risks and implementation of anti-fraud measures, and the overall governance of pension plans.		
Compensation Committee	Responsible for recommending compensation policies to the Board and for the annual review of senior officer and director compensation. Reviews the CEO's corporate goals and objectives and recommends them to the Board, evaluates CEO performance in these areas and makes recommendations to the Board on CEO compensation.		

We take measures to develop and enhance the Board of Directors' and the Safety and Sustainability Committee's understanding of economic, environmental and social topics at regular meetings, strategy sessions and site visits. Some recent examples include:

- Hosting external speakers on the current global economic climate for our Board of Directors
- Conducting site visits for the Safety and Sustainability Committee: in 2015, site visits were conducted at Elkview Operations where an overview of safety, water quality, and biodiversity initiatives was provided and at Trail Operations where there were presentations on safety, water, and air quality management
- Special presentations to the Safety and Sustainability Committee: in 2015, these presentations included the following topics: Indigenous agreements, mine closure, permitting, tailings management, water quality matters, climate change, safety and other topics of importance to COIs

### **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, 14.3% of the Board, or two out of 14 directors, are women. Please view our 2016 Management Proxy Circular, pages 31–32, 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 as outlined in the following policy documents:

- Charter of Corporate Responsibility A set of principles related to business ethics, health, safety, environment and community that governs all operating practices and provides our overarching sustainability governance commitment
- **Code of Ethics** Our dedication to upholding high moral and ethical standards, specifying basic business conduct and behaviour
- Anti-Corruption Policy Our commitment to work against corruption in all its forms, including extortion and bribery
- **Code of Sustainable Conduct** Our commitment to sustainable development, focusing on aspects such as community and environmental performance

- **Health and Safety Policy** Our commitment to providing leadership and resources for entrenching the core value of safety
- Human Rights Policy Our commitment to respecting the rights of our employees, the communities in which we operate and others affected by our activities
- Indigenous Peoples Policy Our commitment to respect the rights, cultures, interests and aspirations of Indigenous Peoples

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

Our HSEC Management Standards include overarching corporate policies, guidelines and site-level policies and procedures. This structure is illustrated in <u>Figure 26 on our website</u>. Our HSEC Management Standards integrate requirements from our internal corporate policies and external sustainability commitments and, as such, they form the framework for implementing sustainability at our company. The Standards provide a consistent and systematic methodology 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 the performance 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 at <u>www.teck.com</u>.

### **Executive Remuneration**

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 is about 15% to 20% of their overall bonus. In addition, the personal component of executive bonus ratings often includes specific objectives related to HSEC. Executive remuneration is fully disclosed in our 2016 Management Proxy Circular.

### **Management Committees and Corporate Functions**

We have a number of management committees that are responsible for managing sustainability issues. For more information on these management committee functions, visit the Sustainability Governance section of www.teck.com. Our senior management team is responsible for overseeing our sustainability strategy including goal development and progress against our goals. The structure in Figure 25 on www.teck.com provides an overview of how sustainability is structured at Teck.

### 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 or to 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 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**

Inbound supply chain risks are initially identified as part of the spend analysis and identification of critical suppliers by our Supply Management group. Outbound supply chain risks are identified by the transportation group as well as 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. Furthermore, 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 communicate our expectations for suppliers and contractors through our Recommended Protocols for Suppliers and Service Providers. The Protocols include 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 Protocols into our procurement and contract processes.

#### **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. Furthermore, 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 minimum standards. As a condition of doing business with us, each on-site supplier/ contractor (of 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

#### **Supplier 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 potential impacts and activities they conduct. Suppliers are asked to self-assess their performance against the focus areas set out in the Protocols. 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.

In 2015, we developed a Supply Management Best Practices Implementation Manual to support supply management teams across our company. The implementation of best practices will support improvements with our suppliers and service providers toward achieving expectations for sustainability performance and responsible business practices.

### **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 Sustainable Development Framework and the Mining Association of Canada's 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 influence global sustainability trends. We also make commitments that guide and inform our sustainability performance. <u>A full list of Teck's memberships and partnerships</u> related to sustainability is available on www.teck.com.

Teck is also working to advance progress on the SDGs. We recognize that the mining industry has an opportunity to positively contribute to all 17 of the SDGs. However, Teck has chosen to focus on three goals in particular: Goal 3, ensure healthy lives and promote well-being for all at all ages; Goal 8, promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all; and Goal 13, take urgent action to combat climate change and its impacts. <u>An overview of the work Teck is doing to address each of the</u> <u>17 Sustainable Development Goals is available on www.teck.com</u>.

# Sustainability Strategy

In 2010, we formalized a sustainability strategy to address the greatest risks and opportunities facing our business in the area of sustainability. Our strategy has been integrated into decision-making by embedding it into our HSEC Management Standards, corporate, site and employee annual objectives and remuneration.

Teck's sustainability strategy is organized around six focus areas. A focus area is a topic that has a material impact on our business and COIs, represents an area of significant opportunity and/or risk and requires company-wide internal engagement. For each focus area, we established a vision, long-term goals to 2030 and short-term goals to 2015 that are coordinated across Teck by corporate and site leads. A report on our progress against our 2015 goals can be found on page 15.

2015 marked the end of our first set of short-term goals. It also marked the first major milestone in the path to achieving our longer-term goals. This provided us with the opportunity to review and evaluate the scope of our strategy. To undertake this review, we engaged external subject matter experts and brought together employees from across our operations into focus area working groups to examine internal and external sustainability risks and opportunities and determine the actual and potential impact to our business. Based on this analysis, there were three major changes to our sustainability strategy as outlined below:

- The addition of 'Air' as a focus area. 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, resulted in 'Air' being added as a focus area.
- 2. Renaming the 'Energy' focus area 'Energy and Climate Change' to reflect our increasing focus on climate action. The growing global emphasis on combating climate change by reducing emissions, coupled with increasing regulatory pressure, prompted us to place greater emphasis in this focus area on climate change.
- 3. The withdrawal of '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 removed and 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. Focus area working groups provided recommendations for goal revisions based on an external analysis including best practices, emerging risks, COI feedback and societal expectations. The 2020 goals were developed to ensure we continue to progress towards achieving our 2030 goals. To support the achievement of the 2020 goals, internal plans were developed that outline the key steps for implementation. The senior management team and the Safety and Sustainability Committee of the Board reviewed and approved the changes to the sustainability strategy. For more detail on each of our focus areas including visions, 2020 and 2030 goals, visit www.teck.com.





# Performance Summary of 2015 Sustainability Goals

For each of our sustainability focus areas, we set long-term goals to 2030 and short-term goals to 2015 that build on the work we are doing and set out the path to achieve our vision for sustainability. The following tables summarize our performance against our 2015 Sustainability Goals and introduce our new 2020 goals. Moving forward, we will report annually on our progress against the 2020 goals including the successes and challenges we may face. By the end of 2015, we achieved all of our short-term 2015 goals. A summary of our performance can be found in the table below.

2015 Goals	Performance Summary	2015 Highlights
Community		
<ol> <li>Establish uniform measures to assess social risk and performance and manage activities.</li> </ol>	Completed social baselines, assessments and risks including human rights risk assessments at 100% of operations, development projects and advanced exploration sites where determined to be needed to inform the development of community engagement plans.	<ul> <li>Continued work towards implementation of community aspects of our HSEC Management Standards and expanded our use of Social Management and Responsibility at Teck (SMART) tools to 100% of operations, including integration of social considerations into closure planning.</li> </ul>
2. Implement policies and frameworks to guide interactions with Indigenous Peoples.	Negotiated agreements with the majority of Indigenous Peoples near our operations. In 2015, there were 34 active agreements with Indigenous Peoples in place.	<ul> <li>Established an Indigenous Peoples Policy.</li> <li>Completed Cultural Awareness Training at nine of 12 (75%) of operations.</li> </ul>
<ol> <li>Put processes in place to maximize community benefits and collaboration.</li> </ol>	Developed and implemented a community investment strategy and feedback mechanisms, which are in place at 100% of our operations.	<ul> <li>Provided enabling funds to Red Dog Operations Subsistence Committee to attend government engagement sessions on regulatory changes and co-funded dialogue training for NANA Regional Commission's resource technicians and shareholder development specialists.</li> <li>As part of our strategic community investment plan, we donated \$16.7 million to organizations around the world in 2015, meeting our target of donating 1% of average annual earnings before taxes during the preceding five-year period.</li> </ul>
4. Build our internal capacity.	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. Expanded and implemented use of SMART tools to 100% of operations and sites.	<ul> <li>Completed dialogue training for Communities staff and other key members at our Quebrada Blanca and Carmen de Andacollo operations, Santiago office and Project Corridor.</li> <li>Completed SMART refresher training for 50 employees in exploration globally.</li> <li>Completed Cultural Awareness Training with 300 community-facing employees at 11 sites. Red Dog Operations completed human rights training and completed a comprehensive update to their existing training materials on Indigenous rights and cultural awareness. However, implementation is scheduled in 2016.</li> </ul>
Our People		
<ol> <li>Reduce overall total reportable injuries.</li> </ol>	Reduced total reportable injury frequency by 30% from 2010 to 2015. Our High-Potential Risk Control (HPRC) strategy was implemented at 100% of operations.	<ul> <li>Reduced our High-Potential Incident frequency rate by 25% in 2015 compared to 2014.</li> </ul>
2. Retain existing employees and skills.	Conducted formal performance and development career reviews for 90% of regular salaried employees.	• More than 3,000 employees used our <i>Building Strength with People</i> system to set and track annual and career objectives.
<ol> <li>Increase employee training and development opportunities.</li> </ol>	Developed and executed Leading for the Future, Leading for Excellence and Emerging Leaders programs.	<ul> <li>Engaged 332 employees in leadership development programs.</li> </ul>

# Performance Summary of 2015 Sustainability Goals

2015 Goals	Performance Summary	2015 Highlights			
Our People (continued)					
<ol> <li>Enhance recruitment programs.</li> </ol>	Increased the number of women in operational and technical roles from 439 in 2010 to 686 in 2015 — a 56% increase.	<ul> <li>Improved recruiting practices and processes to guide recruiters, operations leaders and human resources leaders.</li> </ul>			
<ol> <li>Embed sustainability principles throughout our company and ensure that they are routinely considered in decision-making.</li> </ol>	Sustainability training was integrated into leadership development programs. Sustainability considerations were integrated into employees' performance objective setting.	<ul> <li>Sustainability goals were integrated with five-year business plans for each department.</li> </ul>			
Water					
<ol> <li>Establish baseline for water use intensity and water quality at all current operations by 2013.</li> </ol>	Established water management teams, enhanced existing water flows monitoring systems, and established a water baseline to report on water quality and quantity.	<ul> <li>Building on the baseline completed in 2013, we updated our company-wide water balance, which provides a comprehensive account of the volumes of water that flow into and out of 100% of our operations.</li> </ul>			
2. Implement Teck's Water Management Standard by 2013.	Established a consistent approach to water management through the implementation of the Teck Water Management Standard.	<ul> <li>Integrated water management plans at 100% of our operations.</li> </ul>			
<ol> <li>Implement measures to achieve operation-specific targets for improvements in water use intensity and water quality.</li> </ol>	100% of operations have site-specific water targets and are working towards implementing projects and/or initiatives to meet these targets.	<ul> <li>We have set water use intensity goals at our two operations located in water-stressed regions.</li> </ul>			
Biodiversity					
<ol> <li>Develop comprehensive biodiversity management plans, including targets and actions, to minimize impacts at all operations and advanced projects in accordance with our Biodiversity Guidance Manual and company standards.</li> </ol>	Implemented our Biodiversity Guidance Manual and company standards.	<ul> <li>Implemented biodiversity management plans at all operations focused on our long-term vision of having a net positive impact in the regions where we operate. Examples of work in 2015 include:</li> <li>Continued to consult with the regional subsistence committee and incorporate advice on timing of our activities such as road hauling and shipping, in order to minimize our impacts on wildlife such as caribou and marine mammals at our Red Dog Operations.</li> <li>Conducted field surveys for the presence of nesting birds prior to clearing vegetation for new land disturbance at our Highland Valley Copper Operations. We also conducted tests to learn how to best incorporate culturally significant native plants in our reclamation programs.</li> </ul>			
<ol> <li>Develop plans at our operations to offset ecosystem impacts that cannot be fully mitigated or rehabilitated, by enhancing or protecting similar habitat areas of equal or greater ecological value, in the affected regions</li> </ol>	Plans were developed at 100% of our operations.	<ul> <li>Developed plans to offset impacts at our operations, which includes work such as:</li> <li>Continuing our development of the Lower Columbia Ecosystem Management Program around Trail.</li> <li>Advancing our evaluation of biodiversity offset opportunities at Carmen de Andacollo Operations.</li> </ul>			

2015 Goals	Performance Summary	2015 Highlights
Biodiversity (continued)		
<ol> <li>Enhance our contributions to biodiversity conservation knowledge.</li> </ol>	Invested in biodiversity research projects and partnerships, including caribou projects near our Quintette project and native plant collection and archiving projects with the Royal British Columbia Museum.	<ul> <li>Continued our work with the Vancouver Aquarium to research improvements in aquatic health and amphibians.</li> </ul>
<ol> <li>Identify and implement biodiversity improvement and conservation opportunities that would seek to create a net positive impact in our areas of influence.</li> </ol>	Improved the prioritization for managing our dormant mine properties. Conducted ecosystems projects in all of our geographic areas of activity.	<ul> <li>100% of operations developed biodiversity management plans focused on our long-term vision of having a net positive impact.</li> </ul>
Energy and Climate Change		
<ol> <li>Reduce energy consumption at existing operations by 1,000 terajoules (TJ).</li> </ol>	Implemented energy reduction projects resulting in 1,200 TJ of energy reductions.	<ul> <li>Projects ranged from optimizing blasting efficiency to increased grinding efficiency to using more energy-efficient lighting.</li> </ul>
2. Reduce greenhouse gas (GHG) emissions at existing operations by 75 kilotonnes (kt) of carbon-dioxide-equivalent emissions.	Implemented projects that have reduced GHG emissions by approximately 200 kt to the end of 2015. We did not use offsets to meet this target.	<ul> <li>Projects in 2015 included the continued displacement of coal in our dryers by natural gas in our dryers and the piloting of LNG fuel in haul trucks.</li> </ul>
3. Commit to 30 megawatts (MW) of alternative (non-carbon- emitting) energy generation.	As of the end of 2015, 30.7 MW of alternative energy generation is in operation.	<ul> <li>Recent efforts included investing in solar power near our Quebrada Blanca Operations.</li> </ul>
<ul> <li>4. Carry out the following for our new projects:</li> <li>Conduct an analysis of currently available energy sources and evaluate opportunities to develop new energy sources</li> <li>Based on best practices, establish energy design criteria</li> <li>Complete comprehensive project energy maps to facilitate design options, identify opportunities, and determine incremental capital and operating costs for energy reduction projects</li> </ul>	Project evaluation process implemented.	<ul> <li>Completed energy maps for Quebrada Blanca Phase 2, Project Corridor and Frontier.</li> <li>Worked with external parties to establish energy design criteria.</li> </ul>

# Sustainability Visions, 2020 and 2030 Goals

	Air	Biodiversity	Communities Energy and Climate Chang		Our People	Water
Visions	We continually improve air quality for the benefit of workers, communities and the environment in areas affected by our activities.	We achieve a net positive impact on biodiversity in areas affected by our activities.	We build strong relationships and create lasting mutual benefits based on respect for what communities value.	We take action to reduce GHG emissions by improving our energy efficiency and implementing low-carbon technologies.	We engage and develop our people, and ensure everyone goes home safe and healthy every day.	We contribute to the balance between social, economic, recreational and cultural benefits of water resources, within ecologically sustainable limits.
2030 Goals	<ol> <li>Partner with communities, governments and other organizations to facilitate action and the sharing of knowledge to continuously improve air quality.</li> <li>Contribute to measurable and meaningful improvements in areas where our activities impact air quality.</li> </ol>	1. Achieve a net positive impact on biodiversity in regions where we operate through environmental management, reclamation and conservation.	<ol> <li>Fully integrate social risk and opportunity, human rights, and the rights of Indigenous Peoples into how we do business and our individual actions and behaviours.</li> <li>Create lasting mutual benefits through collaboration on social, economic, and environmental initiatives.</li> <li>Collaborate with Indigenous communities to consistently create lasting benefits that respect their unique interests and aspirations.</li> </ol>	<ol> <li>Implement projects that reduce energy consumption by 6,000 TJ.</li> <li>Implement projects that reduce GHG emissions by 450 kilotonnes (kt) of CO<sub>2</sub>-equivalent.</li> <li>Commit to 100 megawatts (MW) of alternative energy generation.</li> </ol>	<ol> <li>Eliminate serious injuries, illnesses and fatalities through effective high-potential risk management.</li> <li>Be a diverse and inclusive workforce representative of the communities in which we operate.</li> <li>Be a workplace with a shared commitment to fairness, respect, operational excellence and productivity.</li> </ol>	1. Work within an informed understanding of ecological limits, regional issues, and demands on water resources to address: <i>Water Quality:</i> Keep clean water clean, minimize water quality deterioration, and take care of affected water resources <i>Water Quantity:</i> Minimize water use per unit of production and transition to alternative water sources <i>Water Stewardship:</i> Contribute to water use planning in our areas of influence
2020 Goals	<ol> <li>Improve monitoring and understanding of our releases to air and the potential impacts on people, communities and the environment.</li> <li>In consultation with communities, governments and other organizations set air quality goals and establish risk-based action plans to achieve goals.</li> <li>Strengthen the integration of air quality considerations into early-stage project development.</li> </ol>	g1. Implement biodiversity management plans for each of our operations.1. Refine our business policies and practices based on results of our social risk assessments our work in human rights and development in the rights of Indigenous Peoples.2. Integrate the consideration of biodiversity into the exploration, construction and closure stages of the mining life cycle.1. Refine our business policies and practices based on results of our social risk assessments our work in human rights and development in the rights of Indigenous Peoples.2. Integrate the consideration of biodiversity into the exploration, construction and construbutions to biodiversity1. Refine our business policies and practices based on results of our social risk assessments our work in human rights and development in the rights of Indigenous Peoples.3. Enhance our conservation knowledge, t t collaboration in research, education and conservation.1. Refine our business policies and practices based on results of our social risk assessments our work in human rights and development in the rights of Indigenous Peoples.3. Enhance our conservation knowledge, t t collaboration in research, education and conservation.3. Work with Indigenous communitie 4. Develop metrics for monitoring Indigenous training, employment		<ol> <li>Implement projects that reduce energy consumption by 2,500 TJ.</li> <li>Implement projects that reduce GHG emissions by 275 kilotonnes (kt) of CO<sub>2</sub>-equivalent.</li> <li>Assess opportunities and identify potential project partners toward achieving our 2030 alternative energy goal.</li> <li>Engage with governments to advocate for effective and efficient carbon</li> </ol>	<ol> <li>Reduce serious         <ul> <li>injuries and eliminate             fatalities by ensuring             our high-potential             risks have effective             controls in place             and by enhancing             our culture of safety.</li> <li>Implement             improved occupational             health and hygiene             monitoring and             exposure control to             protect the longer-             term health of             workforce that             includes more             workforce that             includes more             women and             Indigenous People.             4. Develop leaders             who can confidently             and efficiently</li> </ul></li></ol>	<ol> <li>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.</li> <li>Increase our understanding of groundwater and proactively assess groundwater risks.</li> <li>Collaborate in developing innovative water technology and practice.</li> </ol>

and procurement to

establish baselines

and drive progress.

pricing.

manage safe,

respectful and

productive operations.

# 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's *G4 Principles for Defining Report Content* (GRI Guidelines).

The GRI Guidelines define 51 aspects (sustainability subjects such as energy, emissions, anti-corruption); for the purpose of our materiality assessment process, we group those aspects under the broader headings of 'material' and 'non-material' topics. For more detail about the scope of our material topics, see <u>Table 33 on www.teck.com</u>.

### **2015 Materiality Assessment**

In preparing for our 2015 annual materiality assessment, we first reviewed the GRI aspects grouped under each of our 16 material topics, as identified through our 2014 materiality assessment, and determined that the scope is still relevant for this year's reporting cycle. There were minor changes to the topic titles, but the material topics remain the same as those identified in 2014. Following this review, we conducted a four-step process to prioritize and rank the materiality of each topic, as outlined in Table 32 on www.teck.com.

### **Materiality Matrix**

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

### Figure 3: Materiality Matrix



### **External COI Panel**

In January 2016, we convened our seventh external COI Panel with representatives from Indigenous Peoples, public/private institutions, government, investment analysts, industry and NGOs to review our materiality assessment and to provide feedback on the relevance of the topics selected and their prioritization, as well as to provide their perspective on emerging sustainability issues. Feedback from the Panel was integrated into our assessment and the materiality matrix below. For example, the COI Panel indicated that two material topics, water management and human rights, were more important to COIs than indicated in our initial assessment.

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: low-carbon future, community engagement and impacts, social equity and shared value, workforce attraction and development, increasing regulation on environmental impacts, tailings and mine waste management, transboundary issues, innovation and reclamation.

#### Economic

- 2. Economic Performance and Contributions
- 9. Our Workforce
- 12. Business Ethics
- 13. Mine Closure

#### Social

- Health and Safety of Our Workforce
- 4. Engaging with Indigenous Peoples
- 5. Emergency Preparedness
- 8. Community Engagement
- 15. Product Impacts
- 16. Human Rights

#### Environmental

- 3. Tailings and Mine Waste Management
- 6. Water Management
- 7. Air Quality
- 10. Energy and Climate Change
- 11. Environmental Management

14. Biodiversity

# 2015 Material Topics

Торіс	What is included in this topic?					
Economic						
Economic Performance and Contributions	Economic performance, indirect economic impacts, local hiring and procurement practices.	23				
Our Workforce	Diversity and equal opportunity, employment, labour relations, non-discrimination and training/development.	32				
Business Ethics	Anti-corruption, general compliance with laws and regulations, compliance for product responsibility and public policy.	42				
Mine Closure	Planned or actual closure planning and related impacts on workers, local communities and the environment.	49				
Social						
Health and Safety of Our Workforce	Health and safety including occupational health and hygiene.	57				
Engaging with Indigenous Peoples	Indigenous Peoples engagement, agreements, benefits and disputes.	63				
Community Engagement	Support from local communities, community disputes, community engagement, positive and negative impacts (e.g., employment, inflation, infrastructure), grievance mechanisms for impacts on society.					
Human Rights	Actual and potential impacts on the human rights of the people foreseeably affected by our activities, including people in our supply chain and living near our operations.	78				
Product Impacts	Actual and potential impacts of our products through product stewardship.	83				
Emergency Preparedness	Emergency preparedness, particularly in the context of tailings management.	86				
Environmental						
Tailings and Mine Waste Management	Tailings management, including construction, operation, and ongoing monitoring of the various health, safety, and environmental risks and impacts associated with tailings storage facilities.	91				
Water Management	Water use, selection of water sources, and protecting against water contamination, in the context of balancing the needs of multiple local water users and global water concerns.	96				
Air Quality	Emissions and air quality control and monitoring at our operations and in the transportation of our products. Includes particulate (dust), nitrogen oxides (NOx), sulphur oxides (SOx), other gas emissions and ozone-depleting substances.	105				
Energy and Climate Change	Energy usage (fuel and electricity consumption and costs, energy intensity, energy efficiency initiatives), climate action and greenhouse gas emissions.	109				
Biodiversity	Actual and potential impacts on high biodiversity value species and ecosystems, as well as our approach and performance in remediation.	117				
Environmental Management	Overall day-to-day environmental management, including total environmental expenditure, compliance with environmental regulations, compliance with permits, supplier environmental assessments.	123				

# Measuring Our Performance

Material Topic	Focus Area	Performance Indicators	Target	2015	2014	2013
Economic Performance and Contributions	Community	Amount of funds disbursed through community investment (in millions)	1% of our average annual pre-tax earnings during the preceding five-year period	\$17	\$20	\$22
Economic Performance and Contributions	Community	% of local employees at our operations	_	61%	66%	87% <sup>1</sup>
Economic Performance and Contributions	Community	Community % of spending on locally based – suppliers		27%	27%	29%
Our Workforce	Our People	% of women working at Teck	orking at Teck Increase % of women at Teck			
Our Workforce	Our People	% of total turnover	-	10%	12%	8%
Mine Closure	Biodiversity	Hectares of land reclaimed	-	198	101	434
Health and Safety of Our Workforce	Our People	Work-related fatal injuries	I fatal injuries Zero fatalities			0
Health and Safety of Our Workforce	Our People	Total Reportable InjuryReduce rate of overallFrequency Ratetotal reportable injuries		1.24	1.01	1.26
Engaging with Indigenous Peoples	Community	Procurement from Indigenous suppliers (in millions)	curement from Indigenous – pliers (in millions)		\$161	\$127
Community Engagement	Community	# of significant disputes	Zero significant disputes	3	1	3
Tailings and Mine Waste Management	Community and Water	% of tailings review boards at active tailings storage facilities <sup>2</sup>	-	100%	_	_
Water Management	Water	% of water reused and recycled at mine sites <sup>3</sup>	-	161	160	149
Water Management	Water	New water use intensity per million tonnes of raw coal processed at coal operations (in cubic metres)	lion – coal		0.38	0.42
Water Management	Water	New water use intensity per million tonnes of ore processed at milling and flotation operations (in cubic metres)	-	0.36	0.41	0.46
Air Quality	Air	Particulate matter of size less than 10 microns generated by our operations	-	28,000	21,000	20,000
Energy and Climate Change	Energy and Climate Change	Energy consumption in terajoules (TJ)	1,000 TJ reduction by 2015	42,217	45,336	45,556
Energy and Climate Change	Energy and Climate Change	GHG emissions by direct $CO_2e$ in kt	75 kt reduction by 2015	2,805	3,066	2,722

(1) The definition of local varies from site to site and has changed since 2013. As result, a year-over-year comparison is not meaningful.

(2) This indicator is being 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.

(3) The percentage calculation is based on the total volume of water reused and recycled divided by the total volume of new water use.

# Economic

## **Material Topics**

# Economic Performance and Contributions 23

Economic performance, indirect economic impacts, local hiring and procurement practices.

## Our Workforce

Diversity and equal opportunity, employment, labour relations, non-discrimination and training/development.

# **Business Ethics**

Anti-corruption, general compliance with laws and regulations, compliance for product responsibility, public policy.

# Mine Closure

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



#### **Material Topic**

# Economic Performance and Contributions

### Why was Economic Performance and Contributions a Material Topic in 2015?

Global Context: The ongoing slowdown in growth in China and emerging markets in 2015 had a major impact on the global economy. As the world's second-largest economy and the largest consumer of most commodities, slowing growth in China has created significant drag on the global economy and regional economies around the world. Commodities were particularly hard hit as prices fell below levels experienced in 2008-2009. This downturn in commodity prices has resulted in declining investment and declining revenues to government in resource-dependent regions and economies around the world. In response, governments are increasingly looking at measures to stimulate growth and manage budget shortfalls.

#### **Industry Context**

The decline in commodity prices due to the slowdown in China and emerging markets coupled with oversupply made 2015 one of the most economically challenging years on record for the global mining industry. Margins of return for the industry were by far the lowest they have been in 30 years. Across the industry, mining companies focus on measures to maintain economic viability, including asset sales, project cancellations and deferrals, closures and workforce reductions. The commodity price downturn also had a significant impact on mining-dependent communities and countries as jobs were lost and tax revenues fell. Communities were also increasingly concerned about the cyclical nature of the industry and looked to governments and companies to take measures to mitigate the impacts of down cycles. As a result, many mining companies have increasingly focused on engagement throughout the mining life cycle in order to determine and demonstrate long-term mutual benefits.

#### **Teck Context**

In line with the rest of the industry, the downturn in commodity markets resulted in decreased revenues and lower profits for Teck. In response, we continued to implement a variety of cost reduction measures, which included a global workforce reduction of 1,000 positions by the end of 2016. In addition, Teck announced in 2015 the suspension of our Coal Mountain Phase 2 project, which will result in the existing Coal Mountain Operation closing in 2017. In the face of impacts on local employment, investment and procurement, we have increased engagement with local communities in order to be transparent about the challenges we are facing, the steps we are taking to address them and the potential impacts they may have on the community. Through this engagement, we work to maintain trust, mitigate impacts where possible and create mutual benefits for the long term.



#### What is in this Topic?

Economic performance, indirect economic impacts, local hiring and procurement practices, community investment.

#### **Performance Highlights**

Revenue of

**5** billion and gross profit before depreciation

of \$2.6 billion

Cash flow from operations of **\$1.95** billion

# Over billion

of liquidity at the end of 2015; cash balance of \$1.9 billion and a US\$3.0 billion unused line of credit

\$16.7 million

in community investments

#### Learn More

Mine 2015: The gloves are off - PwC

Pictured left: Shenzhen, China at night Pictured above: Two employees discuss operations at Quebrada Blanca Operations

# 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.

Our annual community investment budget is 1% of average annual earnings before taxes during the preceding fiveyear period. With a budget tied to earnings, our success as a company directly impacts our ability to invest in the communities where we operate. 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 costefficiency of our operations and ensuring we receive full value for our products. This in turn ensures 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 Local Hiring and Procurement

Promoting long-term employability and economic resilience will help support the sustainability of communities throughout the mining life cycle and ensure 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. Reflecting this, one of our 2015 goals under our sustainability strategy was for operations to enhance local employment and procurement opportunities.

Local hiring is a priority at Teck operations. In order to ensure that the communities most directly affected by our activities benefit through their interactions with us, we have been working to develop a consistent approach to the definition of "local' at each operation.

As part of defining local, we determined the need to identify geographic and time-scale criteria. In order to determine what constitutes the local geographic area of each operation, we completed "Area of Influence" exercises at all of our operations to identify those communities and areas that are directly influenced by our activities. This improved the clarity of the geographic criteria of what constitutes the local area. Next, we considered how long a person needs to live in an area before they can reasonably be considered local. This is clearly a highly subjective question and there was no established industry norm. Through our work, we established that if a person asserts that their primary residence is within the direct area of influence at the time they apply to work at our operations, then the applicant will be considered local. Human Resources personnel at our operations have started using this information in their assessment of applications so that those who fall under our direct area of influence are identified as local in the hiring process. To ensure that local hires have the skills necessary for advancement, we focus on access to training opportunities at or near Teck locations. In 2016, our Communities and Human Resources teams will work together to better define the weighting of the local criterion during the hiring process.

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.

### 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 support community development priorities and to enhance specific community objectives. Community investments also help build and maintain our social licence to operate, manage social risks, enhance our reputation and improve employee recruitment and retention.

Our community investment program is guided by best practices from the International Finance Corporation, the London Benchmarking Group and Imagine Canada. Our annual community investment target is 1% of average annual earnings before taxes during the preceding five-year period; with our target tied to earnings, our success as a company directly impacts our ability to invest in the communities where we operate.

In particular, our community investments are focused on:

- Health programs and initiatives that improve the status of health in a community, including child and maternal health, access to health services and reductions in the prevalence of disease.
- Education programs and initiatives designed to enhance access to educational resources and training opportunities, including early childhood education, primary and secondary schooling, lifelong learning and institutions of technical training and higher education, with particular emphasis on programs of relevance to the mining, metals and energy industries.
- Environment programs and initiatives designed to support and enhance environments, with particular focus on water, biodiversity (including wetlands protection and enhancement of fish and wildlife habitats, flora and fauna) and climate.
- 4. Community programs and initiatives designed to enhance social and economic sustainability and the capacity to earn a living or improve livelihoods, including support for business development, agriculture, subsistence activities, employment initiatives, food security and vulnerable groups. This category also includes support of relevant community and Indigenous organizations focused on social and community programs, and sponsorship of athletic and recreational activities and events and teams where the main goal

of the investment is to promote community spirit and wellness.

 Other — from time to time, we support initiatives not covered in our four primary categories.

Our approach to community investment is based on the knowledge we gain through the following activities:

- Collecting social baseline information and understanding our area of influence
- Mapping, prioritizing and directly engaging with COIs
- Understanding social impacts and the needs of particular communities
- Identifying potential risks and opportunities
- Developing a strategic engagement plan linked to social risks in order to effectively engage with COIs
- Assessing and incorporating engagement and social baseline information into our community investment plan

Our internal community investment policy guides how we align business drivers with community priorities, and guides our approach to providing long-term community benefits. Our community investment program is administered by the Corporate Community Investment Committee, which consists of the Chief Financial Officer, the Chief Operating Officer, the Senior Vice President, Sustainability and External Affairs and the Vice President, Community and Government Relations. Sites and Project Teams develop and submit proposed community investment budgets to the Committee for assessment. The Committee considers several factors, such as the social needs of the community in question, the outcome of social/risk assessments and the availability of other funding partners when evaluating and ultimately approving budgets.

The geographic distribution of our contributions can be categorized at a local, regional, provincial/state, country or global level. We understand that building and maintaining our community relationships is essential, not only to our success, but also to the sustainable future of communities. That is why much of the focus of our community investment program is designed to support the many communities where we live and work.

# What was Our Performance in Economic Contributions in 2015?

#### Update From Our Subject Matter Experts

"As our community investment budget is tied to earnings, our community investment levels been reduced in line with our declining revenues. However, we continue to work to ensure that the organizations we support are well prepared for this transition and that, where possible, they have diverse funding streams."

Mark Edwards, Vice President, Community and Government Relations 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.

# Economic Value Generated and Distributed in 2015

In 2015, we generated approximately \$8.3 billion in revenue and distributed approximately \$6.9 billion in economic value distributed as defined by the Global Reporting Initiative (outlined in the table below). We paid dividends at an annualized rate of \$0.20 per share and paid \$255 million in income and resource taxes to various levels of government, creating benefits where we operate. Additionally, we contributed \$16.7 million to charitable organizations and projects worldwide through our community investment program in support of community development, environmental protection, human health and education.

In 2015, we incurred a loss attributable to shareholders of \$2.5 billion, or \$4.29 per share. This compares with a profit of \$362 million or \$0.63 per share in 2014, and \$961 million or \$1.66 per share in 2013. The reductions are due mainly to the \$2.7 billion of after-tax impairment charges taken in 2015 and declining commodity prices, partially offset by the effect of the strengthening U.S. dollar and our cost reduction initiatives. See our 2015 Annual Report for more detailed information on our financial performance.

#### Table 2: Economic Value Generated and Distributed (Dollars in millions)

	USA	С	anada	(	Chile	I	Peru	C	)ther	2015 Total	2014 Total	2013 Total
Economic Value Generated												
Revenues	\$ 1,322	\$	5,572	\$	730	\$	635		-	\$ 8,259	\$ 8,599	\$ 9,382
Economic Value Distributed												
Operating Costs <sup>1</sup>	\$ 532	\$	3,203	\$	548	\$	175	\$	12	\$ 4,470	\$ 4,565	\$ 4,612
Wages and Benefits	\$ 172	\$	1,021	\$	121	\$	56	\$	5	\$ 1,375	\$ 1,362	\$ 1,344
Payments to Providers of Capital	-	\$	818		-		-		-	\$ 818	\$ 899	\$ 876
Income and Resource Taxes paid <sup>2</sup>	\$ 106	\$	14	\$	82	\$	53		-	\$ 255	\$ 406	\$ 425
Community Investments	\$ 1.3	\$	8.6	\$	4.8		-	\$	2	\$ 16.7	\$ 20	\$ 22
	\$ 811	\$	5,065	\$	756	\$	284	\$	19	\$ 6,935	\$ 7,252	\$ 7,279
Economic Value Retained	\$ 511	\$	507		(\$26)	\$	351		(\$19)	\$ 1,324	\$ 1,347	\$ 2,103

(1) Per income statement (fiscal year). Operating costs include operating expenses at our mining and processing operations and our general and administration, exploration, and research and development expenses. Employee wages and benefits are not included in the total but are specified separately.

(2) This table reflects income and resource taxes paid. Other taxes (property, payroll, royalty, etc.) are not included, but some taxes may be reflected in operating costs. The amount is found in our Annual Report. Breaking this table down to reflect all components is beyond the scope of this report.

### **Case Study**

Improving Economic Performance: Reducing Haul Truck Cycle Times at Elkview Operations

Improving efficiency is a key part of our efforts to reduce costs and improve the competitiveness of our operations. At our Elkview steelmaking coal operation (EVO) in southeast British Columbia, an opportunity to improve efficiency by reducing haul truck cycle times was identified.

EVO determined that the average haul truck cycle could be reduced. With the total cost to operate each truck at around \$450 per hour, safely reducing cycle times had the potential to have a big impact on operating costs. Two challenges that needed to be resolved were increasing truck speeds in a safe and productive manner and reducing non-productive time (wait time) from the cycle.

Haul truck productivity functions as a system and requires teamwork from a number of people including: shovel operators who load haul trucks; maintenance teams that provide reliable equipment; drilling and blasting teams that provide efficient digging for shovels and assist with maintaining level benches for haul trucks; and haul truck operators themselves.

### "As an interconnected system with many inputs, haul truck cycle improvements rely on contributions from everyone in order to be

**successful,**" said Clayton Podrasky, Mine Operations Superintendent, who led the initiative.

Operations, Maintenance and Engineering teams at EVO worked together on a plan, which was developed through ongoing feedback and insights from employees, to improve systems, practices and infrastructure. As part of the strategy, the teams set expectations necessary for improvement and ensured they were focused on measuring the data that drove the highest value in terms of truck productivity. The major changes to reduce haul truck cycle times included:

- Improving road and bench floor conditions so speeds could be enhanced
- Focusing on reducing truck queue time to minimize non-productive time
- Working with operators to maximize the assets to their safe design capabilities
- · Using Dynamic Dispatch when opportunities existed
- Installing payload systems on shovels to ensure haul trucks were loaded to their rated capacity, but not overloaded, and installing additional lightweight boxes to maximize material payload
- Modifying the dumping procedure to minimize haul truck delays
- Provide ongoing feedback in the form of scorecards
- · Listening to the employees and their ideas
- Providing positive recognition for employee efforts

Since the project began in 2013, the results have been dramatic as cycle times have decreased by 20%. This has resulted in over \$63 million in cost reduction and it has also reduced the need for adding additional haul trucks to the fleet. At the same time, safety at the operation continues to improve.

These improvements are the result of teamwork between supervisors and employees. A culture of excellence is being created at Elkview and there is an increased sense of pride among employees involved. Effort continues on this front and there is still work to do; however, teamwork will continue to be the greatest driver of success.

"Haul truck cycle times are a major part of mining activity at site. Finding ways to improve the efficiency of those cycles has created major cost reductions and safely improved productivity. Our supervisors and employees should be proud of their accomplishments." Don Sander, General Manager, Elkview Operations



#### Local Hiring and Procurement in 2015

The table below displays definitions and data that reflect our approach to tracking local employees and local procurement until the end of 2015. The geographic criterion of "local" was broad and place of residence was not solicited during the application process at all operations, but instead may have been solicited after hire. As such, the below figures may be overstated, given that some employees likely moved to the broadly defined local area as a result of securing employment with Teck and did not live in the local area at the time of application. Increases and decreases in local procurement are influenced primarily by site-level construction and maintenance activity, as well as by the availability of suppliers in the local area. Please refer to the Indigenous Peoples section on page 63 for discussions of our performance regarding sharing the benefits with Indigenous Peoples.

Operation	Lo Emplo	ocal oyment	% of Senior Management Roles Filled by Locals	% of Spending on Local Suppliers	Definition of Local
	#	%	%	%	
Cardinal River	307	92	42	8	Regional
Carmen de Andacollo	386	57	0	19	Regional
Coal Mountain	195	73	71	48	Regional
Elkview	651	67	96	48	Regional
Fording River	729	69	92	48	Regional
Greenhills	415	70	69	48	Regional
Highland Valley Copper	1,013	94	14	29	Regional
Line Creek	319	67	70	48	Regional
Pend Oreille	163	69	13	12	Regional
Quebrada Blanca	316	52	15	24	Regional
Red Dog	226	68	8	55	State-wide
Trail Operations	1,455	99	90	24	Regional
Overall	6,175	80	48	27	As Above

#### Table 3: Local Employment and Procurement in 2015<sup>1,2</sup>

Operational data is not directly comparable as there are differences in how each operation defines "local" and tracks data.
 Senior management are defined by their compensation band.

#### **Community Investment in 2015**

We continue to meet our target of donating 1% of our average annual pre-tax earnings during the preceding five-year period and are committed to doing so going forward. Our community investment expenditures in 2015 were \$16.7 million.

With our recent decline in earnings, our total community investment spending has declined and will continue to decline in the future. This has the potential to impact organizations that receive our community investment funds, so we have been communicating early with those organizations to allow them to prepare for and adapt to the change. In addition, we are also working to support these organizations in finding other funding sources and assist in fundraising efforts such as introductions, letter writing and drafting proposals. In this way, we ease dependence on the company while also helping to develop the organization's capacity in a manner that diversifies their funding sources.

Guided by the London Benchmarking Group, we have a community investment reporting framework to ensure that we report our contributions accurately each year. The framework has four categories:

- 1. Why We Contribute the motive for contribution, from philanthropic donations to community and infrastructure development to commercially driven engagement.
- 2. What We Support the categories of our contributions, such as health and education.
- 3. How We Contribute the type of contribution, whether made in cash or in-kind.
- 4. Where We Contribute the geographic spread of our contributions.

Within the 'Why we contribute' category, we define **philanthropic investments** as a response to a request from an organization, **community and** 

infrastructure developments as contributions to programs that enhance the well-being and infrastructure development in a community, and **commercial** initiatives as investments with a direct business benefit through the promotion of our company as well as a benefit to the communities where we live and work.

#### Figure 4: Where We Contribute











# What was Our Performance in Economic Contributions in 2015?

### **Snapshot**

#### Planning for Community Investment Fluctuations at Highland Valley Copper Operations with United Way

For more than 25 years, Highland Valley Copper Operations (HVC) in southeast British Columbia has hosted an annual fundraising campaign with the local branch of the United Way. With high levels of participation from employees, this has been an important community investment effort for the site. HVC works closely with the United Way, with employees serving on United Way community impact councils and the board.

When the community investment budget started to decline in 2013 due to the downturn in the mining industry, HVC hosted a workshop with United Way personnel to understand how a reduction to the campaign would affect them. In 2013, HVC's total campaign (including employees' personal donations and a corporate equivalent contribution) was funding 27% of the local United Way's annual operating budget, so a decrease in donations from HVC and Teck would have had a big impact on the organization. From 2013 to 2015, HVC worked closely with United Way to manage this decline in corporate contributions, which included clear and consistent communication, and worked with United Way to ensure their key programs continue to be delivered long-term.

#### Table 4: Community Investment Types

Туре	2015	2014	2013
Philanthropic Investments	23%	28%	41%
Community and Infrastructure Developments	61%	41%	45%
Commercial Initiatives	16%	31%	14%

#### Table 5: Community Investment by Site<sup>1,2,3,4</sup>

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

 Steelmaking coal operations include: Cardinal River, Coal Mountain, Elkview, Greenhills, Fording River and Line Creek Operations.
 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, so some sites do not have their 100% budget represented (Carmen de Andacollo 90%, Highland Valley Copper 97.5%, Quebrada Blanca 76.5%).

The increase in community investment expenditures at Carmen de Andacollo and Red Dog operations over the last three years is a reflection of recognizing the greater social need in the areas near each of these operations.

### **Case Study**

Supporting Community: Chilean communities rebuilding after floods receive Teck support

In March 2015, flash floods due to heavy rains caused extensive damage in Chile. In Alto del Carmen County, located in the Atacama region's Huasco Province, the floods damaged homes while also significantly impacting the local agriculture industry, an important economic driver in the region.

This area is significant to Teck, as our former Relincho copper project, now known as Project Corridor, a 50/50 joint venture owned by Teck and Goldcorp, is located there. In areas where our employees live and work, we support community development and enhance specific community objectives as part of our community investment commitment.

Our commitment to communities is unwavering, especially in times of significant need. That's why we provided multi-faceted support to help address short-term and long-term priorities for communities in Alto del Carmen County that were impacted by flooding. During and immediately after flooding, we provided construction materials and the use of machinery to protect homes and open critical roadways. We also provided equivalent donations from Teck employees, with overall funds used to purchase immediate living needs including beds and other household items.

We provided long-term support to help rebuild the community. Through extensive local engagement with multiple levels of government, local farming and union organizations as well as community members, it was identified that there were significant impacts on local small-scale farmers whose irrigation systems were damaged due to flooding. Many local farmers were unable to access funds through traditional funding sources in order to repair irrigation systems and begin farming again. Teck worked with Chile's National Institute for Development of Agriculture and Livestock (INDAP) to develop the Teck-INDAP fund, which provides loans for local farmers to repair irrigation systems that will be repaid once farmers regain financial self-sufficiency.

Teck initially contributed US\$500,000 to the fund and as of March 2016, four farmers have accessed funding. A board consisting of representatives of Teck, the National Irrigation Commission, Atacama Agricultural Seremi, the local farming community and the Governor of the Huasco Province meets regularly to determine qualification for loans. The fund, managed by INDAP, will continue to provide support to small-scale farmers to help enable the region to prosper again.

"Teck supported the community in many ways following the devastating floods, and the Teck-INDAP Fund is helping revitalize small-scale farming in the area, an important industry that many people and families rely on." Carolina Jacques, Manager, Community Development



#### Emerging Risk – Product Substitution

Technological innovation, changing regulations and future fluctuations in commodity prices may result in substitutions of certain commodities. For example, new regulation around fuel efficiency standards has prompted some vehicle manufacturers to use lighter weight materials such as aluminum instead of steel. Increased use of technologies such as 3-D printing could lower demand for certain commodities while increasing demand for others. Changes in battery storage could reduce the demand for lead. Environmental regulations — similar to the European Union's e-waste recycling requirements - could result in an increase in use of recycled metal and mineral products.

### Outlook for Economic Performance and Contributions

Persistent low commodity prices are expected to continue to impact Teck's revenues and associated earnings. This in turn will impact funds available for government, employment, local procurement, community investment expenditures and infrastructure projects. Teck will continue to take measures to ensure the long-term viability of our business and work collaboratively with communities of interest to keep them informed of the challenges we are facing and the actions we are taking. Wherever possible, we will continue to work to mitigate impacts and focus on creating mutual long-term benefits.

# Our Workforce



What is in this Topic?

Diversity and equal opportunity, employment, labour relations, nondiscrimination and training/development.

#### **Performance Highlights**

# **332** employees were engaged in leadership development

programs in 2015.

#### Learn More

<u>The Future of Jobs Report —</u> <u>World Economic Forum</u>

## Why was Our Workforce a Material Topic in 2015?

Global Context: As the world becomes more interconnected and the population more mobile, competition for workers is increasing. At the same time, the nature of employment is changing. Jobs increasingly require more complex skills and training. Leading companies recognize that a high-performing workforce is linked to business value. They are investing in the development of employee skills and working to attract and retain a diverse workforce to maximize performance.

#### Industry Context

With the downturn in commodity markets, mining companies are facing significant financial challenges and pressure to reduce costs. As a result, throughout 2015 mining companies across the industry undertook significant workforce reductions. For example, more than 26,000 jobs in the Canadian mining industry<sup>1</sup> and 131,000 jobs in the American mining industry<sup>2</sup> were eliminated. 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.

#### **Teck Context**

In line with the rest of the industry, the downturn in commodity markets resulted in decreased revenues and lower profits for Teck. As part of our focus on cost reduction, in November 2015 we began reducing our workforce by 1,000 positions across all offices and operations, to be completed by the end of 2016. This will bring our total labour force reductions since 2014 to approximately 2,000 positions. We recognize that workforce reductions create stress on our employees, and in turn, on our business and communities. To address this, we continue to provide employees with training, development and mentorship opportunities to enhance productivity in a safe and sustainable way.

# How Does Teck Manage Our Workforce?

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 global workforce strategy is to attract, engage and develop the very best people. In 2015, our efforts in human resources supported these three pillars and Teck's cost reduction program. We also developed a new set of short-term goals to 2020 and revised our long-term goals to 2030 for developing our workforce within our sustainability strategy.

Our Vice President, Human Resources, who reports to the CEO, is responsible for human resources management and our global workforce 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 our internal commitments as outlined in our Charter of Corporate Responsibility, Code of Ethics, Human Rights Policy, and Health and Safety Policy.

#### **Managing Workforce Reductions**

As part of our focus on cost reduction, in November 2015 we began reducing our workforce by 1.000 positions across all offices and operations, to be completed by the end of 2016. Workforce reduction is challenging for the individuals involved. We supported affected employees and their families in this transition by providing exit packages that included personal counselling and coaching, assistance with career transition and help with understanding opportunities available in the wider economy, in addition to financial compensation. Wherever possible, personnel were directed to other opportunities available at Teck.

### **Attracting the Right People**

Although hiring was limited in 2015 due to current market conditions, we continued to develop our attraction strategies to ensure that Teck remains in a strong position to attract top talent when required and when market conditions improve. To this end, we focused on improving diversity, workforce planning and optimizing our recruitment resources and processes.

#### Workforce Diversity

We believe our workforce should reflect the diversity of the communities where we operate and that a more diverse workforce allows for a greater diversity of perspectives, leading to more informed and balanced decision-making.

In 2015, we developed a diversity strategy to create a more diverse workforce at all levels of the company in alignment with our 2020 goal of building a diverse workforce that includes more women and Indigenous Peoples. We will be reporting on our progress against this goal in the years ahead.

Historically, women have been underrepresented in our workforce, which is why we are focused on increasing recruitment and retention of women. 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 underrepresented in our industry. The nonadministrative roles such as trades, technical, labourers and equipment operators are the most difficult demographic to attract and retain across the industry. Attracting women to Teck starts with our job postings and as such, we reviewed them for "gendered" language and are replacing it with language that has been proven to be more influential in attracting women to apply.

#### **Our Targets and Commitments**

We are committed to building a diverse workforce that includes more women and Indigenous People and developing leaders who can confidently and efficiently manage safe, respectful and productive operations. We continue to be involved in external groups to provide insight into Teck's practices in diversity and to share information. Our Vice President of Human Resources represents Teck on the Women in Mining (WIM) Canada Gender Advisory Committee and the Mining Industry Human Resources (MiHR) Gender Equity in Mining committee in Canada. Other involvement by Teck employees includes the MiHR Mining Alternative Careers for Immigrants and two University of British Columbia Studies: Women of Impact in the Canadian Materials, Metallurgy and Mining Field, and Engendering Engineering Success. In Chile, Teck regularly attends the Trabaiando.com recruitment fair in the city of Antofagasta and the Mine Engineer recruitment fair at the University of Chile.

Overall, we continue to work to achieve our goal of having an inclusive and diversified workforce. The changes that have been made to date have had an impact on our demographics and this trend should continue as we advance our efforts to attract a more diverse workforce.

#### **Non-Discrimination**

Discriminatory practices are unacceptable and are not tolerated in our company. We are committed to the proper treatment of 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. In 2015, while we dealt with individual reports of harassment through our human resource procedures, we did not receive any allegations of discrimination through our whistle-blower hotline (see our Business Ethics section on page 43 for more information on our Doing What's Right program).

As part of Teck's ongoing commitment to build a more diverse and inclusive culture and work environment, Unconscious Bias Training was held for the senior management team in 2015. Implicit or unconscious bias can affect how we hire, promote, develop and mentor. Unconscious Bias Training is part of our efforts to increase awareness and eliminate any potential discriminatory practices.

#### **Workforce Planning and Recruitment**

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 correctly position Teck to proactively respond to and strategize for looming demographic challenges. In 2015, we created and implemented a tool to forecast workforce needs and inform our recruitment strategies.

While hiring was reduced in 2015, Teck continues to focus on recruitment to ensure we have the right people with the right skills to meet business requirements. To that end, improved recruiting practices and processes were put in place to guide recruiters, operations leaders and human resources leaders last year. For example, we increasingly focus our recruitment efforts through online platforms such as social media to reduce our costs and increase our capacity to target specific skill sets.

#### **Engaging Our People**

As we operate in market conditions that require us to enhance productivity, employee engagement remains integral to our business. Research shows that some of the top drivers of employee engagement in any organization include: being recognized, being rewarded fairly, having development opportunities, and a good relationship between the employee and their supervisor. We focus on enhancing engagement across Teck through employee remuneration, performance review and labour relations.

#### **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 continue to monitor the employment market to ensure we maintain a costeffective total compensation offering while continuing to attract and retain the employees needed to be successful now and in the future. A global compensation and benefits strategy was developed in 2015 to allow
#### **Case Study**

Workforce Diversity: Mentorship Program for Women at Trail Operations

One of the ways we are working to recruit and retain more women is through our Trail Operations' participation in the Mining and Refining for Women (MR4W) project, funded by the Status of Women Canada and implemented with assistance from the Greater Trail Community Skills Centre. The goal of the project - which includes design and execution of a 30-month coaching/mentorship program for women — is to identify workplace barriers and increase opportunities for women in the mining and resource sectors in positions ranging from front-line operations to technical and professional roles. The project involves a series of structured eight-month mentorship programs involving two cohorts of female employees and their mentors, who are chosen from within the ranks of senior leaders at Trail.

"We strongly believe that a diverse workforce is a stronger workforce. Through the women's mentorship program, we are strengthening gender diversity at Trail Operations while also helping meet future demand for skilled employees." Dave DeLong, Director, Human Resources, Zinc

A sponsorship team made up of representatives from the Greater Trail

Teck to be competitive in the different areas where we are located and the different industries where we compete for talent.

To help employees better understand the value of their compensation, we issued total compensation statements to the majority of salaried employees in the United States and Canada and for hourly employees at our Trail, Red Dog, and steelmaking coal operations. The statements include information regarding an employee's salary, bonuses, premiums, long-term incentive plan, benefits and Community Skills Centre, the union, Teck Human Resources staff and female employees is guiding the mentorship program design through ongoing feedback, monitoring and evaluation of each of the two cohorts.

As of January 2016, the first cohort of 16 mentees and mentors was halfway through their mentorship program. For the remainder of the cohort, the mentorship pairs will focus on the attainment of personal goals for the mentees, face-to-face mentorship meetings, group coaching sessions, the completion of a workshop on diversity, and working on their team projects. The projects are chosen by the mentees to address perceived barriers for retaining and advancing women at Trail Operations. Topics include pre- and post-maternity options and maternity policy review, posting policies and succession planning, raising awareness of gender biases at Trail and strengthening networks across the business areas.

"Throughout my career with Teck, I have been supported by several mentors who have provided valuable coaching and insight into the career paths available," said Sherrill Moreno, Mentor, Property Services Manager. "As a mentor in the MR4W, I can now give back what others have given me. Over and above that, participating in the program has also allowed me to gain insight and understanding into other working environments and to increase my network with other women at Teck's Trail Operations."

"The biggest benefit of the program is networking and relationship building with the other mentees as well as the mentors. Having meaningful discussions on issues that women face in the workplace, and working together to develop solutions that directly address these issues, has been invaluable both personally and to the operation," said Jasmine Hango, Mentee, Process Engineer, Process Support and Development. "Seeing the support and enthusiasm of some of the senior group mentors has been refreshing, encouraging and exciting."



retirement savings, and summarize the total value of the compensation received for the respective calendar year.

#### **Performance Review**

Over 90% of our regular full-time, active salaried employees received formal performance development and career reviews in 2015. In addition, we are in various stages of implementation and execution of annual performance and development reviews, including career conversations, for our hourly employees.

#### **Building Positive and Productive** Labour and Management Relations

Building positive employee relations is a key objective for us. Mining is a heavily unionized industry, and we continue to develop our relationships with unions and our unionized employees at both the local and national levels. Approximately 62% of our workforce is unionized. We engage with our unions on a regular basis across our operations on all aspects of our business. In 2015, this included a focus on cost reduction, health and safety, tailings management and community concerns. Furthermore, we engage with unions on grievances and labour relations on a site-by-site basis. We formally engage unions through negotiations on collective agreements. There were no strikes exceeding one week's duration in 2015.

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

Table 6: Development Programs at Teck

Community Management Standards. All operations have employee committees covering various matters. For example, 100% of locations have an Occupational Health and Safety Committee to deal with safety issues. Examples of other committees found 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 work collaboratively with unions to engage our hourly employees.

#### **Developing Our People**

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.

Program	What is it?	Why do we do it?	How do we measure effectiveness?
Building Strength with People (BSWP)	Framework through which salaried employees have regular performance, development and career conversations with their supervisors. Goals tracked in BSWP are directly linked to goals in five-year business plans.	To clarify and align business priorities with individual performance and development expectations as well to identify critical experiences that are necessary to meet the individual's career interests.	Conduct an annual BSWP effectiveness survey, analyze results and focus on improvement based on employee feedback.
Leading for the Future	A series of workshops for supervisors and team leaders who are currently supervising employees on the front line of Teck's business.	To prepare a new generation of leaders to replace our current leaders, who will retire soon. Moreover, we rely on our leaders to develop the people we	Track the number of employees who participate in the programs, with an emphasis on women. We also track retention, movement and promotions of past
Leading for Excellence	A series of workshops for people who are currently managing other managers; at many sites, this translates to Superintendent, Manager and General Supervisor.	need to deal with current and future business challenges.	program participants and their effectiveness as leaders through business impact stories and 360 reporting.
Emerging Leaders	A year-long program for employees who are on track to reach key senior positions in the company.		

#### **Employee Development**

We continue to focus on employee development, with a particular focus on developing skills and knowledge through on-the-job application. As an organization, we focus on identifying critical experiences that are necessary to meet current and future business needs, as well as an individual's career interests. In 2015, we reviewed our apprenticeship program and developed a new strategy to ensure the program adequately meets retirement demand and business needs. We also developed a plan to leverage existing supervisor skill programs and implement best practice training throughout the company.

Building Strength with People, our performance and development program, continues to be the framework through which salaried employees have regular performance, development and career conversations with their supervisors. Our focus over the past few years has been to improve the process, supporting tools, documentation and, mostly, the conversations. Our annual Building Strength With People effectiveness survey shows that the quality of these conversations is continuing to improve. The results this year showed the largest year-over-year increase in the survey's overall results, with significant improvements in each of the three areas surveyed: performance, development and career. That said, there continues to be room for improvement on the quality of conversations, specifically on development and career conversations and the connection between compensation and performance.

In addition to *Building Strength with People*, Teck is working to ensure training hours are documented completely and consistently across our operations. In 2016, we are focused on developing a system to ensure every site uses the same method to track training costs and hours. Company-wide data and reporting will give us the ability to analyze training costs and opportunities for cost savings.

#### Leadership Development

Teck's approach to leadership development is primarily focused on three programs: Leading for the Future, Leading for Excellence and Emerging Leaders. Leading for the Future is targeted at supervisors and team leaders who are currently supervising employees on the front line of Teck's business. Leading for Excellence is aimed at people who are currently managing other managers; at many sites, this translates to Superintendent, Manager and General Supervisor. Emerging Leaders is targeted at employees who are on track to reach key senior positions in the company. These programs and the development of our leaders are critical to the future success of our company, as many of our current leaders will retire soon. Moreover, we rely on our leaders to develop the people we need to deal with current and future business challenges.

## Knowledge Transfer and Succession Planning

As experienced workers retire, we work to ensure their skills and knowledge are transferred to the young people in professional, operational and trades roles. In 2015, we began reviewing knowledge transfer systems currently in place at our operations in an effort to improve knowledge transfer. Company-wide results will be analyzed and shared to ensure we are effective in preparing for the retirement of key personnel over the next five to 10 years.

In addition to knowledge transfer, Teck conducts succession planning and talent management through robust and meaningful conversations about talent development at site, department, business unit, and corporate levels. Tracked through our *Building Strength with People* system, the succession planning process was updated in 2015 to include a greater focus on diversity.

# Sustainability Strategy Spotlight

#### Progress Against Our 2015 Goals

- Conducted a review of knowledge transfer systems currently in place at our operations in an effort to improve knowledge transfer.
- Engaged 332 employees in leadership development programs.
- Improved recruiting practices and processes to guide recruiters, operations leaders and human resources leaders.

For a full list of 2020 and 2030 goals, see page 18.

### What was Our Performance in Our Workforce in 2015?

In this section, we report on our global workforce profile and progress against our global workforce strategy of attracting, engaging and developing our people.

#### **Our Global Workforce Profile**

At the end of 2015, there were 10,037 employees<sup>3</sup> working at Teck-operated mining and metallurgical operations and offices. The figures and tables below present data on our workforce, broken down by age, gender, geographic location and employment type.



#### Figure 7: Global Workforce by Geographic Location and Gender

Total Female: 1,439 Total Male: 8,598

1,600

1,400

1.200

1,000

800

600

400

200 0

38



1,148 180 212

1,034 **177** 

259

180

Female Male

1,133 1,133 137 180

556 53

#### Figure 9: Global Workforce by Employment Level (as at year-end)





Employment Level	2015	2014	2013
Operations	6,860	7,342	7,124
Administration	363	470	538
Professional Support	1,066	1,130	1,189
Professional	1,023	1,101	1,148
Management	600	612	615
Executive & Senior Management	125	120	117
Total	10,037	10,775	10,731

#### Table 7: Global Workforce by Employment Level (as at year-end)

# Attracting the Right People in 2015

#### Diversity

Despite the overall decrease in the workforce in 2015, the number of women in technical or operational roles has increased at Teck from 439 in 2010 to 688 in 2015, which represents an increase of 57% over a five-year period. Women make up 14% of our total workforce and 52% of these women work in technical or operational roles, compared to 37% in 2010. Female engineers and geoscience fields are actively tracked and we have seen increased growth over the five years of 95% and 28%, respectively.

We recognize the importance of increasing the number of women in leadership roles, particularly at the site level. Since we began measuring this data in 2010, the number has climbed from 47 women in supervisory roles to 127 in 2015. This represents an increase of 170% over a five-year period.

#### Table 8: Women in Operational or Technical Positions

	% Change Since 2010	2015	2014	2013	2012	2011	2010
Labourer, Operator, Loss Prevention	68%	321	339	327	278	235	191
Technical	46%	191	174	183	166	153	131
EIT	50%	3	3	2	2	4	2
Engineer	95%	72	71	72	72	49	37
Geoscience	28%	46	49	51	56	48	36
Apprentice	-50%	7	10	12	11	13	14
Trade	30%	26	27	25	20	19	20
Superintendent	180%	14	14	13	9	7	5
Supervisor	100%	6	5	6	5	5	3
Total	56%	686	692	691	619	533	439
As a percentage of all employees in operational or technical roles (%)	47	7.2	6.4	6.2	5.6	4.9	4.5

#### Table 9: Women in Operational or Technical Leadership Positions<sup>1</sup>

% Ch Since	ange 2010	2015	2014	2013	2012	2011	2010
Leadership positions within those in Table 8	175	129	111	96	78	67	47
Percentage of women in operational or technical leadership positions (%)	75	19	16	14	13	13	11

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

#### **Engaging Our People in 2015**

#### Labour Relations

In 2015, three collective agreements at Quebrada Blanca Operations were negotiated with two-year terms; at Carmen de Andacollo Operations, two agreements were negotiated with four-year terms; and at Line Creek Operations, a new agreement was negotiated with a five-year term. An agreement was reached at Coal Mountain Operations in March 2016 and collective bargaining at Elkview and Fording River Operations is currently underway.

Teck worked to improve our collective bargaining strategy in 2015 by:

- Updating guiding principles for collective bargaining including processes for committees, objective setting, communications and contingency planning
- · Reviewing top collective agreement
- issues for every unionized operation
- · Reviewing employee relations best

#### Table 10: Voluntary Turnover by Region and Gender

practices at non-union operations

 Drafting a five-year labour relations plan in consultation with a working committee of Human Resources professionals, Vice Presidents and General Managers

In 2015, a union certification vote was conducted at Greenhills Operations, in which the majority of employees voted against representation by the United Steelworkers.

#### **Employee Turnover**

For overall understanding of workforce dynamics and changes, we track employee turnover, including voluntary resignations, involuntary layoffs and retirements. In 2015, total turnover was 10% compared to 12% in 2014 and 8% in 2013.

Table 10 below outlines voluntary and total turnover numbers, and rates by gender and age group across the regions in which we operate. There was a slight decrease in voluntary turnover in 2015, but the rate remains relatively consistent with 2014.

Gender	Country	Under 30 Years Old	30 to 50 Years Old	Over 50 Years Old
Female	Canada	8	33	37
	Chile	5	18	3
	China	-	1	-
	Ireland	-	2	-
	USA	4	4	5
Total		17	58	45
Male	Canada	51	195	300
	Chile	13	95	71
	China	-	1	-
	USA	26	39	27
Total		90	330	398
Grand Total		107	388	443

#### Table 11: New Hires by Age Group and Gender

Gender	Country	Under 30 Years Old	30 to 50 Years Old	Over 50 Years Old
Female	Canada	11	23	4
	Chile	4	8	1
	USA	7	4	2
Total		22	35	7
Male	Australia	1	_	_
	Canada	44	93	14
	Chile	4	22	8
	Peru	-	1	1
	USA	30	55	28
Total		79	171	51
Grand Total		101	206	58

#### Table 12: Return to work and retention rates after parental leave

	2015	2014	2013
Number of employees who took parental leave	93	116	89
Number of employees who returned to work after parental leave ended	Data for 2015 will be	111	83
Return to work and retention rate of employees who took parental leave (%)	available at year-end 2016	96%	93%

#### **Developing Our People in 2015**

- More than **3,000** employees used our *Building Strength with People* system to set and track annual and career objectives
- **332** employees were engaged in leadership development programs

#### Leadership Development

Teck's strong commitment to leadership development continued in 2015, with the delivery of five Leading for the Future program cohorts and the implementation of the Leadership Challenge Program that included members of former Leading for Excellence cohorts. 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.

#### **Outlook for Our Workforce**

The downturn in commodity prices will continue to have a significant impact on our workforce including the ongoing workforce reductions planned to take place throughout 2016. Although our workforce is being reduced we recognize that, like any business, our success is dependent on the quality of our people. As a result, we will continue to implement our global workforce strategy to attract, engage, retain and develop the very best people to meet our current and future business needs. In 2016, this will include continuing to implement our diversity strategy, training and mentorship programs and leadership development across our business. We will continue negotiations for collective agreements at our Elkview and Fording River operations.

# Business Ethics



#### What is in this Topic?

Business ethics and anti-corruption practices, transparency in payments to governments, and public policy practices.

#### **Performance Highlights**

# 100%

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.

#### Learn More

Extractive Industries Transparency Initiative



#### Why was Business Ethics a Material Topic in 2015?

Global Context: Strong business ethics are required to prevent corruption, which can result in resource misallocation, lower employment and exacerbated poverty.<sup>4</sup> Domestic and international laws have been established to promote stronger business ethics and increase transparency of payments in an effort to fight bribery and corruption. There is also increasing pressure for, and regulation requiring, greater transparency around how companies engage, lobby or influence governments.

#### **Industry Context**

As a global industry that operates in a wide range of jurisdictions, business ethics and anti-corruption is a major focus for the mining industry. The importance of business ethics is reflected in the International Council on Mining and Metals (ICMM) 10 Principles, ICMM Principle 1 is to "implement and maintain ethical business practices" and states that companies must implement policies and practices that seek to prevent bribery and corruption. At the same time, anti-corruption regulation continues to broaden in scope and depth in major jurisdictions around the world including Canada with the emergence of the Extractive Sector Transparency Measures Act. All ICMM member companies also support the Extractive Industries Transparency Initiative (EITI), which is a voluntary global initiative that promotes transparency in payments to government and revenues for extractive industries.

Brought into force in 2015 by the Canadian government, the *Extractive Sector Transparency Measures Act* requires businesses involved in the exploration or extraction of oil, gas or minerals to publicly report each year on specific types of payments made to all levels of government, in Canada and abroad. Payment categories are: taxes, royalties, fees, production entitlements, bonuses, dividends, and infrastructure improvement payments.

#### **Teck Context**

Teck operates primarily in relatively low-risk jurisdictions that are characterized by stable political and economic conditions and robust legal systems. We also sell our products in jurisdictions 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 we work in and regularly engage with government on public policy initiatives primarily focused on maintaining and enhancing the competitiveness of our industry.

The primary countries we operate in (Canada, United States and Chile) have well-established anti-corruption laws. In addition to the anti-corruption laws in place in the countries where we operate, 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. For more detail about the governance and development standards in our countries of operation, please see <u>the</u> <u>business ethics section of www.teck.com</u>.

Pictured above: Foreman and haul trucker driver stop for discussion at Highland Valley Copper Operations

<sup>4</sup> The Moral Compass of Companies: Business Ethics and Corporate Governance as Anti-Corruption Tools, Global Corporate Governance Forum and IFC World Bank Group, http://www.ifc.org/wps/wcm/connect/3a387c8048a7e613a4bfe76060ad5911/Focus7\_AntiCorruption.pdf?MOD=AJPERES

### How Does Teck Manage 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 with the spirit and intent, as well as the technical requirements, of all contracts that we enter into as well as 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 practices, and has provisions for conflicts of interest. We maintain and implement a tax policy and disclose our engagement in 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. To assist employees in this regard, 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. This code affirms Teck's commitment to uphold high moral and ethical principles and specifies the basic norms and behaviours for those conducting business on our behalf. Our Doing What's Right program is supported by additional ethics-related policies and procedures, including:

- Competition and Anti-Trust Law
   Compliance Policy
- Anti-Corruption Compliance Policy and Manual
- · Human Rights Policy
- · Employee Trading Policy
- · Employee Concerns Disclosure Program
- · Corporate Disclosure Policy

All non-union, non-hourly employees are required annually to certify compliance with our Code of Ethics and to report any potential infractions. Biannually, these employees undergo 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.

Our employees are required to report any violations, or potential violations, of our Code of Ethics through our *Doing What's Right* program, which includes a whistle-

blower hotline and web portal that are managed by a third party. The hotline and portal are available 24 hours a day, seven days a week, in all jurisdictions in which we have employees, to provide a confidential and secure means for our employees to report concerns about conduct that may be contrary to our values and standards. We do not tolerate any form of retaliation against employees raising concerns. All allegations of harassment or intimidation by others as a result of contacting the hotline/web portal are investigated and, if required, appropriate disciplinary action is taken, which can include dismissal.

#### **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 section of www.teck.com. 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 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.

#### **Our Targets and Commitments**

We are committed to upholding high moral and ethical principles as affirmed in our <u>Code of Ethics</u>. 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, though local customs may vary, Teck's activities are based on honesty, integrity and respect. The following high-risk factors are considered as part of our anti-corruption compliance program, along with a number of other medium- and low-risk activities:

- · Work in high-risk countries
- · Use of independent advisors
- · Third-party due diligence
- · Sales to state-owned enterprises

All charitable donations, sponsorships and community investments must comply with Teck's Anti-Corruption Policy and follow Teck's charitable donations and community investment guidelines, which prohibit donations that would improperly benefit a government official. Compliance with the Anti-Corruption Policy is subject to periodic review by internal audit.

Our Indigenous Participation Funding Guidelines provide guidance on payments made to Indigenous Peoples for participating in Teck-related activities. It is not illegal for a company to provide these types of payments to Indigenous Peoples so long as (i) the provision of the payments is not made corruptly to assist the Company in obtaining or retaining business, and (ii) the provision of the payments is not prohibited by the applicable country or local laws.

We provide anti-corruption training to employees who may be exposed to corruption risks due to the nature of their work. For example, employees who work with government officials or who could potentially have contact with government officials are required to complete an anti-corruption training program. Employee anti-corruption training is conducted at least every two years. Third-party service providers, agents and consultants who represent Teck to government officials are asked to complete our Third-Party Anti-Corruption questionnaire and, in some instances, to complete our training.

#### **Third-Party Due Diligence Program**

In 2014, Teck began to implement its third-party due diligence program under the Company's Anti-Corruption Policy. Under the Policy, consultants, agents or intermediaries who have contact with, deal with, or do business with a government official on behalf of Teck must undergo sufficient due diligence to enable Teck to conclude with reasonable assurance that the service providers understand and will fully abide by applicable Anti-Corruption Laws and this Policy. The program was designed to only include service providers who present the highest risk to Teck of a potential corruption violation. Under Teck's risk analysis, service providers who have contact with or have the potential to have contact with government officials on Teck's behalf should be included in Teck's due diligence program.

In 2015, there were 584 service providers in the third-party due diligence system, which includes 511 approved service providers, 22 pending registration, four pending approval, five pending screening and 42 in a declined status — we do not do business with those in a declined status. Of 584 service providers, 71 completed additional anti-corruption training as required.

#### **Conflicts of Interest**

Our Code of Ethics contains provisions regarding conflicts of interests 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.

#### **Transparency and Tax Policy**

A growing number of 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. Participants currently include "compliant" and "candidate" countries along with supporting governments. There are currently over 90 supporting extractive companies who participate. The process requires multi-stakeholder participation including companies, governments and other COI participation. Requirements for extractive sector companies to report on payments to governments have been introduced in Canada, and the development of equivalent requirements in the United States continues. In the Economic Performance and Contributions section of this report (page 23) we disclose tax payments in the primary countries where we operate.

Recently, there has been change in international tax rules and regulations to prevent aggressive tax avoidance. There is also increasing concern regarding the use of "tax havens" by multinational companies. We have a limited presence in offshore financial centres, including a financing affiliate that finances operations outside of Canada and an insurance affiliate that insures our worldwide mining operations. Our activities in these jurisdictions are fully disclosed to all relevant tax authorities in accordance with applicable law. We do not conduct sales activities through these jurisdictions, and the aross revenue of our affiliates in these iurisdictions constitutes less than 1% of Teck's consolidated gross revenue.

Our Tax Policy guides our approach in all jurisdictions where we operate and outlines practices to ensure we are compliant, transparent, cooperative and ethical in all tax matters. We respond openly and fully on a timely basis to all government requests for information pertaining to taxes in the course of their audits. Our goal is to support the growth and development of our business in a way that reflects our legal obligations as well as our commitments to our people, our shareholders and the communities in which we operate.

#### **Public Policy**

Teck focuses on being a collaborative, solutions-based partner with governments in the jurisdictions we work in. We take a systematic 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.

Our Government Affairs team guides Teck's approach to public policy and engages government directly through a variety of means, including written advocacy letters and submissions, roundtable meetings, and one-on-one meetings. Teck also engages with government indirectly through our business and industry associations. We report on our advocacy efforts in an open and transparent manner, conforming to all lobbying laws, including publicly reporting our activities via applicable lobbyist registries in jurisdictions where we undertake advocacy efforts. We regularly update corporate and site-based employees who interact with governments on our compliance requirements.

Teck regularly evaluates the effectiveness of our public policy engagement by identifying where our advocacy has resulted in outcomes that support our business objectives. For example, successful outcomes include but are not limited to results that:

- · Support our sustainability objectives
- · Achieve cost reductions or mitigate additional costs
- Streamline processes and reduce administrative burden

We report on alleged violations against our Code of Ethics, public policy initiatives and political contributions in the section below.

#### **Doing What's Right Program**

All 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. We received 20 reports of alleged violations to our Code of Ethics in 2015. The majority of these (30%) related to employee relations issues, followed by a range of other matters, including allegations of time theft (employee abuse of paid company time) and substance abuse. By the end of 2015, all 20 reports were closed following investigation, of which eight 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.

#### **Anti-Corruption**

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. No deficiencies in ICFR were identified in 2015. 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 such frauds were identified during 2015. Furthermore, 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.

## Tax and Other Payments to Government

We disclosed \$255 million in tax royalties and other payments to government in 2015.

## Significant Tax Issues — Responding to Severe Tax Hike in Alaska

For over 25 years, Teck's Red Dog Operations has provided annual contributions to the Northwest Arctic Borough (NAB) — a local municipality - under a negotiated Payment in Lieu of Taxes (PILT) agreement. However, as of January 1, 2016, in place of a negotiated PILT, the NAB has instead levied a substantial severance tax. The new tax falls solely on Teck Red Dog Operations and, if legal, would increase annual payments to the municipality from approximately US\$11.5 million under the prior agreement to an estimated US\$30-40 million, depending on zinc prices. This would be over seven times greater than the next-highest municipal tax paid by a comparable mine in Alaska.

Teck Alaska has filed a complaint in the Superior Court for the State of Alaska seeking to enjoin the enforcement of a new severance tax on the grounds that the municipality lacks the authority to tax interstate commerce, that the tax violates Teck Alaska's equal protection and due process rights, and that the imposition of the tax breaches a prior negotiated agreement between Teck Alaska and the municipality. That complaint is currently before the courts.

Filing a legal complaint was not an action we wanted to take. It is our hope that the NAB will instead agree to enter into good faith negotiations to collaboratively establish a new, reasonable PILT agreement that is supportive of both the region and the long-term sustainability of Red Dog Operations.

#### **Public Policy Initiatives**

In 2015, we continued to support the development and enhancement of regulatory frameworks that are sciencebased, well-designed and contribute effectively to environmental protection while supporting sustainable economic development. Regulatory issues we conducted advocacy on in 2015 included:

Providing input into the Canadian government'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 these matters through 2015 and will continue to do so in 2016. 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. The development of a coal mining regulation will also support our ongoing efforts as part of the implementation of our Elk Valley Water Quality Plan.

Ensuring there is adequate resourcing, capacity, and cross-ministry and jurisdictional coordination mechanisms 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, including Canada and Chile. In 2015, outcomes included increased funding by the B.C. government for the Ministry of Energy and Mines to establish a Major Mines Permitting Office.

Providing input into the Chilean government's 'Pro-Investment' committee, which includes representation from the Ministries of Mines, Environment, Finance and Economics: As a member of Consejo Minero and Sociedad Nacional de Minería, (SONAMI), Teck participated in working groups on regulatory issues, gender equity, labour and environment. In 2015, we continued to advocate for government actions that support the competitiveness of the resource sector in jurisdictions where we operate in response to sustained challenging market conditions. Our efforts included:

 Pursuing Provincial Sales Tax modernization and an electricity rate deferral program in British Columbia:
 We welcomed the government of B.C.'s announcement in early 2016 that it will allow mining companies to temporarily defer their electricity payments as a means to support the mining industry during the current economic downturn, and it will conduct a review of sales tax.

Advocating for climate change policy that supports global, national and regional efforts to demonstrate leadership on climate change policy and innovation while also supporting efforts to ensure carbon pricing and policy mechanisms enable fair competition for trade-exposed sectors: Teck is a Paris Pledge signatory and globally, we support the development of effective and efficient carbon pricing regimes and believe such regimes are important tools needed to achieve the goals of the 2015 Paris Agreement. We define an effective price on carbon as one that reduces emissions and ensures that all emitters and all jurisdictions are contributing to the solution. We define an efficient price on carbon as one that facilitates the greatest amount of real reductions at the lowest cost. In 2015, we were pleased with the Canadian government's efforts to demonstrate global leadership on climate change policy and innovation, along with the government of Alberta's commitment to include measures to maintain the competitiveness of energy-intensive trade-exposed industries (EITEIs) in the new carbon pricing regime. In British Columbia, we supported the provincially appointed Climate Leadership Team's recommendation to address EITEIs in the B.C. carbon tax system. As the Canadian government continues to work with the provinces and territories on a national climate change framework in 2016, we will continue to advocate for carbon pricing regimes that enshrine the principles of efficiency and effectiveness.

#### **Outlook for Business Ethics**

Teck remains committed to upholding high moral and ethical principles as affirmed in our Code of Ethics. In 2016, we will continue to implement our *Doing What's Right* and anti-corruption programs and engage in public policy initiatives. Furthermore, we will continue to ensure we are compliant, transparent, cooperative and ethical in all tax matters and meet reporting requirements under the Canadian *Extractive Sector Transparency Measures Act.*  Likewise, in other jurisdictions, we continue to advocate for climate change policies and carbon pricing regimes that support the transition to a lower carbon economy while ensuring a level playing field for EITEIs, such as the mining sector. For more details about carbon policies, see the Energy and Climate Change material topic on page 109.

Participating in the public-private mining working groups in the Tarapacá and Coquimbo regions of Chile:

To support ongoing activities at our Quebrada Blanca and Carmen de Andacollo operations, we actively participated in these working groups to ensure key issues such as water scarcity and economic development are addressed. We will continue this work in 2016 with a focus on participating in a "Valor Minero" or "Value of Mining" working group in the Coquimbo region near Carmen de Andacollo to support mining investment in the region.

- Advocating for changes to the Canada Transportation Act (CTA) that support a cost-effective and reliable supply chain and economic growth across all sectors: In 2015, Teck participated in the CTA Review. As a major Canadian transportation stakeholder and the country's largest rail shipper, Teck made recommendations to the CTA Review Panel including our desire for the introduction of legislative measures that will enhance the commercial relationship between shippers and railways. The Review Panel's report was released in early 2016 and we expect to engage with government regarding its conclusions.
- Encouraging Canada to meaningfully enhance diplomatic and economic ties with key markets, with a focus on China: As a major exporter to China, in 2015, we continued to advocate for Canada to advance an economic dialogue with China in a timely fashion.
- Supporting the development of a competitive royalty regime in Alberta: We welcomed the outcome of the Government of Alberta's 2015 royalty review, which took into account overall industry competitiveness.

In 2015, we continued to advocate for government support for programs for Indigenous Peoples in the areas of human resources, skills development and training. For example, we continue to support the creation of a new iteration of the BC Aboriginal Mine Training Association with the Mining Association of British Columbia and Association of Mineral Exploration in British Columbia.

Indigenous engagement and programs have been a key focus of our activities in Chile in 2015. For example, we participated with other mining companies in the Indigenous Leading Council of the Indigenous development area of the Jiwasa Oraje peoples in the Tarapacá region. In 2016, Teck will serve as the primary representative from the mining sector.

#### **Political Contributions**

From time to time, we make political contributions in the Canadian provinces in which we operate. All contributions are made in accordance with applicable laws. We do not make political contributions outside of Canada. In 2015, our contributions totalled \$43,380:

Political group	Donation amount
BC Liberal Party	\$ 37,180
BC New Democratic Party	\$ 1,200
Alberta Progressive Conservative Party	\$ 5,000

#### Material Topic

# Mine Closure

#### Why was Mine Closure a Material Topic in 2015?

Global Context: 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 products and activities. Planning for the completion of activities and the effective implementation of those plans in consultation and collaboration with communities 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, temporary closure or acceleration of permanent closure of mines. Closure of an operation leads to 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 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 ecosystems.

#### **Teck Context**

Being in business for over 100 years, we have a large 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 2015, we had three significant events related to closure: we ceased operations at Duck Pond Operations in Newfoundland and Labrador, Canada, due to exhaustion of reserves and began implementing the closure plan; we suspended further work on the Coal Mountain Phase 2 project due to economic conditions, which means the current operations will cease in 2017, and accelerated closure planning activities; and we completed the bulk of our activities at our previously closed Sa Dena Hes property in the Yukon Territories.



#### What is in this Topic?

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

#### **Performance Highlights**

# 33%

of our current operations have comprehensive closure plans, with the remaining operations working through the phases of closure planning as appropriate to mine life.<sup>5</sup>

# 198 hectares (ha)

of land were reclaimed and 524 ha were disturbed by our activities in 2015, compared to 101 ha reclaimed and 908 ha disturbed in 2014.

#### Learn More

Planning for Integrated Mine Closure Toolkit



### How Does Teck Manage Mine Closure?

#### **Our Targets and Commitments**

We are committed to responsibly ending mining operations by developing and implementing closure plans with communities of interest. We are committed to responsibly ending mining operations by developing and implementing closure plans with communities of interest (COIs). There are three phases of mine closure that extend from the beginning of the mining life cycle until the 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.

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, Indigenous Peoples, water and biodiversity. Closure planning begins early in a mine's life, with development of a conceptual closure plan relevant to the particular operation. This plan is periodically updated over the life of the operation, and 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 local economies and government are known.

Closure plans include consideration of:

- Water management including long-term quality
- · Stability of landforms and water courses
- Socio-economic impacts on local communities
- Input from communities
- Biodiversity, ecosystems, and possible post-closure uses
- · Post-closure management requirements
- · Cost-effective execution

Each closure plan is developed to address unique characteristics of the site and regulatory requirements of the particular jurisdiction. 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.

#### **Community Engagement**

At closure, community engagement activities focus on reducing the impact of workforce reductions, fewer procurement opportunities, decline in community investment and revenues from tax and royalties. We engage with employees, suppliers and government to effectively mitigate these social risks.

#### Developing Guidance for Community Engagement During Closure Planning Through the SMART Framework

Within the Social Management and Responsibility at Teck (SMART) Framework, our Social Closure Planning Tool provides sites with a process to identify issues, undertake engagement planning, and co-develop closure plans that address community concerns and priorities.

#### Table 13: Community Engagement Through the Stages of Mine Closure

Before Mining	During Mining	After Mining
Early engagement with communities of interest (COIs)	Engagement with COIs <ul> <li>build on relationships</li> </ul>	Engagement with COIs <ul> <li>support employees and COIs through transition</li> </ul>
<ul> <li>inform and involve before any activity</li> </ul>	prepare employees and COIs for closure	Closure • shut down operations and decommission site
<ul> <li>engage in closure planning for exploration activities</li> <li>research and studies</li> <li>site design and planning</li> <li>permitting and approvals</li> </ul>	Construction <ul> <li>prepare land and erect infrastructure</li> <li>store soil and waste rock for reuse in reclamation, operation and production</li> </ul>	<ul> <li>remove and properly dispose of any hazardous materials</li> <li>implement closure, which includes the following components:         <ul> <li>wildlife conservation</li> <li>Indigenous Peoples' subsistence activities</li> </ul> </li> </ul>
<ul> <li>biodiversity baseline development</li> </ul>	Progressive reclamation grow plants and trees for transplant	(e.g., hunting and gathering) — recreation — agriculture
Closure planning (conceptual)	renabilitate disturbed areas no longer required	economic development projects
<ul> <li>identify closure objectives</li> <li>outline progressive and post-closure reclamation</li> <li>forecast mine life and closure date</li> <li>assess social impacts and</li> </ul>	<b>Closure planning (detailed)</b> in collaboration with COIs, expand upon closure and end land use plan incorporate new issues, research and practices	Reclamation         • slope and contour waste rock piles         • cap or cover and revegetate with plants and trees         • close or reclaim water features
<ul> <li>assess social impacts and mitigation strategies</li> <li>estimate cost of closure and reclamation</li> </ul>	<ul> <li>begin detailed planning as closure nears</li> </ul>	Post-Closure  • manage water quality • conduct ongoing monitoring — identify further reclamation initiatives

#### · ongoing care and maintenance

- · evaluate success of end land use objectives
- maintain public access management and safety

#### Table 14: Social Impacts of Closure Planning Tool

Step	Description
Reach out internally and gather relevant information	<ul> <li>Establish a team who will be responsible for planning each component (e.g., environment, engineering/operations, legal, community engagement) and determine how social closure considerations will be integrated throughout the plan</li> <li>Compile documents related to closure and social management to ensure that the team has the right data</li> </ul>
Establish a post-mining vision, goals and objectives jointly with COIs	<ul> <li>Work with COIs to understand community priorities post-closure</li> <li>Collaborate to define vision, goals and objectives</li> </ul>
Identify closure-related risks, opportunities, commitments and impacts	<ul> <li>Identify the main drivers of social closure-related activities</li> <li><i>risks</i> (primary social and socio-economic risks)</li> <li><i>opportunities</i> (how closure can generate value for us and for our COIs)</li> <li><i>commitments</i> (how we have committed and are obligated to our COIs by law, through agreements, and through commitments we have made)</li> </ul>
Develop engagement plan	· Develop Social Closure Engagement Plan
Assess viability of community/ communities without Teck	• Assess how the community changed from pre-Teck to current state and the level of dependency; if dependency risks exist, identify partners, capacity training, and resources as mitigation
Incorporate into closure plan	· Use the post-mining vision and goals to establish closure-related objectives with indicators of success and assign resources for implementation

#### **Case Study**

Closure Planning: Collaborative Land Use Planning at Highland Valley Copper Operations

As part of our ongoing process of planning for closure at each of our mines, we develop an End Land Use Plan (ELUP) to determine the objectives for reclamation after mining concludes. At our Highland Valley Copper (HVC) Operations in British Columbia, the previous ELUP was developed almost 20 years ago and required significant updates. As HVC is located within the traditional territory of the Nlaka'pamux Nation, it was essential that this new land use plan reflect the priorities of Nlaka'pamux communities.

In 2015, a collaboration and engagement process was initiated to bring together HVC, Nlaka'pamux community members and technical representatives. The goal of this work was to create a plan that is meaningful to the Nlaka'pamux community and to be guided by their feedback on what the post-mining landscape will look like and what uses the land should provide.

Two groups were established to guide the development of the ELUP. The first was a Community Working Group (CWG) with representation from HVC and Nlaka'pamux communities that discussed community interests and traditional land-use objectives, such as hunting, gathering and fishing, and shared information and concerns related to the mine. The second was a Technical Working Group (TWG) with representation from Nlaka'pamux Nation Tribal Council, Citxw Nlaka'pamux Assembly and the Lower Nicola Indian Band, which guided incorporation of community feedback into the ELUP and provided feedback on the draft plan.

The CWG held four open community meetings, conducted a door-to-door survey of community members to gather feedback and conducted a mine site tour to learn first-hand about reclamation practices and land use planning. The TWG also held four meetings to guide engagement activities and review the ELUP. In 2016, the final ELUP was reviewed and supported by the TWG.

The new End Land Use Plan will now guide HVC's reclamation work and research for the next five years, throughout which we will continue to engage with the Nlaka'pamux community. In 2020, the plan will be reviewed and updated in cooperation with the Nlaka'pamux to ensure it remains relevant and continues to reflect their priorities for land use after mining is completed.

"Nlaka'pamux Nation Tribal Council and Teck are on a new path grounded in recognition and respect of Nlaka'pamux title and rights. Our Indigenous laws and knowledge were utilized throughout the collaborative end land use planning process and provided our communities the opportunity to contribute in the planning for a future landscape and environment that will help sustain our future generations once the mine is closed."

Matt Pascoe, Title Protector, Nlaka'pamux Nation Tribal Council



#### Closure

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

#### 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). Activities include:

- · Removing and properly disposing of any hazardous materials
- · Removal of unneeded infrastructure
- $\cdot$  Implementing long-term water management
- $\cdot$  Ensuring stable landforms and water courses
- · Resloping and contouring waste rock piles as necessary
- · Capping or covering and vegetating waste rock piles
- · Closing or reclaiming water features, including tailings facilities
- · Managing any contaminated soil

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 knowledge across our operations. For example, we have won awards for our reclamation at numerous operations including Cardinal River, Highland Valley Copper, Elkview and legacy properties including Pinchi Lake. Sa Dena Hes and Sullivan. To plan for future reclamation obligations, we ensure that we allocate sufficient resources for reclamation in our mine budgets. For more information about reclamation and our approach to biodiversity, please see page 117 of the Biodiversity section.

#### **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 with expertise in contaminated sites assessment and remediation, tailings storage facility management, reclamation, project management and water treatment. Their job is to ensure that our closure actions remain successful in achieving key objectives, which cover landform stability, habitat rehabilitation, public safety, and water quality protection, and include monitoring of structures such as dams and rock piles, water treatment, and access controls over portions of the site. We track 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 Sa Dena Hes in the Yukon.

In addition to monitoring sites closed in recent years, we continually assess and manage conditions at older mining and industrial operations that were operated by Teck or its predecessors and remain under our stewardship. Given the more than 100-year history of our company, 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.

As such, 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 closure practices at these properties according to current practices.

### How Does Teck Manage Mine Closure?



#### **Case Study**

#### Mine Closure: Implementing Collaborative Closure Planning at Duck Pond Operations

Our Duck Pond copper and zinc mine in central Newfoundland and Labrador closed in July 2015, after about eight years in operation. As the closure of a mine leads to a decline in employment, local procurement and community investment, it was important for us to plan for closure in a way that supported our employees through the transition and mitigated the impacts of closure on the local communities as much as possible.

The plan was created in collaboration with communities and governments, and included support for employees such as severance, resumé assistance and help identifying employment opportunities at other Teck operations in Canada or other companies in the region. We have connected with more than 60 vendors to collaborate on strategies for how they could participate in the various stages of closure and reclamation and continue to generate local economic benefits. In addition, we are promoting the sale of the Duck Pond mill to potential buyers, in an effort to create new employment and economic opportunities in other areas.

In the years and months leading up to closure we held a series of information sessions in the six local communities to seek input on closure plans. We also scheduled regular meetings and site visits with municipal governments and local organizations. The feedback we received throughout this process was largely concern over lost employment and a desire for information on Teck's plans to return the land to a pre-mining state for end land uses including hunting, fishing and logging.

The three-phase closure process at Duck Pond began in June 2015. The first phase (2015–2018) includes infrastructure removal and reclamation; the second (2018–2024) constitutes water management and treatment; and the third (2024) phase involves the end of most activities at the site. To ensure the environment is protected during that time, we developed a water quality monitoring program, which was approved by the Newfoundland Department of Environment and Conservation. An application for a new water usage licence was approved. In 2015, as a result of our performance and community engagement, Duck Pond received the Corporate Citizen of the Year Award from the regional Chamber of Commerce and the Miner of the Year from the local branch of the Canadian Institute of Mining, Metallurgy and Petroleum.

We continue with decommissioning and reclamation activities at Duck Pond, with a focus on maintaining engagement with our communities of interest to keep them informed and identifying further opportunities to create benefits.

"The strong relationship built between Duck Pond, local communities and the local government over the years continued through the end of operations and into closure, and played an important role in the development of the closure plan for the operation."

Larry Bartlett, General Manager, Duck Pond

### What was Our Performance in Mine Closure in 2015?

We report on the annual area of land distributed, reclaimed and yet to be reclaimed as well as the total area of land reclaimed and our total footprint in 2015. Furthermore, we provide a summary of provisions and closure plans.

At the end of 2015, Teck had a total footprint of 29,301 hectares (ha) of which 22,808 ha are yet to be reclaimed and 6,493 ha had been reclaimed. During 2015, 478 ha of land were disturbed while 198 ha were 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 reclaimed.

#### Table 15: Area Reclaimed and Distributed<sup>1,2,3</sup>

	2015	2014	2013
Area reclaimed during the current year (ha)	198	77	434
Area disturbed during the current year (ha)	478	908	310
Area of land yet to be reclaimed (ha)	22,808	22,414	20,791
Total area of land reclaimed (ha)	6,493	6,438	6,357
Total footprint (ha)	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 area of land reclaimed during the current year may include land that was previously reclaimed but subsequently 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.

#### Update From Our Subject Matter Experts

"In 2015 I was particularly pleased with our accomplishments in two areas. Our Elkview Operations developed a comprehensive closure plan that will act as a template as updated plans are developed at our other mines. As well, we worked collaboratively with the government of Newfoundland and Labrador to implement a new mine closure review process for our Duck Pond **Operations**. This process appears to be working well and meeting the needs of both the province and the Operation as closure activities continue at the site."

Mark Freberg, Director, Permitting and Closure

#### Outlook for Closure Planning

Addressing mine closure issues, including early engagement with COIs on closure planning, is helping us to align Teck's business interests with local priorities and we anticipate that this alignment will bring better and more cost-effective outcomes. We will continue to ensure that our mine closure activities — from closure planning to progressive reclamation effectively manage risk and meet or exceed our commitments. In 2016, we will focus on mine closure planning at Coal Mountain Operations and implementation of the closure plan at Duck Pond Operations.

# Social

#### **Material Topics**

## Health and Safety of Our Workforce

Health and safety including occupational health and hygiene.

## Engaging with Indigenous Peoples

Indigenous Peoples engagement, agreements, benefits and disputes.

## Community Engagement

Support from local communities, community disputes, community engagement, positive and negative impacts (e.g., employment, inflation, infrastructure), grievance mechanisms for impacts on society.

## Human Rights

Actual and potential impacts on the human rights of the people foreseeably affected by our activities, including people in our supply chain and living near our operations.

## Product Impacts

Actual and potential impacts of our products through product stewardship.

### Emergency Preparedness

Emergency preparedness, particularly in the context of tailings management.

78 83 86

53



#### **Material Topic**

# Health and Safety of Our Workforce

#### Why was Health and Safety of Our Workforce a Material Topic in 2015?

Global Context: 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>6</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.

#### **Industry Context**

Mining and processing involves the handling of large volumes of materials, the use of heavy equipment, and potentially hazardous production processes. It also has the potential to expose employees and contractors to chemical, physical and biological health hazards. 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. The importance of health and safety is reflected in the International Council on Mining and Metals (ICMM) 10 Principles. ICMM Principle 5 is to "seek continual improvement of our health and safety performance" and 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. Poor occupational health and safety performance can negatively impact labour costs, productivity, morale and reputation. Moreover, low performance in health and safety can significantly impact the lives of our employees, their families and the greater communities in addition to resulting in fines and other liabilities. The health and safety of employees can impact the communities where they live.

#### **Teck Context**

Safety is a core value at Teck and 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. As a result of two fatalities in 2014, we increased our focus on the safety risks that have the highest potential to cause serious injury or loss of life.

In 2015, there were no fatalities and we continued to build on our efforts to improve safety performance, achieving a 25% reduction in our High-Potential Incident frequency compared to 2014. However, our total reportable injury and lost-time injury frequency edged upwards. This emphasizes that we must remain diligent as we work to reach our ultimate goal of everyone going home safe and healthy every day.



#### What is in this Topic?

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

#### **Performance Highlights**

Reduced High Potential Incidents (HPIs) by approximately

**25%** 

# 16,000

employees and contractors have completed Courageous Safety Leadership training since 2009.

#### Learn More

See the recently released <u>Health and</u> <u>safety critical control management: good</u> <u>practice guide</u> from the ICMM



### How Does Teck Manage Health and Safety?

#### **Our Targets and Commitments**

We believe that all incidents that could cause serious harm to our employees or contractors are preventable. We are responsible for providing a safe workplace by effectively managing workplace risk. We are also committed to providing leadership and resources for managing health and safety to ensure that all employees and contractors have the knowledge and ability to safely perform their duties.

We identify and manage occupational health and hygiene exposures for the protection of longer-term health. We also strive for continual improvement and hold ourselves accountable through verification and reporting of our performance.

We expect all employees and contractors to be leaders in health and safety through identification of hazards and the elimination and control of high-potential risk. We all share in the responsibility for our safety and that of our co-workers. Working together, we believe we can eliminate fatalities and serious injuries in the workplace.

Each year we set internal targets to improve our safety performance. Our goal in 2016 is to reduce our Lost-Time and Disabling Injury Frequency by 15%. 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, accidents, property damage and operational disruption.

#### Figure 10: Three-Pillar Approach



#### Everyone Going Home Safe and Healthy Every Day



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 Risk Management Committee, which is made up of several members of our executive management team. The Safety and Sustainability Committee of the Board also plays an oversight and governance role in monitoring health and safety at Teck. We have an executive Health and Safety Steering Committee to inform our five-year health and safety plan and provide

additional oversight of performance, as well as to evaluate emerging health and safety trends and initiatives.

Our <u>Health and Safety Policy</u> defines our corporate commitment to providing leadership and resources for entrenching core values of health and safety across our company. In 2014, our Health and Safety policy was updated to include a statement regarding our commitment to occupational health and hygiene for the protection of longer-term health. For more information on how our Health and Safety Policy works with our Health, Safety, Environment and Communities Management Standards, please see page 12.

#### **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 two major initiatives to foster a culture of safety at Teck: Courageous Safety Leadership (CSL) and Visible, Felt Leadership (VFL).

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 their 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. This phase will be implemented starting in 2016 to enhance the development of a positive culture of safety.

VFL is a key health and safety program for management teams across the company that helps Teck to evaluate how effectively CSL and other safety requirements are being embedded throughout the organization. Through VFL, managers interact and engage with our workforce on a regular basis to foster relationships and gain mutual understanding of the issues the workforce may be facing, particularly with regard to working in a safe way. In 2015, a company-wide guidance document for VFL was rolled out to each of our sites to outline the expectations for team site tours, solo site tours, and health and safety meeting participation and feedback.

#### Learning Organization

We foster a culture of continuous learning and improvement in safety performance by analyzing High-Potential Incidents, 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 2015, we applied ICAM to 144 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 2015, which has now been implemented at all our operations. This program focuses on improving the way we identify 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. As part of our emphasis on reducing HPIs and effectively managing high-potential risk, in 2015 we continued to develop and roll out requirements that establish minimum controls and expectations for various areas that may result in HPIs, including specific standards for the following:

- · Energy isolation and lockout
- · Heavy mobile equipment and other vehicle interaction
- · Working at heights
- Barricading

## How Does Teck Manage Health and Safety?

#### Snapshot

#### Individual Risk Assessment Through Take 5

Individual risk assessments have an important role to play in identifying high-potential risks.

The Take 5 personal safety planning tool currently in use at our steelmaking coal operations is an example of an individuallevel risk assessment that is helping employees form the habit of taking the time to assess workplace risks before they begin a task.

When they complete a Take 5, employees ask themselves a series of questions under five prompts:

#### 1. Stop

- · Am I clear on what the task is?
- Do I have the required skills and training?
- · Is this task routine?

#### 2. Think

- · Do I need a permit?
- Could work conditions change that may introduce new High-Potential Risks during the task?
- Are there other workers involved/introduced who are unfamiliar to the task?
- Could my task seriously injure myself or other people?

#### 3. Observe

 What High-Potential Risks may I encounter in my work environmental or as I undertake this task?

#### 4. Plan

 How will I control the High-Potential Risks?

#### 5. Proceed Safely

- Does this task feel right to do now?
- If yes, proceed. If no, do not commence task and contact supervisors if effective controls are not in place.

#### **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, 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 occupationally related illness or disease. This includes exposure to dust, noise, vibration and hazardous chemicals.

In 2014, we formed an Occupational Health and Hygiene Committee consisting of corporate and business unit health and safety representatives to assist in the development of Teck Occupational Health and Hygiene Principles and to inform strategy development.

In 2015, the committee developed and issued a self-assessment tool that was applied across all sites to determine the type of occupational health and hygiene programs in place. The results are being used to guide future strategy and improvement. The committee also assisted with establishing requirements for Teck occupational hygiene programs.

In 2016, we will work to enhance our occupational health and hygiene risk assessments, monitoring, and exposure controls to protect the long-term health of employees. Beginning in 2016, we will develop leading and lagging indicators for occupational health and hygiene reporting and incorporate these indicators into health and safety performance reporting.

#### **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 2015. 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 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 late 2014 and in 2015, we conducted clinics at Line Creek Operations, Trail Operations, Product Technology Centre, CESL and at our offices in Toronto, Calgary, Sparwood and Vancouver, with 670 employees attending. Learn more in this online case study.

#### **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 potential 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 the six mines in our steelmaking coal business for over 10 years. In 2012, our steelmaking coal sites expanded these policies to include random testing. Since the initiation of random testing, we have seen a decrease in post-incident positive tests. In addition, voluntary requests for drug and alcohol rehabilitation increased following the introduction of random testing. At our Cardinal River Operations in Alberta. random drug and alcohol testing was suspended in 2015 after an arbitration decision in which the arbitrator determined there was not sufficient evidence of a drug and alcohol problem at Cardinal River Operations to warrant the need for random testing. The operation continues to implement pre-employment, reasonable cause and post-incident testing. Random drug and alcohol testing at our other

steelmaking coal sites in British Columbia is subject to ongoing arbitration.

In 2015, Trail and Highland Valley Copper Operations finalized and rolled out drug and alcohol policies that include postincident and reasonable cause testing. 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**

High-Potential Risk Control: Improving Working at Heights Safely at Trail Operations

Working at heights is a potential safety issue for mobile equipment operators and heavy truck drivers at our Trail Operations in British Columbia. Operators often access the tops or backs of tall equipment to adjust canopies, remove ice and snow buildup, and adjust material weight.

In alignment with the best practices for working at heights, we identified that these employees and contractors were accessing equipment at heights of 3–4 metres, which could lead to a Potentially Fatal Occurrence if they fell.

To help control this risk, Trail Operations implemented an improved fall-arrest system in 2015 designed to prevent workers from injuring themselves when working at heights on these pieces of equipment. Trail Operations installed two fall protection towers on-site. While wearing fall protection, workers on-site can use these towers to access the tops or backs of large mobile equipment.

The system — similar to that used for railcar access — is equipped with a self-rescue device that safely lowers a worker to the ground if there is a fall. Each person using the towers is required to have fall protection training completed beforehand. Instructions on how to safely use the towers is also provided.

The fall protection towers went into service in the third quarter of 2015,

and to date, the feedback from employees using the system has been positive.

The fall protection towers now in use at Trail Operations align with our High-Potential Risk Requirements (HPRR) for working at heights and are just one example of how we ensure that everyone working at our site goes home safe and healthy every day. The work done at Trail Operations has been shared with other operations so they can assess potential applicability.

"Use of the new fall protection towers has mitigated one of our working at height risks. This aligns closely with our High-Potential Risk Control strategy." Thompson Hickey, General Manager, Trail Operations



## Sustainability Strategy Spotlight

#### Progress Against Our 2015 Goals

As part of our goal to reduce overall total reportable injuries, there has been a reduction in Total Reportable Injury Frequency (TRIF) of approximately 30% and in Long-Term Injury Frequency (LTIF) of approximately 27% since 2010.

For a full list of 2020 and 2030 health and safety goals, see page 18.

# Outlook for Health and Safety of Our Workforce

Safety is a core value at Teck and we are committed to continually improving our performance. Moving forward, we will continue to focus on strategies to reduce incidents that have the potential to seriously or fatally injure people, or exposures that may result in occupational disease. In 2016, we will continue to improve the quality of our High-Potential Risk Control strategy implementation, roll out the next phase of Courageous Safety Leadership and build on our Occupational Health and Hygiene Strategy. We track several leading and lagging indicators to monitor our safety performance. In this section, we report on our safety performance.

#### **Safety Performance**

In 2015, we continued to build on our safety performance in areas of greatest risk. We sustained no fatalities and we reduced our High-Potential Incident (HPI) frequency rate by approximately 25% compared to 2014. Total Reportable Injury Frequency (TRIF) was 20% higher than in 2014, largely due to an increase in medical aid injuries; our Lost-Time Injury Frequency increased by 5%. That being said, since 2010, there has been a reduction in TRIF of approximately 30% and in LTIF of approximately 27%. 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 the table below. For more detail on safety performance of employees and contractors by country of operation, go to the Health and Safety of Our Workforce section of www.teck.com.

#### Table 16: Safety Performance<sup>1,2</sup>

2015	2014	2013	2012
1.24	1.01	1.26	1.33
78	74	69	94
0.43	0.40	0.34	0.46
0.27	0.25	_	-
18.6	80	19	17
0	2	0	0
	2015 1.24 78 0.43 0.27 18.6 0	2015     2014       1.24     1.01       78     74       0.43     0.40       0.27     0.25       18.6     80       0     2	2015     2014     2013       1.24     1.01     1.26       78     74     69       0.43     0.40     0.34       0.27     0.25     -       18.6     80     19       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 Antamia 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 fatalities, which are automatically counted as 6,000 lost days.

Since tracking of HPIs commenced in 2010, we have seen an overall decrease in HPI frequency (Figure 11). 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 2015, there were seven PFOs, which were investigated using ICAM, and corrective actions were developed. The ICAM results are shared with all of our operations in order to facilitate a local gap analysis against the findings to prevent similar occurrences.

# Figure 11: High-Potential Incident Frequency



# Engaging with Indigenous Peoples

#### Why was Engaging with Indigenous Peoples a Material Topic in 2015?

Global Context: There are more than 370 million Indigenous People 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 and, as a result, many live in poverty and their cultural traditions are threatened. Consequently, Indigenous Peoples are particularly vulnerable to the impacts of commercial development and business activities.

The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), International Labour Organization's Convention No. 169 and International Finance Corporation's (IFC) Performance Standards on Environmental and Social Sustainability provide international standards for engagement with Indigenous Peoples.

#### **Industry Context**

In many cases, mining activity is located within or adjacent to the territories of Indigenous Peoples. Exploration, development, operation, closure and reclamation of mines can have positive and negative impacts that can be particularly felt by Indigenous Peoples due to their inherent connection to the land. 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 well-being. The effects of these impacts can be particularly significant for Indigenous communities in comparison to other populations, including the potential disturbance of local land, water systems, biodiversity and heritage sites — all of which can be of cultural and/or spiritual significance.

In 2013, the International Council on Mining and Metals (ICMM) released an <u>Indigenous</u> <u>Peoples and Mining Position Statement</u>

that applies to all member companies. This statement 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. Members were required to align their practices with this position statement by 2015.

The interpretation of Indigenous rights and their application to the natural resource development industry continues to evolve. In 2014, the Supreme Court of Canada issued a significant decision with respect to the jurisdictional powers and Aboriginal title rights of First Nations in Canada. The case of Tsilhqot'in Nation v. British Columbia made Canadian history as the first time that Aboriginal title has been definitively established by the Supreme Court of Canada. The decision also clarified and affirmed the ability of the provincial government to establish regulatory frameworks over natural resource development and environmental values, subject to certain consultation and accommodation requirements. In 2015, the provincial government and Tsilhqot'in Nation worked together towards setting the terms and goals for negotiating land, governance and resource agreements over the Tsilhqot'in territory.

#### Teck Context

Nine 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. In 2015, Teck formalized our Indigenous Peoples Policy, which confirms our approach to working with Indigenous Peoples including our commitment to FPIC.



#### What is in this Topic?

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

#### **Performance Highlights**

new agreements were reached with Indigenous Peoples in 2015, taking our total number of active<sup>9</sup> agreements in place to 34

# **300** employees

at 11 sites completed Indigenous Peoples cultural awareness training

In 2015, we formalized our Indigenous Peoples Policy

#### Learn More

Indigenous Peoples and Mining Good Practice Guide — ICMM



Pictured above: Nic Milligan, Manager, Community and Aboriginal Affairs, discusses a project with Rosemary Phillips, Industry Engagement Officer with the Ktunaxa Nation Council Economic Sector

<sup>7</sup>Business Reference Guide: United Nations Declaration on the Rights of Indigenous Peoples. <sup>8</sup>Does not include operations in which Teck has an ownership interest

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, it also helps Teck advance projects in a timely, cost-effective manner.

Our engagement with Indigenous Peoples is conducted by Communities staff at each of our operations, project or exploration sites and 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, projects and exploration group, which provides oversight and guidance on major initiatives with Indigenous Peoples including the negotiation of agreements.

In this section, we outline our Indigenous Peoples Policy, our approach to recognizing and respecting the interests and rights of Indigenous Peoples, negotiating agreements and supporting traditional knowledge and land use studies.

#### **Teck's Indigenous Peoples Policy**

In 2015, Teck released an Indigenous Peoples Policy that confirms our commitment to working with Indigenous Peoples to ensure Indigenous rights, cultural heritage and traditional land use are respected. In particular, it confirms our commitment to working to achieve the free, prior and informed consent of Indigenous Peoples when proposing new or substantially modified projects. The policy was developed with input and guidance from Indigenous Peoples from our local communities as well as leading international and local agencies with expertise in Indigenous and mining policy. Teck's Indigenous Peoples Policy is included in full in the snapshot.

#### Snapshot

#### **Indigenous Peoples Policy**

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.

Teck engages with Indigenous Peoples potentially affected by our activities to:

- Build respectful relationships through early, inclusive dialogue and collaborative processes
- · Provide resources to build the capacity

of both Indigenous Peoples and Teck for meaningful dialogue

- Integrate Indigenous Peoples' perspectives and traditional knowledge into company decision-making throughout the mining life cycle to enhance benefits and address impacts
- Work to achieve the free, prior and informed consent of Indigenous Peoples when proposing new or substantially modified projects
- Work with Indigenous Peoples to achieve self-defined community goals that provide lasting benefits

Teck is committed to responsible resource development and we recognize

that building relationships with Indigenous Peoples is fundamental to our success. We are guided by the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the International Labour Organization (ILO) Convention No. 169 on Indigenous and Tribal Peoples, and the International Council on Mining and Metals (ICMM) Position Statement on Indigenous Peoples and Mining. This policy is supported by our Health, Safety, Environment and Community Management Standards and other internal guidance, and will be reviewed regularly and updated as required.

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

We acknowledge and respect Indigenous Peoples' rights and interests as enshrined in regional, national and international law, and we understand that the extent to which Indigenous Peoples' rights are legally recognized varies by jurisdiction. In Canada, for example, certain Indigenous Peoples' 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 socioeconomic, political and cultural development.

International law continues to shape requirements related to working with Indigenous Peoples. For example, application of International Labour Organization's Indigenous and Tribal Peoples Convention is already represented in Chilean law, which requires the state to consult Indigenous Peoples in regards to their lands and resources.

Consultation can play an important role in regulatory approval processes and project development. As required by international conventions and typically by domestic law, many governments acknowledge 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 Peoples' rights or traditional access to land, we seek opportunities for meaningful consultation to share information on our activities, to understand the interests of Indigenous Peoples and to develop measures to address impacts on those interests.

#### **Negotiating Agreements**

We believe that the best foundation for the establishment of stable, constructive and mutually beneficial relationships with Indigenous Peoples is through the development of clear and predictable benefit agreements. These 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 approach in negotiating agreements focuses on:

- Recognizing the importance of building trust, mutual respect, cooperation and open communication of interests and concerns
- · Improving community well-being
- Working with Indigenous Peoples in innovative and collaborative ways
- · Reducing business risk through effective consultation and other processes
- · Increasing project certainty

Agreements 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.

#### Sharing Traditional Knowledge and Supporting Land Use Studies

For Indigenous communities, the landscape and its features provide sustenance and spiritual attachment. The stories communicated through song and dance and the ongoing practice of ceremony, or traditional practices, give places and features significance. To minimize impacts to Indigenous heritage and culture, Teck consults with Indigenous Peoples to promote mutual understanding and cooperation.

At our operations and resource development projects and, in some cases, at our exploration 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.

#### **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.

### How did Teck Manage Engagement with Indigenous Peoples in 2015?

#### **Case Study**

Engaging with Indigenous Peoples: Collaborating with the Nlaka'pamux People to Study Dust and Traditional Plants

Teck's Highland Valley Copper Operations is located in territory traditionally occupied by the Nlaka'pamux people. For many generations, the Nlaka'pamux have used local plants for medicine, food and other traditional activities.

In recent years, Nlaka'pamux communities have asked about dust emissions from the mine and whether there is a potential impact on local ecosystems and on those traditional plants used by community members. To answer this question, Highland Valley Copper and the Nlaka'pamux communities jointly launched a study to examine dust deposition from the mine and assess any potential effects on traditional plants.

The study was designed to address Nlaka'pamux community members concerns regarding the potential impact of mine dust on the land and the traditional plants in the Highland Valley area. Many traditional plants are still used by the Nlaka'pamux communities today for food, medicine and spiritual purposes.

The first was a study to examine how dust from the mine was travelling. This was done by collecting and analyzing lichens, which are particularly sensitive to dust because they are physiologically dependent on atmospheric deposition for nutrients. The study compared an area within 10–15 kilometres of the mine boundary with a reference area identified by Nlaka'pamux community participants as dust-free and good for comparison to dust-affected areas. The community members were also engaged to ensure the study included specific gathering areas where concerns about dust had been identified.

This information on dust patterns was used to develop the next phase of the study — determining any potential effect of the dust deposition on traditional plants. Nlaka'pamux workshop participants decided to focus the study on the shoots and berries of soapberry, which is important to the Nlaka'pamux for medicine, food and other values. Soapberry is a good species to study the effects of dust because the plant is ubiquitous across the Highland Valley area.

Fieldwork for the traditional plants study was carried out within the mine study area and in the reference area. Community engagement consisted of six workshops over the course of the study, in which Nlaka'pamux representatives were involved in setting study objectives, developing the study design and methodology, interpreting results, and planning for sharing results with the communities. The study included collection of berries and other plant samples and soils, which was led by Nlaka'pamux elders and youth. This included a field workshop with elders to show the techniques used for harvesting and processing the various parts of the plant. Youth participated in the workshop as an opportunity to learn traditional harvest techniques. To address community concerns about any changes that could occur during processing, not only were the

berries and leaves analyzed, but the tea and juices as well.

Overall, the traditional plants study indicates that, while there is a measurable effect of mine dust on soapberry plant parts in the study area and derivatives such as tea and juice, the levels of metals in these materials are generally very low and it is safe to consume soapberry products within the study area.

"Working with input and guidance from the Nlaka'pamux, we have been able to comprehensively study this issue and answer the questions raised, as well as increase our understanding of how dust from the operation interacts with the local environment." Jaimie Dickson, Environmental Supervisor, Highland Valley Copper



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## What was Our Performance in Engagement with Indigenous Peoples in 2015?

In this section, we report on agreements, feedback from and disputes with Indigenous Peoples, procurement from Indigenous suppliers, community investment focused on Indigenous Peoples and cultural awareness training.

#### Agreements with Indigenous Peoples

Building constructive relationships with Indigenous Peoples and pursuing understanding and shared commitments through agreements have taken on increasing importance in our activities. Negotiations to reach an agreement can take considerable time, and there must be a shared understanding of the expectations of both parties. Although we recognize that agreements are important milestones, the relationship itself is the true indicator of success.

As a result of our long-standing commitment to reaching agreements with Indigenous Peoples, Teck currently has agreements in place with Indigenous Peoples at the majority of our operations and major exploration projects. In 2015, we focused on advancing agreements for Quebrada Blanca Operations, Frontier and Quebrada Blanca Phase 2 projects and our steelmaking coal operations.

Of the 12 operations covered in the scope of this report, nine are located within or adjacent to Indigenous Peoples' territories, and we have established or are negotiating agreements with all of these Indigenous groups.

Our agreements with Indigenous Peoples traditionally address the full range of our activities from early stages of exploration to closure. Agreements can cover short-term, seasonal project work and long-term operations.

#### Perspective on Engaging with Indigenous Peoples

"As stewards of our homeland, the protection of the Elk and Flathead Valleys has always been a priority for the Ktunaxa Nation. Our partnership is demonstrative of the commitment the Ktunaxa Nation and Teck have to wildlife and habitat conservation and the protection of land of significant cultural value. It is my hope the Ktunaxa Nation and Teck continue to work together for the benefit of not just Ktunaxa citizens, but all those who call Ktunaxa Territory home."

Table 17: Active Agreements with Indigenous Groups at our Operations

Operations Within or Adjacent to Indigenous Peoples' Territory	Name of Indigenous Group	Formal Agreements with Indigenous Groups
Cardinal River	Alexis Nakota Sioux	Impact Benefit Agreement
Elk Valley	Ktunaxa Nation Council	Working Protocol 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	Negotiation 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

Kathryn Teneese, Ktunaxa Nation Council Chair To date, Teck has negotiated many 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 17. 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. In 2015, there were 34 active<sup>10</sup> agreements in place with Indigenous Peoples, including newly signed agreements or agreements already in implementation.

#### **Grievances and Litigation**

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. In 2015, there were five grievances under our existing agreements or through our formal grievance mechanisms involving Indigenous Peoples. This includes a concern regarding recreational hunting near one of our advanced projects.

Environmental litigation regarding the Upper Columbia River and involving the Confederated Colville Tribes and the Spokane Tribe of Indians continues. For more information, visit the <u>Upper Columbia River project website</u>.

#### Procurement from Indigenous Peoples Suppliers

In 2015, our operations spent approximately \$142 million on suppliers who self-identified as Indigenous; this represents an overall increase of 11%, or nearly \$17.5 million over the prior year. The vast majority of this spending is at our Red Dog Operations, where Indigenous Peoples' procurement is a cornerstone of our operating agreement, which governs the operation and development of the mine. In 2015, 67.9% of Red Dog's spending was with Indigenous suppliers.

We are developing initiatives aimed at increasing procurement from Indigenous suppliers through the establishment of business development support tools and tracking and evaluation systems for our Indigenous procurement process. 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 gualifications, or provide them with training and business development support. 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 2015 at several of our operations.

#### Community Investment Focused on Indigenous Peoples

To support our relationships with Indigenous Peoples, Teck aims to improve the way in which we identify investment opportunities that benefit Indigenous Peoples at a local, regional and national scale. Although the total amount allocated each year for community investment is reflective of current fiscal realities at our operations, the percentage of total community investment that goes toward Indigenous-specific investments was 17% of the total Teck community investment spend in 2015 or \$2.7 million. To support this work, Teck is moving towards a more strategic approach to community investment that aligns investments with opportunities identified in collaboration with Indigenous Peoples.

#### **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 Peoples' rights and cultural awareness for key exploration, operations and management staff. As such, in 2015, 11 Teck sites located within or adjacent to Indigenous traditional lands hosted cultural awareness training. In total, 300 Teck employees responsible for engaging with Indigenous Peoples or overseeing business activities that may affect Indigenous Peoples completed cultural awareness training in 2015.

#### **Case Study**

Engaging with Indigenous Peoples: Supporting Post-Secondary Students in Canada Through Indspire Bursaries

Teck uses targeted community investments to support Indigenous Peoples at a local, regional and national level, and demonstrates our commitment to working with Indigenous communities to achieve self-defined goals that provide lasting benefits.

An example of this is our funding of the Teck Canadian Aboriginal Bursary through Indspire, a national charity created by and for Aboriginal people in Canada. Established in 2012, the Teck Canadian Aboriginal Bursary Award is part of Teck's commitment to developing long-term relationships with Indigenous Peoples in the areas where we operate, and to building capacity in order to support the economic development of communities and Indigenous Peoples. Since inception, more than 19 postsecondary students from across the country have received this bursary. Once example is Jamie Davignon, an Environmental Engineering student at the University of Northern British Columbia and recent recipient of the Teck Canadian Aboriginal Bursary. A member of the Tahltan Nation, an Indigenous group near Teck's Galore Creek project, Jamie recently graduated and is working as a junior engineer-in-training.

## Why did you choose to study Environmental Engineering?

I wanted a career in a field that was constantly changing so that I can keep learning year after year. I also wanted a career that would allow me to work outside and travel the world. That's why I decided to study environmental engineering, which involves several disciplines, like civil and chemical engineering, and includes everything from waste treatment to clean energy assessments.

#### What are your career goals?

In the next few years, I plan to work towards earning my Professional Engineer designation, commonly known as the P.Eng., and work in different countries. Eventually, I hope to start my own consulting company in my hometown of Whitehorse.

#### What does being a recipient of the Teck Canadian Aboriginal Bursary mean to you?

It means a lot to me to be able to represent Aboriginal women, especially in the field of engineering, as a bursary recipient. The Teck Canadian Aboriginal Bursary has allowed me to focus on my studies and enjoy my time at university without having to work part-time or worry about making ends meet.

#### Why do you think it is important for companies like Teck to support students through Indspire?

From my experience, many Aboriginal students depend on funding through organizations like Indspire to be able to study and live in major cities. Working during the semester is very difficult, if not impossible, depending on course schedules.



# Outlook for Engagement with Indigenous Peoples

We will 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. In 2016, we will focus on concluding negotiations on agreements with other Indigenous communities located near our operations while continuing to build long-lasting and mutually beneficial relationships with Indigenous Peoples.

# Community Engagement



#### What is in this Topic?

Achieving support from local communities, community disputes, community engagement, positive and negative impacts (e.g., employment, inflation, and infrastructure), grievance mechanisms for impacts on society.

#### **Performance Highlights**

### 887 responses

received through our feedback mechanism. Common topics were related to environmental questions and concerns, Indigenous-related concerns or concerns originating from Indigenous COIs, opportunities related to community investment, and our mining activities.

#### Learn More

<u>Understanding Company-Community</u> <u>Relations Toolkit — ICMM</u>



#### Why was Community Engagement a Material Topic in 2015?

Global Context: In response to increasing expectations for 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 is reshaping how communities engage with the broader world, which is creating 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.

Maintaining trust through effective community engagement is critical to long-term business viability. In the 2015 PwC survey of CEOs, 55% surveyed reported that they are concerned about the lack of trust in business today — compared with 37% just three years ago. With the growing importance of building trust between communities and business, it is essential to build effective and long-lasting relationships with communities of interest (COIs).

#### 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. A 2015 International Council on Mining and Metals (ICMM) stakeholder perception survey showed that only 25% have positive perceptions of the mining industry's progress towards sustainable development. In their 2016 Tracking the Trends report, Deloitte reported that mining projects with capital expenditures of between US\$3 and US\$5 billion can incur weekly losses of roughly US\$20 million due to delayed production caused by community opposition.

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 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 attain regulatory approvals throughout the mining life cycle.

#### **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 located next to Andacollo, Trail and Sparwood, respectively. Even our operations that are located a significant distance from settlements, 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.

In 2015, we took a number of measures to reduce costs across our operations in response to persistent challenging market conditions. These measures included workforce reductions and reductions in capital spending, some of which impact local hiring and procurement. Given these circumstances, we worked to increase our engagement with local COIs to keep them informed of the challenges we faced and the steps we took to address them. Similarly, we engaged with communities specifically on tailings management in 2015, in response to the tailing dam breaches at the Mount Polley and Samarco mines, operated by other companies.
### How Does Teck Manage Community Engagement?

Our vision is to build strong relationships with communities and create lasting mutual benefits based on respect for what communities value through engagement. Community engagement is an iterative and ongoing process of developing and deepening the relationship between our sites and COIs.

Community engagement is guided by our Health, Safety, Environment and Community (HSEC) policies and Management Standards as outlined on page 12, our Human Rights and Indigenous Peoples Policies, and the Social Management and Responsibility at Teck (SMART) Framework. These standards, policies and management tools inform all activities across Teck and across the mining life cycle. Through meaningful engagement and collaboration, we build trusting relationships with COIs to manage social risks, impacts and opportunities, and comply with HSEC Management Standards and international commitments.

At Teck, we begin engagement with communities at the earliest phase of the mining life cycle in order to achieve and maintain community trust and support for our activities. We work to engage communities and continuously demonstrate our ability to effectively manage environmental and social impacts while providing opportunities and mutually defined benefits throughout the mining life cycle. 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.

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

The SMART toolkit provides guidance to achieve conformance with our community-related HSEC Management Standards.

The SMART tools and guides are categorized into:

• **Thematic guides**, which provide a definition and explanation of relevant themes throughout the mining life cycle; these themes include human rights, the rights of Indigenous Peoples, gender and vulnerable groups

**Process tools**, which provide direction on understanding and managing the social impacts of our activities; these tools include engagement planning, social risk assessment and managing social impacts

**Phase-specific tools**, which provide guidance on 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 <u>on the Community</u> <u>Engagement section of www.teck.com</u>.



#### **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.

We recognize that the strength of our relationships with communities is determined by how effectively we:

- Achieve and maintain effective and meaningful communications with local communities
- Manage our impacts on local communities
- Create sustainable benefits for local communities

### How Does Teck Manage Community Engagement?

### Implementing the SMART Framework

We have Communities teams at all our operations who are focused on implementing these tools to build and strengthen trust-based relationships with our local COIs. At our exploration and development projects, exploration geologists and project managers are provided with the tools and training they need to effectively and appropriately engage with local COIs through all stages of their activities. These exploration and development personnel are supported by country-based communities specialists. Teck's corporate community team provides guidance and reviews performance related to understanding and managing our impacts on, and relationships with, COIs across operations, projects and exploration activities. The SMART tools are implemented in a "Plan-Do-Check-Act" cycle, which uses planning, implementation, monitoring, and review processes to drive improvements in managing social risks and opportunities as outlined in the table below.

#### Table 18: Implementing Social Management Activities

Management Actions	Implementation Detail				
	Plan				
Understand the broad socio-economic context, undertake a	We conduct social baseline studies to understand existing socio-economic conditions in the region. We have conducted social baseline studies at the majority of our operations and at key development projects to identify opportunities for improvements to community well-being. The baseline information also enables Teck to measure socio-economic performance.				
social risk assessment, and plan risk management activities	We conduct social impact assessments to help us understand how our activities might positively and negatively impact local communities, and as required by regulatory approval processes. For example, we completed social impact assessments for the Baldy Ridge Expansion Project in the Elk Valley. We also initiated a social impact study in support the Quebrada Blanca Phase 2 project in Chile.				
	We also conduct social risk assessment to help us understand how and why impacts from our activities are relevant to our COIs and how external factors can affect COI acceptance of our activities, and, ultimately, our ability to conduct business.				
	Do				
Engage with COIs and manage risks	Starting from early exploration, we conduct COI mapping and "Area of Influence" exercises in order to help define local COIs that we then seek to engage with. Early engagement gives communities an opportunity to learn about Teck, who we are, how we operate, and the details of our proposed exploration long before any activities begin. This allows the community to develop an understanding of our activities and an early opportunity to express their concerns and interests. Teck also benefits from establishing these early relationships. When this occurs, we are more likely to develop exploration projects that can incorporate community feedback and secure their support. We conduct Area of Influence and COI identification exercises at all our operations, development and exploration projects.				
Maximize positive impacts and minimize negative impacts through proactive management actions that are informed by community consultation	We minimize our negative impacts primarily through stringent and comprehensive environmental management systems and through engagement to understand and manage issues of importance to COIs. We maximize positive impacts by seeking ways to improve the socio-economic well-being of local communities through local employment and procurement opportunities, taxation and payments to governments, and direct voluntary investments into communities. Please see the Economic Performance and Contributions section starting on page 23 for detailed discussions on how we accomplish this goal.				
	Check and Act				
Monitor and evaluate performance to understand the effectiveness of management actions and improve on them where necessary	Our primary means for measuring the effectiveness of our management approach is through the information we receive via feedback mechanisms and engagement, including surveys, workshops, town hall meetings, and grievance mechanisms. Our feedback mechanisms are designed to enable our COIs to ask questions, to express concerns and provide feedback about any area of our activities, and to receive a timely response. Through direct engagement with local COIs, we can gauge the success of our management approaches and determine how we need to adjust them to improve results.				
Recognize and adapt to changes in impacts throughout the mining life cycle	Operations routinely update their social risk assessments to ensure the impacts of our activities are avoided or minimized and, where unavoidable, rehabilitated or rectified. This process of continual improvement is embedded in our system and helps us to respond to changing conditions or priorities of COIs where we operate. Building on engagement and assessment activities, we analyze the results and, incorporating our past experiences and industry knowledge, can reasonably foresee issues that will need management, as well as opportunities for the realization of benefits.				

### **Case Study**

Evaluating Effectiveness of Social Management Systems to Maintain Community Support for Exploration Projects in Turkey

Exploration teams are sometimes the first contact with local communities, so it is critical that we get it right at the beginning. In northwestern Turkey, geologists in Teck's exploration team first engaged with local communities in 2006 as we built a portfolio of projects.

Turkey is home to one of our largest exploration drilling programs for gold and copper. As project activities advanced through to drilling and resource estimation, our capability and capacity to engage with the community expanded to include dedicated community professionals on the exploration team to address the risks and opportunities of mining. For example, they identified an opportunity to raise awareness of mining for one community that was previously unfamiliar with mining. Community members were taken to see a modern active zinc mine to demonstrate responsible management of mining activities including, mitigation of environmental impacts, as well as the positive impacts on the local economy and community well-being.

More recently, the community team engaged with potentially vulnerable groups in the local community, the women and children, through health and educational seminars, initiatives with schools and additional mine tours.

In 2015, we took the opportunity to evaluate the effectiveness of the SMART tools currently in use. The goal of the evaluation was to update and strengthen the exploration team's skills to authentically and transparently engage with local community members, so that ultimately we obtain the community's support to proceed with geological investigations and maintain support through mapping, technical reviews and drilling.

The review brought together 20 key members of the Turkey exploration team including, senior geologists, communities professionals, project managers and the country manager over five days.

The workshop and training helped identify areas for improvement, such as an anonymous feedback mechanism for vulnerable members of one local community, and opportunities to facilitate development partnerships. An engagement strategy developed in the workshop provided a scalable process for the exploration teams to consider on other projects. In the months following the workshop, the training and guidance tools have been used to update community engagement strategies implemented by exploration geologists and community professionals at other key projects in the broader district in support of early engagement.



### **Encouraging Community Feedback**

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 site to specifically ensure that those who want to submit any kind of feedback - be it a comment, question, concern or complaint - are able to do so easily and, if they choose, anonymously. Our SMART Feedback Mechanism Tool guides the process of developing and implementing a feedback mechanism appropriate to the scale of mining activity. These mechanisms may include dedicated phone lines, in-person or online platforms to provide feedback. To date, all of Teck's operations, projects and exploration sites have implemented feedback mechanisms. Feedback items that are received are recorded using our TrackLine system and categorized into four levels:

- 1. Feedback/donation request
- 2. Question or concern

### How Does Teck Manage Community Engagement?

3. Issue, concern or grievance

 Repeated and ongoing concern, or an issue, concern or grievance that is major in nature and may include a breach of law or company policy

Levels 3 and 4 feedback items are referred to as "grievances", recognizing that they are often specific issues of concern to community members that require a response and potential further action from the company. We investigate all grievance-type feedback to determine the root cause and to implement appropriate actions, and we communicate this information in a timely manner back to the concerned party. Our aim is to resolve and close out any grievance to the satisfaction of all parties, and as applicable, recommend and/or implement changes to our practices, procedures and activities to prevent future grievances.

### **Case Study**

### Project Corridor: Partnering to Create Value in Chile

In August 2015, Teck and Goldcorp announced an agreement to combine their respective Relincho and El Morro projects, located approximately 40 kilometres apart in the Huasco Province in the Atacama Region of Chile, into a single project with the interim name of Project Corridor.

"Combining these two neighbouring assets is a commonsense approach that allows us to consolidate infrastructure to reduce costs, reduce the environmental footprint and provide greater returns over two stand-alone projects," Don Lindsay, President and CEO

Community concerns associated with environmental protection of watersheds contributed to the decision to combine the projects. Combining these two projects is expected to provide a number of benefits, including:

#### **Reduced environmental footprint**

Project Corridor will reduce infrastructure requirements, including using a single desalination plant, a single port, a single transmission line, a single concentrator and a common tailings facility. As a result, the environmental footprint of Project Corridor will be significantly less than the combined footprint of the standalone projects. The use of a common tailings facility located at the Relincho site responds to concerns expressed by local communities regarding the location of the previously proposed El Morro tailings facility within the agriculturally important Huasco River watershed.

#### Lower cost, improved capital efficiency

Common infrastructure will significantly reduce project capital costs and ongoing operating costs. Further, the Preliminary Economic Assessment contemplates a phased development approach that will allow future expansions to be funded from project cash flows, which will significantly reduce the initial funding requirement.

#### **Optimized mine plan**

The integrated project is one of the largest undeveloped copper-goldmolybdenum projects in the Americas. Project Corridor allows for the optimization of both resources, resulting in a longer mine life of at least 32 years, based on existing proven and probable reserves, with the scope for further extensions, given the significant exploration potential across the combined property.

### **Enhanced community benefits**

Project Corridor is expected to provide significant economic benefits to the local region. An estimated 4,000 jobs will be created during the construction phase and 1,400 jobs during operation. The increased mine life will also provide longer-term employment opportunities and community investment.

### **Community engagement**

Project Corridor will continue to undertake extensive engagement with communities, Indigenous Peoples and other communities of interest to help guide the project's development. In the months ahead, project staff will be meeting with the community and Indigenous Peoples to explain the Project Corridor concept and will work collaboratively to define the project's engagement model. This process will be facilitated by two independent organizations with expertise in community engagement and experience in enhancing social performance and socially sustainable outcomes for resource projects.



### What was Our Performance in Community Engagement in 2015?

All operations, projects and exploration sites continue to demonstrate a high level of performance on engagement with key COIs to address current and emerging issues and maximize opportunities that provide strategic value for both Teck and those communities.

We demonstrate our performance in community engagement by reporting on dialogue training, impact management, general feedback received, grievances and disputes. For a detailed discussion on our 2015 performance in creating sustainable benefits for local communities, please turn to page 23 in the Economic Performance and Contributions section of this report.

### Progress on Implementing the SMART Framework

In 2015, we continued to support work on the Frontier Project and Quebrada Blanca Phase 2 social and environmental impact assessments using SMART tools. We used the SMART framework to provide early guidance for Project Corridor. The SMART framework and training were also used to guide completion of social risk assessments at all of our operations and key development projects.

In addition, we focused on continuous improvement in engagement including dialogue training for Communities staff and other key members at our Quebrada Blanca and Carmen de Andacollo Operations, Santiago office and Project Corridor. This approach to engagement helps strengthens our mutual understanding of priorities and concerns.

### Engagement on Actual or Potential Impacts

Activities across the mining life cycle may result in a range of social, economic and environmental impacts. Examples of specific impacts experienced at our operations in 2015 and how we responded are discussed in Table 19. Please refer to the Engaging with Communities of Interest section of our website for a detailed discussion on how we engage our COIs to understand their concerns and avoid, minimize and mitigate issues.

### Feedback Mechanism Activity in 2015

In 2015, we received 887 feedback responses through direct feedback

mechanisms established across our sites. Figure 13 below illustrates a breakdown of feedback received through those mechanisms by category. Common topics included environmental questions and concerns, Indigenous-related concerns, opportunities related to community investment, and our mining activities.

### Figure 13: 2015 Total Feedback Received Through Feedback Mechanism by Topic Category



In 2015, we received less community feedback through our mechanisms than we did in 2013 and 2014. Having analyzed data over three years, we believe this is largely attributed to shifts in project permitting and exploration activities that resulted in higher quantities of feedback through our mechanisms in those previous years. We also believe that continued proactive engagement with our communities has created more opportunities for COIs and individuals to provide feedback directly to company representatives without using formal feedback mechanisms. Nevertheless, Teck will continue to monitor the performance of feedback mechanisms and engagement processes across sites to ensure that communities continue to have diverse opportunities to engage with and provide feedback to all our operations, major projects and key exploration projects.

### Perspective on Community Engagement

"The relationship between companies, especially those in the extractives industry, and communities is evolving from a focus on social responsibility to defining and achieving shared value. In many cases, financial contributions designed with the best intentions did not respond to the priorities and expectations of the community. The challenge today is for both sides to identify a shared development strategy and work collaboratively in its implementation."

Ximena Abogabir,

Founder and Board Member, Casa de la Paz, a civil society organization

### Sustainability Strategy Spotlight

### Progress Against Our 2015 Goals

Continued work towards implementation of community aspects of our HSEC Management Standards and expanded our use of Social Management and Responsibility at Teck (SMART) tools to 100% of operations, including integration of social considerations into closure planning.

For a full list of 2020 and 2030 community goals, see page 18.

### What Was Our Performance in Community Engagement in 2015?

### Table 19: Actual and Potential Impacts from Our Activities and Major Engagement Activities

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 in Northern Alaska	We supported an independent process for the community of Kivalina to evaluate changes of traditional use resulting from the presence of RDO. We are working with NANA and the Kivalina IRA Council to establish a formal working group with the community of Kivalina. The objective of the working group is to develop an independent and collaborative process for the community to investigate and address their concerns related to the mine's activities.
Socio-economic: Socio-economic impacts on the District of Sparwood from the development of the Baldy Ridge Extension (BRE) project	Elkview Operations (EVO) Operations in the Elk Valley of British Columbia	In collaboration with the District of Sparwood, we developed a community engagement plan focused on local COIs to ensure potential impacts of the BRE project are minimized and mitigated.
Environmental: Potential impacts on aquatic or human health from selenium levels	Steelmaking coal operations in the Elk Valley of British Columbia	We facilitated community consultation on the first year of implementation of the Elk Valley Water Quality Plan to communicate progress and solicit feedback on continuous improvement.
Socio-economic: Potential impacts on relationships with Indigenous Peoples as a consequence of lack of awareness of customs, culture or manners		With the support and participation of the Ktunaxa Nation, we completed cross-cultural training to educate employees on cultural awareness and sensitivity at all Elk Valley operations.
Environmental/socio-economic: Actual and potential impacts on agricultural livelihoods and community well-being due to dust from blasting	Carmen de Andacollo Operations (CdA) in Northern Chile	At CdA in Chile, we are working closely with the community and regulators to address concerns associated with dust related to blasting and mining activities. In late 2014, the Chilean government established requirements aimed at improving air quality (particulate dust levels) in the community of Andacollo. The plan, which came into force on January 1, 2015, sets out commitments, terms and responsibilities for Teck, for another local mining company and for local government towards improving air quality in the Andacollo region. In response to these requirements and as part of ongoing efforts to improve air quality and reduce dust in the Andacollo region, senior management from Carmen de Andacollo, representatives from Chile's Ministry of Environment and municipal government officials announced the launch of the operation's detailed Atmospheric Decontamination Plan. The plan's objective is to lower dust emissions by 65% over the next two years.
Economic/human rights: Balancing land use and access with the right to a livelihood from artisanal and small-scale mining (ASM)		In 2015, there were 25 ongoing contracts with small-scale miners, of which 15 are active. The purpose of the contracts is to improve the health, safety, and environment and community aspects of small-scale mining extraction in areas of CdA. These efforts help strengthen the livelihoods of the small scale miners by providing guidance on occupational safety and health and best practices in collaboration with the government of Chile. The contracts also form an agreement between the small-scale mines and the government on security, mining and rehabilitation.
Environment: Impacts on water	Exploration in Canada	Exploration conducted pre-drill and post-drill water surveys on a number of sites to build an understanding of water chemistry and monitor potential impacts. Through engagement with COIs, this effort helps to build trust as well as enhance understanding of mineral exploration. In 2015, Teck tested a semi-closed diamond drilling system to manage water use and capture drill cuttings from drilling.
Human Rights: Impact on livelihood	Exploration in Canada	Helicopter transportation to remote sites has the potential to impact the livelihood of guide outfitters. To avoid disruption, we engage early with guide outfitters to discuss our proposed exploration activities and work closely with them to plan our programs respecting their guiding activities.
		In 2015, we had an unplanned interaction in the field with a guide outfitter. We received their feedback and engaged with them early in the year to work with us during planning stages to ensure we did not disrupt their activities again.

### **Grievances and Disputes**

In 2015, of the total feedback received, 66 were considered grievances (classified as level 3 or level 4 feedback). Some disputes may be related to the rights of Indigenous Peoples. Please refer to page 63 in the Engaging with Indigenous Peoples section of this report for more detail.

### Figure 14: 2015 Total Grievances Received Through Feedback Mechanisms by Topic Category



It is important to note that the specific topics of grievances are determined by the individuals who file the grievances. They may be reflective of either 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 for that complainant.

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 2015, two of Teck's operations — Carmen de Andacollo and Red Dog — experienced significant disputes summarized below:

### **Carmen de Andacollo Operations**

A significant community dispute occurred at Carmen de Andacollo (Operations CdA) in 2015. Two blockades occurred in July 2015 on a highway near the mine. The dispute was primarily related to ongoing grievances associated with dust. CdA is actively updating its engagement strategy in response to this incident and working to better understand the root cause of these disputes with the goal of engaging proactively with all communities of interest.

### **Red Dog Operations**

At our Red Dog Operations, two significant disputes occurred. The first dispute was a petition from the Kivalina IRA Council to the Environmental Protection Agency (EPA) to commence a Preliminary Assessment and determine if activities at Red Dog pose a human health or environment risk. Teck collaborated with NANA to engage with the Kivalina IRA Council to develop a Memorandum of Agreement to create an independent and collaborative process to investigate and address concerns. As a result, the Kivalina IRA Council requested the EPA withdraw their petition for a Preliminary Assessment.

A second dispute was related to subsistence hunting. In September 2015, Red Dog briefly closed access to the road between the port and mine site in response to concerns of the Red Dog Subsistence Committee, who stressed the importance of ensuring mining activities do not impede caribou migration. Although efforts were made to communicate the reason for the closure, several calls and emails were received from Iñupiat residents alleging this action impeded their right to subsistence hunting. Red Dog and the Subsistence Committee are examining options to improve approaches and communications with Iñupiat residents for 2016.

### Update From Our Subject Matter Experts

"Teck has implemented a range of cost reduction measures in order to remain competitive, including a workforce reduction and overall spending cuts. Some of these measures have had an impact on local communities through the decline in local procurement and hiring. This underscored the importance of continuing to engage with communities on the challenges we are facing, the measures we are taking to address them and how we can work together to mitigate impacts wherever possible."

Amparo Cornejo, Director, Social Responsibility and Corporate Affairs.

### Outlook for Community Engagement

The slowdown in the global mining industry will continue to have impacts on Teck and communities. as we implement further measures to reduce costs and improve competitiveness. As such, we will continue to be transparent around the economic issues we are facing and how we are responding. By continuing to integrate these activities across the mining life cycle — from exploration to projects to operations — and engaging with communities to identify social, economic and environmental priorities and mutually define outcomes. we will work towards our vision of building strong relationships and creating lasting mutual benefits.

## 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.

### **Performance Highlights**

Completed corporate human rights assessments for our business units.

Integrated key Human Rights considerations into corporate management tools.

### Learn More

For more information, see a brief video introduction on the <u>UN Guiding Principles</u> on Business and Human Rights.

ICMM conducted Human Rights and Indigenous Peoples workshops through a multi-COI platform. <u>Some of the</u> challenges and opportunities to applying the Guiding Principles are highlighted in these reports.



### Why was Human Rights a Material Topic in 2015?

Global Context: Companies have the potential to impact human rights both positively and negatively wherever they operate. As businesses are increasingly becoming global, they may operate in areas with higher human rights risk or areas where economic or 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 governments to uphold 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 of interest to file grievances and allow them to participate in the remedies.

### Industry Context

Mining requires access to a variety of resources including land and water, and therefore there is a risk that companies can potentially infringe on a broad range of human rights such as those related to water, land appropriation, Indigenous Peoples, local communities, health and safety, and security. As resources become increasingly scarce, many mining companies are moving into areas with higher socio-political risk to access deposits, which may increase the potential for impact on human rights<sup>11</sup>. At the same time, the mining industry has a significant opportunity to contribute to social and economic development and well-being that can assist in alleviating existing human rights issues within communities.

Human rights have become a central concern as well as an opportunity for members of the International Council on Mining and Metals (ICMM) and the wider mining sector. Through their participation, ICMM members commit to taking practical steps to respect human rights at all their operations as well as providing public support for the UN Guiding Principles on Business and Human Rights. This means showing commitment through policy and establishing practices throughout the organization that demonstrate respect for human rights.

### Teck Context

Teck operates primarily in relatively low-risk jurisdictions that are characterized by stable political and economic conditions, as well as by high standards for legislation and regulation. This means our risk of infringing on human rights may be lower than that of other global mining companies. Despite operating in relatively low-risk jurisdictions, we recognize the importance of this issue to our communities of interest in the broader global mining context, and that concerns about mining companies potentially infringing on human rights are increasing.

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 as identified in collaboration with communities of interest.

### How Does Teck Manage Human Rights?

Teck's 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 below.

### **Human Rights Policy**

Through our <u>Human Rights Policy</u>, we commit 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 International Labour Organization Core Conventions
- Diligently seek not to infringe directly, or through complicity in acts of others, on the human rights of our employees, workers in our supply chain, members of the communities where we operate or others who are affected by our activities

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.

We expect our suppliers and business partners to share this commitment and to put in place policies and processes that support respect for human rights. We put special emphasis on the rights of vulnerable groups that may be impacted by our operations, including Indigenous Peoples, women and children, with the goal that communities are better off as a result of our presence.

As part of our efforts to fulfill our duties under the United Nations Protect, Respect and Remedy Framework, commonly known as the Ruggie Framework, we have adopted a policy consistent with UN Guiding Principles on Business and Human Rights. 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.

### **Human Rights Management**

We operate primarily in relatively low-risk jurisdictions that are characterized by stable political and economic conditions, as well as by high standards for legislation and regulation. This means our risk of violating Human Rights may be lower than that of certain other global mining companies. Despite operating in relatively low-risk jurisdictions, we take our various human rights commitments seriously.

Our approach to managing human rights is outlined in Figure 15. At the highest level. we are guided by our Charter of Corporate Responsibility, Code of Ethics and Code of Sustainable Conduct. Our policies for Human Rights, Human Resources, Security, Materials Stewardship and Supply Chain outline our commitments, and our Health, Safety, Environment and Community Management Standards frame how the policies, codes and charters are applied. Our Social Management and Responsibility at Teck (SMART) framework, social risk assessments and several other tools guide our corporate and operational implementation. Through training, we ensure our people have the skills they need to implement these tools. Finally, we report our performance in respecting human rights internally and externally.

### **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. Furthermore, we are committed to engaging with our communities of interest on our human rights impacts and to reporting on our performance.

### How Does Teck Manage Human Rights?



#### Figure 15: Human Rights Management Framework

As part of our human rights policy implementation and our sustainability strategy, all operations developed and implemented site-based feedback mechanisms. Our feedback mechanisms include human rights grievances 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 70.

### Social Risk and Human Rights Assessments

As part of our regular risk processes, we conduct assessments for a range of social risks. Social risk assessments identify potential and actual risks and opportunities that companies and communities can pose on one another. Our operations complete risk registers, which take into account considerations of communities. Social risk assessments have been completed at each of our operations. They include analysis of the risk of potential regulatory delay due to social risk. They also evaluate our performance to date on sharing benefits with COIs relevant to our operations. These can include the assessment of risks relating to:

- Lost opportunity to hire locally (women/ Indigenous Peoples)
- Erosion of community trust, due to increased environmental incidents
- Community rights around water, land and biodiversity
- · Indigenous rights and permitting delays

The social risk assessment process is supplemented by Human Rights Assessments that engage multidisciplinary groups at each operation, including the General Manager and employees from the Environment, Communities and Human Resources departments, and are overseen by a Human Rights Working Group.

### Human Rights Management During Exploration

Prior to entering a country to conduct exploration activities, we assess a range of risks associated with operating in each jurisdiction including those relating to:

- National security, including terrorism, social unrest, border conflict, religious conflict and ethnic conflict
- Personal security, including kidnapping, extortion, hijacking and robbery
- Personal health, including access to safe water, pollution levels, sanitation and disease

Based on the results of these assessments, a decision is made as to whether it is appropriate for us to pursue exploration activities in a given location.

### Human Rights Management During Projects

Our approval process for new projects and major investments integrates human rights considerations from the start. As a result, human rights issues are taken into consideration during project design, evaluation and decision-making.

### Human Rights Management in Joint Ventures

Teck has several joint venture partners, including Goldcorp in Project Corridor, a joint venture in the Atacama Region of Chile combining the former El Morro and Relincho projects. In 2015, Teck and Goldcorp committed to ensuring that Project Corridor undertakes meaningful engagement with communities to better understand current human rights conditions and the risks and opportunities associated with human rights in the region.

### Spotlight on Supply Chain Management

#### Supply Chain and Human Rights

We set out clear expectations with respect to the human rights performance of our suppliers and service providers in our Recommended Protocols for Suppliers and Service Providers, which were established in 2012 and have since been communicated to suppliers. In addition to addressing issues relating to ethics, health and safety, and environmental stewardship, the Protocols integrate expectations regarding the abolition of child labour, fair working conditions and non-discrimination.

As part of our commitment to fostering ethical practices in our supply chain, we are undertaking pilot activities to assess the compliance of our primary suppliers with the expectations as set out in our Protocols. We are conducting initial evaluations and, where we identify potential risks, we gather additional information on the supplier to support any subsequent management actions. See page 12 for more details on how we manage sustainability, including human rights, in our supply chain.

### **Outlook for Human Rights**

In all of our activities, Teck will remain committed to respecting and observing all human rights. While we have found through our human rights assessments that the risk of our activities infringing upon human rights is low, we will continue to ensure human rights considerations are integrated through the life cycle of our operations and projects. For example, in 2016 we will work to further embed the principles in our Human Rights Policy into our procedures and practices such as social risk assessments. Furthermore, we will work to identify opportunities to advance human rights values in the areas where we operate, as identified in collaboration with communities of interest.

In 2015, Teck worked to demonstrate our ongoing commitment to respecting and observing all 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. In particular, we updated our human rights management practices in our projects and exploration areas and continued to evaluate findings from human rights assessments conducted at our operations. We had one human rights complaint in 2015. A Red Dog employee filed a complaint alleging his rights were violated for being required to undergo medical screening; however, through third-party investigation, the allegation was found to be unjustified.

### Updates to Human Rights Management Practices

In 2015, Teck's Project Delivery Framework was updated to ensure human rights are being considered as part of ongoing impact and risk assessment activities. Furthermore, risk assessments that evaluate potential impacts to human rights were formally integrated into the Community Policy for Exploration; this internal policy will be implemented through training in 2016.

### Progress on Human Rights Assessments

We have completed Human Rights Assessments (HRAs) at our 12 operations to identify and analyze where there may be human rights risks and, if risks were present, their associated impacts. The Human Rights Assessment process found that:

- There are laws in place to specifically protect a number of human rights in the areas where we operate. For example, employees' rights to unionize are well entrenched in Canadian, American and Chilean law.
- Our operations have a number of processes in place that protect the human rights of our employees, our communities and our suppliers. These include feedback mechanisms at each of our operations

and a *Doing What's Right* hotline that allows employees and suppliers to confidentially report their concerns. Concerns around potential impacts on livelihood, including environment, water quality and conservation issues are also being received, and responded to, through our operations-based community feedback mechanisms.

• While significant negative human rights risks were not identified at any of our operations, opportunities to further enhance our performance in this area were identified, such as implementing diversity initiatives to improve attraction and retention of local Indigenous Peoples.

While the risks identified through these assessments were low, they helped set an initial baseline that allows Teck to re-evaluate our practices. In 2015, we evaluated a number of corporate functions including Human Resources, Exploration and Project Development against this baseline to ensure they continue to integrate human rights considerations in their activities. In addition, we continue to monitor for potential human rights issues associated with our operations through processes such as site feedback mechanisms.

### Material Topic Product Impacts

### Why was Product Impacts a Material Topic in 2015?

Global Context: Societal concern over the impacts that materials and their production can have on people and the environment through waste, emissions and the accumulation of hazardous by-products is increasing. Producers are expected to take responsibility for their products, making it more important than ever for producers to fully understand product life cycles in order to maximize value while minimizing impacts.

### **Industry Context**

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

### **Teck Context**

Teck is a producer of materials essential to the quality of life of people around the world — 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 is producer of a range of industrial products and fertilizers, which are recovered from our zinc and lead smelting operations. We recognize 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. For more information, see the Energy and Climate Change section on page 109.

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.

### **Performance Highlights**

Conducted

customer site visits.

### Learn More

<u>Materials Stewardship Reports</u> — ICMM <u>Teck's Safety Data Sheets for our</u> <u>Products</u>



### 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.

### Snapshot

### Life cycle thinking through Deleterious Elements Require Thought (DERT) project

An example of how life cycle thinking is influencing our actions and decisions is the DERT project of our Exploration department. The DERT program helps flag, in the exploration phase, above-normal levels of deleterious elements that may impact the value of the products from the orebody or create environmental or processing issues. This program helps ensure that information on deleterious elements is incorporated into project assessments.

We are committed to managing the potential impacts of our products while maximizing their value through materials stewardship. We use our technology and expertise to support and advocate for the responsible use, reuse, recycling, recovery and disposal of materials.

As part of our work in materials stewardship, we engage with manufacturers, users and governments to ensure the responsible use of our products and to promote effective, efficient and economic recycling of metals.

### 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 and 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 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 and end users. As part of our commitment to upholding business ethics, regulatory requirements and external expectations, we work to ensure smelters, including ours and downstream, of our products 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, and our materials stewardship program is actively engaged with collective industry efforts, including those of the ICMM, towards continuously improving materials stewardship.

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 look to exceed these requirements. We work to continually improve recycling at our operations by identifying and sharing best practices throughout the company. This includes conducting ongoing assessments of our recycling and reuse practices.

### What was Our Performance in Managing Product Impacts?

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 conducted several site visits with potential and existing customers to evaluate their capacity to handle our products responsibly. In 2015, we conducted 11 customer site visits, which included site visits focused on lead from Red Dog Operations, copper from Carmen de Andacollo Operations and products from Trail Operations.

An important part of our work in managing product impacts through materials stewardship is recycling. In 2015, we recycled 40,800 tonnes of material, compared to 37,797 tonnes in 2014 and 73,270 in 2013.<sup>12</sup> We also have focused on reducing our use of consumables in part to further reduce associated waste.

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 18,537 tonnes of used lead in 2015, compared to 18,955 in 2014 and 16,147 in 2013. 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 details on our performance in managing environmental and social risks, please see the Environmental and Social sections of this report. For example, for performance on tailings and mine waste management, including the amount of hazardous and non-hazardous waste produced in 2015, see Table 35 on www.teck.com.

### **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 working group 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. For example, we will continue to conduct customer site visits and issue data sheets for our products in 2016.

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## Emergency Preparedness



### What is in this Topic?

Preventing and preparing for emergencies, particularly in the context of tailings management.

### **Performance Highlights**

Effective deployment of our emergency preparedness plan in response to the 8.3 magnitude earthquake in Chile, near our Carmen de Andacollo (CdA) Operations.

### Learn More

TSM Crisis Management Standard



### Why was Emergency Preparedness a Material Topic in 2015?

Global Context: Over the past few years, a number of high-profile incidents have significantly impacted companies. These incidents can result from external factors such as natural disasters or pandemics. They can also result from business activities such as spills or dam failures. While governments and companies must work with communities to mitigate their risks whenever possible, equally important is their 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. The recent tailings facility incidents at other companies in Canada and Brazil 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. ICMM Principle 4 is to "implement risk management strategies based on valid data and sound science" and states that member companies must develop, maintain and test effective emergency response procedures in collaboration with potentially affected parties. Emergency planning, like most business activities, is a process of continuous improvement.

### **Teck Context**

Nothing is more important to us than the safety of our people, the environment and neighbouring communities. 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.

### How Does Teck Manage Emergency Preparedness?

We 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. The vast majority of these potential situations 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 the figure below.

### Figure 16: Emergency Preparedness at Corporate, Sites and Communities

Corporate Risk Group	<ul> <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>			
Individual Sites	<ul> <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>			
Local Communities	<ul> <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 were originally established in 1984 through our Corporate Loss Prevention Guidelines, which 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.

### **Our Targets and Commitments**

We are committed to meet or exceed the Mining Association of Canada's Towards Sustainability Mining (TSM) protocol requirements for crisis management and emergency preparedness globally. TSM is a Canadian standard; therefore, only our Canadian operations are audited through a third party against these requirements.

### How Does Teck Manage Emergency Preparedness?

### **Snapshot**

### Tailings Management and Emergency Preparedness

Many of our operations have tailings storage facilities. We have a comprehensive approach to managing those facilities to ensure they are safe and properly maintained. At the same time, we also ensure we undertake extensive contingency planning and Emergency Preparedness Activities to ensure we are prepared for any eventuality. These measures include:

- · 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
- Communities of interest consultation and communications plan
- Regular testing of emergency response plans

For more information on how Teck manages tailings and other mine wastes, see page 91.

### **Emergency Response Planning**

Each operation develops, implements and maintains various components of an emergency response plan, including:

Components	Example
Clearly defined roles/ responsibilities	· Identifying, equipping and training first responders
Emergency response	· Security
guidelines and procedures	· Medical
	· Fire and explosion
	· Special considerations (earthquake, avalanche, tailings dam breach)
Communication systems	· Establishing internal and external communication mechanisms
and procedures	· Call-out procedures
	<ul> <li>Musters and/or evacuations</li> </ul>
	· Media (reporters, social, etc.) management
Response and control	· Organizational structure and responsibilities
•	· Reviews and inspections (internal/external)
	· Capital replacement plans
	· Continuous improvement
Internal emergency response	<ul> <li>Plans for addressing emergencies within Teck's facilities, including scope, personnel involved, training, facilities and equipment and maintenance</li> </ul>
External emergency response	<ul> <li>Plans for addressing emergencies outside of Teck's facilities, including mutual aid agreements, joint responsibilities and other agreements</li> </ul>
	· Contractor service agreements
	<ul> <li>Medical treatments, including availability, means of transport and transport time</li> </ul>
Testing and training for	· Scheduling and conducting exercises and simulations
emergency situations	· Ongoing tabletop reviews
	<ul> <li>Collaborative effort by operations, the Risk Group, Corporate Crisis Management Team and occasionally with multi-jurisdictional participation</li> </ul>
Incident investigation	· Maintaining documentation
procedures	<ul> <li>Incident Cause Analysis Method (ICAM) or other form of investigation</li> </ul>
	· Sharing of lessons learned

Other Teck locations, such as exploration sites and major projects, have a similar emergency preparedness process that is tailored to the unique needs of the situation. For example, because exploration teams are largely mobile and may be in place for only a short time, they need to be prepared to deal with unplanned natural disasters, but may not need to address risk to infrastructure.

### What was Our Performance in Emergency Preparedness in 2015?

While emergency preparedness is an ongoing effort, we had several notable activities in 2015 as the sites and Corporate Risk Group identified changes to the risk landscape.

Table 20: 2015 Emergency	Preparedness	Performance	Highlights
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Category	Examples of Site-Specific Plans	2015 Highlights
Natural Disasters	<ul> <li>Earthquake preparedness at Carmen de Andacollo Operations (CdA)</li> </ul>	<ul> <li>An 8.3 magnitude earthquake occurred in Chile which triggered effective earthquake response at CdA</li> </ul>
	<ul> <li>Avalanche preparedness at Line Creek Operations (LCO)</li> </ul>	• Excellent coordination of emergency teams at LCO in response to a landslide, unrelated to mining activity, resulted in no injuries and a return to full operation within three weeks
Transportation- Related Emergencies	<ul> <li>Train derailments and/or product spills at or near Trail Operations</li> </ul>	<ul> <li>Minor spills from third-party transportation companies were responded to by Trail Emergency Response Teams</li> </ul>
	· Concentrate truck spill	<ul> <li>Teck responded to two separate incidents involving contractor transport trucks near the port at Red Dog Operations</li> </ul>
Operational	<ul> <li>Simulation of Waneta</li> <li>Dam failure</li> </ul>	<ul> <li>At Trail, we participated in a joint exercise with BC Hydro, FortisBC, Trail Operations, and Waneta Dam personnel to plan for hydro dam failure scenarios</li> </ul>

### 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 2016, 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. For example, we will continue to engage communities of interest and employees in emergency response planning specific to tailings storage facilities.

### Snapshot

### Helping Employees and Their Families Prepare for Emergencies

More than a decade ago, Teck developed an Earthquake Preparedness Guide for Home and Office and continues to update this guide year after year. This guide, provided in English and Spanish to employees, helps them think through how to prepare and respond to an earthquake if one occurs — whether they are at home, the office or somewhere in between.

The guide covers what to expect during an earthquake, the "dos and don'ts" during and after an earthquake, and how to prepare a home plan for an earthquake.

In addition to the guide, Teck's Risk Group provides regular training sessions on earthquake preparedness and tsunami warnings.

### Environmental

### **Material Topics**

### Tailings and Mine Waste Management

Tailings management, including construction, operation, and ongoing monitoring of the various health, safety and environmental risks and impacts associated with tailings storage facilities.

### Water Management

Water use, selection of water sources and protecting against water contamination, in the context of balancing the needs of multiple local water users and global water concerns.

### Air Quality

Emissions and air quality control and monitoring at our operations and in the transportation of our products. Includes particulates (dust), nitrogen oxides (NOx), sulphur oxides (SOx), other gas emissions and ozone-depleting substances.

### Energy and Climate Change

Energy usage (fuel and electricity consumption and costs, energy intensity, energy-efficiency initiatives), climate action and greenhouse gas emissions.

### Biodiversity

Actual and potential impacts on high biodiversity value species and ecosystems, as well as our approach and performance in remediation.

### Environmental Management

Overall day-to-day environmental management, including total environmental expenditure, compliance with environmental regulations, compliance with permits, supplier environmental assessments.



### **Material Topic**

## Tailings and Mine Waste Management

### Why was Tailings and Waste Management a Material Topic in 2015?

Global Context: 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 those impacts, proper waste and material management is critical to ensuring human health and the environment are protected. Responsible corporations are taking greater ownership for their role in managing waste across the life cycle of their products.

### **Industry Context**

Mining involves the management of large quantities of material to produce an end product. This process generates non-economic materials consisting of rock and overburden from mining and tailings from processing. These combined materials have traditionally been termed mine wastes, but are not to be confused with industrial wastes. If not responsibly managed, the environment, health and safety impacts associated with mine wastes have the potential to directly affect communities of interest (COIs) and the ongoing operations of mines.

Tailings management is especially critical for the mining industry. While very rare, recent tailings facility incidents in Canada and Brazil at other companies served as a reminder of just how critical. In response to these events, the industry is working collaboratively to review and improve standards and critical controls for tailings management. For example, 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. Another response was initiated in December 2015 when the International Council on Mining and Metals (ICMM) announced a global review, supported by external experts and member company representatives including Teck, of tailings storage facility standards and critical controls.

#### **Teck Context**

Teck operates seven mines with active tailings storage facilities (TSFs)13 and we take extensive measures to ensure the safety of these facilities. Tailings storage facilities at all of our operations meet or exceed regulatory requirements and we are continually improving the management of our facilities by developing and incorporating best practice. Teck has played, and will continue to play, an active role in promoting best practices for tailings facility management, both in our own operations and across the mining industry. For example, our Vice President, Environment was a member of the aforementioned tailings management task force established by MAC. We believe that our ongoing efforts help us build trust in our communities, minimize legal and regulatory challenges, and keep local ecosystems safe and healthy for decades to come.



#### 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 (TSFs) and waste rock facilities.

#### **Performance Highlights**

### 6

The number of tailings review boards in place, which covers 100% of our major active tailings facilities as detailed on page 95.

#### Learn More

Towards Sustainable Mining Tailings Management Protocol — Mining Association of Canada



Pictured left: Garry Luini, Environmental Officer, at Line Creek Operations

Pictured above: Reclamation activities are ongoing at Highland Valley Copper's Highmont Tailings Pond <sup>13</sup> 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. Mining at Teck 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. Responsible tailings and waste management practices are a critical part of environmental management and operational integrity at Teck.

### Table 21: Mining Waste Categories

Tailings and Fine Coal Refuse	Tailings and fine coal refuse are the finer fractions of the processed material that have no economically recoverable mineral or coal content. Tailings and fine coal refuse are typically stored in tailings storage facilities (TSFs).
Coarse Coal Refuse	Coarse coal refuse (CCR) is a coarse fraction of raw coal that is separated during processing; it is not currently an economic product. CCR is placed in designated engineered facilities or, if determined to not be susceptible to leaching, may be used as a construction material including for creating dams to store fine coal refuse.
Waste Rock and Overburden	The rock that is removed to access ores and coal, which typically contains trace amounts of naturally occurring metals and other constituents, is commonly called waste rock. Waste rock must be properly managed to ensure geotechnically and geochemically sound storage to create stable landscapes that minimize effects on local waterbodies.
Hazardous Waste	Hazardous wastes produced at our operations include such items as waste oil, solvents, antifreeze, paint, batteries and fluorescent tubes. This waste is recycled or transported off-site by licensed contractors to appropriately designated and regulated facilities.
Non-hazardous Waste	Non-hazardous waste (e.g., scrap metal, wood waste, glass, tires, cardboard and paper) is recycled whenever possible.

### **Tailings Management**

We take extensive measures to safeguard the tailings storage facilities at each of our operations. 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 is 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 tailing 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 do 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 Audits: On a rotation basis of approximately once every three years, our HSEC management team audits 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. This guidance document was developed under our Tailings and Water Retaining Structures Policy, and adheres to Teck's HSEC Standards, MAC TSM Tailings Management Protocol and associated guides, and several other relevant national and international guidance documents.
- **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 tailing storage facilities have Tailings Review Boards comprising

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 issues being considered by the board, to conduct a third-party review of design, operation, surveillance and maintenance of our storage facilities.

Our facilities also have detailed Operations, Maintenance and Surveillance (OMS) manuals and Emergency Preparedness and Response Plans, both of which are regularly updated. We maintain sitespecific 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" indicates that tailings management practices that meet industry best practice, as defined by the MAC Tailings Guidelines, have been developed and implemented. In addition to our minimum requirements, several of our facilities reach Level AAA, which indicates that excellence and leadership in tailings management are demonstrated through validation by an external, independent evaluation.

As the need for updating the TSM indicators is being evaluated and the call for industry to re-evaluate its practices is being heeded, we provided substantial support and input to the MAC; the Mining Association of BC; the Canadian Institute of Mining, Metallurgy and Petroleum; and the ICMM in related discussions throughout 2015.

#### Update From Our Subject Matter Experts

"At Teck, we have comprehensive systems and procedures in place for the safe operation, maintenance and monitoring of our tailing facilities which we consider to be industry best practices. At the same time, we recognize the value of continued improvement in tailings management both for Teck and the industry. For example, I represented Teck in 2015 on an independent task force to review Mining Association of Canada's (MAC) Towards Sustainable Mining (TSM) tailings management requirements. The task force made 29 recommendations to support the mining industry in ensuring zero failures, which have been accepted by MAC's membership and will be integrated into TSM during 2016."

Michael Davies, Vice President, Environment

### How Does Teck Manage Tailings and Mine Waste?

### Snapshot

### Learning from the Mount Polley Tailings Pond Breach

In light of tailings storage facilities failures at the Mount Polley mine and Samarco mine, we recognize the need for the mining sector as a whole to improve its performance and provide greater assurance to the public of the measures taken to ensure the integrity of tailings facilities.

While we have confidence in our policies and procedures relating to tailings management, following the Mount Polley incident we undertook a comprehensive review of our tailings management systems. In addition to conducting specific reviews of our facilities to ensure safety and stability following the Mount Polley failure, we also reviewed our dam consequence classification scoring system to ensure tailings dams are classified based on risk. Our tailings storage facilities scores were also reviewed, as well as potential inundation impacts, and surveillance and monitoring practices. The review concluded that our practices were appropriate. A company-wide tailings database, which contains key information for our facilities, was updated and will be reviewed annually. We have also increased COI engagement activities, to better inform COIs about our tailings management practices and about our emergency response and evacuation procedures.

### Coarse Coal Refuse Management

Coarse coal refuse is mixed with dewatered fine coal refuse within engineered structures at several of our operations for storage efficiency and optimal geotechnical performance. Long-term storage of coarse coal refuse is conducted in accordance with approved closure plans involving contouring, covering and revegetation to achieve established land use objectives.

### Waste Rock Management

The bulk of waste rock from our operations is placed in areas that are specifically designed to contain the rock, or it is used to backfill open pits and underground workings. Waste rock that is not susceptible to oxidation processes, which can lead to metal leaching, is also used for reclamation activities and to construct dams and roads. Long-term storage of waste rock is conducted in accordance with closure plans approved by regulatory authorities. These plans can include contouring, covering and revegetation to achieve established land use objectives.

### Hazardous Waste and Non-Hazardous Waste Management

Although a small volume relative to our tailings and waste rock, we treat our other waste management responsibilities with equal focus. Hazardous and non-hazardous wastes are segregated and disposed of in accordance with waste management plans and regulatory requirements. The primary hazardous wastes produced at our operations include waste oil, solvents, antifreeze, paint, batteries and fluorescent tubes. This waste is recycled or disposed of off-site by licensed contractors. Nonhazardous waste (e.g., scrap metal, wood waste, glass, tires, cardboard and paper) is recycled whenever possible. We have systems in place to responsibly manage all of our waste materials.

### What was Our Performance in Tailings and Mine Waste Management in 2015?

In this section, we report on tailings management and waste management performance.

### **Tailings Management Performance**

Well before the incidents at Mount Polley and Samarco operations, Teck had in place a tailings management policy and guidance document and employed industry best practices such as review boards. However, as a result of these recent tailings incidents, we have further intensified our focus on reviewing our tailings management practices and facilities to ensure they meet evolving best practice. We continue to assess and improve our operating, inspection, monitoring and maintenance practices. Table 22 below outlines the internal and external review mechanisms that are in place.

#### Table 22: Summary of Management At Active Tailings Storage Facilities at Teck<sup>1,2</sup>

		Staff	Annual External	Detailed Third- Party Reviews	Tailings Beview
Operation	Туре	Inspection	Inspection	(Frequency)	Board
Carmen de Andacollo	Tailings Impoundment	Yes	Yes	N/A <sup>1</sup>	Yes
Elkview	Tailings Impoundment	Yes	Yes	Every 5 years	Yes
Fording River	Tailings Impoundment	Yes	Yes	Every 7 years	Yes
Greenhills	Tailings Impoundment	Yes	Yes	Every 7 years	Yes
Highland Valley Copper	Tailings Impoundment	Yes	Yes	Every 5 years	Yes
Pend Oreille	Tailings Impoundment	Yes	Yes	Every 5 years	N/A²
Red Dog	Tailings Impoundment	Yes	Yes	Every 5 years	Yes

(1) This type of review not mandated in Chile — Teck utilizes the Tailings Review Board for this function.

(2) Pend Oreille Operations is not a major facility with a credible failure mode, so a tailings review board has not been struck.

### Waste Management Performance

In 2015, our operations generated approximately 822 million tonnes of mineral waste, with the vast majority being waste rock from the extraction of ore and coal. In 2015, we generated approximately:

- 69 million tonnes of tailings and fine coal refuse from processing ore and raw coal in 2015 (73 million tonnes in 2014)
- 9 million tonnes of coarse coal refuse (11 million tonnes in 2014)
- 744 million tonnes of waste rock (829 million tonnes in 2014)

We don't currently track office and construction waste, which are managed by external waste service providers. <u>Hazardous and non-hazardous waste</u> <u>numbers can be found on www.teck.com</u>.

#### Emerging Risk — Tailings Management Technologies

Societal concern on how tailings are managed has increased in the wake of tailings dam failures in 2014 and 2015. There are growing COI expectations that mining companies will implement alternatives to water-covered tailings storage facilities for new mine developments. This may result in changes to regulatory requirements, increased mine construction costs and community opposition if preferred tailings alternatives are not employed. At the same time, this focus has the potential to drive new advancements in tailings technologies over the longer term.

### 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 2016, Teck will participate in the ICMM global tailings management review, the review of Towards Sustainable Mining (TSM) Tailings Management Protocol and other industry forums. At our operations, we will continue to review our facilities and procedures to maintain the highest standard of safety while meeting all environmental management objectives.

# Water Management



#### What is in this Topic?

Management approach and performance related to water use, selection of water sources, and preserving water quality, in the context of balancing the needs of multiple local water users and global water concerns.

#### **Performance Highlights**



The approximate number of times water was reused and recycled at our operations in 2015.

#### Learn More

World Economic Forum, Global Agenda 2015: Increasing Water Stress



### Why was Water Management a Material Topic in 2015?

Global Context: Water is a precious shared resource with significant social, cultural, environmental and economic value and it is fundamental for healthy, functional ecosystems. Global concerns regarding water availability and quality continue to increase. For example, in 2015 the World Economic Forum cited "increasing water stress" as one of the top issues in the coming 12 to 18 months. Ensuring that water is fairly allocated is an important issue, particularly in areas of water scarcity or where water quality can be negatively affected by human activity.

### **Industry Context**

In the mining industry, water management has emerged as a critical issue because mining typically uses large volumes of water and can potentially affect water quality, which in turn can impact 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.

Many tailings facilities involve the management of large quantities of water and other mine wastes and, given the major tailings dam failures at other companies in Canada in 2014 and Brazil in 2015, tailings management is very topical. In response to these and similar events, the industry is working collaboratively to review and improve standards and critical controls for tailings storage that include practices for managing water. See more detail on the Tailings and Mine Waste Management material topic on page 91.

### **Teck Context**

Communities near our operations or 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. Likewise, responsible water management is fundamental to maintaining the trust of our communities of interest in areas where we operate.

### How Does Teck Manage Water?

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. Our commitment to water stewardship is embodied in our HSEC Management Standards and our sustainability strategy. At a global level, Teck has endorsed the <u>UN Global Compact CEO</u> <u>Water Mandate</u>. This means we have a commitment to adopt and implement the Mandate's strategic framework and its six core elements for water management, and to publicly report on progress annually.

### **Protecting Water Quality**

Protecting water quality is a key part of our sustainability strategy. Our efforts are focused on keeping clean water clean through a strategy that avoids affecting water quality whenever possible. In order to ensure compliance with applicable standards, regulations and permits, we monitor the quality of water that is discharged from our operations and returned to the environment.

See more about our water compliance as part of environmental compliance on page 127.

### Snapshot

#### Working Together on Environmental Monitoring in the Elk Valley

Teck is engaging with numerous COIs as part of our efforts to address water quality constituents released by mining activities throughout the Elk River watershed, where five of our steelmaking coal operations are located.

Under the regional wastewater discharge permit issued by the B.C. Ministry of Environment, we participate in an Environmental Monitoring Committee (EMC), a forum to share technical information and traditional knowledge related to the monitoring, adaptive management and reporting activities of the Elk Valley Water Quality Plan.

In addition to Teck, the EMC includes representatives of the B.C. government, First Nations and an independent scientist.

The inaugural EMC meeting was held in March 2015. Over the course of the year, the committee reviewed 19 water quality reports, study outlines and held a public meeting to discuss their work and issued the first of their annual reports. The 2015 EMC Public Report is available online.

#### **Our Targets and Commitments**

Our vision is to contribute to the balance between 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 all 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 water quality targets to reduce long-term risks related to water quality through improved water management practices or new treatment facilities, as well as water quantity targets to increase the volumes of water reused.

### How Does Teck Manage Water?

### Sustainability Strategy Spotlight

#### Progress Against Our 2015 Goals

We are proud to have met our 2015 goals, including establishing operation-specific water balances and water management plans at each operation, to inform water management decision-making, and developing operationspecific water targets.

For a full list of 2020 and 2030 water goals, see page 18.

### Collaborating with Communities to Ensure Fair Allocation of 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 where we operate. We promote the fair use of water at all of our operations. To evaluate whether water in a region is stressed, we consider the following criteria:

- 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
- · 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 minimizing our impact. Each of our operations has completed integrated water management plans and site-wide water balances, 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 are updated annually in conjunction with the update of each operation's water balance. Each plan also describes 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. They help us work towards operationspecific objectives and performance, as well as our company-wide 2020 water goals. 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, of consumption, and of reuse/recycle and discharge volumes at each operation. Water balances are used as a decisionmaking 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 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 enabling better decisionmaking. Our 2015 company-wide water balance is available on page 104.

### What was Our Performance in Water Management in 2015?

In this section, we report on our performance in protecting water quality, collaborating with our communities of interest to ensure the fair allocation of water, and improving water use efficiency.

### **Protecting Water Quality**

We are committed to managing and monitoring water quality related to our mining activity. For example, we monitor several groundwater and surface water parameters at all of our sites such as pH, temperature, total suspended solids, metals and hydrocarbons. The detection limit for each parameter depends on local regulations or guidelines. At each of our operations, we have specific legal requirements embedded in our operating permits regarding discharge quality and quantity. In 2015, we have no water-related regulatory non-compliances, compared to three in 2014 and none in 2013. Despite our best efforts, from time to time, unexpected events or process upsets can lead to non-compliance events.

### Snapshot

### Teck's First Water Treatment Facility in B.C.'s Elk Valley

Water from precipitation and runoff flows through the waste rock piles at our steelmaking coal operations, carrying naturally occurring substances such as selenium into the watershed. In large quantities, these substances can impact aquatic health in the watershed.

Beginning in the spring of 2013, Teck led a groundbreaking process to develop an area-based management plan the Elk Valley Water Quality Plan — to address water quality challenges in the Elk Valley. The Plan was developed with input from the public, First Nations, governments, technical experts and numerous other stakeholders. Feedback was collected through an extensive three-phase consultation process with the public, Ktunaxa Nation and other interested parties.

Teck is implementing the Elk Valley Water Quality Plan in order to stabilize and reverse the increasing trend of selenium and other substances in the Elk River watershed in British Columbia, where five of our steelmaking coal operations are located.

To achieve the objectives of the Plan, we are constructing water treatment facilities, the first of which went into full operation in February 2016 at our Line Creek Operations.

The West Line Creek Active Water Treatment Facility treats up to 7,500 cubic metres of water per day — enough to fill three Olympic-sized swimming pools. The \$120 million facility is reducing selenium concentrations by about 96% and nitrate concentrations by over 99% in treated water.

"This water treatment facility is part of our work to implement the Elk Valley Water Quality Plan, which was developed with input from communities, governments and First Nations to maintain water quality while supporting continued responsible mining in the region." Robin Sheremeta, Vice President, Coal

### Collaborating with Communities to Ensure Fair Allocation of Water

Two of our operations are located in regions where water is scarce, and it has been particularly important for us to consider our neighbours' water needs at these locations. We are implementing various strategies to manage our impacts on local water availability at our Carmen de Andacollo (CdA) and Quebrada Blanca Operations in Chile, 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 discharged.

We have developed an alternative water supply for CdA. Dialogue with the community about their concerns regarding water use at the mine led to an agreement to supply water to our process plant from a different source. In 2011, we completed construction of a 27-kilometre water pipeline to bring water to the process plant at CdA, eliminating the need to extract water from a groundwater aquifer we had previously shared with the community. This decision was made in consideration of the other water users in the community. This is consistent with our commitment to implementing effective water management techniques in recognition of other users in the watersheds where we operate. In addition, we are evaluating the construction of a community wastewater treatment plant to provide water for our CdA operations, to potentially further reduce our demand on the local fresh water supply. 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're also making sure to evaluate alternative approaches for meeting water needs in new development projects. At Quebrada Blanca Phase 2 (QB2) and Project Corridor, which are both located in water-stressed regions of Chile, we have proposed the use of desalinated seawater in order to protect and conserve local fresh water sources 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 Project Corridor). For these two projects, we are focusing on the protection of local fresh water supplies while simultaneously exploring opportunities to offset some of the emissions from electricity generation by using renewable sources.

### **Improving Water Efficiency**

We track our water data at both the company-wide and operational levels. In order to ensure compliance with applicable standards, regulations and permits, we monitor the quality of water that is discharged from our operations and returned to the environment and how it is used to improve our water efficiency.

### Water Used, Reused and Recycled

In 2015, we used a total of 294.2 million cubic metres (m<sup>3</sup>) of water, of which 113.1 million m<sup>3</sup> was new water, and 181.1 million m<sup>3</sup> was reused or recycled water. In 2014, we used 334.6 million m<sup>3</sup> of water, of which 128.4 million m<sup>3</sup> was new water, and 206.4 million m<sup>3</sup> was reused or recycled water. In 2013, we used 329.9 million m<sup>3</sup> of water, of which 132.6 million m<sup>3</sup> was new water, and 197.3 million m<sup>3</sup> was reused or recycled water.

#### Table 23: Water Used, Reused and Recycled in 2015<sup>1,2</sup>

	2015	2014	2013
Total water inputs (m³)	323,993,000	391,398,000	442,839,000
Total water outputs (m³)	334,149,000	388,667,000	430,870,000
New water use (m <sup>3</sup> )	113,116,000	128,355,000	132,261,000
Water reused/recycled (m <sup>3</sup> )	181,127,000	206,246,000	197,294,000
Water used ÷ water recycled (%)	160	161	149

(1) This data is limited to our 11 mining operations and excludes Trail Operations.

(2) The percentage calculation is based on the total volume of water reused/recycled divided by the total volume of fresh water used.

We track our data 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 160% across the company. At our mining operations only, this percentage was 440%. This means that our mining operations recycled and reused the same water approximately 4.5 times on average before returning that water to the environment.

Trail Operations accounts for nearly 25% of our total water use and 65% of our new water use. Almost all of the water used at our Trail Operation is used 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 17, on the next page, shows the new water and total water use trend over the past three years. In 2015, the significant reduction of total water use across all our operations is largely due to the implementation of a cooling tower retrofit project at our Trail Operations. The project's objective was to reduce the volume of water needed in the cooling circuit and resulted in an approximately 25% reduction in water use, based on the baseline average. The reduction of total and new water used across our mining operations is attributable, for the most part, to the decision to implement staggered three-week shutdowns at our steelmaking coal operations.

### What was Our Performance in Water Management in 2015?



### Figure 17: Total and New Water Use (m<sup>3</sup>)





#### Water Intensity

We benchmark our water performance on the basis of new water use intensity, as shown in Table 24. Our new water use intensity is defined as the annual volume of new water used per unit of material processed by our steelmaking coal, 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 establish new water use efficiency targets that will inform water management decisions and improvement projects at our operations.

	Coal Operations <sup>1</sup>			Milling and	d Flotation Op	perations <sup>2</sup>
	2015	2014	2013	2015	2014	2013
New water use, in million cubic metres (m <sup>3</sup> )	14.9	15.4	16.6	24.9	29.4	30.7
Quantity processed or produced	<b>35,302,000</b> tonnes of raw coal processed	40,424,000 tonnes of raw coal processed	38,941,000 tonnes of raw coal processed	69,186,000 tonnes of ore processed	72,565,000 tonnes of ore processed	67,357,000 tonnes of ore processed
New water use intensity	<b>0.42</b> m³/tonne of raw coal processed	0.38 m³/tonne of raw coal processed	0.43 m³/tonne of raw coal processed	<b>0.36</b> m <sup>3</sup> /tonne of ore processed	0.41 m <sup>3</sup> /tonne of ore processed	0.46 m <sup>3</sup> /tonne of ore processed

### Table 24: New Water Use Intensity

(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 2015 new water use intensity metrics continued to show an improvement for our coal operations and our milling and flotation operations relative to 2014 and 2013. The improvements can be attributed to continuous focus and commitments to reduce our water use intensity across the company and the development of the 2015 water targets. At our coal operations, improvements are largely attributable to Line Creek and Greenhills, where there was a significant increase in the amount of water reused/recycled. The improvements at our milling and flotation operations are largely attributable to the closure of our Duck Pond Operations and commissioning of our Pend Oreille Operations, as the water use intensity at Pend Oreille Operations is significantly lower than at Duck Pond.

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 25: New Water Use (in million m<sup>3</sup>) at Quebrada Blanca and Trail Operations

	2015	2014	2013
Quebrada Blanca (water used primarily in metal leaching process)	1.7	1.7	1.9
Trail (water used primarily for cooling)	71.7	81.6	83.4

### What was Our Performance in Water Management in 2015?

### Outlook for Water Management

In 2016. Teck will continue to focus on three areas of water management — water efficiency, groundwater risks and innovative water technology - and improving our performance across our operations, particularly in waterstressed regions. For example, we will increase our understanding of groundwater conditions across the company and proactively assess groundwater risks. In addition, a groundwater treatment plant at our Trail Operations is currently under construction and is expected to become operational in 2016. Furthermore, we will continue our work to improve water quality near our steelmaking coal operations through the Elk Valley Water Quality Improvement Plan.



### Figure 18: Company-Wide 2015 Water Balance in million cubic metres 1,2,3

### 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<sup>1</sup>
- Groundwater
- · Seawater
- · Third-party sources<sup>2</sup>

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, 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<sup>3</sup>

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

 (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 directly 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 is not recoverable (e.g., contained in ore concentrate or tailings).

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### **Material Topic**

## Air Quality

### Why was Air Quality a Material Topic in 2015?

Global Context: Increasing urbanization and growth of industrial development has created greater pressure on air quality through airborne emissions in some regions from sources such as personal and commercial transportation, manufacturing, energy generation and resource extraction. Other factors such as forest fires and burning of fuels for heating also impact air guality. Air pollution can have negative impacts on human health, and in some areas, it is a significant public health concern. In 2013, the World Health Organization's (WHO) specialized cancer agency, the International Agency for Research on Cancer, classified outdoor air pollution and particulate matter as carcinogenic to human health. Outdoor air pollution in both cities and rural areas was estimated to cause 3.7 million premature deaths worldwide in 2012. The WHO has called on governments to develop policies and implement measures to improve air quality. Communities are increasingly concerned about the quality of air. To address this global concern, businesses are required to monitor and mitigate their impacts to 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, 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, residents report one of their concerns with mine operations is dust. In Chile, residents in Carmen de Andacollo report dust and perceived health issues associated with dust exposure as being one of their primary concerns. 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. There are increasing regulatory requirements associated with emissions that impact us.



### What is in this Topic?

Emissions and air quality control and monitoring at our operations and in the transportation of our products. Includes particulate emissions, nitrogen oxides (NOx), sulphur oxides (SOx), other gas emissions and ozone-depleting substances.

### **Performance Highlights**

**65%** 

The percentage of fugitive dust to be reduced over the next two years through a comprehensive plan at our Carmen de Andacollo Operations.

### Learn More

National Pollutant Release Inventory — Environment Canada

<u>Toxic Release Inventory — United States</u> <u>Environmental Protection Agency</u>



#### **Our Targets and Commitments**

We are working to improve monitoring and understanding of our releases to air, set air quality goals with corresponding action plans and strengthen the integration of air quality considerations into early-stage project development. 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, we added 'Air' as a focus area in our sustainability strategy in 2015.

In conjunction with our efforts in the areas of energy and climate change, reducing emissions, monitoring air quality and reducing dusting events are important components of Teck's environmental management program.

### **Establishing Air as a Focus Area**

In adding Air as a focus area to our sustainability strategy, we have established company-wide goals and activities to improve our performance in air quality. Air, similar to some of our focus areas that we established in 2010 such as Water and Communities, has had less-established company-wide processes and has primarily been managed on a site-by-site basis.

Focus areas create a more systematic approach to managing the issue consistently across the company. This requires us to create consistent monitoring practices, set baselines and develop greater capacity at operations before quantitative targets can be developed.

In 2015, we identified our 2020 goals and selected leaders across the company to implement the following activities in 2016: develop capacity, establish air release baselines and conduct risk assessments for air issues. These steps will set the foundation for setting air quality goals and action plans to achieve the goals.

### Minimizing Emissions to Improve Air Quality

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 northwestern Alaska and Trail Operations in southeast British Columbia to mitigate fugitive dust associated with transportation and refining. For more information about dust reduction at Red Dog Operations, see our case study on page 107. For more information about dust reduction at Trail Operations, read this case study online.

Another example comes from our Carmen de Andacollo Operations in Chile, where we are working closely with the community and regulators to address concerns associated with dust related to mining activities including blasting. In late 2014, the Chilean government established requirements aimed at improving air quality (particulate dust levels) in the community of Andacollo. The plan, which came into force on January 1, 2015, sets out commitments, terms and responsibilities for Teck, for another local mining company and for local government towards improving air quality in the region.

### **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 Partners to Reduce Dusting During Transportation

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 dustsuppression 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.

#### **Case Study**

#### Improving Air Quality: Reducing Fugitive Dust near Red Dog Operations

Activities such as mining, milling and transportation at our Red Dog Operations, located in the territory of the Iñupiat people of Northwest Alaska, generate dust, which has the potential to affect the environment.

The Iñupiat have long engaged in subsistence hunting, fishing and gathering on their lands. A Subsistence Advisory Committee, made up of residents from the communities of Noatak and Kivalina meets regularly with NANA and Teck representatives to review all subsistence-related issues and to guide subsistence protection activities at the mine and associated facilities, including the management of fugitive dust.

We recognize that dust mitigation is important in order to ensure the Iñupiat people's way of life is protected and, as such, we take measures to protect air quality through our fugitive dust mitigation program.

Since mine operations commenced in 1989, Red Dog has invested more than \$24 million in an aggressive program to reduce fugitive dust emissions through operational and facility improvements and activities including:

• Designing engineering controls to either prevent dust from occurring or to keep it contained

- Installing air quality control devices, such as baghouse dust collectors, in storage and transport buildings to more efficiently remove dust from the air
- Enclosing buildings and conveyors at Red Dog's port and mine to keep the amount of dust on-site to a minimum
- Applying a mixture of non-toxic calcium chloride and water to the 52-mile road between our mine and the port to control dust generation
- Changing the truck fleet to hardcovered trailers to transport concentrate

As a result of these measures, a risk assessment conducted in 2007 concluded that it is safe to consume subsistence foods in all areas without restrictions. Dust monitoring studies in the two communities closest to the mine — Noatak (35 miles away) and Kivalina (50 miles away) — also concluded that the level of dust present in the environment does not pose any health concerns to humans. We recognize the need to continually monitor and test water quality, air emissions, fish, local caribou populations, plants and berries, and other potential food sources to ensure that subsistence foods are safe to eat. These assessments and studies were developed and implemented in collaboration with NANA and shared with communities.

We continue to monitor and evaluate our performance and look for opportunities for further improvement. For example, trials for potentially more effective road dust suppression products are planned for 2016 and we continue to invest in dust control products. Protecting air quality through continual reduction of dust is just one of our commitments to the communities near our operations and our employees to safeguard human health and the environment.

"We are focused on continuing to take the steps necessary to manage fugitive dust emissions and ensure that traditional subsistence activities are protected." Henri Letient, General Manager, Red Dog Operations



#### **Outlook for Air Quality**

Managing air quality will continue to be an integral part of the environmental management activities at our operations. By establishing Air as a focus area in our sustainability strategy, we have now set specific goals to continue to improve our performance in this area and create more consistent practices across the company. In 2016, we will focus on improving our air quality monitoring and understanding of our releases to air, and the potential impacts on people, communities and the environment. In this section, we report on emissions to air and progress on improving air quality near Carmen de Andacollo Operations.

#### **Emissions to Air in 2015**

In addition to monitoring particulate matter, our operations monitor and report on other air emission parameters in accordance with permit and regulatory requirements. In 2015, our operations generated approximately 28,000 tonnes of particulate matter of a size less than 10 microns and 5,000 tonnes of particulate matter of a size less than 2.5 microns. In late June 2016, information relating to other air emissions will be available in the Air Quality section of www.teck.com.

#### Progress on Improving Air Quality near Carmen de Andacollo Operations

In response to regulatory requirements set out in 2014 by the Chilean government and as part of Teck's ongoing efforts to improve air quality and reduce dust in the Andacollo region, Carmen de Andacollo Operations launched a detailed Atmospheric Decontamination Plan with Chile's Ministry of Environment and municipal government officials in 2015. The plan's objective is to lower dust emissions by 65% over the next two years. The Atmospheric Decontamination Plan outlines reduction measures such as application of dust suppressants on plant, mine and other internal roads, the construction of stockpile domes to cover ore and prevent dust from escaping into the air, increased meteorological monitoring and the implementation of double-layer blasting. Double-layer blasting is a procedure endorsed by Chile's National Geology and Mining Service that significantly reduces the amount of particulate matter generated by blasting. Analysis to date has shown that compared to conventional blasting, double-layer blasting provides a 33% reduction in the amount of particulate matter emissions.

In recognition of our use of double-layer blasting at Carmen de Andacollo to improve air quality, Teck received the 2015 National Environment Award by the Recyclápolis Foundation in recognition of the efforts of Chilean and multinational companies for their commitment to sustainability and the environment.

# Energy and Climate Change

#### Why was Energy and Climate Change a Material Topic in 2015?

Global Context: Climate change is a major global challenge and an area of increasing importance for businesses and communities alike. In a carbon-constrained world, energy production and consumption needs to change in order to reduce greenhouse gas (GHG) emissions and transition to a low-carbon economy. This will likely require significant change in the way we produce and consume energy.

2015 was a significant year for global action on climate change. At the United Nations Climate Change Conference, COP21, countries from around the world negotiated the Paris Agreement. In the lead-up to and following the Paris Agreement, a number of jurisdictions have commitments to reduce emissions, which is likely to result in higher prices on carbon emissions. Businesses are increasingly stepping forward to advocate for more climate-related regulation and guidance, to reduce uncertainty and create a level playing field.

#### **Industry Context**

As society transitions to a low-carbon economy, the transition will present risks and opportunities for the mining industry. Demand for commodities is likely to shift in response to a low-carbon environment, and certain commodities may be more significantly affected than others. In response to COP21, a number of major mining jurisdictions announced new climate change commitments. These measures will likely result in higher carbon costs in North America. 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 as the price of carbon increases.

#### **Teck Context**

We recognize the need to take action on climate change and we are committed to reducing GHG emissions by improving energy efficiency, implementing low-carbon technologies and advocating for carbon pricing. Few companies in our industry have as much experience with carbon pricing as Teck. All of our steelmaking coal business, half our copper business, and all of our smelting and refining business are currently covered by carbon pricing. Based on this experience, we believe that carbon pricing is the most efficient and effective way to materially reduce emissions and that implementing such mechanisms will require leadership from governments and industry.

As the world transitions to a low-carbon economy, there will be shifts in the commodity demand mix. In response, our strategy is focused on three areas: diversification to ensure exposure to a range of commodities, targeting the lower half of the cost curve to allow our operations to withstand the impacts of higher carbon prices and potential demand shifts, and continuing to lower our GHG emissions by improving our efficiency and investing in alternative energy generation. We believe our products will have an important role to play in a low-carbon world. For example, steelmaking coal will be required to produce the steel used in low-emission high-density housing, copper for use in electric vehicles and alternative energy, zinc for galvanizing to extend material life cycles, and energy to support higher incomes and a larger global population.

Teck is one of the lowest-emission miners in the world. In comparison to our peers, Teck's steelmaking coal and copper production ranks among the lowest for carbon intensity, based on data from the ICMM. Despite our low-energy intensity, we are committed to continuously improving our energy efficiency and reducing our GHG emissions. Energy costs remain one of Teck's most significant operational expenditures and energy use is a major source of GHG emissions at our operations. As resources are extracted, we expect to mine at deeper depths and move materials further distances in the coming years, which will make it increasingly challenging to further reduce our energy intensity.



#### What is in this Topic?

Energy (fuel and electricity consumption and costs, energy intensity, energy efficiency initiatives), climate risks and emissions (greenhouse gas emissions, other gas emissions and ozone-depleting substances)

#### **Performance Highlights**

Implemented energy reduction projects resulting in

of energy reductions since our baseline year of 2011. Projects ranged from optimizing blasting efficiency for increased grinding efficiency to using more energy-efficient lighting.

Implemented projects that have reduced greenhouse gas emissions by approximately

## 200 kilotonnes

to the end of 2015, including the continued displacement of coal in our dryers by natural gas and the piloting of LNG as a dual fuel source in haul trucks.

As of the end of 2015,

# **30.7** megawatts of alternative energy generation is

in operation. Recent efforts included investing in solar power near our Quebrada Blanca Operations.

#### Learn More

Visit the Paris Pledge for Action website.



### How Does Teck Manage Energy and Climate Change?

#### **Our Targets and Commitments**

- · Reduce energy consumption
- · Reduce GHG emissions
- · Support alternative energy generation
- Engage and advocate for effective carbon pricing

In 2010, we proactively established company-wide short- and long-term energy and GHG reduction targets to drive improvements in energy efficiency and to reduce our GHG emissions at our operations. We implement energy and GHG reduction projects, we share best practices in energy management among our operations to achieve our goals and we contribute to global efforts to reduce emissions by advocating for carbon pricing. We have also set goals that drive investment in lower-carbon and alternative energy generation, including investments that ultimately contribute to the transition to a low-carbon economy.

#### Reducing Greenhouse Gas Emissions

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 improve energy efficiency at our operations and we are making significant progress towards achieving them. We implemented several energy and GHG reduction projects that contributed to our energy goals in 2015. We also identified reduction projects that were successful at a number of our sites, and worked to implement them at our other operations. These included optimizing blasting efficiency to increase grinding efficiency, the continued installation of lightweight truck boxes, installing variablespeed drive technology on ventilation and dryer fan motors, using more efficient fan designs, and using more energy-efficient lighting, among other projects.

Collectively, projects implemented in 2015 have reduced annual energy consumption at our operations by 40 gigawatt hours (150 terajoules) — enough power for 1,400 homes. Since 2011, our efforts have resulted in reduction projects totalling 1,200 terajoules (TJ) exceeding our 2015 goal of implementing reduction projects that reduce energy consumption by 1,000 TJ. We have also surpassed our 2015 GHG reduction target of 75,000 tonnes of CO<sub>2</sub>-equivalent (CO<sub>2</sub>e) emissions, with reductions estimated at approximately 200,000 tonnes of CO2e emissions at the end of 2015. Moreover, this has also produced savings for our bottom line. For example, a recommendation, made through our employee energy reduction engagement campaign at Highland Valley Copper Operations, to replace a pump will

save an estimated 6.5 terajoules (TJ) in energy and \$150,000 in energy costs when implemented in 2016. Learn more in this case study on www.teck.com.

#### **Supporting Climate Action**

At Teck, we are committed to supporting society's move towards a lower-carbon future. That is why we are implementing initiatives to reduce our emissions and actively advocating through industry organizations and directly with governments for effective and efficient carbon pricing, which we believe can materially reduce emissions.

Teck supports an effective and efficient price on carbon emissions. An effective price on carbon is one that reduces emissions and ensures that all emitters and all jurisdictions are contributing to solutions. By applying a carbon price for all emitters, all sectors of the economy are incentivized to play their part in solving a challenge to which we are all contributors. Carbon policies must be implemented in a manner that is reasonably consistent between jurisdictions so that the risk of creating a competitive disadvantage for some emitters does not induce carbon leakage — the transfer of production and associated emissions to countries with limited or no GHG regulations — are avoided. This approach is critical to the longterm success of emissions reductions. Broad-based pricing of carbon is the most effective way to incentivize emission reductions while also ensuring that all emitters and jurisdictions are contributing to the solution. Further, it will level the playing field for companies like Teck who have already had to adapt existing carbon pricing into their business as outlined in the Carbon Pricing and Regulation section.

#### **Understanding Our Climate Risk**

At Teck, carbon pricing is integrated at multiple levels of decision-making, ranging from annual operating budgets developed at the site level to corporate decisionmaking for large capital investments. We incorporate a carbon price into our capital and risk decision processes where material, and 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.

The physical risks of climate change can include rising sea levels, rising temperatures and changes in precipitation. These can result in the increased intensity and duration of extreme weather events such as storms, drought and flooding. These all have the potential to impact our activities. Consequently, climate variables (e.g., precipitation, temperature, water runoff) are integrated into the design and operation of our business.

In 2010, we began working with technical experts in the field of climate modelling and forecasting to better understand potential future changes in climate-related variables. This project is serving to assess the utility of climate modelling as a tool while developing data that is integrated into our decision-making and risk management practices. For example, we take into consideration climate modelling in project development, mine planning and closure planning and have for many years. For example, trends in permafrost advance and retreat, precipitation patterns, tidal variations and storm intensity impacts on operations/transport are all evaluated using simulated scenarios. The results of these scenarios are used to set the design criteria for new projects and existing operation upgrades so that our business decisions today are appropriately risk managed for the potential eventualities of the conditions of tomorrow.

#### **Carbon Pricing and Regulation**

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 2015, our seven B.C.-based operations incurred \$52.6 million in provincial carbon tax, primarily from our use of coal, diesel fuel and natural gas. Our Cardinal River Operations (CRO) meets Alberta GHG compliance requirements through efficiency improvements and the use of offsets generated from our interest in our Wintering Hills Wind Power Facility. In 2015, we expect that CRO will be below the performance threshold, and will therefore not require offsets to meet the compliance obligations.

In 2015, governments in both B.C. and Alberta initiated engagement processes to review, analyze and determine climate change policies that will apply starting in 2018. Teck is actively engaged in the consultation processes, and we will refine our forecast cost estimates once each government provides further detail as to the design of their future climate change policies.

Prior to these announcements, 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.

#### **Snapshot**

### Participating in Global Action on Climate Change

We believe that Teck and the broader mining industry have a role to play in addressing climate change, which is why we are actively working to reduce our own carbon footprint and to advocate for policies to support the global transition to a low-carbon economy.

On the international stage, we are a signatory of the <u>Paris Pledge for Action</u>, which invites non-state organizations to take action to support the objectives of the 2015 Paris Agreement on climate change to limit global temperature rise to less than 1.5 degrees Celsius above pre-industrial levels.

For our own operations, we have set ambitious targets to reduce emissions and improve energy efficiency. Since 2011, we have made significant progress towards achieving these goals, with a cumulative reduction to date of more than 200,000 tonnes of CO<sub>2</sub> annually.

Mining also has a role to play by supplying the materials necessary for climate action. Many of the metals and mineral products we produce are essential to building the technologies and infrastructure necessary to reduce GHGs and fight climate change. The average wind turbine, for example, requires about 180 tonnes of steel, which, in turn, requires about 100 tonnes of steelmaking coal to produce. Many renewable energy systems also require as much as 12 times more copper than traditional energy systems.

### How Does Teck Manage Energy and Climate Change?

### Sustainability Strategy Spotlight

### Progress Against Our 2015 Goals

- Implemented projects resulting in 1,200 terajoules of energy reduction since our baseline year of 2011.
   Projects ranged from optimizing blasting efficiency for increased grinding efficiency to using more energy-efficient lighting.
- Implemented projects that have reduced greenhouse gas emissions by approximately 200 kilotonnes to the end of 2015, including the continued displacement of coal in our dryers by natural gas and the piloting of LNG fuel in haul trucks.
- As of the end of 2015, 30.7 MW of alternative energy generation is in operation. Recent efforts included investing in solar power near our Quebrada Blanca Operations.

For a full list of 2020 and 2030 goals, see page 18.

#### **Low-Carbon Energy**

One of our key goals is to minimize the amount of GHG emissions created while producing our products. Based on data reported by ICMM, our coal business unit has among the lowest carbon intensities in the world for our production of steelmaking coal.

At between 60 and 70 kilograms of  $CO_2$  per tonne, it is less than half the industry average of over 150 kilograms of  $CO_2$  per tonne. Furthermore, our copper production averages 3 tonnes of  $CO_2$  per tonne of copper — 25% below the industry average of 4 tonnes.

In addition to projects we have implemented to reduce our energy consumption and GHG emissions, we also enjoy access to 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 the past several years, approximately 25% of our energy requirements (i.e., electricity and fuels) were supplied by non-carbon-emitting sources, primarily hydroelectricity. Of our total electricity consumption in 2015, 80%, or 10,984 TJ, was hydroelectricity.

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.

#### **Alternative Energy Generation**

Teck is also investing in research and building alternative power generation technology. We are partners in a largescale wind power facility in Alberta, and a community solar farm in B.C., and we are assessing other opportunities to build and source alternative power generation for our other sites. Our investment in Wintering Hills has provided an opportunity to develop our understanding of wind power generation, which facilitates evaluation of other opportunities to develop wind farms around our operations.

In January 2015, we increased our interest in Wintering Hills to 49%, with TransAlta Corporation, the current project operator, holding the remaining 51%. Our 49% share of power generation from Wintering Hills in 2015 was 136 GWh, enough power to provide 85,000 tonnes of  $CO_2$ -equivalent credits. Our share of expected power generation in 2016 is 135 GWh, although actual generation will depend on weather conditions and other factors.

We set a 2015 goal of 30 megawatts (MW) of alternative energy generation, and set a 2030 goal to expand that portfolio to 100 MW. To meet our targets, we have been exploring opportunities for the procurement of alternative energy sources. As of the end of 2015, 30.7 MW of alternative energy generation is in operation, which meets and exceeds our 2015 goal of generating 30 MW.

### What was Our Performance in Energy and Climate Change in 2015?

Our operations require energy for the production and transportation of our products, and energy is one of our most significant expenses. We are focused on continually identifying opportunities to improve our energy efficiency and reduce greenhouse gas emissions in order to reduce costs and minimize our carbon footprint.

#### **Energy Use**

In 2015, we consumed a total of 42,521 TJ of energy (i.e., electricity and fuels), as compared to 45,336 TJ in 2014. 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 19. In 2015, 10 of our operations reduced their absolute energy consumption from 2014.

### Figure 19: Energy Consumption by Type 2013–2015<sup>1</sup>



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

#### Table 26: Primary Uses of Energy at our Operations

Fuel Type	Primary Uses		
Electricity	<ul> <li>Powers processing at our metal mines (e.g., milling) and the smelter facility at Trail Operations</li> </ul>		
Coke, petroleum coke, natural gas and coal	<ul> <li>Provides the primary process and combustion fuels at Trail Operations</li> </ul>		
Natural gas and coal	· Used primarily for drying our coal product		
Diesel	· Fuels haul trucks to move material		
Natural Gas	· Fuel in LNG form for haul trucks to move material		

#### **Case Study**

#### Energy and Climate Change: Piloting LNG at our Steelmaking Coal Operations

Fuel used to power our mobile equipment fleets is a significant contributor to our operational greenhouse gas (GHG) emissions. As part of our work to reduce GHG emissions and minimize our carbon footprint, Teck launched a pilot to test the use of liquefied natural gas (LNG) as a fuel source in six haul trucks at our Fording River steelmaking coal operation in southeastern B.C.

The use of blended LNG/diesel-fuelled haul trucks — the first ever at a Canadian mine site — has the potential for significant environmental benefits and cost savings. LNG produces virtually no particulate or sulphur dioxide emissions and reduces GHG emissions by up to 20% in comparison to diesel alone. We have the potential to eliminate approximately 35,000 tonnes of CO<sub>2</sub> emissions and potentially reduce fuel costs by more than \$20 million annually by adopting LNG and diesel hybrid fuel across our operations.

FortisBC — a B.C.-based electric power and gas distribution/retail company is transporting and supplying LNG to Fording River. The pilot is one of the steps we are taking to achieve our long-term target to reduce annual GHG emissions by 450,000 tonnes at our operations by 2030. To date, we have reduced annual emissions by 200,000 tonnes as the result of initiatives implemented since 2011.

With support from FortisBC, we have upgraded Fording River's truck maintenance shop, provided engine conversion kits, installed fuelling facilities and implemented a comprehensive safety program in advance of the pilot. The pilot is expected to run until mid-year 2016 and will provide more information about the potential of using LNG more broadly across Teck's haul truck fleet, creating the opportunity for further fleet conversions to LNG in the future. "LNG is a fuel source that has the potential to lower costs, significantly reduce emissions and improve environmental performance at our operations. We are committed to minimizing our own carbon footprint while at the same time continuing to provide the mining products that are essential to building a modern, low-carbon society." Don Lindsay,

President & CEO, Teck



#### **Energy Intensity**

In Figures 20 to 22, 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 2015 (Figure 20). This change is due to 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 20: Energy and Carbon Intensity for Steelmaking Coal Production 2013–2015



In 2015, both Trail and Red Dog saw reductions in their energy and carbon intensities as a result of continued focus on operational efficiency. Overall, however, energy intensity increased, as a greater proportion of our zinc production came from Trail Operations relative to previous years.

### Figure 21: Energy and Carbon Intensity for Zinc and Lead Production 2013–2015



In 2015, both our energy and emissions intensities for copper decreased (Figure 22). The decrease in intensities is the result of a large decrease (improvement) in intensity at Highland Valley Copper due in part to higher ore grades and the increased proportion of our total copper production coming from Highland Valley Copper, our lowest GHG-intensity copper operation.

### Figure 22: Energy and Carbon Intensity for Copper Production 2013–2015



#### **Greenhouse Gas Emissions**

In 2015, our total GHG emissions, as  $CO_2e$ , were 2,826 kilotonnes (kt), compared to 3,066 kt in 2014. Of those totals, our direct GHG emissions<sup>14</sup> were 2,469 kt in 2015, compared to 2,723 kt in 2014. Figure 23 shows a detailed breakdown of our emissions by fuel type.

The key sources for direct GHG emissions vary significantly by operation. For example, at our steelmaking coal operations, the drying of coal, our mobile equipment, and the methane gas released from coal seams during mining each account for roughly one-third of total emissions. 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 fuel for mobile equipment is 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. In 2015, 10 of our operations reduced their GHG emissions.

We estimate our indirect GHG emissions associated with electricity use for 2015 to be 357 kt, or approximately 13% of our total emissions. These emissions are associated primarily with our Cardinal River, Red Dog, 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., Newfoundland and Washington State obtain a significant proportion of their electricity from hydroelectric generation.

In comparison to the broader industry, our GHG emissions per unit of production are significantly lower. ICMM data indicates our steelmaking coal operations have among the lowest carbon intensities in the world when compared to other coal mines. Likewise, emissions associated with our copper production are 25% percent below the industry average. Data is not currently available to assess the relative GHG intensity of our zinc operations.

### What was Our Performance in Energy and Climate Change in 2015?

#### Emerging Risk — Transition to Low-carbon Economy

Achieving the COP21 goal of limiting climate change to 1.5 degrees Celsius or less will likely result in new regulations, policies and changing consumption patterns that could either negatively or positively affect demand for various mining commodities as they come into effect.

#### 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, as a result, reducing our greenhouse gas emissions. For example, we will continue our pilot project to test the use of LNG fuel in haul trucks at our operations and work with sites to identify and implement projects to further reduce our energy usage. In 2016, we will continue to advocate for carbon pricing, reduce our emissions and support the development of alternative energy technologies.

### Figure 23: GHG Emissions by Fuel Type 2013–2015<sup>1,2</sup>



- 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 (direct) emissions occur from energy sources controlled by the company and scope 2 (indirect) 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 2015 sales volumes, scope 3 emissions from the use of our steelmaking coal are approximately 76,000 kt of  $CO_2e$ .

### Material Topic Biodiversity

#### Why was Biodiversity a Material Topic in 2015?

Global Context: 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. As recently outlined in the OECD Environment in 2015 Report, there is increasing evidence that ecosystems will be challenged over the long term to continue providing essential services such as food provision, soil formation and climate regulation due to ongoing environmental degradation.<sup>15</sup>

#### **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.

Regulatory requirements are changing in response to widening recognition of these impacts on biodiversity, including requirements to tailor mine reclamation to meet requirements of wildlife and plants of greatest conservation concern, and requirements to implement biodiversity offsets to mitigate impacts that cannot be fully addressed through avoidance, minimization and rehabilitation.

Responsible mining companies also can create significant opportunities to achieve positive impacts on biodiversity, and on people's ability to benefit from and enjoy nature. This can include the protection and restoration of ecosystems and sharing expertise to improve biodiversity management.

#### **Teck Context**

All our operations are adjacent to or within areas of high biodiversity value, including tropical 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. Our COIs 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 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 of all species 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.



#### What is in this Topic?

Includes discussions of management approach and performance related to anticipating and minimizing impacts on high biodiversity value species and ecosystems, as well as our approach and performance regarding remediation.

#### **Performance Highlights**

100%

of operations developed biodiversity management plans focused on our long-term vision of having a net positive impact.

Continued our investment in biodiversity research projects and partnerships, including caribou projects near our Quintette project and native plant collection and archiving projects with the Royal British Columbia Museum.

#### Learn More

United Nations Environmental Programme: <u>Biodiversity Report</u>

Convention on Biological Diversity: <u>Global Biodiversity Outlook</u>

November 2014 <u>ICMM Biodiversity</u> <u>Performance Review</u>



### How Does Teck Manage Biodiversity?

#### **Our Targets and Commitments**

We are working to achieve a net positive impact on biodiversity in areas affected by our activities, to implement biodiversity management plans for each of our operations and to develop net positive impact targets for exploration, construction and closure stages.

#### **Perspective on Biodiversity**

"As part of our work to protect lands in the East Kootenay region of British Columbia, we identified six key parcels. In 2013, Teck purchased two parcels for the purpose of conservation, Alexander Creek and Flathead Townsite, which were at the top of that list. This conservation initiative by Teck is an important legacy for the entire region. Their commitment to having a net positive impact on biodiversity shows that it is possible to have both a world-class environment and world-class resource development. We continue to engage with Teck, the Ktunaxa people, the Nature Conservancy of Canada and the Nature Trust of British Columbia to share and enhance knowledge of these lands to help effectively manage them long-term."

Harvey Locke, Yellowhead to Yukon Conservation Initiative and John Bergenske, Wildsight We work 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 areas, achieving a net positive impact, developing biodiversity management plans and reclamation.

### Integration with Strategies and 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 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 carefully assess how our activities can impact biodiversity prior to disturbance, to develop a biodiversity baseline, and to implement site-specific plans that minimize our impacts, from exploration through to closure. The actions we use to achieve these goals include progressive reclamation, the use of native vegetation species (with seed from local sources where feasible), and using the most recent research and techniques.

#### **Engagement with Communities**

Through engagement with our 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 and time to hunt during traditional hunting season are priorities that we support through our subsistence committee with NANA.

#### **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>16</sup> High biodiversity value areas have features that provide essential ecosystem services relied on by humans and animals, an abundance of rare, vulnerable or endemic species, and/or large areas of relatively intact natural habitat.

Using a combination of databases to identify global conservation priorities, 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 determined that these characteristics exist within or adjacent to all of our operations; this information is an important input into the development of biodiversity management plans for each operation. Each of our operations have occurrences of species at risk within and adjacent to the operation. Some examples include the olive-sided flycatcher (a local bird) at all of our Canadian operations, whitebark pine at many of our southeastern B.C. steelmaking coal operations, and the guanaco (related to the llama) at some of our Chilean sites.

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 IUCN; however, the road between Red Dog Operations and its port facility passes through the Cape Krusenstern National Monument, an IUCN category III protected area.

#### Achieving a Net Positive Impact

As a responsible resource company, we create significant opportunities to achieve positive impacts on biodiversity, and on peoples' 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. 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 24: Implementing our Biodiversity Mitigation Hierarchy to Achieve a Net Positive Impact



Stages in the Mining Life Cycle

### How Does Teck Manage Biodiversity?

#### Snapshot

#### Quebrada Blanca Implements New Monitoring Technologies to Help Protect Local Ecosystems

Our Quebrada Blanca Operations in Chile recently implemented two systems to enhance our ability to monitor and protect biodiversity at our operations, using new environmental monitoring camera technology.

The first piece of technology uses hyperspectral sensors to produce detailed aerial photographs that capture more colours than visible to the human eye. These intense colours are indicative of the level of chlorophyll found in the plants, allowing for highly accurate species identification.

The second piece of technology uses movement-activated sensors to capture photographs of wildlife, both day and night, revealing the presence and behaviours of diverse species such as pumas, foxes, birds and amphibians. Combined, these new monitoring tools provide our team with valuable information to build a complete picture of the local environment, enabling us to focus our efforts and better conserve these ecosystems.

#### **Biodiversity Management Plans**

In 2015, we accomplished our goal to develop biodiversity management plans (BMPs) at all of our current operations that set out how NPI would be achieved at all our operations. 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 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 Health, Safety, Environment and Community (HSEC) Management Standards and the Mining Association of Canada's Towards Sustainable Mining Biodiversity Conservation Management Protocol.

To create the BMPs, operations and advanced projects collect biodiversity information, conduct a preliminary identification of risks and existing mitigation actions, conduct gap analyses and create workplans. We identify risks based on a risk register that weights risk 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.

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 example, our steelmaking coal operations are located in the habitat of grizzly bears, a species of special concern, and we work to understand, conserve and restore their habitat. Habitat mitigation includes ongoing reclamation activities conducted at each site as well as multi-partner conservation initiatives. To learn more about how are working to conserve habitat, such as purchasing 7,150 hectares of land near our operations, see this case study.

#### 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 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, please see page 49.

#### **Case Study**

Supporting Mutual Benefit: Red Dog Operations and the Noatak Seed Collection Pilot Study

Unemployment in the Northwest Arctic Borough where our Red Dog Operations is located is higher than the state-wide average in Alaska, and employment opportunities are expected to decrease across the state in 2016 due to the challenging economic climate.

To help address these challenges and provide economic contributions to communities, Teck and the local Indigenous Iñupiat people have been piloting a unique seed collection program that could provide people a local opportunity to supplement their income and share traditional knowledge while also playing a role in reclamation at the mine.

When we work to reclaim an area after mining has concluded, we seek to create a self-sustaining ecosystem, including revegetating areas using native plants where possible to support traditional land uses and local wildlife. At Red Dog Operations, we have historically purchased plant seeds for environmental reclamation activities from commercial seed providers. However, with no provider of seeds local to the mine's region, we have had to buy seeds harvested further south. Because these seeds are in a different climatic zone, they don't grow as well as seeds indigenous to the Arctic, so we have been working to find a local source of indigenous seed varieties to support reclamation. Additionally, many of the indigenous plant species are not available commercially.

The Noatak Seed Collection Pilot Study was initiated in 2014 — led by the Alaska Plant Materials Center in partnership with Red Dog, NANA Regional Corporation and local residents — to look for a way to address this challenge. Local residents who join the seed project harvest local plant seeds, which are then stored by Red Dog for use in future reclamation work.

The Noatak Seed Collection Pilot Study has the potential to help create flexible employment opportunities for some residents in the Northwest Arctic region while also benefiting Teck's reclamation efforts through increased used of native seeds, which have long-term climatic adaptations that will enable disturbed land to be restored as closely as possible to its original state, and protect against invasive species.

Work undertaken to date through the pilot study included community workshops and seed harvesting in August of 2015. The results of the activities undertaken through the pilot study are now being assessed, with the goal of determining the long-term feasibility of the program.

"The Noatak Seed Collection Pilot Study is a unique way to bring together the traditional knowledge and subsistence activity of the Iñupiat people with the reclamation work taking place here at Red Dog." Wayne Hall, Manager, Community and Public Relations, Red Dog Operations



### Sustainability Strategy Spotlight

#### Progress Against Our 2015 Goals

- Developed comprehensive biodiversity management plans for all operations.
   Examples of work in 2015 include: continuing to consult with the regional subsistence committee and incorporating advice on timing of our activities such as road hauling and shipping, in order to minimize our impacts on wildlife such as caribou and marine mammals at our Red Dog Operations.
- Developed plans to offset impacts at our operations, which includes work such as: continuing our development of the Lower Columbia Ecosystem Management Program around Trail Operations and advancing our evaluation of biodiversity offset opportunities at Carmen de Andacollo Operations.

For a full list of 2020 and 2030 goals, see page 18.

### What was Our Performance in Biodiversity in 2015?

#### Update From Our Subject Matter Experts

"While we have made good progress on achieving our biodiversity goals, there is more work to be done. We will focus on ensuring that our operations' plans for managing biodiversity are fully implemented, including integration with mine planning and overall closure planning and developing additional performance metrics that will enable our employees and COIs to judge whether we are truly doing things that make net positive contributions to biodiversity"

Steve Hilts, Director, Environmental Legacies

#### **Outlook for Biodiversity**

In 2016, our biodiversity priority is the continued implementation of biodiversity management plans at all operations. For example, at several of our operations, including Highland Valley Copper, we will work to redefine our post-mining land use objectives so that our ongoing reclamation actions are better directed towards the habitat needs of plants and wildlife that existed on the site before mining began. We will develop net positive impact objectives for exploration, construction and closure stages. 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. For an overview of the area reclaimed and disturbed to date, see Table 15 on page 55 in the Mine Closure section.

#### Table 27: Key Activities and Accomplishments in Biodiversity in 2015

Operation	Steps to Implement Biodiversity Mitigation Hierarchy (see page 119 for further detail)	Performance Highlight
Highland Valley Copper	Avoid impacts where possible	We conducted field surveys for the presence of nesting birds prior to clearing vegetation for new land disturbance. We also conducted tests to learn how to best incorporate culturally significant native plants in our reclamation programs.
Red Dog Operations	Minimize impacts that are unavoidable	We continued to consult with the regional subsistence committee and incorporate advice on timing of our activities such as road hauling and shipping, in order to minimize our impacts on wildlife such as caribou and marine mammals.
Coal Mountain, Elkview, Greenhills, Fording River, Line Creek Operations	Rehabilitate affected areas	At our Elk Valley, B.C. steelmaking coal operations, we committed to consider ways in which the reclaimed areas of the mine can be made to more closely achieve pre-mining characteristics. This may include steps that can be taken on young forests to provide some of the characteristics of older forests, such as additional placement of woody debris, organic soil amendments, and wildlife tree placement to support woodpeckers and other cavity-nesting species.
Carmen de Andacollo and Quebrada Blanca Operations	Offset any residual impacts	We began our evaluation of biodiversity offset opportunities for achieving our Net Positive Impact vision by working with external biodiversity experts to examine the potential applicability of regional offset opportunities that have been prioritized in the region.
Trail Operations	Offset any residual impacts	Continued our development of the Lower Columbia Ecosystem Management Program (LCEMP) around Trail. LCEMP is a program we developed to leverage restoration and conservation offset opportunities available to Teck by linking them with the biodiversity conservation objectives of regional regulatory agencies and non-governmental organizations. In 2015, while advancing development of the overall program framework, we also acted on several new opportunities to protect habitats on Teck-owned lands in the area. For example, we completed fencing installations to protect yellow-breasted chat bird habitat in the Pend Oreille valley

# Material Topic Teck 2015 Sustainability Environmental Management

#### Why was Environmental Management a Material Topic in 2015?

Global Context: Business and society depend on ecosystems and their components such as water, air, biodiversity and climate. 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.

#### **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
- The potential vulnerability of ecosystems as a whole

When commodity prices decline and mining companies focus on cost reduction, communities may be concerned that environmental management decreases in priority. The 2015 ICMM perception survey found that stakeholders identified reduction of environmental impacts as the most important issue for the mining industry to address. Therefore, industry must be especially attuned to this concern and demonstrate that it remains focused on strong environmental management.

#### **Teck Context**

Responsible environmental management is an integral part of who we are as a company; it is enshrined 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. Sound environmental management is an important component of regulatory compliance and permitting, particularly as permitting processes become more complex due to increased regulatory requirements, societal expectations, focus on social factors, interconnectivity of communities through technology, and lengthier and broader stakeholder consultation.

Environmental management is very important to our COIs. For example, in 2015, 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 to operations. For more information about community grievances and how they are tracked, please see the Community Engagement section on page 70.



#### What is in this Topic?

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

#### **Performance Highlights**

In 2015, Line Creek 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.

#### Learn More

Health, Safety, Environment and Community Management at Teck



#### **Our Targets and Commitments**

We are committed to conducting regular audits of our sites on our environmental compliance. We develop corrective action plans where necessary based on findings, and we regularly assess the implementation of these plans. We manage our environmental performance by following guidance based upon our Health, Safety, Environment and Community (HSEC) Management Standards. We also work to improve our performance through external certification of our environmental management system. We are committed to meeting permit requirements and we track our compliance through internal and external audits and environmental monitoring. In addition, we track environmental incidents to aid in the development of mitigation strategies and to avoid having repeat events.

#### **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. Additional information on our environmental management approach is provided in the HSEC Management Standards section on page 12 and within the sections in this report that focus on air quality (page 105), water management (page 96), biodiversity (page 117), tailings and mine waste management (page 91) and energy and climate change (page 109).

#### **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 is yet to achieve certification and Quebrada Blanca Operations is very close to attaining certification.

#### **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 ensures 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 99).

#### Quebrada Blanca Environmental Impact Assessment

In 2014, we submitted a social and environmental impact assessment (SEIA) to update permits for our facilities and extend the life of mine at our existing Quebrada Blanca operation in Chile while we continue working towards developing Quebrada Blanca Phase 2. We engaged with local communities during the development of the SEIA to gather input and inform our submission. The SEIA includes an expansion of the pit to extend operations to 2020 and the improvement of the water management systems to enhance environmental performance. In addition, we will be improving our water management systems to reflect new environmental regulations. For example, the SEIA proposed the construction of a series of channels to keep non-contact water separate from water

exposed to mine operations. The SEIA is currently under review by the Government of Chile and a decision is anticipated mid-2016.

#### Fording River Swift Project

The Environmental Assessment Certificate (EAC) for the Fording River Swift Project was issued in September 2015. There are 19 conditions that form part of the EAC and that were developed following consultation with key stakeholders and First Nations. Each of the conditions and the certified project description are legally binding requirements that Teck must meet to be in compliance with the certificate.

#### **Internal and External Audits**

Our Health, Safety and Environment assurance program is designed to ensure 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 2015, 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 within two years 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 28 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 28: Internal and External Audits of Environmental Management

Туре	What is audited?	For whom?	Evaluation criteria					
Internal								
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					
Mid-term 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					
	Externa	al						
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					

### What is Teck's Approach to Environmental Management?

#### Spotlight on Supply Chain Management

#### Evaluating the Environmental Management Practices of Our Suppliers

We established our **Recommended Protocols for** Suppliers and Service Providers in 2012, communicated the expectations contained within these Protocols to major suppliers, and integrated the Protocols into our procurement and contract processes. The Protocols include expectations to address issues relating to ethics, health and safety, environmental stewardship, and human rights, including numerous labour law requirements.

To strengthen the utility and impact of the Protocols, as well as inform the development of our Supply Chain Risk Management Strategy, in 2014 we undertook additional engagement with a selection of our major suppliers through a pilot questionnaire to create greater mutual understanding of expectations, performance, and potential risks and impacts of our suppliers.

In 2015, we expanded the questionnaire to 40 suppliers and service providers. Suppliers ranged in nature from small family-run businesses to railways and multinational organizations. No major issues were uncovered in our evaluation of supplier responses to the questionnaire. Where suppliers had questions, support was provided to them to assist in reporting. We will continue the assessments into 2016 and expand on the lessons learned from this process.

#### **Environmental Monitoring**

We conduct thousands of measurements to manage and evaluate our environmental performance. We monitor a range of environmental data, including:

- · Emissions to air
- · Ambient air quality
- · Noise levels
- Geotechnical information related to 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 for 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 environmental implications. All of our operations have control measures in place to minimize the likelihood of environmental incidents and to mitigate potential effects on the environment for those incidents that do 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 2015?

In this section, Teck reports on our environmental expenditures, 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.

#### **Environmental Expenditures**

In 2015, Teck reported \$49 million in environmental costs compared to \$52 million in 2014 and \$27 million in 2013. Environmental costs are reported in our Annual Report under Operating Costs on page 29. Expenditures on material environmental risks are reported (e.g., water, reclamation, renewable energy). Expenditures related to legal compliance and the routine operational activities are not reported separately. Environmental expenditures are a part of operating costs and are not accounted for separately.

#### **Environmental Compliance**

Compliance across all of our operations remained high in 2015. We had 107 permit non-compliance incidents, compared to 100 in 2014, and two regulatory non-compliance incidents, compared to six in 2014. Our response to significant non-compliance incidents is discussed in the Significant Environmental Incidents section.

The number of permit non-compliances has increased due to more rigorous internal monitoring and review. While noncompliances have increased, the severity of environmental incidents has decreased.

#### Table 29: Permit and Regulatory Non-Compliances

	2015	2014	2013
Permit Non-Compliances	109	100	79
Regulatory Non-Compliances	2	6	5

#### Significant Environmental Incidents

We assess the severity of environmental incidents based on their potential environmental, safety, legal, community, reputational and financial impacts. In general, 2015 was an outstanding year in terms of environmental stewardship at Teck, with fewer incidents of all nature in comparison to previous years. Based on our incident severity criteria, three environmental incidents occurred in 2015 that were of greater significance across all of our projects and operations, with one of those being a natural event unrelated to our activities.

#### **Fish Incident at Greenhills Operations**

In August 2015, 83 westslope cutthroat trout were killed during a fish salvage and relocation project at Greenhills Operations

in southeast British Columbia. The intent of the project was to dry out, inspect and remediate any identified deficiencies in a spillway and stilling basin. Unfortunately, the planning and execution of the fish relocation from the basin resulted in fish mortality.

Following this incident, an application to install a fish screen at the top of the Greenhills sediment pond spillway was submitted to the Department of Fisheries and Oceans. Since installation, the fish screen has reduced the risk of trapping fish in the spillway stilling basin over the winter while we are developing a longerterm mitigation plan. Additional monitoring, process controls and incident response are being implemented across all steelmaking coal operations to prevent further fish mortalities.

### What was Our Performance in Environmental Management in 2015?

#### Outlook for Environmental Management

In 2016, we will continue to implement and evaluate the effectiveness of our environmental management practices through our assurance program, 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. For example, at Trail Operations, we are investing \$8.1 million in improved environmental controls, including construction of an upstream outfall retention reservoir. At our steelmaking coal operations, we will continue to implement the area-based water management plan, the Elk Valley Water Quality Plan, to address the increasing trend of selenium and nitrate in the watershed. At our Red Dog, Trail and Carmen de Andacollo (CdA) operations, we will focus on improving our air quality monitoring and understanding of our releases to air and the potential impacts on people, communities and the environment; in particular, we will focus on implementing the Atmospheric Decontamination Plan to improve air quality near CdA.

#### Landslides at Line Creek Operations

An intense rainfall event triggered two separate landslides adjacent to Line Creek Operations in July 2015. Neither event was connected to activities at the mine. The landslides blocked the access road to the site, fully obstructed Line Creek and severely damaged the cable belt system that delivers raw coal from the mine to the process plant. As a result, operations were suspended temporarily while removal of debris, slope stabilization and repairs to the cable belt were completed.

Through the remediation process, the stream was rehabilitated to pre-slide conditions. This included re-establishment of the previous gradient, placement of riprap to protect against future erosion, and strategic placement of boulders throughout the channel to enhance the stream habitat and restore natural stream flows. To reduce downstream turbidity during the remediation process and to minimize impacts to water quality and commercial fly fishing guides, clean water from above the slide debris was pumped around the work area. Development of the remediation plan included engagement with provincial and federal agencies as well as local First Nations. All work was approved by the Ministry of Forests, Lands and Natural Resource Operations, observed by the Department of Fisheries and Oceans and overseen by an Independent Environmental Monitor. Flow was fully restored to Line Creek in mid-August.

#### **Concentrate Spill at Red Dog Operations**

In 2015, there was one significant spill. A trailer carrying zinc concentrate from the Red Dog mine to the port overturned in October 2015 and released approximately 65,500 kilograms of concentrate to the tundra and across an intermittently flowing drainage. No environmental impact was indicated and immediate cleanup was initiated. All work has been 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, visit the <u>Upper Columbia River project website</u>.

#### **Charges, Fines and Penalties**

In the third quarter of 2015, the British Columbia Ministry of Environment (BC MOE) filed charges in relation to the death of five bighorn sheep at Greenhills Operations in July 2014. The sheep perished after ingesting ammonia nitrate stored at the explosives storage facility. Fines may result from these charges. Improved procedures and facilities have been implemented across Teck's coal operations to address the issue.

In January 2015, we paid penalties of \$10,000 relating to a late report submission from our Duck Pond Operations in the first half of 2014.

In the second quarter of 2015, the Chilean Environmental Superintendence (SMA) announced five charges against Carmen de Andacollo stemming from inspections in 2013 and 2014. Carmen de Andacollo submitted a defence document to the SMA in the third quarter of 2015. On March 29, 2016, the SMA issued a sanction of \$60,000 for two of the charges classified as 'mild', while the remaining three charges were dropped.

In February 2016, Teck Metals was assessed a penalty for five charges under the Fisheries Act and 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 noncompliances, of which only one constituted an exceedance of our daily allowable permitted discharge limit. No impact to 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.

# Methodology and Restatements

The scope of the 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. Our Duck Pond mine completed operations in June 2015 and we have included its data where relevant. 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

This report discloses sustainability data for the fiscal year ended as at December 31, 2015. Assessment of material issues continued through the first quarter of 2016. The consolidated data for key indicators can be found in the Measuring our Performance Table on page 21.

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.

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 2014 and 2013 have been reclassified or restated to conform to the presentation adopted for 2015.

# Independent Assurance Report

To the Board of Directors and management of Teck Resources Limited:

#### What we looked at: Scope

Deloitte was engaged by Teck Resources Limited (Teck) to provide limited assurance on selected sustainability subject matter areas presented within the Teck 2015 Sustainability Report (the Report) for the year ended 31 December 2015.

#### 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; and
- Emergency preparedness.
- 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; and
- Area reclaimed during the current year, total disturbance to date.
- Teck's self-declaration of reporting in accordance with the Global Reporting Initiative (GRI) G4 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 Initiative G4 Reporting Guidelines (GRI G4).

#### **Responsibilities**

#### **Deloitte LLP**

Our responsibility is to express a conclusion on Teck's approach and reported assertions detailed in the description of the subject matter areas.

#### **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).

#### What we did: Approach

Our limited assurance engagement has been planned and performed in accordance with the International Federation of Accountants' International Standard for Assurance Engagements Other Than Audits or Reviews of Historical Financial Information (ISAE 3000 "revised") and ICMM's Sustainable Development Framework Assurance Procedure.

#### Primary procedures performed

- · 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;
- Testing 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 detailed than that undertaken for a reasonable assurance engagement, the level of assurance is lower than would be obtained in a reasonable assurance engagement.

#### Inherent limitations

Inherent limitations exist in all assurance engagements due to the selective testing of the information being examined. Therefore fraud, error or non-compliance may occur and not be detected. Additionally, non-financial data may be subject to more inherent limitations than financial data, given both its nature and the methods used for determining, calculating and estimating such data.

#### **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 reference for this 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.

#### What we found: Assurance conclusions

Based on the work described above, nothing has come to our attention that causes us to believe that the selected subject matter for the year ended December 31, 2015 has not been prepared, in all material respects, in accordance with the Reporting criteria.

Deloitte LLP

Deloitte LLP Chartered Accountants Vancouver, B.C. April 22, 2016

#### Addendum: Selected Performance Measures Reviewed

The following corporate-wide performance measures were included in Deloitte's review of selected sustainability subject matter areas within Teck's Sustainability Report for the year ended December 31, 2015.

2015
0
78
0.43
2,469
357
76,000
113,116,000
198
22,808
3

#### **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 "expects", "anticipates", "focuses" 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 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 and in public filings with the United States Securities and Exchange Commission at www.sec.gov. 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.

#### Teck Resources Limited

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Setting Possibilities in Motion