

lundin mining

2016

Sustainability Report





Lundin Mining Corporation is a diversified Canadian base metals mining company with operations in Chile, the USA, Portugal, and Sweden, primarily producing copper, nickel and zinc.

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OUR COMMITMENT TO THE UN GLOBAL COMPACT

Lundin Mining Corporation joined the United Nations Global Compact in 2016 and supports the 10 Principles on human rights, labour standards, environment and anti-corruption. We promote the UNGC's Sustainable Development Goals and communicate on our implementation progress of the 10 UNGC Principles on an annual basis.

Message From the President and CEO

DEAR STAKEHOLDERS,

Lundin Mining Corporation (LMC) continued to demonstrate strong business and sustainability performance across its operations in 2016. Through the concerted effort of all our employees, we are delivering on our objective of responsibly and profitably discovering and developing mineral resources and operations while generating shared value with host communities and other stakeholders.

Sustainability includes securing the mineral reserves needed to continue mining, extending the lives of our profitable mines and the employment and economic benefits that brings to the communities where we operate. This delivers value over the long-term to all our stakeholders. During 2016, through the success of our targeted exploration program, the Company achieved a net increase in mineral resource and mineral reserve, positioning us well for mine life extension and production expansion. Despite globally-depressed metals markets for much of the year, the Company produced according to plan and continued to be profitable by reducing operating costs through spending restraint without any long term impacts on employees or stakeholders. 2016 also saw a record number of staffing transfers between mines, allowing us to better leverage our experience across the Company, and providing career growth to those employees.

We continued to advance development and implementation of our Responsible Mining Management System to drive continuous improvement in health, safety, environmental, and social performance. Key achievements in 2016 included full implementation of the Tailings Stewardship program across all operations and successful execution of health, safety, environmental and product stewardship audits to drive performance improvement. In early 2016, we joined United Nations Global Compact (UNGC) and initiated the process of integrating its principles and sustainable development goals. This complements and reinforces policies and work practices we already have in place on human rights, labour, the environment, stakeholder engagement, anti-corruption, and other responsible mining practices necessary to sustain a successful business.

At each operation, we continued our focus on the development of a strong, sustainable, and interdependent safety culture. As a Corporation, we are proud to have achieved our best-ever safety performance, successfully reducing our total recordable injuries by 30% over 2015, and achieving a Total Recordable Injury Frequency rate of 0.6 against a target of 0.9. We also reduced lost time injuries by 33% over 2015, resulting in a Lost Time Injury Frequency rate of 0.4.

Environmentally, we continued to advance reclamation efforts at our closed properties and we were particularly pleased to receive the International Green Apple Award for Environmental Best Practices for the former Galmoy Mine tailings area reclamation achievement and engineered wetland development in Ireland. We also focused on water management improvements at our operations, resulting in a 44% reduction in fresh water consumption at our European operations over the last two years. Building on our continual efforts to improve environmental management, there were no serious environmental incidents at any of our sites in 2016.

Despite our excellent environmental management results in 2016, LMC did receive notice of a Chilean government resolution that assessed a \$4 million fine related to alleged environmental permit infractions resulting from government inspections conducted in 2013 and 2014, prior to LMC's acquisition and assumption of control of the Candelaria mining complex. The legal process is ongoing and we will report on any resolution.

In alignment with our commitment to sustainability performance, we significantly increased corporate staffing in the areas of permitting, closure, social investment, and stakeholder engagement. In 2016, we were pleased to have secured important permits for construction of a new tailings facility at our Candelaria mining complex, and this project is progressing according to plan.

Through active stakeholder engagement and partnership, we continued to foster and deepen our community relationships and support to ensure that our operations continue to benefit local communities. In 2016, LMC focused efforts to improve local procurement of our goods and services near our mines. We also continued to make significant social investments in the communities where we operate and we are currently working with our stakeholders to enhance the positive impact of our community investment programs.

This *Sustainability Report* presents our performance on the issues and areas of greatest interest and importance to our stakeholders and our business. I trust you will find it informative, and we look forward to continuing to work closely with our employees, communities, host countries, partners, and investors to deliver value and lasting benefits in a sustainable manner.

Looking ahead, we will continue to progress our sustainable mining efforts through the implementation of our Responsible Mining Management Framework. This includes progression of our initiatives in energy and greenhouse gas emissions reduction and water management, and continued alignment of our business practices with international commitments including the UNGC and the UN Sustainable Development Goals. There is still a lot to do to advance our sustainability practices as Lundin Mining evolves and grows. Our reputation is built and maintained through transparency, ethical behavior, consistency, and integrity; and we commit to those actions as fundamental components of our future success.



A handwritten signature in black ink, appearing to read 'Paul Conibear'. The signature is stylized and written in a cursive-like font.

Paul Conibear
President & Chief Executive Officer

About This Report

Lundin Mining Corporation has been producing an annual *Sustainability Report* since 2011. Our report provides information on the economic, environmental, and social issues that are of greatest interest to communities near our operations, our employees, our investors, and other stakeholders.

* More detailed information regarding our financial and operational results for the reporting period can be found in our 2016 Annual Information Form and 2016 Audited Financial Statements. Unless otherwise stated, all references to \$ means United States dollars, C\$ means Canadian dollars. "Lundin Mining", "Company" or "LMC" refer to Lundin Mining Corporation and/or its subsidiaries.

SUSTAINABILITY REPORTING FRAMEWORK AND CYCLE



REPORTING PERIOD

January 1, 2016 – December 31, 2016



DATE OF LAST REPORT

December 31, 2015



REPORTING CYCLE

Annual



REPORTING FRAMEWORK

Global Reporting Initiative (G4/Mining & Metals Sector Supplement)



IN ACCORDANCE OPTION

Core (+ 9 Comprehensive General Standard Disclosures)

REPORT SCOPE AND DATA

Our 2016 *Sustainability Report* covers operating mines that are majority-owned and managed by LMC through its subsidiaries, and includes the following sites:

- Candelaria Complex (Chile)
- Eagle Mine (USA)
- Neves-Corvo Mine (Portugal)
- Zinkgruvan Mine (Sweden)

Production data is reported based upon Lundin's ownership basis. Candelaria is reported at 80% representing Lundin's ownership interest.

This report also includes summary-level information with respect to mine closure-related activities for the following closed sites:

- Galmoy (Ireland)
- Vueltas del Rio (Honduras)
- Storliden (Sweden)
- Aguablanca (Spain) (closed January 2016 and subsequently sold)

The Company is also assisting local government in Sweden as part of a multi-stakeholder group assessing and exploring reclamation options for a historical processing and tailings site at Åmmeberg, Sweden.

In addition to the operations within LMC's control in 2016, LMC held a 24% (non-operating) equity interest in the Tenke Fungurume (Tenke) copper and cobalt mine (Democratic Republic of Congo, or DRC). On November 15, 2016, LMC announced that it would sell its minority interest in Tenke, including the mine and refinery in the DRC. As a result of the 2016 announcement of the planned divestment of LMC's minority non-operational-interest-holder position in Tenke, these assets were considered discontinued operations for the purposes of this report. LMC completed the sale of its non-operational interest in Tenke on April 19, 2017.

LMC holds a 24% (non-operating) equity interest in the Freeport Cobalt Oy business, including the cobalt refinery in Kokkola, Finland. The business is operated by Freeport McMoRan Inc.

Certain labour practice indicators and performance data regarding employees, health and safety, and training are also included for our Corporate offices in Toronto, Canada; and Haywards Heath, UK; as well as for our exploration projects and sites.

DEFINING OUR REPORT CONTENT

This 2016 *Sustainability Report* focuses on those issues most material – or of greatest interest – to our business and our stakeholders. We conduct our materiality assessments regularly, and in recent years, we expanded our materiality process to a larger group of internal stakeholders to support the identification of material sustainability topics. Quantitative and qualitative data were gathered through ongoing stakeholder engagement during the reporting period, as well as a materiality survey that, when collated, incorporated feedback and perceptions from community members, employees, contractors, labour unions, government authorities, non-governmental organizations, customers, lenders, and shareholders. We are currently in the planning stages of our next materiality assessment process update, scheduled for completion in 2017.

The material issues and topics that form the content of LMC's 2016 *Sustainability Report* are shown below:

GOVERNANCE

Business Integrity/Ethics	Risk Management Compliance
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ECONOMIC

Economic Performance	Local Procurement
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PEOPLE

Our Workforce Health and Safety	Labour Relations Professional Training and Development
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ENVIRONMENT

Water	Effluents and Waste
Mine Closure Planning	Air Emissions
Energy Consumption Reduction and Efficiency	Permitting

SOCIAL

Local Communities Stakeholder Engagement	Community Investment Social Aspects of Mine Closure Planning
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There were a small number of additional issues that, while not deemed to be material to our business, were nonetheless identified as topics of interest to some of our stakeholders. For this reason, we have included within this report information related to the following subjects: Human Rights, Biodiversity, and Product Stewardship.

Our G4 Content Index (at the end of this report) lists the General Standard Disclosures and Specific Standard Disclosures (performance indicators) found in this report and identifies the location of these sections within the report.

BOUNDARIES – WHERE IMPACTS OCCUR

Our material sustainability issues may affect stakeholders inside our organization, outside our organization, or both. Within the report narrative, we describe why each material aspect is important and to whom. Where this is not the case, we have provided a specific stakeholder aspect boundary coding in the Content Index.

INDEPENDENT ASSURANCE

In 2016, LMC selected Bureau Veritas to provide independent assurance of the Company's 2016 *Sustainability Report*. Bureau Veritas is a global professional services company, established in 1828 and operating in over 140 countries, specializing in the fields of Safety, Health, Environmental, Quality, and Social Accountability obligations. The assurance process for the 2016 *Sustainability Report* was conducted to a moderate assurance level in accordance with AA1000AS–2008 as a Type 2 engagement. During the assurance process, the accuracy, reliability and objectivity of selected performance indicators were assessed against the applicable indicators in the Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines:

- Safety – Total Recordable Injury Frequency (TRIF) rate and Lost Time Injury Frequency (LTIF) rate
- Water – total amount of water withdrawn from all sources and total amount of water discharged
- Energy – total energy consumption within Lundin Mining operations, including electricity and liquid and gaseous fuel consumption
- GHG Emissions – Scope 1 and Scope 2 (location-based and market-based) emissions
- Stakeholder Engagement – as it relates to the AA1000AS principles of inclusivity, materiality and responsiveness
- Grievance Mechanism – grievances filed during the year including number, description, action taken, and outcome

Bureau Veritas' Independent Assurance Statement can be found on pages 98-101.

About Lundin Mining

Lundin Mining Corporation is a diversified Canadian base metals mining company with operations in Chile, Portugal, Sweden, and the United States. The Company also holds a 24% equity interest in the Freeport Cobalt Oy business, including the cobalt refinery in Kokkola, Finland. LMC's principal products and sources of sales include mineral concentrates of copper, nickel, and zinc. LMC's headquarters are in Toronto, Canada, with an operations and technical project support office in Haywards Heath, UK.

Our Mission is to develop and continuously upgrade a base metals mineral resource and mining portfolio which provides leading returns to shareholders and upholds our strong commitment to Responsible Mining through the following priority business objectives:

- Responsible and profitable development of mineral resources and operations while generating shared value with host communities and other stakeholders
- Generation of a steady pipeline of high potential development opportunities while maximizing value from our existing operations and maintaining a strong corporate balance sheet
- Development of a high-performance culture across all operations, being an employer and partner of choice

Our Mission and commitment to Responsible Mining are underpinned by the following guiding principles:

- We are committed to achieving a safe, productive, and healthy work environment wherever we operate. The health and safety of our employees and contractors is first and foremost in everything that we do.
- We engage in open and inclusive dialogue with local communities and other stakeholders in a spirit of transparency, cooperation, and good faith. We recognize every community as unique and respect the cultural and historical perspectives and rights of those affected by our operations. We work to improve the long-term well-being of those affected by our activities.
- We foster the provision of lasting benefits to local communities, aligned with their priorities.
- We are vigilant and collaborative in our protection of the environment and in seeking ways to minimize our environmental impacts.
- We conduct our activities in accordance with recognized standards for respect of indigenous and human rights.
- We maintain high standards of ethics, corporate governance, and honesty in all aspects of our business.

To support our commitment to these guiding principles, we engage with our industry peers, associations, governments, non-governmental organizations, and civil society to communicate on our performance and to contribute to best-practice development. We strive to meet or surpass applicable legal requirements wherever we work, and we seek to continuously improve our performance.



LMC VALUES

What We Believe In and How We Operate

STEWARDSHIP

Safety and Well-being of our people, communities, contractors, and the environment, leading to increasing stakeholder support.

Our Reputation is built and maintained through transparency, ethical behaviour, consistency, and integrity.

VALUE CREATION

Delivery of strong returns on invested capital. Growth through strategic exploration, value-added projects and acquisitions.

High Performance is achieved through superior execution of our exploration, projects, and operations. A continuous cost/benefit focus in everything we do.

CULTURE

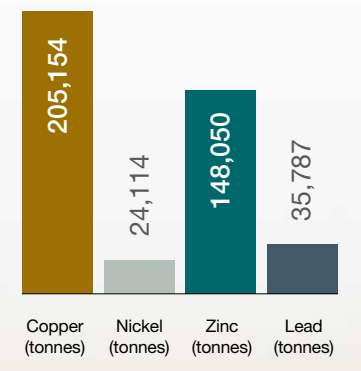
Our Style is entrepreneurial. Our people are motivated to achieve superior results, aligning interests with shareholders.

Trust is demonstrated through mutual respect and teamwork, embracing our diverse workforce and the communities where we operate.



2016 Performance Highlights

Metal Production Statistics
(contained metal)



 **3,221**
Employees

 **3,984**
Contractors

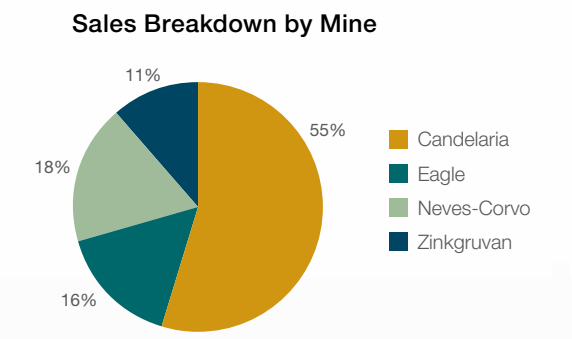
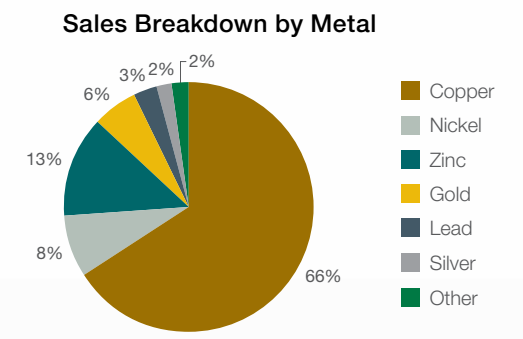
 Implementation
of Responsible
Mining Framework

\$1.55 billion
Revenue Generated

\$4.7 million Community Investment

 Lost time injuries
reduced by 33%
over 2015 for a Lost Time Injury
Frequency (LTIF) rate of 0.4

 Total recordable injuries reduced
by 30% over 2015 for a Total
Recordable Injury Frequency
(TRIF) rate of 0.6



 **44%** Water management efficiency initiatives at
European operations reduced surface water
consumption by 44% from 2014 to 2016



Our Operations



Eagle, USA
NICKEL-COPPER

Interest **100%**
 Number of Employees **190**
 Number of Contractors* **243**
 Mine Type: underground
 Mine Life: 7 years to 2023 (extension possibilities)



Candelaria, Chile
COPPER-GOLD-SILVER

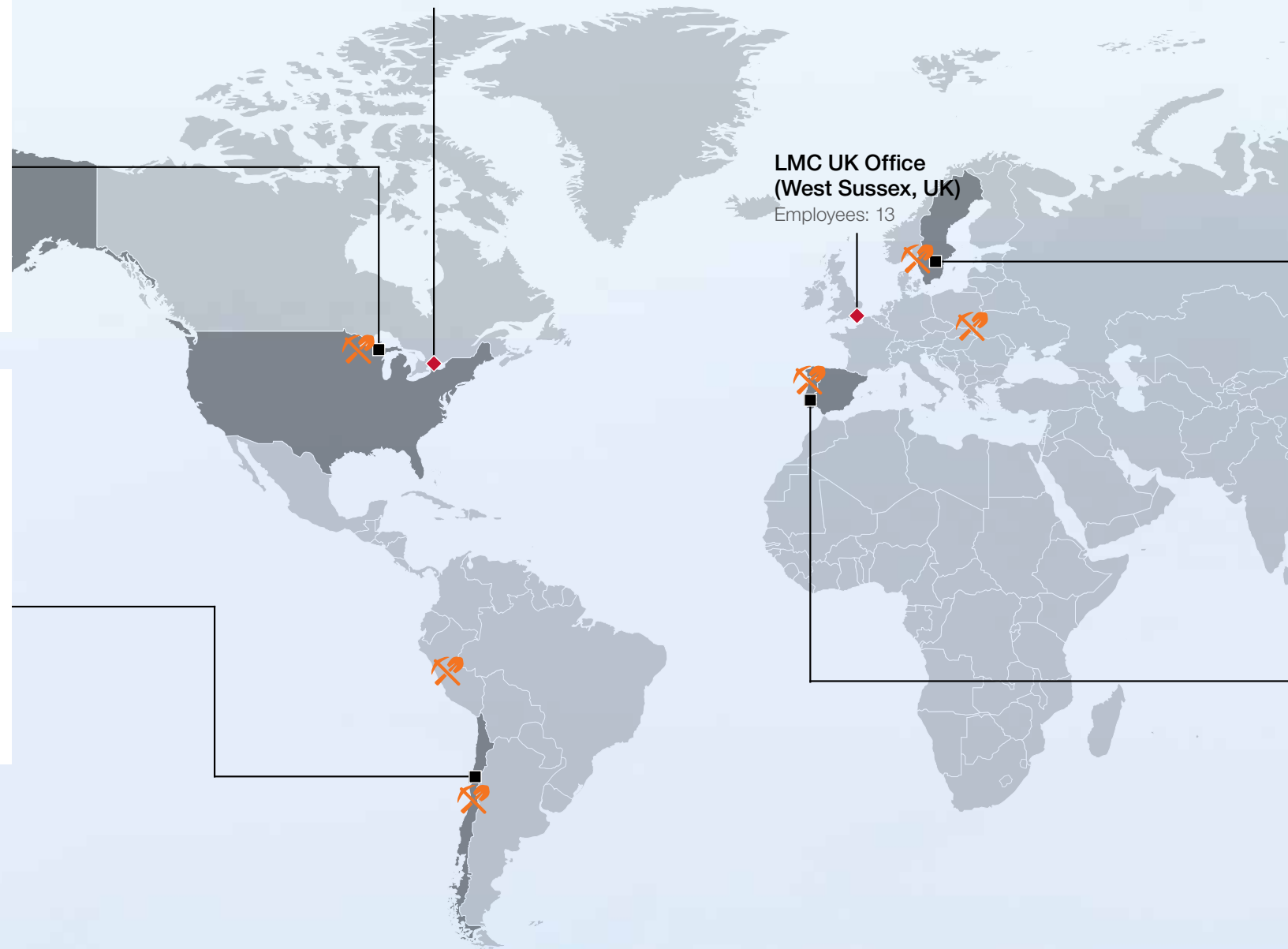
Interest **80%**
 Number of Employees **1,552**
 Number of Contractors* **2,905**
 Mine Type: open pit/underground
 Mine Life: 19 years to 2035 (extension possibilities)

- Operations
- ◆ Head Office
- ⚡ Exploration Activities
- Copper
- Zinc
- Nickel
- Lead
- Gold
- Silver

* Contractor data was based on headcount

LMC Head Office (Toronto, Canada)
Employees: 38

LMC UK Office (West Sussex, UK)
Employees: 13



Zinkgruvan, Sweden
ZINC-LEAD-COPPER

Interest **100%**
 Number of Employees **368**
 Number of Contractors* **59**
 Mine Type: underground
 Mine Life: 10 years to 2026 (extension possibilities)



Neves-Corvo, Portugal
COPPER-ZINC

Interest **100%**
 Number of Employees **1,042**
 Number of Contractors* **763**
 Mine Type: underground
 Mine Life: 10 years to 2026 (extensions approved May 2017 to extend mine life to at least 2030 with Zinc Expansion Project (ZEP) investment)

EXPLORATION ACTIVITIES

- Number of Employees: 17
- Candelaria, Chile (Copper)
- Eagle, USA (Nickel, Copper)
- Neves-Corvo, Portugal (Copper, Zinc)
- Zinkgruvan, Sweden (Zinc, Lead, Copper)
- Peru (Copper)
- Eastern Europe (Copper)



Our Operations

Candelaria

The Candelaria Mining Complex, comprising Minera Candelaria and Minera Ojos del Salado, as well as the Punta Padrones Port facility near the community of Caldera, produces copper concentrates from open-pit and underground mines located near Copiapó in the Atacama Region of Chile. Minera Candelaria consists of an open-pit mine and an underground mine providing copper ore to an on-site concentrator with a capacity of 75,000 tonnes per day. Minera Ojos del Salado comprises two underground mines, Santos and Alcaparrosa, and an on-site concentrator with a nominal throughput capacity of 3,800 tonnes per day.

Construction of the new Los Diques tailings management facility commenced in 2016 following receipt of key construction permits. This will replace the existing facility, which is due to be decommissioned in 2018.

Aggressive exploration in the underground mines continued to be successful during 2016, and feasibility studies were initiated on potential debottlenecking expansions of the main Candelaria processing plant to increase throughput capacity by approximately 15%.

Eagle

Eagle Mine is an underground, high-grade nickel and copper mine located in western Marquette County of Michigan's Upper Peninsula in the USA. Ore from the mine is transported by truck to the Humboldt processing plant with a capacity of 2,000 tonnes per day. In 2015, exploration drilling discovered the Eagle East high-grade nickel and copper deposit, approximately 2 km east of the Eagle deposit. During June, 2016, a maiden Inferred Mineral Resource estimate was released on Eagle East, and a Preliminary Economic Assessment was published. During April, 2017, the Feasibility Study was released on Eagle East, indicating that this mineralization has extended the estimated Eagle mine life and exploration continues.



Neves-Corvo

Neves-Corvo is a copper, zinc, and lead underground mine located approximately 100 km north of Faro, Portugal, in the western part of the Iberian Pyrite Belt. The mine has been a significant producer of copper since 1989 and in 2006 commenced treating zinc ores. The facilities include a shaft with a total hoisting capacity of 4.7 million tonnes per annum (mtpa), a Copper Plant with 2.5 mtpa processing capacity and a Zinc Plant with 1.2 mtpa processing capacity. The Zinc Plant has the flexibility to process zinc or copper ores.

In anticipation of a positive decision to expand zinc production capacity at Neves-Corvo, LMC initiated permitting of the Zinc Expansion Project (ZEP) in 2016 to increase zinc ore mining and processing capacity to 2.5 mtpa. The project was approved in May 2017 and is expected to double zinc production by 2020 through the investment of approximately €260 million.

Zinkgruvan

The Zinkgruvan Mine, located 200 km southwest of Stockholm, has been known since the 16th century and has been producing zinc, lead, and silver on a continuous basis since 1857. The operation consists of an underground mine, processing facilities, and associated infrastructure, with a nominal ore production capacity of 1.25 mtpa.

During 2016, the Company commenced construction of the Enemossen East expansion to the existing tailings management facility (TMF). In addition, an expansion of the process plant was initiated to increase the processing plant capacity to 1.35mtpa. Both projects are due for completion in 2017.

EXPLORATION AND NEW BUSINESS DEVELOPMENT GROUP

The strategy of the Exploration and New Business Development Group is to support production growth, economic viability, and sustainability of LMC by:

- Further developing and expanding mineral resource and reserve potential at existing operations, including process optimization, with the goal of extending mine life
- Maintaining a certain proportion of greenfield exploration in the LMC portfolio with new business/discovery potential

The total exploration expense for 2016 was \$46 million (excluding Tenke), a decrease of approximately \$11 million from 2015. The majority of planned and executed exploration activity for 2016 was directed toward near-mine targets at Candelaria and Eagle East. For more information, we invite you to visit our Exploration webpage at www.lundinmining.com/s/Exploration.asp.

OUR CUSTOMERS AND MARKETS

LMC's principal products and sources of sales are mineral concentrates of copper, nickel, and zinc. Concentrates are transported by covered truck or rail, in bulk, to outbound ports for shipping, or are transported directly to smelter facilities for further processing.

Concentrates are mainly sold under multi-year sales contracts to a variety of smelter customers in Europe, Asia, and the Americas. The end-users of our products are global.

OUR SUPPLY CHAIN

LMC relies on an international network of suppliers for the provision of products and services required to support business activities at our mines. The largest categories of suppliers across our operations in 2016 included, in no specific order: mining contractors, maintenance, mechanical, electrical, construction, exploration drilling, engineering, equipment and parts, energy, chemicals, explosives, transportation, fuel, and cement.

All LMC suppliers are expected to operate in general conformance with the Company's Code of Conduct, Ethical Values and Anti-Corruption Policy, as well as our Responsible Mining Policy. This helps ensure that we select and work alongside suppliers who share our values and have acceptable protocols in place with respect to labour, health and safety, environmental, and human rights business practices.

MEMBERSHIPS AND ASSOCIATIONS

Involvement with memberships and industry associations enables LMC to keep current regarding matters of public policy, emerging-sector and sustainability trends, regulatory updates, and the sharing of industry best practices. In 2016, LMC was a member or participant in the following industry associations:

Corporate

- [Mining Association of Canada](#)
- [European Association of Mining Industries, Metal Ores & Industrial Metals \(Euromines\)](#)
- [European Copper Institute International Maritime Organization Working Group](#)
- [International Zinc Association](#)
- [International Lead Association](#)
- [Prospectors and Developers Association of Canada](#)
- [United Nations Global Compact](#)



Aerial view of Eagle Mine near Big Bay, Michigan

Eagle

- [Michigan Manufacturers Association](#)
- [Michigan Chamber of Commerce](#)
- [American Exploration and Mining Association](#)

Candelaria

- [Chilean Mining Council \(Consejo Minero\)](#)
- [National Mining Society \(SONAMI\)](#)
- [Atacama Regional Development Corporation \(CORPROA\)](#)
- [Instituto de Ingenieros de Minas de Chile \(IIMCh\)](#)
- [Red Ambiental Atacama](#)
- [Comité Regional de Seguridad Minera Atacama \(CORESEMIN\)](#)
- [LICEO Jorge Alessandri Rodriguez](#)

Neves-Corvo

- [National Association of Extractive and Transforming Industry \(ANIET\)](#)
- [Setubal Port Community](#)
- [Portuguese Shippers Council, member of the European Shipper's Council](#)

Zinkgruvan

- [Swedish Association of Mines, Mineral and Metal Producers \(SveMin\)](#)

Our Performance Against 2016 Targets

Our annual sustainability targets are aligned with our Responsible Mining Policy and help us achieve continuous performance improvement in key sustainability areas. In establishing our targets, we consider the results of internal risk assessments, stakeholder feedback, and continuous improvement of existing processes and procedures.

2016 TARGET

RESULT HIGHLIGHTS

GOVERNANCE

2016 TARGET	RESULT	HIGHLIGHTS
Meet or exceed the 10 principles contained within the UN Global Compact (signed in 2015)	●	Company-wide implementation of the 10 UNGC principles was initiated, as documented in our <i>2016 UNGC Communication on Progress</i> : www.unglobalcompact.org/participation/report/cop/create-and-submit/active/323781 .
Review existing Risk Management Policy, Group Standard and Framework to ensure they reflect management's philosophy regarding risk and develop a plan to ensure alignment across the organization	●	LMC's 2010 Risk Management Policy and Framework were replaced by a Risk Management Statement. A new Risk Management Framework, based on the ISO 31000 Risk Management Standard, was also approved as a guide to the Risk Management Statement.
Complete the Responsible Mining Management System (RMMS) and develop a communication plan for roll-out at the end of 2016	●	The draft RMMS was completed and a roll-out program initiated. The finalization and roll-out of the RMMS to all operations will be fully achieved in 2017.

ECONOMIC

Improve efficiencies and profitability at all mines	●	Operating costs were lower than targeted amounts at each of the operations.
Improve return on capital invested, manage a healthy balance sheet for the next stage of growth	●	LMC continued to generate positive cash flows, despite the low metal price environment, and maintained a strong balance sheet, enabling approval of the inaugural shareholder dividend.
Advance growth opportunities	●	All mines pursuing expansion projects. Through exploration programs, LMC expanded its Mineral Resources and Reserves.

HEALTH AND SAFETY

Zero fatalities	●	There were no fatal injuries.
Total Recordable Injury Frequency Rate (TRIF) of 0.9	●	Lundin Mining achieved a TRIF of 0.6 – a best-ever for the Company.

● Achieved ● Partially Achieved ● Not Achieved

2016 TARGET

RESULT HIGHLIGHTS

TRAINING AND DEVELOPMENT

Achievable, measurable improvement in career development initiatives, succession planning, and inter-operation transfers

● Succession planning in process at every LMC operation and office. Increased number of operational and head office transfers.

Measure training hours

● Total training hours, training hours per female/male, and scheduled internal training hours were measured in 2016. Training related to Health & Safety and Supervisory Skills was a focus this year.

ENVIRONMENTAL

No incidents at or above Level 3 at active or legacy sites

● No serious environmental incidents were recorded at any of our mines.

Develop and implement an Environmental Audit Tracking Tool and Procedure

● The Environmental Audit Tracking Tool was successfully developed and implemented at all mines.

Review and update the priority conservation values and initiatives at each site

● Biodiversity Management Plans were updated to align with the Biodiversity Management Group Procedure at all mines.

Identify opportunities for reduction of greenhouse gas emissions intensity

● LMC effectively completed its GHG Emissions Reduction and Energy Efficiency Data Collection Program. All sites identified new initiatives for energy efficiency assessment, and commenced and/or completed implementation of new or previously identified initiatives.

Progress permitting efforts for tailings facility expansion projects

● Permitting efforts were successfully advanced to progress tailings facility expansion projects at Candelaria, Zinkgruvan and Neves-Corvo, supported by the Tailings Stewardship Program.

Complete audits of the Mine Closure Standard at all sites

● HSE & Product Stewardship Audits, including Mine Closure, were completed at all LMC mines.

SOCIAL

Implement stakeholder engagement standard at all sites and operations

● LMC completed our Stakeholder Engagement Standard and initiated roll-out to our mines.

Implement community investment standard at all sites and operations

● LMC roll-out of the Community Investment Standard at all mines began in 2016 and will continue in 2017.

Roll out social impact management standard at all sites and operations

● Social Impact Management Standard development began in 2016 and will be completed in 2017. Roll-out will be initiated when the Standard is complete.

Develop an implementation plan for UN Global Compact

● Company-wide implementation of the 10 UNGC principles was initiated, as documented in our *2016 UNGC Communication on Progress*: www.unglobalcompact.org/participation/report/cop/create-and-submit/active/323781.

Establish a process for reporting on social activities and integrate social reporting into HSE reporting

● LMC sites and operations established a process for monthly reporting on Social Performance that is integrated with HSE quarterly reporting requirements.

2017 Sustainability Goals



GOVERNANCE

Communicate / roll out the 2016 Risk Management Statement and Framework, including review of the current processes for identification and assessment of key risks.

Continue to identify opportunities to implement the 10 principles contained within the UN Global Compact and align Lundin Mining's sustainable development activities with relevant UN SDGs.

Progress the roll-out of the Responsible Mining Management System (RMMS) and communication plan to all sites.



ECONOMIC

Improve efficiencies while preserving margins and cash flows at all operations.

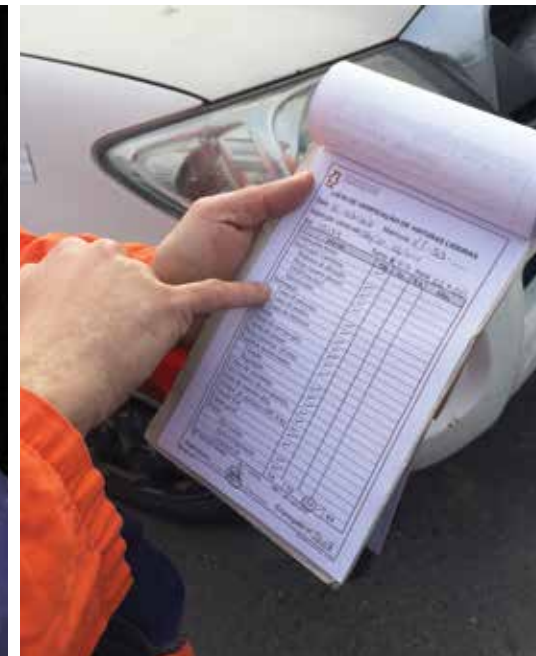
Improve return on capital invested, manage a healthy balance sheet for the next stage of growth.

Advance growth opportunities at existing operations and/or new sites.



OUR PEOPLE

Appoint, develop, and retain talent to support our current business and future growth.



HEALTH AND SAFETY

Ensure Zero Fatalities.

Achieve a Total Recordable Injury Frequency (TRIF) rate of 0.8.



ENVIRONMENT

Develop and implement strategic plans for top five environmental risks for each of Lundin Mining's operations.

Advance the development of targets for improved energy efficiency and GHG emissions reduction.

Complete integrated HSEC audits at all sites.



SOCIAL

Undertake social performance audits to evaluate each operation's risks, needs, and gaps in proactively managing stakeholder engagement, community investment, and social impact management.

Review of social performance tools developed to date and evaluate their efficacy and relevance for implementing the RMMS and proactively manage social risks.

Develop a community investment handbook.

Ensure all LMC sites and operations have community investment policies and plans.

Our Approach to Responsible Mining

Lundin Mining is committed to Responsible Mining. Our reputation as a good corporate citizen is central to our values and vital to the long-term success of our business. We seek to create enduring relationships and shared values with our local communities and our stakeholders.

LMC is committed to operating in compliance with applicable laws and regulations in all jurisdictions where we operate, and we seek to continuously improve our sustainability performance. We strive to align our policies and procedures with international best practice and guidance for social and environmental performance, and to ensure that LMC meets its objectives and targets. Management monitors and reviews performance on a regular basis, and we publicly communicate our efforts annually.

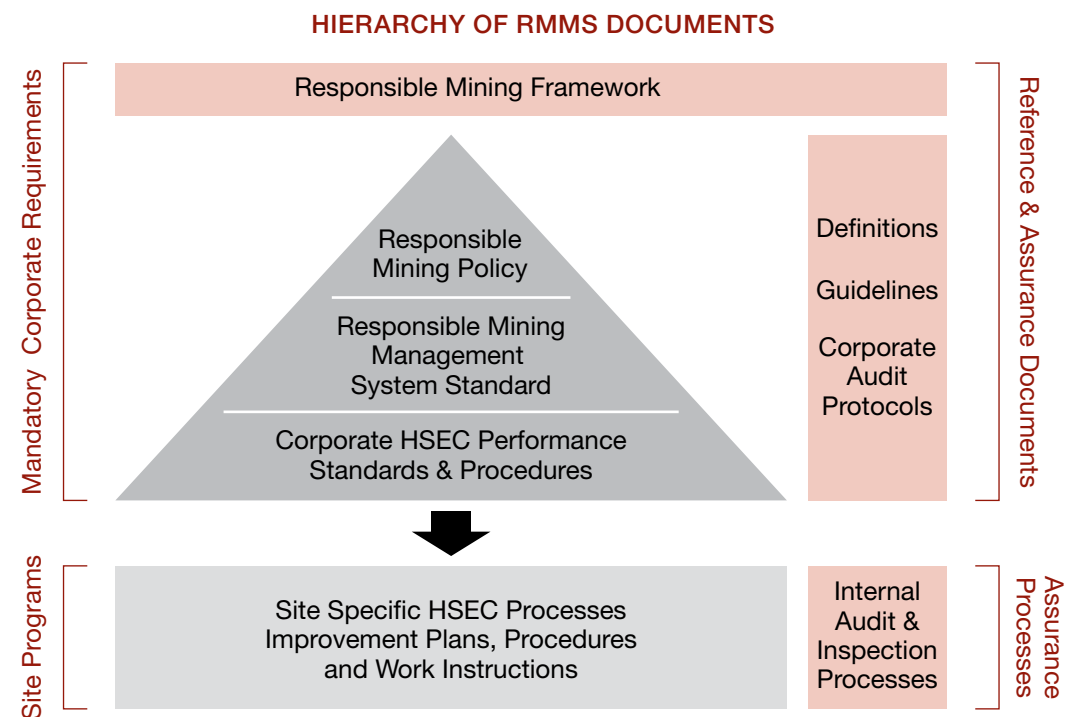
Our commitment to Responsible Mining is outlined in the following documents:

- Our **Responsible Mining Policy** outlines the Company's policy commitments and principles for Responsible Mining

- LMC's **Responsible Mining Framework** outlines our commitment to develop and implement management systems and operating practices that take into consideration applicable international guidelines, and defines the way we manage material economic, social, H&S, and environmental issues

For more details, please visit: www.lundinmining.com/i/pdf/LMC_Framework_LetterSize_SP.pdf.

In 2016, we continued to progress the development of our Responsible Mining Management System (RMMS) Standard. The RMMS Standard, which replaces the existing set of Health, Safety, Environment and Community (HSEC) management system standards, is an auditable specification outlining mandatory requirements for management systems to be implemented at all Lundin Mining sites for the management of the HSEC aspects of our business. The RMMS Standard directly supports the Company-wide implementation of our Responsible Mining Policy.



Responsible Mining Policy

Lundin Mining Corporation (LMC) is committed to Responsible Mining. We view transparent and sustainable practices as central to being a successful base metals – focused producer. Our reputation as a good corporate citizen is vital to the long-term success of the business, and we seek to create enduring relationships and shared value with our local communities and our stakeholders. We conduct our business responsibly by adhering to the following principles:

- 1 We are resolute in our effort to achieve Zero Harm. We strive to ensure the health and safety of our employees and contractors is first and foremost in everything we do. As a leader in health and safety we promote the well-being of people in our host communities.
- 2 We conduct our business activities ethically and transparently, in accordance with the Company's Code of Conduct and Ethical Values Policy.
- 3 We strive to meet or exceed legal requirements in fulfilling the commitments of this policy.
- 4 We aim to design, develop and operate our facilities to minimize their overall environmental impact and take into account their eventual closure. We efficiently use water, energy and other resources, and responsibly manage wastes. We contribute to the conservation of biodiversity by promoting research, partnerships and responsible land management practices.
- 5 We assess the risks and impacts of our operations and integrate these considerations into our planning and operational decision-making processes. We strive for continuous improvement in our health, safety, environmental and community performance.
- 6 We are accountable to our stakeholders. We engage with host communities early and throughout the life cycle of projects to understand their expectations and to develop relationships based on mutual trust.
- 7 We provide training to assist with meeting our Responsible Mining objectives. We empower our employees and contractors to do the right thing, and we expect everyone to act responsibly.
- 8 We work closely with host communities and our partners to provide lasting benefits in the form of self-sustaining programs and other initiatives that enhance the quality of life where we operate.
- 9 We treat people with dignity and we respect human rights as set forth in the United Nations Universal Declaration of Human Rights.
- 10 We respect and take into consideration the rights, interests, concerns, traditional land uses and cultural activities of Indigenous peoples within our sphere of influence.
- 11 We develop and implement corporate governance processes to underwrite our Responsible Mining commitments.
- 12 We monitor and measure our performance against the principles of this policy, and we publicly report our progress.

For more detail on how we implement the commitments of this Policy, see Lundin's Responsible Mining Framework, available on our website at www.lundinmining.com.

Paul Conibear
 President and CEO
 For and on behalf of the Board
 May 2015



Governance



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OUR APPROACH

Lundin Mining is committed to maintaining high standards of ethics, corporate governance, and honesty in all aspects of our business. We do this by enacting robust corporate governance processes and ensuring our employees understand and consistently meet the Company's Guiding Principles and Responsible Mining Policy and Framework.

Board of Directors

The Board of Directors (the Board) is primarily responsible for the oversight of management, as well as LMC's strategy and business affairs. The Board's chairman, together with the lead director, are responsible for ensuring appropriate governance mechanisms are in place to monitor LMC's development through regular contact with the President and CEO, and to ensure the Board regularly receives reports concerning the development of LMC's business and operations. This includes progress and continuous improvement efforts with respect to its economic, environmental, and social performance.

The Board has eight members (seven male members and one female member), five of whom are independent, non-executive directors. The Board members are required to own common shares in the Company to align their interests with those of shareholders.

The Board also has four standing committees including the (1) Audit Committee, (2) Human Resources and Compensation Committee, (3) Corporate Governance and Nominating Committee, and (4) Health, Safety, Environment and Community Committee. Committee mandates are reviewed and updated regularly to maintain continued relevancy and to provide an effective framework for a high standard of governance.

In December 2016, Directors of the Company elected to form an Ad Hoc Risk Committee of the Board. Members of this newly developed Ad Hoc Risk Committee include the Chair of each Board Committee. The Ad Hoc Risk Committee is scheduled to meet periodically to discuss key risks to the business and Management's efforts to address these risks. Also in December 2016, an Executive Risk Committee (ERC) was established with executive management team members including the Company's CEO, CFO, COO, SVP – Projects, VP – Environment, and VP – Technical Services. The ERC is scheduled to meet at least quarterly to, among other things, review the Company's risk profile and efforts to treat key risks and take advantage of new opportunities.

The Health, Safety, Environment and Community (HSEC) Committee assists the Board in its oversight of health, safety, environmental, and social issues. The HSEC committee comprises three members, and meets at least four times per year. Informed by quarterly reports from key departments, the committee is responsible for reviewing the effectiveness of corporate policies in these areas and the RMMS; ensuring compliance with applicable legal and regulatory requirements; and reviewing performance, leadership, and external reporting associated with these matters.

The HSEC Committee formally reviews and approves LMC's *Sustainability Report* and has ensured all identified material aspects receive coverage in the report. Senior management has reviewed and ensured the accuracy of the data and information contained in this report, including the President and CEO, COO, CFO, VP – Environment, Corporate Director of Health & Safety, Director of Sustainability and Regulatory Affairs, and Director of CSR and Social Performance.

Business Ethics

The Company and its subsidiaries, and their respective directors, officers, employees, consultants, and contractors, are expected to conduct business activities ethically and transparently and in accordance with our Code of Conduct, Ethical Values and Anti-Corruption Policy (the Code). The Code was revised in early 2016 to enhance existing anti-corruption and human rights policies, and is available on our corporate website www.lundinmining.com/i/pdf/code-of-conduct-2016.pdf. In addition to our Code, our Values Statement – what we believe in and how we operate – is embedded in our Responsible Mining Framework. These documents shape and inform LMC's approach to doing business.

To ensure an understanding of required compliance with the Code and the high behavioural standards we expect, we have translated the Code into the working languages at our operational sites and made it readily accessible in key locations at each operational site and on our internal website. Each employee reviews the Code during the on-hire induction process, and again on an annual basis. We also distribute our Code to contractors, suppliers, and service providers to ensure they understand LMC's expectations and conduct their activities in accordance with these standards.



Environmental Audit 2016, Candelaria

The Code articulates definitions and expectations related to the avoidance of situations that may constitute a conflict of interest. Employees, officers, and directors are expected to avoid all situations where personal interests or activities interfere or appear to conflict with the best interests of the Company, or adversely influence the proper discharge of his/her obligations, duties, and responsibilities to the Company and its shareholders.

Human Rights

LMC respects human rights as set forth in the United Nations Universal Declaration of Human Rights, and we treat our employees, contractors, neighbours, local communities, and host governments with dignity and respect. This commitment, while already in our Responsible Mining Policy and Framework, was embedded into the Code in early 2016.

LMC does not tolerate any form of harassment and we foster a work environment free from discrimination against gender, age, race, national origin, marital status, sexual orientation, religious beliefs, disability, or any other personal characteristics protected by international human rights law. We respect and take into consideration the rights, interests, and concerns of traditional land uses and cultural activities of Indigenous peoples within our sphere of influence. There were no recorded incidents of discrimination at our operations during the reporting period. An unconfirmed claim of discrimination during a corporate office hiring process, received in 2016, was under review by the company at the end of the reporting period; if confirmed, the outcome will be reported in our 2017 report.

In 2016, LMC adopted a Diversity Policy approved by its Board of Directors. The Diversity Policy provides a framework for the Company to achieve its objectives of (1) a diverse and

skilled workforce; (2) a workforce that best represents the talent available where the Corporation's assets and employees are located; (3) a work environment that values and utilizes the contributions of employees with diverse backgrounds, experiences, and perspectives; (4) a workplace culture characterized by inclusive practices and behaviours; (5) an environment that encourages the development of necessary skills and experience for leadership roles; (6) improved employment and career development opportunities for women; (7) awareness in all staff of their rights and responsibilities with regards to fairness, equity, and respect for all aspects of diversity; and (8) workplaces that are free from all forms of discrimination and harassment. Within this framework, the Corporate Governance and Nominating Committee is responsible for making recommendations to the Board on the election or re-election of Board nominees and considers a range of factors, including performance, skills, and diversity, including identification and nomination of female candidates, when identifying and selecting candidates for election or re-election. Management regularly reviews the policy to assess effectiveness and corresponding revisions as may be appropriate. Our Diversity Policy can be found here: www.lundinmining.com/i/pdf/diversity-policy-2016.pdf.

LMC supports freedom of association and collective bargaining, as described in the Code, and there are no operations where the right to exercise these labour rights may be violated or at risk. No operations are at risk for incidents of child labour or young workers exposed to hazardous or industrial conditions. LMC has strict proof-of-age requirements for its workforce upon hiring, at all sites, preventing anyone under the legal industrial working age of 18 from obtaining employment at any of our sites or operations. Similarly, our operations are not at risk for incidents of forced or compulsory labour. There were no reported or known incidents of forced or child labour practices at our operations in 2016.

Anti-Corruption and Anti-Bribery

In 2016, there were no reported or known incidents of corruption. LMC has a zero-tolerance policy for bribery and corruption by employees, officers, directors, consultants, and contractors of the Company, with even the appearance of impropriety deemed unacceptable. We conduct risk assessments of all our business units and have thorough internal financial controls in place for oversight with respect to the financial aspects of operations that could be affected by bribery or corruption. We also updated our Code in early 2016 to include enhanced anti-corruption and anti-bribery requirements, in accordance with the *Corruption of Foreign Public Officials Act (Canada)* and the guidelines on combating bribery of the Organization for Economic Co-operation and Development (OECD) for Multinational Enterprises.

Whistleblower Policy

The LMC Whistleblower Policy establishes a Company-wide protocol and line of communication for the confidential reporting (without fear of reprisal or retaliation) and investigation of any fraudulent, unethical, or illegal financial activity, or any behaviour which violates the Code. This policy can be found here: www.lundinmining.com/i/pdf/whistle-blower-policy-2016.pdf.

In 2016, LMC updated the policy and communicated the revised policy to relevant parties across the Company, including its operating subsidiaries and mine sites, through posters and wallet cards in all host-country languages.



Risk Assessment and Management

We have a systematic approach to identify, analyze, evaluate, and manage material business risks. Our approach is based on the ISO 31000 Risk Management standard and a "plan-do-check-act" model that considers a broad spectrum of stakeholders as well as risk exposures, both internal and external, to the organization. The approach is also intended to identify and prudently leverage opportunities that may be identified through the risk assessment process. We conduct risk assessments to evaluate health, safety, environmental, and social risks and opportunities, among others, both at the site and at corporate levels. We rank identified risks based on the likelihood of a risk event occurrence and the nature and degree of impact on business strategies and objectives. Significant or "key" risk exposures are those that are assessed as having the potential to result in a major or catastrophic net impact on the organization and its stakeholders. Our risk assessment process is iterative, based on both quantitative and qualitative data, and incorporated into our business activities.

We summarize enterprise and operational risk exposures in risk registers that are reviewed regularly, and we track

implementation of risk treatment action plans. We monitor and internally report on identified key risks and action plans on a quarterly basis to senior management and the HSEC Committee of the Board. Reports presenting a consolidated portfolio view of enterprise and operational risks are submitted to the Executive Risk Committee, quarterly, for review and discussion. Periodically, the risk subcommittee of the Board also meets to discuss the risk profile of the organization and changes thereto.

Our most significant enterprise risks in 2016 included commodity price volatility, the ability to secure environmental and other permits, maintaining social license/community support, the evolving regulatory landscape, and the transfer of operating control at Tenke¹. Our most significant potential risks that could impact affected communities include failure to control dust produced by mining activity, inappropriate water/groundwater consumption, water/groundwater contamination, and impaired tailings storage facility integrity.

A listing of specific community concerns raised in 2016, and the Company's response to these issues, is presented in our Social Responsibility section on pages 45-46.

EXTERNAL COMMITMENTS

LMC's Responsible Mining Policy and Framework are aligned with the Government of Canada's Enhanced Corporate Social Responsibility Strategy, and we have committed to develop and implement management systems and operating practices that take into consideration international guidance for extractive companies operating abroad. The following international guidelines have been incorporated into the Company's Responsible Mining Framework:

- Organization for Economic Cooperation and Development Guidelines for Multi-National Enterprises*
- United Nations Guiding Principles on Business and Human Rights*
- United Nations Global Compact (joined in March 2016)
- Voluntary Principles on Security and Human Rights*
- International Finance Corporation Performance Standards on Social and Environmental Sustainability
- Global Reporting Initiative*
- Prospectors and Developers Association of Canada e3 Plus* (LMC commits to align its exploration practices with this program)

¹ The sale of LMC's non-operational interest in Tenke was completed on April 19, 2017.

* Voluntary initiatives



Economic Performance



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OUR APPROACH

The economic sustainability of our business is important to all our stakeholders. We continuously monitor our performance and objectives, conduct opportunity and risk assessments, and integrate these findings into our economic strategy. We regularly review and adjust our strategy to reflect changing internal dynamics and external factors affecting our business.

Our 2016 economic strategy focused on improving margins and cash flows, maximum value realization from our existing operations, maintaining a strong balance sheet and improving our net debt position, and growth through careful reinvestment in capital programs and

near-mine exploration. This strategy enabled the Company to maintain strong production, minimize cash costs at all mines, and significantly reduce our annual capital expenditures. LMC's near-term economic strategy is focused on stable base metals concentrate production, preserving margins and cash flows from all operations, and continuing to maintain a strong balance sheet while pursuing growth opportunities at existing operations. This strategy strongly positions the Company to achieve or exceed annual production guidance, generating healthy cash flows and leading returns in a fluctuating and volatile commodity price environment.

We continued our focus of reinforcing our commitment to a strong, sustainable, and resilient business and progressed these efforts through engagement and collaboration with our workforce. Through established continuous improvement leads and committees, or independent idea contributions, employees were encouraged to share suggestions regarding production optimization, cost savings, and cost

deferrals. Many of these suggestions are being implemented and are expected to contribute toward improved cash flow and profit in 2017.

ECONOMIC CONTRIBUTIONS

LMC's operations contribute to the short- and long-term economic development and prosperity of regional communities through a number of channels. Beyond wages and salaries paid to employees and contractors, taxes, and royalties and fees paid to governments, we support regional socio-economic development, including the ongoing training of our employees to build capacity for long-term employment after mine closure, the local procurement of goods and services to stimulate economic activity, the installation and upgrading of local infrastructure, and the support of community investment programs to create opportunities for social development.

As defined by the Global Reporting Initiative, our total economic value generated in 2016 was approximately \$1.6 billion and total economic value distributed was approximately \$1.1 billion, as detailed in the following table.

In \$US 000s	2016	2015	2014
ECONOMIC VALUE GENERATED			
Revenue	1,553,734	1,706,662	951,314
Total economic value generated	1,553,734	1,706,662	951,314
ECONOMIC VALUE DISTRIBUTED			
Operating Costs (excluding salaries) ⁽¹⁾	720,520	771,365	475,324
Employee wages and benefits	227,791	248,933	181,433
Payments to Governments including Royalties and Taxes ⁽²⁾	20,490	90,579	57,904
Payments to Providers of Capital	79,114	78,652	9,344
Community Investment	4,650	14,828	3,388
Total Economic Value Distributed	1,052,565	1,204,357	727,393
Total Economic Value Retained	501,169	502,305	223,921

⁽¹⁾ The Company makes payments to the governments in countries where we operate in the form of income taxes, royalties and property taxes. Penalties and interest related to income taxes have also been included.

⁽²⁾ Payments to governments have been reported using GRI's G4 Sustainability Reporting Guidelines, and therefore are reported on a different basis than payments to governments that will be disclosed under Canada's Extractive Sector Transparency Measures Act (ESTMA). The Company's inaugural ESTMA report will be issued under separate cover in May 2017.

Economic Performance



LOCAL PROCUREMENT

LMC emphasizes the importance of procuring goods and services locally whenever possible. It is important for the local economies in which we operate and supports the maintenance of competitive pricing. Procuring local goods and services ensures that local and regional communities receive significant benefit from the economic activity generated by our business activities and builds mutually-beneficial relationships and lines of communication.

Prior to selection, we provide our Code of Conduct, Responsible Mining Policy, and Responsible Mining Framework to our contractors, suppliers, customers, and service providers with the expectation that they understand our business ethics and related commitments, and that they conduct their activities in accordance with these standards.

The percentage of supplies and services that can be sourced locally differs among countries and among sites. All our operations have a competitive-bid process for suppliers that, beyond the previously stated requirements to conduct work sustainably in a manner consistent with LMC standards and policies, includes criteria such as location, availability and quality of product, service quality and experience, and cost. Preference is awarded (all other factors being equal) to local suppliers and contractors.

In 2016, approximately \$688 million (or 92%) of our goods and services were procured locally by LMC operating sites in the United States, Latin America, and Europe. Goods or services that cannot generally be sourced locally include specialized or heavy equipment, explosives, chemicals, and certain types of specialized technical consulting services. Rail and vessel shipping are also services that are generally procured outside of local areas.



Inauguration of Planta De Hielo en Escamas, Candelaria

2. Corporate contributions:

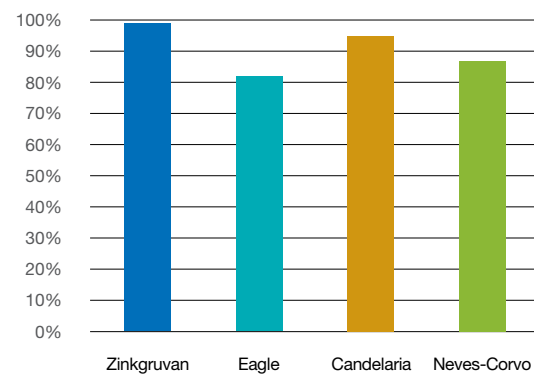
Lundin Mining contributed \$697,000 to various organizations aligned with our community investment priorities. \$649,000 of this amount was provided to the Lundin Foundation to support its execution of social investment programs in regions where the Company has operations.

Operation	2016 Community Investment Expenditures
Candelaria	\$ 3,200,000
Eagle	\$ 532,000
Neves-Corvo	\$ 171,000
Zinkgruvan	\$ 99,000

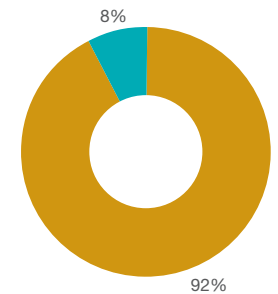


Inauguration of the Entre Rieles Market Area, Caldera

Percentage of Local Procurement by Operation



Local vs International Procurement



■ Total Local Procurement*
■ Total International Procurement

*For the purposes of this indicator, "local" is defined as country of origin for all mine sites.

COMMUNITY INVESTMENT

LMC is committed to providing lasting benefits to local communities affected by our activities and to working in partnership with communities, governments, non-governmental organizations, and local businesses to support self-sustaining initiatives that enhance the quality of life where we operate.

Our Community Investment Corporate Standard was developed in 2015 and rolled out at all operations in 2016. LMC's Community Investment Corporate Standard and Guidance Note outlines the Company's commitment for all operations (and exploration sites, if applicable) to have a Community Investment Plan in place by 2017. This target was partially achieved in 2016 and will be completed in 2017. We will provide an overview of our community investment focus areas defined in these plans for each of our mines in the 2017 Sustainability Report.

All sites have resources available for community investment and aim to be responsive to community development priorities of affected communities and stakeholders; contribute to the economic and social well-being of the local community and build local capacity; and prioritize investment areas that

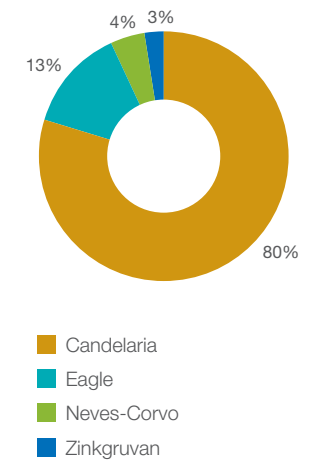
the community has identified as important, where both the Company and community find value, and where LMC can have a meaningful impact without creating dependency.

LMC has the following funding approaches to community investment:

1. Direct community investment in the communities/regions where we operate:

Total direct community investment expenditures across our operations in 2016 were approximately \$4.7 million (compared to \$13.9 million in 2015) and supported education and community development programs, as well as the environment, health, and small business economic stimulation. The predominant reason for the decrease in community investment between 2015 and 2016 is attributable to flood disaster relief, funded and performed by the Company, for a catastrophic flood that occurred in the Copiapó region in March 2015; as well as funds expended in 2015 pertaining to a multi-year community investment agreement reached with the Municipality of Tierra Amarilla for assistance to this community.

Total Community Investment by Operation



Examples of community investment projects undertaken in 2016 are presented in the Social Responsibility section of this report.



Red Earth Classic Mountain Bike Race, Eagle Mine



Contributions of School Supplies to Community College Grauito, Tierra Amarilla



Lundin Foundation

The Lundin Foundation (“Foundation”) is a Canadian non-profit organization principally supported through contributions from the Lundin Group of Companies. The Foundation works in partnership with its corporate partners, host governments, and local communities to improve the management of, and benefit streams from, natural resource development projects.

Since 2007, the Foundation has disbursed over CA\$60 million in support of building resilient communities located in and around operating sites.

The Foundation’s activities are focused on five strategic areas:

- 1) **Resource Governance** – strengthen local and national public institutions to improve capacity to manage the development of, and benefits arising from, natural resource development.
- 2) **Education and Skills Training** – support local populations to gain industry-relevant skills required for direct or indirect employment linked to operations.
- 3) **Local Procurement** – strengthen capacity of local small and medium enterprises to capitalize on procurement opportunities during each stage of the mining life cycle.
- 4) **Economic Diversification** – enable the growth of small businesses in sectors unrelated to natural resource development.
- 5) **Social and Environmental Innovation** – launch and scale up innovative solutions to pressing community challenges.

2016 highlights from the Foundation’s partnership with Lundin Mining include the following:

EAGLE EMERGING ENTREPRENEURS FUND

Eagle Mine, Marquette County, MI USA
Economic Diversification

Since 2013, the Foundation has partnered with Northern Initiatives to support the growth of start-up and early-stage enterprises through business training and a partial loan guarantee. The program has supported 22 enterprises that, in turn, have accessed approximately \$802,000 in financing and created or retained 143 jobs.

The Flying Moose Café exemplifies the local entrepreneurial potential. The enterprise began as a start-up and has since qualified and repaid two rounds of financing, increased revenues by a factor of four, and, in 2016, graduated to traditional banking products based on their business performance.



Flying Moose ribbon cutting ceremony in Marquette

INVENTA COMMUNITY PROGRAM

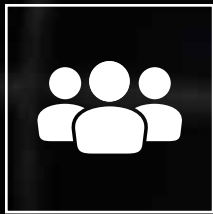
Candelaria Mine, Copiapó/Caldera/Tierra Amarilla, Atacama Region, Chile
Social and Environmental Innovation

The Foundation has partnered with Chrysalis, a local business incubator, to support the launch of innovative solutions to three pressing community challenges in the Atacama Region: water scarcity, sustainable waste management, and food security.

Water scarcity is a major issue in the Atacama Region and can limit the type of economic activities within the region. Alejandro Abarcia of Copiapó designed and founded

YAKAA, an innovative fog catcher. The name is derived from two Quechua words – ‘Yakura’ and ‘Katuri’, meaning ‘water’ and ‘serpent’ respectively. The YAKAA can capture up to ten litres of water per day, with a 92% higher efficiency than current devices on the market, and will be initially targeted for use by local small-scale agriculture. The INVENTA program is supporting business like YAKKA through business training and financing to refine market assessments, product design, and business model.

We invite you to visit www.lundinfoundation.org for more information on the Foundation’s activities.



Our People



OUR PEOPLE



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OUR APPROACH

LMC places great emphasis on our most important resource – our people. Our success depends upon a safe, skilled, and motivated workforce that conducts its work in accordance with LMC’s standards and policies. We understand that employees who feel valued are not only more engaged but also perform better. Our leadership plays a critical role in motivating employees to achieve superior results. We want our employees to feel appreciated, inspired, and to understand how their efforts contribute to our overall goals. We respect human rights and value equality and diversity

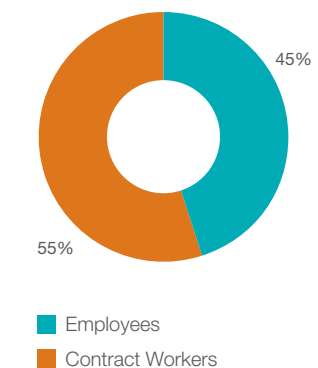
in the creation of a progressive work environment. We value sustainable approaches to all work activities and foster an environment that encourages our workforce to contribute ideas to improve our sustainability performance. We promote a respectful and fair workplace culture with a high-level commitment to achieving a Zero Harm workplace.

OUR EMPLOYEES

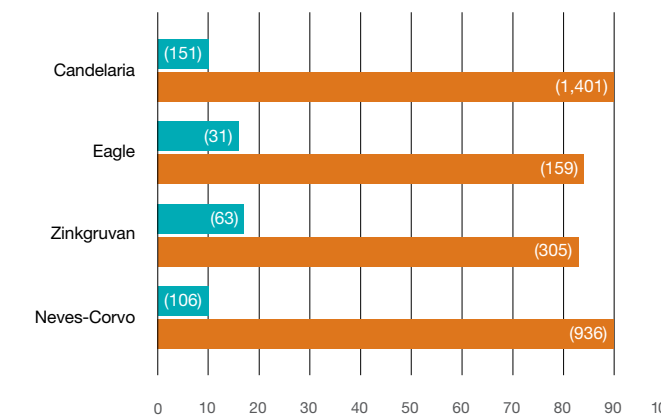
At December 31, 2016, Lundin Mining globally employed approximately 7,209 people: 3,221 employees (3,267 in 2015) and 4,279 contract workers (4,226 in 2015) across four operating mines areas in Chile, Portugal, Sweden, and the United States; including our exploration group and offices in Haywards Heath, UK; and Toronto, Canada. Contract employees are primarily engaged in maintenance, mine development, mining, and project activities, and are included in our safety performance statistics. They are also held to the same safety standards as LMC employees.

Reasons for fluctuations in staffing throughout 2016 included an increase in temporary workers for the construction phase of the tailings project at Candelaria, seasonal workers and summer students, new hires at the corporate office in relation to project acquisitions, and an increase in temporary workers for the exploration office. Our Company-wide turnover rate for 2016 was approximately 16%, a slight increase over 2015 (14%).

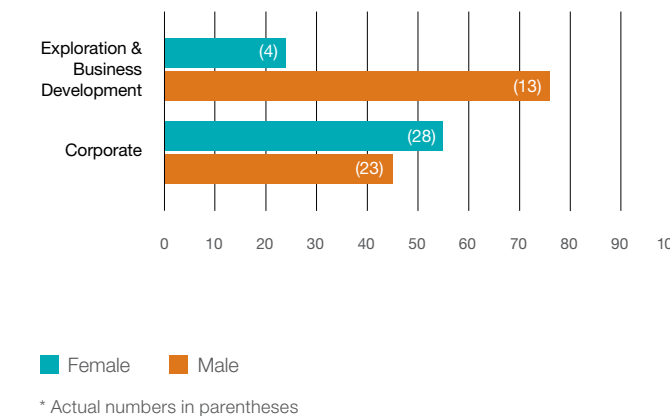
Total Number of Employees



Percentage of Employees* by Gender OPERATIONS



CORPORATE OFFICES





Eagle Mine Employee



Underground Drilling Operations, Candelaria



Analysis of Drill Core, Candelaria

Local Hiring

It is a priority at LMC to draw our workforce from our host countries and, specifically, regional and local communities to ensure the economic benefit of employment remains, to the greatest extent possible, in our host communities. In part due to the developed regions in which we operate, one of LMC's strengths is its ability to source its workforce locally. However, it is occasionally necessary to fill gaps by sourcing specific skills, or a high level of experience or technical expertise, from abroad. In 2016, our employees were almost exclusively from in-country, this year having just slightly over 1% expatriate employees across our operations.

Contractors and suppliers are expected to have practices in place that support and parallel LMC policies and standards and, in this regard, we ask that our contractors and suppliers also adhere to a similar standard with respect to the prioritization of local hiring.

Mining has traditionally been a male-dominated industry. Attraction and retention of female employees, particularly for certain industrial positions, can be challenging. LMC has been proactively promoting equal opportunities for women, including requirements that qualified female applicants are included in open positions – particularly in management positions and for summer student, intern and starting level positions. In 2016, four of our 10 vice presidents were female.

LMC has established a compensation structure based on experience and salary scales associated with different positions, depending on expertise and level of responsibility, irrespective of gender. While some roles traditionally populated by women (such as administrative/non-technical positions) are paid less, women are paid the same wages as men for the same positions. Differences

in compensation over time is the result of varying performance or a difference in seniority.

In 2016, the female-to-male compensation ratio was 63%. The ratio of women's to men's salaries at the operating sites ranged from 77% to 102% in 2016. This broad range is primarily caused by differences in the seniority of women employed at the mines. For example, at Neves-Corvo, the number of female employees is small but their average seniority is high, with women employed in managerial and senior technical, highly paid roles. At Candelaria, on the other hand, most of the female workforce is engaged in support roles.

Employee performance reviews are conducted annually or, in some operations, on a quarterly basis. In 2016, approximately 70% of employees

Company-wide participated in a system-driven performance review process, with some additional employees having performance reviews outside of the system. Performance reviews occur consistently at the supervisory, management, and executive positions, which have performance-based compensation bonuses assessed on metrics such as production, health and safety, environmental compliance and other corporate goals, and individual objectives.

All employees participate in a bonus plan, and some mine bonus plans are not directly linked to individual performance, although annually the Company reviews incentive plans and periodically revises them always with increased performance-related measures as an objective.

LABOUR RELATIONS

LMC supports the unencumbered right to freedom of association and collective bargaining at all our operations. The relationships between the Company, its unions, and employees is distinct at each of our mines; however, what is consistent is that our approach focusses on employee representation based on trust and transparency, respectful dialogue, and constructive, peaceful, resolution of any concerns, if and when they do arise. We engage with union leaders regularly on matters of local labour laws, business changes, and the negotiation of terms and conditions.

As of December 31, 2016, 66% of our employees across the Company had union representation (as compared to 73% in 2015). This figure represents the non-managerial employees working at mine sites who are covered under collective bargaining agreements. The Eagle Mine is not unionized, nor is our exploration group or our corporate offices.

There were no strikes, lock-outs, or work stoppages of any significance across our operations in 2016 and there is no history of worker militancy in the last five years or more at any of our sites.



Planning Meeting, Candelaria



Case Study



Jacob Manier, 2016 CI Award Recipient Traveling CI Trophy, Eagle Mine

EAGLE MINE

CONTINUOUS IMPROVEMENT PROGRAM

Lundin Mining's Eagle Mine in Marquette County, Michigan, commenced operations in 2014 and, since then, has been recognized as an example of a successful green-field operation, helping to positively define mining in the US. In its effort to combine sustainable mining practices with operational efficiency, Eagle Mine created a Continuous Improvement (CI) Program to engage effectively with its workforce to identify ideas for improvement from all areas and levels of the organization.

In 2015, Eagle launched the CI Program, a method for identifying opportunities for streamlining work, reducing the environmental impacts (e.g., reducing waste and energy use), improving health and safety performance, contributing to improved community engagement, and, wherever possible, achieving improved value. All employees were invited to identify and submit ideas and, since inception, Eagle's CI Program continues to demonstrate its effectiveness at providing a method to capture, evaluate, and implement a wide variety of sustainability suggestions. Proving its ongoing success and the high degree of employee engagement, the CI Program received a total

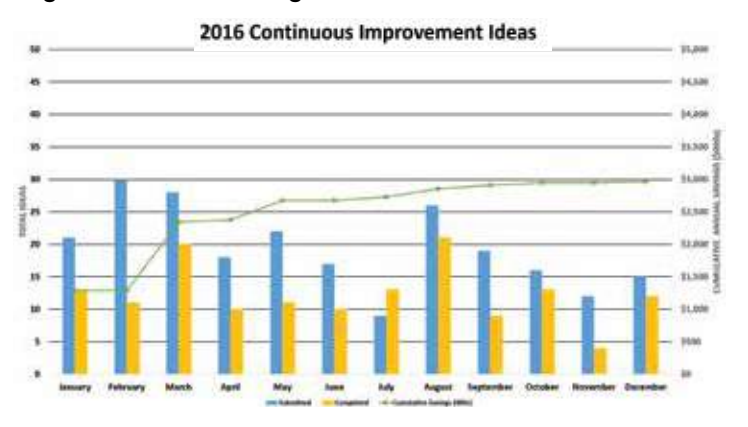
of 233 ideas over the course of 2016 from more than 100 employees. Of those, 147 CI Ideas were implemented, with quantifiable savings of \$2.95 million (see figure 1 below).

Eagle recognizes the Best CI Idea implemented each quarter by presenting the contributing employee(s) with an award created from Eagle Mine ore. In addition, an annual award winner is also selected. In 2016, the annual award recognition was received by Jacob Manier, Maintenance Technician, who suggested a way to improve crusher feeder belt wear. Jacob's innovative approach resulted in reduced unplanned downtime, labour, and materials, thereby reducing waste as a result of a lowered belt replacement frequency and with estimated cost savings of more than \$53,000.

In alignment with Eagle's commitment to continuous improvement, Green Belt training will be offered in 2017 to approximately 20 employees to learn and apply Lean Six Sigma methodologies on strategic improvement projects for their department. Lundin Mining is proud of the efforts made by Eagle Mine employees working to continuously improve sustainability best practices and is committed to supporting their initiatives now and in the future.



Figure 1: CI Cost Savings for 2016



TRAINING AND PROFESSIONAL DEVELOPMENT

Ongoing communication and training are essential elements for employees and contractors to successfully meet our stringent health and safety commitments, to develop the skills and knowledge of our employees, and to achieve our Responsible Mining objectives.

In 2016, LMC employees and contractors received a total of 58,595 hours of training equating to an average of approximately 8 hours per employee/contractor.

Competency training to perform specific tasks and health and safety training for both general proficiency and the recognition of risks associated with workplace activities were the main objectives of employee training across our operations in 2016, followed by skills enhancement and education related to policy or governance, including some of the following specific topics:

- **Health and Safety**
 - A variety of health and safety training topics were presented during 2016. Core topics included safety awareness, safety leadership, injury prevention, safe driving, underground fire prevention, energy isolation and lockout/tagout, and working at heights and fall prevention. Other topics covered by the operating sites included first aid/CPR, fire prevention, emergency evacuation, emergency rescue team training, safe handling and management of chemicals, occupational health and hygiene, and drug and alcohol education.

• Skills Enhancement

- Computer skills and software training, language proficiency (English, Spanish, and Portuguese), project management, supervisory skills, public speaking, technical courses, refresher training for miners, plant operators, and equipment maintenance.

• Policy/Procedure

- New employee orientations, ethics and harassment, accessibility for disability, interview skills, women in leadership, and regulatory updates.

In addition to our regular, ongoing training programs, our supervisors and managers continuously assess our workforce to identify areas of skill mastery and leadership development potential to enhance training opportunities or to advance or promote internally, wherever possible.

In 2016, corporate Human Resources provided training in workplace violence and harassment, human resource risks for supervisors, human resources issues in hiring, and the *Accessibility for Ontarians with Disabilities Act* to all employees in the Toronto office and all members of the executive team.

We consider relocation opportunities whenever possible before layoff of employees or, if desired by the employee, as part of their personal and professional development.



Emergency Response Training Coordinator conducting a CPR Demonstration, Eagle



Safety and Rescue Team Testing Portable Gas Detectors, Neves-Corvo



Health and Safety



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OUR APPROACH

LMC is committed to providing our workforce with a safe, healthy, and productive work environment. We recognize that the health and safety of our workforce directly affects both our internal and external stakeholders, including local communities and suppliers. The health and safety of our employees and contractors is first and foremost in all that we do.

Zero Harm

We remain resolute in our efforts to prevent workplace injuries and illnesses. Our fundamental health and safety objective is Zero Harm and we believe that every injury is preventable. As an organization, we strive to ensure that every worker goes home safe – every shift – every day.



Interdependent Safety Culture

We continue to work on the development of a sustainable and interdependent safety culture.

An interdependent safety culture is one where:

- Standards and systems are well-established
- Work is consistently performed in accordance with procedures and norms
- Hazards are recognized and acted on before work begins
- Safety is held as a value across the organization
- Safety is led from the top, and owned by everyone
- There is a personal commitment by everyone to going home safe, every shift and every day
- Everyone looks out for the safety and well-being of others
- Safety underpins organizational pride, and safety successes are celebrated

Visible Felt Leadership

We recognize that strong leadership, employee involvement, and personal commitment are critical to achieving an interdependent safety culture. Beginning in 2014, leaders from across LMC have been trained on DuPont Sustainable Solution's Visible Felt Leadership concept.

Key traits of Visible Felt Leadership

- Be visible to the organization
- Be relentless about time with your people
- Recognize your role as a teacher/trainer
- Develop your own safety skills and pass them along to the organization
- Behave and lead as you desire others to do
- Maintain a self-safety focus
- Confirm and reconfirm safety as the Number One value
- Put continuous emphasis and clarity around HSE expectations
- Show a passion for ZERO injuries, illnesses, incidents
- Celebrate and recognize Zero Harm successes

These leadership traits are shared by many of the world's safest companies and are the cornerstone to building trust and strengthening relationships among employees, customers, shareholders, and communities. Visible Felt Leadership training will continue into 2017 and 2018 as we work to further develop and enable the skills of our front-line leaders, contractors and the general workforce.



Health and Safety



Health and Safety Systems

While we have developed and implemented formal safety systems, processes, and controls across the Company, the ultimate success of our safety efforts depends on employee involvement and personal commitment. Employees and contractors at each of our operations are involved or represented in health and safety matters through working groups, improvement teams, or through formally designated health and safety representatives. In addition, there are more than a dozen formal health and safety committees across Lundin Mining.

Our focus on 'home safe – every shift – every day' is reinforced through activities such as pre-shift safety talks, pre-task hazard assessments, monthly and quarterly communications meetings, focused injury prevention campaigns, mobilization of formal health and safety committees, workplace safety observations, leadership engagement in the field, and effective training.

Safety Management System

Our Responsible Mining Policy and Framework and our new RMMS Standard (which in 2017 replaces our existing HSEC Management System Standard) set the context for the overall health and safety management system. Workplace hazard identification and control, qualitative and quantitative safety risk assessment, Life-Saving Rules, High Consequence Protocols, safety work observations, and incident reporting and investigation make up the core of our health and safety management system. Combined, these components are aligned to ISO 14001 and OHSAS 18001 requirements.

Fatality and Serious Injury Prevention

Our sites have Life-Saving Rules, which are formed on the basis of Lundin Mining's 11 High Consequence Protocols (HCPs). These protocols establish the foundation for mandatory safe work programs, and are fundamental to our fatality and significant injury prevention efforts. In addition, each site must have mandatory training and formal safe work procedures to meet HCP requirements. Lundin Mining's HCPs cover the following topics:

- Obligation to Refuse Unsafe Work
- Personal Protective Equipment
- Energy Isolation & Lock-out/Tag-out
- Confined Space Entry
- Working at Heights
- Operation of Equipment
- Ground Control
- Lifting and Rigging
- Explosives Management
- Hot Work
- Machine Guarding

Safety Reporting

We report our safety performance monthly and review it quarterly, with corporate senior leadership and the Board of Directors HSEC Committee. Incidents with the potential for a significant negative outcome, serious injury, or that have key learning points that support incident and injury prevention are reported, analyzed, and shared across the Company on a more frequent basis. The safety performance of each operation, exploration site, business development project, office location, and the overall

corporation is regularly evaluated for trends, and to identify safety improvement and injury prevention opportunities. Safety performance statistics, incident investigation findings, and lessons learned are accessible to employees, contractors, and visitors across the Company.

Measuring Our Performance

We measure the safety performance of our employees and contractors using a combination of leading and lagging indicators. Leading indicators are an important part of our 'Zero Harm' and 'Visible Felt Leadership' efforts. Leading indicators help us to identify strengths and weaknesses in our safety systems and to highlight and take action to address issues and risks before they result in an incident or injury. Leading indicators include near-misses, identified hazard reports, safety observations, safety suggestions, and findings from planned audits and inspections. More than 42,000 leading indicators were reported across the Company during 2016.

Our primary lagging indicator for measuring safety performance and benchmarking against our mining peers is the Total Recordable Injury Frequency (TRIF) rate. LMC uses the US Occupational Safety and Health Administration (OSHA) definition of medical treatment for classification of recordable injuries at all operations. Other lagging indicators include Lost-Time Injury Frequency (LTIF) rate, Medical-Aid Frequency (MAF) rate and Lost-Time Severity rate (SR). All rates are calculated based on a 200,000-hour formula.



Underground Miner, Zinkgruvan



Emergency Response Training, Exploration Peru

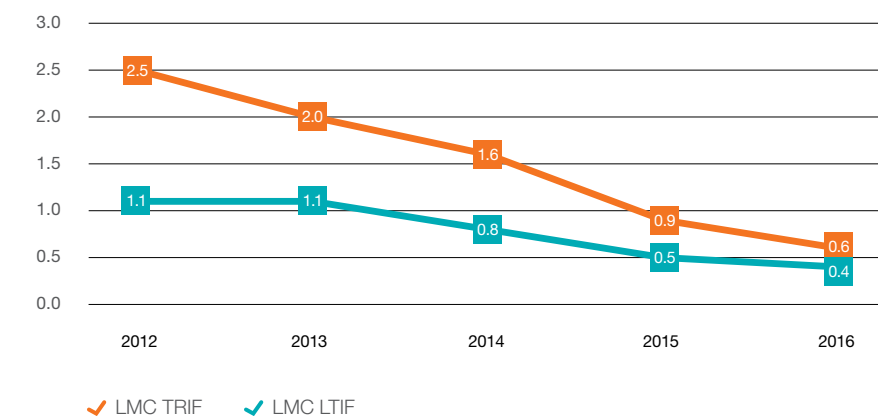
2016 SAFETY PERFORMANCE

In 2016, we achieved our best-ever safety performance. The 2016 TRIF rate of 0.6 was significantly better than our corporate target of 0.9. Although there was a total of 46 recordable injuries across the Company, this number shows a 30% improvement over 2015, and provides evidence that our Zero Harm and Visible Felt Leadership efforts are helping to send more workers home safely every day. Of the total recordable injury cases, 28 involved lost workdays. These injuries resulted in a LTIF rate of 0.4 and a corresponding SR of 20.

Safety Performance Comparison ¹	2016	2015	2014 ^(a)
Total Recordable Injury			
Frequency rate (TRIF) ²	0.6	0.9	1.6
Lost Time Injury Frequency rate (LTIF) ³	0.4	0.5	0.8
Lost Workdays	1,473	2,169	NA ⁴
Lost Time Severity Rate (SR) ⁵	20	28	24
Fatalities	0	1	0

- Our safety performance figures include both employees and contractors.
 - Total Recordable Injury Frequency rate (TRIF) is calculated as (total number of recordable injuries [including fatalities, lost time injury, restricted work and medical treatment injury] x 200,000 hours) / total worked hours.
 - Lost Time Injury Frequency rate (LTIF) is calculated as (total lost time injuries x 200,000 hours) / total worked hours.
 - The Lost Workday metric was not standardized across LMC until 2015.
 - Lost Time Severity rate (SR) is calculated as (total lost workdays x 200,000 hours) / total worked hours.
- (a) Excludes Candelaria data. Candelaria data included in LMC external reporting from January 2015.

Lundin Mining – TRIF & LTIF Trends





Occupational Health Nurse, Neves-Corvo



Job Planning Discussion, Neves-Corvo

OCCUPATIONAL HEALTH

Occupational health plays a key role in our Zero Harm effort and, in this regard, each of Lundin Mining's sites maintains an industrial hygiene program to regularly sample and assess workplace exposure to hazardous substances. The focus of each site's industrial hygiene program is to identify, minimize, and eliminate, wherever possible, potential health exposure risks.

During 2016, we sampled for a wide range of potential workplace contaminants, including diesel particulate, silica, nuisance dust, oxides, asbestos, radon, and heavy metals, such as lead. We also evaluated workplace temperatures and humidity, underground mine ventilation, and noise exposure. Sample results were used to verify compliance with safe work requirements and to make improvements to better

safeguard our workforce from injury and illness by eliminating or minimizing potential health hazards.

In addition to the industrial hygiene sampling, more than 1,500 employee health screenings were conducted by our on-site medical services or at local community health facilities. These examinations included biological monitoring to assess exposure to contaminants, such as heavy metals; hearing tests; and workplace drug and alcohol testing. LMC operates on-site medical facilities at Neves-Corvo, Candelaria, and Zinkgruvan, while we use outside service providers and local community clinics at our other operations. Through these resources, we provide counselling and employee assistance referral service for a variety of occupational health concerns.

CRISIS MANAGEMENT PLANNING AND EMERGENCY PREPAREDNESS

While we focus our efforts on preventing emergencies and incidents, it is equally important to ensure we are prepared to respond effectively in the event of an emergency or crisis. LMC has formal emergency-preparedness and crisis management planning processes at all our sites. These include documented crisis management plans for each operation as well as our corporate headquarters, and site-specific emergency response plans at each operation. We conducted facilitated crisis management training and practice scenarios at each operation during 2016.

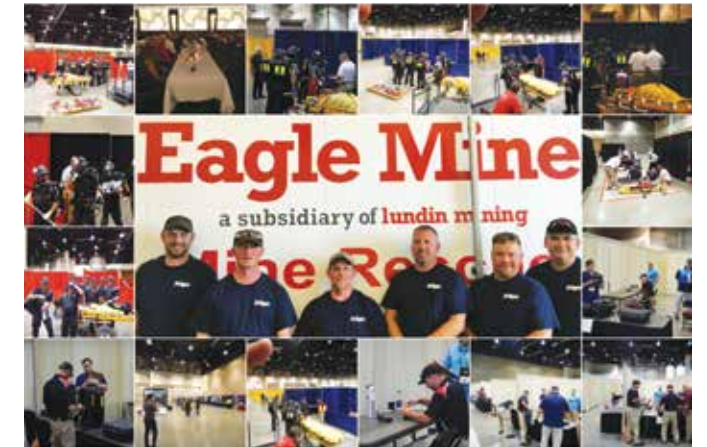
Each operation maintains emergency response capabilities suited to the working environment and associated operating risks and, in total, we have more than 250 employees, volunteers, and contractors trained as Emergency Responders or Mine Rescue Team members:

- Neves-Corvo, Candelaria, and Eagle Mine have well-established on-site emergency response and mine rescue team capabilities
- Zinkgruvan has a team of trained emergency first responders and guides who assist local fire-fighting and emergency response professionals

In addition, a variety of emergency response equipment is available to support emergency response activities at each operation.

Emergency Responders and Mine Rescue Team members receive monthly in-house training on equipment and emergency response techniques. Practice exercises, simulated emergency scenarios, and external training are also provided to ensure that team skills are maintained.

Each of the Company's underground mines is equipped with underground emergency facilities, which can include secondary escape ways, first-aid and emergency response equipment and supplies, fresh-air stations, and strategically located underground refuge chambers. Refuge chambers are equipped with multiple means for communicating to the surface, multiple sources of air for breathing, rescue kits, and supplies of food and water.



EAGLE MINE PARTICIPATION IN THE 2016 NATIONAL M/NM MINE RESCUE COMPETITION

Eagle Mine participated in the US 2016 National Metal and Non-metal Mine Rescue Contest in Reno, Nevada. This was the Eagle team's first-ever national competition. The Eagle team placed 28th out of 35 in the overall competition, 24th in the field competition, and 11th in the First Aid portion of the contest, a good showing for a team's first national event.

Eagle's mine rescue team is made up of volunteers from Lundin Mining and Cementation USA, Inc., our mining partner at Eagle Mine. The team members put in long hours each month to train and practice the critical skills needed for their important role in the organization.

Neves-Corvo mine also has a well-recognized mine safety rescue team who regularly places as a top performer in European mine safety competitions.



Social Responsibility



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OUR APPROACH

Mining operations can have significant economic and social impacts – both positive and negative – on local communities. Social impacts are changes to people’s way of life, culture, community structure, systems, environment, health and safety, property rights, human rights, access to and control of resources, livelihood and well-being, perceptions, and aspirations.

Understanding and managing our social impacts is integral to how we manage our social risks to communities and other stakeholders and maximize the opportunities for meaningful socioeconomic development. Our approach is to build strong relationships with those affected by our operations; uphold fundamental human rights; and respect cultures, customs, and values while engaging in open and inclusive dialogue with communities and employees. We are also committed to generating shared value through our projects, providing tangible support to local communities and host regions by working with communities, local governments, and other organizations to promote sustainable development.

As part of our Responsible Mining initiative, in 2016, LMC began developing a Social Impact Management (SIM) Standard to proactively identify and manage the impacts to communities and stakeholders generated by operations, explorations, and associated activities. The standard and supporting guidance document will help ensure the application of a systematic and consistent approach to managing social risks and impacts, in a dynamic and continuous process that also engages with, informs, and provides for participation of the affected or interested stakeholders.

The long-term objectives of the SIM Standard are to ensure that LMC sites and operations:

- Identify and manage operational impacts that affect our communities positively or negatively
- Adopt a consistent methodology to identifying and managing social risks or negative impacts that cannot be avoided or eliminated
- Promote the importance of understanding our communities and proactively engaging with them
- Improve social performance through the use of this management system, contributing to a lasting, self-sustainable, community development

The SIM Standard will be completed in 2017 and will include minimum requirements to identify social impacts, assess them, define management plans to eliminate or manage negative impacts, and provide for ongoing monitoring of those plans to ensure their efficacy.

STAKEHOLDER ENGAGEMENT

LMC engages in open and inclusive dialogue with our stakeholders. Effective community engagement creates value, manages risk, and helps us to understand the interests and concerns of our stakeholders and to communicate our business objectives. It also helps to identify, on an ongoing basis, emerging issues that could affect our business operations as well as changing social situations that may influence stakeholders’ quality of life and perceptions of the mine.

In 2016, we finalized our corporate Stakeholder Engagement Standard and began the roll-out across our sites and operations. This standard requires development and implementation of site-specific and culturally appropriate processes for consultation and engagement, supported by adequate funds and training. Through implementation of this standard, LMC can ensure that, across the Company, we systematically identify stakeholders and determine how best to engage with them to understand their perspectives and consider their input in our decision-making processes. We consider stakeholders from direct and indirect influence areas, with special attention given to vulnerable groups, such as women, children, and those considered vulnerable within a socio-economic context.



Community Site Visit, Candelaria

As part of our 2016 Sustainability Report assurance process, our stakeholder engagement processes and activities were verified for compliance with the AA1000AS principles of inclusivity, materiality, and responsiveness.

Our approach to stakeholder mapping includes analysis of the following information:

- Type of stakeholder or stakeholder group (e.g., individual, NGO, civil society institution, regulatory agency, government institutions, academic/scientific institution, faith-based organizations)
- Size of stakeholder group
- Geographical influences (project footprint, local, regional, national, international)
- Degree to which stakeholder or group is affected by Company activities
- Level of stakeholder support with respect to the business (supportive, neutral, opposed)

- Estimation of ability or capacity of the stakeholder(s) to influence the opinions or perceptions of other stakeholders or stakeholder groups
- Stakeholder perceptions and motivations regarding our activities, including how these individuals or groups are or can be affected by our decisions and activities, or who may have the ability to impact our activities
- Stakeholder interests and concerns (e.g., jobs, supply chain, water, climate change, biodiversity, environmental impact, safety, community development, economic development, taxes, regulatory environment)

Candelaria, Eagle Mine, and Zinkgruvan have Stakeholder Communication and Engagement Plans in place, which include objectives, activities, and timelines; as well as indicators for tracking, monitoring, and reporting. Neves-Corvo began stakeholder mapping, engagement planning, and communications planning in 2016. This information will be updated annually and used to understand stakeholder interests and concerns and to develop annual plans and strategies for proactive engagement and social investment. Systems are in place to document engagement activities, grievances, and commitments.

The following table provides an overview of stakeholder groups with whom LMC engaged, and a high-level summary of their principal interests and concerns.

Stakeholder Group	Key 2016 Interests and Concerns	Method of Engagement
Employees and Contractors	<ul style="list-style-type: none"> Health and safety on-site Working conditions Career advancement Dependency upon mine for local employment (Neves-Corvo) 	<ul style="list-style-type: none"> Formal health and safety management systems (standards and procedures) Workplace safety inspection programs Occupational health monitoring programs Formal health and safety training Frequent employee-leader safety engagement Regular workforce safety meetings Health and safety committees Formal assessments of employees based on Lundin Mining's competencies is an ongoing process, resulting in continued development for succession and future growth Timely response to grievances Timely response to requests for information
Local Communities	<ul style="list-style-type: none"> Environmental and social impacts Local employment and procurement Local economic diversification (Neves-Corvo) Community infrastructure Participation in working groups (Candelaria) Local impact of social investment projects (Candelaria) Transportation issues, including traffic safety and speed reduction (Zinkgruvan, Neves-Corvo, Eagle, Candelaria) Transparency in transfer of funds to municipality (Candelaria) 	<ul style="list-style-type: none"> Community offices and information centres accessible to all stakeholders Community meetings, open houses, town hall meetings (monthly/quarterly/annually) Stakeholder tours of operations Individual meetings with priority stakeholders Public reports, newsletters, and social media Community investment targeted to advancing local economic diversification and community development Grievance mechanisms Timely response to requests for information
Government	<ul style="list-style-type: none"> Permitting issues Fiscal and regulatory frameworks Environmental compliance Health and safety compliance Hiring of local labour Impact of low metal prices on tax payments Profit shifting and tax avoidance (base erosion profit shifting) 	<ul style="list-style-type: none"> Regular meetings/consultation (monthly/quarterly) Formal health and safety management systems (standards and procedures) Communicating public/private partnerships Annual sustainability reports Timely response to requests for information Extractive industries transparency reporting to commence for the 2016 fiscal year



Stakeholder Group	Key 2016 Interests and Concerns	Method of Engagement
Customers	Reliable supplies High-quality products Information on any hazards	Regular discussions and provision of safety and health data on products Timely response to requests for information
Labour Unions	Workers interests Collective bargaining	Regular and ongoing engagement to share information on a timely basis and to work in partnership for the benefit of all stakeholders
Non-Governmental Organizations	Social and environmental performance of operations Transparency in payments to government	Membership of industry associations that promote best practices in social and environmental performance Participation in industry forums related to social and environmental issues Annual sustainability reports Extractive industries transparency reporting to commence for the 2016 fiscal year Timely response to requests for information
Shareholders / Investors	Growth by acquisition and brownfields investments Capital acquisition Operational and financial performance Environmental, social, and governance (ESG) performance	Annual General Meeting Fulsome financial statements, MD&A, and news releases Quarter-end conference calls Formal meetings, analyst and investor briefings, site visits Annual sustainability reports Timely response to requests for information
Lenders / Financial Institutions	Operational and financial performance Commodity price outlook ESG performance	Regular financial and compliance statements Annual sustainability reports Timely response to requests for information
Suppliers	Fair and open procurement practices Financial health and payment terms	Regular and ongoing communication as needed Procurement practices that encourage competition Timely response to requests for information

Case Study



Inauguration of Caldera Community Office, Candelaria

CANDELARIA COMPLEX

ARTISANAL FISHERMAN PROGRAM AND CALDERA COMMUNITY IMPROVEMENT PROGRAM

Punta Padrones, Candelaria's port facility, is located near the community of Caldera and hosts both Candelaria's concentrate storage and loading facility and the mine's seawater desalination plant. As a major employer and presence in the Atacama Region of Chile, Candelaria has worked diligently to build relationships with the Caldera community and has created a formal Stakeholder Engagement Plan to facilitate this process. The plan forms a road map for the identification and implementation of social initiatives focused on the communities nearest to the mine and port sites.

At Caldera, where most residents are either directly or indirectly linked to the fishing industry, Candelaria tailored the social investment program to establish the Fisherman's Development Fund in 2014, offering local artisanal fisherman groups resources to develop individual collective projects in four main areas: housing, health, education, and economic development. Between 2014 and 2016, Candelaria contributed more than \$3.2 million to these four main areas, providing direct benefits to approximately 921 artisanal fishermen. In March 2016, an agreement was signed to extend the Fisherman's Development Fund into 2017. In addition, and in recognition of the importance of

sustainable shipping practices in an area of shared aquatic resources, Candelaria conducts ongoing environmental monitoring and sediment sampling, confirming that there are no negative environmental impacts to the marine environment in the port operational area.

In 2016, the Company opened the Caldera Community Office, offering an opportunity for increased interaction with the local community and Candelaria operations, including free computer and internet usage, employment search opportunities, multi-functional work spaces, and various training courses and workshops. Since its inauguration on December 13, 2016, the office has been a positive presence in the community. Virtual reality technology, using imaging recorded by SCUBA samplers during environmental monitoring efforts in the port area, is available at the Caldera Community Office to share the underwater experience with interested local residents.

The implementation of these community outreach efforts has resulted in increased communication and transparency between Candelaria and the local Caldera community and fishermen, increasing trust and demonstrating that Candelaria Mine is committed to the development of long-term and positive relationships in the communities in which we work.



Social Responsibility



COMMUNITY INVESTMENT

We are committed to investing in local communities and developing local partnerships to create self-sustaining programs aligned with community priorities and our business objectives.

We aim to invest in areas that will have the greatest impact, with clearly defined and measurable objectives. At the same time, we seek to avoid dependency by building community capacity and investing in and growing economic diversification programs.

During operations, priority is given to ensuring that the mine acts as a direct catalyst for inclusive economic development. LMC's community investment priorities, which support the long-term well-being of affected communities, are intended to:

- Support health and well-being
- Promote education
- Create opportunities for community development
- Encourage youth activity
- Protect and rehabilitate the environment
- Preserve local traditions

Information on our 2016 community investment contributions can be found in the Economic Performance section of this report.

Community Investment Initiatives by Operation

Candelaria

Activity	Description
Excellence Technical Education Program	Collaboration program between local district mining companies and the local technical high school to help improve student opportunities and academic performance through access to technical training from our teams, internships, guided tours, training courses to improve their employability, and similar activities.
Free Wi-Fi network	Candelaria has funded free Wi-Fi service in Tierra Amarilla for eight years and has continued improving the signal and access points, including providing access to Nantoco, which is a more remote community with access and transportation challenges. Because of Candelaria efforts, Tierra Amarilla is now one of the only districts in Chile with a free Wi-Fi-enabled urban area. Candelaria Mine also provides free Wi-Fi access to community members at its Caldera Community Office.
Entre Rieles Market	Construction of the Entre Rieles Market was completed in December 2016. Candelaria provided \$350,000 to the Caldera Municipality and the Entre Rieles – Women's Entrepreneur's Union for the construction. This new public space and market will help small businesses develop and grow their markets and improve their commercial channels.
Local Heritage Program	This program seeks to highlight the rich local heritage of Tierra Amarilla, by collecting historical pictures kept by local families to document local heritage. Two books were written as an educational resource for local communities to increase tourism and recognize these local families.
Colla Indigenous Community Centre	Serrania Poblete Colla Community Centre is in the heart of Colla territory and was constructed and designed in consideration of the community's cultural traditions and heritage. The centre is being used to provide training, attract tourism, and to promote Colla culture.
Community of Tierra Amarilla	Candelaria has an agreement with the Tierra Amarilla Municipality to invest \$16.5 million between 2016 and 2018 in community programs. Some examples of programs in place are the construction of an arts and culture centre located in an abandoned school that has heritage value, a new soccer field in the Los Loros community, and providing two ambulances and a mobile clinic to help improve local access to emergency healthcare.
Assessment for Local Procurement Program	The intent of this assessment project was to identify and evaluate local businesses to understand their gaps and opportunities for becoming suppliers to Candelaria. The target is to support at least five businesses over the six-month period that began in December 2016.

Candelaria (continued)

Activity	Description
Support for local farmers	Candelaria continues to support local farmers' efforts to improve their livestock feed, including the provision of land in Nantoco for crop testing. Technical improvements in water irrigation were made to the Nantoco Agricultural Crop Lab and steps have been taken to develop the product from the Salicornia plant.
Sports Program	The development of this program focused on improving children's and community members' quality of life through encouraging physical activity. This initiative was launched in April 2016 and continued until late December 2016. A total of five sports programs were successfully implemented as of November 2016 (three in Tierra Amarilla; two in Caldera).
Training in Alliance	The aim of this training program is to build capacity in local communities to expand their competencies and skills to be part of the Candelaria workforce and other employment opportunities in the region. The training developed included Electricity, Class B Driving License, Desalination Plant Operation, Machine Operator, First Aid, and OS-10 training.

Eagle Mine

Activity	Description
Community Environmental Monitoring Program	In addition to the preparation and submission of quarterly reports, in accordance with state environmental regulations, the community requested an independent environmental monitoring program. This third-party monitoring program conducts verification monitoring of Eagle's mining, milling, and transportation activities. The program involves two NGOs, the Marquette County Community Foundation (fiscal agent) and the Superior Watershed Partnership (monitoring). Information related to the program is posted on a website and communicated by the NGOs and by Eagle twice per year at community forums. The program contract was renewed for three years in August 2016 and is ongoing.
Technical Middle College	This program was developed to provide high school students an alternative to a traditional 4-year college degree at zero or little cost to the family. Eagle created an endowment to assist with the program's continuation after Eagle Mine ceases operation. Two cohorts (30 students) have enrolled in the areas of health sciences and skilled trades. 86% have improved their high school GPA and are enrolled in college courses. The commitment to renew the program for 2018, 2019, and 2020 was completed in November.
Accelerate UP	The intent of Accelerate UP is to create jobs outside of the mining industry to alleviate the "boom and bust" cycle typically associated with mining. The organization is made up of community partners that volunteer their time. The program has assisted in creating 43 jobs, which invested an estimated \$873,000 of capital in to the local community with an estimated sales increase of \$1.56 million.
Eagle Emerging Entrepreneurs Fund	This program contributes to the long-term economic development of Marquette County by providing affordable financing to high-risk clients that would otherwise be ineligible for traditional financing. Other partners include Northern Initiatives and the Lundin Foundation. The Fund is performing as intended. In 2016, \$471,605 in loans were funded resulting in 29 jobs and 11 new businesses. Since inception, \$837,305 in loans were approved, resulting in 43 jobs and 26 new businesses.
Kindness Campaign	This campaign by Eagle led to donations and pledges for United Way of Marquette County and a Food Bank Drive for the Society of Saint Vincent de Paul Food Banks in the County. Financial contributions and food donations made by Eagle employees were matched by the Company.



Neves-Corvo

Activity	Description
Partnership with music school	This program, between Neves-Corvo and Castro Verde music school, was established to promote musical skills for young people in the area and has been in place for many years. The program helps its best students to enter international competitions and has also helped create the Campo Branco Orchestra.
Partnership to prevent childhood obesity	This program was established to promote healthy eating habits for children and young people and is in place in the communities of Castro Verde and Almodôvar.
Partnership with local schools	Neves-Corvo is providing school meals and books for young people coming from low-income families. A supporting strategic social investment strategy and plan will be developed in 2017.
Home maintenance services to local seniors	As a result of ongoing engagement with the Mayor of Almodôvar to identify community priorities, Neves-Corvo will donate a vehicle to provide home maintenance services to local seniors.
Support to community organizations to provide food deliveries	In lieu of hosting a Christmas party for employees, Neves-Corvo offered support to seven community organizations to provide food deliveries to families in need in Castro Verde, Almodôvar, Aljustrel, Mértola, and Ourique. Employees and contractors participated in this distribution of food to the community organizations.
Transfer of property to Parish Council for new public garden	In December 2016, Neves-Corvo signed an agreement with the Castro Verde Council to transfer an area of property in the Parish of Santa Barbara to build a public garden.
Support local associations	Monthly financial support for children's activities, including football, volleyball, and cycling.
Support to riding school	3-year financial support for Hippotherapy and therapeutic horseback riding for children with mental and physical disabilities in Almodôvar.

Zinkgruvan

Activity	Description
Community swim school	Zinkgruvan sponsored outdoor swim schools at six nearby locations that were attended by 200 children.
Program for emerging entrepreneurs.	Free classes were offered to community members interested in starting their own business.
Knalla Tourist Mine project	In June 2016, Zinkgruvan completed a project to turn one of the closed mine shafts into a tourist attraction, now referred to as the Knalla Tourist Mine (www.knallagruva.se). The objective of the mine is to attract more visitors to the area and increase business opportunities for the community.
Scholarship programs	Zinkgruvan has scholarship programs for students to create interest in the mining industry. Five students from a local technology college were awarded scholarships to visit the Neves-Corvo Mine. A science contest was also held in the spring. The class that won was invited to a two-day study trip at a technology museum.
Community culture centre	In December 2016, Zinkgruvan made a five-year commitment to be the main sponsor of a new community culture centre.
Local kindergarten	In September 2016, in coordination with the local government, construction activities on an outdoor space for a local kindergarten commenced.



Local visitors taking part in an underground mine tour – Summer 2016

Case Study

ZINKGRUVAN MINE

KNALLA MINE MUSEUM

The Knalla shaft, opened in 1857 and closed in 2004, is one of three Zinkgruvan Mine underground shafts. Zinkgruvan Mine collaborated with Atlas Copco, the municipality of Askersund, and the Countryside Society to open the Knalla Mine for tourism and to become part of the existing mine museum, which has been operational since 1992.

During the summer of 2016, the Knalla Mine Museum added an exciting new feature: the ability for visitors to participate in an underground mine tour. Three times daily, three days per week, small groups of ten people are led by guides, many of whom worked in the mine themselves. The tour participants start their descent using the mine elevator, stopping at the 200-meter level, where the underground mine tour commences.

The discussion to open Knalla Mine for tourism began in 2015, with a long-term goal of attracting visitors to the region while encouraging new opportunities for business growth.

Former CEO of Zinkgruvan Mining, Bengt Sundelin, stated at the inauguration that, "Even though it was a challenge, cooperation and good will have made the project possible." Governor Maria Larsson added, "We built our prosperity on the mining industry, and it's great that it has now become part of the tourism industry." Over 2,000 local visitors visited the museum or joined in the guided tours throughout the summer of 2016.

It is always our objective at Lundin Mining to work closely with our host communities and provide lasting benefits in the form of self-sustaining programs that help enhance the quality of life where we operate. For more information on the Knalla Mine tour, please visit: www.knallagruva.se.



MANAGING IMPACTS

Grievance Mechanisms and Feedback from our Affected Communities

All LMC operations have processes in place to receive and address questions, concerns, and formal grievances from third parties. The sophistication of these grievance mechanisms varies across our operations, but all ensure that our stakeholders have an avenue to voice concerns and can expect a fair process where their feedback is heard and complaints are addressed. We receive, document, track, and respond to questions or concerns raised by stakeholders both informally and formally, and are working to align these processes with international standards.

The table below provides a summary of the total number of grievances related to impacts on society filed through grievance mechanisms at each of Lundin Mining's operations in 2016, and the number resolved/addressed.

Operation	Total Number of Grievances About Impacts on Society	Total Number of Grievances Addressed or Resolved
Candelaria	47	40*
Eagle	13	13
Neves-Corvo	1	1
Zinkgruvan	1	1

* All of Candelaria's 2016 grievances have been resolved. The 7 grievances outstanding in 2016 were resolved in the first quarter of 2017.

The majority of grievances filed at Candelaria in 2016 were related to reported damage of physical/structural property or noise, believed by stakeholders to be a result of operations (e.g., blasting, transportation), or related to Internet/Wi-Fi connection issues (Candelaria provides free Wi-Fi to the community of Tierra Amarilla). There were also several grievances filed that were related to payment of service suppliers. All 13 grievances reported to Eagle in 2016 were filed by community members and were related to traffic in local communities. At Neves-Corvo, one grievance was filed by a neighbouring farmer and related to livestock fatalities. Upon investigation, it was determined that the mine was not responsible, though Neves-Corvo subsequently supported the farm in improving its animal husbandry practices.

There were no human rights-related grievances filed at our sites in 2016, nor were there any grievances from previous reporting years that needed to be addressed or resolved.

At Candelaria, four grievances were filed related to environmental impacts (e.g., control and mitigation of operational impacts, dust from operations) in 2016; all four were resolved or addressed.

SOCIAL ASPECTS OF MINE CLOSURE PLANNING

The Company has established closure plans for all its operating mines, and each mine also has funding, held in trust, to meet respective anticipated closure costs. Additional information regarding LMC's Mine Closure program is presented in detail in the Environmental Management section of the *2016 Sustainability Report*.

Stakeholder participation is important to our closure planning process and we require all sites to address legal obligations and corporate commitments, financial provisions, community interests, the environment, and managing employees' expectations once the mine is closed.

Concurrent with environmental closure commitments (see pages 94-95), LMC is also committed to preparing for the potential socio-economic impacts of mine closure. In our 2015 update of the Closure Plan Standard, we include the following components in our engagement, assessment, and budgeting activities:

- Consistent and transparent engagement with affected and interested communities and stakeholders that goes beyond cursory consultation and supports community ownership of post-closure goals
- Consideration of closure initiatives that can continue when the Company is no longer involved
- Community participation in planning and implementation with respect to environmental and socio-economic impacts of conceptual mine closure planning and detailed mine closure plans
- Closure initiatives that have concrete links to Strategic Community Investment (per the Community Investment Standard and Guidance Note)



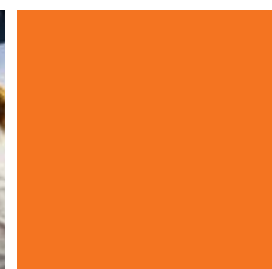
Mine Closure Team, Galmoy

Current Social Considerations

Given continued depressed market prices for nickel and copper, it was announced in January 2016 that Aguablanca Mine would close. At that time, the Aguablanca Mine was not in operation and had a reduced workforce, as detailed in LMC's *2015 Sustainability Report*. Employees and affected communities were advised of the pending closure, and arrangements were made for an external service provider to assist the remaining workforce to manage the progressive transition to the post-closure phase of operations (which may include aspects such as

re-deployment, assistance with re-employment, resettlement, redundancy, etc.). An agreement was signed by the operating company and the employees concerning the terms of all severances that went into effect on June 30, 2016. In late 2016, LMC completed the sale of its Spanish assets, including Aguablanca, through the transfer of all the shares of Rio Narcea Recursos S.A. to Valoriza Minería, a subsidiary of Grupo Sacyr. Prior to the property transfer, all the procedures of the employees' agreement had been followed, including assistance with re-employment, early retirement, pension conditions, and redundancy.

Although closures at our Neves-Corvo, Zinkgruvan, Eagle, and Candelaria operations are many years away, Lundin Mining recognizes that this phase of the mine life cycle could have a significant impact on the local economies in relation to a reduction or change in the procurement of supplies and services. As a major employer in these local areas, Lundin Mining is actively engaging with local businesses, development organizations, and municipal governments to create economic diversification programs in the regions where we operate, in partnership with the Lundin Foundation.





Materials and Product Stewardship



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OUR APPROACH

Stakeholders (local communities and governments, customers, suppliers, transportation providers, and increasingly, our shareholders) want to understand the potential risks involved in the handling and transportation of our products. Consumers are also expressing increased interest in our supply chain and responsibly managed or produced goods.

LMC marketing initiatives focus on being a preferred supplier by providing sustainably developed, quality products; technical and marketing support; and dependable on-time delivery. Concentrates are moved by truck and railcar, either in bulk or in containers, directly to smelters in North America and Chile, or to ports where they are exported to smelters in Europe, Asia, or South America. To reduce any potential for off-site migration of dust or dirt, concentrate is transported to the outbound port areas in covered trucks and railcars, which undergo a washing process prior to departing the various operations, except for Zinkgruvan, where LMC has a project to put a washing process in place. In addition, LMC concentrates are sold and transported in accordance with EU and international regulations, and shipments are accompanied by appropriate documentation.

We evaluate potential health and safety impacts associated with the production of raw materials and base metal ores and concentrates to ensure that the health

of employees, business partners, and service providers is not affected. We continually evaluate risks associated with beneficiation and with transportation of concentrates, and take steps to address identified risks prior to proceeding with the activity. As a consequence of an incident within a concentrate container during transit in 2016, LMC maintains a stronger focus on ensuring that the contractors we engage are appropriately equipped and trained, and follow best-practice procedures, to enable them to deliver our concentrates safely.

OUR ACTIVITIES

The port facilities at Setúbal in Portugal and at Punta Padrones in Chile are owned and/or operated by Lundin Mining. Ports at Otterbäcken in Sweden and Trois-Rivières in Québec, Canada, are operated under contract by third-parties with oversight by LMC. In 2016, a combined third-party HSE & Product Stewardship Audit was conducted at all outbound port facilities that handle LMC concentrate, and the results indicate an excellent calibre of overall performance.

As an example of initiatives undertaken to reduce potential impacts associated with our concentrate shipping on the environment at our port facilities, LMC's Setúbal Port in Portugal has installed a covered conveyor belt connecting the concentrate warehouse to the ship loader. The conveyor belt is fully enclosed and has a water-misting dust suppression system that reduces dust emissions during loading.

For each shipment, Safety Data Sheets (SDS) providing information on the health, safety, and environmental hazards of our concentrates are provided to Lundin Mining personnel, customers, and to those handling and shipping our products. During 2016, the Company progressed its project to update and standardize the

format of the SDS for all its products and set procedures for regular updates when regulatory changes occur.

The initiation of our SDS update program is just one of many activities undertaken to stay current and compliant with constantly changing international regulatory requirements, and as required by the Company's Responsible Mining Management System. LMC follows the Globally Harmonized System (GHS) of classification of concentrates, which follows the 2013 Marpol Annex V regulations for ocean shipping of non-ferrous concentrates. The Company classifies its concentrates to comply with the changes to the International Maritime Solid Bulk Cargoes (IMSBC) Code relating to Materials Hazardous in Bulk (MHB), which came into effect on January 1, 2015. LMC also adheres to the IMSBC code as it pertains to the safe loading, transportation, and discharge of solid bulk cargoes.

During 2016, minor concentrate transport-related non-compliances were identified on two occasions at our Neves-Corvo operation during routine checks by the Portuguese transport authority. In August, transport documentation for one container was found not to comply with regulations, and in December, transport documentation and labelling were found not to comply for one truck. Site procedures have been revised to prevent similar occurrences in the future. Fines for these incidents had not been imposed by the end of the reporting period and, if any are incurred, they will be disclosed in our 2017 Sustainability Report.

We have not received any complaints regarding breaches of customer privacy or losses of customer data. There have also been no fines for non-compliance with laws and regulations concerning the provision and use of our products.



Environmental Management



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OUR APPROACH

Effective environmental management is integral to the success of all of Lundin Mining's operations, from day-to-day activities on-site, to corporate strategic planning. Lundin Mining's operations are committed to compliance with applicable laws and regulations, our Responsible Mining Policy and Framework, our integrated HSEC Management System, our corporate commitments, and adoption of best practice environmental standards.

Our primary objective is to minimize potential environmental impacts through implementation of environmental management controls and procedures that are tailored to meet the individual needs of each of our operations in their unique environmental settings. We achieve this through effective use of environmental impact assessment to identify, quantify, and eliminate or mitigate impacts; integration of environmental controls within our operations, with monitoring to evaluate their reliability and effectiveness, and to identify potential opportunities for improvement; employment of risk assessment and management techniques to minimize the potential for unforeseen environmental

impacts or incidents; and routine checking and continuous improvement through the annual environmental audit process.

Environmental Permitting and Compliance

The Permitting and Approvals process and compliance management are critical aspects of mining and mineral development and ensure that the mining sector is effectively regulated to prevent possible negative impacts to the natural environment or the interests of local communities. In addition to environmental approvals and permits, other mining-associated activities may require permits that are not covered by environmental regulations.

When approvals and permits are issued, they typically include conditions that need to be met by the Company for the permit to be maintained. Meeting these permit conditions, obligations, or requirements is often referred to as "compliance" and, at Lundin Mining, ensuring compliance is a key objective in all we do. To support permitting and compliance activities during all phases of the mine life cycle, extending from exploration through to post-closure, we have developed an integrated HSEC Management System, which has evolved in 2016 into the Responsible Mining Management System (RMMS). The RMMS is supported by effective Standards, Procedures, Guidance, Training, Auditing, and Corrective Action programs to support continual improvement and enhanced environmental performance and compliance. In addition, we participate in various regulatory and industry associations, such as the Mining Association of Canada, UN Global Impact, the Canadian Institute of Mining, the Prospectors and Developers Association, the Carbon Disclosure

Program, and Euromines, to monitor developments and issues in the regulatory environment and to adapt consideration of these developments into our evolving Management System.

All the Company's mines operate under current valid environmental approvals and licenses. In 2016, Lundin Mining's corporate and operational permitting teams undertook significant environmental approvals and permitting efforts at each of its four mines, including:

- **Neves-Corvo:**
 - Environmental Impact Assessment in support of the Zinc Expansion Project
 - Regulatory submission in support of the Environmental License update
- **Candelaria:**
 - Los Diques Tailings Facility sectorial permits for construction and operation
 - Regulatory submission of the Candelaria 2030 Closure Plan
 - Regulatory submission of the Candelaria Underground Pertinencia
 - Regulatory submission of the Alcaparossa Environmental Impact Assessment
- **Eagle:**
 - Progression of supporting studies related to planned Eagle East permitting submissions
- **Zinkgruvan:**
 - Progression of supporting studies related to the recently (2015) extended environmental license conditions



Environmental Management

Environmental Risk Assessment

Environmental risk assessments are conducted on a routine basis at all our operations, in accordance with the requirements of our Corporate Environmental Standards and Procedures. Environmental risks that are significant are included in Lundin Mining's Corporate Environmental Risk Register, which is used to support continuous improvement and planning processes. Credible risk scenarios are identified and assessed, not only for normal mine site operating conditions, but also for exploration, construction, maintenance, plant shutdown and start-up, and reasonably foreseeable emergency situations.

Environmental Audits

Annually, a third-party Environmental Audit program is carried out at each of our operations. In 2016, LMC initiated an integrated HSE & Product Stewardship Audit program, in accordance with the requirements of our HSEC Standards, to provide a more comprehensive and collaborative review across LMC's various business activities. Results of the audit program, including corrective actions, are provided to our operations for review and resolution and reported to LMC management and the HSEC Committee of the Board.

The annual audit program is designed to meet or exceed Lundin Mining's Annual Corporate Environmental Audit Objectives. Site audits are completed through the review and assessment of operational environmental data, environmental reporting, and previous audits; interviews with environmental team staff at each site; and site walkover observations.

All four Lundin Mining operations underwent external HSE & Product Stewardship audits in 2016. Results of the external environmental audits were reported to the HSEC Committee of the Board and action plans were developed by sites to ensure the implementation of corrective actions and continual improvement initiatives.

In addition, the Environmental Management Systems of Minera Candelaria and Minera Ojos del Salado have been certified for many years under the international ISO 14001 Standard. Minera Candelaria was most recently re-certified in March 2015 and the certification for Minera Ojos del Salado was achieved in September 2016.

Environmental Incidents

Lundin Mining is committed to a rigorous reporting system for unplanned HSEC and security incidents. The system classifies incidents in each of these categories on a severity scale of Level 1 (low) to Level 5 (high). In the Environment category, the severity of an incident is judged by the impact upon one or

more of: (a) species, communities, and habitats that comprise ecosystems of the natural environment; (b) the degree of regulatory non-compliance; and (c) the potential concern to local communities. Incidents that are classified as Level 3 or above are reported to the Board of Directors and are disclosed in our sustainability reports.

In 2016, there were no Level 3 or above environmental incidents with impacts beyond our operational areas, including no significant spills. There was one unplanned discharge, which is described further in the Water Discharges section of this report.

In May 2015, our Candelaria Mine was notified by the Chilean Environmental Superintendent (Superintendencia de Medio Ambiente, or SMA) of 16 charges associated with alleged infractions of its environmental approvals. The charges, which originate from two inspections carried out by SMA in June 2013 and August 2014, prior to LMC's acquisition of Candelaria, relate to issues including dust control, road maintenance and signage, disposal of used tires, brine management at the desalination plant, fresh water consumption, and the footprint of the mining operations, among others. Candelaria followed the process established by the SMA for responding to the charges. On December 1, 2016, SMA issued a resolution clearing some of the charges and levying a fine of approximately \$4 million for others, including water management issues. On December 7, 2016, former legal representatives of the community of Tierra Amarilla submitted an independent administrative appeal with SMA to request a reclassification of certain charges that could, if accepted, potentially result in increased fines. On December 23, 2016, Candelaria filed an appeal to the sanctioning resolution. The legal process is ongoing and any resolution will be reported in future disclosures.

At our Neves-Corvo site, a routine inspection visit from the Environmental Inspection Authority was carried out in late 2015. In April, 2016, the site was notified that it had not formally reported a wastewater discharge and noise non-compliances dating back to 2014, in accordance with requirements. Neves-Corvo submitted a response to the authorities that same month, and at the close of 2016, the matter was in process of resolution. Should the charge stand, a fine may be imposed.

A fine equivalent to \$5,952 was imposed on our Zinkgruvan operation by the national regulatory body because of late notification of a temporary onsite leakage of water from the tailings facility pump system. In response, the mine has adjusted its reporting procedures to reduce the potential for repetition of this type of incident in the future.



Mine Water Recovery System and Tailings Storage, Candelaria

WATER MANAGEMENT

At Lundin Mining, we implement a comprehensive water management planning process to allow us to operate without conflict with other water users and associated ecosystems, in accordance with the Lundin Mining Water Management Group Procedure.

Water Availability

In recent years, our operations have renewed their focus on water management to ensure responsible use of this shared resource in a changing climatic environment. Throughout 2016, Lundin Mining has continued to commit

to best practices for water management through the implementation of the Water Management Group Procedure, which includes requirements for evaluation of water-use efficiency, implementation of measurable improvements to prevent unnecessary pressure on shared resources, and evaluation and minimization of environmental and social impacts on surface water and groundwater environments.

Our Candelaria complex operates a seawater desalination plant to supply site operational water requirements to reduce pressure on precious water resources in the Atacama Region. Similarly, our

Neves-Corvo Mine in Portugal, located in a semi-arid and sub-humid zone, has initiated medium-term and long-term water management projects to maximize water storage capacity inside our project boundaries, minimize fresh water intake, and promote sustainable practices.

Further supporting our commitment to sustainable water management, our local engagement strategies, continued forward-planning efforts, and commitment to continuous improvement, have allowed our operations to maintain positive relationships with local water user organizations and to seek opportunities for improved water use and conservation.

Environmental Management



Lake Trysjön, Zinkgruvan

Water Withdrawal and Recycling

Lundin Mining's operations are required to develop water balances, and hydrometric data are used for operational control and reporting purposes. Although some water abstraction from natural water systems is unavoidable, the Company seeks to reduce this as much as possible through operational efficiency and water recycling.

Lundin Mining's operations utilize a range of different water sources, including desalinated seawater; surface water from reservoirs and lakes; groundwater seepage from underground workings, which is captured through mine dewatering; some additional groundwater abstraction from wells and following infiltration into open-pit mines. Water sources at each of our operations are supplemented by the capture of run-off from rainfall and snow melt, where available, on the project catchment areas.

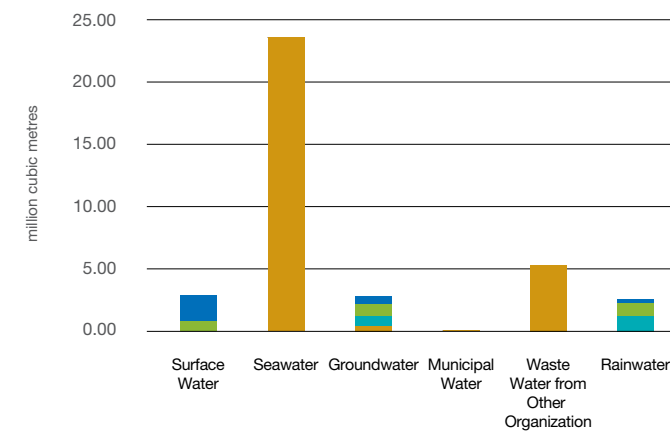
Site	Primary Sources of Water for Use by Operation
Candelaria	Desalinated seawater; treated domestic waste water; mine seepage
Eagle	Mine Site: Mine dewatering; potable well; utility well
	Mill Site: Potable well
Neves-Corvo	Santa Clara Reservoir; mine dewatering
Zinkgruvan	Lake Trysjön; Lake Åmmelången; mine dewatering

No water sources have been significantly affected by our existing water use systems and there are no significant cases of water depletion or new competition for supplies.

Candelaria recognizes the importance of responsible water stewardship and, to this end, developed a state-of-the-art water desalination facility at our port, Punta Padrones. By developing and accessing this alternative source of water, and increasing use of treated wastewater, the operation limits the quantity of water obtained from groundwater wells to less than 0.4% of its total water withdrawal. Well water is only accessed for potable water use. Candelaria continues to maintain a strong focus on improving water stewardship opportunities and minimizing groundwater use, noting that the Sector 4 Copiapó River groundwater source has now been formally recognized as important for the community, local agricultural development, mining and potable supplies, and has recently been legally declared a zone of water scarcity.

At our Zinkgruvan site, our team continues to carefully manage conditions at Lakes Trysjön and Åmmelången. Water from these systems, required to supply mineral processing activities and to maintain a designated minimum flow rate in Dalbyån Creek, is being managed in a manner that protects this valuable and shared resource, thereby reducing the potential for any significant effects on the recreational and environmental values of these systems.

Operations Water Withdrawal by Source 2016

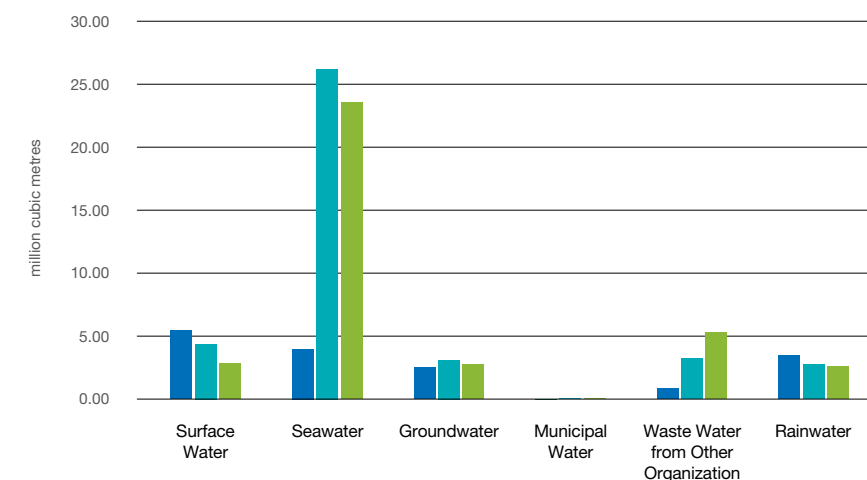


Zinkgruvan	2.09	0.00	0.57	0.02	0.00	0.32
Neves-Corvo	0.76	0.00	1.04	0.00	0.00	1.05
Eagle	0.00	0.00	0.73	0.00	0.00	1.21
Candelaria	0.00	23.57	0.41	0.05	5.30	0.00

Lundin Mining's total water withdrawal was reduced to 37.1 million cubic metres in 2016, as compared to 39.7 million cubic metres in 2015. Of this 37.1 million cubic metres, 63% (23.6 million cubic metres) was seawater withdrawn at Candelaria's Punta Padrones' desalination plant. Of those 23.6 million cubic metres, 41% (9.6 million cubic metres) was pumped inland to our mining complex for use in mining and mineral processing operations, 57% was returned directly to the ocean from the desalination plant's discharge point, and 2% remained within the plant's water circuit.

Our operations at Zinkgruvan and Neves-Corvo also withdraw additional water for supply to local communities. These quantities are effectively provided as a service to the local community and, therefore, are not included in our operational water withdrawal accounting.

Lundin Total Water Withdrawal by Source 2014 to 2016



Note: 2014 data includes our formerly owned and closed Galmoy Mines Ltd. site, our formerly owned and closed Aguablanca site, and only two months of operation for Candelaria; 2015 data includes our formerly owned and closed Aguablanca site.





Environmental Management

Surface water withdrawal trends from 2014 to 2016 demonstrate that a strong, responsible water stewardship focus at Neves-Corvo and Zinkgruvan has had the benefit of reducing the quantities of fresh water used at these sites. Neves-Corvo's investment in upgrading its water management infrastructure in recent years has enabled it to reduce its fresh water abstraction from the Santa Clara reservoir from almost 3 million cubic metres in 2014 to less than 0.8 million cubic metres in 2016. In 2016, Neves-Corvo continued to focus on opportunities to further reduce fresh water needs, adapting its systems to allow re-use of treated water in its mineral processing and paste backfill plants. Zinkgruvan has also advanced efforts to optimize its water balance, resulting in a measurable reduction of approximately 0.3 million cubic metres of fresh water use in 2016.

At Lundin Mining, our measure of water recycling is primarily in the form of water reclaimed from our tailings management facilities for re-use in our operations. Overall, in 2016, Lundin Mining's record of water recycling exceeded overall water volumes withdrawn and included the recycling of 73.3 million cubic metres of water, equating to a recycling rate of 197% of the total water withdrawn (including all water taken into the desalination plant).

Recycling efficiency improvements remain a focus for our operations; however, the overall quantity of water that may be recycled is influenced by mineral throughput. Trends observed at individual sites are more meaningfully explained through discussion of water use intensity.

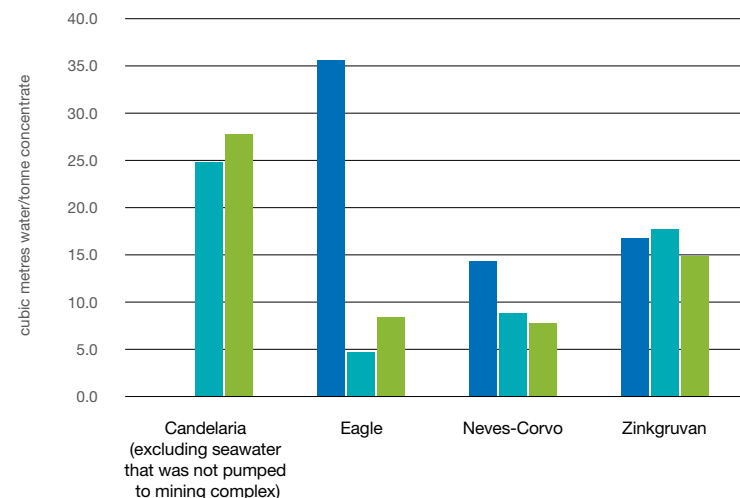
Water Withdrawal Intensity

As a means of tracking water-use efficiency, Lundin Mining measures water withdrawal intensity, measured as cubic metres of water withdrawn per tonne of concentrate produced. The exception to this is Candelaria, where we use the total water drawn into the boundaries of our operations for this calculation. Due to the unique situation at Candelaria, resulting from the use of water from the Desalination Plant, we find it most meaningful to assess efficiency

of water use at that site by using the total water drawn into the boundaries of the Candelaria mining complex for the calculation – that is, including only the quantity of seawater that is pumped from the desalination plant to the mining complex, rather than the total withdrawn from the sea.

There were measurable efficiency improvements in 2016 at Neves-Corvo and Zinkgruvan, as indicated by their achievements in reducing the quantity of fresh water used. Eagle's apparent increase in water use intensity is likely a result of improved data capture for water withdrawal for 2016. Candelaria's water use increased in 2016 due to a lower ore grade, meaning greater quantities of ore undergo processing (with associated water consumption) per tonne of concentrate produced.

Water Use Intensity 2014 to 2016 (cubic metres water used/tonne concentrate produced)



Note: Candelaria was acquired by Lundin Mining in November 2014 – data for that year are not comparable.

Case Study



View of the passive water treatment trials

NEVES-CORVO MINE

PASSIVE WATER TREATMENT PILOT TESTS

Following the successful rehabilitation of the formerly owned Galmoy Tailings Management Facility into a self-sustaining wetlands ecosystem, the Galmoy and Neves-Corvo teams initiated a passive water treatment trial study to support the potential design of an Integrated Constructed Wetland at Neves-Corvo in February 2016.

VESI Environmental, a consulting company specializing in integrated constructed wetlands and wetland landscaping and the lead consultant involved in the successful Galmoy TMF program, was chosen to facilitate the design and analysis of the water treatment system.

The Neves-Corvo trial system includes five-stage cells, which contain local wetland plant species in water of varying quality. Cells 1 and 2 consist of a local version of phragmites. The phragmites have stronger resilience to varying water quality and thus are first exposed to untreated mine water. Cells 4 and 5 support approximately 30–45 plants of the typha latifolia, sourced locally. Cell 3 is a combination of both the aforementioned species.

Mine water treatment occurs using the following three mechanisms:

- 1. Evaporation and transpiration of the water:** When source water is directed to the wetlands, the loss of water to the atmosphere is increased up to 80% due to transpiration from the plants.
- 2. Digestion of the contaminants:** The biological attributes of the wetlands digest sulphates, thiosalts, and other water quality constituents, thereby lowering the concentrations present in the treated water.
- 3. Dilution with rain water:** During periods of precipitation, dilution contributes to lowering the concentration of various constituents in the water.

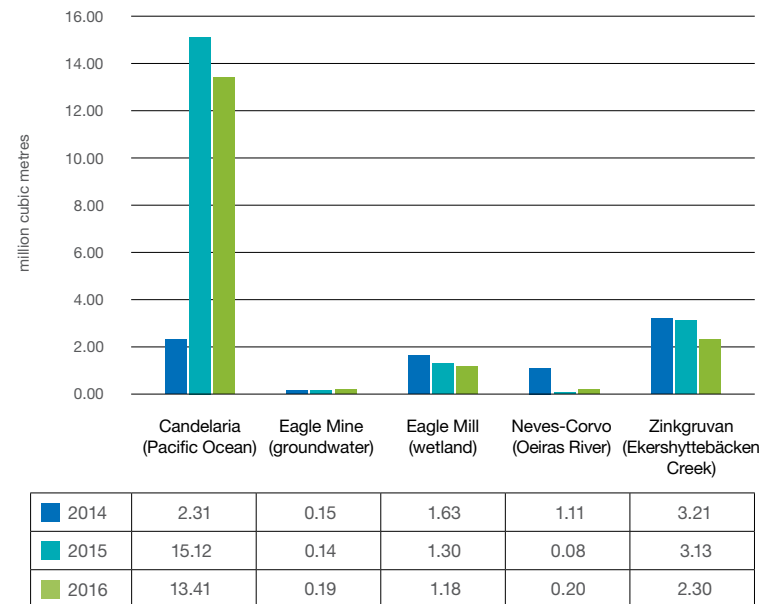
Depending on the time of the year, the precipitation, and the temperatures, the combination of the above three mechanisms results in better water quality.

The pilot program continues to study the treatment processes of all three mechanisms outlined. Detailed results were recorded during 2016 and the trials will continue until mid-2017, at which time a conceptual design will be created for possible implementation of the system during mine operation and post-closure.

Environmental Management



Water Discharged to the Environment by Operation 2014 to 2016



Note: Candelaria was acquired by Lundin Mining in November 2014.

Desalination Plant, Candelaria

Water Discharges

Water management at Lundin Mining's operations involves discharging treated water in accordance with regulatory requirements and corporate standards, which include consideration of the aquatic and terrestrial environments and communities and users downstream of our operations. All our operations have effective water quality monitoring systems in place, with routine regulatory reporting, to verify that off-site discharges are in compliance with environmental regulatory requirements developed to protect people and the environment.

We report planned and unplanned water discharges from our operations. All our reported planned discharge quantities are measured by flow meters. Our Candelaria mining complex operates on a zero-discharge basis, with discharge only from the Desalination Plant at the coast.

Across our operations, we discharged just under 17.3 million cubic metres of water into the environment during 2016. It is significant that Candelaria's discharge is entirely from the desalination plant to the ocean, rather than to a fresh water environment, and the quality of this discharge reflects the original seawater chemistry and the desalination process, rather than the effects of any mining or mineral processing.

Except for Neves-Corvo, all our operations discharged a smaller quantity in 2016 compared to 2015. Neves-Corvo's discharge quantities were unusually low in 2015 because discharge was temporarily suspended while various investigations and infrastructure upgrades were completed at the site. As a result of these investigation and upgrade efforts, the potential for impacts on the Oeiras River can now be more closely monitored and managed, as the increased flexibility in the system for storage and recycling capability also allows the operation to reduce, and even cease, discharge according to natural water flow rates in the river.

Site	Discharge Receiving Body
Candelaria	Desalination Plant: Pacific Ocean Mining and Mineral Processing Complex: Zero-Discharge
Eagle	Mine Site: Groundwater discharge Mill Site: Wetland (adjacent to Escanaba River)
Neves-Corvo	Oeiras River
Zinkgruvan	Ekershyttebäcken Creek (Lake Vättern catchment)

All our operations treat their discharge water to achieve an acceptable quality prior to discharge to the environment. Candelaria's desalination process requires only pH neutralization prior to discharge to the ocean. Eagle uses a comprehensive treatment process, culminating in reverse osmosis and final pH adjustment for its groundwater discharge, and metals precipitation/ sedimentation and ultrafiltration in its wetland discharge.

Neves-Corvo's water treatment system is based on an oxidation process, followed by pH adjustment for metals and sulphates precipitation. A clarifying step is used to remove all solids and then a reverse osmosis process is completed for the water that is discharged. The major portion of water is re-used in the plants after the clarifying process is completed. Zinkgruvan's process is based upon residence time in a clarification pond.

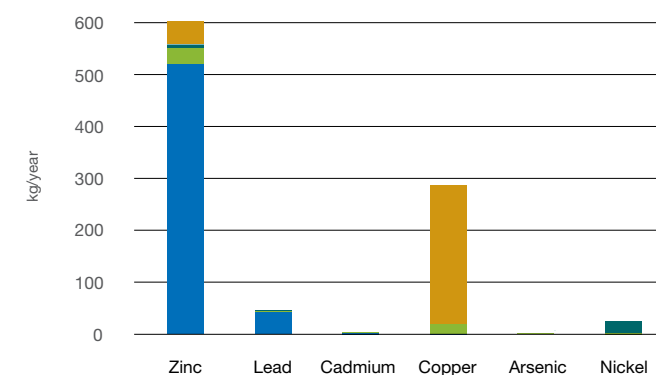
Our annual discharge chemical loads for 2016 were generally comparable with recent years, with a noted reduction of chemical load for measured parameters in Candelaria's ocean discharge and in Eagle Mine's groundwater discharge for measured nutrients and major ions.

Apart from two isolated occasions, LMC's operational water discharges were in total regulatory compliance during 2016. One exception was a single flow rate exceedance at Candelaria's ocean discharge at the Desalination Plant. The second exception was at Eagle's mine site discharge, where a non-compliance resulted because the valve regulating flow of water to the pH meter was closed during a power outage and not re-opened prior to restarting discharge. As a result, treated water was discharged without a prior measurement of pH. Through the implementation of our RMMS and our commitment to continuous improvement,

these types of events were identified and appropriate steps were taken to reduce their potential for recurrence.

There was one unplanned discharge at our Neves-Corvo operation during 2016. In August, 17 cubic metres of industrial water was inadvertently discharged through the site's designated discharge point to the Oeiras River during the cleaning of an industrial water tank. The discharge itself did not constitute a non-compliance, as the site is permitted to utilize its designated discharge point throughout the year; however, the sulphate levels in the discharged water exceeded the permitted concentration. The authorities were informed and site procedures were reviewed accordingly.

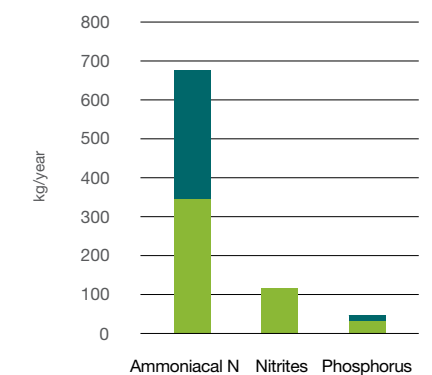
Metal Discharge Loads 2016 (kg)



Candelaria (seawater)	46			268		
Eagle Mine (groundwater)	1	0.1	0.02	0.1	0.1	0.2
Eagle Mill (wetland)	6	0.6	0.1	0.7	0.6	22
Neves-Corvo	31	3	0.6	18	0.8	2
Zinkgruvan	520	42	2	0.3		

Note: Blank = not measured.

N and P Species Discharge Loads 2016 (kg)



Eagle Mine (groundwater)	0.076	0.005	0.001
Eagle Mill (wetland)	330		13
Neves-Corvo	345	116	32



Environmental Management



Pipe Rack Crossing Oeiras River, Neves-Corvo

WASTE MANAGEMENT

Non-Mineral Waste

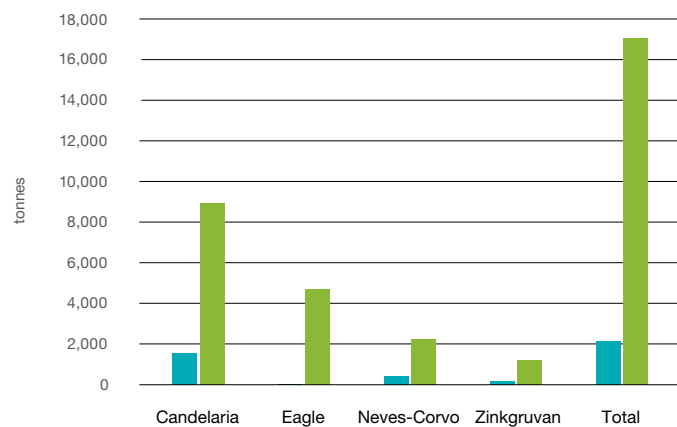
Our operations have developed comprehensive waste management plans that specify how the different types of non-mineral waste produced by our activities are to be managed, including identification of opportunities for waste minimization, recycling, and re-use.

During 2016, the total non-mineral waste generated by Lundin Mining was 19,209 tonnes, of which 17,075 tonnes, or 89%, were classified as non-hazardous waste. Lundin Mining's routine waste generation levels have remained broadly consistent over recent years.

Candelaria is our largest non-hazardous waste producer, corresponding to the relatively large size of the operation when compared to our other mines. Eagle Mine recorded relatively high quantities of materials classified as non-hazardous waste, primarily due to the current regulatory requirement to dispose of exploration drill cuttings from known sulphide zones to landfill and the disposal of its non-hazardous water treatment plant crystallizer waste. Neves-Corvo and Zinkgruvan's non-hazardous waste generation is lower and consistent with the relative scale of the operations.

A similar pattern is observed for hazardous waste generation in 2016, with Candelaria being the largest producer, followed by Neves-Corvo, and Zinkgruvan. By contrast, Eagle Mine generates a relatively low level of hazardous waste. In accordance with applicable regulations, best practices, and Lundin Mining's waste management plans, hazardous waste generated at our operational sites is generally transported off-site, within country, for treatment and re-use or disposal.

Operations Total Weight of Waste by Type 2016



	Candelaria	Eagle	Neves-Corvo	Zinkgruvan	Total
Hazardous Waste	1,528	1	434	171	2,134
Non-Hazardous Waste	8,929	4,692	2,263	1,190	17,075

The main waste treatment or disposal methods used by Lundin Mining's operations remain comparable with previous years. Our waste management programs continue to be effective, with the percentage of total waste being diverted for re-use, recycling, or recovery reaching 94% at Zinkgruvan and over 70% at Candelaria and Neves-Corvo. Eagle Mine's much lower percentage (13%) is influenced by the disposal of drill cuttings to landfill and the disposal of its non-hazardous water treatment plant crystallizer waste, as required by current regulations.

All waste generated by the Company's operations was disposed of in accordance with the applicable waste regulations and site waste management plans. Candelaria has confirmed the methods of waste disposal, while our other operations have relied on information provided by contractors.

Mineral Waste

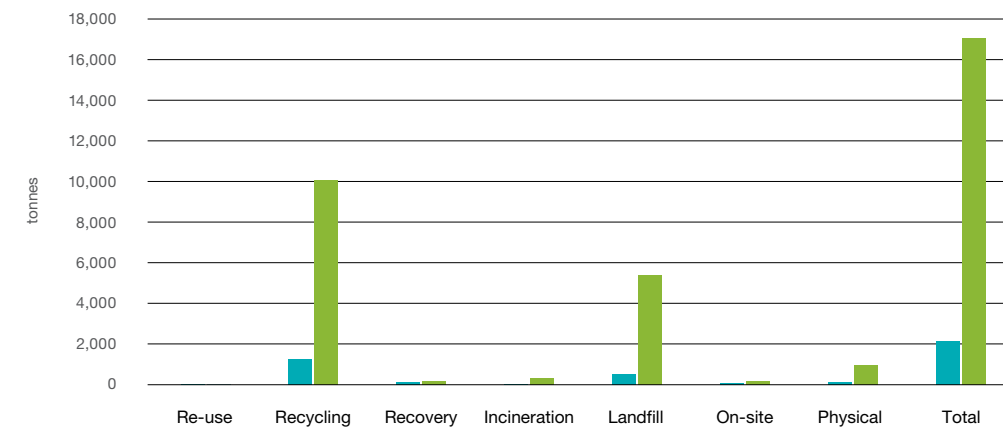
Lundin Mining's operations all generate mineral waste in the form of waste rock and tailings, and our multi-faceted approach to their management provides us with confidence that potential environmental and social impacts associated with our mineral wastes can be reliably identified and minimized.

Efficient mining and mineral processing, along with disposal underground where practicable, allow our operations to minimize the quantities of these wastes. Furthermore, a clear understanding of the characteristics of the wastes, the facility construction materials, and the temporary and/or final settings in which they are placed enables our operations to minimize any risks associated with their disposal.

Operational and post-closure physical and geochemical stability of mineral waste deposits are a priority at Lundin Mining. Robust design, construction, quality

control, inspection, and monitoring are necessary to ensure the physical integrity of our waste facilities. An important environmental consideration for our mineral wastes is the potential for generation of acidic water when sulphide minerals, such as pyrite, in waste rock and/or tailings are exposed to moisture and air. These discharges, known as acid rock drainage (ARD), can adversely affect the quality of waterways or groundwater by introducing undesirable levels of acidity and dissolved metals. Appropriate geochemical characterization programs allow us to understand and manage any ARD and/or metal-leaching risks associated with our mineral wastes. Equally important in determining the appropriate location and design for our disposal facilities is a comprehensive assessment of the disposal setting, addressing aspects including geology, geotechnics, hydrogeology, hydrology, seismicity, biodiversity and ecosystems, and of course, local communities.

Lundin Total Weight of Waste by Disposal Method 2016



	Re-use	Recycling	Recovery (inc. energy recovery)	Incineration	Landfill	On-site storage	Physical Chemical Treatment	Total
Hazardous	37	1,237	138	45	507	54	117	2,134
Non-Hazardous	1	10,075	166	342	5,373	178	940	17,075



Processing Plant Stockpile, Neves-Corvo



Environmental Management

Waste Rock Management

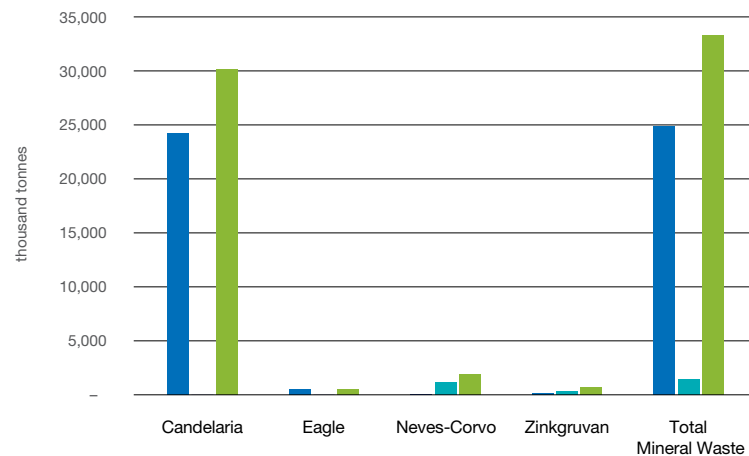
Just under 25 million tonnes of waste rock were generated across all of LMC's operations in 2016, of which 97% (24.2 million tonnes) was produced at Candelaria, due to the scale of its open-pit operation.

At Candelaria, the waste rock is stored in terraced surface-waste depositories located immediately to the north of the open pit (*Deposito Esteril Norte*) and south of the open pit and plant area (*Deposito Esteril Nantoco*). Stability of the waste rock depositories is a high priority, and their design is based on geo-mechanical and seismic parameters. The waste rock has been classified as having a low potential for acid generation, annual rainfall averages 15 mm, and there is no groundwater infiltration; as a result, no specific ARD controls are required.

Expansion of the North waste rock depository was included as part of the permitting package for the Candelaria 2030 project. Candelaria's design of the proposed expansion includes the reconfiguration of approximately 60 million tonnes of material to reduce the potential for shadow effect, thereby mitigating potential for impact on the local Tierra Amarilla community.

At Eagle, the waste rock requires management for ARD. Returning waste rock to the underground workings is required under permit, since on closure the mine will be flooded, and the oxygen-deficient environment is ideal for preventing the generation of ARD. Since the mining schedule requires that waste rock is temporarily stored on surface at the mine, ARD is managed by lining the surface storage facility and collecting all contact water for treatment at the mine water treatment plant. Eagle has commenced progressively returning waste rock underground, with the dual benefit

Operations Total Weight of Waste Rock and Tailings 2016



■ Waste Rock	24,202	486	6	177	24,873
■ Tailings to UG Mine	0	0	1,155	287	1,441
■ Tailings to TMF	30,147	518	1,906	712	33,283

of stabilizing previously mined areas as well as controlling ARD; at the close of the reporting period, 318,599 tonnes of waste rock were stored at the surface. Because of the use of waste rock as backfill, it is anticipated that no waste rock will remain at the surface at mine closure.

Neves-Corvo's comprehensive Waste Management Plan is designed to mitigate the risk associated with ARD generation in its waste rock. Where possible, waste rock with acid potential is retained in the underground mine and used as backfill to stabilize previously mined areas. The remainder of the waste rock is ultimately used in the tailings management facility (TMF) for construction of dykes and cell cover. Approximately 6,420 tonnes of waste rock were brought to the surface and temporarily stockpiled in 2016; the storage facility incorporating a peripheral drainage system to allow collection and

management of contact water, along with the use of engineering construction methods based on geological and geotechnical characterization studies to ensure overall stockpile stability.

Zinkgruvan does not maintain waste rock stockpiles – all waste rock is used underground to stabilize previously mined areas or used in construction of on-site access roads or new tailings pond embankments. Characterization studies for ARD potential have shown that the waste rock poses no immediate or long-term risk, owing to the low sulphide content and the high proportion of calcareous minerals with buffering capacity. As a precaution against elevated metals concentrations, usage of waste rock at the surface is restricted to TMF embankments and road sections where contact water is directed to the TMF.

Tailings Management

Lundin Mining uses two widely accepted methods of tailings disposal: underground disposal involves mixing tailings with products, such as sand or cement, followed by disposal as a paste backfill in previously mined areas of underground mines; surface disposal involves placement in engineered surface impoundments or, in the case of Eagle, in a previously mined open pit.

Active surface tailings impoundments can represent one of the more significant environmental risks for the mining industry and, in keeping with best industry practice, LMC takes considerable care to ensure our TMFs are well-designed, built to exacting standards, well-maintained, and monitored carefully.

All Lundin Mining's operations manage their tailings in accordance with the Company's Tailings Management

Standard (TMS), developed in 2015.

The TMS requires that all TMFs, including major water retention dams, are designed, built, operated, decommissioned, and closed in such a manner that all structures are stable and all aspects comply with regulatory requirements and conform to Company standards, accepted international practice, and commitments to local stakeholders. Sites are required to identify a Responsible Person to ensure proper management of the TMF and ensure procedures for each TMF, including an Emergency Response Plan, are documented and made available to site personnel responsible for the safe operation of the facility.

A component of the TMS is the requirement for regular independent third-party geotechnical reviews, which are recognized as a best practice for effective tailings and water dam

stewardship. The inspections are focused on dam stability and integrity. Another component of the TMS is the requirement that all sites conduct regular geotechnical, hydrogeological, and environmental monitoring to meet regulatory requirements and prevent the uncontrolled release of tailings and/or water to the environment.

In 2016, third-party reviews were completed at Candelaria, Neves-Corvo, Zinkgruvan, and our formerly owned Galmoy Mines Ltd. site (closed site) by an independent consulting firm. No fatal flaws were identified during the third-party reviews at any of the sites, and all sites showed improvement in comparison to the 2015 inspections. Recommendations arising from the reviews are carefully tracked, and follow-ups are reported by each site on a quarterly basis to ensure that appropriate action is taken.





Environmental Management



Filling of Water Truck, Candelaria

Candelaria

The Candelaria TMF is located 8 kilometres northwest of the Candelaria open pit and receives tailings from both processing plants within the mine complex. The TMF has a maximum capacity of 282.6 million cubic metres and will have a final surface area of 450 hectares; it is expected that the TMF will reach the end of its operational life in 2018. The stability of the TMF is inspected and monitored on a continuous basis by Candelaria, and a monitoring report is submitted quarterly to the Chilean Mining and Geology National Authority. The tailings have been classified as having a low potential for acid generation, and there are no specific ARD controls required. Appropriate freeboard is maintained during operation to provide additional security.

The TMF at Candelaria was designed and built using the downstream construction method, with a low-permeability layer of compacted material at the base. Designed for zero discharge, an efficient water recovery system allows the drainage water to be collected and returned to the process circuit. The tailings are conveyed to the TMF through pipelines and spigots, and the clarified tailings water is also collected and recirculated to the process plant.

A new TMF, Los Diques, located to the west of the open pit and plant, is currently under construction and will replace the existing tailings facility when it reaches capacity. The Environmental Permit for the new site has approved a total available tailings capacity of 600 million tonnes, a greater capacity than that required by the current mine life.

The San Esteban tailings impoundments were acquired in 2009 as part of a land acquisition by Candelaria to gain additional area for waste rock depository development to support the mine expansion. There are two such impoundments: San Esteban 1 (SE1) and San Esteban 2 (SE2). These facilities have never been used for tailings disposal by Candelaria. Candelaria is planning the removal of the SE2 impoundment in 2017 to provide for the expansion of the North Waste Depository. Permanent closure of the SE1 facility will also begin in 2017.



Candelaria Desalination Plant, Punta Padrones Port Facility



Humboldt Mill Tailings Disposal, Eagle

Eagle Mine

At Eagle's Humboldt mill site, subaqueous deposition of tailings commenced at the existing Humboldt Tailings Disposal Facility (HTDF) in 2014. The HTDF is a former iron ore open pit that filled with water after the mining operation ceased in the 1970s. It measures approximately 120 metres in depth and has walls composed of bedrock, except at the north end of the facility, where a bentonite cut-off wall has been constructed. Eagle generated 518,027 tonnes of tailings in 2016, and the facility operated with approximately 34 metres of water cover.

Eagle's HTDF has been constructed and is operated in compliance with applicable regulations, in particular, the *Natural Resources and Environmental Protection Act*. This requires that the operator manage the HTDF in such a way that reasonably minimizes actual and potential adverse impacts to groundwater and surface water, and that the Company obtains a permit to fill an inland lake so that the surface water quality of the state remains protected.

Eagle's tailings require management for ARD, and Humboldt mill's proximity to the bedrock-lined former open-pit mine made subaqueous disposal an ideal management method. ARD generation is managed through subaqueous deposition by restricting oxygen access to the tailings and thus preventing oxidation. To meet regulatory requirements, Lundin Mining undertook studies to demonstrate that bedrock walls meet the hydraulic conductivity standard and are not a reasonable conduit of groundwater migration. The bentonite wall was constructed to further reduce permeability and ensure negligible groundwater flow. A risk assessment was completed for the facility, with mitigation of risks incorporated into the design, and quality control programs are in place to ensure that design specifications are met.

Added protection is achieved through water management, including maintaining water levels well below surface elevation to ensure water does not overflow the banks into the environment. Water collected in the tailings facility is treated by a multi-stage treatment system prior to discharge. In addition, ongoing inspections and water quality monitoring are conducted to ensure that the facility functions according to design. A contingency plan has been developed to further mitigate any residual risk.



Environmental Management



Tailings Management Facility, Neves-Corvo

Neves-Corvo

At Neves-Corvo, the Cerro de Lobo TMF is located 4 kilometres southeast of the processing plants. The current permitted capacity of the Cerro de Lobo TMF is 33.35 million cubic metres, allowing the storage of 28.10 million cubic metres of tailings and 5.25 million cubic metres of waste rock. The TMF is operated in accordance with the EU Mine Safety Directive, International Commission of Large Dams, and Portuguese national legislation.

The current tailings disposal system at Neves-Corvo has provided safe and reliable storage of tailings for many years. Neves-Corvo's tailings contain pyrite and have been characterized as ARD-generating; the mine's Waste Management Plan is designed to mitigate the risk associated with ARD generation in the tailings.



Enemossen East Expansion, Zinkgruvan

The embankments at Neves-Corvo were constructed as water-retaining structures to allow subaqueous tailings deposition for ARD management purposes. All lifts use the downstream construction method, which is considered more stable than the upstream method. As this facility reached capacity for subaqueous tailings disposal in late 2010, innovative paste tailings technology was implemented. Paste tailings are tailings that have been dewatered, enabling them to be stacked, and resulting in the production of minimal to no water when deposited. As there is little water in the tails, there is reduced ability for them to flow, thereby reducing environmental risk. During 2016, sub-aerial deposition of tailings in paste form was continued on top of the existing tailings, with the paste being retained by berms constructed of mine waste rock within the tailings basin. An internal drainage system has been designed to capture seepage water from the TMF. Furthermore, comprehensive routine monitoring and management of the tailings deposition process, tailings pore pressure, and structural and hydraulic stability of the TMF embankments all contribute to managing the risk associated with ARD.

Neves-Corvo aims to minimize the volume of tailings to be stored on surface by placing tailings (approximately 38% in 2016) underground as paste backfill to support worked-out areas of the mine.

Zinkgruvan

At Zinkgruvan, the tailings facility is located at Enemossen, 4 kilometres south of the mine. The TMF is nearing its capacity of 12 million cubic metres, which will be achieved by the end of 2017. The tailings management program at Zinkgruvan is based on the SveMin Dam Safety Guidelines, which incorporate cross-audits by SveMin member companies to ensure that standards are applied. Dams are inspected every year by independent, expert consultants on dam design to ensure their continuing integrity and to ensure that rigorous programs of ongoing monitoring are in place.

The TMF embankments were constructed as water-retaining structures with centreline and upstream raises added since the dam was first constructed. Waste rock buttresses were added to provide additional support. Zinkgruvan's tailings have been found to pose no immediate or long-term risk of acid-generating potential, owing to their low sulphide content and high proportion of calcareous minerals.

The mine is operating under a new environmental licence that allows for the construction of a new tailings facility (Enemossen East) adjacent to the existing facility. Construction of the new facility began in June 2016 and is expected to be completed by July 2017. The new facility is permitted to a final elevation of 195.5 metres above mean sea level and, once complete, will have capacity for 5 million cubic metres of tailings.

Almost 30% of the tailings produced at Zinkgruvan was used as backfill material in the mine in 2016, thus reducing the quantity of tailings to be deposited in the surface tailings facility.

Case Study



Aerial View Wetlands at Galmoy



LMC's VP Technical Services, Steven Gatley (centre) and Manager of Environment, Cora Devoy (right)

GALMOY MINES LTD. SITE



WETLAND AND GREEN APPLE AWARDS

The formerly owned Galmoy Mines Ltd. site, a former underground zinc mine located in the south of Ireland, operated from 1995 to 2009. Closure activities included the development of an innovative constructed wetland at the former Tailings Management Facility (TMF), contributing to the restoration of the land and the establishment of an effective and sustainable passive treatment system for surface water run-off.

Rehabilitation of the former TMF into a passive wetland was an integral part of the planned restoration work. The self-sustaining ecosystem was based on the creation of a physically, chemically, and biologically stable system founded upon habitat, species, and community diversity. The constructed wetland formed the final stage of restoration and was designed to take advantage of many of the same processes naturally occurring in wetlands, but within a controlled environment. The constructed wetland was a key contributor to the successful return of the site to a land-use compatible with the surrounding countryside,

while successfully treating surface water run-off and providing an enhanced environment for local and migratory wildlife and bird species.

After conducting detailed birdlife monitoring of the remediated TMF, biologist Kevin Collins concluded that the "rehabilitation of the site has not only restored the site as it was before, it has actually improved the bird diversity in the area," adding, "The site has attracted rare vagrants to this part of Ireland and species such as Little Ringed Plover, Glossy Ibis, and Yellow-legged Gills are first county record for Kilkenny".

In November 2016, Lundin Mining won the International Green Apple Award for Environmental Best Practice for the Galmoy Wetlands project. The Green Apple Awards, issued by The Green Organization, aims to improve environmental performance; encourage the efficient use of resources; promote the competitiveness of organizations; and encourage sustainable development, including social benefits, through community and staff involvement. Steve Gatley, VP of Technical Services, and Cora Devoy, Environmental Coordinator, accepted the award on behalf of Lundin Mining.



Environmental Management

ENERGY AND EMISSIONS

At Lundin Mining, we seek opportunities to improve our energy use efficiency and decrease our greenhouse gas (GHG) emissions. We are also committed to managing other emissions that can be significant environmental/social issues for the mining sector, including gaseous emissions, particulates, noise, and vibration.

All our operations track upcoming changes to regulations and policies and, particularly in relation to energy and greenhouse gases, they foresee changes that will affect how they manage their energy consumption in the future. In addition, in accordance with our corporate Air Quality/GHG Management Planning Group Procedure, all operations are required to address a range of factors, including energy use efficiency, identification of opportunities to reduce emissions, implementation of controls, assessment of environmental and social air quality impact, monitoring and evaluation of data, and training.

Energy Consumption

Candelaria demonstrates proactive management by conducting energy audits, undertaking energy efficiency and GHG-reduction awareness workshops, messaging for operations staff and contractors, and identifying initiatives for future improvements.

In Europe, both our Neves-Corvo and Zinkgruvan operations are subject to laws that have been established to promote energy efficiency and monitor energy consumption at energy-intensive facilities. Both operations are required to conduct periodic energy audits and to develop formal plans for energy efficiency for submission to the authorities. Neves-Corvo's plan includes commitments relating to increasing energy efficiency, targets for energy and carbon intensity, and energy consumption, with a requirement for updating every eight years. New legislation requiring energy audits of large companies was

introduced in Sweden last year, and Zinkgruvan has undertaken their first audit in accordance with this new legislation. Zinkgruvan's plan for efficient use of energy covers the period of 2015 – 2017 and is required to be updated every three years.

In 2016, Eagle Mine's operations team began identifying opportunities and making improvements to reduce electricity and fuel usage, where possible, across the mine and processing sites, although there are no specific requirements in the US to address energy consumption. In addition, Eagle Mine retains a Continuous Improvement Lead and has established a Continuous Improvement Steering Committee to evaluate and implement selected staff-provided recommendations, including sustainability and energy reduction initiatives.

At Lundin Mining, we are committed to a structured and transparent approach to our energy consumption reporting. Data sources include Lundin Mining's internal fuel purchase records and fuel consumption records reported to us by our contractors. Conversion factors to convert quantities of fuel consumed to energy units are sourced in-country from product data sheets and national publications. Diesel is consumed in the greatest quantities at our operations, along with gasoline, gas oil, natural gas, propane, and minor biofuels. Electricity consumption data are obtained from our various suppliers.

Lundin Mining's energy consumption is reported in terms of energy consumed "Within" Lundin Mining and energy consumed "Outside" Lundin Mining. To allow meaningful comparisons, we have recalculated our 2015 energy consumption "Within" Lundin Mining to account for the divestment of our Aguablanca operation in 2016 and to improve accuracy in the reporting of electricity consumption at our Candelaria project in 2015.

Energy "Within" Lundin Mining

We allocate our energy consumption as follows:

Energy "Within" Lundin Mining	
• Fuel consumed at our operational and corporate sites, both by Lundin and by contractors, for activities associated with our "core business" such as transport and heating.	
• Electricity consumed at our operational and corporate sites, both by Lundin and by contractors.	

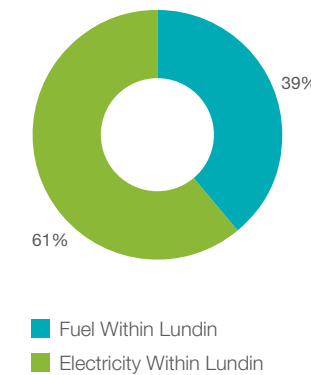
Typical of the mining sector worldwide, the Company's energy consumption remains a significant input at all our operational sites. Total energy consumption "Within" Lundin Mining for 2016 was 7,450,620 GJ, representing a reduction compared to 2015 (recalculated at 8,022,367 GJ). While overall electricity consumption has decreased this year, the reduction was primarily attributed to fuel consumption. Purchased electricity formed the greater proportion of our energy consumption at 61% in 2016, while fuel consumption contributed to 39% of the total energy consumption "Within" Lundin Mining.

Energy Consumption "Within" Lundin Mining 2016:

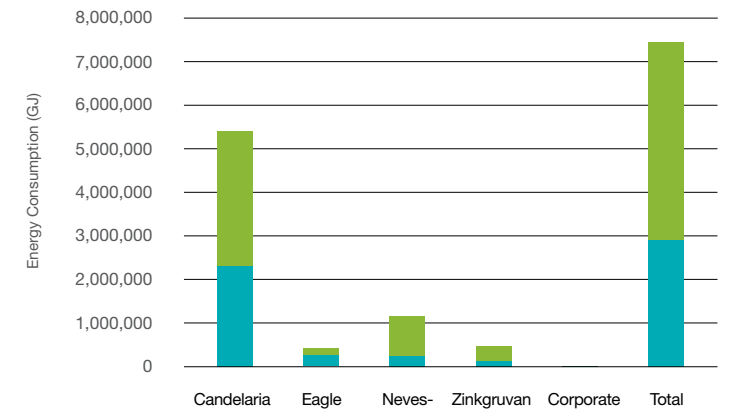
Description	GJ Consumed
Total fuel consumption from non-renewable resources	2,888,823 GJ
Total fuel consumption from renewable fuel resources	24,956 GJ
Total electricity consumption	4,536,842 GJ
Total energy consumption "Within" Lundin Mining	7,450,620 GJ

When comparing energy consumption by operation, there are significant differences that can be accounted for by the scale of the operation and the mine-life stage. The Candelaria operation, our largest operation, is also our largest energy consumer, with just under 5.4 million GJ consumed "Within" Lundin Mining. Neves-Corvo is our second-largest energy consumer (almost 1.2 million GJ consumed "Within" Lundin Mining), consistent with its production levels, followed by our two smaller operations at Zinkgruvan and Eagle Mine. Corporate energy use was very low in comparison to our operational sites, as would be expected.

Energy Consumption Within Lundin 2016



Energy Consumption Within Lundin by Operation 2016



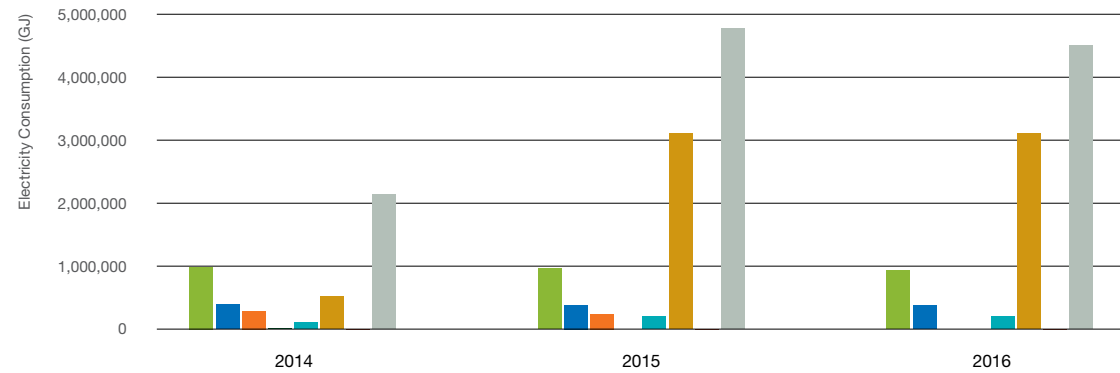
Electricity Within	3,094,170	171,692	921,047	348,779	1,154	4,536,842
Fuel Within	2,301,533	252,417	237,812	121,527	489	2,913,778



Environmental Management



Total Electricity Consumption Within Lundin 2014 to 2016



	2014	2015	2016
Neves-Corvo	982,793	952,167	921,047
Zinkgruvan	354,183	358,834	348,779
Aguablanca	259,122	226,471	
Galmoy	6,177		
Eagle	75,270	172,859	171,692
Candelaria	506,874	3,117,879	3,094,170
Corporate	632	1,115	1,154
Total	2,185,051	4,829,324	4,536,842

Note: Includes recalculated Candelaria 2015 data. Our former Galmoy Mine site lies outside reporting scope since 2014 due to closed status; Lundin Mining divested ownership of Aguablanca in 2016.



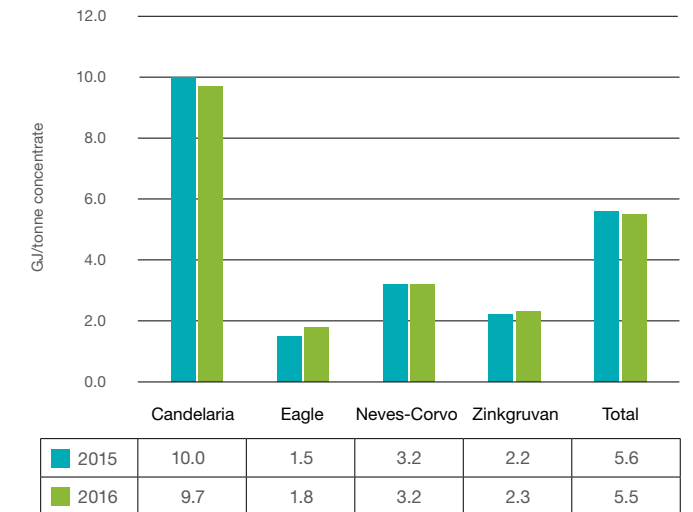
The influence of the Candelaria acquisition in November 2014, our largest operation, is illustrated by its contribution to our electricity consumption in recent years.

Our total energy consumption reflects a range of operational conditions at our sites, particularly in relation to mining and mineral processing throughput. Therefore, we also track annual changes to our “energy intensity,” measuring how much energy we consume per tonne of concentrate produced, which gives an indication of energy management on a site-by-site basis. This metric is also affected by operational factors, and open-pit operations tend to have higher energy intensity as a result of their associated haulage of ore and waste rock.



Although Candelaria has the highest energy intensity levels of all the Lundin Mining mines, attributable to the large-scale, open-pit operation and associated waste rock haulage aspects of the operation, Candelaria achieved an overall reduction in energy intensity in 2016, as compared to previous years. This reduction of energy intensity is attributed to a significant reduction in the quantity of waste rock transported. Energy intensity at Lundin Mining’s three remaining sites has increased slightly this year, attributable to operational factors. For example, Eagle Mine has undertaken significant development in 2016, including the Eagle East decline development, which has resulted in the handling of significantly greater quantities of rock without a proportionate increase in concentrate production. In addition, heating-based propane usage increased because of the addition of comfort heating to some areas of the sites, contributing to a corresponding increase in energy intensity.

Energy Intensity Within Lundin – Comparison to 2015 Base Year GJ consumed per tonne of concentrate



Note: “Total” includes corporate energy use for all years, based on recalculated 2015 base year.

Energy “Outside” Lundin Mining

As a step toward tracking some emissions associated with our value chain, we collect contractor data for fuel consumed during transport activities that are considered to contribute most significantly to fuel consumption that takes place beyond our project boundaries to support our operations.

We allocate our energy consumption “Outside” Lundin Mining as follows:

Energy “Outside” Lundin Mining

- Fuel consumed by contractors for concentrate transport
- Fuel consumed by contractors for the import of some of our significant raw materials, some disposal of wastes, and some transport of personnel

All these activities are considered to comprise “upstream energy consumption” under the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

Energy Consumption “Outside” Lundin Mining 2016:

Upstream Energy Consumption Category	Description	GJ Consumed
Category 4: Upstream transportation and distribution	Concentrate transport and transport of our most significant imported raw materials	337,534 GJ
Category 5: Waste generated in operations	Transport of wastes generated at our operations for treatment/disposal	2,564 GJ
Category 7: Employee commuting	Transport of personnel	23,853 GJ

Environmental Management



Underground Operations, Candelaria

Greenhouse Gas (GHG) Emissions

Typical of the mining industry, our operations use significant quantities of diesel fuel to perform underground and open-pit operations. Consumption of electrical power is also essential for our mineral processing operations, and is a significant contributor to the GHG emissions for our operations, all of which are linked to their respective national grids for electricity supplies.

At Lundin Mining, we are committed to a structured and transparent approach to our GHG data reporting, which we have developed and enhanced over recent years. Our approach to calculation of GHG emissions is aligned with the Greenhouse Gas Protocol methodologies and the Carbon Disclosure Project (CDP). Our GHG emissions consolidation approach is based on operational control. We focus our efforts on our main emission sources; at present, our GHG emissions accounting is based on fuel, blasting agents, and electricity consumption on-site. We do not currently report fugitive GHG emissions from refrigeration and air conditioning equipment at our sites, as these sources are considered likely to be minor in comparison to our other emission sources.

In our calculations, we use the latest Global Warming Potentials given in the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report, as recommended by the GHG Protocol and CDP. Our GHG emissions calculations include carbon dioxide, methane, and nitrous oxide, reported as carbon dioxide equivalents (CO₂e). Where available, emission factors for each fuel type have been obtained in-country, from national publications, otherwise default fuel emission factors have been obtained from the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

The GHG Protocol Scope 2 Guidance, published in 2015, introduced a requirement for “dual reporting” for companies that operate in markets where energy purchase contractual instruments are available. Therefore, we report two sets of Scope 2 emissions data, using both the “location-based” and the “market-based” calculation methods. In 2016, emission factors for our location-based emissions calculations were obtained in-country and are either regional or national data, applied in accordance with the GHG Protocol hierarchy. None of our operations has contractual arrangements with their electricity supplier that meet the GHG Protocol’s Scope 2 Quality Criteria. Therefore, for our market-based emissions reporting, Residual Mix emission factors were used for our European operations and, since these data are not currently available for Chile and the US, regional grid average data have been used for Candelaria and Eagle in accordance with the GHG Protocol hierarchy. In our comparisons across operations and for our GHG emissions intensity calculations, we have used the location-based Scope 2 data.

Scope Allocation

GHG Emission Type	GHG Emission Source
Direct (Scope 1)	Fuel and blasting agents consumed on-site by Lundin Mining and contractors for “core business” activities and in corporate offices
Energy indirect (Scope 2)	Purchased electricity consumed on-site and in corporate offices
Other indirect (Scope 3)	Fuel consumed outside Lundin Mining for concentrate, significant raw material, and waste and personnel transport

Base Year

Lundin Mining defined 2015 as the base year for GHG emissions reporting, primarily because our data were externally assured in that year and we reported both location-based and market-based Scope 2 data. In 2016, we have nominated to undertake a recalculation of our base year Scope 1 and Scope 2 emissions, to account for the divestment of our Aguablanca operation in Spain in 2016 and to improve on the accuracy of activity data used to determine 2015 Scope 2 GHG emissions at Candelaria in Chile. The net effect of these together does not result in a significant change to our base year emissions (a less than 1% decrease) and would not, in itself, warrant a base year recalculation. However, more accurate base year emissions data for Candelaria are important for realistic tracking of emissions at that operation over time, including the tracking of any future emissions reductions.

2015 Base Year	Original GHG Emissions	Recalculated GHG Emissions
Scope 1	270,531 tonnes CO ₂ e	264,843 tonnes CO ₂ e
Scope 2 location-based	454,896 tonnes CO ₂ e	458,887 tonnes CO ₂ e
Scope 2 market-based	440,708 tonnes CO ₂ e	446,272 tonnes CO ₂ e
Scope 1 + Scope 2 location-based	725,427 tonnes CO ₂ e	723,730 tonnes CO ₂ e

Our intention in 2017 is to identify opportunities for energy efficiency and reduction in GHG emissions, against this externally assured and representative recalculated 2015 base year reference point.



Environmental Management



Candelaria Operations at Dusk

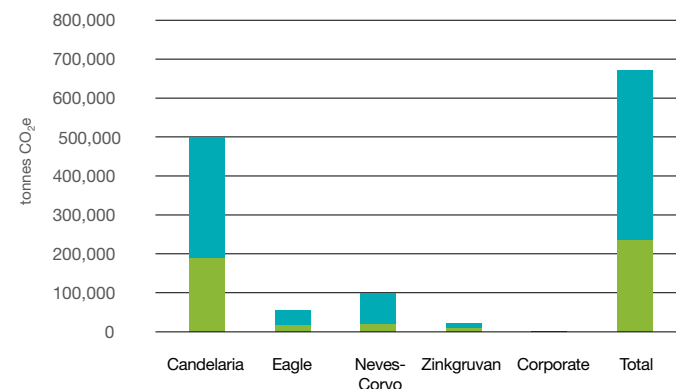
Scope 1 and Scope 2 GHG Emissions

Calculated total Scope 1 and Scope 2 GHG Emissions for Lundin Mining overall, 2016:

Scope	GHG Emissions (CO ₂ e)
Scope 1	234,470 tonnes CO ₂ e
Scope 2 location-based	438,620 tonnes CO ₂ e
Scope 2 market-based	445,924 tonnes CO ₂ e
Scope 1 + Scope 2 location-based	673,090 tonnes CO ₂ e

Biogenic CO₂ emissions in 2016 are not included in our Scope 1 accounting, in accordance with GHG Protocol requirements, and are reported separately at 833 tonnes CO₂.

Scope 1 and Scope 2 GHG Emissions by Operation 2016



	Candelaria	Eagle	Neves-Corvo	Zinkgruvan	Corporate	Total
Scope 2 Location-Based	309,548	36,261	80,592	12,159	60	438,620
Scope 1	189,659	17,203	18,180	9,400	28	234,470

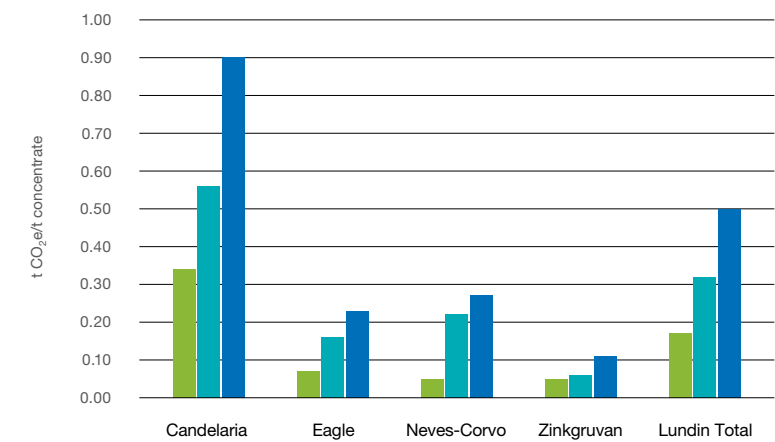
For all our operations, electricity consumption is the greatest source of GHG emissions. Candelaria's emissions reflect not only the scale of the operation, compared to our other sites, but also the fact that it is an open-pit operation with the associated vehicle movements for haulage of ore and waste rock.



Ore Haulage Truck, Eagle

The emissions performance of each operation can be assessed by the GHG emissions intensity. This is a measure of the tonnes of carbon dioxide equivalent produced per tonne of concentrate produced.

Greenhouse Gas Emissions Intensity 2016 (tonnes CO₂e/tonne concentrate produced)



	Candelaria	Eagle	Neves-Corvo	Zinkgruvan	Lundin Total
Scope 1	0.34	0.07	0.05	0.05	0.17
Scope 2 Location-Based	0.56	0.16	0.22	0.06	0.32
Scope 1 + Scope 2 Location-Based	0.90	0.23	0.27	0.11	0.50

Lundin Mining's total combined Scope 1 and Scope 2 (location-based) GHG emissions intensity has been maintained at the recalculated 2015 level of 0.5 tonnes CO₂e per tonne of concentrate produced. Similar to energy consumption rates, the GHG emissions intensity level at each operation reflects its individual situation. The Scope 1 GHG emissions intensity of Candelaria is highest due to diesel consumption associated with its predominant open-pit mining activity and its Scope 2 emissions intensity is highest due to the electricity required to process the relatively low-grade ore in comparison to our other operations. Zinkgruvan's GHG emissions intensity benefits from the favourable location-based emission factor for the electricity supply, while Eagle's emissions are affected by the highest location-based electricity emission factor out of all our operations.

Scope 3 Emissions

As a step toward tracking some emissions associated with our value chain, we calculate Scope 3 emissions from fuel used by contractors for transport of our concentrate product and for the import of some of our main raw materials, some of our wastes, and some personnel transport off-site. The emissions are determined based upon fuel consumption data supplied to us by contractors.

Our calculated Scope 3 emissions were 26,302 tonnes CO₂e in 2016, of which 23,465 tonnes CO₂e was attributed to fuel used by contractors for concentrate product transport to port.



Environmental Management

Energy Conservation Measures and GHG Emission Reduction

At Lundin Mining, our operations have increased their focus in 2016 on identifying opportunities to improve energy efficiency and assess the potential to use energy sources with lower emissions. Our aim is to maintain or reduce our overall GHG emissions intensity.

During 2016, our operations have begun to work on systems to enhance data collection around their energy/GHG emission reduction initiatives. Our reductions in energy consumption are calculated based on an estimate of the annual saving of fuel or electricity to be gained through each energy reduction initiative fully implemented by the end of 2016. The methodologies for

estimating the energy savings vary across our sites, depending on the nature of the initiatives. The associated GHG emissions reductions are calculated based on the estimated annual saving of fuel or electricity. In a number of cases, the decision was made to implement an initiative without transparent estimates of the savings – in these cases, we do not quantify the savings. In 2017, LMC will be undertaking a review of energy data collection practices and addressing any gaps.

Energy reduction initiatives for 2016 and, where data allow, estimated energy and GHG emission savings for initiatives fully implemented at the end of the reporting period are described for each operation.

Operation	Energy Reduction Initiatives
Candelaria	<ul style="list-style-type: none"> Specialized internal technical team, supported by specialized consultants, to progress the identification and implementation of energy efficiency opportunities Early-stage energy/GHG emission reduction assessment projects initiated, including the potential to use an additive to atomize fuel molecules in the combustion chamber and reduce fuel consumption in the mining fleet, a solar heating system for the dressing rooms, and potential for reuse of wood and residual oil Implementation of energy/GHG emission reduction projects commenced, including gradual replacement of lighting above and below ground
Eagle	<ul style="list-style-type: none"> Eagle Mine retains a Continuous Improvement Lead and has established a Continuous Improvement Steering Committee to evaluate and implement selected staff-provided recommendations, including energy reduction initiatives Early-stage energy/GHG emission reduction assessment projects initiated, including modifications at the mill site designed to reduce energy consumption Implementation of 12 energy-saving projects completed in 2016 across the mine and mill sites, including energy efficient lighting and timers, modifications to improve efficiency of ceiling fans, reduction of Company fleet/commuting, modifications to process circuit to allow by-pass and associated shut-down of certain components at times, and a change from treated to untreated well-water in the water truck, reducing water treatment energy Data available for three of the 12 fully implemented initiatives indicate an estimated annual saving of 17,918 GJ of energy, with a resulting annual GHG emissions saving of 3,785 tonnes CO₂e

Operation	Energy Reduction Initiatives
Neves-Corvo	<ul style="list-style-type: none"> Neves-Corvo retains a Continuous Improvement Director to evaluate and implement energy reduction initiatives Early-stage energy/GHG emission reduction assessment projects initiated, including changes to lighting above and below ground, and power cable retrofit in the process plant Implementation of energy/GHG emission reduction projects commenced, including retrofit in the process plant Implementation of three energy-saving projects completed in 2016, including improving operational efficiency for mine ventilators, a mine site air compressor leak detection program, and reactive power compensation in the process plant Data available for the three fully implemented initiatives indicate an estimated annual saving of 4,674 GJ of energy, with a resulting annual GHG emissions saving of 409 tonnes CO₂e
Zinkgruvan	<ul style="list-style-type: none"> Early-stage energy/GHG emission reduction assessment projects initiated, including changes to lighting above and below ground, installation of lighting timers/movement detectors, and regulation of heating Implementation of four energy-saving projects completed in 2016, including enhancement of the switch made in 2015 from gas oil heating to renewable energy by adding a bio-pellet burner for use in conjunction with the bio-oil burner, further insulation of building rooves, recycling of process heat, and changes to light fittings above ground Data available for three of the four fully implemented initiatives indicate an estimated annual saving of 6,800 GJ of energy with a resulting annual GHG emissions saving of 16 tonnes CO₂e



Knalla Mine Museum Tours, Zinkgruvan



Aerial View of Mine Portal, Eagle



Environmental Management



Dust Control, Candelaria

Air Emissions

Eagle and Neves-Corvo are the only Lundin Mining sites with regulated nitrogen and sulphur oxides (NO_x/SO_x) air emissions. Eagle Mine complies with the US Environmental Protection Agency regulations by adhering to operational use (hours per year) restrictions on its stationary engines; the site also calculates emissions from some point sources. At Neves-Corvo, samples are analysed from two boilers, for a suite of parameters; in 2016 all samples were in full compliance with permitted limits. Candelaria also calculates emissions from point sources.

NO_x and SO_x from Point Sources

	NO _x (kg/year)	SO _x (kg/year)
Candelaria	2,376	0
Eagle	18,859	839
Neves-Corvo	125	3

Management of particulate emissions is particularly important for mining operations, the surrounding communities, and the environment. All our operations have controls and procedures in place to

manage emissions of particulates both within and beyond our project boundaries, with associated monitoring to allow the effectiveness of controls to be routinely assessed, and adjusted, if required.

Our operations manage particulate emissions using proven techniques that are typical at mining operations worldwide. These include application of water on unpaved roads and operations areas by sprinkler trucks (both above and below ground); wheel washes and sweeping of paved areas; water sprays following blasting and on open-pit working faces; sprinkler systems at ore passes, dumping bays, loading bays, and stockpile areas; dust capture systems and air filters in indoor areas; application of water on tailings facility embankments; addition of binding agents to stabilize surfaces; and covering of concentrate for transport. Documented procedures and associated training of personnel as to the circumstances under which action is required are critical to the effectiveness of these measures.

Particulate emissions (and in the case of some sites, metal concentrations therein) are regulated at all of our sites, either at the emission source, in the receiving environment in ambient air, or

as deposited particulates. Our mining operations conduct routine monitoring to assess regulatory compliance. In addition to compliance monitoring, particulate matter is routinely measured to assess any impact from Neves-Corvo's operations in the neighbouring villages of Graça, Corvo, and Neves. Candelaria monitors particulates in the communities of Tierra Amarilla, Caldera, and Nantoco. The data from these monitoring stations represent the cumulative effect of a range of sources of particulates in the region, including from other mines and a smelter. The Tierra Amarilla and Caldera monitoring stations are official "Community Status" stations for the authorities, and the newer Nantoco station will also be designated as such in 2017.

In 2016, all our operating mines were in full compliance, with particulate emissions measured below permitted limits. Occasional exceedances of limits were recorded at the off-site Tierra Amarilla and Nantoco stations by Candelaria. These were reported to the authorities but were not considered to be non-compliances, due to the contribution of other non-Candelaria Complex local sources of particulates to these monitoring stations within the community.

Noise and Vibration Emissions

Lundin Mining continued to manage noise and vibration emissions from our sites throughout 2016. With the exception of noise "disturbance" criteria at Neves-Corvo and vibration monitoring at Zinkgruvan, all sites were in full compliance with regulated limits throughout 2016.

Operation	Noise and Vibration Management and Monitoring
Candelaria	<ul style="list-style-type: none"> Conducts and coordinates annual monitoring of noise and vibration based on Chilean legal requirements and in accordance with the provisions of the project licence, with the addition of seven new monitoring sites in 2016 Blasting schedules are communicated to the community, and monitoring is conducted within the community to monitor the effects of noise and vibration from blasting operations
Eagle	<ul style="list-style-type: none"> Activities generating noise are performed within closed buildings Annual noise and vibration surveys are conducted for comparison to baseline
Neves-Corvo	<ul style="list-style-type: none"> Noise mitigation works were conducted at two more ventilation shafts, achieving a mean reduction of 5dB for one shaft and 7dB for the other Noise monitoring is conducted in the villages surrounding the mine surface operations; the operation was in full compliance for the day-time and night-time Maximum Exposure Criteria noise limits Monitoring demonstrated that although a reduction in noise emissions had been achieved this year, the "disturbance" criteria were exceeded at three locations in Graça and Corvo in September 2016; full "disturbance" criteria compliance was achieved at Neves Works are planned with the aim of achieving further noise emission reductions Vibration monitoring at the surface is conducted monthly to measure the effects of the blasting underground; the operation was in full compliance with permitted limits
Zinkgruvan	<ul style="list-style-type: none"> Measurements of noise emissions are performed at six monitoring locations and the resulting noise data are supplied to the authorities Improvements in recent years have enabled the operation to achieve full compliance for noise emissions in 2016 Ground vibration monitoring is conducted at four locations; the permitted limit was exceeded at one monitoring point on two occasions in 2016 and the mine is reviewing opportunities to resolve



Eagle, USA



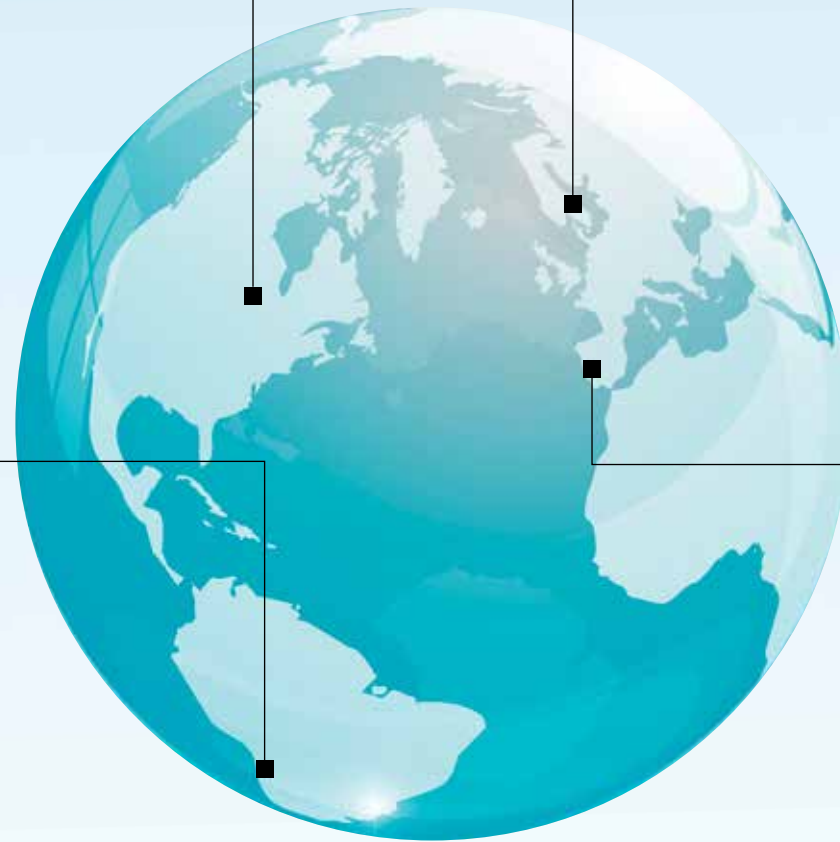
Zinkgruvan, Sweden



Candelaria, Chile



Neves-Corvo, Portugal



BIODIVERSITY

Environmental Management



Advanced Ecological Management, Eagle

BIODIVERSITY AND LAND MANAGEMENT

The loss of natural habitats in the world has become one of the major threats for biodiversity conservation. Lundin Mining contributes to biodiversity conservation through the minimization of habitat degradation and contributions to habitat restoration during the life of mine cycle. Lundin Mining's general objectives for Biodiversity Management are to:

- Implement actions for achieving similar biodiversity values after closure to those evidenced prior to the site's development (the no-net loss of biodiversity values approach)
- Establish priorities for habitat restoration during the planning phase of mine closure
- Promote the sustainable management of living natural resources by fostering partnerships that seek to integrate conservation needs and development priorities

Only one of our sites lies adjacent to a formally designated protected area or High Biodiversity Value Area. Neves-Corvo's land in Portugal is adjacent to the Oeiras River, a High Biodiversity Value Area integrated in the Guadiana Valley Natural Park as part of the European Natura 2000 network. Conservation of the Oeiras River habitat is one of the highest environmental priorities for Neves-Corvo. There are no protected or High Biodiversity Value Areas within or adjacent to our Candelaria, Eagle, or Zinkgruvan sites.

Lundin Mining's Group Procedure for Biodiversity Management was issued in 2015 and, since that time, all four of our operational sites have been in process of aligning their existing Biodiversity Management Plans to the new Group Procedure, a requirement of which is to prepare and update their Biodiversity Action Plans on an annual basis. As part of this process, existing plans are being upgraded to require a more comprehensive understanding of ecological relationships within the various ecosystems. This process will result in enhanced monitoring programs and will allow our operations to plan, and manage effectively, a range of habitat interventions.

Habitats hosting two critically endangered and nine endangered species from the International Union for Conservation of Nature (IUCN) Red List, national and regional conservation lists, are located in areas influenced by Lundin Mining's operations in Chile (Candelaria), Sweden (Zinkgruvan), and Portugal (Neves-Corvo).

IUCN Red List Species, National or Regional Conservation List Species, With Habitats in Areas Where Lundin Mining Has Operations

Extinction Risk	Critically Endangered	Endangered	Vulnerable	Near Threatened	Least Concern
Total Number of Species	2	9	26	17	39
Operations (no. of species)	Neves-Corvo (2)	Candelaria (2) Neves-Corvo (6) Zinkgruvan (1)	Candelaria (16) Eagle (3) Neves-Corvo (5) Zinkgruvan (2)	Candelaria (7) Neves-Corvo (2) Zinkgruvan (8)	Candelaria (17) Eagle (6) Neves-Corvo (15) Zinkgruvan (1)

Critically Endangered:

- Neves-Corvo: Common Snipe (*Gallinago gallinago*), European Roller (*Coracias garrulus*)

Endangered:

- Neves-Corvo: Black-bellied Sandgrouse (*Pterocles orientalis*), Black-crowned Night Heron (*Nycticorax nycticorax*), Bonelli's Eagle (*Hieraaetus fasciatus*), Golden Eagle (*Aquila chrysaetos*), Purple Heron (*Ardea purpurea*), Gull-billed tern (*Gelochelidon nilotica*)
- Candelaria: Guanaco (*Lama guanicoe*) (mine area), Marine Otter (*Lutra felina*) (port facilities)
- Zinkgruvan: European Ash (*Fraxinus excelsior*)



Program for Relocation of Native Species, Candelaria



Environmental Management



Underwater Sediment Sampling, Candelaria

Water Discharge and Aquatic Biodiversity

A high priority for all Lundin Mining's operations is the implementation of robust facilities and procedures for the management of all discharges to minimize effects on aquatic biodiversity, with comprehensive monitoring for timely detection of any changes to aquatic biodiversity that might be attributed to our activities.

No water bodies or related habitats have been significantly affected by water or run-off discharges at Candelaria (ocean discharge) or Eagle. Coastal marine monitoring by Candelaria has continued to demonstrate that no negative impacts upon biodiversity have been recorded since the mine and port operations commenced. At Eagle's mill site, the receiving water body from the water treatment plant discharge is a wetland adjacent to the Escanaba River, which eventually discharges into Lake Michigan. Though not confirmed, the discharge likely accounts for at least 5% of the annual average water volume in the wetland. The wetland is not protected, does not contain any protected or endangered species, and does not have significant habitats or a high biodiversity value. Eagle's permit limits the total volume of water that can be discharged to this wetland so as not to overwhelm the plant community

and exceed recommended water levels for the health of the vegetation. At Eagle's mine site, Lake Superior, adjacent to the Upper Peninsula, is the final receiving water body for the treated mine site water following its injection to groundwater. Monitoring work is routinely undertaken and will be continued throughout operations, closure, and post-closure.

A localized and reversible impact on biodiversity, resulting from Neves-Corvo's past water discharge into the Oeiras River, has been monitored for several years, as reported in previous sustainability reports. Although the discharge is now fully treated and meets all the regulatory requirements, species loss was previously recorded along a stretch of the water course during the past discharge period. The Oeiras River is a designated High Biodiversity Value Area and considerable investment has been made at Neves-Corvo in recent years to upgrade its water management system and reduce any potential future impacts on the Oeiras River. The dual focus has been to improve the quality of the discharge to the Oeiras River through optimization of water treatment, and to increase water storage capacity to allow greater control over the amount of water discharged and the period over which discharge is required. Crucially, the improved system allows discharge to be suspended during times when there is low or no flow in the river.

Biomonitoring in the Oeiras River continued in 2016, with the assistance of external professionals from the Coimbra, Aveiro, Porto, and Lisbon Universities. Neves-Corvo's strategy for the conservation of biodiversity is to preserve areas with no impact; improve conditions in areas with low impact; improve conditions in areas that have experienced high impact, after removal of the cause; and in areas where impacts cannot be avoided, create new habitats or improve the conditions of existing habitats in areas without impact. This work was successfully continued throughout 2016.

Discharge from our operation at Zinkgruvan enters the Ekershyttebäcken Creek, a 4-kilometre-long creek that has received water from the mine for more than 100 years. Lake Hemsjön and Björnbäcken Creek also receive run-off from the tailings facility and they form part of the Hättorpsån water body, where management of the quality of the aquatic environment is regulated. A series of water quality and ecotoxicology studies, which commenced in 2015, continued during 2016 to assess the potential, if any, for long-term risks to the aquatic community. As more data become available, the requirement for any water management modifications will be determined and implemented.

A summary of some of the more significant biodiversity management actions implemented, and our engagement activities for biodiversity conservation, are summarized site by site:

Operation	Biodiversity Management and Monitoring Activities
Candelaria	<ul style="list-style-type: none"> • Extensive biodiversity and marine monitoring programs at mine and port sites, respectively • Desert flora and fauna monitoring programs periodically conducted and reported to the authorities • Coastal marine monitoring program conducted to assess potential impacts upon aquatic life and fish resources from the desalination plant's seawater discharge and from the port facilities and concentrate shipment • Relocation of species of cactus and reptiles from the tailings facility project sector for the dual purpose of protection and restoration, extending to an area of 100 hectares
Eagle	<ul style="list-style-type: none"> • Annual flora, fauna, aquatics surveys, and threatened and endangered species assessments at the mine and mill sites and surrounding areas. Comparison of results to baseline data to assess any changes that could be the result of mining operations. • Rigorous management of discharges to ensure the downstream water environment and the ultimate receiving water bodies for the discharges from the mill site (Lake Michigan) and the mine site (Lake Superior) are not adversely impacted
Neves-Corvo	<ul style="list-style-type: none"> • Routine monitoring of flora and fauna (birds, mammals, reptiles, amphibians), air, and water quality • Soil remediation and biomonitoring initiatives (including aquatic macroinvertebrates, fish, and shellfish) in partnership with the University of Lisbon and Coimbra University • Partnership with Natural Park of the Guadiana Valley Authority (PNVG) in managing riparian habitats in the Vascão River to assist in the preservation of Saramugo – <i>Anaocypris hispanica</i> (a threatened fish species); Vascão River is a tributary of the Guadiana River and is classified as a Site of Community Interest – Guadiana, and as a Wetland of International Importance (Ramsar Convention) • Working with the League for the Protection of Nature to support an application to the LIFE + program that will contribute to the conservation of three endangered species of bird prioritized by the European Union: Bustard, Lesser Kestrel, and Little Bustard • Working with Institute for the Conservation of Nature and Biodiversity/PNVG to support several projects and management planning for the Guadiana Valley • Development of an Emergency Protocol to safeguard the Red Listed mollusc species <i>Unio tumidiformis</i> in Oeiras River in collaboration with Coimbra and Évora Universities and with PNVG • Further studies to evaluate the feasibility of applying Best Available Techniques in the treatment/management of water discharged to the Oeiras River
Zinkgruvan	<ul style="list-style-type: none"> • Development of species inventories for areas adjacent to operations for classification in terms of natural values and biodiversity • Mitigation measures to protect flora species in an area of high natural value adjacent to the footprint of the new tailings facility, including relocation of a Swedish protected orchid (<i>Dactylorhiza incarnata</i>) to a nearby sheltered area, with proposed management and monitoring from 2017 to 2019 • Commitment to transferring water from Lake Viksjön to maintain the flow rate in a creek that flows through a valley of high natural value and is at risk of reduced flow rate due to the expansion of the tailings facility • Nearby lakes are of high cultural value and, as such, the operation considers it to be a key priority to ensure these lakes are not adversely impacted

Environmental Management



Aerial View of Surrounding Environment, Eagle

Land Management

At the beginning of 2016, Lundin Mining was managing 4,805 hectares of land that we own or lease, occupied by our mining and processing activities, and associated infrastructure. This exceeds the 3,179 hectares previously reported for the close of 2015 due to a shortfall in our previous data, with the land occupied by the Ojos del Salado operations at the Candelaria Mine Complex being inadvertently excluded. This has been rectified for 2016 reporting. At the close of 2016, Lundin Mining was managing 5,527 hectares, Candelaria being the main contributor to the balance, with 4,688 hectares.

Land Management (Hectares)

	Candelaria	Eagle	Neves-Corvo	Zinkgruvan	Total
Total land disturbed and not yet rehabilitated (Opening Balance)	3,906	55	670	175	4,805
Total amount of land newly disturbed within the reporting period	782	0	0	6	788
Total amount of land newly rehabilitated within the reporting period to the agreed-upon end use	0	0	66	0	66
Total land disturbed and not yet rehabilitated (Closing Balance)	4,688	55	603	181	5,527

In 2016, newly disturbed land resulted from the construction of the new TMF at Candelaria and the TMF expansion at Zinkgruvan. At Neves-Corvo, 66 hectares were rehabilitated as part of a progressive landscape recovery scheme at the operation's Areeiro quarry.

CLIMATE CHANGE ADAPTATION

Risks and opportunities associated with climate change at our operations have been considered in accordance with the IPCC Special Report on Emission Scenarios 2000 A1B, which considers a balance across all sources of climate change. The potential influence of these changes on our operations, and our approach to reducing and/or mitigating these influences, is described below.

Candelaria is located in Copiapó, the southern part of the Atacama Desert in Chile. The area is arid with an annual average rainfall of 15 mm/year and an annual average temperature of 16°C. The mine operations' water requirement is supplied from desalinated seawater and treated municipal waste water. The climate change model shows a reduction of 10% in precipitation and an increase of 3°C in temperature over the next 80 years. The changes will produce an increase in evaporation rates, which will

require an additional amount of water for the process. The existing water supply capacity and the high water-use efficiency in Candelaria allows the mine to manage this forecast scenario in conjunction with recurrent tracking and evaluation of the water management performance.

The Eagle Mine is located in the Upper Peninsula of northern Michigan, in the United States. The mine and mill area have an annual precipitation average of 775 mm/year and an annual snowfall average of 300 cm/year. According to the climate change model, an increase of 10% in the rates of precipitation and snowfall is expected in the next 80 years. Based on Eagle's estimated life of mine and the design of its water management facilities, no change in the operation is expected.

The Neves-Corvo underground mine is located in a semi-arid region in southern Portugal, with seasonal precipitation patterns averaging 500 mm/year. The climate change model shows that reduced rainfall (from 10% to 20% in

the next 80 years) and increased evaporation in the summer months will likely result in a reduction of the fresh water source, the Santa Clara Reservoir. In addition, some modifications in precipitation patterns and rain intensity are forecast. Neves-Corvo continues to intensify its efforts to minimize the consumption of fresh water by maximizing process water recycling and by optimizing water management circuits and balances at the mine.

The Zinkgruvan Mine is located in south-central Sweden. According to the model, surface temperatures are expected to rise by 3–5°C and precipitation is expected to increase by 20% in the next 80 years. During the summer months, the climate is expected to be warmer and drier, particularly in southern Sweden. As part of the preliminary studies for the new Enemossen tailings facility construction, a review of the existing water balance was performed to evaluate the inclusion of additional water management strategies.



Environmental Management



Aerial View of Wetland, Galmoy

MINE CLOSURE

Lundin Mining takes a responsible and integrated approach to mine closure planning, with the principal aim being to design, develop, and operate our facilities to minimize their overall social and environmental impact and take into consideration their eventual closure. All four of Lundin Mining's operational sites and three closed sites have approved mine closure plans (MCPs), as required by Lundin's Group Procedure for Mine Closure Planning. The MCPs are developed to a level of detail that reflects the stage of each mine's lifecycle, and they are updated at least every five years, or when required due to operational changes. During 2016, both Candelaria and Neves-Corvo reviewed and initiated updates to their MCPs.

Our updated Group Procedure for Closure (2015) requires use of a risk-based approach to closure planning and definition of site-specific closure objectives and completion criteria for each operation. Stakeholder participation is integral to our closure planning process. Our closure plans are required to address legal obligations and corporate commitments, financial provision, community interests, the environment, and employees' expectations once the mine is closed. In general, the updated Group Procedure involves the definition of post-closure land uses, public safety, chemical and geotechnical stability, no net loss of biodiversity, post-closure monitoring and aftercare, post-closure land ownership and tenure, temporary closure, and unplanned premature closure.

Progressive restoration forms a key part of our closure planning process, being integrated into the operational mining plan where feasible. A total of 66 hectares of land were rehabilitated at Neves-Corvo's quarry site in 2016.

Lundin Mining has implemented financial provisions for mine closure in accordance with legal requirements and the Company's commitments and standards. The closure-related financial provisioning and accrual details are provided in Lundin Mining's latest Annual Information Form (www.lundinmining.com/i/pdf/2016-AIF.pdf).

Lundin Mining has been actively managing three closed mines during 2016. All our closure activities are aligned with our commitment to achieve post-closure biodiversity values, wherever possible, that are equivalent to pre-operations in our habitat restoration programs.

The formerly owned Galmoy Mine was an underground zinc and lead mine, located in south-central Ireland in County Kilkenny, acquired by Lundin Mining in 2005. Mining commenced in 1995 and continued until 2009, when the Mine Closure Plan was implemented due to economic reasons. Operations in the mine wound down on a phased basis and the implementation of the Mine Closure Plan encompassed the decommissioning, dismantling, and sale of the processing plant (2009); the dismantling of surface facilities; and decommissioning of the underground workings (2012). Progressive rehabilitation of the TMF was an integral part of the planned decommissioning. The attainment of a self-sustaining ecosystem on the disturbed lands, including the tailings facility, was contingent upon the development of a physically, chemically, and biologically stable system founded upon habitat, species, and community diversity, as well as the restoration of areas affected by mining above and below ground.

The construction of the Passive Water Treatment System was completed in October 2014, including the successful seeding and full development of the wetland's aquatic reeds by the end of spring of 2015.

The mine closure and restoration works at Galmoy were completed during 2015 in accordance with the approved Mine Closure Plan. Completing years of restoration work, the final 12 hectares of the former mine site were successfully rehabilitated, with the TMF water discharge meeting the Irish EPA permit conditions or below detection, allowing it to be discharged to the Glasha stream. Seasonal discharge commenced in December 2015 and continued until May 2016. There was no discharge for the remainder of 2016.

The closure process at Galmoy was supported by the formation of a Mine Closure Committee, consisting of key government stakeholders, to discuss the mine closure in an open and transparent manner. The committee met regularly to discuss the progress of the implementation of the approved Mine Closure Plan. Galmoy Mine's Exit Audit was approved by the EPA in October 2015 and approval of the successful completion of the Mine Closure Plan was granted by the EPA in August 2016.

Galmoy successfully demonstrates progressive mine closure under modern European legislation and encompasses several remedial strategies and technologies. In 2016, Lundin Mining continued to implement the monitoring and aftercare phase of the Mine Closure process. LMC received a Green Apple award for the rehabilitation and remediation works at Galmoy in November 2016. It is noted that the former Galmoy Mine was divested by LMC in early 2017.

The previously-closed Vueltas del Rio Mine in Honduras was acquired by Lundin Mining as part of the Rio Narcea purchase in July 2007. This open-pit, heap leach gold mine operated between 2001 and 2004. The active phase of the approved Closure Plan was commenced in 2012 and concluded in mid-2014. From mid-2014 and for the next three years, a phase of maintenance and monitoring works is underway. By the end of 2016, approval was received from the authorities that the re-vegetated areas had achieved the closure criteria required in the mine Closure Plan. Similarly, monitoring conducted in 2014 confirmed that the fauna at the mine site had recovered to pre-mine conditions; further monitoring will be continued. A compliance audit conducted in Q4-2016 by a certified, local environmental consultant concluded that the project had achieved a high level of compliance with the mine Closure Plan commitments. Internal monitoring programs have verified that the drainages from Vueltas del Rio Mine footprint are not having a negative impact on the water quality of the receiving water body, the Chamelecon River. Improvements to, and maintenance of, the Passive Treatment System (sediment and vegetation cleaning) continue. Re-vegetated areas are maintained and assist in fire protection for the area. A proposal for a social development plan, including consideration of artisanal mining, was prepared by the Company in 2016. Future developments related to the outcomes of this plan will be reported accordingly, once available.

The Storliden Mine in northern Sweden was closed in 2008, with disposal of all waste rock underground, sealing of the access drift, and removal of surface structures. Following investigations in the last quarter of 2013, Lundin Mining committed to the design and implementation of improvements to surface water management at the site, with additional re-vegetation of the closed industrial area. Effective communication and engagement with the local stakeholders has been implemented and maintained to ensure transparency during the process. Following the above-mentioned improvements implemented during 2014, additional removal of soil (2,500m³) from the former mine access road was undertaken in 2015. A study conducted to assess the impacts of residual road material on nearby bodies of surface water demonstrated these impacts to be negligible; the results of the investigation were submitted to the local authorities. Environmental monitoring to assess the effectiveness of remedial activities performed to date at Storliden will continue beyond 2016. While neither widespread nor extensive remediation is anticipated at the closed mine site, localized and focused remediation may be undertaken subject to outcome of discussion with the local authorities.

In addition to the mine sites undergoing active closure, Zinkgruvan monitors the nearby Åmmeberg historical operating site, where mining activities commenced in 1857. The original ore processing facilities from Zinkgruvan were not located at the mine site, as they are today, but were located 10 km away at Åmmeberg, situated adjacent to Lake Vättern. In the past, the tailings were pumped by historical operators directly into Kärrafjärden, an arm of Lake Vättern. In 1977, the concentrator at Åmmeberg was closed and, following discussions with the regulatory authorities and other stakeholders on the preferred approach for the restoration of the old disposal area, plans were put in place to develop most the land area into a golf course. Since 2004, when Lundin Mining became owner's of Zinkgruvan, the Company has been active working with local and regional authorities to perform extensive sampling and to address residual historical subsurface impacts of legacy mining operations at Åmmeberg. A human and environmental risk assessment was prepared by qualified consultants and reviewed with the local authorities in March, 2014. Since this review, additional areas of investigation to address localized subsurface impacts at Åmmeberg have been undertaken in coordination with the project's stakeholders, including property owners and the regulators and members of the community. In other ongoing activities, Zinkgruvan continues to participate in a multidisciplinary and multi-sponsored program of monitoring for a range of environmental parameters in Kärrafjärden Bay.

Appendix A

KEY PERFORMANCE DATA

Metal Production Statistics (contained metal)

Copper (tonnes)

	2016	2015	2014
Candelaria (80%)	133,274	144,832	22,872
Eagle	23,417	24,331	3,905
Neves-Corvo	46,557	55,831	51,369
Zinkgruvan	1,906	2,044	3,464
Aguablanca	–	6,221	7,390
Total	205,154	227,038	81,610

Nickel (tonnes)

	2016	2015	2014
Eagle	24,114	27,167	4,300
Aguablanca	–	7,213	8,631
Total	24,114	34,380	12,931

Zinc (tonnes)

	2016	2015	2014
Neves-Corvo	69,527	61,921	67,378
Zinkgruvan	78,523	83,451	77,713
Total	148,050	145,372	145,091

Gold (ounces)

	2016	2015	2014
Candelaria (80%)	78	82	13
Total	78	82	13

Lead (tonnes)

	2016	2015	2014
Neves-Corvo	4,126	3,077	3,192
Zinkgruvan	31,661	34,120	32,363
Total	37,803	37,197	35,555

Silver (ounces)

	2016	2015	2014
Candelaria (80%)	1,332	1,499	254,400
Eagle	223	210	22
Neves-Corvo	1,242	1,329	1,305,612
Zinkgruvan	2,159	2,542	2,467,729
Total	4,956	5,580	4,027,763

LMC STAFFING SUMMARY

Candelaria

	2016	2015	2014
Total Employees	1552	1439	1417
Male	1401	1308	1286
Female	151	131	131
Employee Turnover	3	2	3
Non-Managerial workforce covered by collective bargaining agreements	83	59	84

Eagle

	2016	2015	2014
Total Employees	190	190	209
Male	159	157	173
Female	31	33	36
Employee Turnover	5	12	15
Non-Managerial workforce covered by collective bargaining agreements	0	0	0

Neves-Corvo

	2016	2015	2014
Total Employees	1042	1040	1058
Male	936	940	955
Female	106	100	103
Employee Turnover	5	0	3
Non-Managerial workforce covered by collective bargaining agreements	100	100	100

Zinkgruvan

	2016	2015	2014
Total Employees	368	368	378
Male	305	304	313
Female	63	64	65
Employee Turnover	8	5	5
Non-Managerial workforce covered by collective bargaining agreements	100	100	100

Exploration

	2016	2015	2014
Total Employees	17	17	41
Male	13	13	35
Female	4	4	6
Employee Turnover	6	246	0
Non-Managerial workforce covered by collective bargaining agreements	0	0	0

Corporate Offices

	2016	2015	2014
Total Employees	51	49	38
Male	23	24	20
Female	28	25	18
Employee Turnover	16	29	27
Non-Managerial workforce covered by collective bargaining agreements	0	0	0



Independent Assurance Statement



INTRODUCTION AND OBJECTIVES OF WORK

Bureau Veritas North America, Inc. (Bureau Veritas) was engaged by LMC Mining Corporation (LMC) to conduct an independent third party assurance of select sustainability information presented in its 2016 Sustainability Report (the Report) for the calendar year ending in December 2016. This Assurance Statement applies to the related information included within the scope of work described below. The intended users of the assurance statement are LMC's management and stakeholders of LMC. The overall objective of the assurance process was to provide assurance on the accuracy, reliability and objectivity of LMC's Report for the specific key performance indicators (KPIs) covered by the scope of work (below).

The information that was assured and its presentation in the Report are the sole responsibility of the management of LMC. Bureau Veritas was not involved in the drafting of the Report. Our sole responsibility was to provide independent assurance on the selected KPIs.

ASSURANCE STANDARD APPLIED

The assurance engagement was performed in accordance with AccountAbility's AA1000AS-2008 standard and was conducted to meet the AA1000AS Type II moderate level requirements.

SCOPE OF WORK

LMC requested Bureau Veritas to include independent assurance the following KPIs covering the calendar year 2016 reporting period:

- Safety – total recordable injury frequency rate (TRIF) and lost time injury frequency rate (LTIF);
- Total amount of water withdrawn from all sources;
- Total amount of water discharged;
- Energy consumption within LMC's operations including electricity, liquid fuels and gaseous fuels;
- Greenhouse gas emissions – Scope 1, Scope 2 (location and market based);
- Stakeholder Grievances filed during the year;
- Stakeholder engagement as it relates to AccountAbility's AA1000AS (2008)¹ principles of inclusivity, materiality and responsiveness.

A table listing the reported and assured data is attached to this statement.

Excluded from the scope of our work is any assurance of information relating to:

- Performance indicators and text in the report not indicated above; and
- Activities outside the defined assurance period of calendar year 2016.

METHODOLOGY

Bureau Veritas undertook the following activities:

1. Interviews with relevant personnel of LMC (including managers and staff members at the corporate and site level);
2. Interviews with selected external stakeholders of LMC;
3. Review of internal and external documentary evidence produced by LMC;
4. Audit of select KPI data presented in the Report including a detailed review of samples of data;
5. Site visit to the Eagle Mine located near Marquette, Michigan, USA.
6. Visit to LMC office in Haywards Heath, UK, where sustainability data is collected, aggregated, analyzed and reviewed for quality and accuracy;
7. Review of LMC data and information systems for collection, aggregation, analysis and internal verification and review; and,
8. Review of the Report as it relates to the assured KPIs.

The work was planned and carried out to provide a moderate level of assurance and we believe it provides a sound basis for our conclusions.

FINDINGS AND CONCLUSIONS

On the basis of our methodology and the activities described above, it is our opinion that:

- The information and data related to the KPIs identified in the scope of work that are included in the Report are accurate, reliable and free from significant error, material mistakes or misstatements.
- The Report provides a fair representation of LMC's activities as it relates to our scope of work over the reporting period.
- LMC has established appropriate systems for the collection, aggregation and analysis of relevant information, and has implemented underlying internal assurance practices that provide a reasonable degree of confidence that such information is complete and accurate.
- The Report adequately reflects the organization's alignment to, and implementation of the AA1000AS (2008) principles of Inclusivity, Materiality and Responsiveness in its operations (further detail is provided below).
- LMC has processes in place for consulting and engaging with its key stakeholders in a structured and systematic manner.
- LMC's has processes in place for recording and managing grievances through to their resolution.

ADHERENCE TO THE PRINCIPLES OF AA1000AS

As required by the AA1000AS (2008) standard, outlined below are our observations relating to LMC's adherence to the principles of inclusivity, materiality and responsiveness.

Inclusivity

LMC's Responsible Mining Policy and Stakeholder Engagement Standard outlines the company's commitments regarding communities, stakeholders and external engagement. LMC's Stakeholder Engagement Standard and supporting Stakeholder Engagement Corporate Procedure (Stakeholder Engagement Guidance document) provides the minimum requirements for sites to identify and engage with groups and individuals who may be impacted by company activities. Bureau Veritas observed implementation of external stakeholder engagement during our discussions with external stakeholders and LMC employees during our visit to the Eagle Mine. LMC's approach

to stakeholder engagement, a list of stakeholder groups and the key interests and concerns of each stakeholder group are described in the Stakeholder Engagement section of the Report. Our observations indicate that LMC takes Stakeholder concerns into consideration and has adequately addressed the inclusivity principle in its operations and the 2016 Report.

Materiality

LMC commissioned a materiality assessment during 2015 that included identifying issues of importance for external stakeholders and internal LMC representatives. LMC conducted an internal review of material aspects during 2016 and accepted the aspects previously identified in 2015. LMC also identified other additional issues that, while not deemed to be material to the business, were identified as issues of interest to some of their stakeholders. These additional issues were Human Rights, Biodiversity and Product Stewardship. The Report included a discussion of these identified issues and is organized to align with the issues determined to be material to LMC's business and stakeholders. Based on our site visit to Eagle Mine, interviews with external stakeholders and LMC employees, LMC has adequately addressed the materiality principle in its operations and the 2016 Report.

Responsiveness

LMC has developed requirements and systems to respond to stakeholder issues such as grievances and complaints in their Stakeholder Engagement Procedure (Guidance) document. The Stakeholder Engagement Standard and associated Stakeholder Engagement Guidance document requires sites to have a Stakeholder Communication and Engagement Plan and a Grievance Mechanism in place to identify, track and respond to concerns raised by stakeholders both formally and informally. Bureau Veritas observed the implementation of Stakeholder Engagement Guidance and the Grievance Mechanism through our discussions with external stakeholders and LMC employees during our visit to the Eagle Mine, and through review of internal reports. Responses to stakeholder concerns were found to be timely and complete based on observations made at the Eagle Mine and reviews of internal reports. Based on our review, we conclude that LMC has adequately addressed the responsiveness principle in its operations and the 2016 Report.

¹ Published by AccountAbility: The Institute of Social and Ethical Accountability

Independent Assurance Statement



KEY OBSERVATIONS AND RECOMMENDATIONS FOR 2016

- LMC showed continued improvement in safety performance. This is evident based on improvement in TRIF and LTIF from 2014 to 2016, and having zero fatalities in 2016 compared to one in 2015. The company's commitment to a safe workplace is evidenced by the inclusion of health and safety as the first principle in their Responsible Mining Policy.
- LMC's commitment to Stakeholder Engagement was evident during our visit to the Eagle Mine. Although Bureau Veritas has not visited other LMC Mines, LMC may consider using Eagle Mine's processes and procedures in Stakeholder Engagement as a model to strengthen this area at other LMC mines.
- A lack of site-specific written protocols and procedures for tracking various performance data such as water consumption, water discharge and energy consumption, as well as manual handling of data, was observed at the Eagle Mine. Although these data were found to be tracked and accurately reported, the reduction of manual handling of data and the development of site-specific written documentation for data collection methods will help ensure continued consistent data management in the future and will be helpful in the event of employee turnover.
- Based on our visit to the Eagle Mine, performance data are tracked and reported internally and management has weekly and quarterly meetings to review KPIs and related trends. However, the mine sites appear to report select KPIs to corporate only on a yearly basis. More frequent reporting of KPIs to corporate should be considered to allow identification of trends and implementation of opportunities for improvement throughout the year.

STATEMENT OF INDEPENDENCE, IMPARTIALITY AND COMPETENCE

Bureau Veritas is an independent professional services company that specializes in Quality, Health, Safety, Social and Environmental management with over 180 years history in providing independent assurance services, and an annual 2016 revenue of 4.55 Billion Euros.

No member of the assurance team has a business relationship with LMC, its Directors or Managers beyond that of verification and assurance of sustainability data and reporting. We have conducted this verification independently and we believe there to have been no conflict of interest. Bureau Veritas has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities.

The assurance team has extensive experience in conducting assurance over environmental, social, ethical and health and safety information, systems and processes, has over 20 years combined experience in this field and an excellent understanding of Bureau Veritas standard methodology for the Assurance of Sustainability Reports.

Attestation:

David Reilly, Lead Verifier
Senior Project Manager
Sustainability and Climate Change Services
Bureau Veritas North America, Inc.

Lisa Barnes, Technical Reviewer
Practice Line Leader
Sustainability and Climate Change Services
Bureau Veritas North America, Inc.



Bureau Veritas North America, Inc.
Costa Mesa, California, USA
May 12, 2017



LUNDIN MINING COMPANY DATA AND INFORMATION SUBJECT TO ASSURANCE

Type	Unit	Results for 2016
Fuels and Energy		
Purchased Fuels (Scope 1)	Gigajoules	2,913,778
Purchased Electricity (Scope 2)	Gigajoules	4,536,842
Total Energy Consumption (Scope 1 and 2)	Gigajoules	7,450,620
Emissions		
Direct CO ₂ e Emissions (Scope 1)	Metric Tons CO ₂ e	234,470
Indirect (purchased electricity) CO ₂ e Emissions (Scope 2) (Location-based)	Metric Tons CO ₂ e	438,620
Indirect (purchased electricity) CO ₂ e Emissions (Scope 2) (Market-based)	Metric Tons CO ₂ e	445,924
Total Scope 1 and Scope 2 CO ₂ e Emissions (Location-based)	Metric Tons CO ₂ e	673,090
Water		
Total Water Withdrawal	Cubic Meters	37,120,492
Total Water Discharged	Cubic Meters	17,279,419
Safety		
Total Recordable Injury Frequency Rate (TRIF)	TRIF is calculated as (total number of recordable injuries (including fatalities, lost time injury, restricted work and medical treatment injury) x 200,000 hours)/ total hours worked	0.60
Lost Time Injury Frequency Rate (LTIF)	LTIF is calculated as (total lost time injuries x 200,000 hours)/ total hours worked	0.40
Stakeholder Engagement and Grievance Mechanism		
Stakeholder Engagement	NA	LMC was found to be effectively engaging with Stakeholders in adherence to the AA1000APS principles of inclusivity, materiality and responsiveness
Grievance Mechanism	NA	LMC has a functioning grievance mechanism in place and in use
Grievances Filed	Number of grievances filed during 2016 company wide	62

G4 Content Index

In Accordance with the 'Core' Option

General Standard Disclosures

DESCRIPTION	LOCATION	DESCRIPTION	LOCATION	DESCRIPTION	LOCATION	DESCRIPTION	LOCATION	
STRATEGY & ANALYSIS		ORGANIZATIONAL PROFILE		STAKEHOLDER ENGAGEMENT		GOVERNANCE		
G4-1	Statement of the most senior decision-maker of the organization	Pages 2-3	Commitments to External Initiatives	G4-25	Basis for identification and selection of stakeholders with whom to engage	Page 43	Governance Structure & Composition	
G4-2	Description of key impacts, risks and opportunities	Pages 2-3, 14-17 2016 Financial Statements: Pages 1-4, 39 Annual Information Form (AIF): Pages 43-53	G4-14	Whether and how the precautionary approach or principle is addressed by the organization	Pages 23, 57	G4-41	Processes for the highest governance body to ensure conflicts of interest are avoided and managed	Page 22 Code of Conduct AIF: Pages 59-60
ORGANIZATIONAL PROFILE		IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES		G4-26	Organization's approach to stakeholder engagement	Pages 43-46	Role in Risk Management	
G4-3	Name of the organization	Page 6	G4-17	Entities included in the organization's consolidated financial statements and any entity is not covered by the report	Page 4 2016 Financial Statements: About Lundin Mining Section	G4-27	Stakeholder groups that have raised key topics and concerns and how the organization has responded to these concerns including through its reporting	Pages 45-46, 52
G4-4	Primary brands, products and/or services	Page 6	G4-18	Process for defining report content and Aspect boundaries	Page 5	Role in Sustainability Reporting		
G4-5	Location of organization's headquarters	Page 6	G4-19	Material Aspects identified in the process of defining report content	Page 5	G4-47	Frequency of the highest governance body's review of the economic, environmental and social impacts, risks and opportunities	Pages 21-22
G4-6	Number of countries where the organization operates	Pages 6, 10-12	G4-20	Aspect Boundary within the organization for each material aspect	Page 5	Remuneration and Incentives		
G4-7	Nature of ownership and legal form	AIF: Pages 9-13	G4-21	Aspect Boundary outside the organization for each material aspect	Pages 5, 102-108	G4-51	Remuneration policies for the highest governance body and senior executives and how remuneration relates to economic, environmental and social objectives	Information Circular Pages 29-34
G4-8	Markets served	Page 13	G4-22	Effect of any restatements in previous reports and the reasons for such restatements	Page 79	G4-52	The process for determining remuneration including whether remuneration consultants are involved and whether they are independent of management	Information Circular Pages 10-13, 31
G4-9	Scale of the reporting organization	Pages 10-12 2016 Financial Statements: Pages 1-4	G4-23	Significant changes from previous reporting periods in Scope and Aspect Boundaries	Page 4	ETHICS AND INTEGRITY		
G4-10	Total number of employees and total workforce by employment type, gender, and region	Pages 31-33, 35	G4-24	List of stakeholder groups engaged by the organization	Pages 45-46	G4-56	The organizations values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics	Pages 6, 21-22 Corporate Website
G4-11	Percentage of total employees covered by collective bargaining agreements	Pages 33, 97				G4-58	Internal and external mechanisms for reporting concerns about ethical and lawful behaviour	Page 23 Corporate Website
G4-12	Description of the organization's supply chain	Page 13						
G4-13	Significant changes during the reporting period	None						
REPORT PROFILE				GRI Content Index				
G4-28	Reporting period for information provided	Page 4						
G4-29	Date of most recent previous report, if any	Page 4						
G4-30	Reporting cycle	Page 4 Annual						
G4-31	Contact point for questions regarding the report or its contents	Back cover						
Assurance				Assurance				
G4-33	The organization's policy and current practice with regard to seeking external assurance for the report	Page 5						
GOVERNANCE				GOVERNANCE				
Governance Structure & Composition				Governance Structure & Composition				
G4-34	Governance structure of the organization including committees under the highest governance body	Page 21 Information Circular: Pages 36-45 AIF Pages: 58						
G4-38	The composition of the highest governance body and its committees	Page 21 Information Circular: Pages 42-45						

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In Accordance with the 'Core' Option

ASPECT BOUNDARY LEGEND

Internal to the Organization		External to the Organization		
1 Employees	2 Contractors	4 Government	6 Shareholders	8 Customers
	3 Local/affected communities	5 Regulators	7 Suppliers	9 Society at Large

Specific Disclosures

DESCRIPTION	EXTERNALLY ASSURED	LOCATION OF DATA
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G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	Pages 23, 93
Aspect	Market Presence: Boundary 1-3, 7	
G4-EC6	Procedures for local hiring and proportion of senior management hired from the local community	Page 33
Aspect	Procurement Practices: Boundary 2, 7	
G4-EC9	Proportion of spending on local suppliers	Page 26
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Disclosure of Management Approach		Page 57
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G4-EN3	Energy consumption within the organization	(DMA) Y Pages 75-77
G4-EN4	Energy consumption outside the organization	Page 77
G4-EN5	Energy intensity	Pages 76-77
G4-EN6	Reduction of energy consumption requirements as a result of these initiatives	Pages 82-83
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G4-EN8	Total water withdrawal by source	(DMA) Y Pages 61-62
G4-EN9	Water sources significantly affected by withdrawal of water	Page 60
G4-EN10	Percentage and total volume of water recycled and reused	Page 62
G4-EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Page 88

Specific Standard Disclosures

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G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	Page 88
G4-EN13	Habitats protected or restored	Page 88
MM1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated	Page 92
MM2	The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place	Page 88
G4-EN14	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	Page 89
Aspect	Emissions: Boundary 1, 3, 5, 9	
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	(DMA) Y Page 80
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	(DMA) Y Page 80
G4-EN17	Other indirect greenhouse gas (GHG) emissions (Scope 3)	Page 81
G4-EN18	Greenhouse gas (GHG) emissions intensity	Page 81
G4-EN19	Reduction of greenhouse gas (GHG) emissions	Pages 82-83
G4-EN20	Emissions of ozone depleting substances (ODS)	None
G4-EN21	NO _x , SO _x , and other significant air emissions	Page 84
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G4-EN22	Total water discharge by quality and destination	(DMA) Y Pages 64-65
G4-EN23	Total weight of waste by type and disposal method	Pages 66-67
G4-EN24	Total number and volume of significant spills	Page 58
MM3	Total amounts of overburden, rock, tailings, sludges and their associated risk	Page 68
G4-EN25	Weight of transported, imported, exported or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III & IV, and percentage of transported waste shipped internationally	None
G4-EN26	Identity, size, protected status and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff	Page 90

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In Accordance with the 'Core' Option

Specific Standard Disclosures

DESCRIPTION	EXTERNALLY ASSURED	LOCATION OF DATA
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G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Page 58
Aspect	Environmental Grievance Mechanisms: Boundary 3-5	
G4-EN34	Number of grievances about environmental impacts	Y Page 52
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Aspect	Labour/Management Relations: Boundary 1-3	
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G4-LA6	Types and rates of injury, occupational diseases, lost days, and absenteeism, and number of work related fatalities by region and by gender	Y Pages 38-39
G4-LA7	Workers with high incidence or high risk of diseases related to their occupation	Page 40
Aspect	Training & Education: Boundary 1-3	
G4-LA9	Average hours of training per year per employee by gender and by employee category	Page 35
G4-LA11	Percentage of employees receiving regular performance and career development reviews by gender and by employee category	Page 32
Aspect	Diversity & Equal Opportunity: Boundary 1, 6	
G4-LA12	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership and other indicators of diversity	Partial disclosure Page 31 Information Circular: Page 41
Aspect	Equal Remuneration Women & Men: Boundary 1	
G4-LA13	Ratio of basic salary and remuneration of women to men by employee category	Page 32
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G4-LA16	Number of grievances about labour practices filed, addressed, and resolved through formal grievance mechanisms	Y None

Specific Standard Disclosures

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G4-HR3	Total number of incidents of discrimination and actions taken	Page 22
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G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk and measures taken to support these rights	Pages 22, 33
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G4-HR5	Operations and suppliers identified as having significant risks of child labour	Page 22
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G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of all forms of forced or compulsory labour	Page 22
Aspect	Indigenous Rights: Boundary 3, 4, 9	
MM5	Total number of operations taking place in or adjacent to Indigenous Peoples' territories, and number and percentage of operations or sites where there are formal agreements with Indigenous Peoples' communities	Eagle and Candelaria Adjacent. No formal agreements.
G4-HR8	Total number of incidents of violations involving rights of indigenous people and actions taken	None
Aspect	Human Rights Grievance Mechanisms: Boundary 1-3	
HR12	Number of grievances about human rights impacts filed, addressed and resolved through formal grievance mechanisms	Y Page 52
SOCIETY INDICATORS		
Disclosure of Management Approach		Page 43
Aspect	Local Communities: Boundary 1-4, 6, 9	
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments and development programs	100% Pages 43-46
G4-SO2	Operations with significant potential or actual negative impacts on local communities	Page 52
MM6	Number and description of significant disputes relating to land use, customary rights of local communities and Indigenous Peoples	Not applicable
MM7	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and Indigenous Peoples	Not applicable

G4 Content Index

In Accordance with the 'Core' Option

Cautionary Note on Forward-Looking Statements

Specific Standard Disclosures

DESCRIPTION	EXTERNALLY ASSURED	LOCATION OF DATA
SOCIETY INDICATORS		
Disclosure of Management Approach		Page 43
Aspect	Local Communities: Boundary 1-4, 6, 9	
MM8	Number (and percentage) of company operating sites where artisanal and small-scale mining (ASM) takes place	Not applicable
MM9	Sites where resettlements took place	Not applicable
MM10	Number and percentage of operations with closure plans	Page 53 2016 Financial Statements Pages: 33-34
Aspect	Anti-Corruption: Boundary 1-9	
G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	Page 22
G4-SO5	Confirmed incidents of corruption and actions taken	Page 22
Aspect	Overall Compliance: Boundary 3, 5, 6, 9	
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations	Page 58
Aspect	Grievance Mechanisms – Impacts on Society: Boundary 3-5	
G4-SO11	Number of grievances about impacts on society filed, addressed and resolved through formal grievance mechanisms	Y Page 52
PRODUCT RESPONSIBILITY INDICATORS		
Disclosure of Management Approach		Page 55
DMA	Report how the organization manages the material aspect or its impacts	Page 55
Aspect	Customer Privacy: Boundary 7, 8	
G4-PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	Page 55
Aspect	Compliance: Boundary 5-8	
G4-PR9	Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services	Page 55

This sustainability report and documents incorporated herein by reference contain “forward-looking information” within the meaning of applicable Canadian securities legislation. All information, other than historical facts, constitutes forward-looking information and statements containing such information constitute forward-looking statements, which information and statements are based on current expectations, estimates, forecasts and projections as well as beliefs and assumptions made by the Company’s management. Such forward-looking statements include, but are not limited to, statements with respect to possible or future events and performance; statements with respect to possible or future events, expectations, goals, initiatives, opportunities, objectives, plans, projects or strategy; estimations and the realization of such estimates (including but not limited to associated timing, amounts and costs), expectations regarding expenditures, activities and timelines (including, but not limited to, regarding reclamation, permitting and other government approvals), capital requirements, impacts of community investment and government regulation; environmental risks; Mineral Reserves and Mineral Resources and life of mine; feasibility studies and their results. Forward-looking statements can be identified by the use of forward-looking terminology such as “aim”, “anticipates”, “believe”, “budget”, “concept”, “drive”, “estimates”, “expects”, “efforts”, “flexibility”, “focus”, “forecasts”, “forward”, “future”, “goal”, “guidance”, “initiative”, “intends”, “look”, “objective”, “opportunity”, “outlook”, “plan”, “position”, “principle”, “priority”, “project”, “risk”, “schedule”, “strategy”, “strive”, “target” or “timeline”, or variations of such words and phrases, or statements that certain actions, events or results may, could, would, might or will be taken, occur or be achieved. Forward-looking statements are necessarily based upon a number of estimates, assumptions and expectations that, while considered reasonable by the Company as of the date of such statements, are inherently subject to known and unknown risks, uncertainties and contingencies. Such risks, uncertainties and contingencies could cause assumptions, beliefs, estimates

and expectations to be incorrect and actual results to differ materially from those projected in the forward-looking statement and, as such, there can be no assurance that forward looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Such risks, uncertainties and contingencies include but are not limited to those relating to: unusual or unexpected geological formations, estimation and modelling of grade, tonnes, metallurgy continuity of mineral deposits, dilution, and Mineral Resources and Mineral Reserves, and actual ore mined and/or metal recoveries varying from such estimates; mine plans, and life of mine estimates; the possibility that future exploration, development or mining results will not be consistent with expectations; the potential for and effects of labour disputes, shortages or other unanticipated difficulties with or interruptions in production; potential for unexpected costs and expenses including, without limitation, for mine closure and reclamation at current and historical operations; uncertain political and economic environments; changes in laws or policies, foreign taxation, delays or the inability to obtain necessary governmental approvals and/or permits; regulatory investigations, enforcement, sanctions and/or related or other litigation; and other risks and uncertainties, including but not limited to those described in the “Risks and Uncertainties” section of the Company’s most recently filed Annual Information Form and in the “Managing Risks” of the Company’s full-year 2016 Management’s Discussion and Analysis. Should one or more of these risks, uncertainties or contingencies materialize, or should underlying estimates, assumptions and expectations prove incorrect, actual results may vary materially from those described in forward-looking statements. Accordingly, there can be no assurance that forward-looking information will prove to be accurate, and readers are advised not to place undue reliance on forward-looking statements. The Company does not undertake to update such forward-looking information unless required under applicable laws.



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**SUSTAINABILITY
REPORT FEEDBACK**

We welcome feedback from stakeholders regarding our 2016 Sustainability Report.

For further information or comments, please contact:

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