

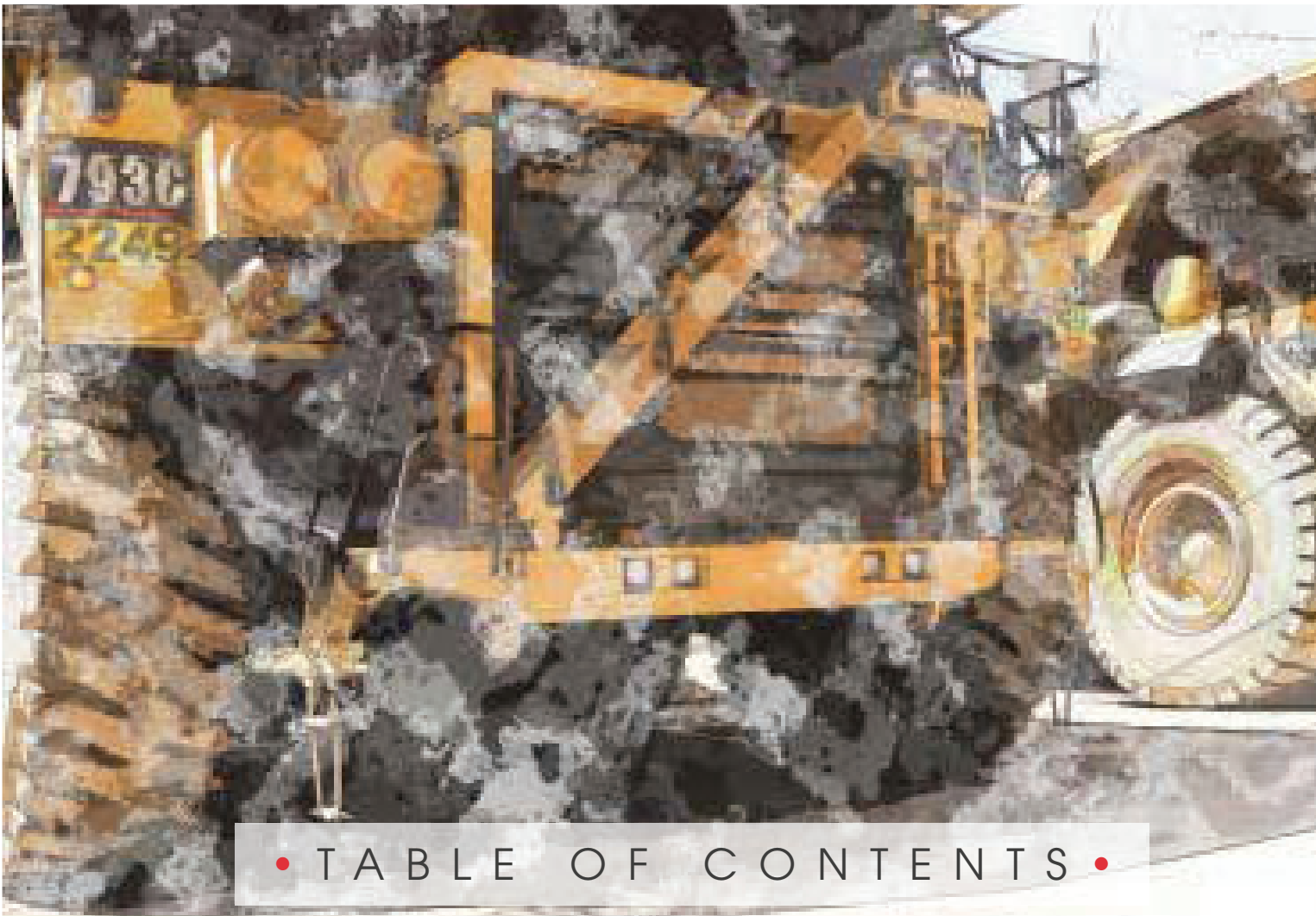


• SUSTAINABILITY •  
REPORT

2016



**DRUMMOND LTD.**  
COLOMBIA



## • TABLE OF CONTENTS •

### (4) INTRODUCTION

A1. Report profile	6
A2. Letter from the president	8
A3. Drummond Ltd. overview	12
A4. Value chain	13
A5. Drummond Ltd.'s strategy	18
A6. Drummond Ltd. by the numbers	20

### (24) CORPORATE GOVERNANCE AND RISK

B1. Corporate governance	26
B2. Risk management at Drummond Ltd.	30

### (32) PATH TO SUSTAINABILITY AT DRUMMOND LTD.

C1. Commitment to sustainability	34
C2. International standards and sustainability initiatives	36
C3. Stakeholder engagement	38
C4. Materiality analysis	46



## (52) ECONOMIC IMPACT AND SUPPLY CHAIN

D1. Economic performance	54
D2. Financial feasibility of projects	62
D3. Supplier management	63

## (74) SOCIETY

E1. Managing human talent	76
E2. Workplace health and safety	95
E3. Relationships with unions	112
E4. Human rights	115
E5. Managing local communities	128

## (152) ENVIRONMENT

F1. Protecting water resources	154
F2. Optimizing energy resources	169
F3. Air quality	176
F4. Protecting the land	185
F5. Impact on health and the environment in coal logistics and transportation	195
F6. Innovation	201

## (206) APPENDICES





• I N T R O D U C T I O N •



## A1. REPORT PROFILE

[GRI 102-54]  
[GRI 102-55]

In this sustainability report, Drummond Ltd. reports to all of its stakeholders on the Company's performance, divided into economic, social and environmental aspects. This report has been prepared in accordance with the GRI Standards: Core option, and the reference table is provided in the appendix so the reader can review the contents of the standards.

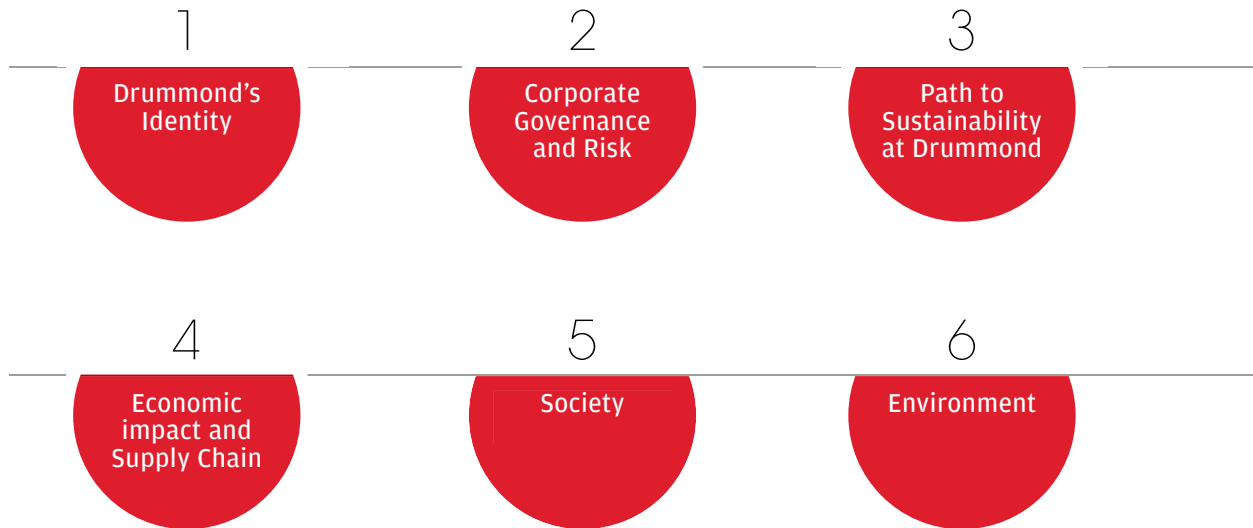
[GRI 102-50]  
[GRI 102-51]  
[GRI 102-52]

The information presented in this report corresponds to 2016, from January 1 to December 31. The 2015 report was published in September 2016 under the guidelines of the Global Reporting Initiative (GRI), G4 version. Drummond Ltd. publishes its sustainability reports annually.

independent third party, which made it possible to recognize and understand the most relevant topics in Drummond Ltd.'s sustainability work, and on the basis of which the company addresses the specific GRI contents that correspond to those topics.

The contents of this report were identified through a materiality analysis with the help of an

This report is divided into six chapters that detail Drummond Ltd.'s performance on each of the aspects that were identified as being material:



[GRI 102-32]  
[GRI 102-56]

This sustainability report was prepared at Drummond Ltd. by the Office of the Vice President of Corporate Social Responsibility and the Office of the Vice President of Communications, and ratified by the Sustainability Committee, to ensure that all material aspects were covered. Additionally, at the direction of the Board of Directors and the senior management team, BSD Consulting was hired to verify the report in accordance with the AA1000 Assurance Standard guidelines, to ensure the reliability and accuracy of the information being published. The scope and conclusions from that verification can be read in the independent review report found in the Appendices.

[GRI 102-53]

Any suggestions, opinions or concerns to be sent to the Company regarding this report can be addressed to:

## MARGARITA SAADE

**Communications Director**

+57 5 5719300 Ext. 8581

Email: [comunicacionesrh@drummondLtd.com](mailto:comunicacionesrh@drummondLtd.com)





## A2. LETTER FROM THE PRESIDENT

Providing more than 5,000 well-paid jobs, exporting 32.6 million tons of coal, benefiting 102 low-income students in the mining area through the company's scholarship program, and positioning Drummond as Colombia's leading coal exporter while contributing significant royalties and taxes for the development of Cesar and Magdalena are a few significant examples of Drummond's corporate impact in 2016.

These numbers are only truly meaningful when we look at them from a broader perspective. The company maintains a strong commitment to sustainability. Our objective is not simply to offer our customers high-quality coal that provides an added value, but instead we also constantly consider the impact that our operations have on the communities and the environment every day, in each project, at every level of the company.

The coal that we mine and export would have no value unless we safely conduct every one of our processes, while protecting the environment, promoting and respecting human rights and focusing on the health and lives of our employees, contractors, visitors and communities.

Drummond is committed to continuing to be a model corporate citizen through working hard at mining done right. Our operation is

environmentally responsible, contributes to the development of communities, and is a major ally to Colombia. This commitment and awareness is one of the most valuable legacies left to us by Mr. Garry Drummond, former CEO of Drummond Company Inc., who passed away on July 13, 2016.

His vision and leadership were always based on strategic pillars to keep the business competitive within a framework of production that is sustainable in economic, social and environmental terms. In that sense, one of Mr. Drummond's most important contributions was adopting international standards that led us as an organization to serve as guarantors of the principles of sustainability. This report that you are holding in your hands is a testimony to that commitment.

In an increasingly challenging international arena, every decision made in Colombia that relates to mining activity has a direct impact on the appeal of Colombian coal in the world market. The support of the national and local authorities, maintained legal stability, and the firm commitment and development generated by the mining sector are responsible, to a large extent, for the country not losing the ground that it has won from its competitors in the world of coal.

[GRI 102-14]

[GRI 102-15]





In this new stage for the company after the death of Mr. Garry Drummond, Colombia will continue to rely on Drummond Ltd. as a partner in the development of the country and that of its people. The challenges that we face every day (which you can identify at the end of each chapter in this report) prompt us go to great lengths to identify and appropriately manage the risks and impacts of an operation of this magnitude, and to do so in a timely manner.

Thank you for this opportunity to present our achievements, challenges and opportunities, to share our objectives and our vision as a company, and to highlight our focus on enhancing all areas where we can improve. On behalf of our Board of Directors, senior leadership and employees from all areas and in all roles, thank you for letting us tell our story and renew, once again, our commitment to Colombia and to generating development through mining done right.

**MIKE TRACY**

**CEO of Drummond Company, Inc.**

---



## A2. LETTER FROM THE PRESIDENT

Our third sustainability report prepared based on the Standards from the Global Reporting Initiative (GRI), is not just an exercise in transparency about Drummond Ltd.'s work vis-à-vis all of its stakeholders, but it is also a living testimony of our commitments to make this operation sustainable and so that it continues to generate development for the region.

In 2016, we were able to elaborate on our strategies to take the company towards a model of sustainable development that aligns the business with leading practices in the global energy and mining sector. In that area, we will continue to adopt standards and initiatives such as Bettercoal, the Voluntary Principles on Security and Human Rights, the UN Guiding Principles and the Working Group on Human Rights and Coal.

With the goal of constantly improving our operations, in this report you will be able to identify the main issues that we prioritized in 2016, such as innovation, supplier management, respecting and promoting human rights, ensuring safe and healthy work

environments, working with local communities, as well as the goals we have set for 2017.

The lack of definition and stability in the basic rules of the game for the sector continues to be an issue that could affect investor confidence and delay the development of mining projects in the country. To that end, Drummond has participated in different local and national events to contribute to a constructive dialogue on how the synergy between the various stakeholders can achieve tangible results in the search for an increasingly competitive mining sector.

Without a doubt, mining has a direct positive effect on regional development, since royalties, taxes, employment and other benefits are a fundamental factor in financing the projects that the communities need, and that contribute to improving levels of social equality. This report provides numerous examples of that impact.

Just as it was a year of significant external challenges, within the company we had to face the passing of our former CEO, Mr. Garry Neil

[GRI 102-14]  
[GRI 102-15]



Drummond. Today we remember each of the 30 years during which he left us invaluable lessons in life, business ethics, honesty, rectitude, family values and love for a country that was like his own.

Mr. Drummond always conveyed to us a leadership and vision that are essential to position this company that is growing hand-in-hand with its people and Colombia as one of the world's main coal producers and exporters.

If we continue to work on mining done right, based on environmentally responsible operations, in which growth and development are balanced and we generate well-being for the communities, we will be honoring Mr. Drummond's legacy. His memory is and will continue to be a source of inspiration to us and a driver to contribute to making Colombia into the country we all dream it can be.

## JOSÉ MIGUEL LINARES

President of Drummond Ltd.

---



### A3. DRUMMOND LTD. OVERVIEW

[G4RI 102-1]  
[G4RI 102-4]  
[G4RI 102-7]

Drummond Ltd. is a mining company that operates solely in Colombia, property of Drummond International LLC, a company based in Alabama, United States. The company is owned by Drummond Company, Inc. and its affiliates (80%) and ITOCHU Coal Americas Inc. (20%).

the mine pit. The rail lines inside the mines and the port are connected to Ferrocarriles del Norte de Colombia (Fenoco), which has stretches that have gradually been expanded to double tracks. It is expected that construction of this expansion will be fully completed in the next two years.

[G4RI 102-2]  
[G4RI 102-7]

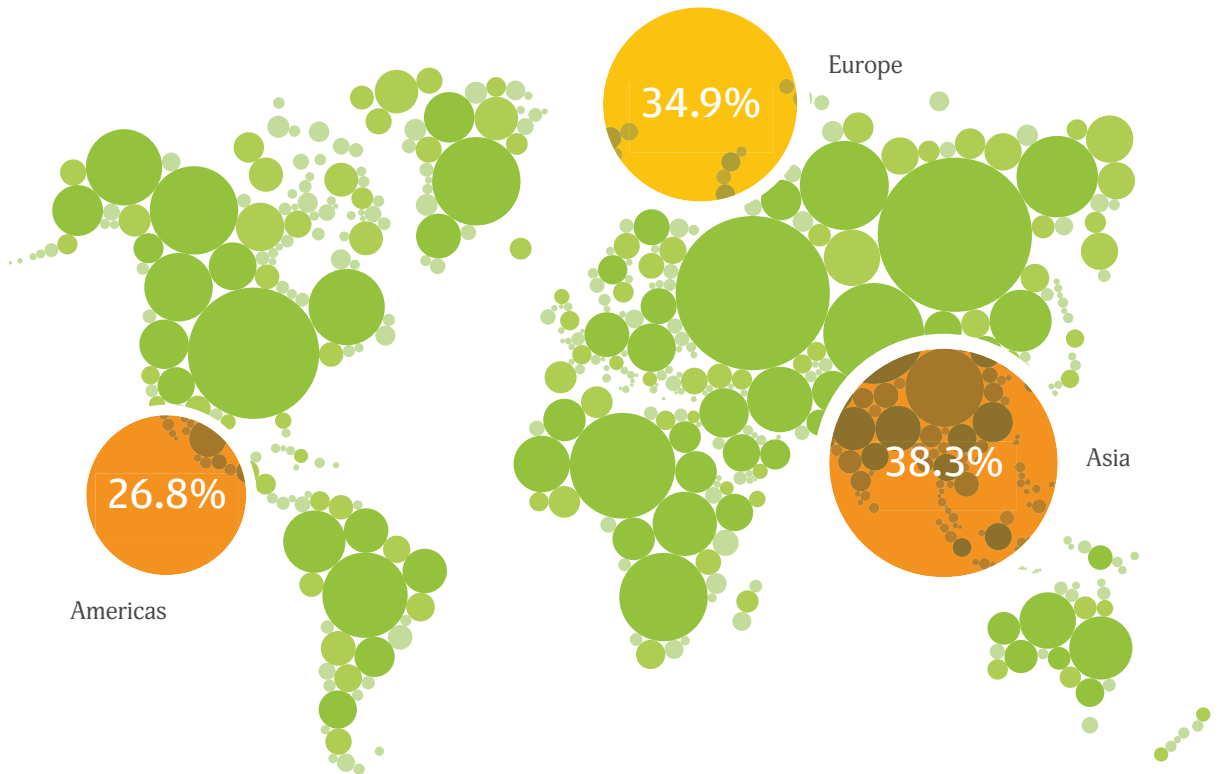
The company's operations are based on the exploration, production, transportation and exportation of steam coal. The mining operations are located in the Department of Cesar, concentrated in two centers: La Loma and El Descanso. It also includes the Rincón Hondo, Similoa and Cerrolargo projects, which are currently in the environmental licensing process.

The export operations are carried out at Puerto Drummond, a port concession from the Colombian government located in Ciénaga, Magdalena, 20 kilometers from the city of Santa Marta. This terminal has the capacity to transport 60 million metric tons of coal per year.

[G4RI 102-6]

Drummond Ltd. also has a fleet of twelve trains to transport coal from the mining operations to the Port using three car-loading facilities adjacent to

The coal that is exported is headed for the world's main power plants, covering markets in Europe, Asia and the Americas. Exports are distributed among the following geographic destinations:



## A4. VALUE CHAIN

Drummond Ltd.'s value chain begins by performing economic feasibility studies based on its available reserves. The economic feasibility study assesses the investments needed to ensure both operational efficiency and the protection of the health of its employees and the environment. Once the feasibility criteria have been met, and as part of its adaptation of the site, the company carries out processes to preserve the natural and cultural richness of the area through archaeological rescues, wildlife relocation, collection of native seeds and seedlings, the implementation of forestry projects and the collection of soil samples. Then it proceeds with the design, development, assembly and preparation of the mines.

Drummond Ltd. performs large-scale, highly-technified open pit mining. This includes the coal mining, selection, transportation and shipment stages, all of which are performed under efficient monitoring and control processes. In the extraction process, coal for sale is separated from overburden; the latter is collected in dumping areas under practices that ensure the smallest possible environmental impact. Once extracted, the coal is transported from the mine to a collection center where it is separated, sorted and crushed, so that the end product meets the conditions the market requires.

The coal is then taken via railroad to Puerto Drummond to be exported. There, the product is stored according to its features and quality, so that mixtures can be prepared at the time of shipment according to each customer's quality requirements. It is worth noting that the port has OHSAS 18001 and ISO 14001, industrial safety and occupational health certifications, and BASC and ISPS physical security and port protection certifications.

### Gas production

Drummond Ltd. has been working on the exploration of non-conventional hydrocarbons, such as coal-bed methane, since 2004, when it signed the La Loma Exploration and Production contract with the National Hydrocarbons Agency (ANH in Spanish) for gas production in the Caporo Norte Development Area, which is located in the municipalities of Chiriguaná and La Jagua de Ibirico in the Department of Cesar and has a surface area of 6,462 hectares.

Since that time, the company's Hydrocarbons and Mineral Exploration Division has conducted exploration studies and has shared information about the project with the communities in its areas of influence, until September 8, 2016, when the National Environmental Licensing Authority (ANLA, in Spanish) approved the environmental license for Drummond Ltd. to begin executing the initiative. This approval was issued through Resolution 984 of September 8, 2016, which clarifies some technical aspects of Resolution 1655 of December 21, 2015, which had previously been granted to the company. The 2017 Sustainability Report will provide detailed information on the hydrocarbon exploration process.

Drummond Ltd. voluntarily abides by the International Energy Agency's Golden Rules that ensure a balance between gas production, the development of the communities in the area of influence and the preservation of the environment.

# OUR VALUE CHAIN

## 1 GEOLOGICAL, MINING AND ENVIRONMENTAL STUDIES



## 2 MINING ENVIRONMENTAL DESIGN

Archaeological rescue



Wildlife translocation



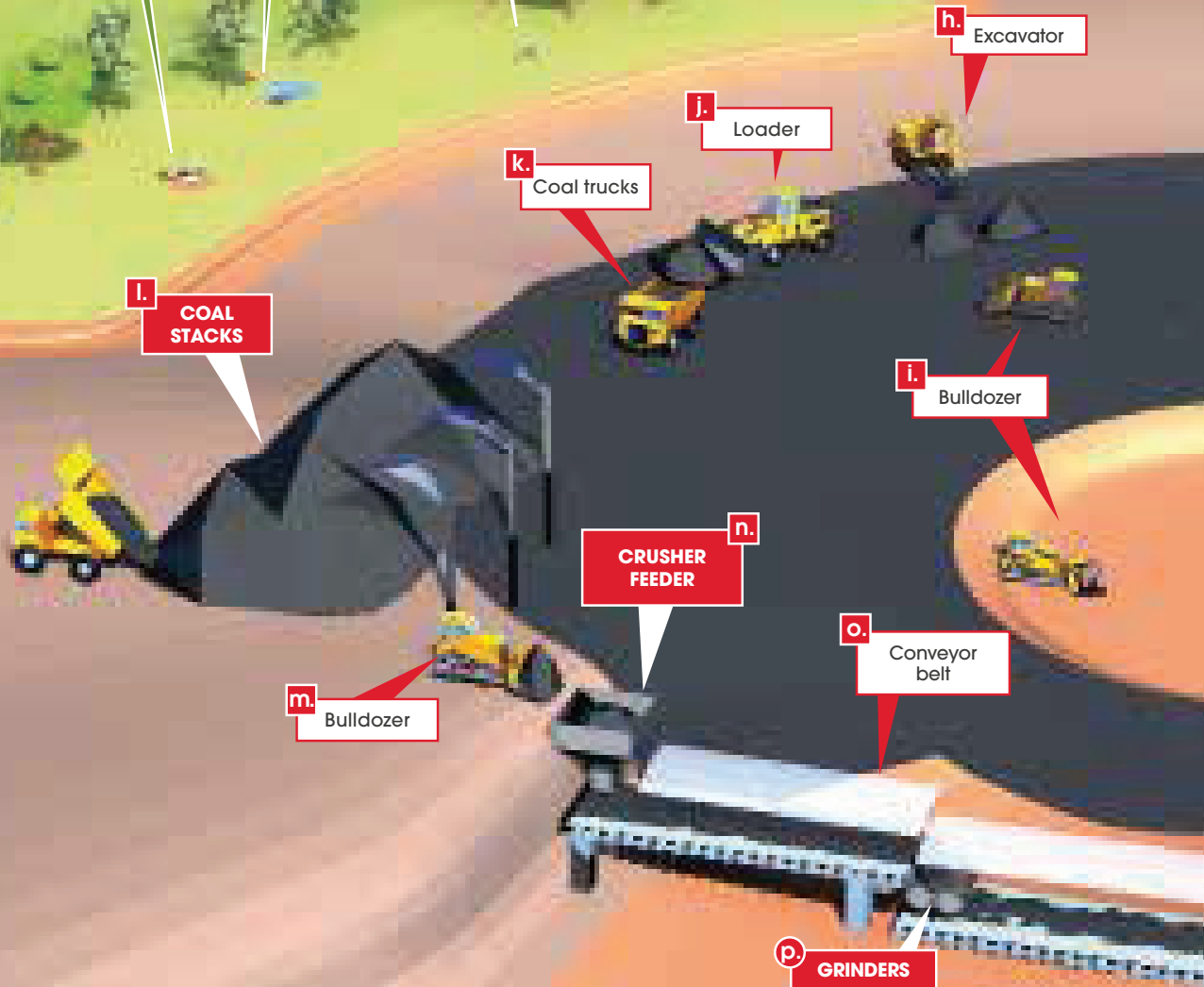
Seedling and seed collection

Soil collection and storage

Forestry



## 3 ENVIRONMENTAL LICENSE AND COMMUNICATION



Implementation of the environmental management, monitoring and control plan



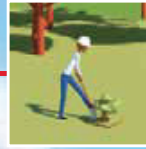
Sedimentation and treatment pools to prevent water from polluting the channels



Constant irrigation plan for roads and coal storage yards to maintain air quality



Replanting: the process by which vegetation is replanted in the areas intervened by mining activities



Waste separation for storage



Constant information to the neighboring communities on the management actions and social investments



4

COAL EXTRACTION PROCESS

DRILLING AND BLASTING

OVERBURDEN REMOVAL

Power shovel

Hydraulic shovel

Bulldozer

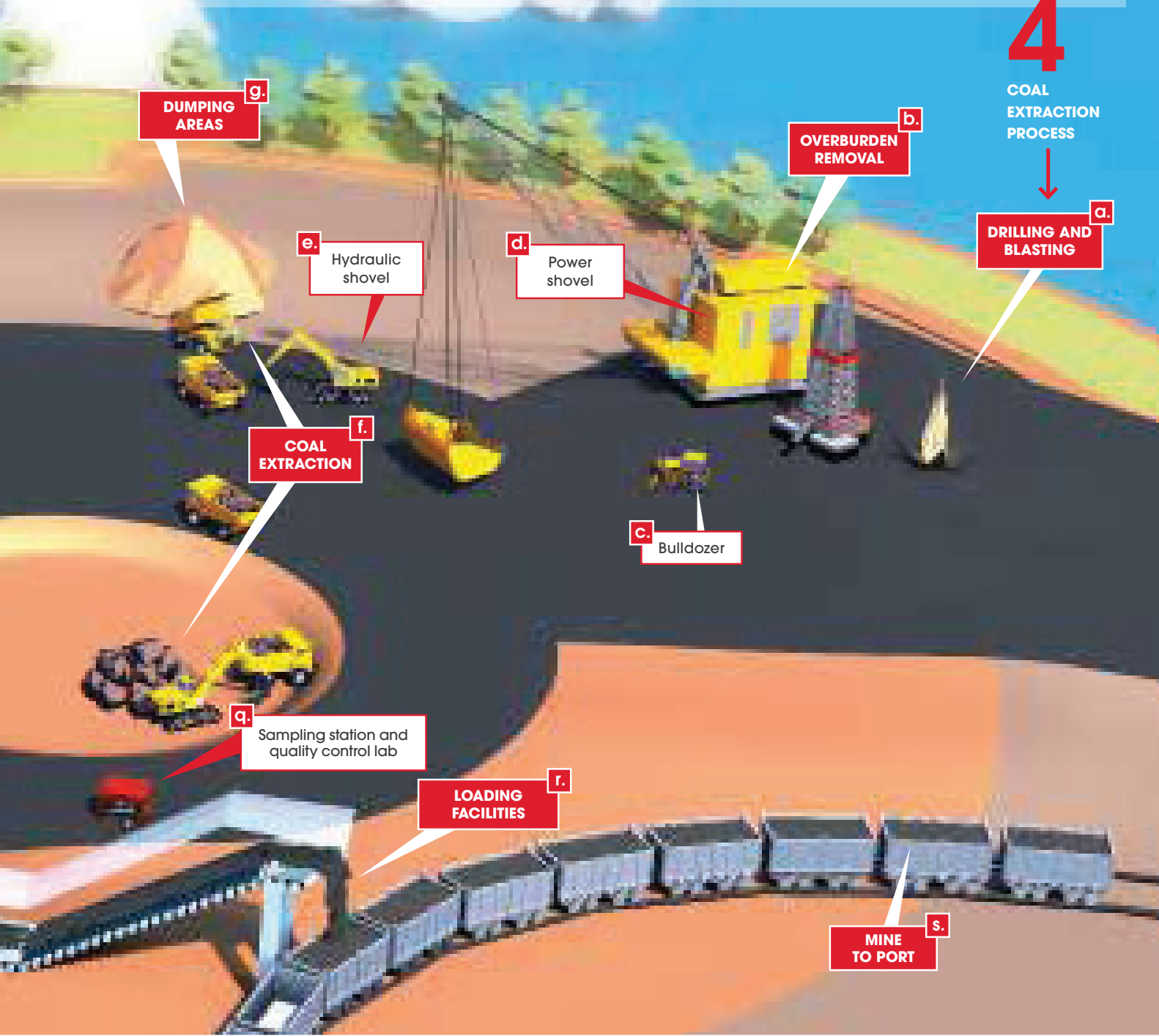
COAL EXTRACTION

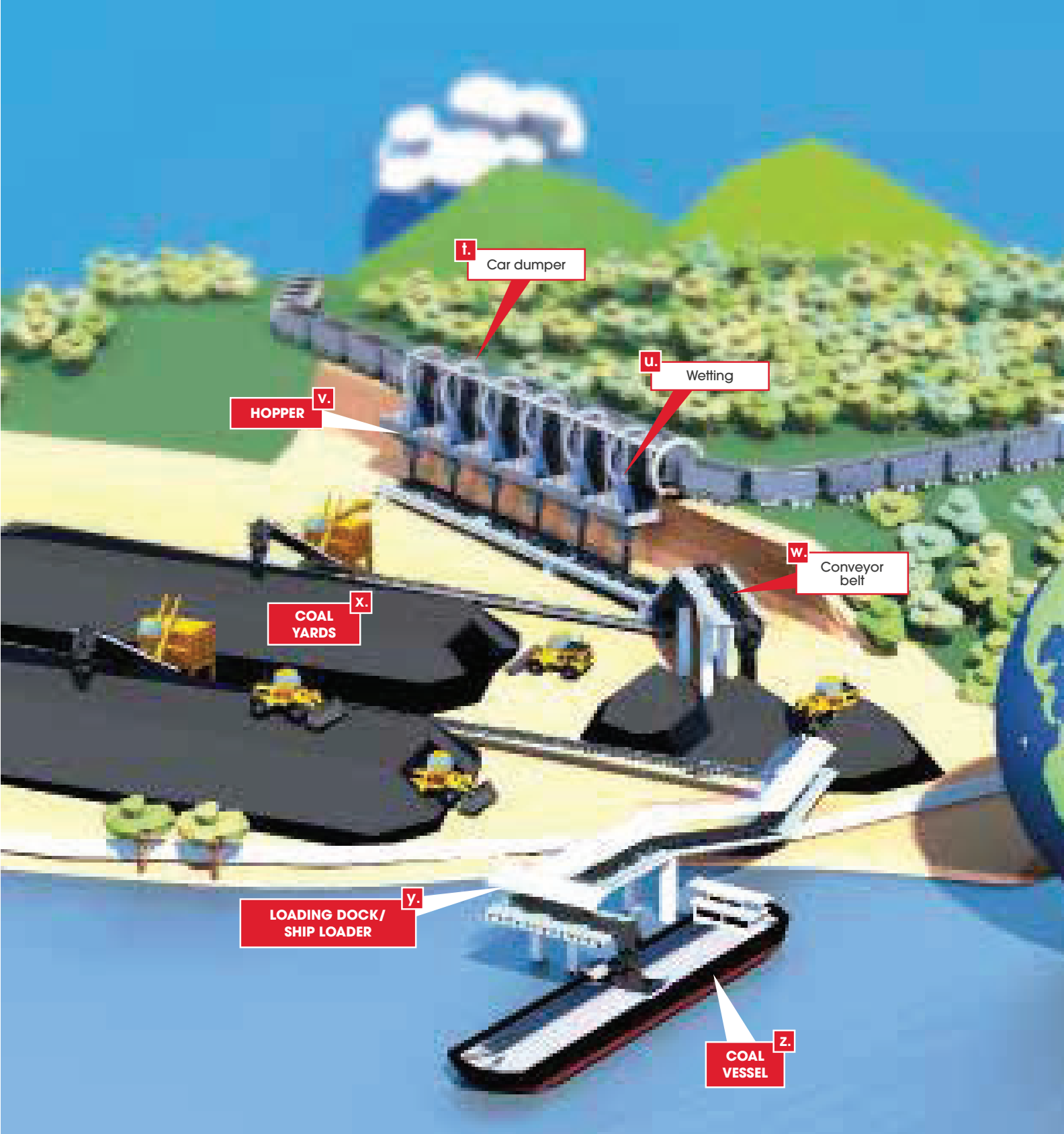
DUMPING AREAS

Sampling station and quality control lab

LOADING FACILITIES

MINE TO PORT





f. Car dumper

u. Wetting

v. HOPPER

w. Conveyor belt

x. COAL YARDS

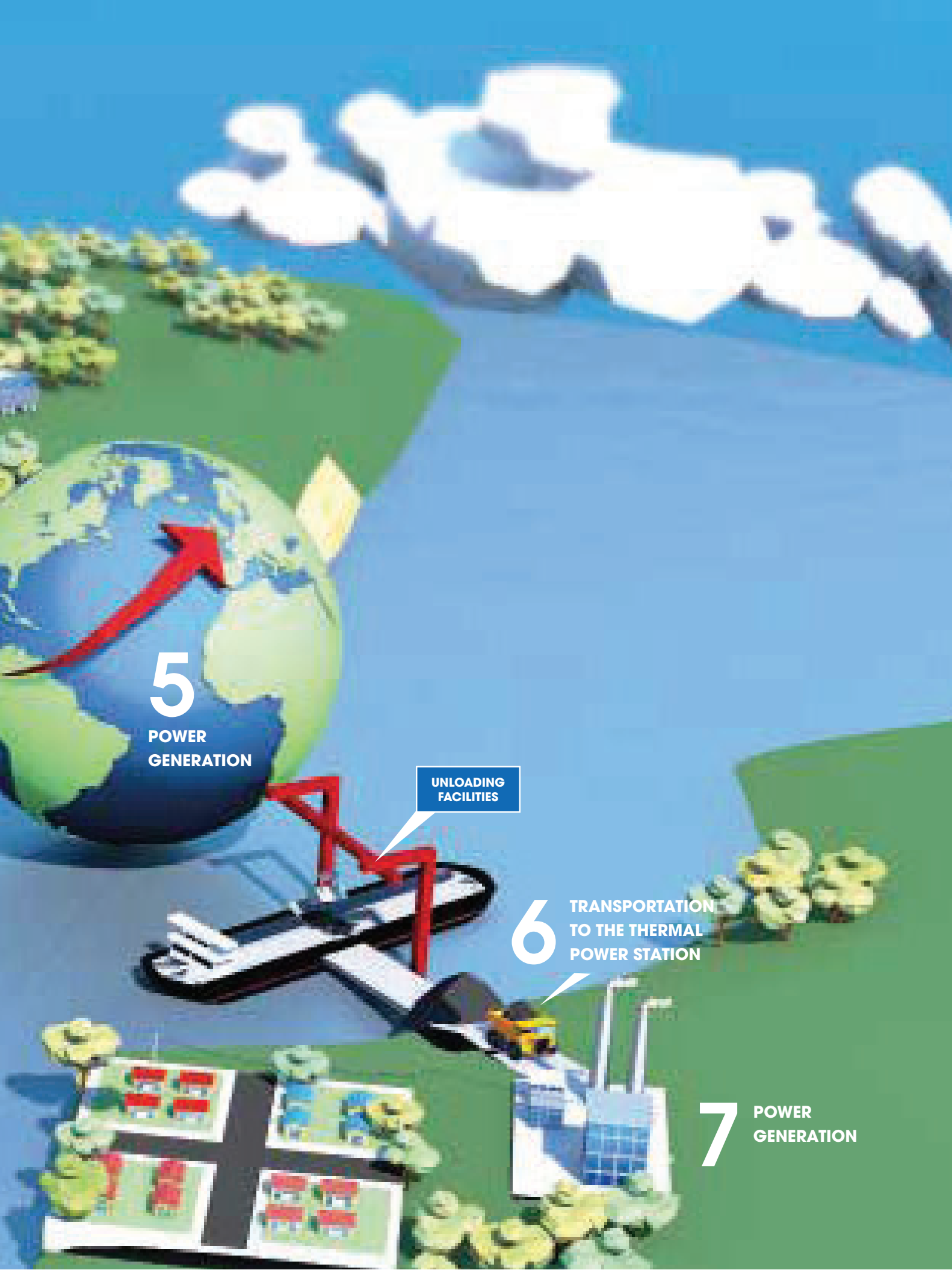
y. LOADING DOCK / SHIP LOADER

z. COAL VESSEL

## ENVIRONMENTAL COMPLIANCE REPORT

During the operation, hydro-biological monitoring is conducted on the wildlife in order to relocate it, solid waste is disposed properly and the beaches at the port are monitored to check for the presence of coal, among many other environmental monitoring activities. Finally, a document is published biannually and another issued annually, to report to the environmental authorities on the implementation of the management measures and the result of the monitoring activities.





5

POWER  
GENERATION

UNLOADING  
FACILITIES

6

TRANSPORTATION  
TO THE THERMAL  
POWER STATION

7

POWER  
GENERATION



## A5. DRUMMOND LTD.'S STRATEGY

Drummond Ltd.'s goal is to offer high-quality coal to its customers worldwide, developing competitive products and services that meet the increasing demands of the market. Drummond Ltd.'s coal is known for its high quality, given its calorific value and low moisture, ash and sulfur content.

In a continuing effort to provide comprehensive services to each of its customers, the company has sought to diversify its portfolio in industries related to the mining and transportation of coal and its derivatives, where its experience and knowledge provide added value.

Additionally, Drummond Ltd.'s commitment to Colombia is solid. Every day, in every project, at each level of the company, it considers the impact of its operations on the communities and the environment. Therefore, when conducting its business, it is vitally important that it carry out its processes safely, protecting the environment and the health and lives of its employees, contractors, visitors and communities.

For all of these reasons, Drummond Ltd.'s strategy is aimed at maintaining its competitiveness in the market under a framework of sustainable production in economic, social and environmental areas, which has led it to define three strategic pillars:

### PILLAR

# 1

## CORPORATE SUSTAINABILITY

- Sustainable development strategies are designed and implemented throughout the mining operations and in accordance with market and technological developments.
- It seeks to maximize the recovery of reserves at a competitive cost, to maintain the dynamism of the local economies.
- The operation is carried out within the legal framework, adopting the highest industry standards

### DRUMMOND LTD.'S COMPREHENSIVE POLICY

is the company's main management guideline:  
<http://www.drummondltd.com/wp-content/uploads/Drummond-Comprehensive-Policy-2016.pdf>



PILLAR

2

**EFFECTIVE SOCIAL AND ENVIRONMENTAL MANAGEMENT**

Drummond Ltd.'s contribution to Colombia's economic and social development, and its commitment to the environment, goes beyond legal compliance:

- The sustainability actions are focused on controlling and mitigating the impacts of coal mining, transportation and shipping.
- The highest standards in environmentally responsible practices are adopted to protect the environment.
- Continuous and long-lasting progress is the driver for improving the quality of life in the communities in the company's area of influence.
- Considerable investments are made in community initiatives, working closely with the local governments and designing and implementing programs for the development and benefit of the communities.

To carry out this contribution, the company uses the following policies and procedures:

**SOCIAL MANAGEMENT:**

<http://www.drummondLtd.com/social-responsibility/?lang=en>

**COMMUNITY ASSISTANCE POLICY:**

<http://www.drummondLtd.com/wp-content/uploads/DTLD-Community-Services-Manual.pdf>

**HUMAN RIGHTS POLICY:**

<http://www.drummondLtd.com/wp-content/uploads/HR-POLICY.pdf>

**SUSTAINABILITY-ORIENTED STRATEGY (ENVIRONMENTAL MANAGEMENT):**

<http://www.drummondLtd.com/environmental-commitment/?lang=en>

PILLAR

3

**EMPLOYEE WELL-BEING**

At Drummond Ltd., employees are high-value capital. For this reason, the company works to ensure their well-being, offering, in addition to their wage compensation, a good organizational climate and the conditions necessary to perform their work comfortably, efficiently and safely. There is also a constant supply of training and refresher courses to promote staff professionalization.

To ensure these conditions, the company uses the following policies and procedures:

**OCCUPATIONAL HEALTH AND INDUSTRIAL SAFETY AS A PRIORITY**

**EMPLOYEE TRAINING AND EDUCATION PROGRAMS:**

<http://www.drummondLtd.com/working-at-drummond/training-programs/?lang=en>.

**HUMAN RESOURCES POLICY:**

<http://www.drummondLtd.com/wp-content/uploads/Human-Resources.pdf>

**RECRUITMENT AND HIRING MANAGEMENT :**

<http://www.drummondLtd.com/wp-content/uploads/SELECTION-AND-RECRUITMENT-POLICY-CHANGE.pdf>.

In late 2016, the CEO of Drummond Company Inc., the President of Drummond Company, Inc., the President of Drummond Ltd. Colombia and other members of the executive team met to outline the company's new corporate social responsibility strategy, including four new pillars: peace and human rights, governance for development, environmental performance and economic development.

The 2017 report will document both the strategy and the projects developed under each of the pillars.



## A6. DRUMMOND LTD. BY THE NUMBERS

[G4RI 102-7]

### Assets, Income and Production in 2016 (US\$)

TOTAL  
ASSETS  
**3,094,276,311**

INCOME  
FROM EXPORTS  
**1,614,304,661**

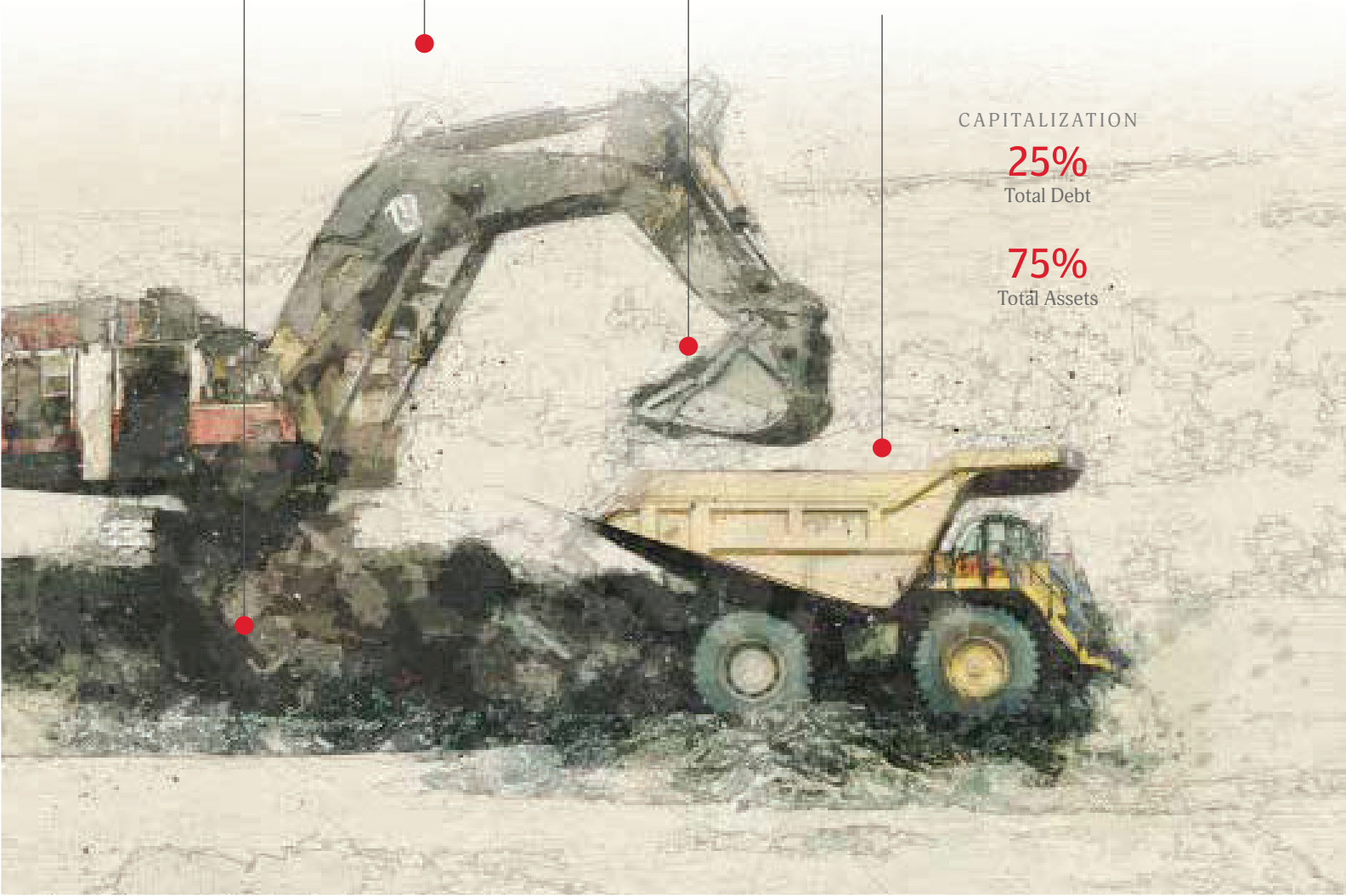
SALES AND  
OPERATING EXPENSES  
**1,505,088,885**

METRIC TONS  
OF COAL EXPORTED  
**32,640,275**

CAPITALIZATION

**25%**  
Total Debt

**75%**  
Total Assets



[GRI 102-8]

## Workforce

### Direct and indirect employees

MINING AND HYDROCARBONS OPERATIONS Valledupar	<b>3,874</b>	2015	Directly with the company	2015	<b>86</b>
	<b>3,815</b>	2016		2016	<b>84</b>
	<b>48</b>	2015	Outside workers	2015	<b>7</b>
	<b>113</b>	2016		2016	<b>5</b>
PORT OPERATIONS Cartagena	<b>824</b>	2015	Directly with the company	2015	<b>80</b>
	<b>781</b>	2016		2016	<b>81</b>
	<b>6</b>	2015	Outside workers	2015	<b>6</b>
	<b>-</b>	2016		2016	<b>2</b>
Bogota	<b>35</b>	2015	Directly with the company	2015	<b>24</b>
	<b>37</b>	2016		2016	<b>24</b>
	<b>1</b>	2015	Outside workers	2015	<b>1</b>
	<b>1</b>	2016		2016	<b>3</b>

### TOTAL EMPLOYEES (AUTOMATIC CALCULATION AND VERIFICATION)





### Direct employees by type of contract

Operation	2015	2016	Contract Type	2015	2016
MINING AND HYDROCARBONS OPERATIONS Valledupar	3,874	2015	Indefinite	86	2015
	3,814	2016		83	2016
	-	2015	Fixed-term	-	2015
	1	2016		1	2016
PORT OPERATIONS Cartagena	796	2015	Indefinite	80	2015
	769	2016		81	2016
	28	2015	Fixed-term	-	2015
	12	2016		-	2016
Bogota	35	2015	Indefinite	24	2015
	36	2016		24	2016
	-	2015	Fixed-term	-	2015
	1	2016		-	2016

### TOTAL (AUTOMATIC CALCULATION AND VERIFICATION)



**Outside workers by type of contract**

MINING AND HYDROCARBONS OPERATIONS Valledupar	<b>48</b>	2015	Other (hired through a temporary staffing firm)	2015	<b>7</b>
	<b>113</b>	2016		2016	<b>5</b>
<hr/>					
PORT OPERATIONS Cartagena	<b>6</b>	2015		2015	<b>6</b>
	-	2016		2016	<b>2</b>
Bogota	<b>1</b>	2015		2015	<b>1</b>
	<b>1</b>	2016		2016	<b>3</b>
<b>TOTAL</b> (AUTOMATIC CALCULATION AND VERIFICATION)	<b>55</b>	2015		<b>14</b>	2015
	<b>114</b>	2016		<b>10</b>	2016







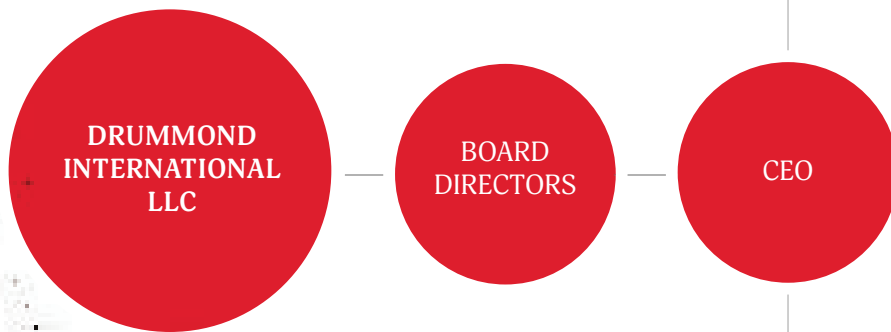


• CORPORATE GOVERNANCE •  
AND RISK





# B1. CORPORATE GOVERNANCE



CHIEF ADMINISTRATIVE OFFICER



PRESIDENT & COO



CEO

EXECUTIVE VP AND CFO



PRESIDENT DLTD



VP HUMAN  
RESOURCES



CHIEF OPERATING  
OFFICER



VP FACILITIES  
ENGINEERING



VP  
HYDROCARBONS



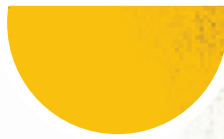
VP OPERATIONS  
SUPPORT & ADMIN



SR. ACCOUNTING OFFICER



VP CORPORATE  
CONTROLLER



PRESIDENTIAL  
ADVISOR



VP COMMUNICATIONS





## BOARD OF DIRECTORS

[GRI 102-18]  
[GRI 102-20]  
[GRI 102-26]

Drummond’s government structure is led by the Board of Directors, which is the highest authority responsible for the company’s strategy and governance. Drummond International’s Board of Directors is made up of Mike Tracy as

chairman of the Board of Directors of Drummond International and CEO of Drummond Company, Inc., and includes three other directors, two from Drummond Company, Inc. and one from ITOCHU Coal Americas, Inc.

### Committees

The Board of Directors includes the Executive Management Committee, whose role is to approve major investments within the operations.

At the managerial level, Drummond Ltd. has the following committees:



**Audit Committee**

REVIEWS AND MONITORS the effectiveness of the company’s internal controls: the annual risk assessment, the scheduled audit plan for the following year (based on the annual risk assessment) and the audit review reports issued during previous years.



**Social Responsibility and Sustainability Committee**

DIRECTS THE ORGANIZATION toward a model of sustainable development, aligning the business with leading practices in the global mining and energy sector.



**Communications Committee**

PROMOTES AND FACILITATES access to and the exchange of information with stakeholders.

## ≡ Role of the Board of Directors on economic, environmental and social Issues

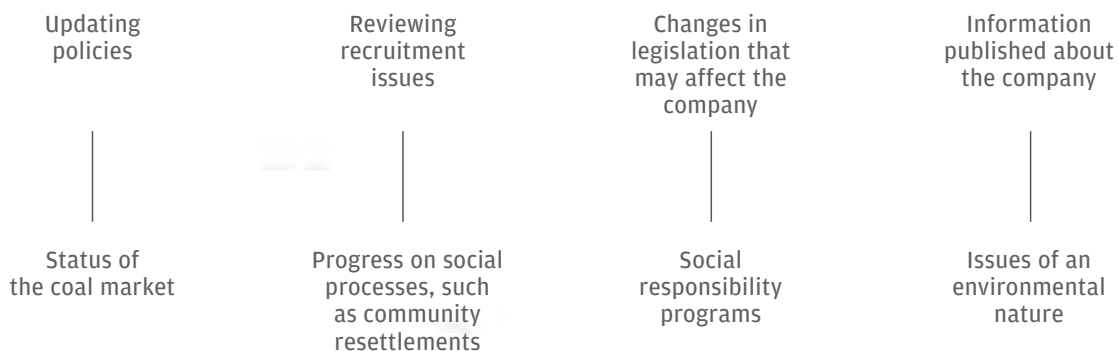
[GRI 102-19]  
[GRI 102-27]  
[GRI 102-33]

At the managerial level, the committees communicate information and alerts related to economic, environmental and social matters to the president of Drummond Ltd. and to the president of Drummond Company, Inc., through direct or formal

mechanisms, such as documents and memoranda. They, in turn, communicate directly with the CEO and chairman of the Board, who reports to the other members of the Board so that it can evaluate the situation and make decisions.

[GRI 102-34]

The majority of the issues and alerts communicated to the Board of Directors can be grouped into the following categories:





## B2. RISK MANAGEMENT AT DRUMMOND LTD.

[GRI 102-16]

The core concepts that serve as the basis for Drummond Ltd.'s way of thinking are recorded in a series of policies that cover aspects such as integrity, safety, responsibility, respect for people and the environment:

Drummond's **COMPREHENSIVE POLICY** serves as its main management guideline and provides the standards for the operations to be conducted safely, protecting the health and lives of all people.

Additionally, the company has **INTERNAL LABOR REGULATIONS**, which contain the mandatory rules for all workers.

**THE CODE OF CONDUCT** establishes the ethical guidelines for all staff in the organization's various relationships, considering that each employee is a representative of the company when carrying out their activities.

1

2

3

The Vice President of Human Resources is responsible for distributing and updating these rules, which are published in Spanish and English on the company's website and are distributed annually throughout the organization.

[GRI 102-17]

## Internal and external mechanisms for promoting lawful and ethical conduct

### Employees

Drummond Ltd. has a Complaints Channel so that any suspicion or knowledge of irregularities in the workplace can be submitted safely by the complainant and promptly resolved. The anonymity of the person who submits the report of an irregularity or a complaint is ensured; nonetheless, if a person, within their free will, wishes to identify themselves, the company will maintain absolute confidentiality about the actions taken as a result of these complaints.

The person concerned should send their complaint to [denuncias@drummondLtd.com](mailto:denuncias@drummondLtd.com), or to Calle 72 No. 10-07 in Bogota, to the attention of the Complaints Committee, which is made up of a representative of the Legal Department and another from the Human Resources Department.

The final investigation report will be presented to the Vice President of Human Resources, with the recommendations on the corrective actions to be taken, if any. On a quarterly basis, a list of the complaints submitted will be sent to the Audit Department, with the decisions made in each case. If the investigations conclude that there has been a violation of the policies, regulations, contracts, collective bargaining agreements, etc., disciplinary proceedings may be initiated, notwithstanding any eventual termination, and if the findings have an impact of a different kind, complaints may be filed with the competent authorities.

- Through the Complaints Channel, six complaints were received in 2016; they have all been answered and the cases have been closed.

### Communities

By publishing the “Community Service Manual,” Drummond Ltd. aims to regulate and communicate the internal processes through which the company handles the requests, suggestions and complaints submitted by the residents of the neighboring communities related to issues of social management, environmental management, land management, recruitment, payments of taxes and royalties, among others, in person at the community service offices or submitted online to [atencionalusuari@drummondLtd.com](mailto:atencionalusuari@drummondLtd.com), which was created exclusively for this purpose.

During 2016, at the Community Service Office located in Puerto Drummond, 67 requests (including invitations) and three complaints were received. It is important to note that the requests that

were received were mostly related to requests for donations and visits to the Port facilities. Three complaints were also received, of which only one was related to negative effects to the environment.

The status of the complaints and requests is reported through the Community Service Offices, located in Valledupar, La Loma and Puerto Drummond, and on Drummond Ltd.’s website.

- The “Community Services Manual” can be found at: <http://www.drummondLtd.com/wp-content/uploads/DTLD-Community-Services-Manual.pdf>







• PATH TO SUSTAINABILITY •  
AT DRUMMOND LTD



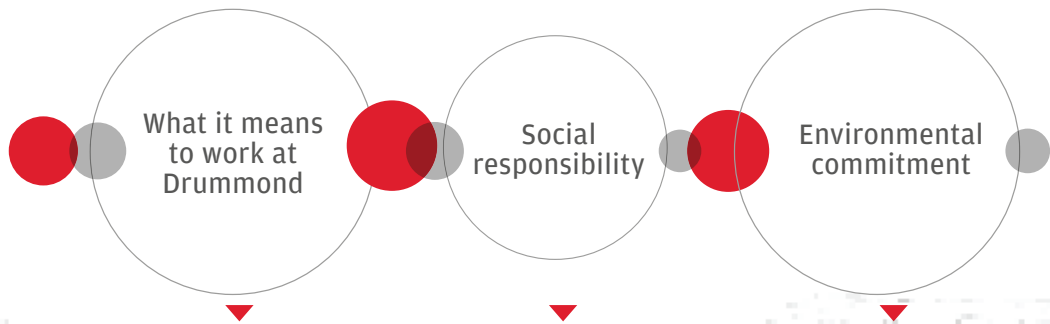


# C1. COMMITMENT TO SUSTAINABILITY

Drummond Ltd.'s commitment to sustainability is based on its three strategic pillars,<sup>1</sup> which correspond to the following:

“Every day, in every project, at every level at Drummond Ltd., we consider the impact that our actions have on our employees, on our communities and on our environment.”

With this statement, the company has taken a position on each core concept:

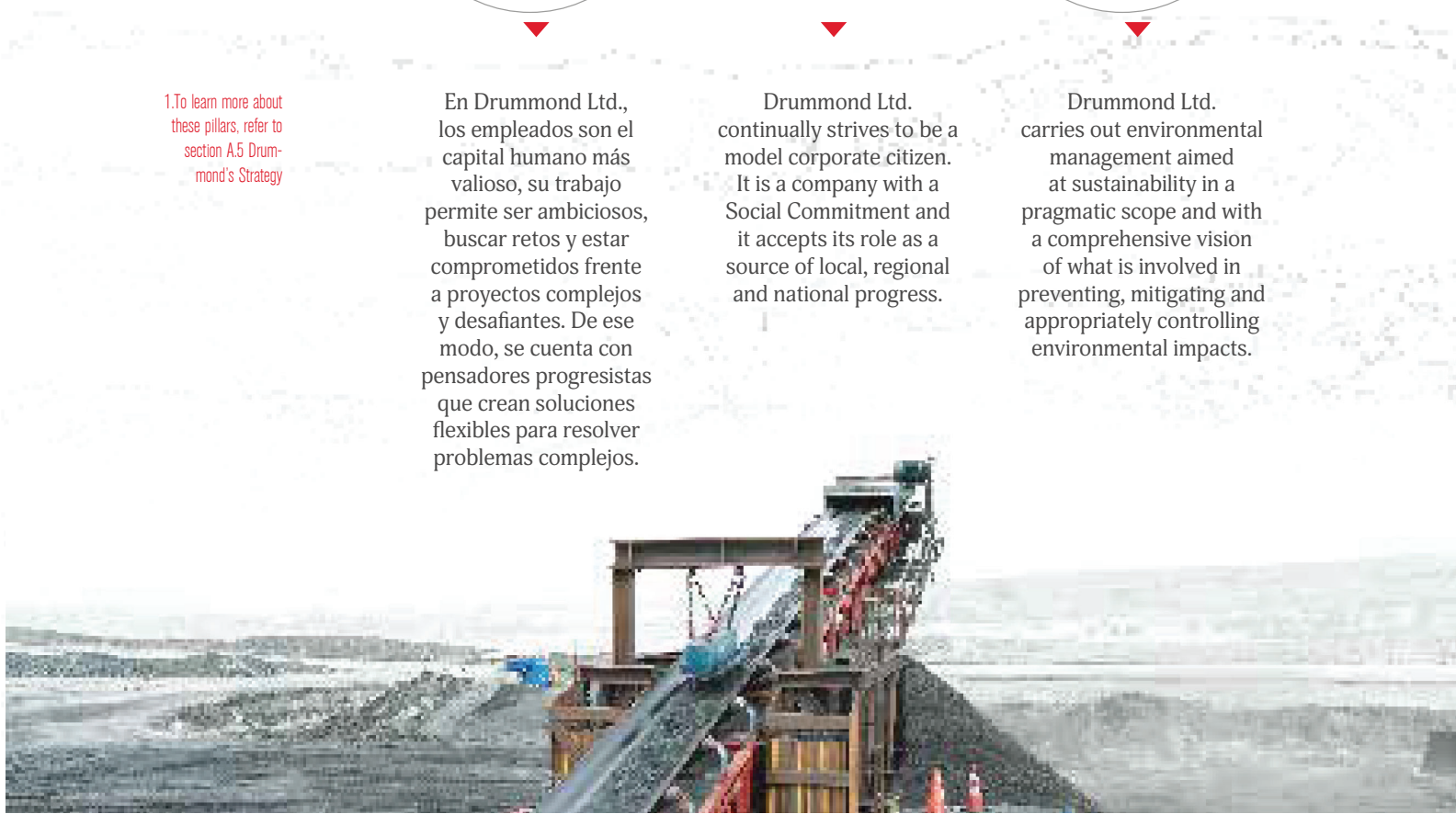


1.To learn more about these pillars, refer to section A.5 Drummond's Strategy

En Drummond Ltd., los empleados son el capital humano más valioso, su trabajo permite ser ambiciosos, buscar retos y estar comprometidos frente a proyectos complejos y desafiantes. De ese modo, se cuenta con pensadores progresistas que crean soluciones flexibles para resolver problemas complejos.

Drummond Ltd. continually strives to be a model corporate citizen. It is a company with a Social Commitment and it accepts its role as a source of local, regional and national progress.

Drummond Ltd. carries out environmental management aimed at sustainability in a pragmatic scope and with a comprehensive vision of what is involved in preventing, mitigating and appropriately controlling environmental impacts.



Additionally, the company has policies<sup>2</sup> to guide and support fulfillment of this commitment.

---

**Human resources policy**

Includes the labor rights that are recognized and respected in Colombia

**Recruitment and hiring policy**

seeks to attract and hire people with high ethical and professional standards

**Wage policy**

Provides guidelines to attract, motivate and retain talents that contribute to the organizational objectives

---

**Conflicts of interest policy**

Offers guidelines to prevent and resolve conflicts of interest problems

**Communications policy**

Describes the guidelines that the communications produced by the company must follow

**Human rights policy:**

Establishes that Drummond Ltd. respects and promotes human rights

---

**Community assistance policy**

Establishes the mechanisms that facilitate and encourage the constant improvement of relationships with the residents of the villages located in the area of influence

**Resettlement policy**

Contains the guidelines that the company must follow on this issue

**Environmental sustainability policy**

This document contains Drummond Ltd.'s commitment to environmental legislation, and the constant evaluation and reduction of our potential impacts on this resource

---

**Energy policy**

Consists of the initiatives that promote efficiency in energy consumption at our operations

**Water conservation policy**

Establishes the activities to conserve and preserve water, since one of the company's priorities is to maintain the quality and quantity of this resource

At the managerial level, Drummond Ltd. has a Social Responsibility and Sustainability Committee, whose primary mission is to lead the organization toward a model of sustainable development, aligning the business with leading practices from the global mining and energy sector.

<sup>2</sup>. All of Drummond Ltd.'s policies can be found at the following link on the company's website: <http://www.drummondtd.com/about-us/our-commitment/?lang=en>



## C2. INTERNATIONAL STANDARDS AND SUSTAINABILITY INITIATIVES

[GRI 102-12]

Drummond Ltd. has signed or voluntarily abides by the following initiatives:



### Bettercoal

Drummond Ltd. is the first company to complete the Bettercoal Evaluation Program cycle – which includes completing the self-assessment questionnaire and undergoing an independent field evaluation, as well as a re-evaluation by consultants approved by Bettercoal whose goal is to confirm what was reported by Drummond Ltd. ERM-CVS was assigned by Bettercoal to complete a field evaluation and the reevaluation at Drummond Ltd. Bettercoal focuses on commitment and continuous improvement, examining management systems, their operation, sustainable performance and impacts, compares them to the terms of the Bettercoal Code and works with the company to improve its practices over time.<sup>3</sup>

The Voluntary Principles on Security and Human Rights.



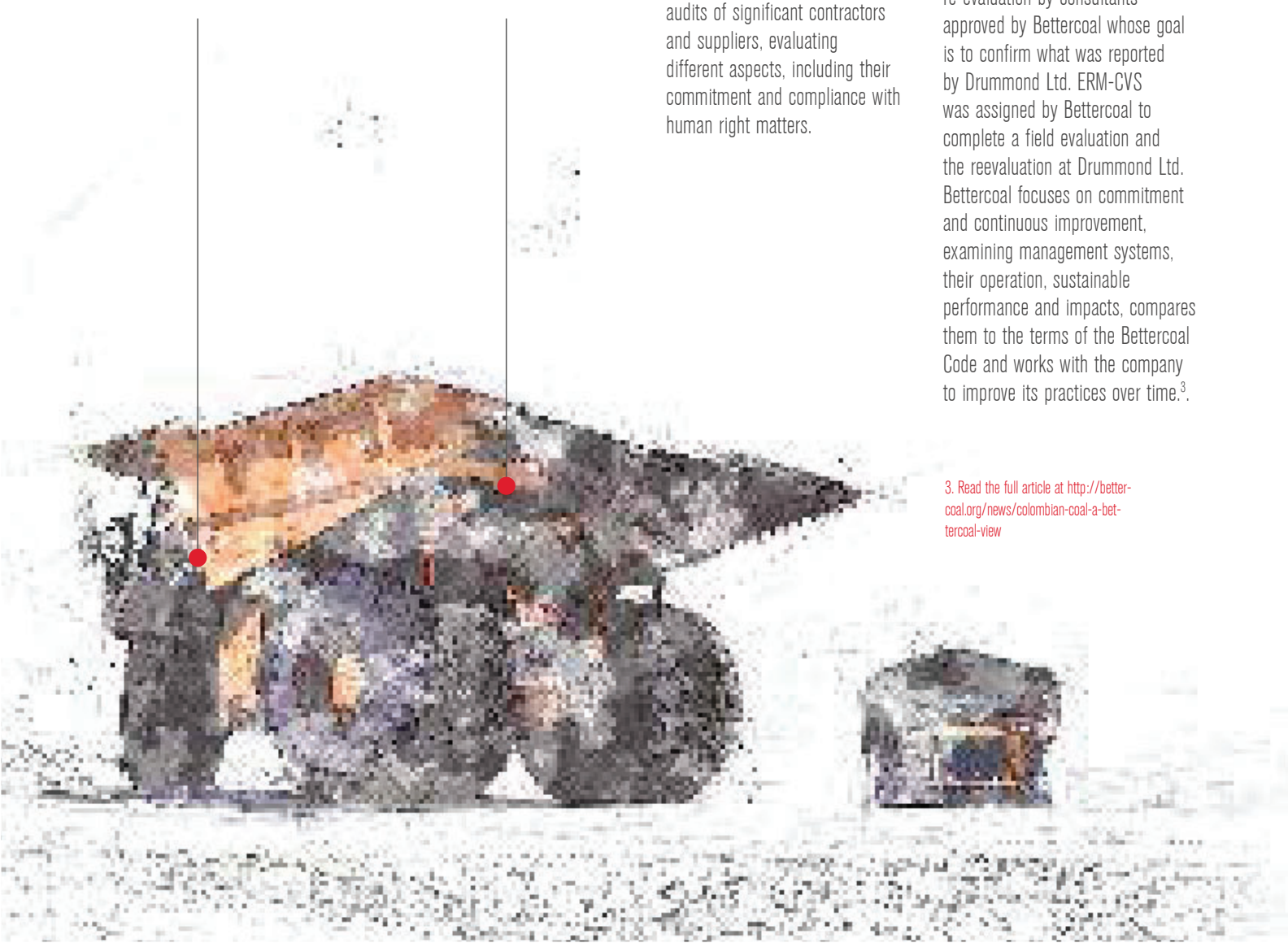
UN Guiding Principles on Business and Human Rights.



Contractors' human rights performance:

The company conducts random audits of significant contractors and suppliers, evaluating different aspects, including their commitment and compliance with human right matters.

<sup>3</sup> Read the full article at <http://bettercoal.org/news/colombian-coal-a-bettercoal-view>





### Human rights risks and management methods

With the support of the vice presidents, managers and departments, the company completed an exercise to identify the risks related to human rights and the methods for managing them, with a plan for implementing them, and their progress is updated biannually. 100% of the company's main operating centers have undergone a human rights assessment.



### Mining SWIA

Drummond Ltd. has been proactive in its participation in the Sector-Wide Impact Assessment (SWIA) conducted by the Institute for Human Rights and Business (IHRB), represented in Colombia by the Regional Center for Responsible Business (CREER, in Spanish).



### Human Rights Working Group (formerly the Human Rights Pilot Program)

Drummond Ltd. participates in this program at the invitation of the Presidential Council on Human Rights, in which, along with other companies from the sector and the Ministry of Mines and Energy and the National Mining Agency, it shares best practices on business and human rights. It began for the purpose of fostering the National Action Plan (PNA, in Spanish) on Human Rights and Business that the national government published on December 9, 2015, and it works on the following issues:

- Complaints and claims systems
- Analysis of risks and impacts
- Relationship with the communities
- Relationships among the national government, local governments, businesses and civil society.
- This pilot has been supported by organizations with expertise in human rights, such as ARDURA and the Ideas for Peace Foundation (FIP, in Spanish). CREER-IHRB has also served as an observer.
- In 2016, the members of the pilot program migrated to a permanent initiative called the Human Rights and Coal Working Group, and we are working with CREER and the recommendations that came from the mining SWIA. This includes developing a framework for the meaning of the non-judicial remediation processes as part of the PNA, and the methodology for improving what we have called the "dialogue of four," involving the national government, regional and local governments, the communities and private companies.

[GRI 102-13]

Additionally, the company is a member of four national advocacy organizations:



National Business Association of Colombia - ANDI



Colombian Mining Association - ACM



Colombian Petroleum Association - ACP



Council of American Companies - CEA



## C3. STAKEHOLDER ENGAGEMENT

[GRI 102-42]

Drummond Ltd. recognizes the importance of maintaining relationships based on trust and constant interaction with its stakeholders, not only in the context of the material process and preparing the sustainability report, but continuously.

These groups are selected based on influence and dependency criteria. The first is understood as the capacity to affect organizational decision-making, and the second is analyzed from the perspective of those who are affected by the company's decisions because their livelihoods depend on them.

Additionally, it has a Communications Committee that promotes and facilitates access to and the exchange of information with its stakeholders.

Below is a list of stakeholders, the relationship mechanisms and the topics that are considered relevant:

[GRI 102-40]

[GRI 102-43]

[GRI 102-44]



### RELATIONSHIP MECHANISMS

#### Employees and their families

Ongoing dialogue between the H.R. department and employees

360 Chats

#### Customers

Ongoing dialogue through the CSR Department

Ongoing dialogue through the Drummond Coal Sales office.

Visits of customers to mining operations

#### Business associations

Working groups with Chambers of Commerce.

Agreements with organizations.

## Suppliers and contractors

Ongoing dialogue between the Materials Department and suppliers and contractors.

---

Comprehensive Manual for Control and Monitoring of Contractors

## Shareholders

Ongoing dialogue with the President's Office

---

Ongoing dialogue with the H.R. Department

## Communities

Ongoing dialogue with communities through Community Relations Department.

---

Community Assistance Policy.

---

Training and information workshops.

---

Informative and awareness-raising meetings.

---

Communication about mining projects.

---

Visits to mining operations.

---

Radio program.

## Community organizations and associations

Ongoing dialogue through the Community Relations Department

---

Community Assistance Policy

---

Training and information workshops

---

Informative and awareness-raising meetings.

---

Communication about mining projects

---

Visits to mining operations

---

Radio program

## Government

Ongoing dialogue with state agencies

---

Letters of request, inquiries

---

Workshops with state agencies

---

Visits to mining operations

## Competitors

Dialogues in working tables with trade organizations of the sector

## Public opinion

Ongoing dialogue with public opinion.



# 2

## MEDIA

### Employees and their families

[Sustainability Report](#)

[Community Service Manual](#)

[Drummond Te Informa](#)

[Revista Drummond](#)

[Press releases](#)

### Customers

[Sustainability Report](#)

[Newsletter](#)

[Revista Drummond](#)

[Press releases](#)

### Business associations

[Sustainability Report](#)

[Community Service Manual](#)

[Drummond Te Informa](#)

[Revista Drummond](#)

[Press releases](#)



## Suppliers and contractors

Sustainability Report

---

*Drummond Te Informa*

---

*Revista Drummond*

---

Press releases

## Communities

Sustainability Report

---

Community Service Manual

---

*Drummond Te Informa*

---

*Revista Drummond*

---

Press releases

## Community organizations and associations

Sustainability Report

---

Community Service Manual

---

*Drummond Te Informa*

---

*Revista Drummond*

---

Press releases

---

## Shareholders

Sustainability Report

---

Financial reports

---

*Revista Drummond*

---

Press releases

---

*Drummond Te Informa*

---

## Government

Sustainability Report

---

*Drummond Te Informa*

---

*Revista Drummond*

---

Press releases

## Competitors

Sustainability Report

---

*Revista Drummond*

---

Press releases

---

*Drummond Te Informa*

## Public opinion

Sustainability Report

---

Financial reports

---

*Revista Drummond*

---

Press releases

---

*Drummond Te Informa*





### COMMUNITY SERVICE LINES, MAILBOXES AND SOCIAL NETWORKS

#### Employees and their families

H.R. support offices

@ denuncias @ drummondLtd.com

Website

@ DrummondLtdco

#### Suppliers and contractors

Website

@ DrummondLtdco

#### Communities

Community service offices

@ atencionalusuario @ drummondLtd.com

Website

@ DrummondLtdco

#### Community organizations and associations

Community service offices

@ atencionalusuario @ drummondLtd.com

Website

@ DrummondLtdco

#### Customers

Website

@ DrummondLtdco

#### Shareholders

Oficinas de atención RRHH

@ denuncias @ drummondLtd.com

Website

@ DrummondLtdco

#### Asociaciones empresariales

Community service offices

@ atencionalusuario @ drummondLtd.com

Website

@ DrummondLtdco

#### Government

Website

@ DrummondLtdco

#### Competitors

Website

@ DrummondLtdco

#### Public opinion

Website

@ DrummondLtdco



## RELEVANT DRUMMOND TOPICS THAT ARE MOST IMPORTANT TO EACH GROUP

### Employees and their families

Human rights

---

Relationships with unions

---

Air quality

---

Protecting the land

### Suppliers and contractors

Managing local communities

---

Human rights

---

Relationships with unions

---

Protecting the land

---

Impact on health and the environment in coal logistics

### Customers

Human rights

---

Relationships with unions

---

Air quality

---

Protecting the land

### Shareholders

Workplace health and safety

---

Human rights

---

Managing human talent

---

Relationships with unions

### Business associations

Impact on health and the environment in coal logistics

---

Fight against corruption

---

Protecting the land

---

Optimizing efficiency in energy consumption

### Government

Human rights

---

Managing local communities

---

Relationships with unions

---

Protecting the land

## Communities

Human rights

---

Relationships with unions

---

Air quality

---

Protecting the land

## Community organizations and associations

Human rights

---

Relationships with unions

---

Impact on health and the environment in coal logistics

---

Air quality



## Competitors

Workplace health and safety

---

Managing human talent

---

Managing local communities

---

Impact on health and the environment in coal logistics

## Public opinion

Human rights

---

Managing local communities

---

Relationships with unions

---

Air quality



## C4. MATERIALITY ANALYSIS

[GRI 102-46]

Drummond Ltd. is aware that the risks and opportunities related to sustainability, inherent in its operational activities, are dynamic over time. This is why it conducted a materiality analysis with the assistance of an independent third party that allowed it to identify the determinants that can significantly impact

environmental, social and corporate governance topics for the company or greatly influence the decisions by the identified stakeholders.

For this reason, in 2016 the company conducted a materiality analysis and updated its stakeholders. Three inputs were used in this process:



GRI standards.



Socio-economic study by the Development, Innovation and Sustainability Group (DIS) for Drummond Ltd.



Results of the “Stakeholder Questionnaire: Analysis of our customers’ opinions” document.

These documents were used to analyze whether there were any additional topics that had not been considered in the materiality analysis in order to **update the list of relevant sustainability topics** for Drummond Ltd. As a result of this exercise, it was decided that there was no need to add new topics or sub-topics, so the **21 relevant topics were maintained, grouped into 104 sub-topics.**

These inputs were also used to update the stakeholders, identifying three more groups than during the previous year. For each stakeholder, the topics were standardized to be able to assign them a grade and determine the order of importance of the relevant topics.

The next step was the **prioritization process**, which was defined using the following resources:



Socio-economic study by the Development, Innovation and Sustainability Group (DIS) for Drummond Ltd.

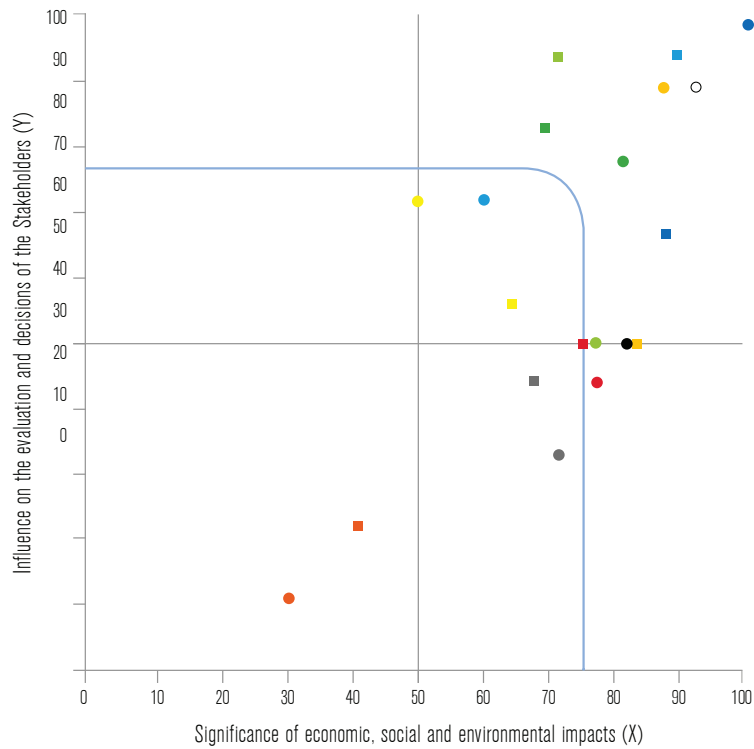


Results of the “Stakeholder Questionnaire: Analysis of our customers’ opinions” document” (customers only).



Based on these inputs, the **materiality analysis was updated, resulting in the following material topics:**

### Drummond Ltd. materiality chart



- Economic Impact
- Financial feasibility of projects
- Customer relationship
- Communications and branding management
- Impact on health and the environment in coal logistics and transportation
- Innovation
- Anticorruption practices
- Dissemination of regulatory matters
- Supplier management
- Managing human talent
- Workplace health and safety
- Relationships with unions
- Human rights
- Managing local communities
- Protecting water resources
- Optimizing efficiency in energy consumption
- Responsible solid waste management
- Air quality
- Efficient use of materials
- Climate Change
- Protecting the land








[GRI 102-47]

The assessment of these topics made it possible to place them spatially on a Cartesian map where the horizontal axis (X) represents the economic, social and environmental impacts for Drummond, and the vertical axis (Y) shows their influence on the evaluation and decisions by stakeholders. Additionally, a reference threshold was considered in which 11 material

topics were found that were presented and approved at a meeting on March 21, 2017. Additionally, **the coverage of the material topics and the content to be reported was defined.**

The list of the material topics resulting from the analysis is presented below:

MATERIAL TOPIC	TOPIC DESCRIPTION	ASSOCIATED GRI ASPECT
	⇒ Identification of the organization's impacts on the economic status of all of its stakeholders, through the financial capital flows among them.	Economic performance Public policy
	⇒ Situation in which taking measures and actions aimed at sustainability do not affect the feasibility of the projects, taking into account their investment, operation and maintenance costs.	
	⇒ Guidelines for the implementation of new technologies that are appropriate for the demands of the organization and the environment.	
	⇒ Processes aimed at identifying, contracting and evaluating the organization's suppliers, in order to reduce negative impacts on the supply chain.	Assessment of suppliers Procurement practices
	⇒ Policies implemented by Drummond Ltd. to ensure respect for and observance of human rights and prevent any action that could cause a violation of these rights.	Human rights category



MATERIAL TOPIC	TOPIC DESCRIPTION	ASSOCIATED GRI ASPECT
	<p>⇒ Activities performed by the company in order to improve quality of life, create wellbeing, mitigate the negative impacts of the operation and promote the social development of the communities where they operate or that are affected by their operations.</p>	<p>Local communities Social complaint mechanisms Environmental complaint mechanisms Indirect economic consequences Artisanal and small-scale mining Resettlement Closure planning</p>
	<p>⇒ Strategies aimed at the selection, training, compensation and development of employees within the organization, understanding that they play a key role for achieving organizational goals.</p>	<p>Employment Market presence Training and education Diversity and equal opportunities Equal pay for men and women</p>
	<p>⇒ Programs and activities carried out by Drummond to ensure healthy and safe working environments for its employees, including mitigating and preventing accidents.</p>	<p>Health and safety</p>
	<p>⇒ Practices developed by Drummond Ltd. to protect the freedom of association of its workers and meet the needs of the existing union groups.</p>	<p>Relationships between workers and management Labor practices complaint mechanisms</p>
	<p>⇒ Methodologies and procedures for identifying and evaluating impacts from the use of water resources. Policies and programs to implement measures that are technically and financially viable in order to achieve efficient and rational use of this resource, including measures for reuse, recycling and the conservation of aquifers.</p>	<p>Water Effluents and waste (partial water)</p>



MATERIAL TOPIC

TOPIC DESCRIPTION

ASSOCIATED  
GRI ASPECT



Policies, processes, practices and initiatives to optimize efficiency in energy consumption and reduce dependence on fossil fuels in the operations.

Energy



Measures and best practices to avoid, minimize, mitigate, restore and compensate for habitat loss, degradation y fragmentation, invasive alien species, overexploitation, changes in water resources, nutrient loads, and contamination in the life cycle of the mine; in order to maintain the value and functionality of the priority ecosystems and increase resource efficiency in Drummond Ltd.'s operations.

Biodiversity



MATERIAL TOPIC

TOPIC DESCRIPTION

ASSOCIATED GRI ASPECT



Mechanisms for the prevention, reduction and control of atmospheric emissions in the operations. Also includes procedures for responding to emergencies, abnormal emissions and dispersion conditions, and in excess of the patterns and measurements permitted in the air quality criteria.

Emissions (partial, non-GEI)



Management of the environmental and health impacts associated with the transportation and delivery of products and raw materials and consumable goods, such as: fuel consumption, GHG emissions and other atmospheric emissions, effluents (chemicals), waste, noise, spills (chemicals, oils and fuels), in order to reduce the ecological footprint of the logistics operations.

Customer health and safety

It is important to clarify that the materiality analysis covers the operations at the two mines and Puerto Drummond in Colombia.



10/10/2024

10/10/2024





• ECONOMIC IMPACT •  
AND SUPPLY CHAIN



# D1. ECONOMIC PERFORMANCE

[GRI 103-1]

The economic results of Drummond Ltd.'s mining operations in Colombia are, undoubtedly, essential to guarantee its continuity over time, generating a sufficient return for its shareholders and significant benefits to its other stakeholders, such as suppliers of goods and services, direct and indirect employees, the national and municipal governments and the communities located in the areas of influence of its operations.

The preservation of the company's financial resources makes feasible both normal mining operations and the expansion projects that are outlined in the long-term mining plans and that allow for Drummond Ltd. to grow sustainably.

## Coal price behavior

[GRI 103-2]

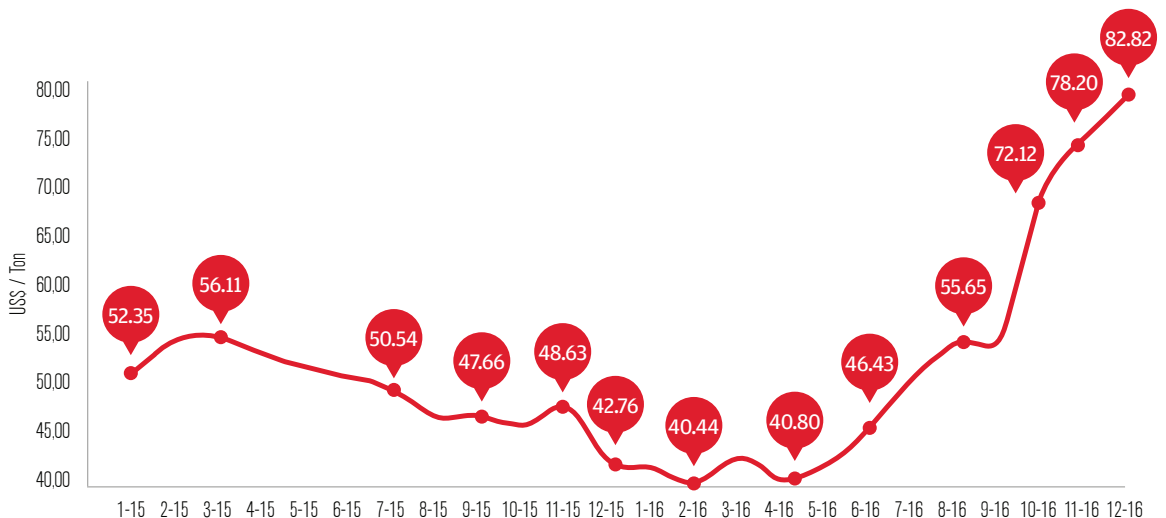
Carrying out efficient mining activities that comply with international industry standards and maintaining low financial leveraging has allowed the company to confront the low coal price scenarios that have occurred in recent years.

The results from 2016 as compared to 2015 were favored to a great extent by the behavior of coal prices on the international market. One of the most important indicators used by the Colombian authorities is the FOB price, which uses the API2 (coal delivery price in northern Europe) and the BCI7 (freight from northern Europe to Colombian port) as a reference.

Just comparing the average price for December 2014 with the price from January 2015, it is evident that the price dropped by 18% (US \$11.69/ton), going from US \$64.04/ton to US \$52.35/ton. During all of 2015, the price continued to drop, closing the year at US \$42.76/ton, representing an average decline of 33% (US \$21.28/ton). During the first five months of 2016, coal prices continued to drop, and the price did not begin to rebound until June. In 2016, the year ended at US \$82.82/ton, representing a 94% recovery as compared to the end of 2015 (US \$42.76/ton). However, when comparing the average price from 2016 to the average from 2015, there was only a 7% increase, going from US \$50.63 to US \$54.34.

### International Coal Price

[API2 - BC17 Index]



The behavior of coal prices on the international market is a function of supply and demand. Many factors affect these variables, such as inventory levels around the world, the intensity of the weather during the winter and summer seasons, changes in internal regulations in coal-producing countries that may limit their production, and more sources of cleaner and lower-cost energy, among others.

Operationally, 2016 showed very positive results compared to those from the previous year. Production volume increased by 10%, going from 25.9 million tons in 2015 to 28.4 million tons in 2016. Additionally, 2016 set a record in sales, with exports of 32.6 million tons, as compared to 28 million tons in 2015, representing an increase of 16%. The exchange rate played an important role, as the average rate from 2015 was COP \$2,746.47, while in 2016 it rose to COP \$3,053.42, which also contributed to reducing the flow of dollars needed to fund the mining, transportation and shipping operations.

[GRI 103-3]

In such a complex environment, it is essential that Drummond Ltd. be able to maintain a very efficient cost structure with minimal debt levels. These have been the guidelines that the company has set out that have allowed it to face this period of low prices, fully complying with the commitments it has made to its stakeholders.

## ≡ Main economic performance indicators

EBITDA  
Million

2016 **US\$ 279.1**  
2015 **US\$ 128.4**

EBITDA  
Per ton

2016 **US\$ 8.55/ton** **+87% increase**  
(US\$ 279.1 million /32.6 million tons.)  
2015 **US\$ 4.58/ton**  
(US\$ 128.4 million /28 million tons.)

EBITDA /  
Operating  
revenues

2016 **17%**  
(US\$ 279.1 million /US\$1,614.3 million)  
2015 **8%**  
(US\$ 128.4 million /US\$ 1,582.7 million)





	Amount 2015 (US)		Amount 2016 (US)
[GRI 201-1]	<b>1,582,686,872</b>	Net Sales Revenue	<b>1,614,304,661</b>
	<b>8,737,348</b>	Revenue from financial investments	<b>14,388,818</b>
	<b>4,696,243</b>	Revenue from asset sales/retirement	<b>2,574,838</b>
	<b>1,596,120,463</b>	Direct economic value generated	<b>1,631,268,317</b>
	<b>852,233,545</b>	Operating Expenses	<b>734,582,793</b>
	<b>305,632,189</b>	Employee salaries and benefits	<b>293,543,873</b>
	<b>411,384</b>	Payments to capital providers	<b>0</b>
	<b>338,530,947</b>	Payments to governments (Royalties and taxes)	<b>338,297,158</b>
	<b>1,213,240</b>	Investments in communities	<b>1,136,343</b>
	<b>1,498,021,306</b>	Economic value distributed	<b>1,367,560,167</b>
	<b>98,099,157</b>	Economic value retained	<b>263,708,150</b>

Amounts expressed in US Dollars

**PAYMENTS TO GOVERNMENTS (ROYALTIES AND TAXES)**



This indicator was built based on the parameters established in the GRI standards. Therefore, amounts related to depreciation and amortization were not considered as part of the company's operating expenses.



## ☰ Payments to the government

The company continues to participate in the Extractive Industries Transparency Initiative (EITI), an international coalition of governments, companies and civil society organizations that promotes good governance through transparency in accountability by companies in the mining sector

Colombia began the process of applying to the EITI in May 2013, as part of the initiatives for transparency and the fight against corruption. The EITI Board of Directors formally accepted Colombia as a member of this initiative in October 2014. In March 2016, the first EITI report was submitted, showing the results of the verification for the 2013 fiscal year, in which 18 companies participated, six

of which belong to the mining sector. The first EITI Colombia report complied with the established requirements, making it possible to reconcile 99.6% of the tax and royalty payments made by the companies and the total revenues received by the Colombian government. In this first report, the discrepancies found were less than 0.4%. In the third quarter of 2016, the amounts from 2014 and 2015 that are subject to validation were reported.

Drummond Ltd. has actively participated in implementing the EITI initiative, which is one of the highest industry standards, consistent with its responsibility to provide information transparently and honestly to its stakeholders.





## Environmental investments

[DLTD-01]

The following are the investments in environmental protection made by the organization or on its behalf in 2016 to prevent, mitigate, control

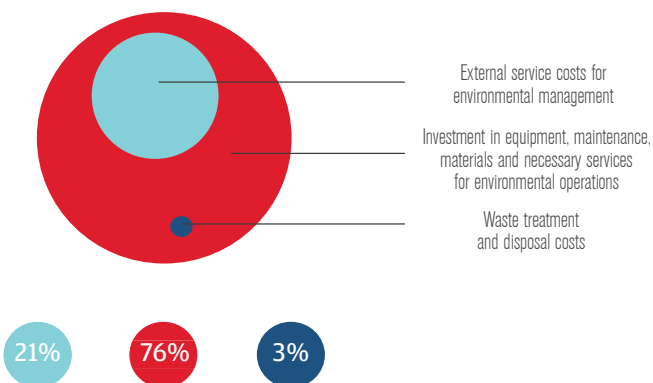
and document environmental aspects, impacts and risks. They include the costs for disposal, treatment, sanitation and cleaning:

	Mine	Port
TOTAL WASTE MANAGEMENT, EMISSIONS TREATMENT AND RESTORATION COSTS (includes investment in equipment, maintenance and services for operation)	<b>13,279,309.44</b> 2016 <b>14,847,331.46</b> 2015	<b>201,017.94</b> 2016 <b>137,493.40</b> 2015
TOTAL PREVENTION AND ENVIRONMENTAL MANAGEMENT COSTS (includes costs for environmental training and education, certifications, external management services and others)	<b>3,608,121.54</b> 2016 <b>3,020,685.54</b> 2015	<b>1,251,342.81</b> 2016 <b>1,669,115.19</b> 2015
TOTAL INVESTMENT IN ENVIRONMENTAL MANAGEMENT	<b>16,887,430.98</b> 2016 <b>17,868,016.99</b> 2015	<b>1,452,360.76</b> 2016 <b>1,806,608.60</b> 2015

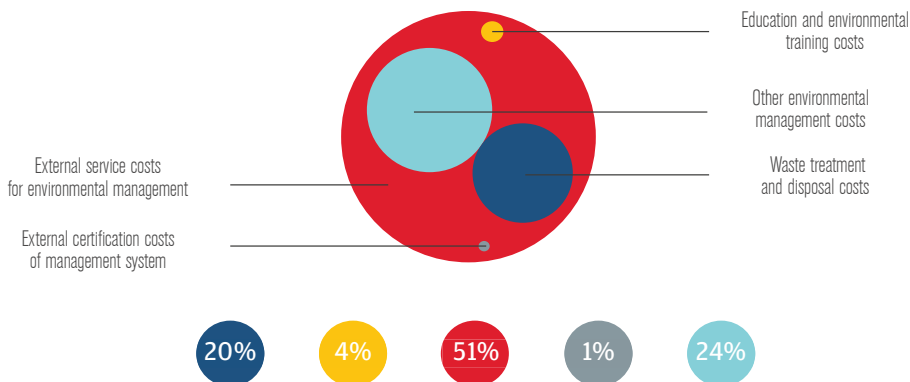
Amounts expressed in US Dollars



### Environmental investments at the mine in 2016



### Environmental investments at the port in 2016



At the port, the major investments in environmental protection are aimed at prevention and environmental management, which includes contracting environmental monitoring projects, lab analysis, studies, technical evaluations and assessments, social and community management, and others such as signage, repairs, clearing, gardening, maintenance and transportation.

At the mines, the largest investments were made in equipment, maintenance, materials and the services required to control and prevent emissions into the atmosphere, in replanting affected areas, in the treatment of domestic, industrial and mining wastewater, and in the comprehensive solid waste management plan.

In 2016, Drummond Ltd. made environmental investments of approximately US\$18.3 million.



## Climate change risks

[GRI 201-2]

Although Colombia only emits 0.42%<sup>4</sup> of global greenhouse gases, it is one of the countries that is most vulnerable to climate change. This vulnerability has led to consequences that, if not managed properly, could greatly affect the organizations' continuity.

Drummond Ltd. no is no stranger to the consequences of climate variability. For this reason, it conducts assessments of possible climate change risks to the mining and port operations as a key input to ensure the economic and operational sustainability of the business.

Risks related to climate change.

Description of the risk

Main impacts

1

Potential floods and disruption of mining and port operations due to more frequent and intense storms.

- Intense rains have led to floods that have affected the operations. There is also a risk to the rehabilitation work on the slopes, creating more channels and deteriorating the work.

2

Long periods of drought and intense sun that can lead to forest fires.

- Prolonged droughts have increased the frequency of forest fires in the areas surrounding the mine and even within the mine area.

3

Community perception of mining operations as the cause of floods or droughts.

- Increasingly intense rains or prolonged droughts lead to the conclusion in the community, due to misinformation, that these phenomena may be caused by the mining operations.

4. National Inventory of Greenhouse Gas Emissions. IDEAM. PNUD. 2016.



It is difficult to distinguish the phenomena related to climate variability from those that can be considered to be derived from climate change, even though one is the result of phenomena that are becoming much more extreme than the other. However, the company is already in the process of reviewing and adjusting its water management systems, taking into account longer return periods for calculating them as a way to involve more intense phenomena into the environmental

management of the mining projects and the port project. It is also working in the mining region with other companies, the local authorities and Corpocesar to establish strategies for preventing forest fires.

All of these actions will be considered as an adaptation to climate change, and the investments will be considered as such. This is expected to be implemented in 2017 and 2018.

### Implications of risk before taking action

- Suspending the operations with lost time.
- Property damage from flooding.

### Methods used to manage risk

- Redesigning the water management and treatment systems. The company has also had to modify its planting and water management on the slopes in rehabilitated areas.

### Cost of measures taken to manage risk/opportunity

**2,500,000**

*(estimated amounts in USD)*

- Allocation of resources for controlling fires.
- Loss of plant cover.
- Damage to rehabilitated areas.

- Preparing better prevention systems and allocating more tools to monitor them.

**1,500,000**

*(estimated amounts in USD)*

- Opposition in environmental proceedings.
- Increased requests for information and claims and complaints.

- Information for the community and support for preventing floods or droughts as part of the company's social responsibility program.

**100,000**

*(estimated amounts in USD)*

### MILESTONES

- In 2016, Drummond Ltd. exported 32.6 million metric tons of coal, which made us the largest coal exporter in Colombia.
- The investment in environmental management at the mining operations in 2016 has been the largest made by the company so far since it began operating.

### CHALLENGES

- Seeking a better cost-benefit ratio in the environmental investments made in the company's projects, to achieve greater effectiveness in environmental control and management actions in terms of the investment made.





## D2. FINANCIAL FEASIBILITY OF PROJECTS

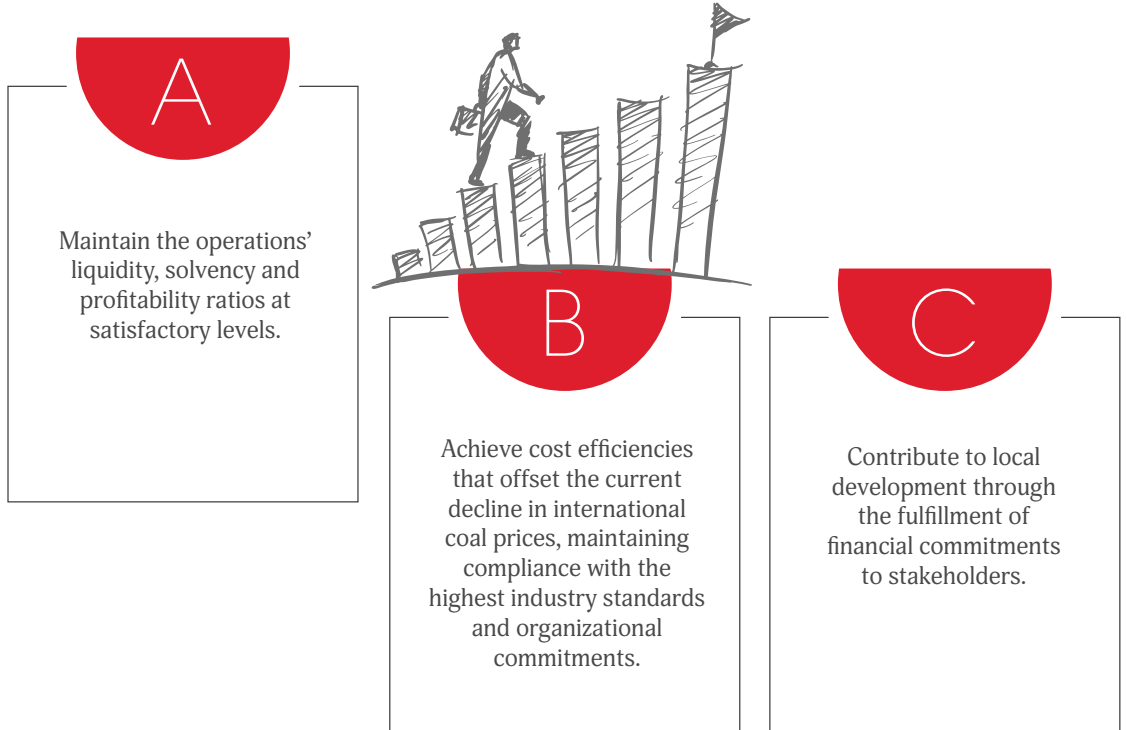
[GRI 103-1]  
[GRI 103-2]  
[GRI 103-3]

The financial feasibility of its operations and future projects is a priority for Drummond Ltd. The development of new mining projects is defined by both a plan for Integrated Operations and for the shared use of infrastructure, which makes it possible to reduce operating costs and optimize the exploitable coal reserves under each of the contracts signed with the mining authorities. In this way, the company seeks to generate

adequate returns in order to continue fulfilling its commitments to all of its stakeholders.

The company's economic performance and the viability of its future projects are interrelated issues, since proper management of the existing resources will depend on projects having the financial backing which would allow the necessary investments to be made at the appropriate time.

### Where Drummond Ltd. is headed



### D3. SUPPLIER MANAGEMENT

GRI 103-1

Supplier management is extremely important to Drummond Ltd., since it ensures the complete and effective development of the value chain, by supplying goods and services in the best quality, timeliness and price conditions. Given that this work has a direct impact on employees, contractors, the communities and the operation as a whole, Drummond Ltd. develops best practices that ensure that the highest quality goods and services are provided, keeping its staff healthy, motivated and committed to their production goals, and avoiding lost time and equipment wear and tear, ensuring optimal productivity.

Additionally, supplier management mitigates risks that, if they were to materialize, would create significant impacts that could compromise its operational, technical and financial integrity (Anti-Money Laundering and Counter Terrorism Financing Risk Management System – SARLAFT, in Spanish) and create safety and environmental risks.

The company encourages the development and contracting of local suppliers. However, this sometimes entails ethical risks that can have a negative impact on the region, leading to fewer purchases of local products, less use of local labor and lower regional taxation. In 2016, as the result of an internal and external audit process, Drummond Ltd. detected a number of fraudulent processes involving employees and suppliers from its area of influence, which is why it decided to exclude these companies from its supplier base and again migrate to using goods and services from companies outside of its area of influence.





[GRI 103-2]

Drummond Ltd. is committed to using good supplier management practices that mitigate risks and ensure the integrity and continuity of the operation, as well as strong relationships with its suppliers. To do so, the company has a variety

of management tools, which allow it to clearly establish the commitments undertaken in providing goods, supplies and services, as well as regarding safety, environmental and human rights issues. These tools include:

# 1

## COMMITMENTS UNDERTAKEN IN PROVIDING GOODS AND SERVICES

These commitments make it possible to ensure technical suitability, to guarantee that contractors and suppliers work with the highest industry standards, have qualified and certified staff, state-of-the-art technology, and adequate machinery and facilities. The following practices are used:

- Contracting through commercial offers that clearly establish the responsibilities and commitments, and the scope.
- Signing of terms and conditions duly accepted by the supplier or contractor's legal representative.
- Signing of irrevocable declarations, both for goods and for services, by the legal representative at the time that the supplier or contractors is created.
- Sharing a Supplier Guide with the supplier or contractor, which establishes the guidelines to be followed regarding providing goods and supplies.
- Personnel verification, in order to ensure that workers do not have criminal records.

# 2

## POLICIES AND GUIDELINES

These policies seek to ensure that all business relationships are conducted under the highest transparency and ethical standards, and to ensure the implementation of the physical and industrial safety, human rights and environmental management policies:

- Communication of Drummond Ltd.'s internal policy on human rights and conflicts of interest.
- Requirement that internal policies be issued and implemented by each supplier or contractor and distributed to the personnel performing work inside the company's facilities.





# 3

## INDUSTRIAL SAFETY, OCCUPATIONAL HEALTH AND ENVIRONMENTAL CERTIFICATIONS

These certifications ensure that service providers operate according to the industry's best physical and industrial safety, health and environmental standards. They are based on activities such as:

- Sharing the Comprehensive Manual for Contractor Control and Monitoring with the supplier or contractor, which establishes the environmental standards for the company's operations.
- Holding periodic meetings, inspections, chats and trainings in order to continuously improve safety and environmental management practices.

# 4

## COMPLAINTS MECHANISM

Drummond Ltd. publishes its Complaints Mechanism and also demands the issuance and implementation of this mechanism from each supplier or contractor, in order to establish a tool by which any employee or third party can directly or anonymously report their suspicion or certainty of an anomaly in the execution of the mining or port operations.

- + See more information on the Mechanism for Reporting Complaints and Irregularities at:  
<http://www.drummond.com/wp-content/uploads/GRIEVANCES-POLICY.pdf>

It is important to note that it also has opportunities for communication by contractors, designed to improve communication with suppliers and so they can provide updated information related to their invoices and tax information.

- + For more information see:  
[http://vss.drummondco.com/Security\\_ESP/VendorLogin\\_ESP.aspx](http://vss.drummondco.com/Security_ESP/VendorLogin_ESP.aspx)






## ☰ Drummond Ltd. supply chain


[GRI 102-9]

Drummond Ltd. has policies, procedures, guidelines, checklists, and activities aimed at ensuring that the companies that are part of the base of suppliers and contractors meet the industry's highest standards. These activities are carried out to conduct efficient and effective


operations from an operational, technical and economic perspective, in addition to ensuring the sustainability and profitability of the mine and port operations. The supply process for all goods, supplies or services required includes the following stages

- 1  **Formalization through Purchase Orders**  
Purchase Orders constitute the documents through which Drummond Ltd. confirms to the supplier or contractor the acceptance of the offer that was submitted, complying with the Terms and Conditions sent in the invitation to quote or bid. In those cases in which the object or service to be supplied is more complex, involves a higher cost or requires the formalization of a long-term commercial agreement, contracts will be signed.

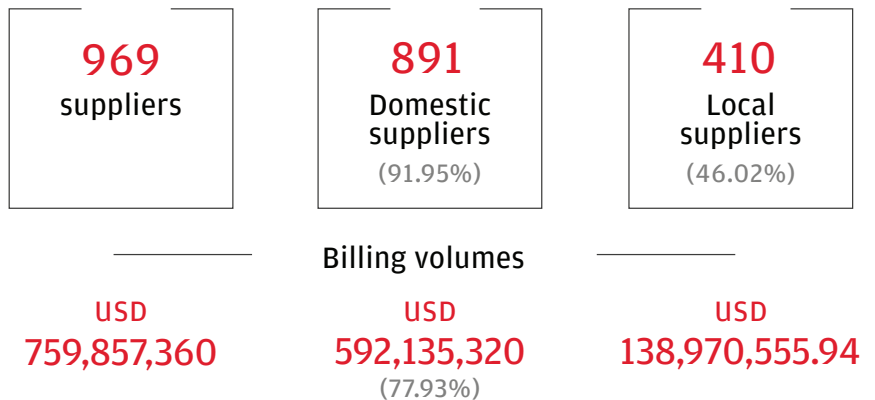
---

- 2  **Receipt of goods and services**  
Drummond Ltd. confirms receipt of the goods provided by the supplier through the verification of waybills, confirming the specifications, quantities and the state in which the goods, supplies or merchandise are received.

---

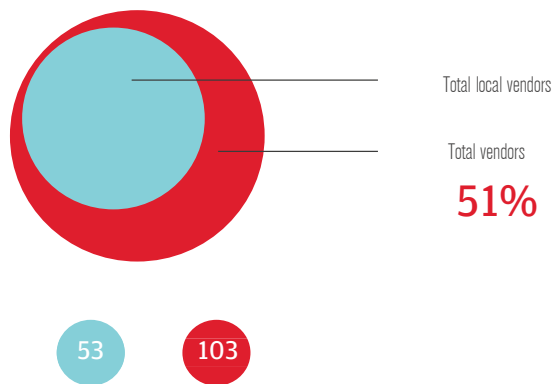
- 3  **Receipt of services**  
Drummond Ltd. confirms receipt of the services provided by our contractors through certificates confirming that the contractor complied with the established safety and environmental standards. This certificate is signed by both parties.

In 2016, Drummond Ltd. had business relationships with



≡ Total number of contracts recorded<sup>5</sup>

Percentage of local vendors and suppliers in 2016

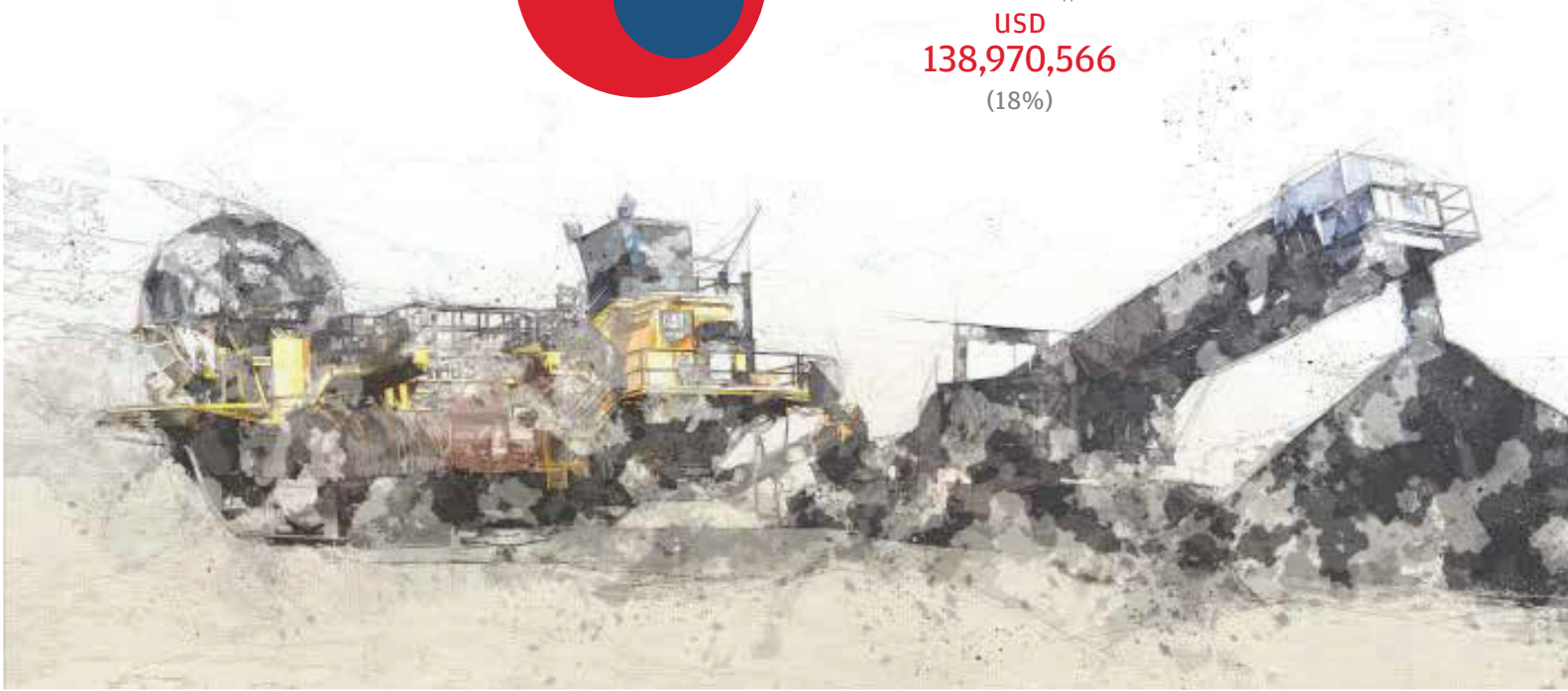
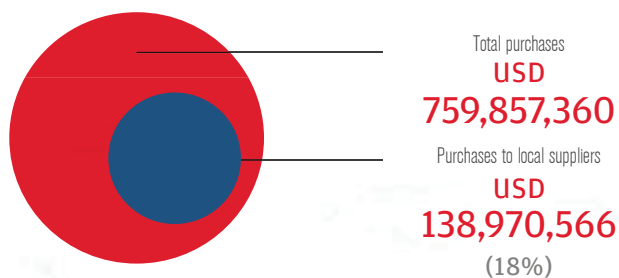


5. Corresponds to the percentage of local suppliers that have long-term business relationships with Drummond Ltd. and who provide recurring services.

≡ Percentage of spending in locations with significant operations that correspond to local suppliers in 2016:

[GRI 204-1]

Percentage of purchases made from local suppliers in 2016



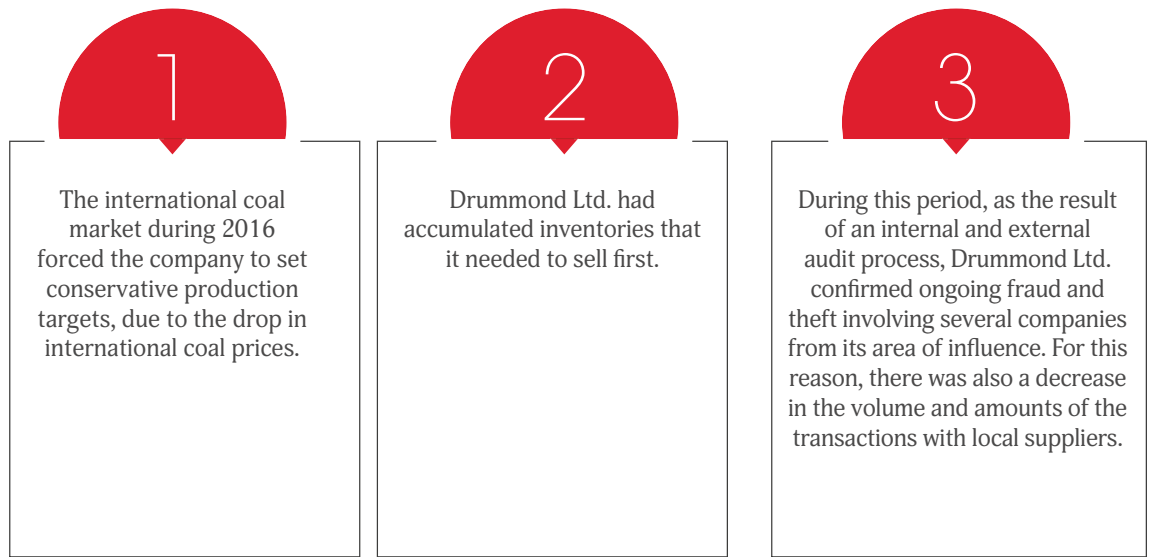


In 2016, 18% of Drummond Ltd.'s purchases were made from local suppliers. A local supplier is one whose main offices are located on the Atlantic Coast, specifically in the departments of Cesar and Magdalena, which cover the areas of influence of the company's mining and port operations.

Drummond Ltd. does everything in its power to purchase goods and services from local suppliers

and contractors, from the towns located within the project's area of influence. It does so provided that the technical and economic efficiency of the operations is not affected, considering quality, timeliness, price and after-sales service.

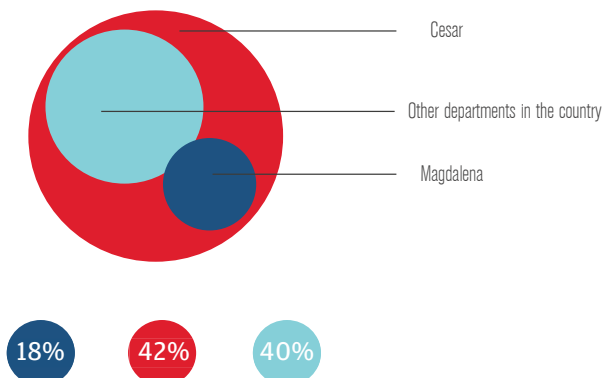
During 2016, there was a decrease in the amounts billed by local suppliers for the following reasons:



### ≡ Hiring local labor

For all contracts in force during 2016, the service providers were requested to hire as much local labor as possible, achieving the following results:

Percentage of local labor in 2016 by region.



## ☰ Supplier selection

Drummond Ltd. seeks to contract with the most competitive companies in the market, evaluating different aspects such as their experience with the service, financial stability, national and international certifications, verification of high-risk lists and performance in terms of safety, occupational health and the environment.

As a prerequisite to proceed with the creation of a new supplier or contractor in the Drummond Ltd. database, the organization's legal representative must sign the Irrevocable Declaration of Goods and Services and the Irrevocable Declaration of Services, which details all environmental obligations that the supplier or contractor must fulfill once the service begins.

In addition to the above:

For contractors that sign contracts with Drummond Ltd., the legal representative signs the Terms and Conditions attachment, which contains the clauses regarding Environmental Indemnification in paragraph 34.

For all suppliers and contractors that sign contracts and master purchase orders with Drummond Ltd., the Environmental Department conducts scheduled and unscheduled audits of the work areas and the management programs.





## Supplier monitoring and evaluation

[GRI 103-3]

Drummond Ltd. conducts internal audits that evaluate its suppliers' or contractors' performance. In order to prioritize and identify which ones should be audited, the company considers the criticality of the service being performed, the annual billing volume and the complaints mechanism.

The company has three **mechanisms for verifying contractor performance**, which consist of:

### PERIODIC AUDITS



- **ENVIRONMENT**

Matrix identifying environmental risks

- **WORKFORCE**

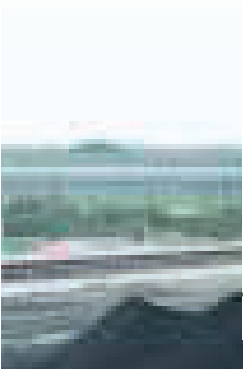
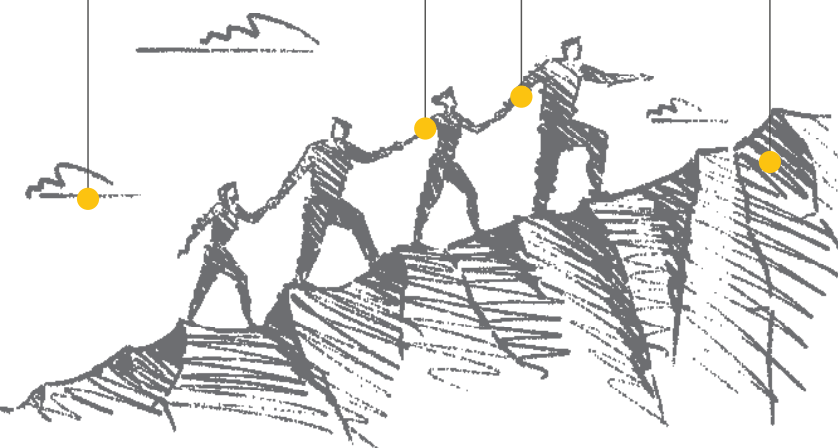
- Staff competencies
- Hiring guidelines
- Payment of staff wages
- Work shifts and rotations
- Delivery of uniforms and PPE
- Social security payments
- Evaluation of facilities, equipment and tools
- Facilities maintenance program

- **HUMAN RIGHTS, CONFLICTS OF INTEREST/ COMPLAINTS MECHANISMS**

- Conflicts of interest policy
- Complaints mechanism

- **OCCUPATIONAL HEALTH AND SAFETY**

- Overview of risk factors
- Emergency response program
- Accident rate indicators
- Performance indicators



Additionally, users and the Industrial Safety Department evaluate contractors' performance annually or three months before the end of each contract.

## FACILITIES INSPECTIONS

2

- POLICIES
- PROCEDURES
- CERTIFICATIONS

- PHYSICAL FACILITIES
- STAFF
- EQUIPMENT AND TOOLS AVAILABLE TO EXECUTE THE SERVICES

## RANDOM INSPECTIONS

3

- MATRIX FOR IDENTIFYING HAZARDS AND RISKS
- PROCEDURES FOR CRITICAL TASKS

- TRAINING AND EDUCATION
- COMPLIANCE WITH RECOMMENDATIONS AND ACTION PLANS



## Environmental and social evaluations

[GRI 308-2 y 414-2]

### Negative social and environmental effects on the supply chain

#### ENVIRONMENTAL

45

Total number of suppliers with which the company had a relationship in 2016 whose impact has been evaluated.

45

Number of suppliers that have significant real or potential negative impacts

100%

Percentage of suppliers that have agreed to make improvements after the evaluation

0%

Percentage of suppliers whose contractual relationship has been terminated as a result of the evaluation

#### SOCIAL

68

0

0%

0%

#### Environmental evaluations

During 2016, 79 inspections were completed, of which 55 were conducted on port contractors and 24 on contractors from the mining operations. The main environmental criteria reviewed during the evaluations were: waste management (recyclables, ordinary, oily, general hazardous, ordinary and special waste), chemicals management, hydrocarbon management, control and prevention of oil and chemical spills.

Additionally, the company noted that the events that occurred most frequently in providing the services were related to: oil spills on the ground, improper waste management and risk of oil and chemical spills. In 100% of the cases that had some sort of negative impact on the environment, plans of actions were agreed to after the evaluation. The implementation of the inspection program has contributed to the continuous improvement of the contractors' environmental management and the generation of an organizational culture that is aimed at caring for and protecting the environment.

#### Social evaluations

Drummond conducts audits and inspections of its contractors, and it also creates opportunities for communication. In 2016, the guidelines and internal policies implemented by the contractors were reviewed to confirm the inclusion of issues related to human rights and labor practices. These evaluations have found no nonconformities on the aspects evaluated in terms of labor practices and human rights that could have significant negative impacts, either real or potential, on the supply chain.

Drummond Ltd. monitors and evaluates the actions of its contractors using a Comprehensive Manual for Control and Monitoring of Contractors, which contains the guidelines related to: environmental management, environmental evaluations and inspections, industrial safety and human rights, among others.



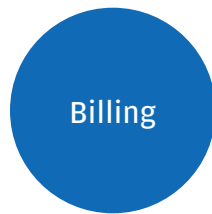
Find more information at:  
[http://vss.drummondco.com/Vendor\\_ESP/VendorXMLData\\_ESP/PDF/ContractorManual.pdf](http://vss.drummondco.com/Vendor_ESP/VendorXMLData_ESP/PDF/ContractorManual.pdf)



## ☰ Case studies for material topics

As part of the company's commitment to social issues, and in order to ensure that the greatest possible number of activities are carried out by companies from the area of influence of the mining projects, during 2016 the contract for food and lodging

services was divided into two to give an opportunity to local companies to participate in part of the services. As a result, a local company was awarded the lodging contract, which led to the hiring of 172 local workers. This strategy brings multiple benefits:



Approximately 28% of the billings that were generated by a multinational company are now managed by a company from the area of influence.



The average recruitment of personnel from the region is 91%. For the case study, the new company was able to hire 98% of its workforce from people from the region.



The supplier who was previously responsible for the food and lodging service was a multinational corporation, with its main offices in the city of Bogota. Therefore, all of the taxes and payments from those services were paid in the country's capital.



The current service provider is a company whose main offices are in the municipality of El Paso, in the Department of Cesar. Therefore, all taxes and payments from the services are paid in that municipality

To measure the impact of these types of cases on the region, the Materials Department generates quarterly reports that measure local hiring and billing levels. Likewise, our contracts and

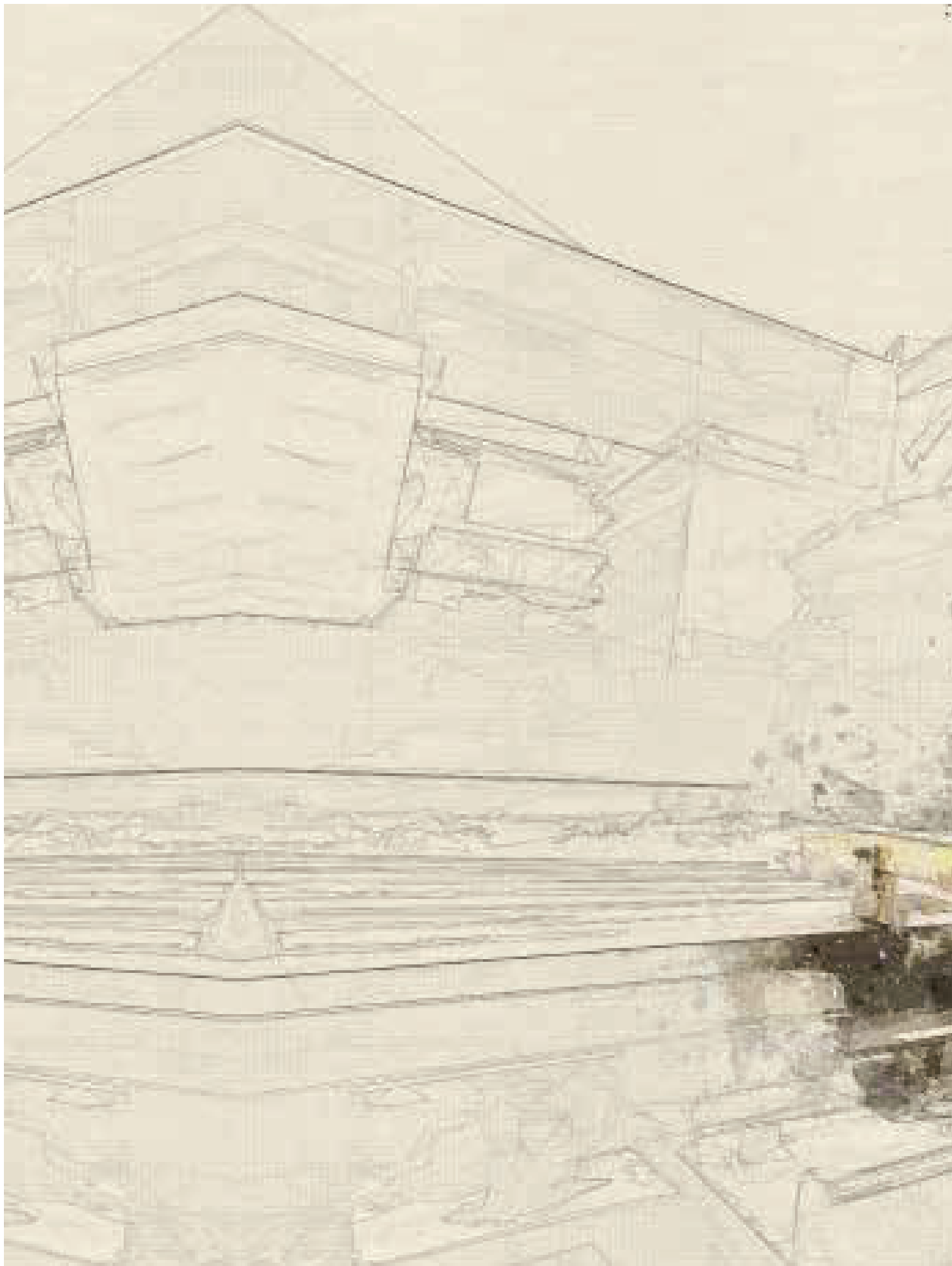
invitations to bid reiterate our social commitment and the importance of taking people from the area of influence into account.

### MILESTONES:

- 42.31% of all active legal entities in the supplier database correspond to local suppliers.
- 90.81% of the staff employed by Drummond Ltd. contractors are employees and workers from the region.

### CHALLENGES

- In 2017 the company wants to increase hiring of local labor by suppliers and contractors by 2%. Additionally, this number is expected to increase to 5% by 2020 over the baseline from 2016.





• SOCIETY •



## E1. MANAGING HUMAN TALENT

[GRI 103-1]

For Drummond Ltd., it is extremely important to work constantly and appropriately on managing human talent, since this is the key to aligning organizational standards and channeling strategic goals and objectives. Drummond Ltd.'s most important asset is its human talent, which has a direct influence on the organization's results; this is why the company's actions are aimed at managing

labor relations, strengthening the organizational culture and maintaining a healthy working environment, as well as promoting productivity through commitment and motivation.

Drummond Ltd. focuses on three main aspects in managing human talent:

### Focus on recruiting and hiring

The company seeks to hire qualified personnel, with high professional and ethical standards, who can take on the organizational challenges and adapt to the dynamics of labor relations. Drummond Ltd., as part of its recruitment process, is known for being a good neighbor to the surrounding areas, giving priority to hiring candidates from this region.

### Focus on compensation and benefits:

Drummond Ltd. seeks to generate well-being and improve the quality of life for its employees through access to education, health care, savings, recreation and wellness programs for them and their families.

### Focus on staff behavior and conduct:

Effective communication, building trust and focusing on health, safety and the environment are the organizational competencies that have been promoted through the company's various programs and plans. All of this is done to ensure a work environment in which values such as respect, communication and tolerance, among others, take precedence.



---

In spite of the steps that Drummond Ltd. takes to provide well-being and generate job opportunities, its activities can lead to some risks or impacts, such as:

- Generating dissatisfaction among residents, given the high labor demand in the surrounding towns that exceeds the number of openings that Drummond Ltd. can offer.
- External impact reputationally and internally on the work environment because some employees do not act in accordance with the skills, values and behaviors that the company promotes.



[GRI 103-2]  
[GRI 103-3]

To mitigate the impact of these risks, Drummond Ltd. has established a variety of policies and guidelines, such as the Recruitment and Hiring policy, the Human Resources policy, the Wage policy and the Employee Manual. These documents establish the guidelines and actions that allow Drummond Ltd. to retain its human talent, to preserve their knowledge and experience, and to generate well-being and improve the quality of life for its employees. This information is available on the company's website (<http://www.drummondLtd.com/about-us/our-commitment/?lang=en>) and in the Employee Manual that is given to each employee when they join the company or whenever it is updated.

Drummond Ltd. has an internal channel for employees to report irregularities on labor matters, guaranteeing complete confidentiality. This complaints channel, which mainly seeks to focus on dialogue and coordination as the main path to resolving complaints or disputes, is available on the website: <http://www.drummondLtd.com/contact-us/?lang=en>. Additionally, as an evaluation mechanism, Drummond Ltd. has an Internal Audit Department that performs verifications to identify findings or recommendations in the processes; in this way, the company improves its internal controls and mitigates the risks inherent in each process. It is important to mention that in 2016, the processes in the Human Resources Department were not subject to internal audits.

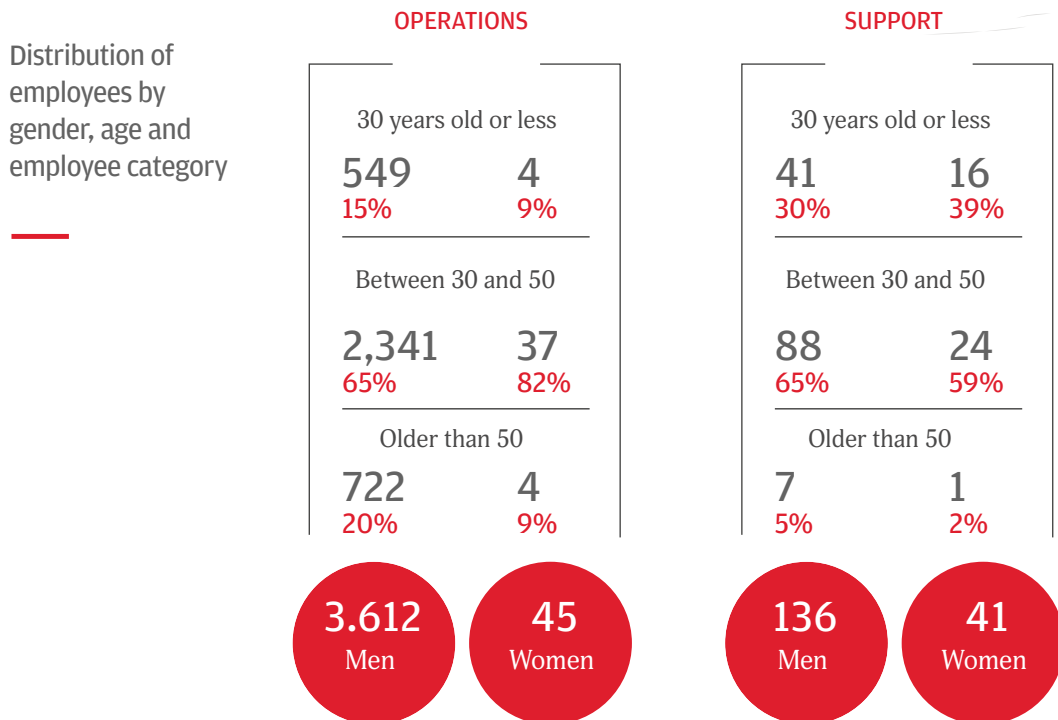


## Description of Drummond Ltd.'s workforce

[GRI 405-1]

### Staff

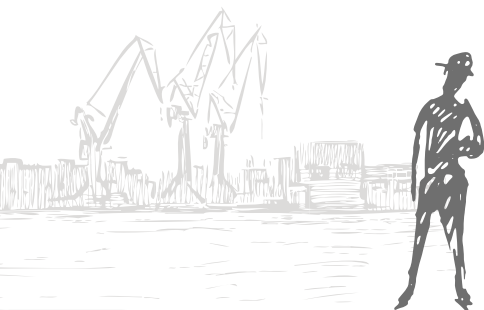
At the end of 2016, Drummond Ltd. had a workforce of 4,822 employees for its mine, port and administrative operations in Bogota, Valledupar and Cartagena. Of the total number of employees, 96% were men and 4% were women. Below is the company's workforce broken down by employee category:



Male and female staff, broken down by employee category



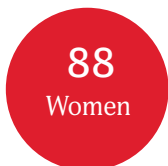
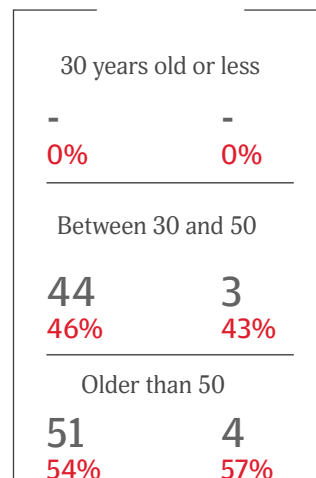
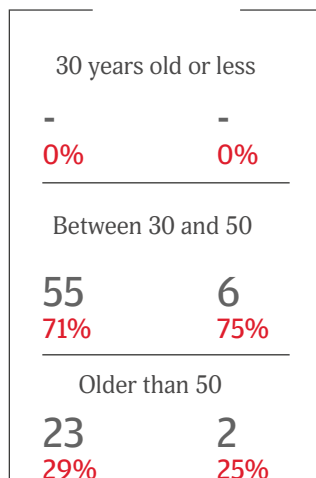
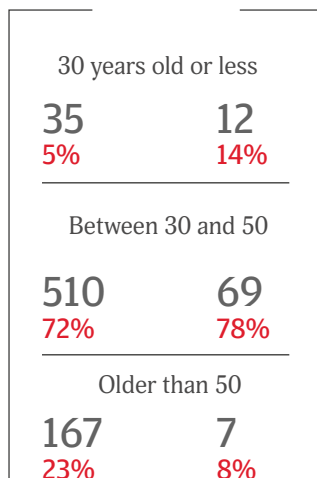
EMPLOYEES FOR MINE OPERATIONS, PORT AND ADMINISTRATIVE IN BOGOTA, VALLEDUPAR AND CARTAGENA.



PROFESSIONAL

TACTICAL

STRATEGIC





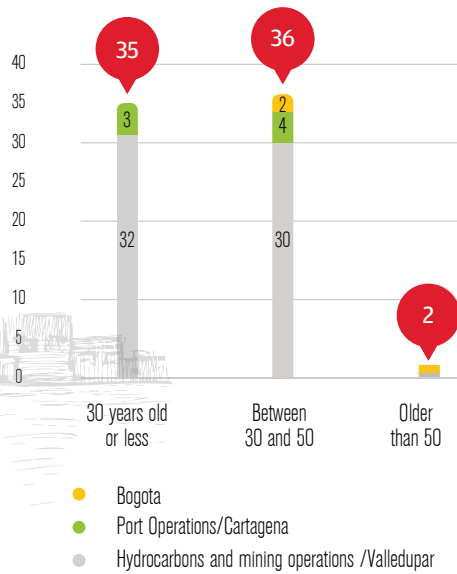
## ≡ New hires

[GRI 401-1]

### By age

The largest number of new hires during 2016 was for people under the age of 30 for the mining and hydrocarbons operations / Valledupar:

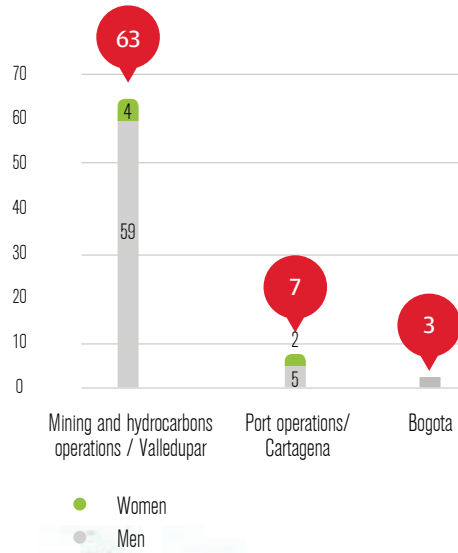
Number of new hires by age in 2016



### By gender

Of the total staff hired in 2016, 92% were men and 8% were women.

Number of new hires by gender in 2016

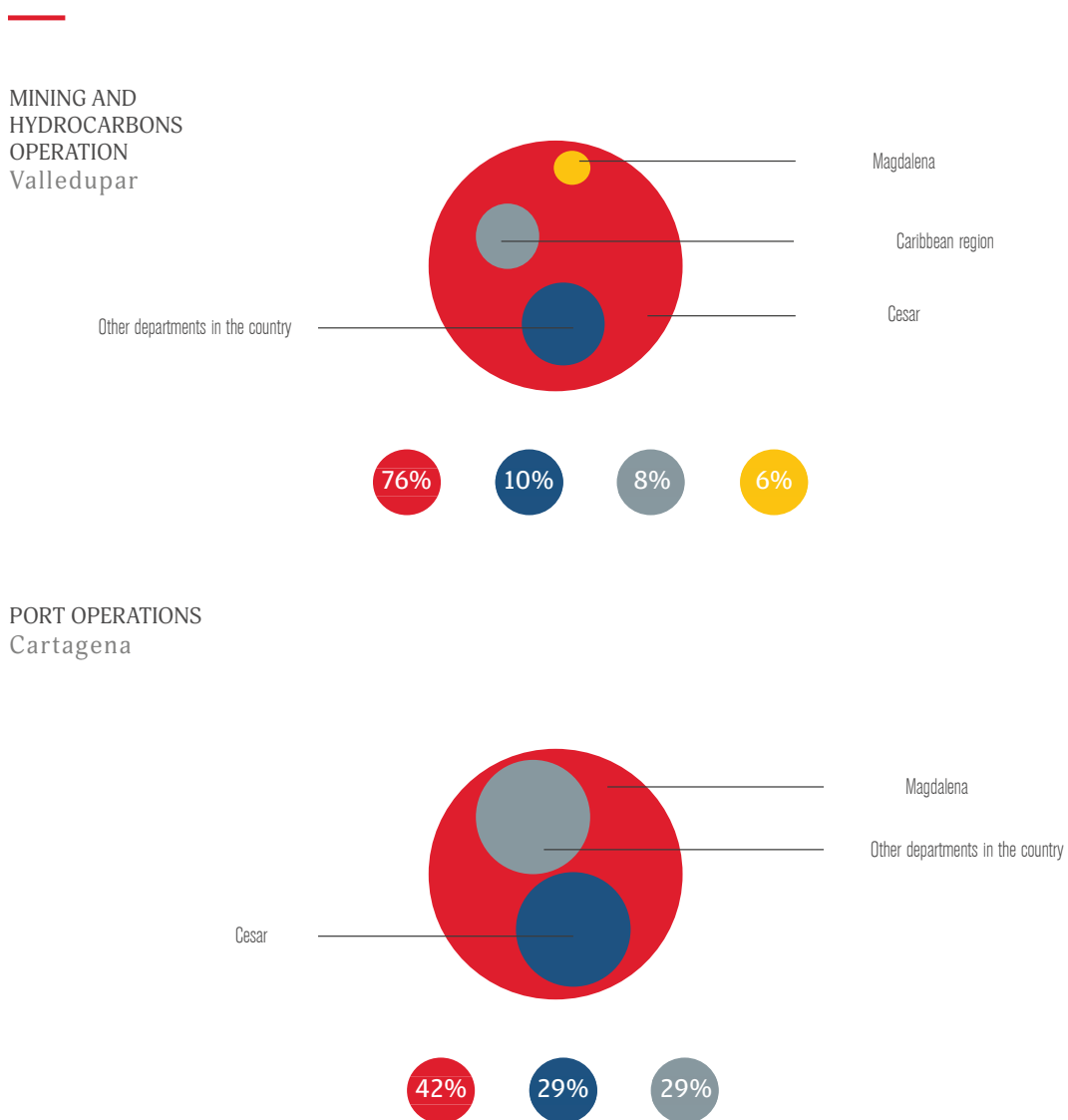




## By place of origin

Drummond Ltd. is also committed to regional development, so the largest percentage of its new workers come from Cesar and Magdalena, the areas of influence of its mining and port operations:

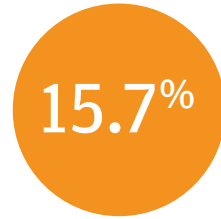
### Distribution of new hires in 2016



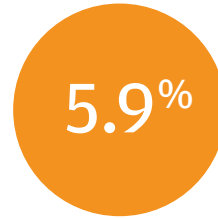


[GRI 202-2]

Additionally, of the total number of managers at the end of 2016, the following were hired from local communities<sup>6</sup>



from the mining and hydrocarbons operations / Valledupar



from the port operations / Cartagena

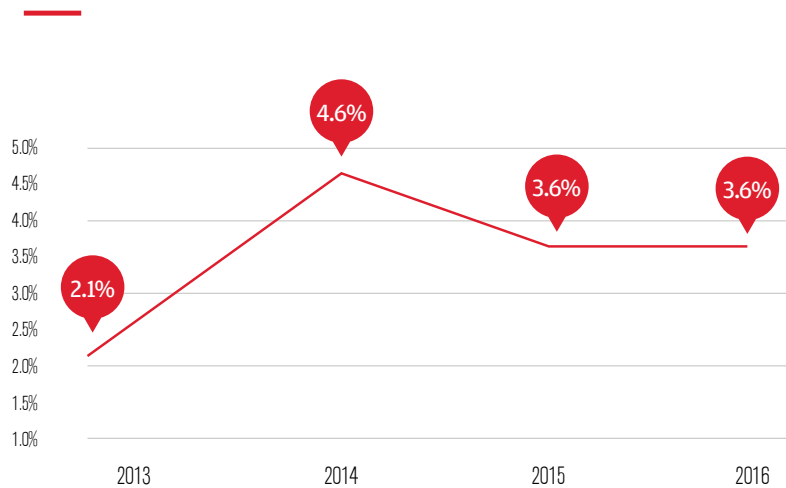
6. Local for Drummond refers to employees from the departments of Cesar and Magdalena.

7. Corresponds to the total number of separations divided by the average number of employees for the year.

This percentage is calculated based on the total number of employees at the strategic level within the company, including: President, Vice Presidents, Superintendents, Managers and Assistant Superintendents. In the case of Bogota, there are no senior managers from the local community.

### ≡ Employee turnover rate<sup>7</sup>

History of Drummond employee turnover.



As shown in Figure 7, Drummond Ltd.'s employee turnover numbers have remained stable as compared to the previous year. This is in addition to other strategies for retaining talent, such as employee educational support, training programs, employee outreach programs and a wage polices that ensures competitiveness and equality



Turnover by age range 2016

MINING AND  
HYDROCARBON  
OPERATIONS  
Valledupar

1.4%	30 years old or less	7.1%
3.3%	Between 30 and 50	3.0%
4.8%	Older than 50	33.3%

PORT OPERATIONS/  
Cartagena

3.5%	30 years old or less	0.0%
4.6%	Between 30 and 50	5.3%
7.0%	Older than 50	0%

Bogota



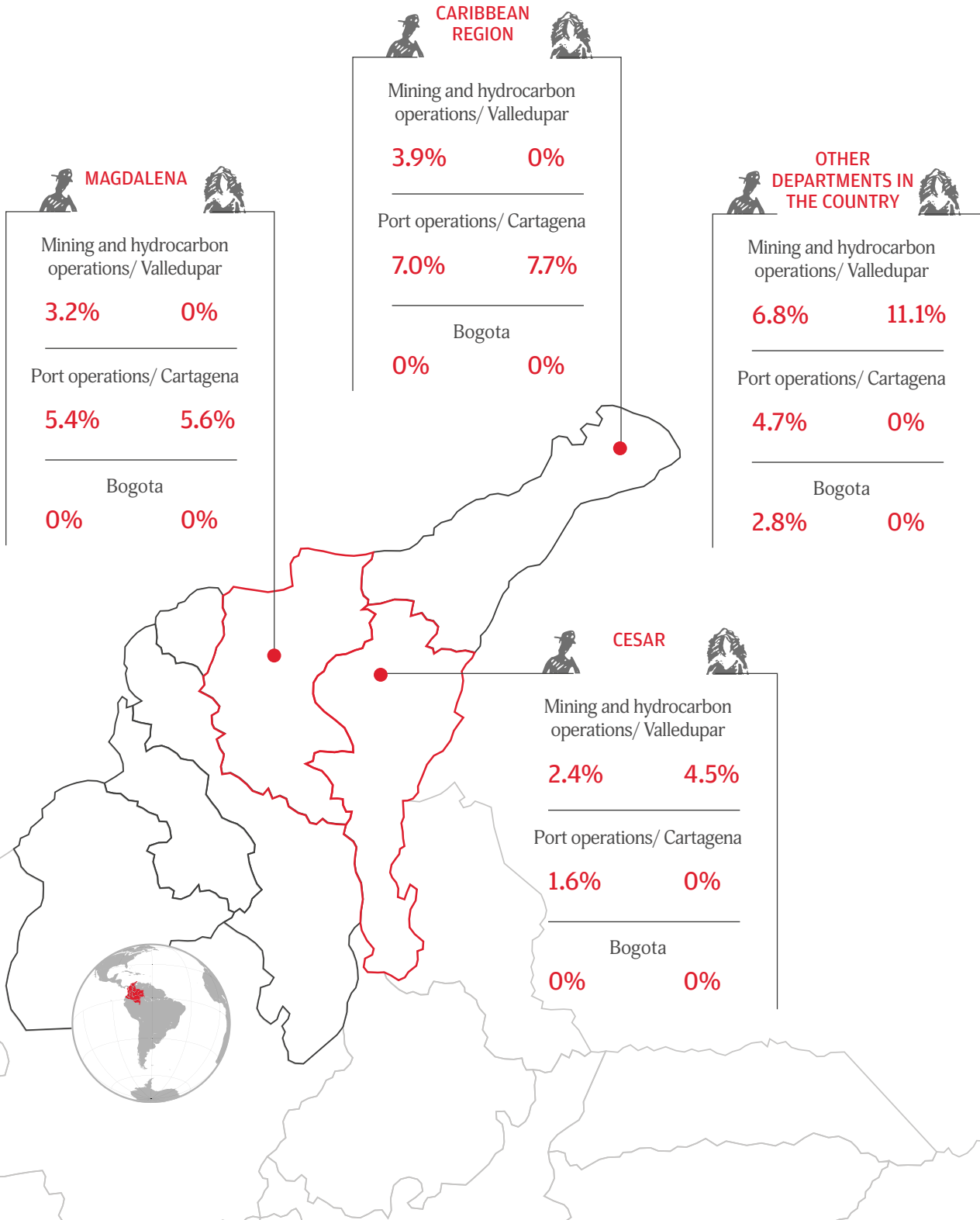
0%	30 years old or less	0%
4.3%	Between 30 and 50	0%
0%	Older than 50	0%





### Turnover by place of origin 2016

#### EMPLOYEES FROM THE DEPARTMENT

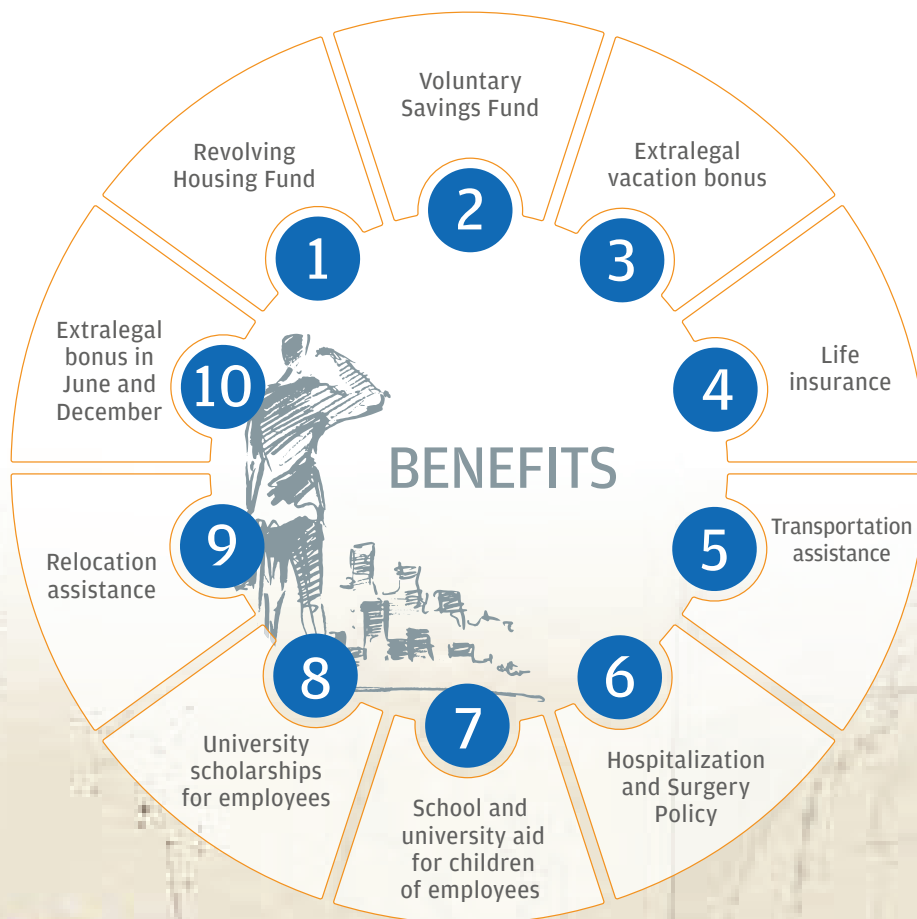


## ☰ Compensation and benefits

[GRI 401-2]

The policies that have been drafted regarding Drummond Ltd.'s wages and extralegal benefits are known for being highly competitive in the region where it carries out its economic activities, as well as at the national level.

Drummond Ltd. offers its direct employees a variety of benefits beyond their base compensation, in order to improve their quality of life and that of their families. They include:





In 2016 the following amounts were spent on compensation and benefits (In US dollars) :

**MONETARY EXTRALEGAL BENEFITS**

EDUCATIONAL ASSISTANCE

**\$3.62**  
MILLION

RELOCATION ASSISTANCE

**\$2.44**  
MILLION

SAVINGS PLAN:

**\$1.16**  
MILLION

TRANSPORTATION ASSISTANCE:

**\$1.01**  
MILLION

**NON-MONETARY EXTRALEGAL BENEFITS**

MEALS  
(mining operations)

**\$18.98**  
MILLION

HOSPITALIZATION AND SURGERY POLICY

**\$11.62**  
MILLION

PERSONNEL TRANSPORTATION  
(mining operations)

**\$4.78**  
MILLION

LIFE INSURANCE POLICIES

**\$1.60**  
MILLION

SUPPLIES

**\$780,436**

There are certain benefits that were designed to cover the employee's immediate family, including: the hospitalization and surgery policy, which for 2016 covered a group of more than 18,000 people, as well as the educational assistance for children of employees, under which more than 8,950 aid packages were provided for preschool, primary, secondary and higher education.

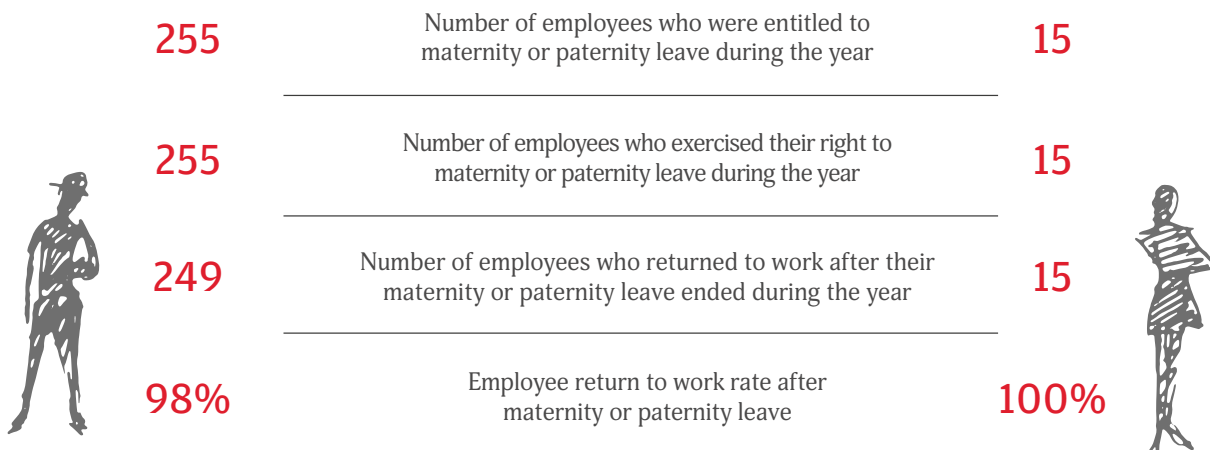


## Return to work and retention rates after maternity or paternity leave, broken down by gender

[GRI 401-3]

In terms of the employee return to work rate after maternity or paternity leave, there was an increase of 11 percentage points as compared to 2015, with 100% of women returning to work after taking maternity leave in 2016:

### Employee return to work rate after maternity or paternity leave



In terms of the employee retention rate, the percentage of retention for women dropped by 15 percentage points as compared to 2015.

### Employee retention rate after maternity or paternity leave



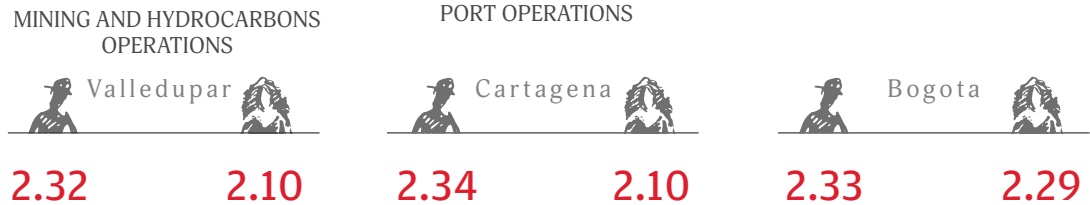
The calculation for the employee retention rate after maternity or paternity leave is made based on the number of employees who continued to work 12 months after their leave divided by the number of employees who took leave in the year prior to the reporting period.



[GRI 202-1]

## Ratio of starting salaries compared to the local minimum wage

### Ratio of starting salaries compared to the local minimum wage



The table showing the employee retention rate after maternity/paternity leave shows the relationship between workers' starting salaries and the local minimum wage for the significant centers of operation. The average income (salary plus daytime and nighttime surcharges, legal and extralegal benefits) that technical and operational employees receive in the maintenance and operations areas is between 7.50 and 14.93 times the legal minimum wage in Colombia.

Drummond Ltd. seeks to ensure that its workers' purchasing power is not affected by inflation in the Colombian economy. For this reason, the employees covered by the current Collective Bargaining

Agreements (which together account for 78% of the workforce), have had increases averaging 1.90% above inflation for the last 10 years.

The company is also careful to ensure that its hiring conditions, social benefits payments and salary terms comply with current regulations and ensure an optimal working environment. Drummond Ltd. requires that all contractors act diligently and responsibly, complying with all laws, rules, regulations and other provisions that apply to the fulfillment of its obligations, and they must obtain and maintain the permits and authorizations required by law to carry out their activities.

[GRI 201-3]

## Benefits plans

At the end of 2016, the company reported benefits classified as defined contributions related to the investments made in legally established pension funds that were freely chosen by each employee, in the amounts stipulated by Colombian law regarding the General Pension System. The payments related to the benefits from the defined contributions were covered with the company's own funds obtained from performing the organization's ordinary activities. It is important to note that the company does not have retirement plans in addition to those described above.

Based on the legislation that regulates the General Pension System, Drummond Ltd. contributes, through the pension funds, an amount equivalent to 16% of the base salary for benefits purposes, corresponding to the income from that period for each employee. To make this payment, the company withholds from each employee's pay an amount equivalent to 4% of the income received during each period and, on this same basis, it contributes an amount equal to 12%.

The estimated value of the benefits from the defined contributions paid by the company during 2016 was US\$14.38 million.



[GRI 405-2]

## ☰ Wage ratio for men and women

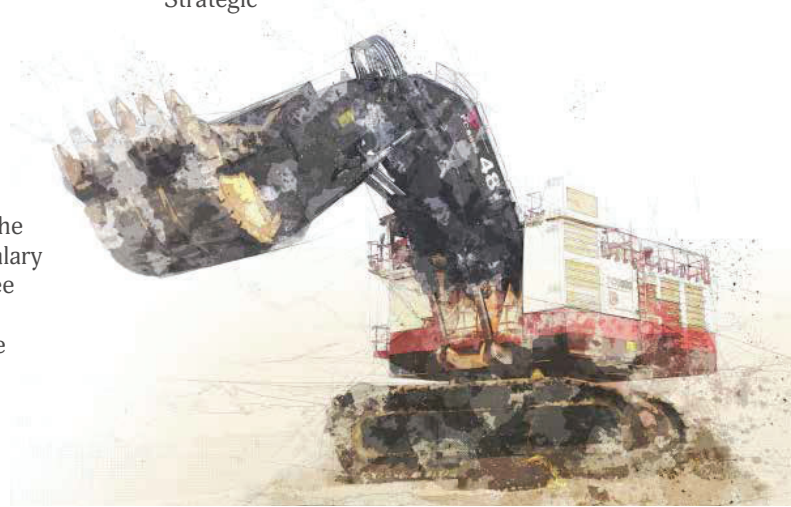
The company strives to ensure equal pay for men and women and to see continuous progress in closing the wage gap:

8. Does not include information on expatriate staff.

Ratio between the average salary for women compared to the salary for men, broken down by region and employee category<sup>8</sup>.

MINING AND HYDROCARBON OPERATIONS Valledupar	0.8 Operations	1 Support	0.7 Professional
	0.9 Tactical	1.3 Strategic	
PORT OPERATIONS Cartagena	1 Operations	1.1 Support	0.8 Professional
	1 Tactical	0.9 Strategic	
Bogota	1 Operations	0.7 Support	1 Professional
	0.9 Tactical	0.8 Strategic	

The table showing the relationship between the average salary for women compared to the salary for men, broken down by region and employee category, shows the relationship between the average wages for women as compared to the average wages for men.





## Employee training and skill-building

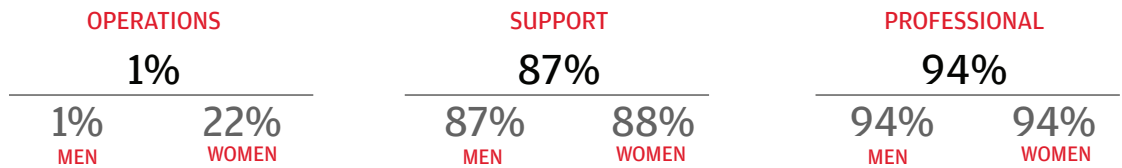
[GRI 404-3]

### Regular performance evaluations

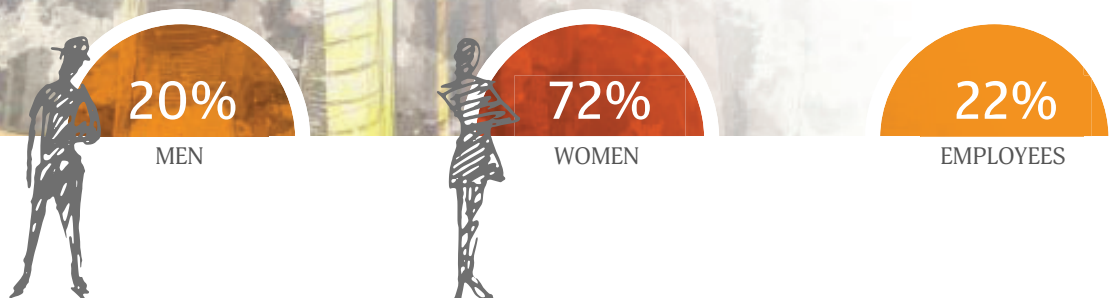
Drummond Ltd. conducts annual performance evaluations for supervisors and administrative staff using the 90° methodology, in which employees and their managers establish their fulfillment of the objectives for the year, generate action plans, identify the competencies that the employee needs to improve and set new goals for the upcoming year.

The employees who receive regular performance evaluations are salaried employees, that is, managers, people in supervisory roles and administrative staff. The hourly workers, who are part of the technical and operational staff, receive periodic feedback from their managers.

Percentage of employees whose performance and development is evaluated regularly, by gender and employee category



PERCENTAGE OF PEOPLE WHO RECEIVE REGULAR PERFORMANCE AND PROFESSIONAL DEVELOPMENT EVALUATIONS



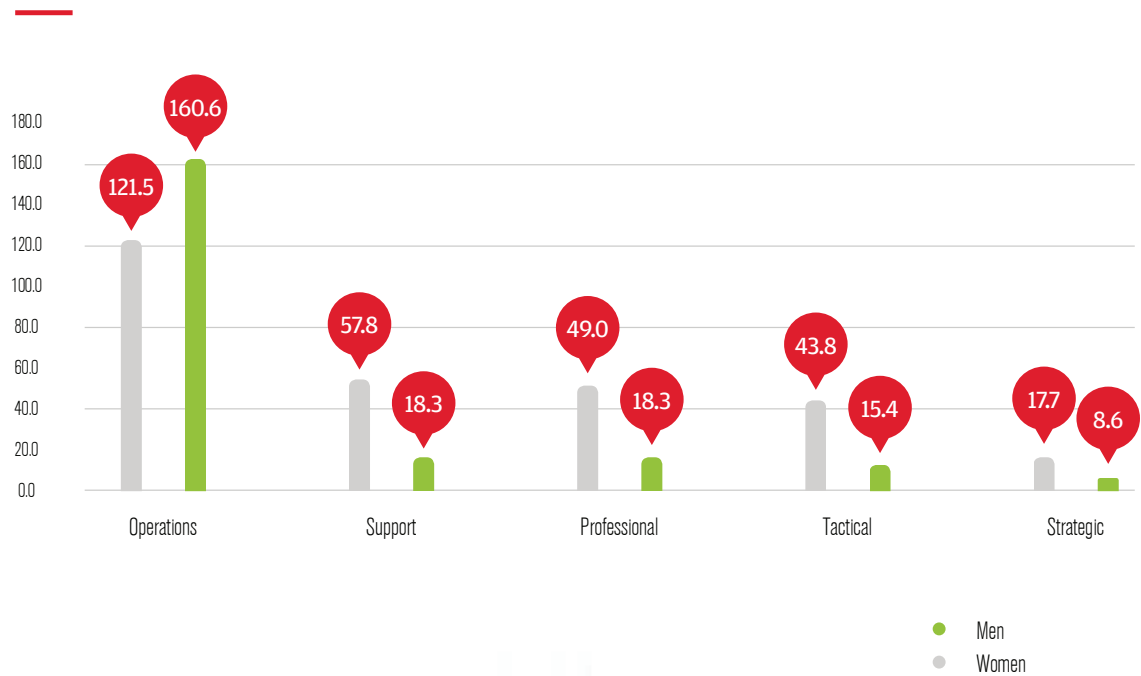
[GRI 404-1]

## Training hours

For Drummond Ltd., regular employee training is an important part of its work. The trainings, which take place during five cycles each year, cover topics related to workplace

health and safety, the environment and human resources. Heavy machinery operators also receive operational and technical training, according to the needs of the business.

Average annual training hours per employee, within the regular training cycle, by gender and job category





[GRI 404-2]

## Skills management and training programs

Drummond Ltd. has a variety of learning programs, trainings, educational assistance and employee outreach programs to improve employees' skills and strengthen relationships:



### TRAINING PROGRAMS

With the goal of preparing people from the region to fill future vacancies at Drummond Ltd.:

- ***In House program:***

Consists of training groups of people from the region to fill vacancies available at Drummond Ltd.'s mining operations. This program is conducted "in house," as its name implies, using a training department that trained a group of 33 people from the region in 2016 to operate mining trucks. After they successfully complete their apprenticeship process, they will be hired directly by the company.

- **Training locomotive engineers:**

this program is carried out in partnership with the National Service of Learning (SENA in Spanish) and is tailor-made to fit the company's needs, seeking to train people from the region in this particular field.

*In 2016, a group of 15 apprentices was trained, who will complete their apprenticeship process in 2017.*



### EDUCATIONAL AND TRAINING SUPPORT

In an effort to promote training within Drummond Ltd., the company provides educational scholarships for employees to encourage and promote continuing education among its workers.

*In 2016, 91 scholarships were awarded to employees.*



3

**OUTREACH PROGRAMS**

The company provides opportunities for communication to improve confidence and achieve a good working environment.

• **Meetings with Vice Presidents**

quarterly informational meetings between Drummond Ltd. employees and the Vice President of Operations and the Vice President of Human Resources.

In 2016, six meetings were held that were attended by approximately 3,000 employees.

• **Family Day**

this initiative seeks to promote opportunities within the company for employees to spend time with their families, while getting to know Drummond Ltd.'s facilities.

In 2016, an activity was held at the mining facilities that was attended by 300 people (including employees and their families).

• **Let's Talk:**

An activity designed to strengthen close relationships and communication between the Human Resources Department and employees by answering questions and responding to staff requests. In 2016, the activity was conducted with the goal of hearing employees' perspectives on the last few years.

The activity was attended by 3,029 employees (63% of the company's total employees), 1,748 from the Pribbenow Mine, 837 from the El Descanso Mine and 444 from the Port.

• **Person-Focused Safety – Coaching for leaders:**

This program has been in place since 2012, with the goal of strengthening leaders' competencies. In 2016, seeking to encourage communication and trust, the company's leaders and the Coach expanded the process to the work areas through learning sessions to strengthen competencies.

216 leaders (132 from the port and 84 from the mines) participated, expanding the person-focused learning process to their teams.

With the approach provided by the different programs, the company has seen positive changes in the managers' leadership, through providing more feedback and communication. In addition, the development of the In House (operator training) courses has significantly boosted hiring of personnel from the region.





## Material aspect case studies

Álvaro Adrián Polo Castilla, 24, is a young man from the community of Boquerón who was a participant in Drummond’s In House program. Before joining the company, he had never had an opportunity to study and he worked odd jobs to help support his family.

Through the *In House* program, he saw an opportunity to improve his quality of life and that of his family. He joined the program on August 19, 2016 and after nine months of education and comprehensive training, he had the “good luck,” as he said in his speech, to be one of Drummond Ltd.’s direct hires.

Thirty three young people started the course with him, and Drummond Ltd., through the In House program, offered them job stability and better living conditions. Through his work, Álvaro Adrián has been able to invest in improving his mother’s home in Boquerón and he has greater peace of mind with his income, knowing that after earning US\$200 a month working “on whatever came up,” now he has a much better, fixed salary that he can use to plan and build his future.

### MILESTONES:

- In 2016, six meetings with Vice Presidents were held, showing strong participation with approximately 3,000 employees.
- In 2016, three collective bargaining agreements were signed with four labor unions.

### CHALLENGES

In 2017, Drummond Ltd. plans to achieve the following goals:

- In the In House program, train 99 truck operators and 15 bulldozer operators.
- In the locomotive engineer program, train a group of 15 apprentices.
- Hold nine informational meetings with Vice Presidents (three at Pribbenow, three at El Descanso, three at the port).
- Hold eight feedback meetings with employees and the company’s managers (four in the mining operations and four at the port).
- Hold three family day events at the port and two at the mining operations.



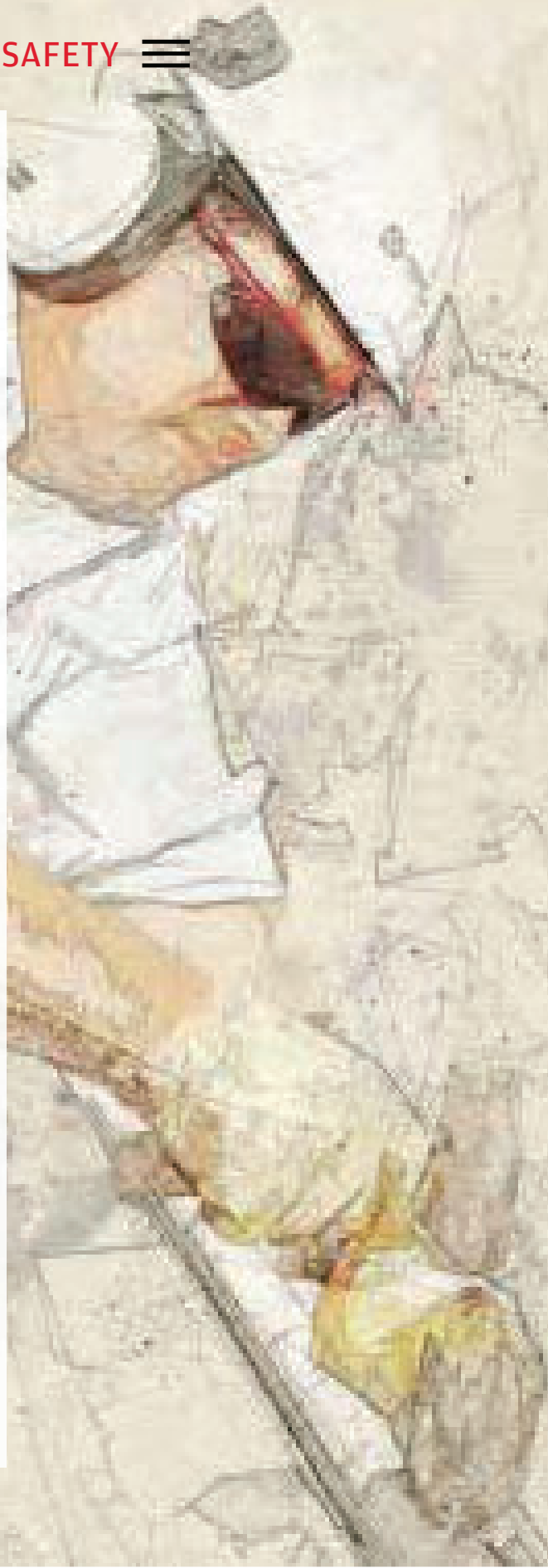
## E2. WORKPLACE HEALTH AND SAFETY

[GRI 103-1]  
[GRI 103-2]

Drummond Ltd. believes that its OHS work is fundamental in carrying out its activities since it is directly related to the well-being of its employees and contractors, its productivity and, therefore, the sustainability of the business. Industrial health and safety are a way of life for the company's employees that guide all of their actions, protecting those around the organization, its environment, resources and the employees themselves.

The importance of making employee safety a way of life is making progress as a common practice that ensures the normal flow of the mining and port operations, reducing workplace accidents and occupational diseases that can affect workers' quality of life and generate economic costs and delays in the operation.

To focus its efforts on maintaining a safe and healthy environment, the company has implemented different control and management systems, as well as guidelines, mechanisms and strategies, with the goal of avoiding and minimizing the risks to which employees and contractors are exposed. In this way, it ensures that the activities that are part of the coal exploration, extraction, transportation and sale operations can be conducted safely.





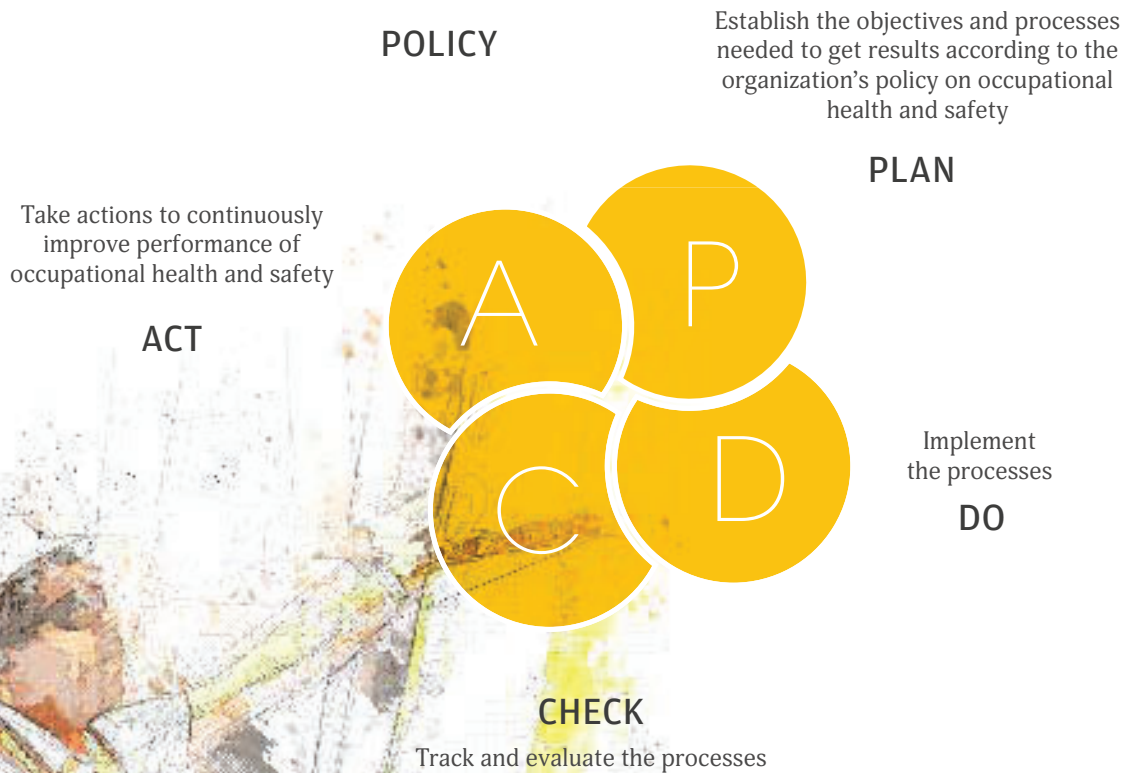
## Health and safety management system

Health and safety management is carried out by following the guidelines for the continuous improvement cycle defined in the OHSAS 18001:2007 standard as a tool for achieving the objectives and programs that have been established. This work also includes programs for preventing accidents and occupational diseases, personnel training and education, as well as

emergency preparation, which are essential in the company's internal processes.

The company's OHS management system has five elements, as shown in Figure 1, and it helps to ensure compliance with its corporate policy based on a cycle of planning, implementation, verification and continuous improvement:

### Drummond Ltd.'s Occupational Safety and Health Management System







[GRI 103-3]

9. Ver: <http://www.drummondLtd.com/wp-content/uploads/Anexo-11-Reglamento-de-Seguridad-Industrial.pdf>

As part of this comprehensive management system<sup>9</sup>, the company conducts ongoing monitoring of activities to monitor and prevent accidents and occupational diseases, based on hazard identification, risk assessment and the application of the appropriate controls. Corrective actions for hazards classified as priority apply to both direct employees and contractors, and are an input for carrying out action plans and updating policies.

Another one of Drummond Ltd.'s valuable management tools is the corporate Health, Safety and Environment policy, which includes Drummond Ltd.'s guidelines for maintaining its management systems, considering the needs of the company, the legal requirements and the standards under which the operations are certified. This policy is aimed at protecting and preserving the environment and the health and lives of its employees, contractors, visitors and surrounding communities. Additionally, this policy establishes the company's commitments to its stakeholders and ensures that it has the resources needed to develop its activities. See more information at:

<http://www.drummondLtd.com/wp-content/uploads/Drummond-Comprehensive-Policy-2016.pdf>

In the case of an event that could jeopardize the safety of employees or contractors, in addition to the opportunities for internal participation such as weekly meetings with supervisors, safety chats with employees, the coexistence committee and quarterly meetings between the Vice Presidents and employees; Drummond Ltd. has an internal channel through which people can report labor irregularities. The channel is totally confidential and it is available on the website:

<http://www.drummondLtd.com/contact-us/?lang=en>

The effectiveness of implementing OHS activities can be seen through internal and external audits, resulting in the certifications that Drummond Ltd. has received. The mining, transportation and hydrocarbon exploration operations are certified under international standards, such as OHSAS 18001:2007 and ISO 14001:2004, which strengthen a culture of self-regulation and prevention.

Below are the main management indicators from 2016:



## ≡ Main health and safety indicators

[GRI 403-2]

At Drummond Ltd. it is critical that the company conducts its operations safely, so it must apply all measures and controls that allow it to continue to reduce reactive management rates in health and safety. In this regard, it should be noted that in 2016 there was a 20% decrease in the number of recordable workplace accidents<sup>10</sup> as compared to 2015.

**46**  
Accidents with injuries  
(medical treatment and incapacitating)  
2015



↓  
**20%**  
Decrease

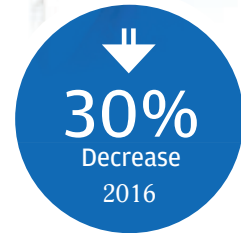
10. Number of workplace accidents based on OHA 1904.0 criteria for recording and reporting occupational injuries and diseases, with a parameter of 200,000 hours. Does not include first aid.

### OHS indicators for direct employees Frecuencia de accidentalidad

11. Número de accidentes de trabajo basado en criterios OSHA 1904.0 para registro e informes de lesiones y enfermedades ocupacionales con un parámetro de 200.000 horas. No incluye primeros auxilios.

In 2016 there was a 30% decrease in the lost time injury rate compared to 2015, meeting the goal that had been set.

It is calculated by comparing the number of workplace accidents to the total number of actual hours worked by employees during 2016<sup>11</sup>.



Lost time injury rate

### Accident frequency rate



**0.78**

MEN

Operación de minería e hidrocarburos/ Valledupar

**0.00**

WOMEN

**0.00**

Operación portuaria / Cartagena

**0.69**



### Accident rates

**0.35**

Lost-time injury rate

2011

The lost-time injury rate dropped from 0.35 in 2011 to 0.14 in 2016, which represents a significant decrease of 60%.

It is calculated by comparing the number of workplace accidents to the total number of exposed workers who were directly employed in 2016.



**60%**  
Decrease

#### Accident rate for 2016



**1.09**

MEN

Mining and hydrocarbon operations/ Valledupar

**0.00**

WOMEN



**0.13**

Port operations/ Cartagena

**1.20**

Occupational disease frequency rate for women



### Frequency of occupational diseases

This rate is calculated by comparing the number of occupational diseases<sup>12</sup> to the total number of actual hours worked for employees during 2016. The occupational disease frequency rate for women was 0 in both operations.

#### Frequency rate for occupational diseases



**0.14**

MEN

Mining and hydrocarbon operations/ Valledupar

**0.00**

WOMEN



**0.00**

Port operations/ Cartagena

**0.00**

<sup>12</sup> Classified as occupational disease in 2016.

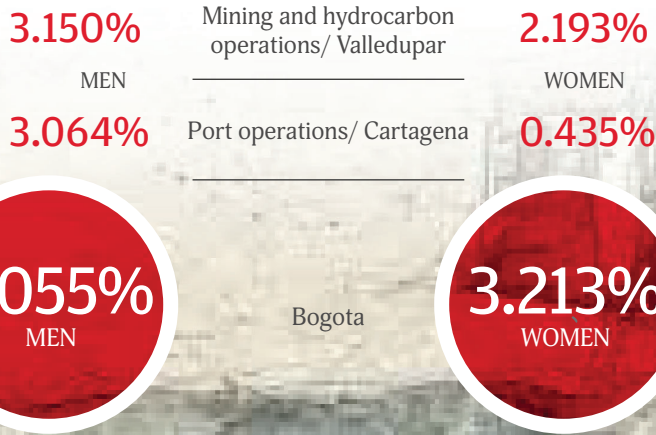


### Absenteeism rate

This rate is expressed by comparing total absences (for occupational disease, workplace accidents and common illnesses) to the total number of actual hours worked for employees during 2016.

For the office in Bogota, the accident frequency rate, the occupational disease rate, the lost days rate and the accident rate is 0.

#### Absenteeism rate

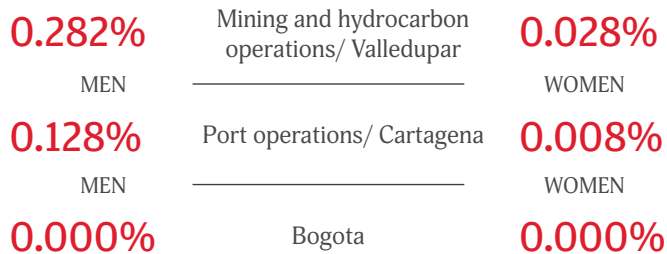


### Lost Day Rate

13. To calculate lost days, calendar days are included, starting the day after the accident occurred.

This rate is expressed by comparing the total number of absences for occupational disease and workplace accidents to the total number of actual hours worked for employees during 2016<sup>13</sup>.

#### Lost day rate for workplace accidents and occupational diseases



## Main causes of workplace accidents

Applying the root cause analysis from the TapRooT® methodology, it was possible to determine that, as in a significant percentage of events, the causes of the accidents are associated with problems in applying and following workplace procedures; administrative standards, rules or controls that were not used or applied and, also, with communication-related failures.



## ≡ OHS indicators for contractors

Below is the number of contractors that were included in the measurement:

### Total number of contractors

WOMEN	MEN
412	3,724

Mining and hydrocarbon operations/ Valledupar

WOMEN	MEN
99	2,698

Port operations/ Cartagena



## Accident frequency rate

Despite the work on occupational health and safety practices for contractors, there was an increase in workplace accidents as compared to 2015 (52 accidents). In 2016, there were 71 accidents.

It is calculated by comparing the number of workplace accidents to the total number of actual hours worked by contractors during 2016.<sup>14</sup>

### Accident frequency rate for contractors in 2016

WOMEN	MEN
2.79	2.17

Mining and hydrocarbon operations/ Valledupar

WOMEN	MEN
1.16	1.46

Port operations/ Cartagena

14. Number of workplace accidents based on OHA 1904.0 criteria for recording and reporting occupational injuries and diseases, with a parameter of 200,000 hours. Does not include first aid.



## Accident rate

It is calculated by comparing the number of workplace accidents to the total number of exposed contractors in 2016.

In 2016, Drummond Ltd. implemented robust workplace health and safety management practices. There were no fatal accidents involving employees or contractors in 2016

### Accident rate

<b>3.20</b>	Mining and hydrocarbon operations/ Valledupar	<b>4.13</b>
MEN		WOMEN
<b>3.31</b>	Port operations/ Cartagena	<b>2.38</b>

## Classification of events

In order to define a standard that would allow the company to compare its reactive management to similar companies or economic sectors, the company has adopted the event classification criteria established in the OSHA 1904 standards: 1904.0 Injury and Illness Recordkeeping and Reporting Criteria, and 1904.4 Recording Criteria, which classify events as follows:

1

**NON-RECORDABLE ACCIDENTS**

First aid



2

**RECORDABLE ACCIDENTS**

Fatality  
Injury with lost time-  
Incapacitating  
Medical treatment

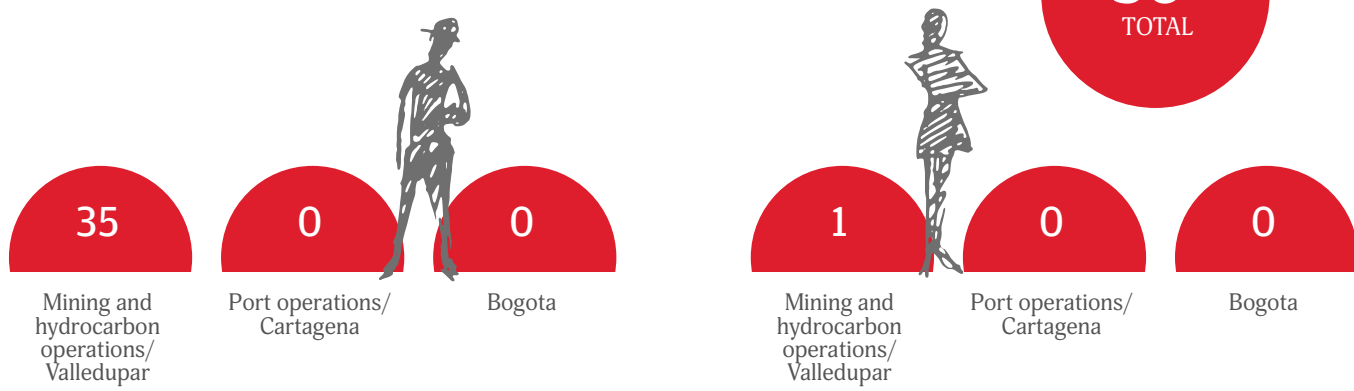
All personal injuries, no matter how minor the diagnosis, are reported to the ARL for proper management. This information is communicated through the publication of reports and documents contained in the Workplace Health and Safety Information Management System.

The types of accidents that occurred in 2016 involving Drummond Ltd. employees are the following:

**Drummond Ltd.  
2016**

FATALITY	-	Mining and hydrocarbon operations/ Valledupar	-	}	0
	-	Port operations/ Cartagena	-		
	-	Bogota	-		
LOST-TIME INJURY - INCAPACITATING	9	Mining and hydrocarbon operations/ Valledupar	-	}	10
	-	Port operations/ Cartagena	1		
	-	Bogota	-		
MEDICAL TREATMENT / TRANSITIONAL WORK	26	Mining and hydrocarbon operations/ Valledupar	-	}	26
	-	Port operations/ Cartagena	-		
	-	Bogota	-		

**36**  
TOTAL





The types of accidents that occurred involving contractors during 2016 are as follows:

Contractor  
2016

FATALITY	-	Mining and hydrocarbon operations/ Valledupar	-	}	0
	-	Port operations/ Cartagena	-		
	-	Bogota	-		
LOST-TIME INJURY - INCAPACITATING	23	Mining and hydrocarbon operations/ Valledupar	3	}	45
	16	Port operations/ Cartagena	3		
	-	Bogota	-		
MEDICAL TREATMENT / TRANSITIONAL WORK	26	Mining and hydrocarbon operations/ Valledupar	-	}	26
	-	Port operations/ Cartagena	-		
	-	Bogota	-		

**71**  
TOTAL



Mining and hydrocarbon operations/ Valledupar

Port operations/ Cartagena

Bogota



Mining and hydrocarbon operations/ Valledupar

Port operations/ Cartagena

Bogota



## ☰ Commitment to health and safety

[GRI 403-1]

1 ⇒

Drummond Ltd. has the COPASST committee, made up of representatives from different areas and levels of the company, whose objective is to ensure the health and safety of all working groups by monitoring compliance with the established rules, standards and procedures. The characteristics of its structure means that all employees have full confidence in the committee, which facilitates the fluidity of its communication at all levels of the organization. Additionally, the president of this group holds meetings with senior management, from whom he receives full support to share relevant information. Elections are held for the members who will represent the workers and management chooses the representatives for the administration. In 2016, 100% of the employees were represented on the COPASST committee.

---

[GRI 403-4]

2 ⇒

The collective bargaining agreement is aligned with Drummond Ltd.'s OHS commitment. At least 23 of 67 articles are related to Industrial Safety and Occupational Health, which represents 34.3% of all articles. They deal with issues regarding agreements, actions related to social security, permits, meetings, committees, benefits, suppliers, protective equipment, etc.; there is also a special commission created to monitor the operation of the hospitalization policy.

---

3 ⇒

Drummond Ltd. has a Hospitalization and Surgery Policy, a supplementary prepaid medical health plan, which provides employees and their families with general illness coverage, at no cost. This plan ensures not only health care but also the implementation of high-quality prevention programs.

---

4 ⇒

The company has a series of programs and trainings, making its labor practices safer: hazard identification, the implementation of controls, safe work procedures, planned inspections, audits, emergency brigade meetings, drills and safety campaigns.

---



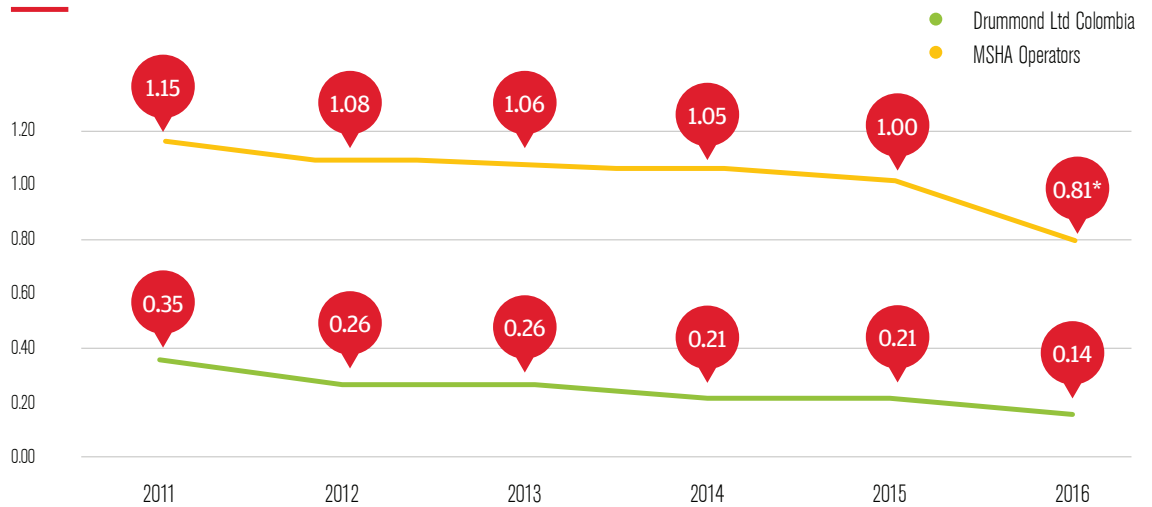
## Good health and safety practices

As one of the mechanisms for evaluating the effectiveness of the actions taken in the operations, Drummond Ltd. compares its accident rates with those reported by the MSHA (Mine Safety and Health Administration) of the United States Department of Labor. The MSHA is the agency that administers provisions aimed at eliminating fatal accidents, minimizing health risks and promoting health and safety in mines in the United States,

regardless of their size, number of employees, the commodities being mined or the extraction method.

For 2016, the rate of incapacitating injuries for Drummond Ltd.'s direct employees was 0.15; this includes mines, port and rail, as compared to the 0.81 recorded by MSHA; this shows a highly competitive performance as compared to companies in the sector with similar activities and risks.

LTIR Drummond Ltd. Vs MSHA



(\*) Data updated by MSHA as of December 2016.

LOST TIME INCIDENT RATE: includes any occupational injury that results in the employee not being able to work a full shift. Lost time incidents occur when there are no circumstances where the worker cannot return to a meaningful workload

LTIR = Number of cases with lost time x 200,000 / Number of employee-hours worked

LTIR MINING OPERATIONS 2016

0.08

Mina Pribbenow

0.33

El Descanso Mine

0.16

Mining Operations

LTIR DLTD COLOMBIA OPER. 2016

0.16

Operaciones mineras

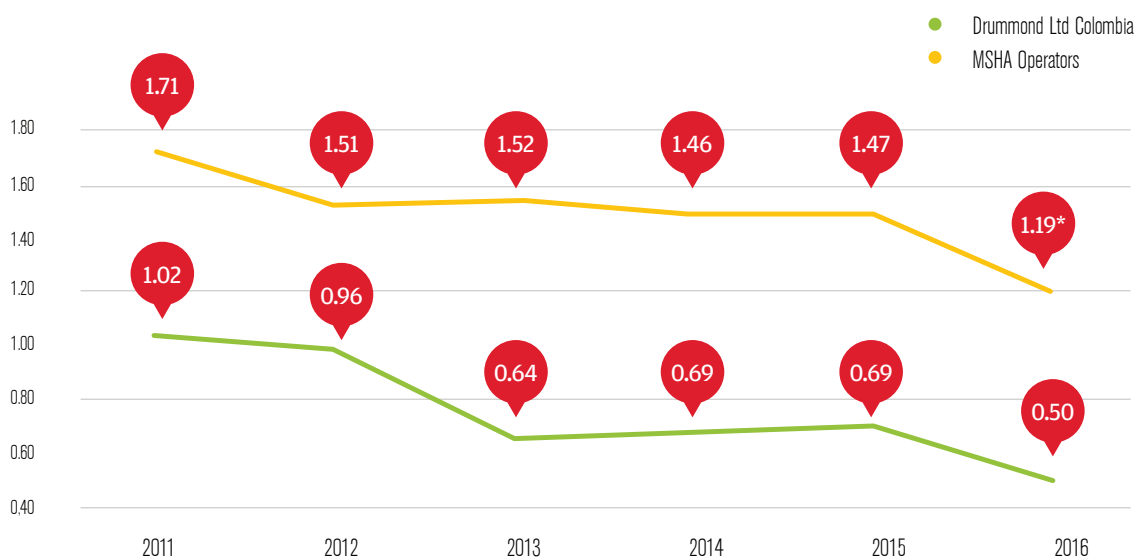
0.07

Transportation Department

0.14

DLTD Colombia

### RIF Drummond Ltd. Vs MSHA



(\*) Data updated by MSHA as of December 2016.

REPORTABLE INJURY FREQUENCY: an injury to an individual that requires medical treatment or results in death or loss of consciousness or inability to perform all job duties on any workday after the injury or temporary assignment to other duties or transfer to another job

RIF = Number of injury occurrences x 200,000 / Number of employee hours worked

RIF  
MINING OPERATIONS  
2016

0.53

Mina  
Pribbenow

0.77

El Descanso  
Mine

0.61

Mining  
Operations

RIF  
DLTD COLOMBIA OPER.  
2016

0.61

Operaciones  
minerias

0.15

Transportation  
Department

0.50

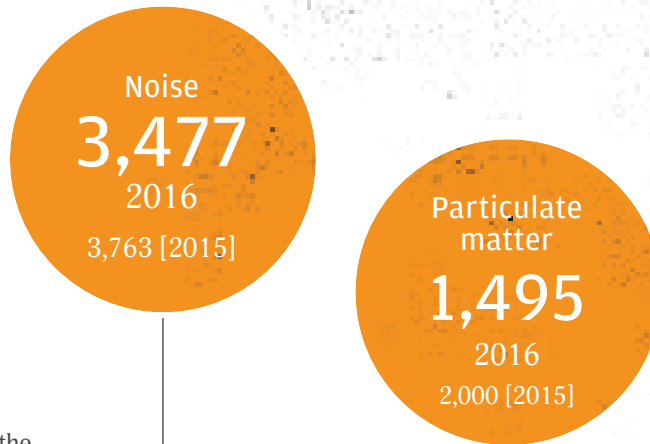
DLTD  
Colombia



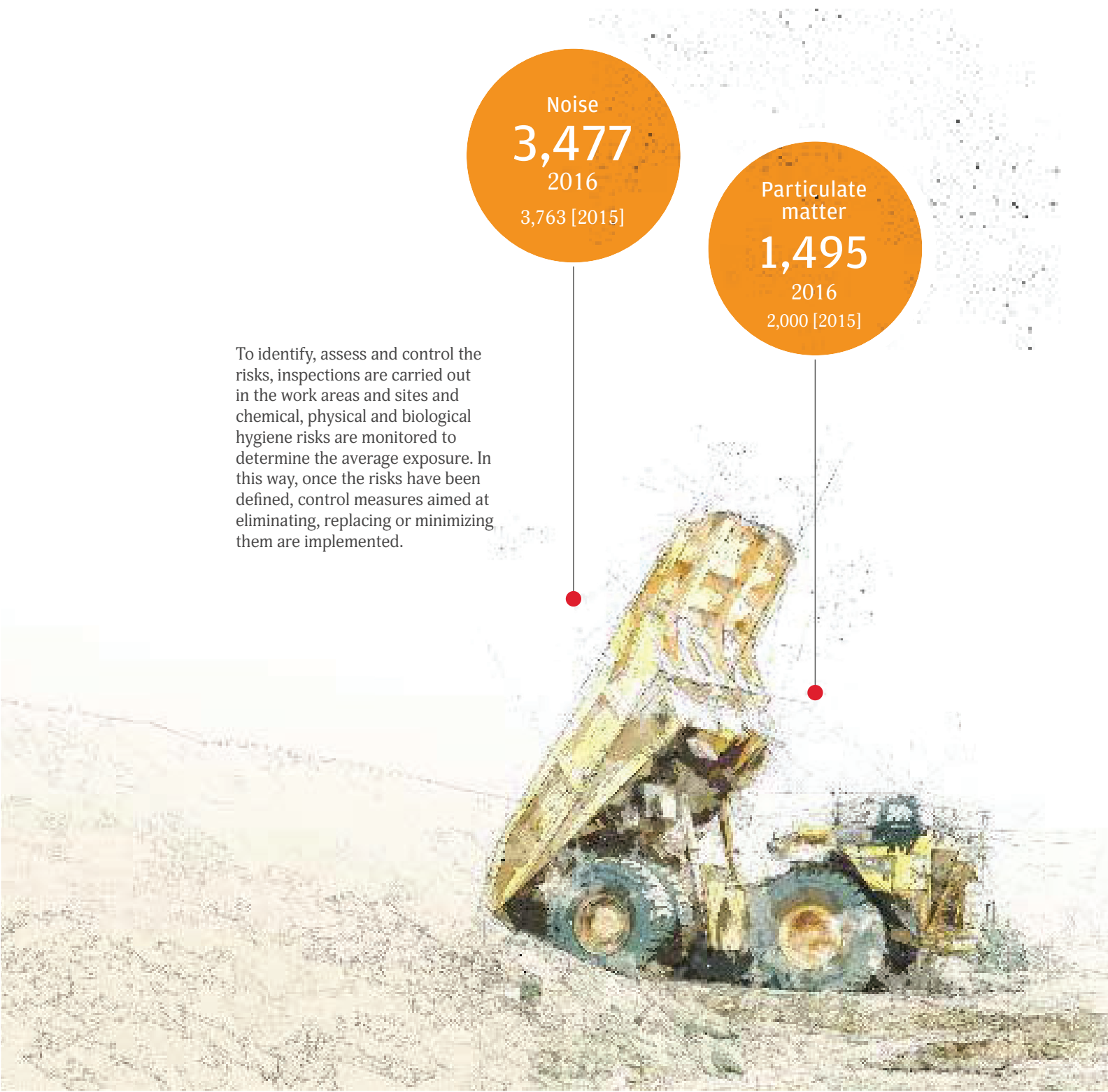
## Workers with exposure to risk in the operations

[GRI 403-3]

At Drummond Ltd., the employee groups who are at the greatest risk of developing occupational diseases are those who work in the operations areas. Below are the details of the workers exposed to hygiene risks that required periodic medical observation:



To identify, assess and control the risks, inspections are carried out in the work areas and sites and chemical, physical and biological hygiene risks are monitored to determine the average exposure. In this way, once the risks have been defined, control measures aimed at eliminating, replacing or minimizing them are implemented.



## Material aspect case studies

One of the risk agents that receives special attention in open-pit coal mining is airborne particulate matter from the production operations and the transportation of coal and minerals, given that their chemical compositions contain geometric forms of free silica, such as quartz, cristobalite and thymidite.

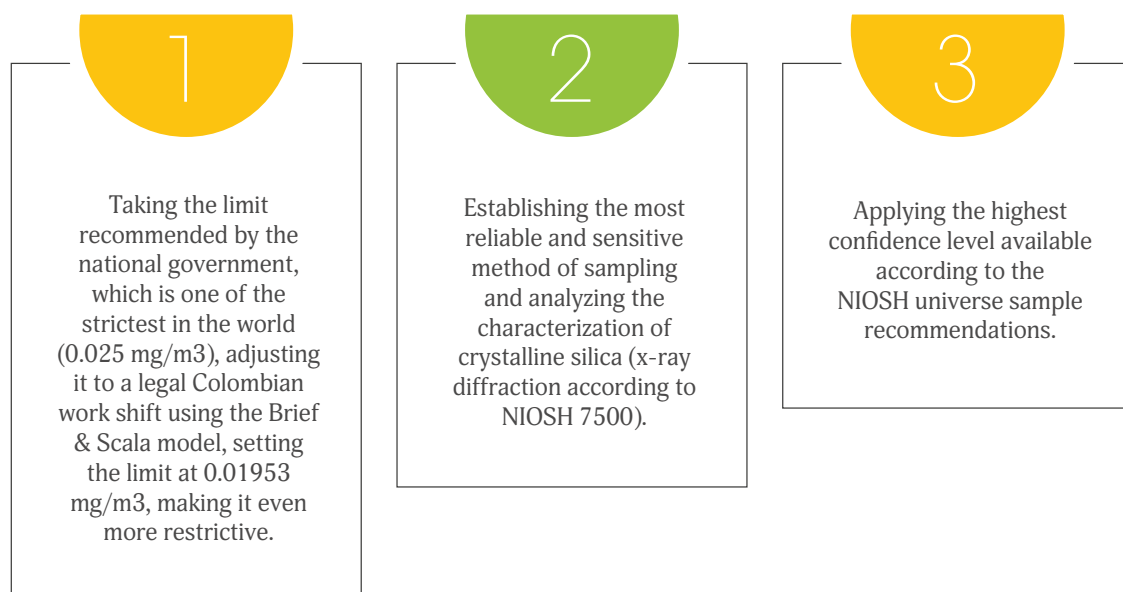
They are determinants in the occurrence of serious pulmonary disorders, such as silicosis, anthracosis and other respiratory diseases that are no less serious that, as clearly shown by the evidence, contribute to the occurrence of loss of life and declines in workers' quality of life.

In order to control workers' potential exposure to crystalline silica, in 2003 the company began a priority-risk hygiene management program for breathable particulate matter with siliceous content, based on basic characterization processes, observation and analysis of trends

in exposure to the risk under the Similar Exposure Groups (SEG) strategy, to establish the exposure profile for workers with a high degree of confidence and, using that, establish more effective control and monitoring measures.

Therefore, the hygiene risk factor that is currently the best documented in studies of populations exposed to open-pit mining corresponds to particulate matter with siliceous content, considered to be the most significant hygiene agent in the sector, not only because of the material's potential to cause pneumoconiosis, but also because of the number of workers exposed to it.

During this process within Drummond Ltd., the Industrial Hygiene program has considered three aspects to be particularly relevant to provide tools that have a high impact on the effectiveness of the environmental monitoring system. These three aspects are:



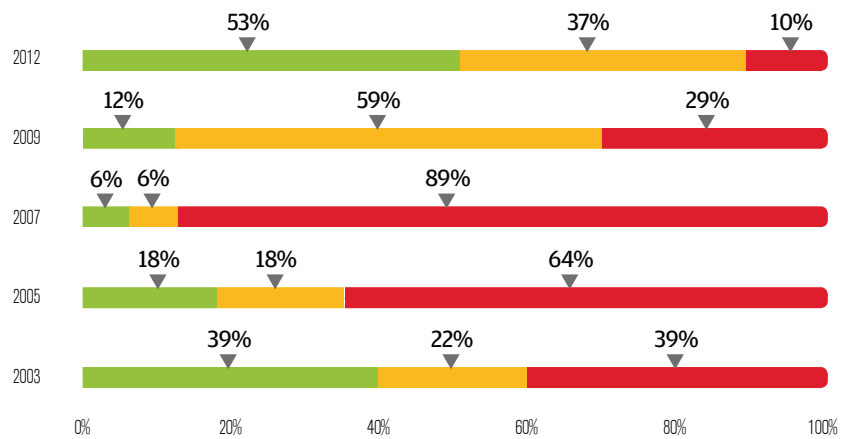


These three aspects made it possible to make approximately 3,500 individual crystalline silica determinations in the last 10 years, i.e., 7 of every 10 workers have been subject to an objective evaluation, with a 95% confidence level on the general exposure trend in the working population.

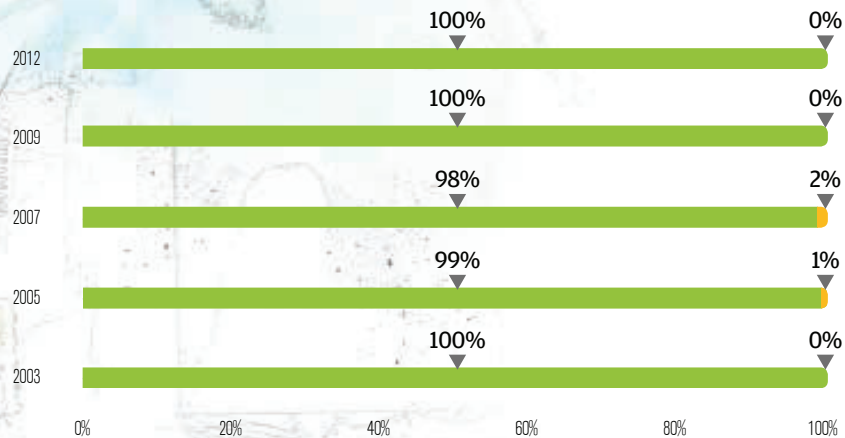
The results of the inter-annual evaluation campaigns made it possible to clearly define the intervention strategy that had been planned, including training

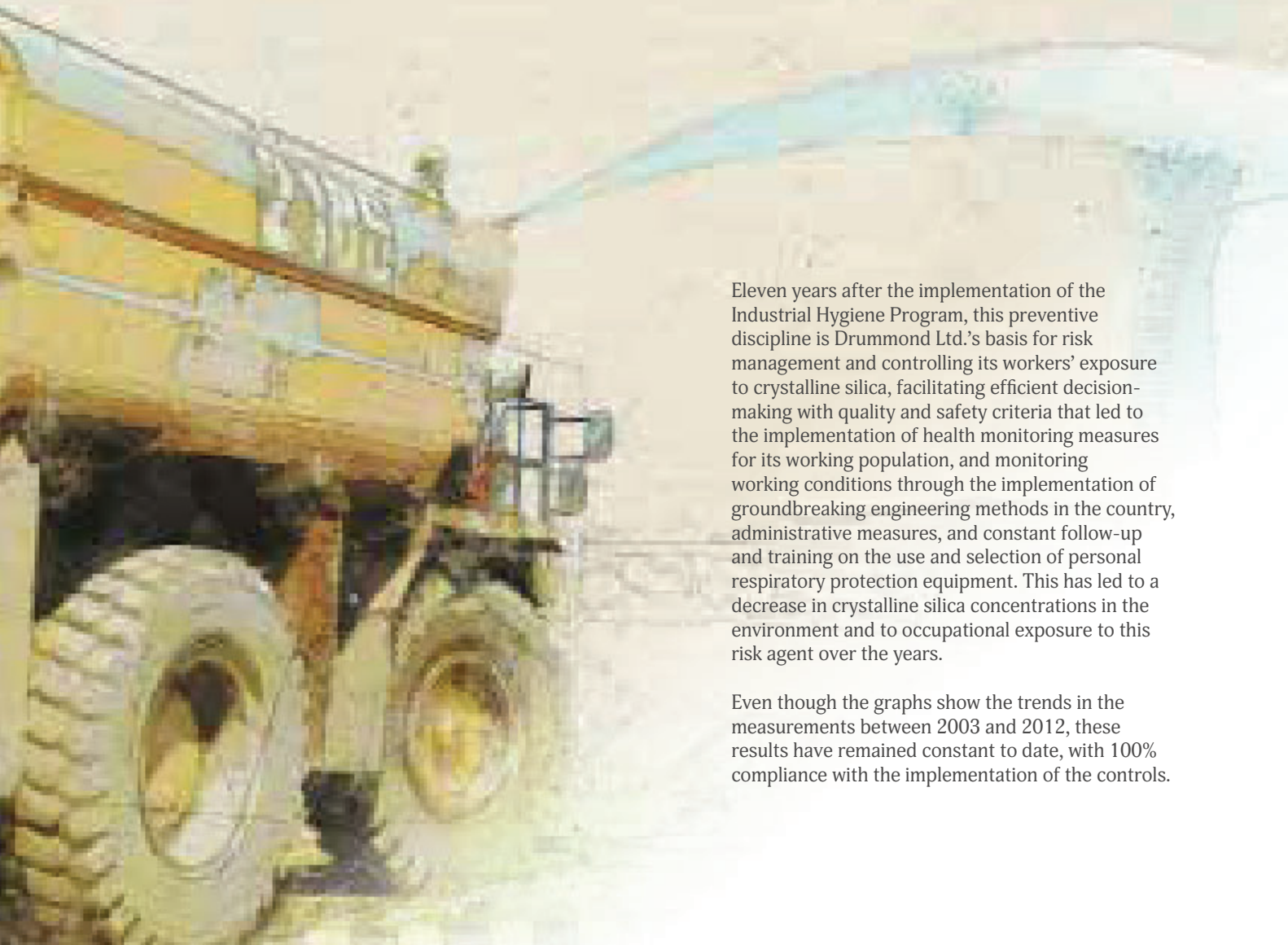
and informational programs, technical control, personal protection and health monitoring, critical elements for setting up the structure to prevent respiratory diseases from exposure to crystalline silica, through which we have been able to go from having exposure concentrations that exceeded the allowable limits, to exposure concentrations that are well below that limit after the implementation of all of the control measures mentioned above, as can be seen:

### Before control



### After control





Eleven years after the implementation of the Industrial Hygiene Program, this preventive discipline is Drummond Ltd.'s basis for risk management and controlling its workers' exposure to crystalline silica, facilitating efficient decision-making with quality and safety criteria that led to the implementation of health monitoring measures for its working population, and monitoring working conditions through the implementation of groundbreaking engineering methods in the country, administrative measures, and constant follow-up and training on the use and selection of personal respiratory protection equipment. This has led to a decrease in crystalline silica concentrations in the environment and to occupational exposure to this risk agent over the years.

Even though the graphs show the trends in the measurements between 2003 and 2012, these results have remained constant to date, with 100% compliance with the implementation of the controls.

### MILESTONES

- Reducing the lost-time injury rate at Drummond Ltd.'s operations by 60% in the period from 2011 to 2016.
- An increase of 54% in the coverage of health and safety trainings during the last five years (2011-2016)
- Reducing the accident rate in high-risk tasks by 100% during the 2015-2016 period.

### CHALLENGES

- Reducing the lost time injury rate by 20% in 2017, as well as an additional reduction of 10% in 2020.
- Keeping the risk index (RI) for occupational exposure to silica below 1.0 with the use of personal protective equipment (PPE) by 2017, and to reduce similar exposure groups with an RI greater than 1.0 by 50% by 2018.
- Maintaining the ISO 14001:2004 and OHSAS 18001:2007 certifications for the Integrated Management System for the Hydrocarbons

Division in 2017, and implementing the integrated management system that includes the ISO 14000:2015; ISO 9001:2015; ISO 26000:2010 and OHSAS 18001:2007 standards, in 2018. The certifications obtained, with the exception of OHSAS at the port (recertification in 2017), have been granted with monitoring visits for the three years of their validity.



## E3. RELATIONSHIPS WITH UNIONS

[GRI 103-1]

Drummond Ltd. believes that good labor relations contribute to generating and maintaining peace in the workplace, which is fundamental for achieving the company's objectives, since it has an impact on employee productivity, professional development and well-being.

stakeholders, such as customers, suppliers, contractors, communities and administrative and/or judicial authorities. For this reason, the company seeks to reduce risks related to disruptions in the operations, collective disputes, judicial and/or administrative proceedings that may affect the corporate reputation and the company's sustainability.

[GRI 103-2]

Managing union relationships includes all of Drummond Ltd.'s operations and directly affects workers, and it can also have an impact on other

To mitigate these risks, the company has the following tools for managing labor relations:



Drummond Ltd. has mechanisms to process complaints about labor irregularities through the Complaints Channel found at the following website: <http://www.drummondltd.com/contact-us/?lang=en>. Through this channel, those interested (employees and/or outsiders) can submit their labor-related concerns or complaints, which are handled guaranteeing complete confidentiality and anonymity. The actions that take place as a result of the use of this mechanism are managed by the Human Resources, Legal and Internal Audit departments, which coordinate user responses with the areas involved.

To define Drummond Ltd.'s labor relations within the law and the company's guidelines and policies, it has an Employee Manual that is given to workers and contains, among others, the following documents:

- The company's Comprehensive Policy
- Human Rights Policy
- Human Resources Policy
- Wage Policy
- Recruitment and Hiring Policy, Code of Conduct
- Ethics/Conflicts of Interest Policy
- Mechanism for Reporting Complaints and Irregularities, Community Service Manual
- Communications Policy
- Environmental Sustainability Policy
- Industrial Safety Policy
- Drug and Alcohol Regulations

At Drummond Ltd. there is a Labor Relations Department under the Vice President of Human Resources (H.R.), which is officially in charge of managing and coordinating matters that generally affect workers and unions. It is important to note that labor relations at the company are not an issue exclusive to the H.R. department; rather, each worker builds these relationships every day through the work they perform, and their responsibility and leadership.

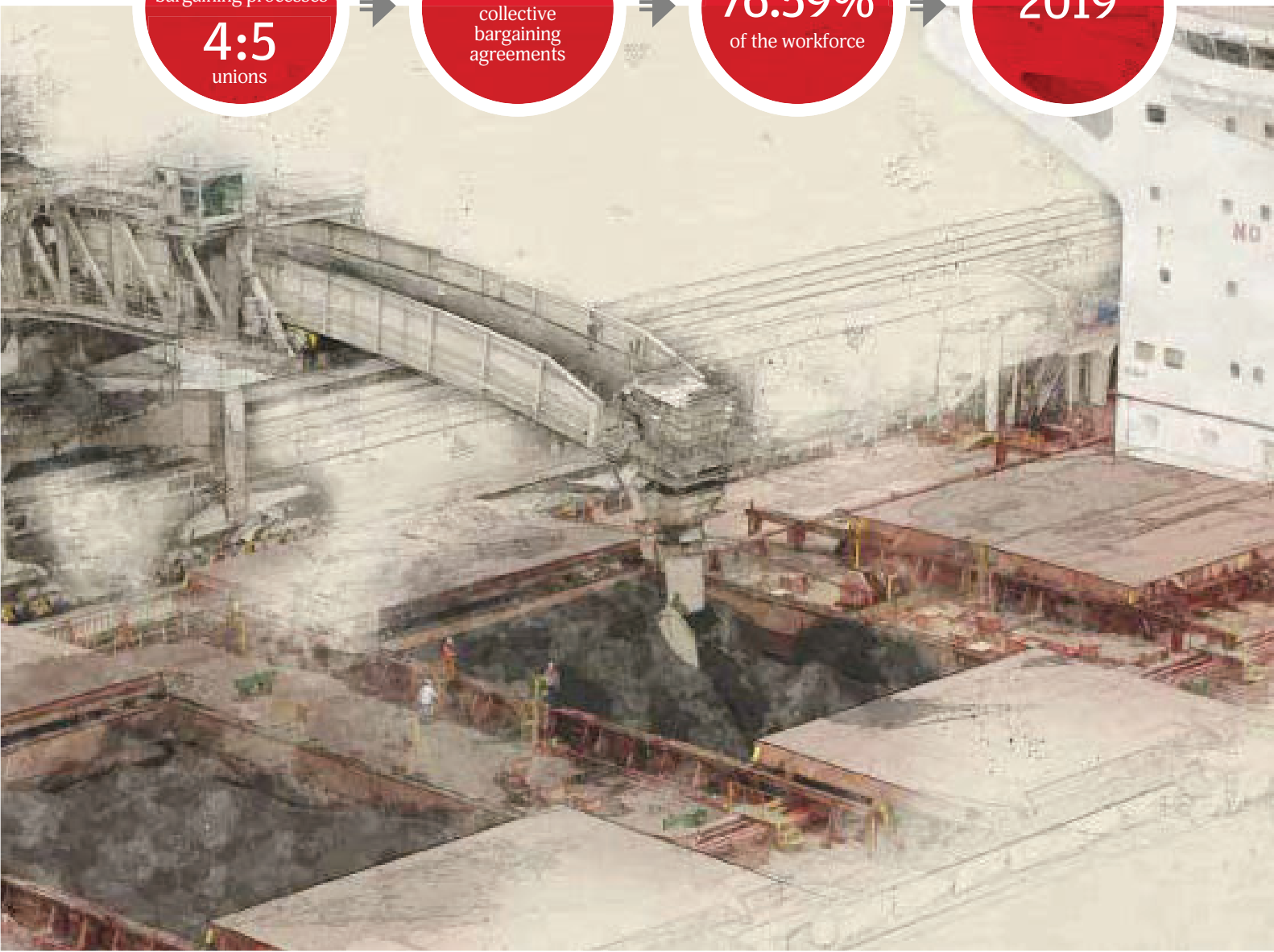
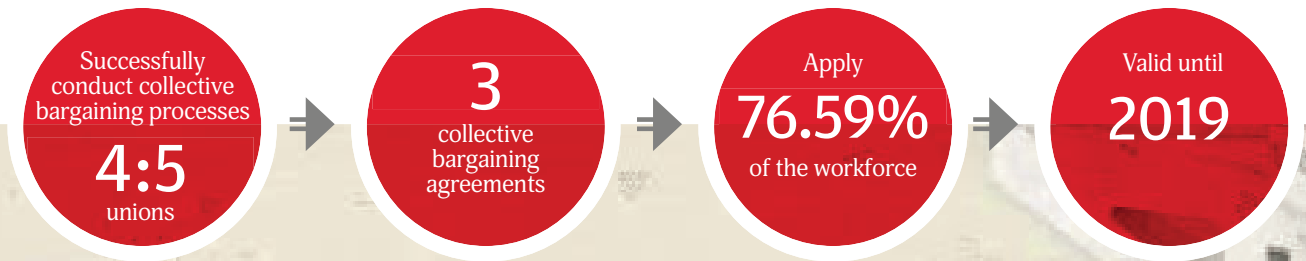
These policies are also published on the company's website at: <http://www.drummondltd.com/about-us/our-commitment/?lang=en> and they have also been communicated through the company's various publications and scheduled trainings.



[GRI 102-41]

Managing union relations has made it possible to successfully conduct collective bargaining processes with four of the five unions, which concluded with the signing of three collective bargaining agreements in 2016, which apply to 76.59% of the workforce and will be valid until 2019. Although a collective bargaining process could not be carried out with one of the unions, there is a pending arbitration decision to resolve the collective dispute; however, all of its members benefit from these collective bargaining agreements.

+ See the details about these negotiation processes at <http://www.drummondtd.com/news-publications/press-releases/?lang=en>





[GRI 103-3]

Drummond Ltd. evaluates its approach to managing union relations through various opportunities for communication and the following scenarios:

Periodic meetings with the unions as part of the collective bargaining process, as well as informal meetings with them and other employees.

Open meetings with employees led by the Vice President of Operations and Human Resources, by the managers of the operating areas and Industrial Safety (360°), which are an important opportunity for providing feedback.

A network of labor relations with other companies in the industry to exchange best practices.

Visits from external stakeholders (customers, NGOs, international unions) to learn about Drummond Ltd.'s practices and establish direct contact with the unions.



[GRI 402-1]

Currently, Drummond Ltd. has no minimum notice periods established in its collective bargaining agreements. Nonetheless, when there are operational changes that affect workers, the company holds meetings with the union organizations to share that information. By doing this, in 2016 the quarterly meetings involving the Vice President

of Operations and the Vice President of Human Resources and all employees were reinforced, with the goal of updating important aspects of the project such as industrial safety, production, human resources, achievements and objectives. New opportunities for feedback were also created for employees and their respective departments.

### MILESTONES

- During 2016, three collective bargaining agreements were signed with four of the five existing unions, each for a period of three years.

### CHALLENGES

- Strengthening opportunities for direct communication with employees and unions, to maintain labor relations that lead to the achievement of the company's goals.
- Efficiently managing the collective bargaining agreements to ensure that employee benefits are recognized and that the commitments made by the company are fulfilled.

## E4. HUMAN RIGHTS

[GRI 103-1]

For Drummond Ltd., it is essential to fulfill its commitment to respecting the human rights of all people involved in any way in its mining and port operations. For this reason, the company reaffirms its responsibility to adhere to international standards to ensure the implementation of practices that promote respect for human rights and that make it possible to carry out its activities with an understanding of corporate policies on this topic.

This understanding is critical to prevent risks from materializing that could be associated with judicial, fiscal and reputational consequences, and that could also affect the sustainability of the operation. By doing so, Drummond Ltd. acts in full compliance with Colombian law and international rules and standards, ensuring that opportunities are created instead of risks. An opportunity comes when a customer knows that they are buying coal from a company with good mining practices, that respects and promotes human rights.





## ≡ Promoting human rights at Drummond Ltd.

[GRI 103-2]

To reaffirm its commitment to respecting and promoting human rights and fundamental freedoms, Drummond Ltd.:



Expresses its willingness to align its policies, procedures and actions with the Voluntary Principles on Security and Human Rights. For this reason, in 2014 Drummond Ltd. adopted the Voluntary Principles on Security and Human Rights (VPS) and in 2015 it adopted the UN Guiding Principles on Business and Human Rights (UNGPs). In addition, the company continually communicates its commitment and adherence to these international human right standards, with external stakeholders such as the national government, the Armed Forces and a significant group of embassies.



Conducts risk studies on human rights and prepares management plans that establish a harmonious relationship with the authorities and communities in the area of influence.



Has a Human Rights Policy, which seeks to reaffirm its respect for and promotion of those rights.



It is available on the website: <http://www.drummondLtd.com/wp-content/uploads/Human-Rights-Policy-Drummond-Ltd.pdf>

## Training and education for security personnel

[GRI 410-1]

During 2016, the commitment by Drummond Ltd.'s senior management to the strategy for training, education, dissemination and applicability of human rights and the voluntary principles was critical to aligning the entire organization under a single policy:

### In-house security personnel that received human rights training

MINING AND HYDROCARBON OPERATIONS Valledupar	87%	2015
	100%	2016
PORT OPERATIONS Cartagena	55%	2015
	100%	2016
Bogota	0%	2015
	100%	2016



Has a channel for reporting irregularities on labor issues, called the Mechanism for Reporting Complaints and Irregularities, which ensures anonymity and seeks to achieve consensus as the main way to resolve disputes or complaints.



More information at: <http://www.drummondLtd.com/wp-content/uploads/GRIEVANCES-POLICY.pdf>.



Additionally, in 2016 the company succeeded in:

Designing the human rights models, which were included in the regular training cycles for the workers participating in the operations.



[GRI 412-1]

Completing the human right assessment for 100% of the company's significant operations centers (mines and port).



**Security personnel (outsourced) that received human rights training**

MINING AND HYDROCARBON OPERATIONS Valledupar	<b>100%</b>	<b>2015</b>
	<b>100%</b>	<b>2016</b>
PORT OPERATIONS Cartagena	<b>100%</b>	<b>2015</b>
	<b>100%</b>	<b>2016</b>
Bogota	<b>100%</b>	<b>2015</b>
	<b>100%</b>	<b>2016</b>

These training sessions deal with topics related to analyzing the risk matrix for human rights and the Voluntary Principles, measures for managing risk and handling human rights and the Voluntary Principles, and the Guiding Principles on Human Rights. The applicability of the training sessions comes from the fact that the employees are able to identify and prevent social conflicts from arising that are related to the mining and port operations.

In this way, Drummond Ltd. is committed to incorporating human rights into its security operations, by communicating the commitments it has undertaken in this area to the Armed Forces. In 2016, approximately 400 security personnel who provide services to Drummond Ltd. were trained on human rights issues, in addition, to high-level officers from the armed forces and the national police. It is also important to highlight that every time new military personnel arrive in the area, they are provided with training in compliance with the law on topics related to the security and human rights policies.



## ≡ Evaluation of work regarding human rights

### Internal Management

[GRI 103-3]

To evaluate the potential impacts and prevent them from occurring, the company conducts the following:



Periodic workshops with the management and administrative team, which is supported by a firm with experience in implementing international standards such as the Voluntary Principles and the United Nations Guiding Principles. In the planning stage, those who are responsible for specific projects also participate in these exercises, to ensure that the risks and the ways to handle them are identified from the start, and that a plan is designed to implement them.

---



Audits by the Bettercoal organization. This organization, made up of utility companies in Europe, and in which NGOs such as CREER-IHRB are also involved, established some standards that promote responsibility in the value chain that provides them with raw materials. In their annual audits (that are conducted with expert firms such as ERM Consulting), they analyzed different aspects and practices in Drummond Ltd.'s performance to ensure that it complies with the principles and standards that they propose. The company agreed to be the first in the world to be studied by Bettercoal. Additionally, international companies such as RWE, EnBW and Enel, which are also part of Bettercoal, completed independent audits that showed Drummond Ltd.'s strong performance in terms of human rights.

---



As part of the company's strategy to grow closer to its international audiences, it made trips to Europe to participate in several forums, such as the Dutch Coal Dialogue, and held meetings with government officials, NGOs, and other companies that purchase coal from Drummond Ltd.

---



In 2016, a study was conducted to compare the Complaints and Claims Process (CCP) for Drummond Ltd.'s mining and port operations in Colombia to international standards, in order to identify opportunities to improve the CCP system based on the UNGPs and other compatible standards. This claims mechanism is very important for Drummond Ltd., since it is one of the main points of contact for learning about any irregularities or risks that may arise.

---

## Freedom of association and collective bargaining

[GRI 407-1]

At Drummond Ltd., there are no suppliers or operations whose freedom of association or right to benefit from collective bargaining agreements are at risk. The company expressly prohibits any type of violation of the freedom of association and the right to negotiate collective bargaining agreements.

The measures adopted by Drummond Ltd. to defend the freedom of association and the

right to collective bargaining are based on the Comprehensive Manual for Control and Monitoring of Contractors, a document that is shared with all suppliers with contracts or long-term negotiations with the company; it establishes, in Section 18, the prohibition against all forms of violations of the freedom of association and the right to negotiate collective bargaining agreements.





## Child labor

[GRI 408-1]

For Drummond Ltd., identifying the centers and suppliers with significant risks of child exploitation is of vital importance, so much so that its work in 2016 resulted in no events related to this item.

Drummond Ltd. has the following measures to identify and control any possibility of cases of child labor:

Complaints mechanism, under which suppliers and contractors can report cases anonymously.

Access control, which requires every person entering the mine and port operations to undergo a security check.

Random social security payment verifications and random inspections.



It is worth reiterating that Drummond Ltd. prohibits all types of child labor and abides by the norms established in the laws and regulations applied in Colombia, in addition to the international declarations regarding recruitment, working hours and work shifts.



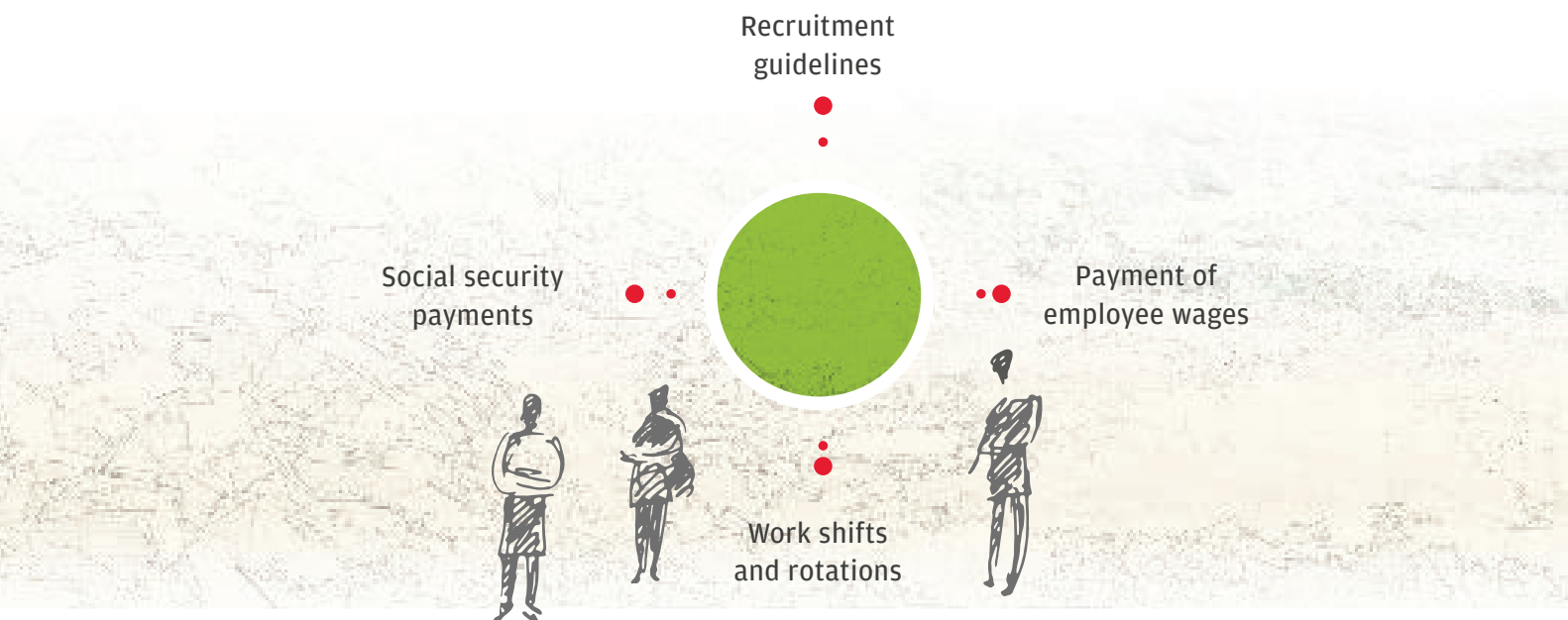


## Forced labor

[GRI 409-1]

As a result of the controls and measures established by Drummond Ltd., none of the centers or suppliers showed a risk of causing episodes of forced labor.

As a result of the measures that have been established, Drummond Ltd. conducts random audits of its contractors, evaluating different aspects such as:



Additionally, all suppliers and contractors that sign contracts and master purchase orders with Drummond Ltd. are given a copy of the Comprehensive Manual for Control and Monitoring of Contractors, which establishes in Section 8.2 paragraph NI the obligation to hire personnel of legal age, using proper hiring procedures and enrolled in the Comprehensive Social Security System.

By doing so, and bearing in mind that Drummond Ltd. prohibits any type of forced labor and abides by the norms established in the laws and regulations applied in Colombia, in addition to the international declarations regarding recruitment, working hours and work shifts, the results from 2016 show that there were no significant risks of forced labor that were identified, which is a measure of the effectiveness of each of the actions taken in complying with human rights requirements.

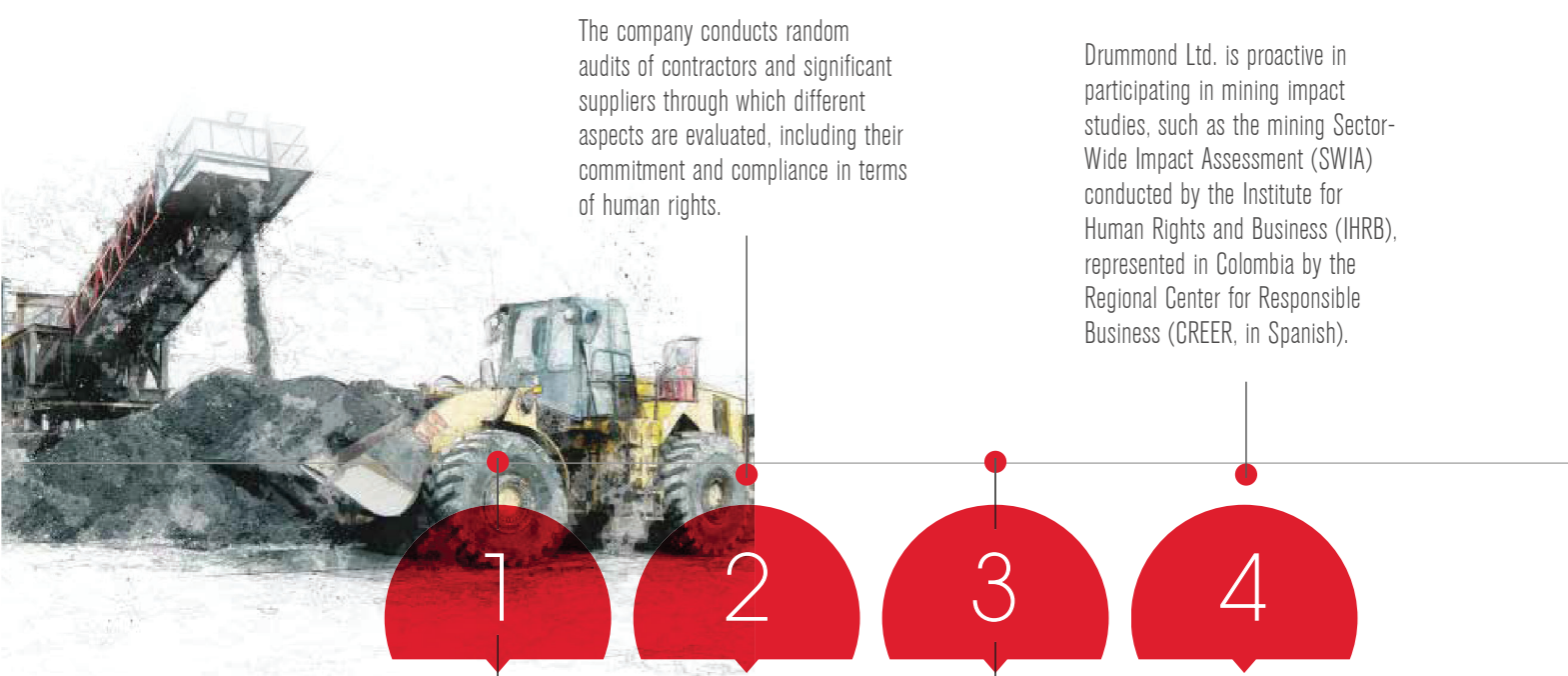
To supplement these actions, Drummond Ltd. has substantial measures to control child labor and forced labor, and a prerequisite for creating any new supplier or contractor in its database is for the legal representative for that organization to sign an Irrevocable Declaration of Goods and Services.

This Declaration, in Chapter IX Section 39, obliges the supplier or contractor to provide their services in strict compliance with the policies, procedures and actions from the “Voluntary Principles on Security and Human Rights” that were established in December 2000 by the U.S. State Department and the Foreign and Commonwealth Office of the United Kingdom, along with seven companies and three society civil organizations, and with the “Guiding Principles on Business and Human Rights” approved by the United Nations in 2011.



## Work with contractors on human rights issues

Through different activities and mechanisms, Drummond Ltd. assesses its compliances and that of its contractors with the commitments acquired regarding respect for human rights:



The company conducts random audits of contractors and significant suppliers through which different aspects are evaluated, including their commitment and compliance in terms of human rights.

Drummond Ltd. is proactive in participating in mining impact studies, such as the mining Sector-Wide Impact Assessment (SWIA) conducted by the Institute for Human Rights and Business (IHRB), represented in Colombia by the Regional Center for Responsible Business (GREER, in Spanish).



In talks with stakeholders on different aspects of the operation, issues related to human rights were discussed freely. Furthermore, for interested audiences, and for those who believe that they would benefit from more detailed information on the activities related to human rights, Drummond Ltd. always seeks to achieve direct dialogue. Additionally, the company is diligent in sending any material that may be relevant.

Even though the company has a robust tool for handling grievances, which includes community relations offices in the towns near its operations that allow people to receive direct, timely attention, an improvement plan was evaluated and developed in 2016. This system includes email accounts where people can write anonymously or in their personal capacity. The people responsible for receiving these emails re-direct the complaint or claim to the appropriate person within the company, and it is tracked until the case is closed.

## Evaluation - Human rights

[GRI 412-1]

During 2016, an analysis of risks related to human rights in Drummond Ltd.'s operations was completed. The risks were identified through a process involving a group of 30 top-level executives in Colombia and five from the parent company.

As a result, they selected measures to manage each risk identified, assigned responsibility for

each of the measures and prepared an initial progress report. All of this work took place under the framework of the Drummond Ltd. human rights policy, the VPs and the UNGPs.

In terms of the evaluation of the company's human rights performance, below is a list of the centers that have been subject to inspections or assessments on this topic.

---

### Centers that have undergone a human rights evaluation



4

Total number of operations centers that the organization has.

4

Number of centers that have been examined for human rights issues or where the impact on human rights has been evaluated.

100%

Percentage of centers that have been examined for human rights issues or where the impact on human rights has been evaluated.

---

In 2016, an analysis of human rights risks derived from Drummond Ltd.'s operations was completed. Through that process, the risks were identified, measures to manage each risk were chosen, and responsibility for each of the measures was assigned, all under the framework of the Drummond Ltd. human rights policy, the VPs and the UNGPs.



## Investment - Human rights

[GRI 412-2]

All of the work planned and carried out by Drummond Ltd. is extremely important, such as ongoing training for its employees. Accordingly, human rights training plans are implemented that specify the company's procedures and policies on this issue.

### Hours of training for employees on policies and procedures related to human rights

<b>3,015</b> 2015	Total number of hours of employee training during 2016 on policies and procedures related to human rights relevant to the operations	<b>2,345</b> 2016
<b>4,992</b> 2015	Total number of employees at the end of 2016	<b>4,946</b> 2016
<b>30</b> 2015	Number of employees training on policies and procedures related to human rights in 2016	<b>35</b> 2016
<b>0.60%</b> 2015	Percentage of employees trained in 2016 on policies and procedures related to human rights that are relevant to the company.	<b>0.71%</b> 2016

As a result, in 2016 trainings using the “learning by doing” methodology and an analysis of human rights risks under Drummond Ltd.’s policy were conducted with approximately 30 of the company’s senior executives and five from its parent company. During these sessions, the VPs and UNGPs, the Universal Declaration of Human Rights and their relationship to the human rights established in OAS treaties and in the Colombian Constitution was explained.

[GRI 412-3]

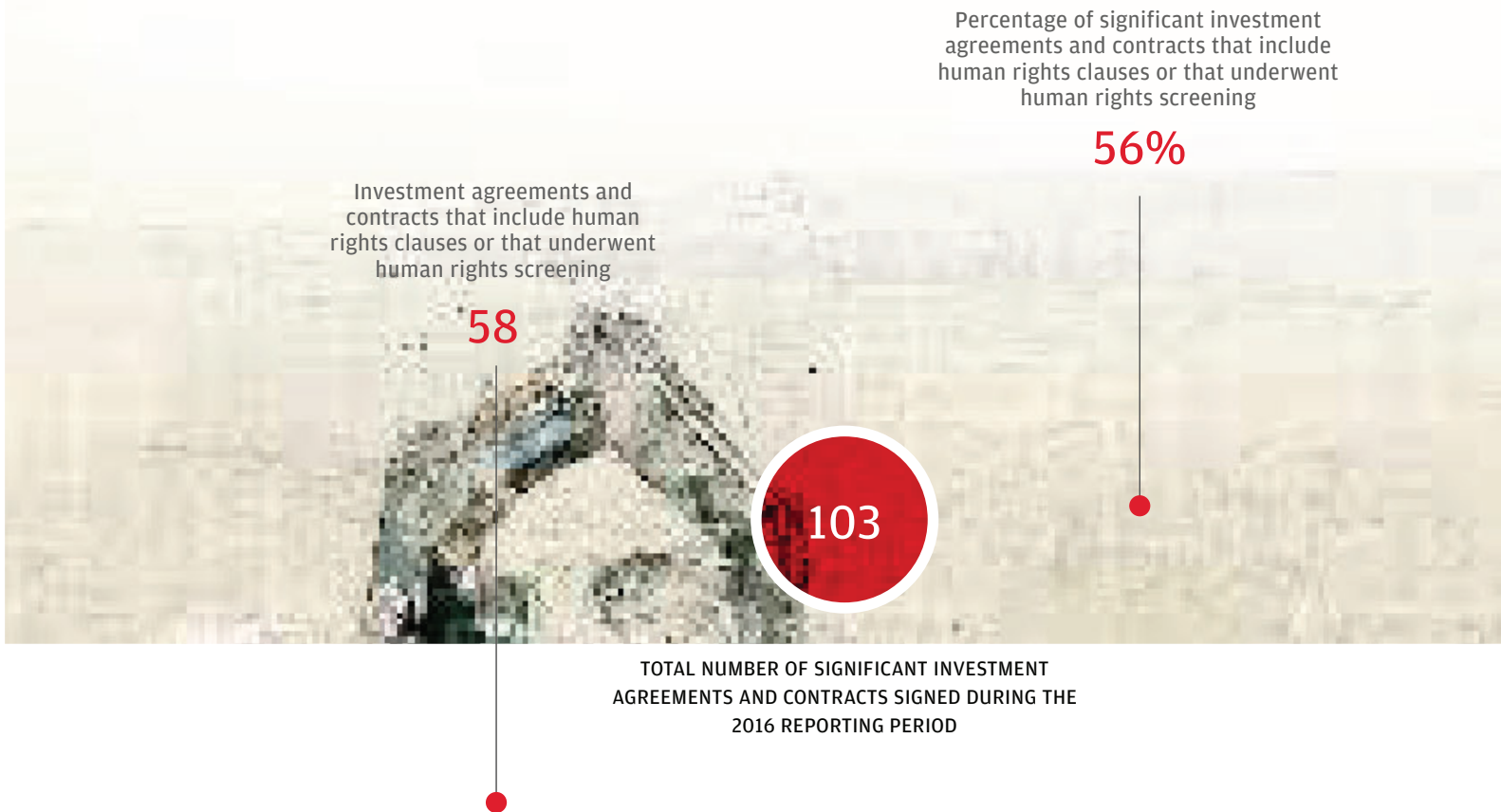
### Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening.

For Drummond Ltd., significant investment agreements include all services regulated through commercial offers or contracts. Starting in 2015, the Terms and Conditions appendix that is attached to commercial offers made to Drummond Ltd. include, in Section 39, the parties' commitment to understand the fundamental rights related to human rights and to provide the services in strict compliance with them. Taking this into account, the commercial offers signed in

2016 or past contracts that were extended include this new section within their terms.

In addition to the above, the Comprehensive Manual for Control and Monitoring of Contractors, a document given to all of the service suppliers that enter Drummond Ltd.'s facilities, establishes in Section 18 the prohibition of any type of practice that violates human rights, child labor and forced labor, among other aspects.

### Number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening

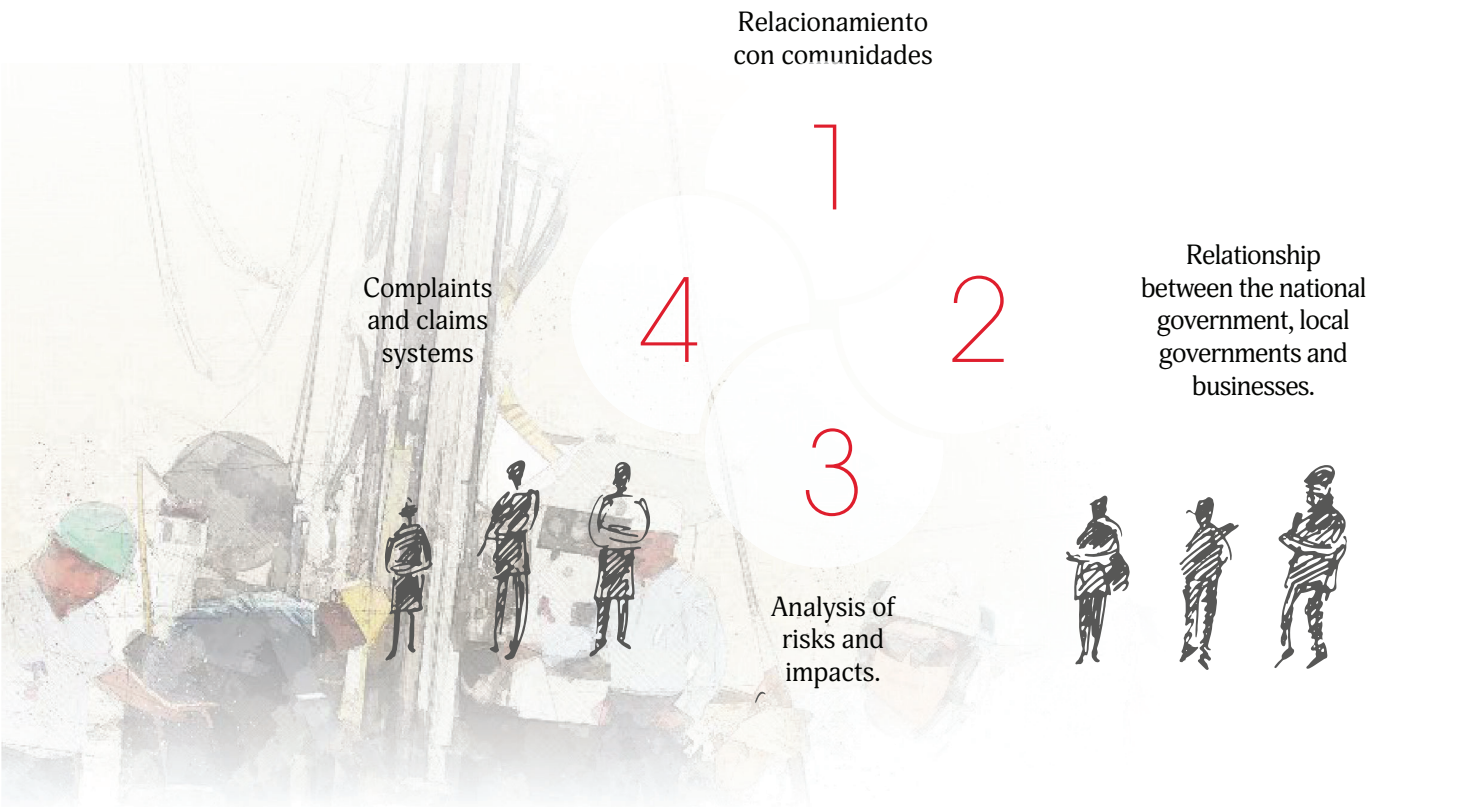




## Material aspect case studies

In 2015, Drummond Ltd. accepted the invitation from the Presidential Advisor on Human Rights to participate in a pilot program in which, along with other companies in the sector, the Ministry of Mines and Energy and the National Mining Agency, it would share best practices on human

rights and business, and generate inputs to foster that National Action Plan (PNA, in Spanish) on human rights and business. The national government published the first version of this plan on December 9, 2015. The pilot program addressed four specific topics:



This pilot program has been supported by organizations specializing in human rights, such as Ardura and the Ideas para la Paz Foundation (FIP). In addition, CREER-IHRB has acted as an observer.

In 2016, it was migrated into a permanent initiative called the Human Rights and Coal Working Group, and the company is working with CREER based on the recommendations that came out of the Sector-Wide Impact Assessment

(SWIA). This includes developing the framework of the significance of the non-judicial remediation processes as part of the PNA, as well as the methodology to improve what has been called the “four-part dialogue,” involving the national government, the regional and local governments, the communities and private businesses.

In 2016 several meetings were held, which resulted in the following:



The drafting of documents that present options on this issue, inspired by the results of the Pilot in 2015, the PNA and reports from the NGOs that criticize the performance of the coal sector in Colombia.



The preparation of documents that compare the main statements from the risk analyses to similar documents written by the Office of the President, the Ministry of Mines and Energy (MME), the National Mining Agency (ANM) and the companies



The drafting of documents that summarize the statements and recommendations from the Mining SWIA.



The Coal SWIA study – CREER developed an extract of the Mining SWIA regarding coal production in the departments of Cesar and La Guajira, which was reviewed by this Working Group.



The Program for Development and Peace (PDP) of Cesar’s approach to considering the possibility of forming an alliance based on common goals.

### MILESTONES

- In 2016, Drummond Ltd. trained 1,500 workers on human rights standards.
- Drummond Ltd. is cited by Bettercoal as an example of implementing lessons learned regarding human rights.
- Drummond Ltd. leads the Human Rights and Coal Working Group.

### CHALLENGES

- Increasing the coverage of the human rights training modules by 30% in 2017, and achieving 100% coverage in 2018.
- Holding two workshops through the implementation of social dialogue modules in 2017.
- Participating in three international forums related to human rights and business in 2017.



## E5. MANAGING THE LOCAL COMMUNITIES



[GRI 103-1]

For Drummond Ltd., it is very important to respect and have a positive impact on the communities where it operates, since progress for the communities in its area of influence is a fundamental pillar for the organization's sustainable development. For this reason, the company continually strives to become a model corporate citizen, to build stronger communities, preserving and caring for the local heritage.

Carrying out its mining and sales operations without taking the local communities into account would imply certain risks, including the weakening of relationships as a result of providing little or no response to the needs and expectations of civil society, public entities, contractors, suppliers and other companies from the sector that are present in the areas of influence. This could make it more difficult to clearly identify the most important sectors, the scope of action, the key actors and the scope of the projects.

Therefore, Drummond Ltd. works constantly on developing and implementing mechanisms that seek to continuously improve its relationships with the residents of the towns located in the area of influence of its activities through information and constant communication programs with the communities, responses to claims and requests, priority in job creation and local hiring, environmental education and awareness-raising, among others. Additionally, Drummond Ltd.'s commitment to community development includes various projects, including building schools, providing equipment and improving the physical infrastructure at hospitals, health centers and clinics, which contributes to providing greater coverage and improving the quality of these services. This commitment is reflected through the company's work on consolidating joint actions by the public sector, private businesses and the community. This involves action by three parties, in which community empowerment is a key factor to ensure the development of the projects in the medium- and long-term.

### ≡ A commitment to the communities

[GRI 103-2]

The tools for working with the communities under Drummond Ltd.'s social management guidelines are based on three main objectives:





Based on these objectives, the company uses municipal development plans, projects coordinated with local governments, community meetings and awareness-raising sessions and other documents as management tools that make it possible to confirm the start-up, execution and implementation of the projects.

The company has various mechanisms that facilitate and promote the continuous improvement of relationships with the residents from its area of influence and also seek to build efforts to strengthen communication between stakeholders and the company's various departments. These mechanisms include:

1

### COMMUNITY ASSISTANCE POLICY

its goal is to generate well-being, mitigate the operation's negative impacts and promote social development.



See more information on the website: <http://www.drummondLtd.com/social-responsibility/community-attention-policy/?lang=en>

2

### COMMUNITY SERVICE MANUAL

its goal is to respond to any type of request, complaint or suggestion (including those of a social or environmental nature). Using this manual, the community in the area of influence can communicate by telephone, physically at the community service offices (La Loma, Valledupar and Puerto Drummond) or via email to report a claim or complaint. This information is entered into the CCP, which codes and distributes it to the appropriate department. The communities can also submit this information in-person to the Community Relations Coordinators who constantly visit the area of influence.



See more information on the website: <http://www.drummondLtd.com/wp-content/uploads/DTLD-Community-Services-Manual.pdf>

3

### PUBLICACIONES EXTERNAS

through press releases to all media outlets, radio advertising, and magazine ads. The company also has internal publications, such as *Revista Drummond* and the *Drummond Te Informa* newsletter.





[GRI 103-3]

To ensure that Drummond Ltd. applies these mechanisms properly and works to use best management practices, it carries out the following:



Perception surveys applied annually to the communities in the area of influence of the mining and port projects.



This process makes it possible to receive feedback to continuously improve the processes and interventions in the communities.



Bettercoal<sup>15</sup> external audits



The evidence from these processes is submitted annually to the competent authorities through the Environmental Compliance Reports (ECR) and the Regional Development and Communities Report, which is submitted to the National Mining Agency (ANM). The National Environmental Licensing Authority (ANLA) also follows up on social management projects.



Work in cooperation with different institutions, foundations and other private companies.



This initiative is very important for Drummond Ltd., since it involves extracting best practices to adapt them to the circumstances and features of the areas of influence. Fundepalma, Fundaunibán, Fundebán, the Casa en el Árbol Foundation, the Génesis Foundation, the SENA, the Universidad del Magdalena, the Naval School of Barranquilla, USAID, Fundemicromag, AUNAP, Asbama, Corpamag, the University Foundation of the Andean Region, the Pro-Sierra Nevada de Santa Marta Foundation, the Colombian Agency for Reintegration, the ICBF, the DPS, the SoyDoy Foundation, municipal and departmental governments are some of Drummond Ltd.'s strategic allies in its centers of operation.

15. For more information go to: <https://bettercoal.org/>



## ☰ Local community participation and development programs

For Drummond Ltd., it is important to have decision-making tools that make it possible to guide efforts to address the current needs of the communities. This needs assessment is carried out in two ways: **endogenously**, that is, the project proposals are generated within the company, and **exogenously**,

when the initiatives are identified and proposed to Drummond Ltd. by the community, so the company can assess their viability and the scope of its participation in the projects. To strengthen its understanding of these needs, in 2016 the company carried out the following:



Outreach programs through field visits to the areas of influence or through the Community Service Offices.

These programs make it possible to align the company's investment objectives and projects with the strategies from the Municipal Development Plans, contributing to achieving the local government's goals and implementing programs for the development and benefit of the communities.



Studies of the socioeconomic features of the population in the area of direct influence of Drummond Ltd.'s mining and port activities.

This study was carried out with the help of the DIS Group, and it is used as an essential tool to guide decision-making related to social intervention projects and stakeholder engagement.<sup>16</sup>

16. Socioeconomic Study of Households in the municipalities in the area of influence of Drummond Colombia's operations. DIS Group, Bogotá, August 2016. This study consists of 4 volumes and a Stakeholder Consultation.



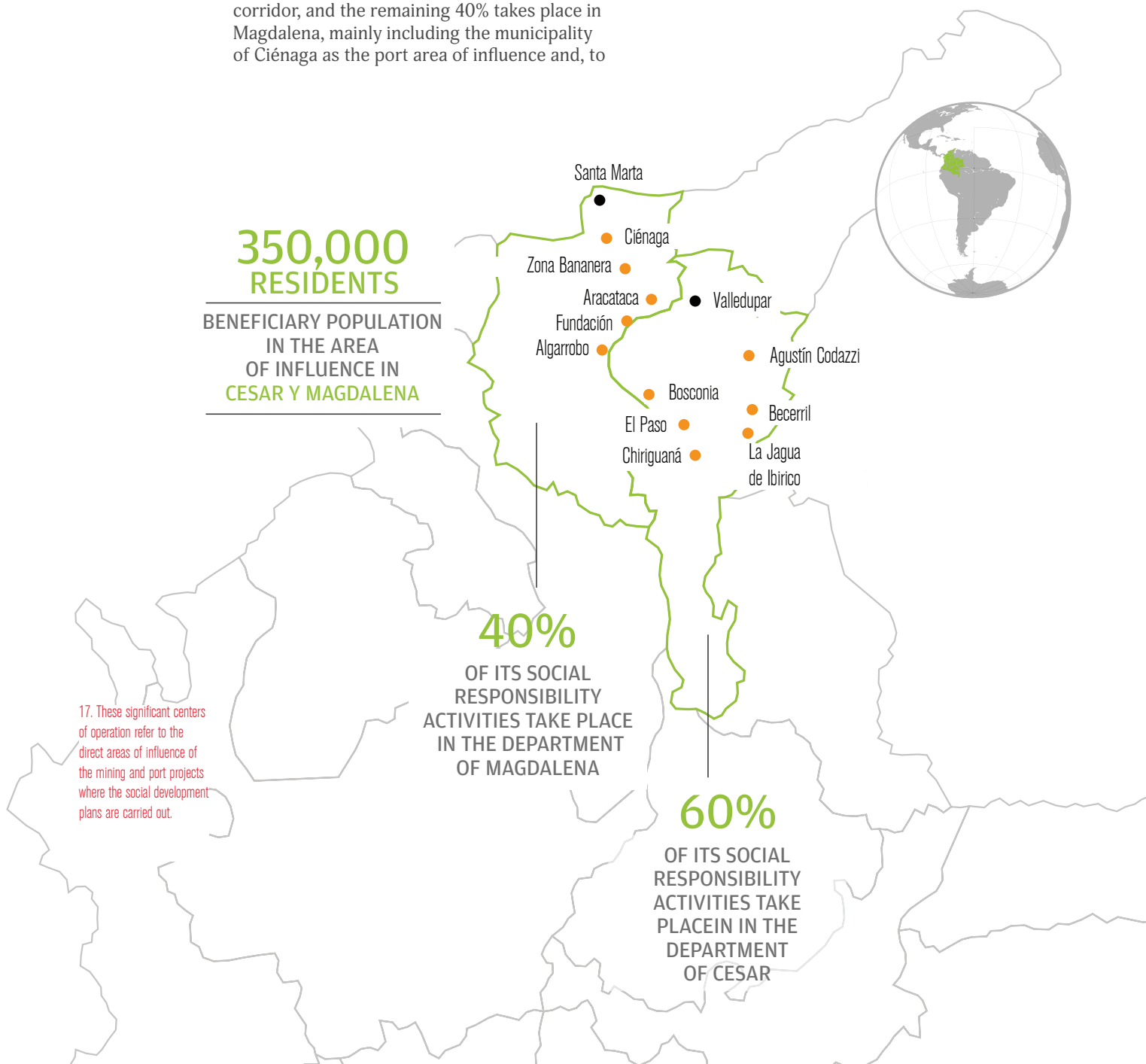
## Social development programs

[GRI 413-1]

In 2016, 100% of Drummond Ltd.'s significant centers of operation<sup>17</sup> (mines and port) had development programs, impact assessments and participation by the local community.

Therefore, 60% of its social responsibility activities take place in the Department of Cesar, an area that includes the municipalities of Agustín Codazzi, Becerril, La Jagua de Ibirico, Chiriguaná, El Paso and Bosconia, the latter as part of the railroad corridor, and the remaining 40% takes place in Magdalena, mainly including the municipality of Ciénaga as the port area of influence and, to

a lesser extent, the municipalities of Algarrobo, Fundación, Aracataca and Zona Bananera, located along the railroad corridor. The activities also include the capitals of the two departments, Valledupar and Santa Marta. It is estimated that the beneficiary population of the company's various social responsibility programs and projects in the area of influence in Cesar and Magdalena totals 350,000 residents.



## Drummond Ltd. invests in the region

[GRI 203-1]

Bearing in mind that, for Drummond Ltd., community relations are fundamental in carrying out its activities, the company is increasingly concerned with generating strategies that will have a positive impact and contribute to creating value for the community. Therefore, social investments have grown larger each year:

Social investment in US dollars





The social investments managed by the Community Relations Department during the 2016 period amounted to US\$ 1,136,343, divided among the following projects:

**Significant investments<sup>18</sup>**

<b>\$ 452,781</b>	EDUCATION AND CULTURE	<b>39.85%</b>	<b>100%</b>
<b>\$ 95,127</b>	RECREATION AND SPORTS PROMOTION	<b>8.37%</b>	<b>100%</b>
<b>\$ 88,408</b>	CHILD HEALTH AND NUTRITION	<b>7.78%</b>	<b>100%</b>
<b>\$ 200,578</b>	MAINTENANCE OF PHYSICAL AND ROAD INFRASTRUCTURE	<b>17.65%</b>	<b>100%</b>
<b>\$ 41,819</b>	MAINTENANCE OF CHURCH INFRASTRUCTURE	<b>3.68%</b>	<b>100%</b>
<b>\$ 10,686</b>	IMPROVING THE ENVIRONMENT	<b>0.94%</b>	<b>100%</b>
<b>\$ 100,159</b>	SERVICES FOR AFFECTED COMMUNITIES	<b>8.81%</b>	<b>100%</b>
<b>\$ 61,661</b>	INCOME-PRODUCING DEVELOPMENT	<b>5.43%</b>	<b>79%</b>
<b>\$ 45,744</b>	INSTITUTIONAL STRENGTHENING	<b>4.03%</b>	<b>100%</b>
<b>\$ 39,376</b>	COMMUNITY AND INSTITUTIONAL INFORMATION	<b>3.47%</b>	<b>100%</b>

18. Drummond Ltd.'s involvement is in kind. It provides all necessary materials, administration, labor and the community benefitting from the project. The university scholarships awarded to high school graduates are the only amounts not provided in kind.

**\$ 1,136,343**

Investment  
(US Dollars)

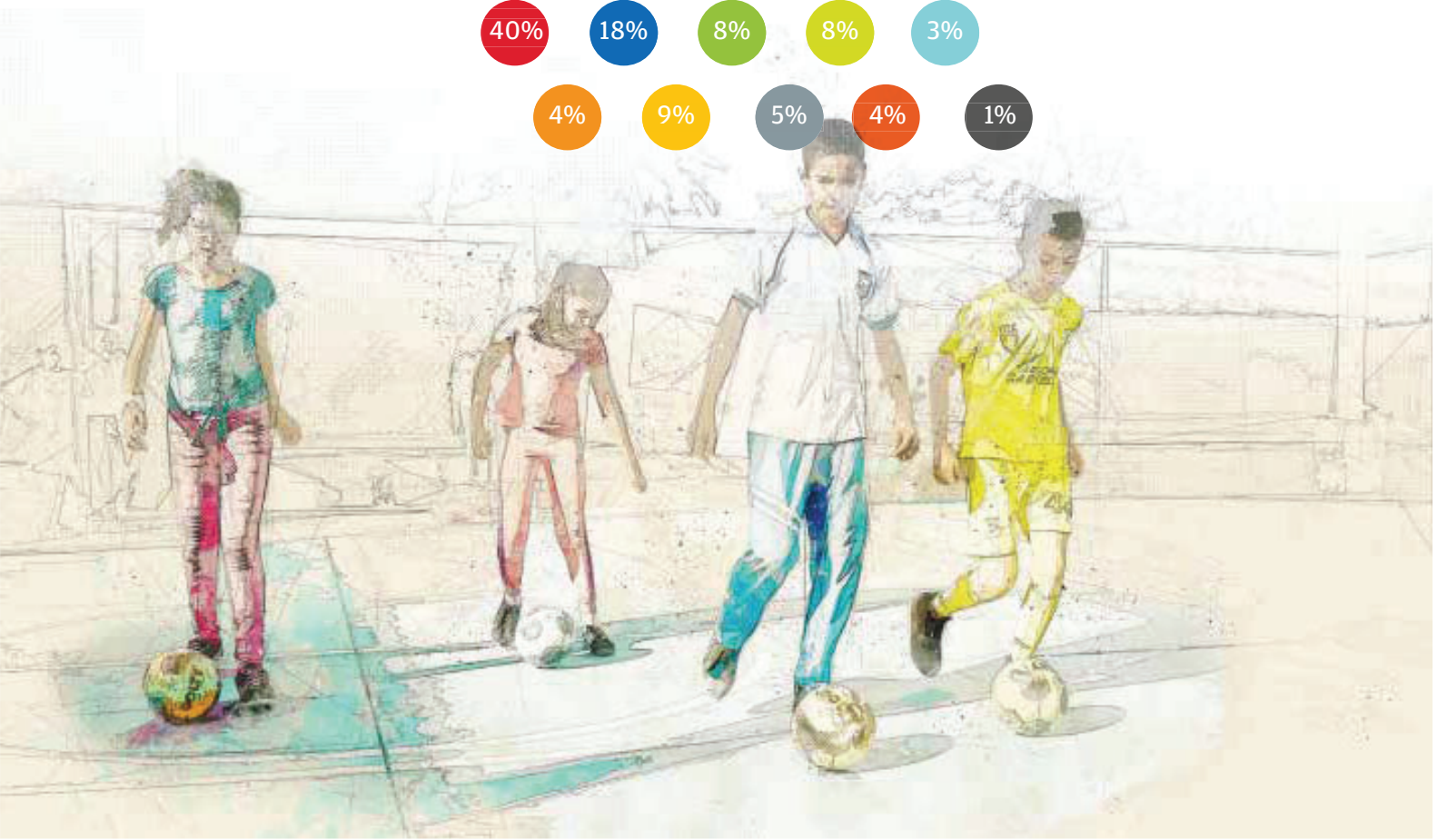
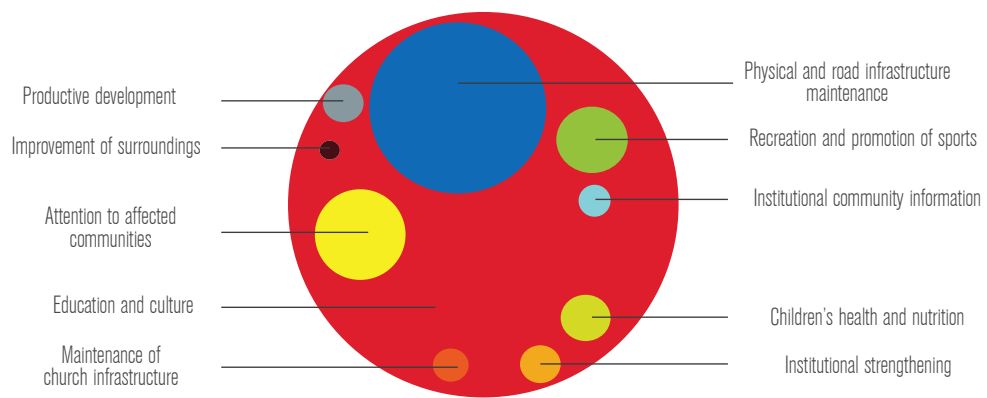
**100%**

Percentage of total

**98%**

Progress in 2016

## Social investment Drummond





## ≡ Social Management Plan

During 2016, the company continued to develop Community-building, Institutional Strengthening and Community and Institutional Information programs, within the framework of the Social Management Plan:



### COMMUNITY BUILDING

Through this program, the communities in the area of influence have been positively affected on eight different fronts:

#### 2016

Drummond Ltd. firmly believes that education is the foundation for progress. For this reason, in 2016 it carried out

- The renovation of one (1) children's room in the Rafael Carrillo Luquez departmental library in Valledupar, which benefits nearly 30,000 children each year
- Technological equipment for a Training and Entrepreneurship Center in the Orihueca district in the municipality of Zona Bananera
- Construction, renovation and air conditioning for 16 classrooms that will benefit nearly 800 students in the municipality of Ciénaga, creating high-quality educational environments.
- Growth opportunities were also provided for the high school graduates in Drummond Ltd.'s area of influence through the university scholarship program, which as of 2016 has benefitted 102 graduates of the public schools in the departments of Cesar and Magdalena.
- Additionally, following the national government's guidelines, the company provided support for Early Childhood programs by strengthening the Child Development Centers (CDC). It updated two CDCs in the districts of Boquerón and La Loma in the municipalities of La Jagua de Ibirico and El Paso, respectively, which benefitted approximately 600 children between the ages of 0 and 5.





**2**  
Child health  
and nutrition

**2017**

For 2017, in the Education and Culture sector, the company plans to build and/or update classrooms, school cafeterias, install bathroom facilities and donate desks in different municipalities in its area of influence in Cesar, projects that will benefit more than 5,000 students. In the area of the railroad and port corridor in Magdalena, the company plans to build a block of three classrooms as part of the second phase of a project that will benefit approximately 250 students from the municipality of Ciénaga.

**30,000**  
CHILDREN BENEFITED

RENOVATION OF ONE (1) CHILDREN'S ROOM IN THE RAFAEL CARRILLO LUQUEZ DEPARTMENTAL LIBRARY IN VALLEDUPAR

**800**  
STUDENTS BENEFITED

RENOVATION AND AIR CONDITIONING FOR 16 CLASSROOMS IN THE MUNICIPALITY OF CIÉNAGA

**2016**

- The company has played a fundamental and permanent role in improving the medical and hospital supply, which has benefitted approximately 7,000 residents of the districts of Boquerón, Potrerillo and Cuatro Vientos in the municipalities of La Jagua de Iberico and El Paso, with the remodeling of three health centers and provision of medical and dental equipment. Additionally, to promote healthy lifestyles in the surrounding communities, vaccination campaigns and medical brigades have been implemented.
- In coordination with the national government's strategies, which prioritize early childhood services, the company has developed agreements with foundations for nutritional support programs. In Magdalena, the company continued with the agreement with the Génesis Foundation, through which eight Child Development Centers benefit that provide services to approximately 1,330 children from the mining and port area of influence.

**2017**

During 2017, specifically in the Department of Cesar, two healthcare centers in the rural area of the municipality of El Paso will be updated with civil engineering and equipment, which is expected to benefit approximately 1,700 residents of the area of direct influence. Similarly, in support of the national government's Early Childhood Programs, the company will develop agreements with foundations to provide comprehensive care to 850 children from the areas of influence in Magdalena.



# 3 Recreation and promoting sports



For Drummond Ltd. it is critically important to promote activities that motivate adults, young people and children, especially those from the communities in its area of influence, to participate in new recreational alternatives. For this reason, this sector covers three main components:

1

Repairing and building sporting venues

2

Athletic training

3

Providing uniforms and equipment

2016

2017

- During 2016, the company completed civil engineering projects to repair and provide lighting for the multi-purpose field in the district of Boquerón in the municipality of La Jagua de Ibirico, and the construction of two multi-purpose fields at public schools located in the coastal area of the municipality of Ciénaga. In terms of athletic training and recovering social fabric, the company continued the "Soccer for Peace" program

with the Casa en el Árbol Foundation and the community of the district of Cordobita in the municipality of Ciénaga, promoting respect for basic social norms, the proper use of leisure time, healthy recreation and reinforcing social values.

It is worth highlighting the 27% increase in the investment, as compared to 2015, in donations of uniforms and sporting goods, including the donation

to the Valledupar Football Club (VFC), the First "Peace and Coexistence" Youth Soccer Tournament in the Department of Cesar; the Unión Ciénaga and Juventud Deportiva clubs; the Magdalena Youth Team, the Colombian Agency for Reintegration (ACR) to implement the "El Golombiao" Peace Games strategy.<sup>19</sup> Approximately 2,000 adults, young people and children will benefit in this area.

- The company plans to benefit approximately 15,000 residents in 2017 by updating the sporting venues in the municipal capital of Bosconia, the remodeling of Parque Ayacucho and the remodeling of the Central Park in Aracataca and Zona Bananera, respectively.

19. To promote coexistence and peace where soccer is a vehicle for building a life away from violence in vulnerable communities and those affected by the conflict.



# 4

## Improving the environment

Maintaining its surroundings and protecting the environment has always been a priority for the company.

### 2016

- Therefore, during 2016, with the community's active participation, approximately 4,500 trees were planted, which contributed to the beautification of schools, parks, streets and plazas. This project includes an environmental awareness-raising component, training the local communities on the topics of planting and caring for the plant species that were donated.

- This intervention will have a positive impact on the population in the mining and port areas of influence, since trees are their main source of oxygen, helping to create fertile soil, avoid erosion, reduce temperatures, help control emissions, decrease sound pollution and participate in the water cycle, among other qualities.

**4,500**  
**TREES WERE PLANTED**

WHICH CONTRIBUTED TO THE  
BEAUTIFICATION OF SCHOOLS,  
PARKS, STREETS AND PLAZAS.





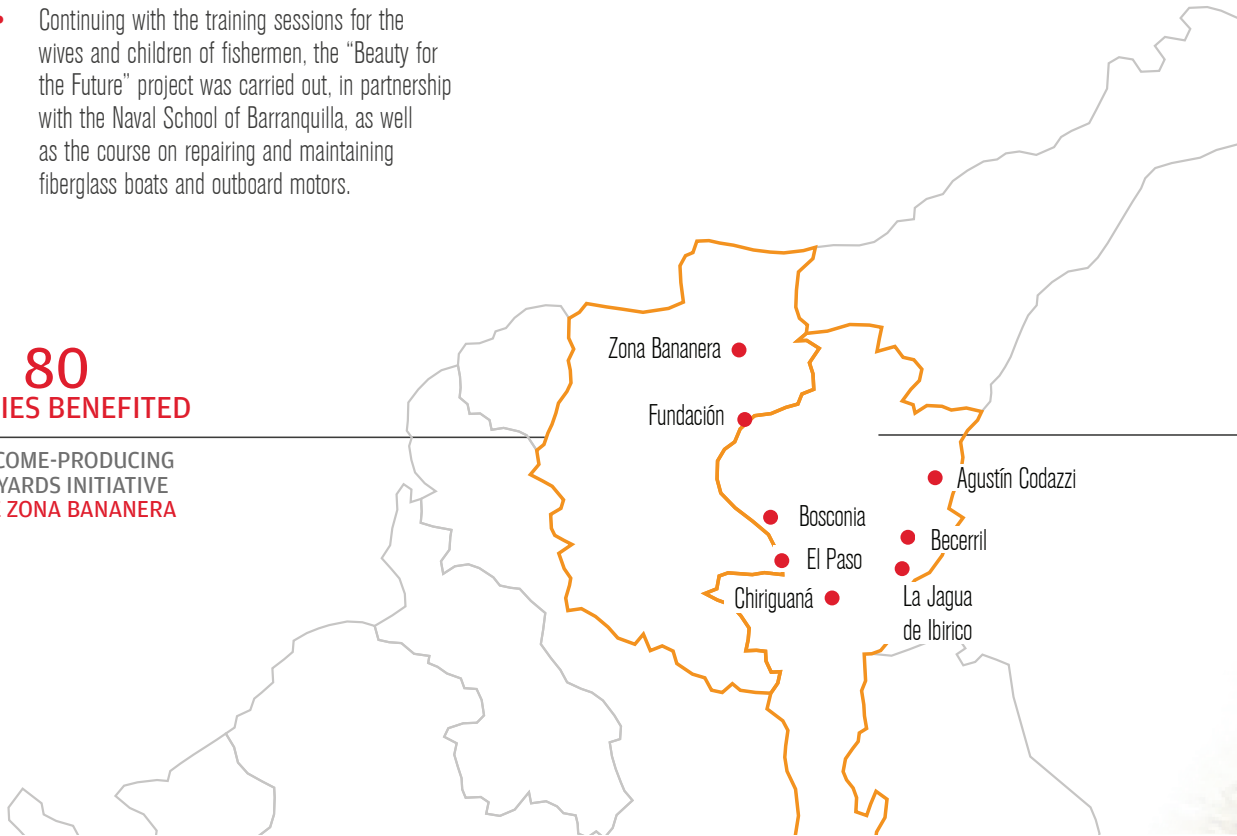
# 5 Income-producing development

## 2016

- With the goal of generating opportunities through entrepreneurship, in 2016 business units were implemented based on pork and poultry production. With this project, 84 families from the district of Boquerón in the municipality of La Jagua de Ibirico will benefit, which translates into approximately 600 people who are receiving technical assistance to execute their income-producing projects.
- Se proyectó, también, la construcción del centro de acopio y área administrativa para fortalecer la capacidad productiva y de comercialización de la Asociación de Técnicos y Profesionales en Pro de la Serranía del Perijá, en beneficio de 120 familias productoras y 40 familias con miembros activos en la asociación.
- Continuing with the training sessions for the wives and children of fishermen, the “Beauty for the Future” project was carried out, in partnership with the Naval School of Barranquilla, as well as the course on repairing and maintaining fiberglass boats and outboard motors.
- In terms of income-producing projects, Drummond Ltd. will provide the equipment and machinery for the leather goods and footwear course that will be held through the Beatriz de Vigna Workshop, in partnership with the Governor of Cesar, focused on training single mothers.
- In Magdalena, the next phase (entrepreneurship) of the group of children of fishermen will be carried out, focusing on fixing outboard motors and repairing fiberglass boats, and it will continue with the “Beauty for the Future” program in partnership with the United States Agency for International Development (USAID), Fundemicromag, the National Aquaculture and Fisheries Authority (AUNAP) and the Municipal Government of Ciénaga.

## 80 FAMILIES BENEFITED

AN INCOME-PRODUCING BACKYARDS INITIATIVE IN THE ZONA BANANERA



# 6

## Maintenance of physical and road infrastructure

### 2016

- During 2016, the company continued with the paving of urban roads under self-management in the municipality of Fundación, Magdalena. As part of the Road Maintenance Program, the municipalities of Chiriguaná, La Jagua de Ibirico, Bosconia and Becerril, and the La Loma district in the municipality of El Paso were improved. The residents of the area of influence benefitted from the maintenance of approximately 73,000 linear meters of the road network in the municipal capitals and tertiary roads in Cesar and Magdalena.

**73,000m.**

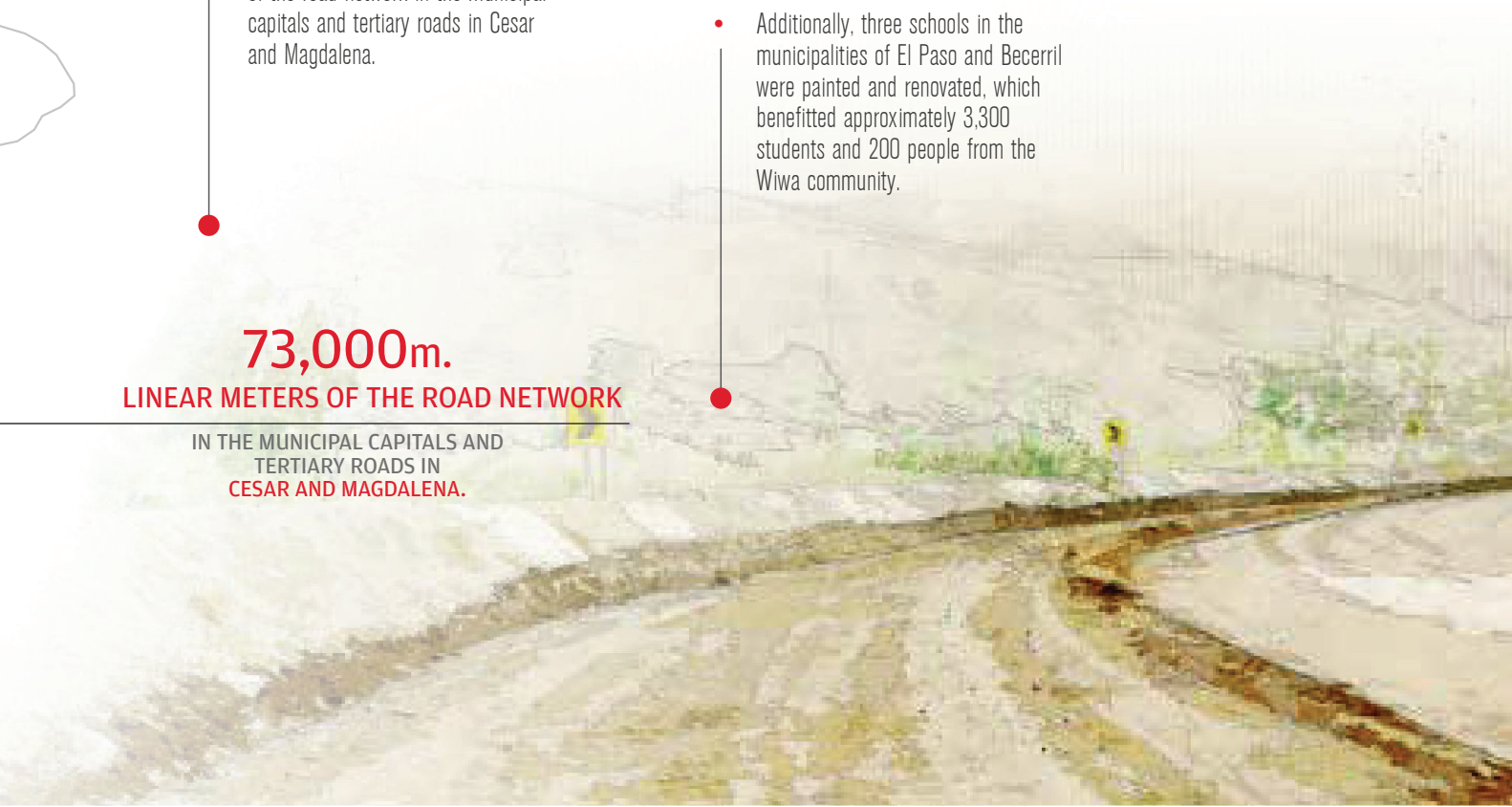
**LINEAR METERS OF THE ROAD NETWORK**

**IN THE MUNICIPAL CAPITALS AND TERTIARY ROADS IN CESAR AND MAGDALENA.**

### 2017

- For 2017, in partnership with the Department for Social Prosperity, the company plans to improve the living conditions in 200 homes to improve the quality of life of the beneficiary families, which will be distributed as follows: 100 in the municipality of Ciénaga, 33 in the district of La Aurora and surrounding communities (Ojo de Agua and Los Cerrajones) and the municipality of Chiriguaná, 32 in La Loma (El Paso) and 35 in Casacará (Agustín Codazzi).

- Additionally, three schools in the municipalities of El Paso and Becerril were painted and renovated, which benefitted approximately 3,300 students and 200 people from the Wiwa community.





## 7

### Maintenance of church infrastructure

#### 2016

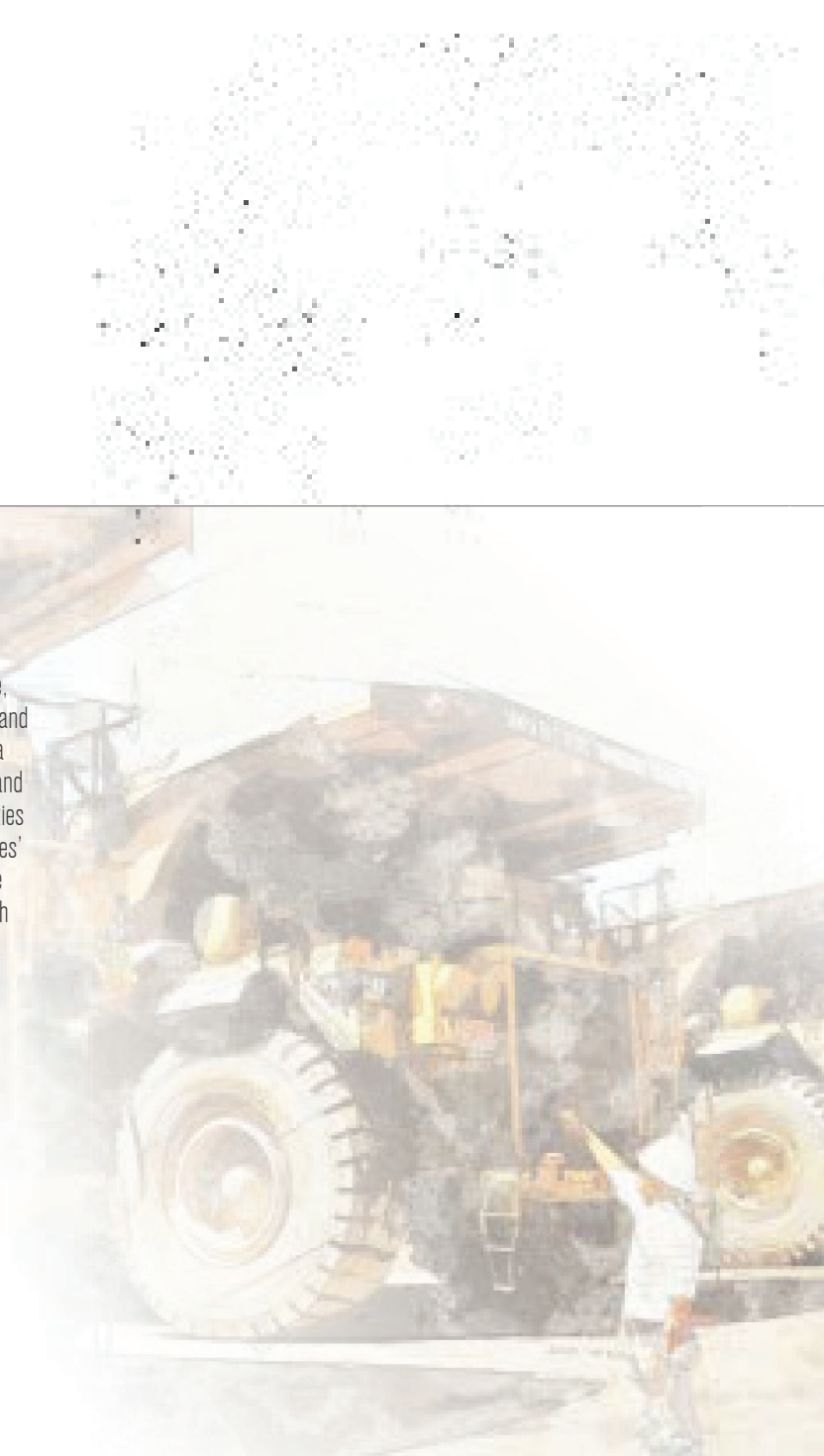
- In order to strengthen community ties, contributions were made in 2016 to update, repair and build a cathedral in Valledupar, and three parishes: the Garagoa parish in Santa Marta; the Divino Niño parish in Bosconia and the Divino Niño parish in Chiriguana, activities that contribute to rebuilding the communities' social fabric, the reconciliation process, the promotion of values and the spiritual growth of the residents of the areas of influence.

## 8

### Aid to affected communities

- Due to the emergency caused by the passage of Hurricane Matthew through Magdalena, during the meeting of the Departmental Risk Council with the involvement of the National Disaster Risk Management Unit (UNDRD, in Spanish), the Governor of Magdalena, municipal mayors, the National System for Disaster Relief and Prevention -Red Cross, Civil Defense, Firefighters-, the National Army and

others, Drummond Ltd. joined in to help the victims with donations of 2,000 food kits, 400 mats, 400 sets of pots and pans, 400 stoves, 500 blenders and 400 sets of dinnerware. The company, through its social responsibility program, joined the emergency relief efforts that benefitted nearly 12,000 families from the municipalities of Zona Bananera, Aracataca, Fundación, Ciénaga and Santa Marta.



1

Training civil servants and oversight networks

B

INSTITUTIONAL STRENGTHENING

The impacts created by the organization are reflected in four different areas.

- Each year, Drummond Ltd. has supported training sessions for civil servants on issues related to the management, formulation and evaluation of projects. After the 2015 elections, the company prepared the second version of the Good Governance Workshop Seminar, in which 220 elected officials participated.
- In 2016, through a partnership with the University Foundation of the Andean Region, 24 officials and 38 community leaders that belong to oversight networks in the area of influence in Cesar were trained, including six residents from the city of Valledupar.
- Similar processes were carried out in the port area of influence, during which 25 public officials were trained, in partnership with the Universidad del Magdalena.
- This work translates into an impact in favor of the municipalities from the area of influence and at the departmental level, since it provides them with civil servants with better tools for public management and empowers civil society in social control and the investment of the royalty funds.

2

Participation on the Committee to Monitor the Investment of Coal and Oil Royalties

- In this sector, financial contributions are made to strengthen and re-launch the Committee to Monitor the Investment of Royalties (CSIR, in Spanish) in the Department of Cesar. Drummond Ltd., out of its own dedication, made economic contributions to this agency to reactivate it, since it believes that its constant operation is critical to building a policy for properly managing the royalty resources.





### 3

#### Teacher training

- In cooperation with the Colombian Agency for Reintegration (ACR, in Spanish), the methodology from the "El Golombiao," peace game, strategy was taught to teachers from the public schools in the municipality of Ciénaga, which consists of promoting leadership and conflict resolution through soccer.



### 4

#### Support for art and folklore

- The company participates in the co-financing of cultural and patron saint festivities in the municipalities in the area of influence. In Cesar, eleven cultural events were co-financed, including the following: the Paletilla Folklore Festival and the patron saint celebration for Our Lady of Candelaria, in the municipality of Becerril; the patron saint celebration for San Martín de Loba in Casacará, in the municipality of Agustín Codazzi; the XXVIII Accordion Festival in the municipality of El Paso; the Tobago Cane and African Palm Festival in the district of La Aurora in the municipality of Chiriguana, and the Vallenato Legend Festival in Valledupar.
- In the Department of Magdalena, five festivals received economic support, including the National Cienaguero Cayman Festival, the Sea Festival and the Ocean Soul Fest.

In addition, in 2016 musical instruments were donated to the Filemón Quiroz School of Music and Art in the municipality of Becerril and to the municipal band of Valledupar, with an investment of nearly 85 million pesos.



1

Community service system



## COMMUNITY AND INSTITUTIONAL INFORMATION

The impacts are defined on three fronts:

- This system is governed by the community service policy and its respective manual. In 2016, 178 CCP were received, of which 97% consisted of requests and 3% were claims that were satisfactorily resolved by the company. Additionally, it should be noted that approximately 450 people were received in the offices, with the main issue being applications for employment and job training.

2

Mine and Port Visits

DURING 2016  
**493**  
 VISITORS WERE RECEIVED  
 AT THE PORT

**1,278**  
 VISITORS WERE RECEIVED  
 AT THE MINES

- The purpose of the visits is to introduce the mining and port operations to the public and inform the communities (schools, universities, technical and technological institutions, state agencies, unions, social organizations both nationally and locally) about the company's progress in the social-environmental management plans and the industrial safety tools implemented in the mines and the port, which reaffirms the company's Good Neighbor Policy.

3

Communication of the Environmental Management Plan

- Each year, Drummond Ltd. plans public awareness events to create communication bridges between the company and its neighboring communities. The main goal of these communications is to inform the community and the local authorities of the company's actions, progress and results throughout 2016 on environmental management matters. In Cesar, approximately 150 people from the municipalities of Becerril, Agustín Codazzi, La Jagua de Ibirico, Chiriguaná and El Paso attended.



## Identification of risks and impacts on the population

[GRI 413-2]  
[GRI 203-2]

Drummond Ltd.'s two main centers of operation (the coal mining and transportation operations) generate great development opportunities for the surrounding regions and for the country, but it can also create various risks and impacts on the local communities in the area of influence where it operates.

High volume of floating and outside populations that settle in the municipalities due to the mining operations. This leads to a deficiency in providing utility services and pressure on land ownership, especially for communal use.

Increase in the cost of living in the surrounding areas as a result of Drummond Ltd.'s presence.

Higher taxes in the municipalities in the area of influence.

Cultural changes in the original population.



Job creation associated with the mining operations.

Income generation through entrepreneurship, with the implementation of business units based on pork and poultry production, as well as the implementation of income-producing backyards and ongoing training on alternative activities.

Income generation related to strengthening of the commercial, financial, hotel, food and service sectors in general.

Addition of small- and mid-sized businesses from the area of influence to Drummond Ltd.'s supply chain, which meet all of the specifications and conditions to provide goods and services.

Reduced risk of the inappropriate use of free time by adolescents and young people, through support for education and sports.

When characterizing these risks and the impacts on the population, Drummond Ltd. could clearly identify the best practices to mitigate and prevent these risks from materializing in all stages of the operations:



1

an identification of the baseline is completed through an environmental and social impact study.



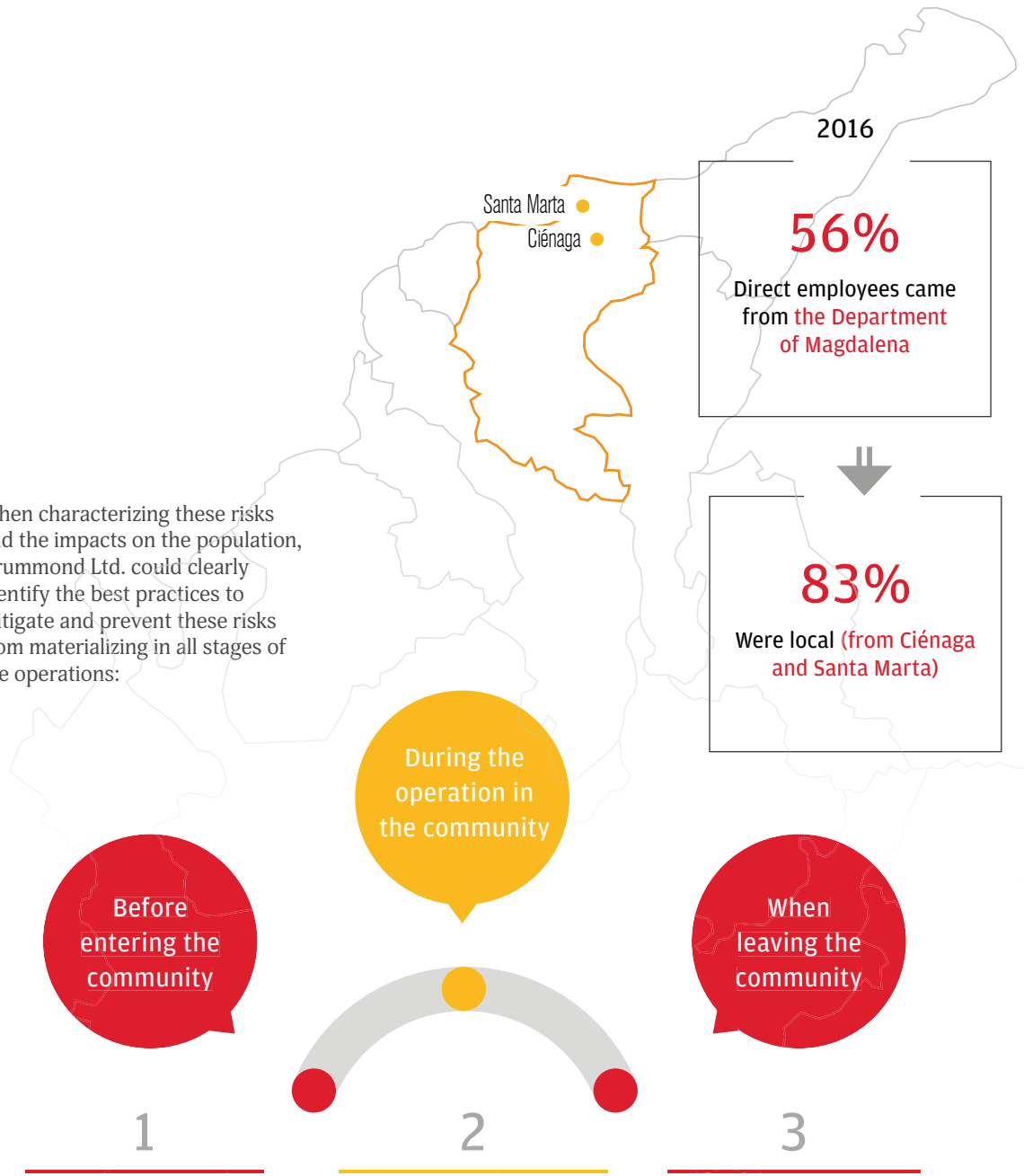
2

throughout the project, several modifications are made at the socio-environmental level and the status of the impact study is updated. Different plans are generated such as, for example, water saving and efficiency, least possible use of natural resources, maximizing the use of mining and port water to avoid competing with the demand for water resources, among others. In addition, the natural environment is strengthened, generating a greater abundance of species.



3

A Closure Plan is prepared and management and monitoring measures are projected. These plans include community information and communication programs about the closure of the project and the land restoration or compensation measures that may apply.





## Closure plans

[G4-MM10]

Both Drummond Ltd.'s mining and port operations have closure and decommissioning plans approved under their environmental licenses.

### Mining operations

the closure plan mainly focuses on proposing the general morphological scheme for leaving the land at the end of the operations, with the most sustainable distribution of possible uses of the land that has already been affected, according to the biophysical and social characteristics of the local environment. This plan includes the implementation of different measures, such as the dismantling of the facilities, physical and chemical stabilization, replanting and soil rehabilitation, information and communication with the environmental authorities and the communities. At the same time, it provides for participation and action by the various administrative and institutional bodies and community representatives during its different phases, in order to identify and prioritize programs and projects that make the social, economic and environmental sustainability of the area of influence feasible. It also provides alternatives for creating economic activities that will make it possible to hire the workforce that is unemployed after the mine closure. The closure plan has been executed progressively as there are areas where rehabilitation can begin.

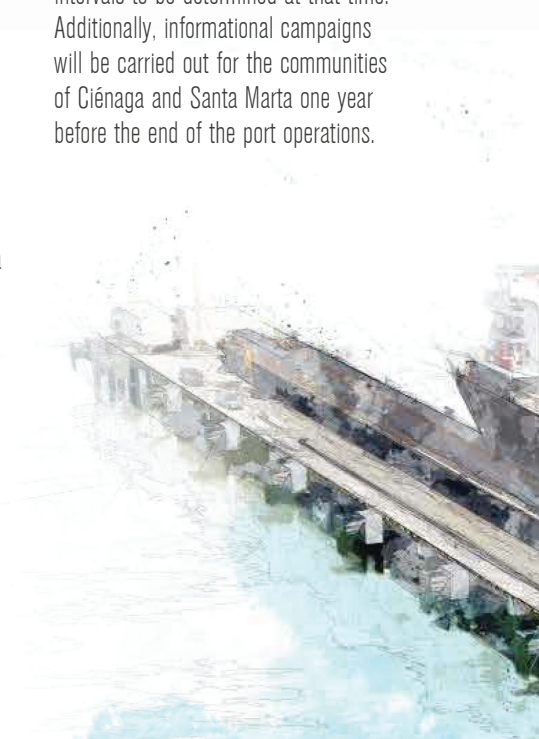
### Port operations

this closure plan includes activities for monitoring natural resources and social projects when the project closes. One year before the end of the port operations, during the decommissioning of the projects and for one year thereafter, monitoring will be conducted on the marine and land physical-biotic components with sampling intervals to be determined at that time. Additionally, informational campaigns will be carried out for the communities of Ciénaga and Santa Marta one year before the end of the port operations.

[G4 - MM6]  
[G4 - MM7]

### Land use

In 2016 there were no disputes with local communities or indigenous communities associated with land use. There are ongoing land restitution proceedings filed by individuals seeking to have the Nation return property that was sold in the past to other individuals, which was acquired by Drummond Ltd. years later, in compliance with the obligations and requirements established in the environmental licenses issued so that it could carry out its mining operations. Drummond Ltd. has participated in these land restitution proceedings and continues to exercise its right of defense, opposing restitution in its position as a third party purchaser in good faith.



At the request of the regulatory agencies and in fulfillment of the commitments acquired by the company in the contractual agreements signed with the State, its liabilities (provisions) are determined during each period to cover the obligations derived from carrying out its ordinary activities.

The provision for Replanting corresponds to the present value of the specific calculation of the number of hectares affected and a reclamation plan developed by the Engineering Department, whose costs include the equipment used and the market value of the seeds, hay and fertilizers.

The provision for forestry compensation corresponds to the present value of the specific calculation of the number of hectares affected and the compensation ratio established in the resolution that authorizes the intervention, taking into account the compensation plan provided by the Engineering Department and the compensation costs per hectare established by Corpocesar.

The company has been executing its closure plan practically since the start of operations. In

2016, progress was made rehabilitating areas on a total of 58 hectares at the La Loma project, and 13 hectares at the El Descanso project. These processes have been complemented with the geomorphological implementation of the dumping areas, which includes the construction of bodies of water at the different dumping levels, landscaping and construction of canals. Additionally, progress has been made in backfilling, seeking to maximize the areas that will return to ground level for subsequent replanting.

As a result of the protection of the areas surrounding the operations, the company has continued to monitor them and to relocate wildlife toward those areas, in order to boost their abundance and continue promoting the natural succession process, which prepares all of the genetic material that will contribute to the areas undergoing rehabilitation in areas inside the operations.

Finally, the proposal for the forestry compensation project in the San Antonio basin has been concluded and is in the process of being reviewed and approved by Corpocesar, and then it will be sent to the ANLA for authorization; implementation is expected to begin in 2017 or 2018. The forestry compensation proposal for the El Descanso Norte project is in the tender stage, and the studies are expected to start in 2017 and implementation in 2018 or 2019, once approval from Corpocesar and the ANLA has been obtained.

The company has continued to monitor them and to relocate wildlife toward those areas, in order to boost their abundance and continue promoting the natural succession process.



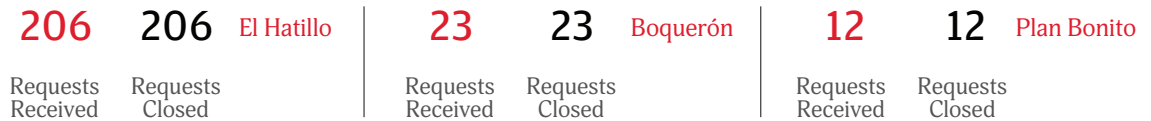


## Resettlement management

To comply with the resettlement order issued by the government to the mining companies, a consultation process with the communities is being carried out, aimed at jointly structuring a Resettlement Action Plan (RAP). It is essentially a broad, public and participatory process with support and monitoring provided by authorities from the national, regional and local governments, and with the presence of human rights guarantors, such as the National Ombudsman's Office, in which the parties involved (spokespersons and representatives for the companies and the

community), with mediation and facilitation provided by a technical operator with expertise in involuntary resettlements, jointly build agreements on how to resettle this population.

Any disagreements, concerns, requests, complaints and claims are addressed through an established CCP procedure for each community. Under this mechanism, the procedure for receiving requests and their response times are communicated. In 2016, 241 requests were received using this tool, as follows:



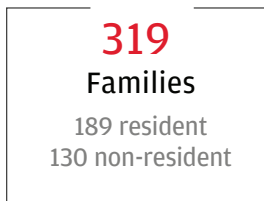
[G4-MM9]

During 2016 the following activities were carried out:



El Hatillo

the process of formulating the Resettlement Action Plan (PAR) is being carried out for the 319 families that make up the community that will be the beneficiary of the process. The PAR was presented to the community and its advisors for review, analysis and comment.



Boquerón

The topographical survey was completed, establishing the number of properties involved, and progress is being made in agreeing on the methodology for structuring and completing the socio-economic census. The document with the methodology proposed by the operator was submitted to the community in November 2016, and a challenge for 2017 is to reach an agreement on the document with the community.

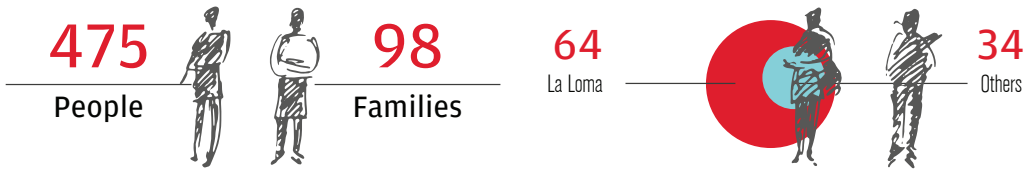


Plan Bonito

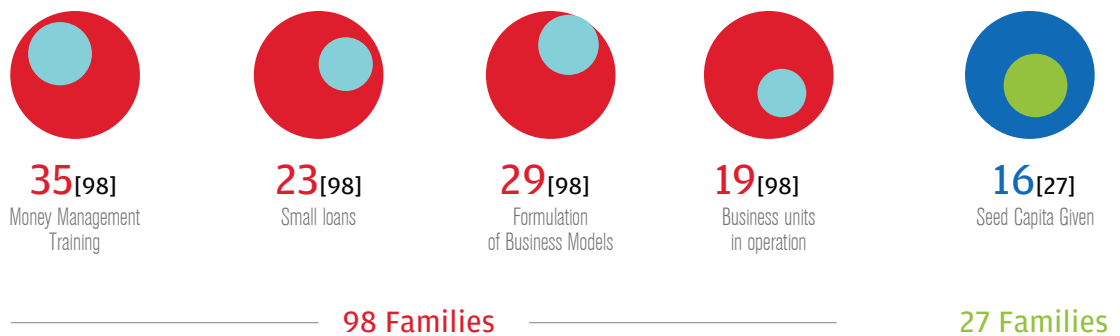
Progress was made in the implementation of the Livelihood Restoration Program (PRMV, in Spanish) for the families relocated in 2015, with the implementation of a framework for social intervention in education, healthcare and entrepreneurship programs for the 475 people who make up the 98 families living in the former village of Plan Bonito. Application of this intervention framework will continue throughout 2017.



Plan Bonito  
Intervention framework



Financial capital



Human and social capital



NOTABLE MILESTONES

- Drummond Ltd., through its Scholarship Program, has benefitted 102 students from the departments of Cesar and Magdalena.
- Drummond Ltd. joined the emergency response efforts after Hurricane Matthew, benefitting 12,000 families from the department of Magdalena.
- Drummond planted approximately 4,500 trees with active involvement by the community, contributing to preserving the environment.

CHALLENGES

- Awarding 8 university scholarships in 2017 and increasing the number of beneficiaries of the program in the short-term.
- In terms of the income-producing development programs, in 2018 the company plans to strengthen and consolidate the production chain for the business units based on pork and poultry production, through marketing and expanding the chain to local markets in the area of influence.
- In 2017, organizing at least one visit per month by the neighboring communities to the company's mining and port operations.







• E N V I R O N M E N T •



# F1. PROTECTING WATER RESOURCES



[GRI 103-1]

Water resources represent an essential natural element for the company to operate properly and sustainably, both in its mining projects and in its port project. Its importance lies both in the need to use it to carry out the company's activities, and in the need to properly manage the natural currents and the water produced by variable climate conditions year after year, and during the course of a single year.

In terms of carrying out the company's activities, it is an essential element both for conditions for workers in the projects, and for implementing the

environmental control measures that make the operation viable and environmentally sustainable. The need for water for domestic use and human consumption by those who work at the project, for industrial use in the activities supporting the operations, and its use to implement all of the emissions mitigation and control actions in the various processes that generate them, and to irrigate the natural areas that provide for the survival and protection of the wildlife that lives within the projects provides a general summary of the vital relevance of water to our operations.

[GRI 103-2]

For these reasons, Drummond Ltd. has a corporate policy<sup>20</sup> related to water conservation that covers specific actions both in terms of quantity and quality, mainly focused on the efficient use and conservation of water resources.

The company has been transforming risks into opportunities by designing strategies that increase the sustainability of the project. Some of them include:

20. The water conservation policy is publicly available on the company's website: <http://www.drummond.com/wp-content/uploads/Water-Conservation.pdf>



Implementing water saving and efficient water use programs.



Taking additional actions for water treatment, to improve the quality of the discharges and provide better conditions for its use downstream by the communities.



Having its own accredited environmental laboratory that allows the company to constantly verify the water quality conditions throughout its operations, based on timely and reliable analysis and results.

For Drummond Ltd. is it extremely important to plan a mining sequence that seeks to reduce impacts downstream from its operations.



Designing dumping areas that avoid, as much as possible, affecting riverbeds or flood areas (hydraulic damping). The measurement framework must ensure that the evolution of the water resources is exactly what the monitoring results show.

In this regard, one of the strategies for managing water resources that has been very fruitful has been the implementation and operation of the Paujil reservoir in the La Loma mining project, which stores approximately 10 million cubic meters of water, and which constantly feeds the intermittent San Antonio stream, allowing for agricultural activities in the lower part of this basin at times of the year when they previously could not be performed due to lack of water. This reservoir, in addition, has supported the creation of a protected ecosystem, which has enriched biodiversity in the region.

[GRI 103-3]

To assess the progress made through this work, the company analyzes both water consumption and water quality in discharges and in bodies of water, based on the results of periodic monitoring. These results are compared not only with the quality standards required by the relevant authorities, but also to water quality conditions upstream and to the IDEAM's water quality indexes.





## Water collection

In order to implement its philosophy of efficient use of water resources and reducing pollution, the company has carried out several strategies. It has designed and been implementing a program for

saving and efficiently using water in the mining and port operations, which has involved taking action to optimize use, save and store water which have led to the following water collection results:

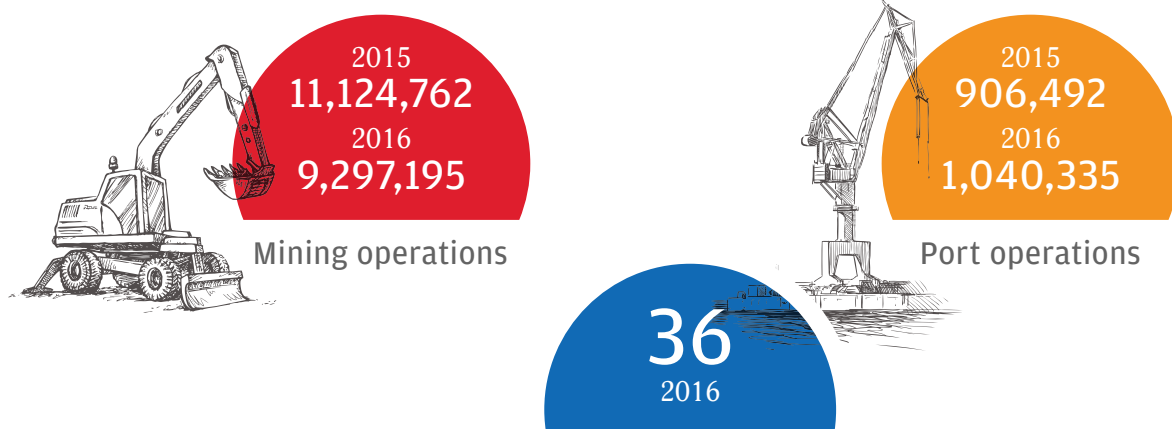
[GRI 303-1]

### Total water collection by source

#### Total water collection by source

<b>1,782,860</b>	2015	Collection of surface water in m <sup>3</sup>	2015	<b>271,947</b>
<b>1,436,313</b>	2016		2016	<b>356,547</b>
<b>371,044</b>	2015	Collection of groundwater in m <sup>3</sup>	2015	<b>634,544</b>
<b>362,457</b>	2016		2016	<b>683,788</b>
<b>8,970,858</b>	2015	Collection of bilge or mining water in m <sup>3</sup>	2015	-
<b>7,498,425</b>	2016		2016	-

#### TOTAL IN M<sup>3</sup>



Rainwater, surface and groundwater collected directly and stored by the organization. Hm<sup>3</sup>



The La Loma and El Descanso Norte mines use, among other systems, the 7 Bocas pool and Mine Pit 1 for collecting and storing water, respectively. The former has a maximum storage capacity of 1 Hm<sup>3</sup>, while Pit 1 has a capacity of 35 Hm<sup>3</sup>, helping to supply water for the various mining activities.

As a result of this strategy, in 2016 consumption of surface water was:

---

LA LOMA AND EL DESCANSO

**1,436,313**  
M<sup>3</sup>

---

PORT

**356,547**  
M<sup>3</sup>

---

REDUCTION  
for the mining projects

**19%**  
2016

In the case of the Port, there has been an increase in water consumption due to the migration to the direct loading operation, which has meant that new coal yards have gone into operation progressively, which has demanded greater use of water resources.

[GRI 303-2]

### Water sources that have been significantly affected by water collection

In addition, it is important to note that Drummond Ltd. does not have a significant effect on natural bodies of water because the mining projects are located in the lower part of the basin; the populations closest to the project that use water resources (agriculture, domestic consumption, etc.) are located upstream –in the middle and high parts– and, therefore, when the company carries out the authorized water collection, it has already been significantly affected upstream. Additionally, the collection does not significantly affect the water resources, since the concessions established by the authorities are monitored constantly so as not to exceed the limit established in the different concessions.

In the specific case of the port project, each month the surface water collection is monitored to keep water collection levels below the limit of 105 L/s authorized by Corpamag.

Just as the shortage of water resources represents a risk for the company’s proper operation, excess water from changing and increasingly extreme climate conditions also represents a challenge as well as an opportunity, which need to be managed properly for the benefit not only of the company, but also of the surrounding communities. This means not only efficiently managing water resources, but also adapting to changing climate conditions; for both situations, the company has a strategy that is described below.



[GRI 303-3]

## Percentage and total volume of recycled and reused water

As a result of the water saving and efficient water use programs, in 2016 Drummond Ltd. was able to quantify the amount of water that it recycled and reused in its various processes. As a result, it recorded savings in the amount of water used in the coal washing process, as shown in the following Table:

### Percentage and total volume of recycled and reused water

TOTAL VOLUME OF WATER recycled and reused by the organization<sup>21</sup>

**633,884**  
M<sup>3</sup>

21. At the port, water is not recirculated because the operating conditions do not allow for it.

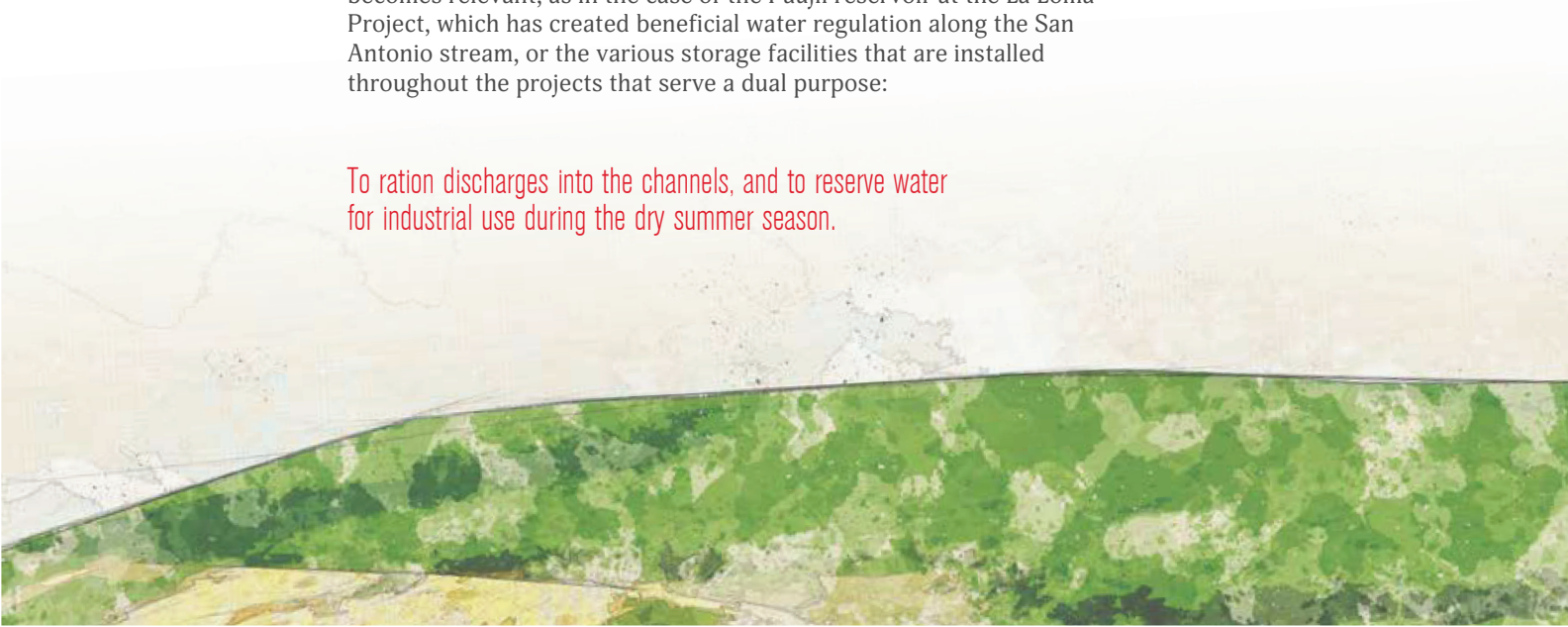
TOTAL VOLUME OF WATER recycled and reused by the organization as a percentage of the total water collected under 303-1

**7%**  
Mining operations 2016



At this point, the capacity to dampen the floods that can be created as a result of the existence of the projects and their associated facilities becomes relevant, as in the case of the Paujil reservoir at the La Loma Project, which has created beneficial water regulation along the San Antonio stream, or the various storage facilities that are installed throughout the projects that serve a dual purpose:

To ration discharges into the channels, and to reserve water for industrial use during the dry summer season.



In addition to the above, and due to the climate behavior that was more rain-intensive than normal in 2016, the company saw the need to design specific management strategies for

extreme climate conditions, aligned with the mechanisms to adapt to climate change that the government is promoting, which include:



Administration by the authorities to change the conditions allowed by the permits.



Creation of flow buffer sites with intermediate pools in internal channels within the mine.



Review and adjustment of the discharge structures to adapt them for extreme conditions.

## ≡ Discharges

[306-1]

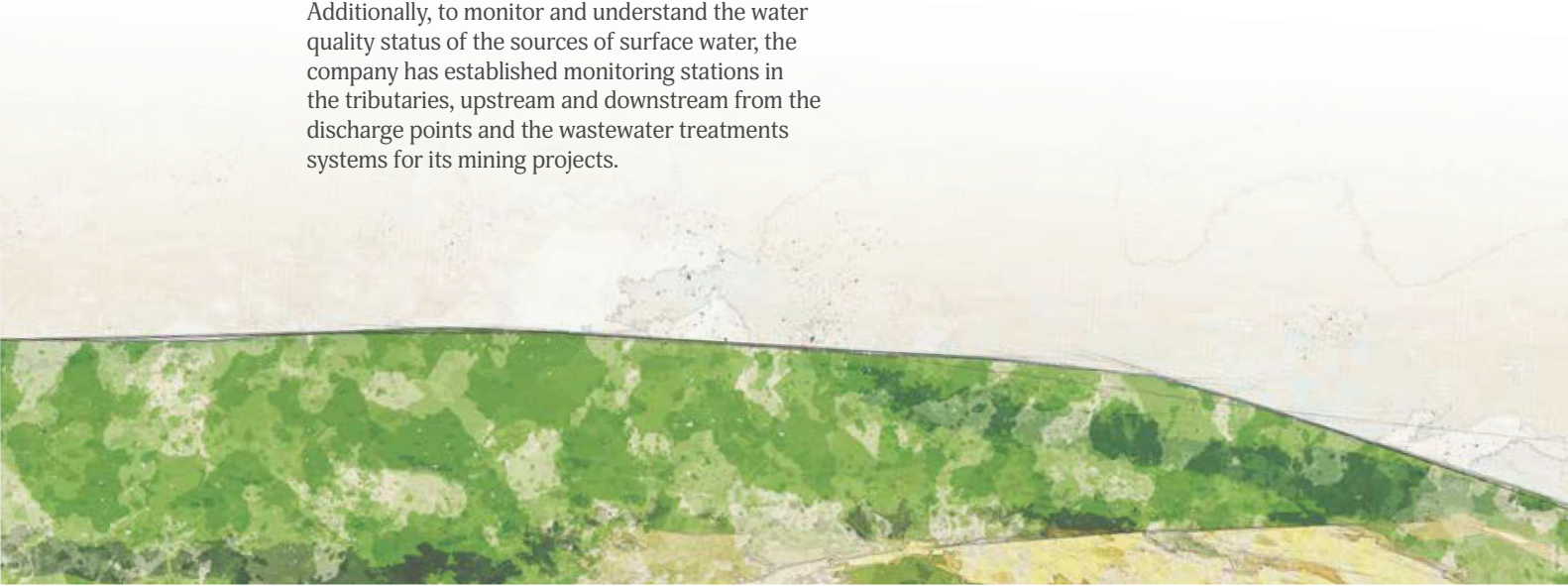
### Total water discharge by quality and destination

Another relevant aspect for Drummond Ltd. is the generation of discharges into channels, and the quality of the discharges is very important; they must not only be the same as or better than the natural channel, but they must also fall within the standards allowed under the regulations.<sup>22</sup> This point is another opportunity for continuous improvement, in which the implementation of actions in addition to those that have been authorized makes it possible to deliver water in conditions that are suitable for use downstream by the neighboring communities.

Therefore, in order to obtain results that provide the reliability and timeliness that decisions in this area require, all results are issued by laboratories that are duly accredited by the Institute of Hydrology, Meteorology and Environmental Studies of Colombia (IDEAM, in Spanish). To illustrate the status of the water quality in the channels, before and after the discharges, the values from the Water Quality Index (WQI), which make it possible to identify the impact that the discharges from Drummond Ltd.'s mining projects may have on the receiving channels.

22. Resolution 631 of 2015.

Additionally, to monitor and understand the water quality status of the sources of surface water, the company has established monitoring stations in the tributaries, upstream and downstream from the discharge points and the wastewater treatments systems for its mining projects.





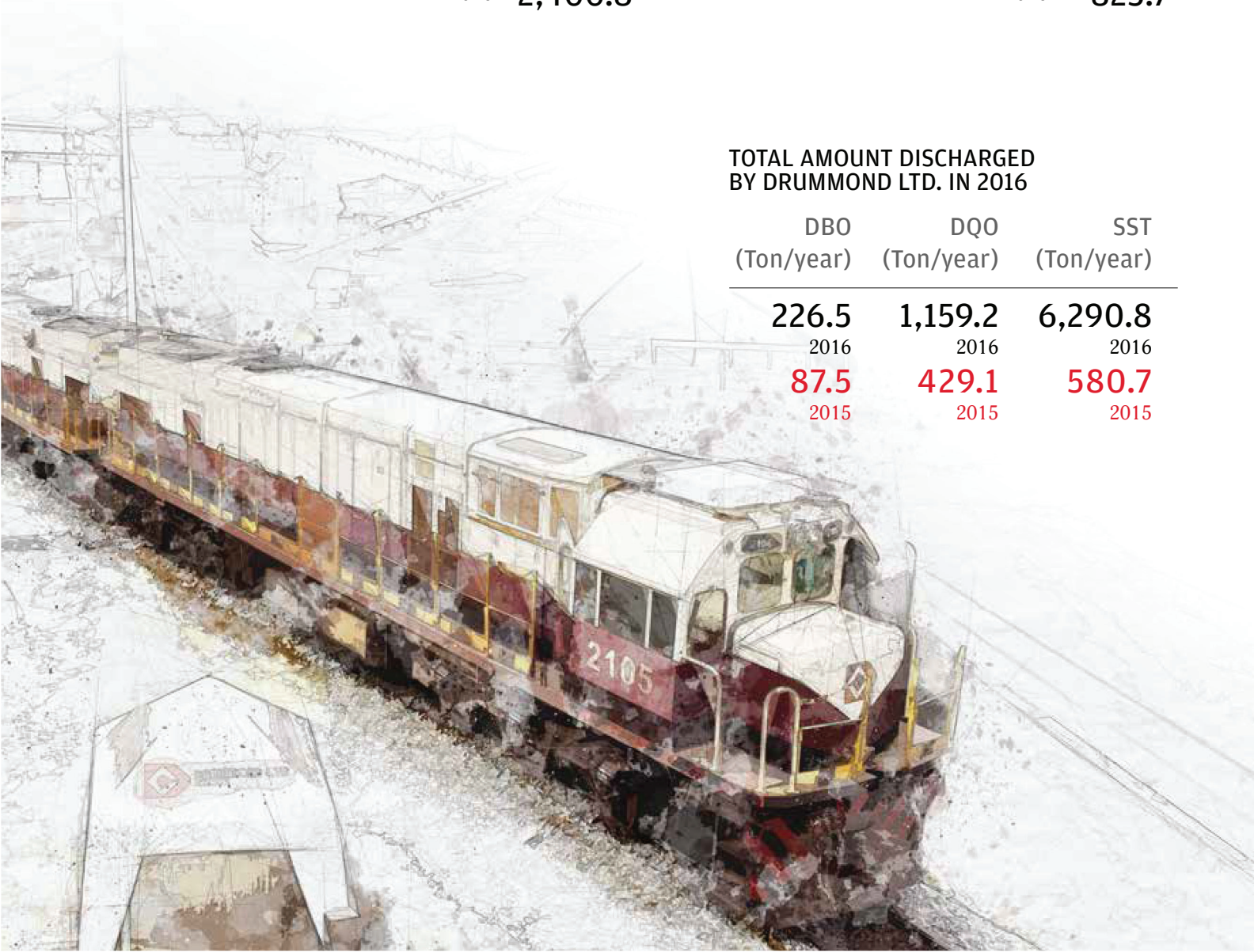
Some variables use to monitor discharges rose as compared to 2015, due to the fact that precipitation amounts increased during 2016, and this is recorded in the following Table:

Discharge points

<b>1</b> GARRAPATAS STREAM E 1054054 - N 1548316	DBO (Ton/year)	2015	<b>43.4</b>	<b>2</b> PARALUZ STREAM E 1061286 - N 1554187	DBO (Ton/year)	2015	<b>4.0</b>
		2016	<b>67.9</b>			2016	<b>26.5</b>
	DQO (Ton/year)	2015	<b>199.0</b>		DQO (Ton/year)	2015	<b>16.4</b>
		2016	<b>341.4</b>			2016	<b>145.0</b>
	SST (Ton/year)	2015	<b>269.8</b>		SST (Ton/year)	2015	<b>20.5</b>
		2016	<b>2,400.8</b>			2016	<b>825.7</b>

**TOTAL AMOUNT DISCHARGED  
BY DRUMMOND LTD. IN 2016**

DBO (Ton/year)	DQO (Ton/year)	SST (Ton/year)
226.5 2016	1,159.2 2016	6,290.8 2016
<b>87.5</b> 2015	<b>429.1</b> 2015	<b>580.7</b> 2015





<b>3</b> PAUJIL CHANNEL E 1067239 - N 1547534	DBO (Ton/year)	2015	<b>1.3</b>
		2016	<b>4.1</b>
	DQO (Ton/year)	2015	<b>5.3</b>
		2016	<b>18.2</b>
	SST (Ton/year)	2015	<b>2.0</b>
		2016	<b>7.0</b>

<b>4</b> SAN ANTONIO STREAM (POOL 6) E 1054054 - N 1548316	DBO (Ton/year)	2015	<b>10.1</b>
		2016	<b>16.2</b>
	DQO (Ton/year)	2015	<b>59.6</b>
		2016	<b>77.6</b>
	SST (Ton/year)	2015	<b>50.3</b>
		2016	<b>73.8</b>

<b>5</b> SAN ANTONIO STREAM (POOL 7) E 1062298 - N 1547956	DBO (Ton/year)	2015	<b>19.0</b>
		2016	<b>24.0</b>
	DQO (Ton/year)	2015	<b>76.2</b>
		2016	<b>127.9</b>
	SST (Ton/year)	2015	<b>169.2</b>
		2016	<b>264.1</b>

<b>6</b> EL MOCHO STREAM E 1053470 - N 1566304	DBO (Ton/year)	2015	<b>1.4</b>
		2016	<b>3.3</b>
	DQO (Ton/year)	2015	<b>5.6</b>
		2016	<b>14.8</b>
	SST (Ton/year)	2015	<b>2.0</b>
		2016	<b>8.5</b>

<b>7</b> EL ZORRO (D3) STREAM E 1061836 - N 1570451	DBO (Ton/year)	2015	<b>6.1</b>
		2016	<b>71.6</b>
	DQO (Ton/year)	2015	<b>52.3</b>
		2016	<b>368.6</b>
	SST (Ton/year)	2015	<b>47.0</b>
		2016	<b>2,621.1</b>

<b>8</b> EL ZORRO (D4) STREAM E 1063333 - N 1569004	DBO (Ton/year)	2015	<b>0.6</b>
		2016	<b>5.1</b>
	DQO (Ton/year)	2015	<b>2.5</b>
		2016	<b>23.5</b>
	SST (Ton/year)	2015	<b>2.4</b>
		2016	<b>45.5</b>

<b>9</b> EL ZORRO (D5) STREAM E 1066368 - N 1572010	DBO (Ton/year)	2015	<b>1.7</b>
		2016	<b>7.8</b>
	DQO (Ton/year)	2015	<b>12.2</b>
		2016	<b>42.3</b>
	SST (Ton/year)	2015	<b>17.5</b>
		2016	<b>44.2</b>

<b>10</b> RAINFOREST E 985092 - N 1715645	DBO (Ton/year)	2015	<b>1.5</b>
		2016	<b>0.2</b>
	DQO (Ton/year)	2015	<b>5.6</b>
		2016	<b>0.9</b>
	SST (Ton/year)	2015	<b>15.9</b>
		2016	<b>2.4</b>



As a result of the strategies that the organization has proposed regarding the water quality of the discharges, the company is continuing to apply chemicals to reduce the sediment load. With the goal that this water can be used in greater quantities by the communities downstream, the company has been working with the Regional Environmental Authorities on the possibility of removing the current restrictions, which only allow discharges in a 1:3 ratio with the channel's flow, which prevents discharges from being made when the seasonal channels dry up.

With respect to Puerto Drummond, the Domestic Wastewater Treatment Plant remains in operation,

and its processes make it possible to obtain water quality that is comparable to that of natural bodies of water in the area.

Additionally, as a complement to the strategies for managing the discharges, to understand their quality the company uses the WQI index, a number between 0 and 1 that indicates the degree of quality of a body of water, in terms of human welfare, regardless of its use. Additionally, it is an aggregation of the physical, chemical and, in some cases, microbiological conditions of the body of water, which gives evidence of pollution problems (IDEAM) and it is interpreted as follows:

### WQI amounts

#### Water quality rating

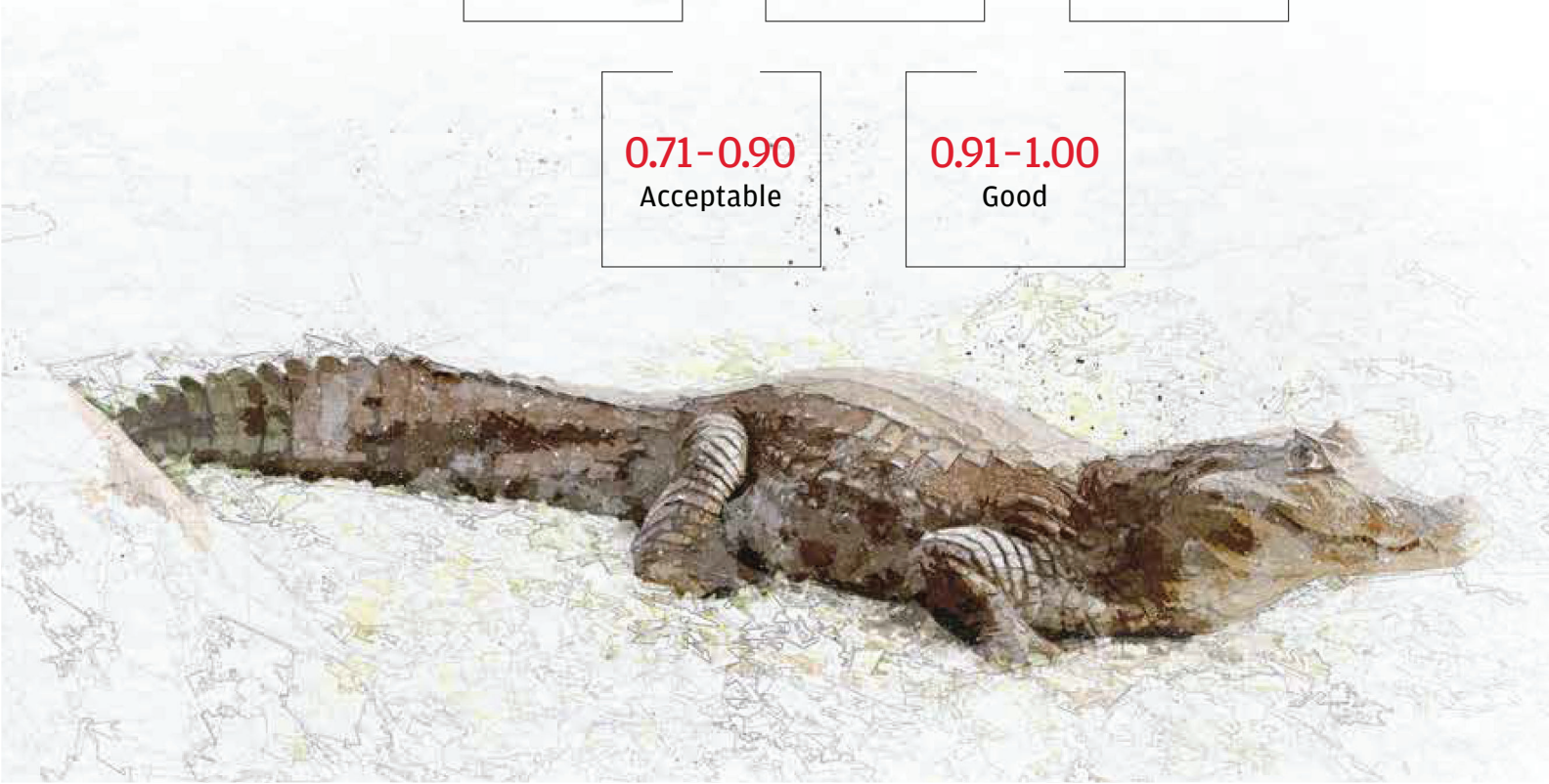
**0.00-0.25**  
Very poor

**0.26-0.50**  
Poor

**0.51-0.70**  
Average

**0.71-0.90**  
Acceptable

**0.91-1.00**  
Good



Using the above values as a reference for the quality of the channels downstream from the mining projects, the company was able to maintain on average the same quality as compared to upstream. According to the IDEAM quality index,

this shows that there was no negative change in the quality of the water in the channels from the company's operations, which can be confirmed in the following Table:

### Water quality comparison

Result		Index	Rating	
<b>0.67</b>	2015	EH10 (San Antonio US)	2015	Average
<b>0.74</b>	2016		2016	Acceptable
<b>0.66</b>	2015	EH22 (San Antonio DS)	2015	Average
<b>0.68</b>	2016		2016	Average
<b>N/D</b>	2015	EH18 (Garrapatas US)	2015	N/D
<b>0.70</b>	2016		2016	Average
<b>0.68</b>	2015	EH14 (Garrapatas DS)	2015	Average
<b>0.64</b>	2016		2016	Average
<b>0.69</b>	2015	EH15 (Paujil US)	2015	Average
<b>0.68</b>	2016		2016	Average
<b>0.68</b>	2015	EH29 (Paujil DS)	2015	Average
<b>0.72</b>	2016		2016	Acceptable
<b>0.62</b>	2015	EH35 (Paraluz US)	2015	Average
<b>0.65</b>	2016		2016	Average
<b>0.66</b>	2015	EH36 (Paraluz DS)	2015	Average
<b>0.67</b>	2016		2016	Average
<b>0.68</b>	2015	EHD21 (Zorro US)	2015	Average
<b>0.68</b>	2016		2016	Average
<b>0.64</b>	2015	EHD12 (Zorro DS)	2015	Average
<b>0.61</b>	2016		2016	Average

\*US: Upstream. \*DS: Downstream



Similarly, in the seawater quality monitoring conducted within the port concession area, no significant changes were identified as compared to those taken at the monitoring point outside the concession area, which indicates that there is no effect caused by the port operations.

Additionally, on a periodic basis, the Regional Environmental Authority conducts sampling campaigns throughout the entire mining region in Cesar, in order to evaluate the environmental quality conditions of the water resources; from the results to date, there have been no conclusions from which any decline coming from the company's operations can be inferred.

It should be mentioned that, in 2016 there were no substantiated<sup>23</sup> complaints or claims by the community that implied or showed the existence of competition for water resources between the mining projects or the port project and economic activities or domestic or human use in their vicinity and arising from them.

As a result of the company's emphasis on its relationship with the communities and to answer a request by our stakeholders, below are the results of the monitoring of heavy metals in discharges.<sup>24</sup>

### Discharge of heavy metals in mg/l

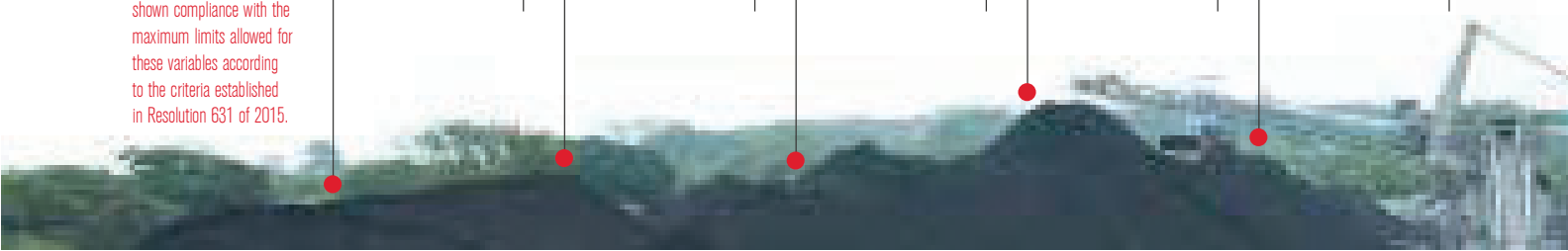
[GRI 306-1]

### Discharge of heavy metals

Reference value from Res. 631/15	Pool D4 (Garrapatas stream)	Pool 1A (Paraluz stream)	Pool 5 (Paujil channel)	Pool 6 (San Antonio stream)
As (mg/l) 0.10	As (mg/l) <0.0001248	As (mg/l) <0.0006932	As (mg/l) <0.0000988	As (mg/l) <0.0004996
Cd (mg/l) 0.05	Cd (mg/l) <0.0000156	Cd (mg/l) <0.00010398	Cd (mg/l) <0.0001235	Cd (mg/l) <0.00008743
Zn (mg/l) 3.00	Zn (mg/l) <0.002496	Zn (mg/l) <0.0008665	Zn (mg/l) <0.00001235	Zn (mg/l) <0.018735
Cu (mg/l) 1.00	Cu (mg/l) <0.00312	Cu (mg/l) <0.01733	Cu (mg/l) <0.00247	Cu (mg/l) <0.01249
Cr (mg/l) 0.50	Cr (mg/l) <0.00312	Cr (mg/l) <0.01733	Cr (mg/l) <0.00247	Cr (mg/l) <0.01249
Fe (mg/l) 2.00	Fe (mg/l) 0.0416208	Fe (mg/l) 0.18817492	Fe (mg/l) <0.00247	Fe (mg/l) <0.04996
Hg (mg/l) 0.002	Hg (mg/l) <0.0000312	Hg (mg/l) <0.0001733	Hg (mg/l) <0.0000247	Hg (mg/l) <0.0001249
Ni (mg/l) 0.50	Ni (mg/l) <0.0001248	Ni (mg/l) <0.0008665	Ni (mg/l) <0.0000988	Ni (mg/l) <0.0006245
Ag (mg/l) -	Ag (mg/l) <0.0000624	Ag (mg/l) <0.00003466	Ag (mg/l) <0.00000494	Ag (mg/l) <0.00002498
Pb (mg/l) 0.20	Pb (mg/l) <0.0000156	Pb (mg/l) <0.00008665	Pb (mg/l) <0.00001235	Pb (mg/l) <0.00006245

23. Anyone interested in filing a complaint should send an email to [denuncias@drummondLTD.com](mailto:denuncias@drummondLTD.com) or send a report to Calle 72 No. 10-07 Suite 1302, Bogota, Colombia, to the attention of the Complaints Committee.

24. There is special monitoring of the concentration of metals and metalloids in the water that is discharged, given their important effects on health and the environment; the monitoring has shown compliance with the maximum limits allowed for these variables according to the criteria established in Resolution 631 of 2015.



[306-5]

## Water bodies affected by water discharges and/or runoff

To monitor and understand the water quality status of the sources of surface water, the company has established monitoring stations in the tributaries, upstream and downstream from the discharge points and the wastewater treatments systems for its mining projects.

To obtain reliable and timely results, they are issued by laboratories that are duly accredited by the Institute of Hydrology, Meteorology and Environmental Studies of Colombia (IDEAM, in Spanish). To illustrate the status of the water quality in the channels, before and after the discharges, the values from the Water Quality Index (WQI), which make it possible to identify the impact that the discharges from the company' mining projects may have on the receiving channels.

Pool 7 (San Antonio stream)	Pool D2 (El Mocho stream)	Pool D3 (El Zorro stream)	Pool D4 (El Zorro stream)	Pool D5 (El Zorro stream)
As (mg/l) <0.0006732	As (mg/l) <0.000088	As (mg/l) <0.0014884	As (mg/l) <0.0001248	As (mg/l) <0.0002172
Cd (mg/l) <0.0001683	Cd (mg/l) <0.000044	Cd (mg/l) <0.00022326	Cd (mg/l) <0.00001872	Cd (mg/l) <0.0000543
Zn (mg/l) <0.01683	Zn (mg/l) <0.000044	Zn (mg/l) <0.007442	Zn (mg/l) <0.0000936	Zn (mg/l) <0.0002172
Cu (mg/l) <0.01683	Cu (mg/l) <0.0022	Cu (mg/l) <0.03721	Cu (mg/l) <0.00312	Cu (mg/l) <0.00543
Cr (mg/l) <0.01683	Cr (mg/l) <0.0022	Cr (mg/l) <0.03721	Cr (mg/l) <0.00312	Cr (mg/l) <0.00543
Fe (mg/l) 0.146124	Fe (mg/l) 0.01562	Fe (mg/l) 0.67568982	Fe (mg/l) 0.01833	Fe (mg/l) 0.0272586
Hg (mg/l) <0.0001683	Hg (mg/l) <0.000022	Hg (mg/l) <0.0003721	Hg (mg/l) <0.0000312	Hg (mg/l) <0.0000543
Ni (mg/l) <0.0006732	Ni (mg/l) <0.000066	Ni (mg/l) <0.0022326	Ni (mg/l) <0.000156	Ni (mg/l) <0.0001629
Ag (mg/l) <0.00003366	Ag (mg/l) <0.0000044	Ag (mg/l) <0.00007442	Ag (mg/l) <0.00000624	Ag (mg/l) <0.00001086
Pb (mg/l) <0.00008415	Pb (mg/l) <0.000011	Pb (mg/l) <0.00018605	Pb (mg/l) <0.0000156	Pb (mg/l) <0.00002715



### Discharges into bodies of water

[GRI 306-5]

### Water and related habitats significantly affected by water discharges and/or runoff from the organization (2016)

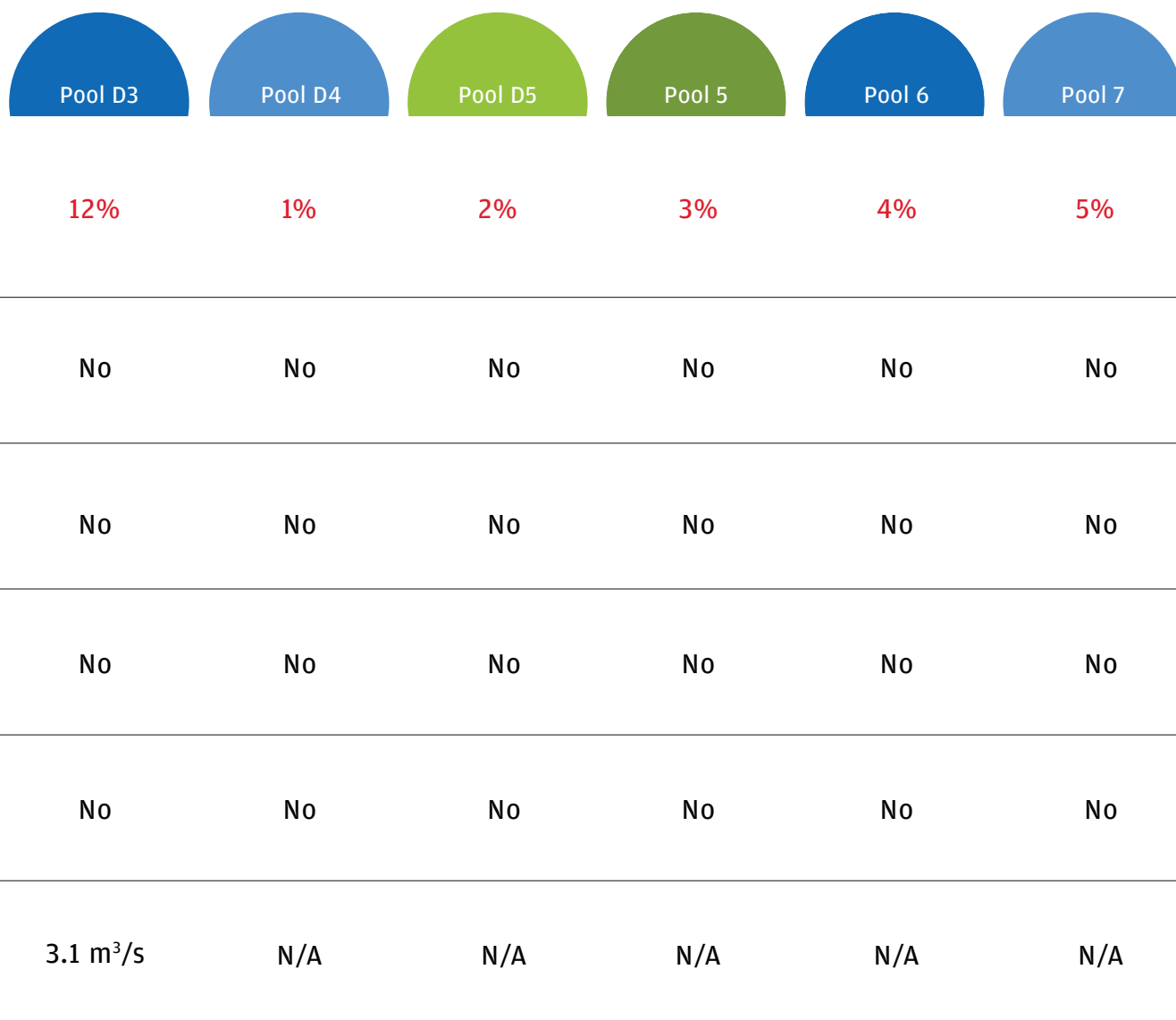
	Aspect/Sourc	Pool 1A	Pool 4	Pool D2
1	Annual discharges account for an average of 5% or more of the annual average volume of the water body	50%	>100%	11%
2	Are the water body and related habitat designated as a protected area?	No	No	No
3	Is the discharge to a wetland listed in the Ramsar convention?	No	No	No
4	Has the water body into which the water is discharged been identified as having a high biodiversity value?	No	No	No
5	Does the water body into which the water is discharged have high value or importance to local communities?	No	No	No
6	Size of the water body and related habitat that exceeded 5% of the flow that was discharged	0.35 m <sup>3</sup> /s	0.085 m <sup>3</sup> /s	0.2 m <sup>3</sup> /s

It is located to the north of the projects, covering a distance of 25 Km in an east-west direction, from its source at a place known as "Loma de los Venados," next to the village of Boquerón, until it flows into the Ciénaga de Matepalma, in the jurisdiction of the district of Potrerillo.

The Garrapatas stream is a seasonal stream that maintains a flow only during the rainy season. It collects the runoff water from the savannah and runs WSW, flowing into the Ciénaga Mata de Palma.

The El Mocho stream is located northwest of Pit 1 in the El Descanso Norte mine, in the vicinity of properties including El Platanal, Santa Elena, La Chiquita, La Sirena, Filadelfia and Santa Rita. Its runs northwesterly and it flows into the Cesar River.

This information provides peace of mind about the discharges and shows that the heavy metals are below the maximum allowed limits; most of the data is below the minimum amounts that the laboratory analysis can reference.



The source of the El Zorro stream is upstream from Pit 3 in the El Descanso mine, in the vicinity of the Serranía del Perijá (Becerril-Codazzi). It runs southwest, passing by Pit 1 and finally flowing into the Sicarare River.

To implement all of the strategies established by the Environmental Department, the funds allocated to protecting and conserving water resources in the mining projects amounted to US\$977,284 and for the port project they amounted to US\$346,788.

The achievements described were possible thanks to the Environmental Department, which is responsible

for managing water resources with a technical and operational team permanently dedicated to evaluating, designing and implementing actions to properly manage water quality and quantity and to monitoring it, as well as the necessary technology. This team relies on the operating personnel from the mining projects and the port project to implement the improvement actions that take place periodically.



## Case studies

Given the obligatory progress of the mining activities in the region, it is necessary, sporadically, to address the natural channels through realignments, which undoubtedly generate concerns in the communities due to their possible negative consequences, but due to the exacting and responsible nature of the hydraulic, civil and environmental designs made by the top experts on the matter, as well as the results and evidence from the previous realignments

completed by the company in the area, they seek to provide the greatest guarantees to the communities and the authorities regarding these interventions.

On this topic, it is worth mentioning that the realignment of the San Antonio stream was approved in 2016 as part of the modification of the license for the La Loma project, whose working considerations, in compliance with the above, include the following:

1

Preparing the designs with a company that will provide the best guarantees of their quality and accuracy; a leading scientific institution on the subject was selected, the Hydraulics Department of the Colombian School of Engineering.

2

Critically evaluating the previous realignments to define lessons learned and tie them to the new designs.

3

Conditioning the designs on maintaining both the hydraulic and geomorphological characteristics of the new channel to reduce the likelihood of modifying the behavior of the channel downstream.

4

Contemplating the uses of the water resources downstream and ensuring maintenance of the flows under the current conditions.

5

Maintaining the connection between the new realignment and the Paujil reservoir, so that it can provide water during the dry season to the economic activities performed downstream from the project.

6

Providing constant contact and information to the communities to address concerns and provide peace of mind.

### MILESTONES

- In 2016, less than 16% of the water used in the mining projects came from natural waterways. Meanwhile, Puerto Drummond only used 31.4% of the water it was authorized to use.
- The La Loma mining project, from the El Paujil water reservoir, provided a total of 1,901,568 m<sup>3</sup> of water to the San Antonio stream during the summer season, at a time when the stream had zero water flow.

### CHALLENGES

- Reusing 31,433 m<sup>3</sup> of water in the internal processes in the explosives plant and the power plant. Maintaining the amount of water reused at 31,433 m<sup>3</sup> each year until 2019.
- Reducing the water used from the Paujil reservoir by up to 200,000 m<sup>3</sup> in 2017 by using water collected during the rainy season, and reducing a total of 800,000 m<sup>3</sup> by 2019.
- Keeping the industrial water consumption index below 35 L/ton during 2017, and by 2019 ensure that the index is below 34 L/ton.



## F2. OPTIMIZING ENERGY RESOURCES

Optimizing efficiency in energy consumption is aimed at reducing greenhouse gas production, directly or indirectly, and thereby contributing to mitigating climate change. For Drummond Ltd., its strategy is mainly focused on rationalizing internal consumption of liquid fuels, prioritizing the use of natural gas for the sustainable operation of the production and support equipment.

Related to the above, Drummond Ltd. seeks to take full advantage of coal bed methane gas, in turn reducing its natural gas consumption and reducing competition with domestic use for this resource.

[GRI 103-1]

For Drummond Ltd., optimizing the efficiency of its energy consumption is part of its vision of the mining business, aimed at reducing operating expenses and mainly at reducing its carbon footprint, keeping its forecast focused on achieving the environmental and social sustainability of the operation.

It is very important for the national environmental context, but especially at the global level, that all of the actions that the company takes be aimed at reducing greenhouse gases in order to mitigate the progression of climate change.

In this regard, within the national and regional context, it is extremely important to reduce

consumption to generate less competition with other productive sectors and the household sector for energy resources. Given the climate extremes that the country experiences and the energy pressure exerted on water resources, it is important to be efficient in the use of energy resources.

Therefore, the possibility of generating energy from a natural resource that exists in coal, such as methane gas, provides Drummond Ltd. with an opportunity to avoid the use of natural gas and reduce competition with household use, contributing to the availability of natural gas for the communities and for other productive sectors.





[GRI 103-2]

DDrummond Ltd. has an energy policy that explains its commitment to efficient energy use.

The strategy, whose goal is to seek the rational use of liquid fuels, is composed of the following actions:



Producing its own electricity, mainly from natural gas, to prevent competition with household use and other productive sectors in the Caribbean region for this energy.

---



Converting mining production equipment with high consumption of liquid fuels into electric equipment (draglines and hydraulic shovels), reducing the carbon footprint of the company's production.

---



Progressively converting the mining operation's fleet of light vehicles to a natural gas to reduce gasoline or diesel use.

---



Electrical connection project from the Drummond Power Plant to the National Power Transmission System, in order to reduce energy losses from the closed system that the company currently uses.



It can be found at the following link:  
<http://www.drummondLtd.com/wp-content/uploads/Energy-Policy.pdf>

By taking these steps, the management tools are concentrated in large-scale projects that at the same time offer significant result in terms of energy savings and efficient use.

In this regard, the construction and commissioning, in 2004, of the Dual Power Plant:

---

WITH A  
CAPACITY OF

**169**  
MW

---

FUEL SAVINGS

**10**  
million gallons  
of diesel per year

---

PREVENTING THE EMISSION OF

**100**  
tons of CO<sub>2</sub> per year

In relation with the above, the management strategy has also focused on converting many pieces of mining equipment, such as shovels, pumps and diesel generators, to electrical systems, which reduces the use of liquid fuels in the operation, reducing greenhouse gas emissions and the company's carbon footprint.

Following the goal of optimizing the use of energy resources, and having access to natural gas in the mining operations, the company has sought to reduce consumption of liquid fuels in the fleet of light vehicles that provide support for the operations by progressively converting those vehicles to natural gas.

In terms of using coal bed methane gas, the company is in the production stage, and it will be used in the company's Power Plant, thus reducing natural gas consumption, which in turn generates less competition with the household sector for that resource, whose use is a priority.

This plant mainly uses natural gas, and in the short term it will use methane gas, which will reduce competition with the household sector for this important energy resource.





[GRI 103-3]

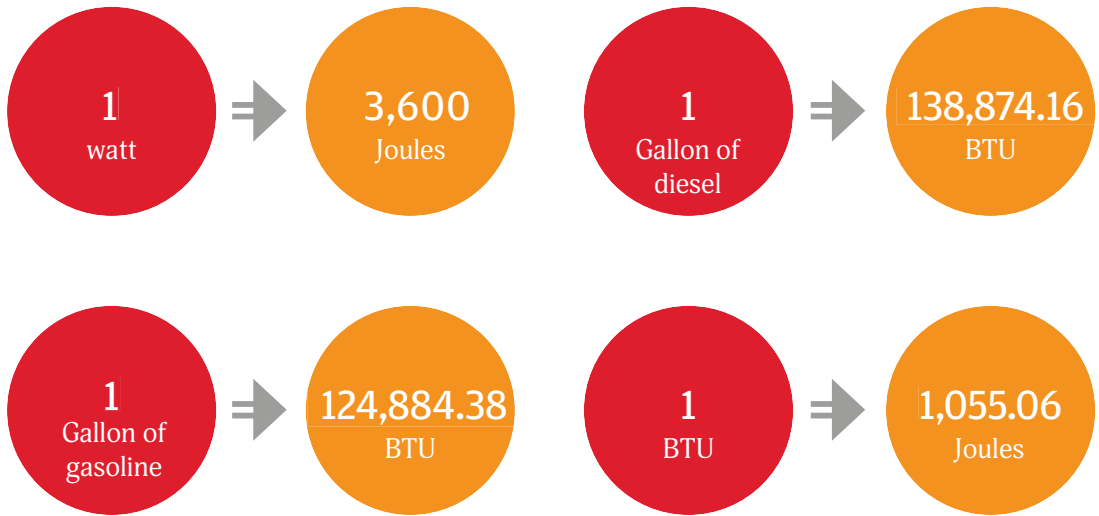
La eficacia del enfoque de gestión puede ser evaluada a partir del indicador de uso de energía por unidad de producción, el cual se espera que sea menor una vez se se implemente el proyecto de conexión al Sistema de Transmisión Nacional.

Actualmente, el consumo energético interno de Drummond Ltd. tanto en mina como en puerto se identifica de la siguiente manera:

[302-1]

## Internal energy consumption

The method used to calculate the conversion factors is as follows:



Electric energy consumption is calculated based on what was invoiced by Isagén, the energy supplier for the mine and the port. Total fuel consumption from non-renewable sources is calculated by converting the gallons of diesel and gasoline consumed in the operation into gigajoules.



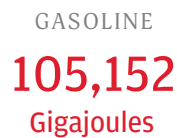
For the mine, internal energy consumption in 2016 was as follows:

### Internal energy consumption at the mine

TOTAL CONSUMPTION of fuel from non-renewable sources.



**ELECTRICITY CONSUMPTION**



**TOTAL ENERGY CONSUMPTION**

The result of the energy consumption at the port for 2016 is as follows:

### Internal energy consumption at the port (Total consumption 2016)

TOTAL CONSUMPTION of fuel from non-renewable sources.



**ELECTRICITY CONSUMPTION**



**TOTAL ENERGY CONSUMPTION**



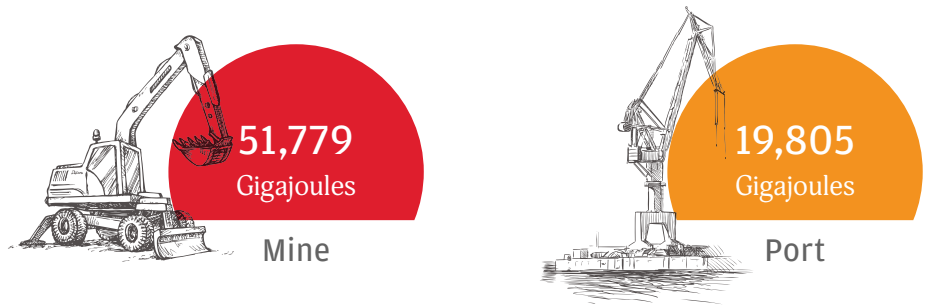
[GRI 302-2]

## External energy consumption

External energy consumption is calculated based on the energy consumed in waste treatment and the fuel used to transport personnel. The former was calculated by multiplying the energy consumption by

the incinerator furnace, and the latter was calculated by converting the gallons of diesel and gasoline consumed into gigajoules.

### External energy consumption at the mine and port



[GRI 302-3]

## Energy intensity

The energy intensity calculated for the port is expressed as follows:

### Energy intensity at the mine and port

ENERGY CONSUMPTION  
by the organization

11,671,237

Gigajoules

1,431,159

NUMERIC VALUE  
of the measure  
and unit selected

28,419,38

Tons of coal

32,640,275

TOTAL  
(TOTAL ENERGY INTENSITY)

410,678,816

Joules/tons of coal

Mine

43,846,439

Joules/tons of coal

Port

Finally, the projects for the future include the connection of the Power Plant to the National Power Transmission System. This strategy will be carried out by the Electrical, Materials, Maintenance and Environmental Departments, which will be responsible for designing the necessary projects, processing the environmental permits required for

the different phases of the strategy, making the modifications and conversions that the mining and support equipment require, building the physical facilities that will support the new electrical connection and transmission system, and monitoring the results of the optimization strategy on the efficiency of energy consumption.

## ☰ Material aspect case studies

### Energy optimization project

Since 2004, Drummond Ltd. has been implementing strategies aimed at reducing greenhouse gases and optimizing its energy use, whose economic and environmental benefits have undoubtedly been significant. In the first phase, the company constructed a natural gas power plant, which allowed it to significantly reduce its use of liquid fuels, while at the same time supporting the conversion and use of electrical power in its main operating equipment, such as hydraulic shovels, and the introduction of more efficient equipment, such as draglines.

Despite this significant improvement in economic and environmental efficiency, the company saw that, since the power plant and its internal network were a closed energy system, and the entry of large equipment, such as draglines, which at times acted as dynamic generators and required the installation of resistor grids to dissipate that energy, there was an opportunity for energy optimization through a future connection to the National Transmission System that would make it possible to channel the energy injected by the large equipment into the national network, avoiding the loss of energy represented by the dissipaters.

The project for connecting to the National Transmission System, given the sensitivity of the system, requires the creation of legal conditions by agencies such as the UPME, the presence of authorized companies to be part of this regulated system and, of course, environmental authorizations for the projects

that must be undertaken. This is without taking into account the design and construction phase of the projects that are ultimately authorized.

Drummond Ltd. has been promoting the contractual and technical conditions with the national government to authorize a connection to the National Transmission System through power companies accredited for this purpose; subsequently, other negotiation stages must take place with the power company selected by the government for the connection, and finally the environmental licensing and community consultation processes must be completed for this project to become a reality.

It is estimated that it could take at least three more years for the project to materialize, including the contractual agreement with the power company selected by the government, the designs for the necessary projects, processing the environmental permits required for the power lines and the connection, the construction of the physical facilities to support the new electrical connection and transmission systems, and finally the completion of the necessary tests and the start-up of the system.

The results are expected to be significant in terms of energy optimization, since according to preliminary calculations and based on the estimated future production levels, the energy savings from this project when it is fully implemented will be close to 6 million Kw hours.

#### NOTABLE MILESTONES

- The mining operations have a 169 MW gas-fired power plant that significantly reduces the consumption of liquid fuels per year, by approximately 10 million gallons.
- In the near future, the company will be connected to the National Transmission System, making it possible to achieve significant additional energy savings in the production process, which could reach 6 million KW hours per year.
- Also in the near future, the use of methane gas in the power plant will reduce the use of natural gas, allowing for greater availability for the household sector.

#### CHALLENGES

- Reducing electric power consumption by 6 million Kw hours per year.



### F3. AIR QUALITY

[GRI 103-1]  
[GRI 103-2]

Air quality in any open pit mining operations is one of the greatest environmental challenges, since it usually involves moving a large amount of earth, in addition to the constant movement of machinery and equipment on roads, which can generate significant emissions if the necessary controls are not used.

Bearing in mind that emissions represent a risk to the health of the workers and their physical safety due to possible accidents, and a risk to the communities surrounding the operations which are located within their sphere of influence, the company has taken different actions aimed not only at preventing, but also at control and mitigation to minimize the creation of particulate matter and keep emission levels to amounts that do not represent a risk to the workers or the neighboring communities.

It is important to note that the mining area in the center of Cesar includes the presence of several mining companies and various operations. The air quality monitoring systems, both those owned by Drummond Ltd. and those from Corpocezar's public network, are located in the towns in the area of influence of all of the mining operations and they record all sources of emissions, not just those from the company's mining operations.

In recent years, Drummond Ltd. has used a management approach that focuses on prevention and the implementation of new technologies, seeking to reduce and control emissions from each of the processes, and monitoring systems to provide timely alerts about substandard conditions related to emissions.

Drummond Ltd.'s main management tools are the Air Quality Environmental Monitoring and Management Programs, designed to prevent, control and monitor emissions of particulate matter, taking into account the fact that the company has its own monitoring network accredited by the IDEAM.

This is all part of the mining planning process; based on this, the company considers developments that would make it possible to reduce particulate matter emissions, by seeking less vehicle traffic, more backfilling and proximity in the waste disposal sites. Drummond Ltd. constantly updates numerical air quality models that help it to categorize the most relevant operations in terms of their emissions and target control measures in order of importance.

As a result, the organization has implemented different mechanisms that have made it possible to reduce and control emissions at its most significant operations, which include:



Having the largest tanker fleet for irrigation per unit of mining production in Colombia, which carries out the main emissions control process on the internal roads inside the operations.



Use of fog cannons or dust busters to control emissions at the Shovel-Truck loading operations (pioneering activity in Colombia)



Wetting in coal loading and unloading activities in the mine and the port



Use of dust suppressors on perimeter roads during the driest months of the year



Use of water launchers to control emissions at the material loading and stacking operations.



Other actions outside of the project for the benefit of the communities, such as the cleaning and sweeping of urban roads, the paving of urban roads, closing open landfills in neighboring towns, among others.



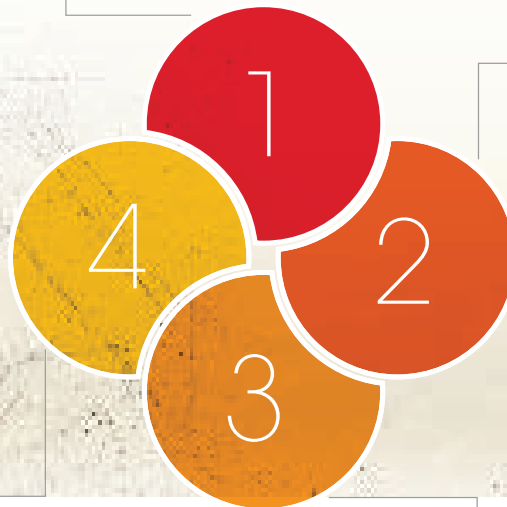
[GRI 103-3]

The evaluation of all strategies depends on timely monitoring so that the environmental management can be effective. For this reason, the company uses state-of-the-art technology that allows for more flexible responses to any unwanted changes in the status of a natural resource, considering the largest number of measurement parameters and intensifying the frequency of controls when any particular situation must be mitigated.

In accordance with the above, and using it as a foundation, the organization evaluates the effectiveness of its management approach based on various mechanisms, since it is not possible to establish a direct causal relationship between the company's performance and the air quality conditions in the towns, given the presence of other factors that affect it. For this reason, the company takes different measurement aspects into account:

The results of the internal monitoring in real time, which are designed to have a greater correlation to the mining operations' environmental performance.

The visits by the communities and the communications about them, which provides feedback regarding their perception of the air quality conditions in their communities and the possible sources that should be controlled.



The results of the air quality monitoring in the area, given the complexity and multiple actors and factors. These results have been evaluated with a focus on the management to be carried out within the communities to improve living conditions for their residents.

The monitoring visits by the environmental and mining authorities, which have confirmed that the control mechanisms are functioning properly, and the air quality conditions within the operations, which provide a good idea of the operations' emissions in the surrounding areas.



[GRI 305-7]

## NO<sub>2</sub>, SO<sub>2</sub> and other significant air emissions

With regards to the NO<sub>2</sub>, SO<sub>2</sub> and CO measurements of emissions taken in 2016 by K2 Consultores, an expert in the field, in the areas around the pit, they were very low and similar to the emissions

measurements taken in previous years. This shows that the NO<sub>2</sub>, SO<sub>2</sub> and CO emissions that are generated in the mine have little significance for the air quality in the area, as shown in the following graphs:

### NO<sub>2</sub> Concentration vs daily norm

	Barrancas station (µg/m <sup>3</sup> )	El Paujil station (µg/m <sup>3</sup> )	Caporo 21 Station (µg/m <sup>3</sup> )
13/02/16	15	11.4	11.1
14/02/16	10.7	11.5	11.1
15/02/16	11.1	11.4	12.3
16/02/16	11.5	11.5	11.3
17/02/16	11	11.1	11.5
18/02/16	11.3	11.2	11.4
19/02/16	11.1	10.9	10.7
20/02/16	11.6	11.6	11.7
21/02/16	14.3	17.3	11.1
22/02/16	11.3	13	11.1
23/02/16	13.5	11.1	11
24/02/16	12.9	11	10.7
25/02/16	11.1	11.2	11.4
26/02/16	11.5	11.6	11.6
27/02/16	11.6	11.4	11.5
28/02/16	11	11	11.1
29/02/16	17.5	10.7	10.6
1/03/16	21.6	18.5	11.3

**150**  
(µg/m<sup>3</sup>)  
Daily norm

## SO<sub>2</sub> Concentration vs daily norm

	Barrancas station ( $\mu\text{g}/\text{m}^3$ )	El Paujil station ( $\mu\text{g}/\text{m}^3$ )	Caporo 21 Station ( $\mu\text{g}/\text{m}^3$ )
13/02/16	13.8	15.1	14.2
14/02/16	14.1	14.3	14.1
15/02/16	14.2	14.3	14.1
16/02/16	15.1	14.6	14.5
17/02/16	14.5	14.6	14.7
18/02/16	14.3	14.7	14.5
19/02/16	14.7	14.3	13.5
20/02/16	15.3	15	14.9
21/02/16	14.3	14.9	14.3
22/02/16	14.6	14.6	14.1
23/02/16	14.3	14.3	14.3
24/02/16	13.7	13.8	13.9
25/02/16	14.3	14.2	14.3
26/02/16	14.5	14.6	14.7
27/02/16	14.9	14.7	14.6
28/02/16	14.4	14.1	14.1
29/02/16	13.8	13.6	13.9
1/03/16	14.7	14.5	14.4

250  
( $\mu\text{g}/\text{m}^3$ )  
Daily norm






### CO average hourly Concentration - Barrancas station

	February 13 2016	February 14 2016	February 15 2016
0		0.1781	0.1334
1		0.0957	0.2689
2		0.1265	0.4073
3		0.2124	0.4266
4		0.2811	0.3361
5		0.3296	0.6935
6		0.6242	0.8788
7		0.3730	0.4641
8		0.1893	0.0148
9		0.1566	0.0000
10	0.0473	0.0019	0.0000
11	0.0000	0.0000	0.0001
12	0.0000	0.0000	0.0000
13	0.0000	0.0000	0.0000
14	0.0000	0.0000	0.0000
15	0.0000	0.0000	0.0000
16	0.0000	0.0000	0.0000
17	0.0000	0.0000	0.0000
18	0.0000	0.0000	0.0000
19	0.0000	0.0000	0.0614
20	0.0000	0.1122	0.6144
21	0.0000	0.2061	0.9621
22	0.0000	0.5771	0.9720
23	0.0000	0,8064	1.0955

February 16 2016	February 17 2016	February 18 2016
0.3589	0.2543	0.2296
0.1733	0.3015	0.3963
0.4045	0.2308	0.5532
0.5233	0.3055	0.5902
0.5621	0.3591	0.7403
0.6837	0.3061	0.5388
0.7330	0.3596	0.6005
0.7486	0.3373	0.4937
0.4962	0.0306	0.4026
0.3578	0.0000	0.2488
0.0193	0.0040	0.0008
0.0000	0.0000	0.0000
0.0000	0.0000	0.0000
0.0000	0.0000	0.0000
0.0000	0.0000	0.0000
0.0000	0.0000	0.0000
0.0000	0.0000	0.0000
0.0000	0.0000	0.0000
0.0000	0.0000	0.0000
0.0000	0.0000	0.0000
0.0000	0.0000	0.0000
0.0000	0.0000	0.0000
0.0004	0.0000	0.0000
0.0905	0.0000	0.0000
0.1494	0.0000	0.0986
0.7679	0.0635	0.3669
0.8155	0.0514	0,4722
0.8692	0.0410	0.7375

**40.000**  
( $\mu\text{g}/\text{m}^3$ )  
Hourly norm



In conclusion, Drummond Ltd. has invested in a management system that combines the installation and use of state-of-the-art technical machinery with environmental control and monitoring methods that are innovative, relevant and constantly optimized, thanks to technological evolutions, always seeking to continuously improve its environmental management.

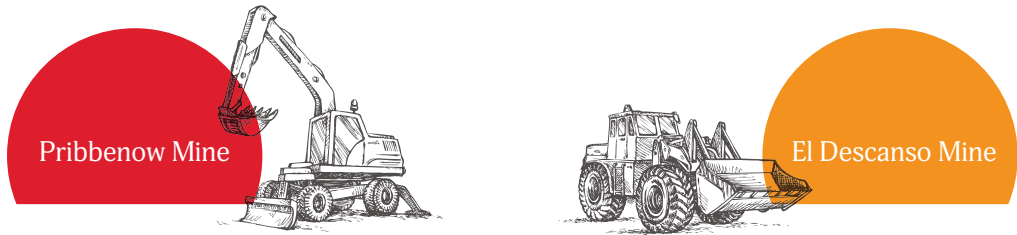
Additionally, and based on its approach to environmental responsibility, it identifies and proposes, individually or in cooperation with the other mining operations, a series of actions in the urban centers of the nearby towns.



In one way or another, this is reflected in the reduction in TSP and PM10 levels in the stations associated with the La Loma and El Descanso mining projects during 2016, as compared to

the levels reported in 2015, which is in addition to the increase in rainfall in the area in 2016 as compared to 2017. Below, the results of the measurements are described in greater detail:

### Mining operations



**7,175** **9,028** **6,989**  
 2014 2015 2016

Significant air emissions  
 of particulate matter PM  
 (TSP Ton/year)

**6,633** **11,823** **8,197**  
 2014 2015 2016

**2,230** **2,783** **2,168**  
 2014 2015 2016

Significant air emissions  
 of particulate matter PM  
 (PM10 Ton/year)

**1,954** **3,960** **2,376**  
 2014 2015 2016

#### Methodology used to perform the PM measurement

AP42 Emission factors

#### Sources of PM emissions

Mobile sources from the mine operations<sup>25</sup>

#### Source used to calculate the emission factors

EPA - U.S.

25. Emissions from transporting overburden, alluvial material and coal in the pit, on surface roads and in the dumping areas. Loading and unloading materials, light vehicle transit, drilling, blasting, wind erosion, etc.

## Port operations



Significant air emissions of particulate matter PM (TSP Ton/year)

<b>197</b>	<b>385</b>	<b>250</b>
<b>2014</b>	<b>2015</b>	<b>2016</b>

### Methodology used to perform the PM measurement

AP42 Emission factors

### Sources of PM emissions

Mobile sources from the port operations<sup>26</sup>

### Source used to calculate the emission factors

Coal unloading, conveyor belt transfer points, coal operations in the stacking yard, coal loading on the dock, vehicle transit on internal port roads

26. Emissions from transporting coal in the storage yards. Coal loading and unloading. Wind erosion. Transfer points on conveyor belts.

This reflects the effectiveness of the actions taken to improve air quality outside of the projects, considering that they are discussed in the spaces for jointly assessing results with the other actors in the area.

As a result of all of the work done by Drummond Ltd. related to the air quality conditions in the towns in its area of influence and according to the air quality monitoring system in the mining area, the average concentrations obtained in 2016 at the majority of the stations showed a downward trend as compared to the results from 2015.

The results of this management strategy that combine the proper implementation of control measures inside the operations with work in cooperation with other public and private actors have improved the environmental conditions in the region, in addition to increasing the communities' confidence in the operations and enriching the company's relationship with the environmental, local and regional authorities.



## Material aspect case studies

In 2016, Drummond Ltd. installed an automatic monitoring network made up of six pieces of equipment in locations close to the La Loma and El Descanso Norte mining projects and in the direction of the towns in the area of influence. During the measurement period from that year, there were no concentrations higher than the prevention levels that had been established, which would indicate possible effects on those populations caused by emissions generated by the projects.

Keeping in mind that the implementation of the monitoring network created synergies among the various lines of action in the Environmental Department, the Innovation chapter provides a more detailed explanation of the results of this implementation, specifically in the discussion of the case study.

These results confirm the predictions made by the particulate matter dispersion models prepared for each mining operation.

### NOTABLE MILESTONES

- Drummond Ltd. cuenta con 33 vehículos tanqueros, 17 en Mina Pribbenow, 13 en la mina El Descanso y 3 en Puerto. Es la flota de tanqueros por unidad de producción más grande del país y la de mayor capacidad de riego.
- Drummond Ltd. cuenta con redes internas de monitoreo de calidad de aire en tiempo real para cada una de sus operaciones mineras, con las cuales hace más efectivo el control operacional según los resultados que emita la misma.
- Los recursos destinados para la gestión de la calidad de aire en los proyectos mineros de Drummond Ltd. alcanzaron en 2016 la suma de 40.443.625.103 COP, y para el proyecto portuario la suma de 1.594.103.982 COP.

### CHALLENGES

- Implementing the operational control network in each mining project, with two networks in operation composed of three pieces of equipment each, to carry out operational control by 2019, and based on the operation of this internal network, establish additional controls and/or operating criteria to avoid affecting air quality.
- Continuing with the implementation of control systems for particulate matter emissions in loading with shovels, and by 2019 install 6 water cannons for the loading operations in the El Descanso project at the material loading points.
- Keeping daily particulate matter emissions in the port operations below 300 µg/m.3



## F4. PROTECTING THE LAND

[GRI 103-1]

Protecting the land is a matter of environmental and social responsibility with society at Drummond Ltd.'s operations, understanding that these operations have a limited lifespan and that, when the company leaves, the areas need to be returned to society fully prepared for later use, with the company's goal that they be used for protection and conservation, given the degree of human intervention on the land in the region.

This objective could not be achieved if, from the start of operations, the company had not planned how to reach it. Additionally, during the course of the project the company must take specific, visible and verifiable actions to achieve it; this must be confirmed by the communities and the authorities in a way that gives them peace of mind regarding a sustainable operation, generating the acceptance and approval of stakeholders.

These four strategies have shown visible results, which provide evidence of the viability of the future environmental recovery of the areas that were affected in a sustainable manner.

As a result, progress in this area is based on four lines of action:



Protection and strengthening the buffer areas.



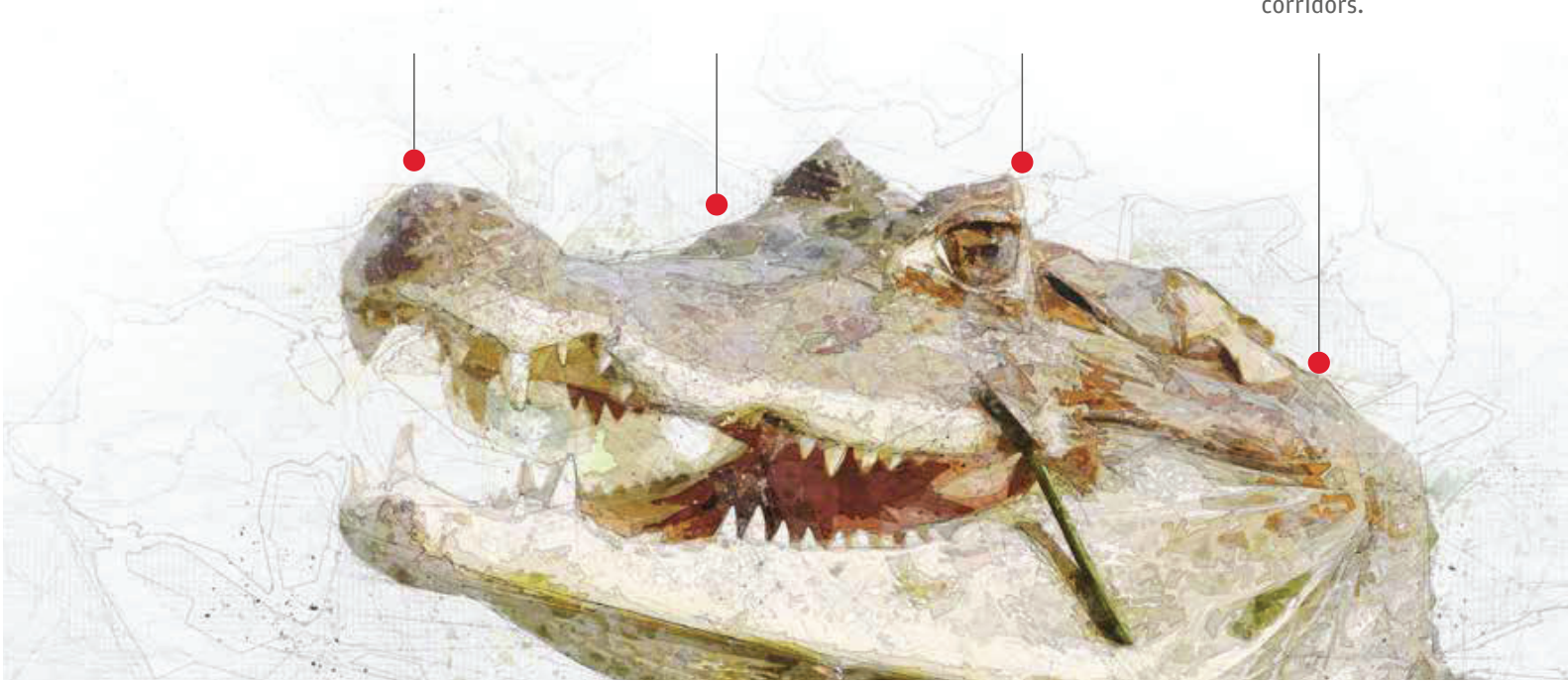
Rescuing, relocation and protection of wildlife.



Rehabilitation of the affected areas.



Implementation of forestry compensation aimed at strengthening the conservation corridors.





[GRI 103-2]

This matter is handled by the Environmental Department, which works constantly in coordination with the Engineering Department so the operational designs focus on the environmental criteria. They also work with the Construction Department so that the implementation of the expansion projects apply the best practices and the best materials, which result in fewer effects.

Since the Environmental Department coordinates with other departments to adjust the operations, it has been able to avoid affecting natural ecosystems that in the future will make up the protected areas outside of the operations, which will serve as a focus for spreading germplasm and an offshoot of the recovery process in the affected areas.

With respect to wildlife, the rescue, relocation and protection work plays a critical role in the strategy for land recovery, since it makes it possible to protect the species located in the areas where the mining actions are or will be carried out, ensuring that they can remain near the operations to then naturally repopulate the rehabilitated areas.

Therefore, when the sites that are suitable for transferring wildlife are selected, priority is

given to the non-affected ecosystems around the operations to keep the animals close to the operation and subsequently facilitate the recovery of the affected areas. Of course, this process assesses the capacity of the receiving site, to avoid affecting its natural conditions.

In terms of the rehabilitation, it should seek to be effective and be aimed at its own sustainability in terms of integrating the rehabilitated area into its environment; that is, with the surrounding ecosystems. It is not just a replanting process that shows that the site of the operation is “green,” but also that the mine can be part of the surrounding ecosystems so it can become a wildlife refuge thanks to the presence of artificial bodies of water in the flooded pits or other reservoirs.

To complement the rehabilitation, forestry compensation is implemented in the biological corridors that are connected to the mining area and achieve the above-referenced integration. Active and passive restoration processes implemented in external ecosystems, close to the mine or in watersheds supplying these ecosystems, ensure the environmental construction of a sustainable future for the affected areas.





[GRI 103-3]

To achieve this goal, Drummond Ltd. has managed the rehabilitation and compensation with unified guidelines on establishing and protecting natural areas from strengthening successional processes that ensure that the areas evolve toward a sustainable recovery.

In terms of the forestry compensation, it promotes the conservation of natural areas and the recovery of areas that have been degraded using Landscape Management Tools, with a social component managed using a framework similar to the payment for environmental services.

In accordance with what has been described, and as a result of the process, the evaluation of this strategy is completed using several mechanisms that the environmental authorities use to establish environmental performance, which is carried out through field inspections and documentary review. Additionally, the company has joined the BetterCoal initiative, which conducts an independent inspection with internationally trained personnel to verify the environmental performance of the mining operations.



[GRI 304-3]

## Habitats preserved, restored or compensations

The implementation of Effective Environmental Management, in the framework of land protection, has demonstrated that it is a strategy that provides significant benefits in terms of the environmental recovery of the affected areas, when the proper and relevant steps are taken for that purpose, some of which are in addition to

those conceived under the management plans or those imposed by the Environmental Authorities, but they undoubtedly have obvious benefits.

Below is a description of the different processes that have been carried out in the mining and the port operations:

### Habitats preserved, restored or compensation processes at the mining operations

#### SORORIA RIVER

Colombia, municipality of La Jagua de Ibirico

The areas are moving forward with the restoration process: in 2017 monitoring will be conducted to establish the status of the recovery

Area  
**11**  
ha

Confirmed by ANLA

In the process of building the methodology to be implemented to establish the restoration status (baseline).

#### SORORIA RIVER

Colombia, municipality of La Jagua de Ibirico

The areas in the restoration process remain in good condition, even though they have been affected by water stress and by fires in 5% of the total area

Area  
**382**  
ha

Confirmed by: ANLA and the MADS Ecosystems Division.

The activities to be conducted in the maintenance stage are still in the process of being agreed on by the ANLA and the Ecosystems Division of the Ministry of the Environment and Sustainable Development. A diagnostic of the compensation areas was completed to look for a sustainability strategy that can be implemented in conjunction with the associated communities.

#### DUMPING AREAS NORTH AND NINE

Colombia, municipalities of Chiriguana, El Paso and La Jagua de Ibirico - La Loma or Pribbenow mine

Different successional stages, from pioneers to low secondary

Area  
**887**  
ha

Confirmed by ANLA and Corpocesar

Continuing with the restoration process

#### DUMPING AREA ONE

Colombia, municipality de Becerril - El Descanso Mine

Pioneer successional stages

Area  
**13**  
ha

Confirmed by ANLA and Corpocesar

Continuing with the restoration process

## Habitats preserved, restored or compensation processes at the port operations

### HYGROFITIC FOREST COMPENSATION

Coordinates: North 1715629 – East 985100

Country: Colombia  
Department: Magdalena  
Municipality: Ciénaga  
District: Papare  
Location: Puerto Drummond  
Average altitude: 2 mamsl

It is a forest that is well-formed and structured, in the advanced secondary successional stage

697  
Trees  
planted

Forest planted in October 1998, with native species typical of the area

Area  
0.9  
ha

Confirmed by ANLA and Corpamag

### MIDDLE BASIN OF THE TORIBIO RIVER

Distance from Santa Marta: 33 Km.

Country: Colombia  
Department: Magdalena  
Municipality: Santa Marta DTH  
Average altitude: 1150 mamsl  
Total area: 20 ha

The area consists of two lots: Lot 1, with 5 ha, and Lot 2, with 15 ha, located on the slope of the mountain in the middle basin of the Toribio River

18.380  
Trees  
planted

Both lots were completely devoid of shrub vegetation and only low stubble was observed. Despite the climate conditions, the trees have been maintained, starting to generate connectivity with the forest relics from the basin.

Area  
20  
ha

Confirmed by Corpamag





[GRI 304-4]

Number of species included in the IUCN Red List and on national conservation lists whose habitats are in areas affected by the operations, according to the species' level of danger of extinction.

It is important to note that species have been identified :

### Species identified in the mining operations

-	Critically endangered species	Blue-billed curassow ( <i>Crax alberti</i> )
-		Red-footed tortoise ( <i>Chelonoidis carbonaria</i> )
<hr/>		
Perehuetano ( <i>Parynarium pachyphyllum</i> )	Endangered species	-
<hr/>		
Monkey-pot tree ( <i>Lecythis minor</i> )	Vulnerable species	Comelón ( <i>Leporinus muyscorum</i> )
<hr/>		
-	Near-threatened species	-
<hr/>		
Roble ( <i>Tabebuia bilbergii</i> )	Least-concern species	Southern lapwing ( <i>Vanellus chilensis</i> )
		Black-bellied whistling duck ( <i>Dendrocygna autumnalis</i> )
		Double-striped thick-knee ( <i>Burhinus bistriatus</i> )
		Orange-chinned parakeet ( <i>Brotogeris jugularis</i> )

Name of plant species

(common + scientific)

Name of animal species

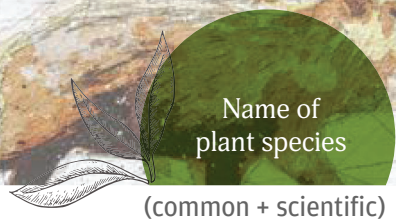
(common + scientific)



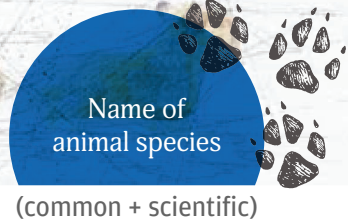
**Species identified in the port operations**

-	Critically endangered species	-
-		-
<b>Peroba rosa</b> ( <i>Aspidosperma polyneuron</i> Müll. Arg.)	Endangered species	-
<b>Palma llanera</b> ( <i>Copernicia tectorum</i> (Kunth) Mart)	Vulnerable species	-
<b>Wild cashew</b> ( <i>Anacardium excelsum</i> (Bertero ex Kunth))	Near-threatened species	<b>Semipalmated sandpiper</b> ( <i>Calidris pusilla</i> ) Migratory species
-	Least-concern species	-

It is worth noting that all of the species reported at the wildlife stations are included on the IUCN list and they are categorized as least-concern.



Name of plant species  
(common + scientific)



Name of animal species  
(common + scientific)

However, for Drummond Ltd. preserving and protecting all natural resources is a priority and is part of its work philosophy.



[G4-MM1]

### Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated

In terms of the amount of land disturbed or rehabilitated by Drummond Ltd., during 2016, 887 hectares of land were rehabilitated as a result of the management and execution of the various strategies that Drummond Ltd. uses, as follows:

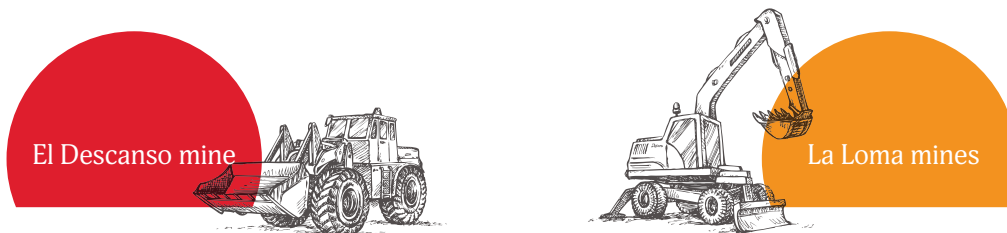
#### Amount of land disturbed or rehabilitated

TOTAL AMOUNT of land disturbed and not rehabilitated at the start of 2016 (A)	2016 2015	<b>5,486 ha</b> <b>5,228 ha</b>
TOTAL AMOUNT of land disturbed during 2016, excluding the land taken into account in the previous item (B)	2016 2015	<b>119 ha</b> <b>316 ha</b>
TOTAL AMOUNT amount of land rehabilitated in 2016 (C)	2016 2015	<b>71 ha</b> <b>58 ha</b>
TOTAL AMOUNT of land disturbed and not rehabilitated A+B-C= (D)	2016 2015	<b>5,534 ha</b> <b>5,486 ha</b>





**Amount of land disturbed or rehabilitated per mine**



2,299 ha	Total amount of land disturbed and not rehabilitated at the start of 2016 (A)	3,187 ha
116 ha	Total amount of land disturbed during 2016, excluding the land taken into account in the previous item (B)	3 ha
13 ha	Total amount of land rehabilitated in 2016 (C)	58 ha*
2,402 ha	Total amount of land disturbed and not rehabilitated A+B-C= (D)	3,132 ha

\*Not counting the areas that were the subject of rework because of issues in seed quality and soil compaction.

Regarding the port operation, during 2016 there were no processes that disturbed the land and, on the contrary, the company has been implementing a plan to strengthen the rehabilitated areas and replant deteriorated areas.

Finally, and considering the significance of the issue, Drummond Ltd. will continue to promote a mining design that encourages the creation of areas that are set up for the community at the end of the project, with the idea that these areas can be used for protecting and conserving land in the region. To achieve this goal, it has provided human, physical and financial resources.

**Material aspect case studies**

The 58 hectares that were rehabilitated at La Loma have a land improvement strategy based on legumes, which showed high productivity (beans and pigeon peas); in 2017 tests will be conducted in a specialized

food laboratory to certify their quality for human consumption and donate part of the production to the neighboring communities to strengthen their food security and improve their nutrition.



## CHALLENGES

- **2017 challenge:** make progress in the replanting of 75 ha in dumping area 9 at the La Loma mine
- **2017 challenge:** make progress in the replanting of 25 ha in the El Descanso mine

## MILESTONES

- The protected areas around the Paujil reservoir and its buffer zone reached 208 ha.
- In 2016, 34 animals including caimans, iguanas, snakes and birds were relocated; the company highlights the rescue of approximately 120,000 bees, which were relocated to sites that are favorable for their search for food.
- Of the affected areas, 887 ha have been rehabilitated (874 ha at the Pribbenow mine and 13 ha at the El Descanso mine) and 382 ha in the Sororia river basin, corresponding to the Cerrolargo mine, have been compensated

## F5. IMPACT ON HEALTH AND THE ENVIRONMENT IN COAL LOGISTICS AND TRANSPORTATION

The environmental impact of the logistics chain and coal transportation are associated with the movement of cargo by rail from the mining operations to Puerto Drummond; under this approach, the towns located along the national railroad are considered to be the object of these impacts.

Therefore, in addition to the implementation of the mitigation measures applicable to the railroad equipment in aspects such as:



Noise reduction.



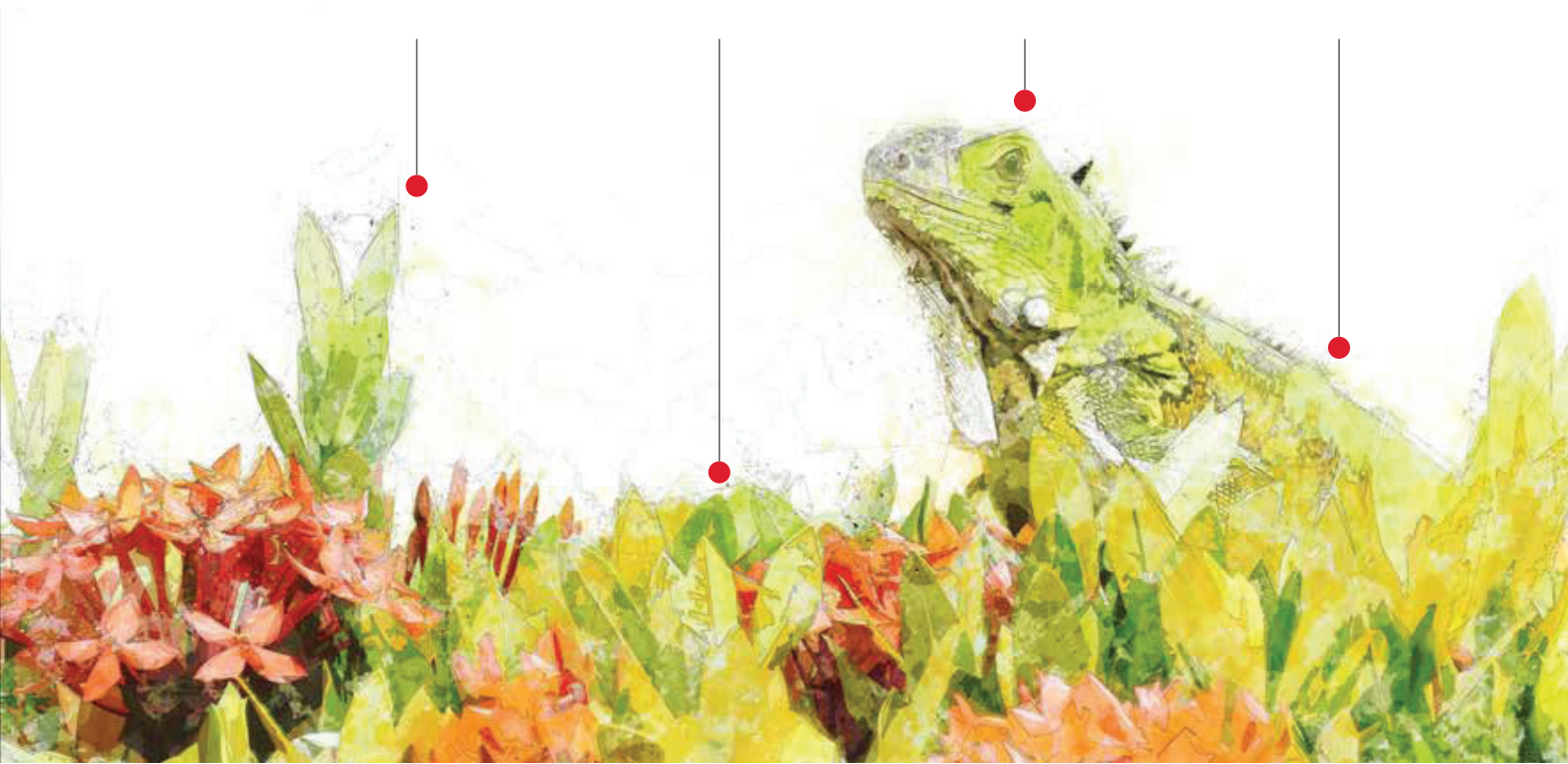
Control of atmospheric emissions and optimization of the convoy system to make it more efficient



Provide more support for the implementation of management measures by the concession holder.



Support for the work by its stakeholders, whenever possible.





[GRI 103-1]

For Drummond Ltd. it is critical for the coal transportation operations from the mine to the port to be carried out in a safe, healthy, responsible and sustainable manner. This stage is one of the critical phases of the company's operations, and its proper and timely operation is essential to the company's viability.

In the coal mobilization stage, the environmental impacts are associated with generating emissions (mainly exhaust gas from the locomotives) and noise for the residents near the tracks, and any events that may happen during transportation, such as possible coal and oil spills when any accidents occur.

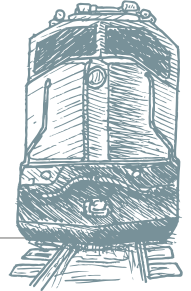
While the national railroad track is under a concession granted by the Colombian government to Ferrocarriles del Norte de Colombia S.A. (Fenoco), which has an environmental license for this operation, and therefore any impacts caused during transit should be managed directly by the concession holder, Drummond Ltd. understands its level of joint responsibility in this work, and it participates in cooperation and coordination with the concession holder in managing and controlling these impacts. By doing so, it ensures greater effectiveness in mitigating them.

ENVIRONMENTAL MEASURE unilaterally implemented by the company since

1997

MEASURE ADOPTED by the other mining companies by

2007



It is important to remember that coal transportation by rail, in and of itself, constitutes the largest measure to mitigate environmental impacts, avoiding the numerous negative environmental and social effects that road transportation causes all along the route.

[GRI 103-2]

[GRI 103-3]

Managing this issue is critical to Drummond Ltd. For this reason, efficient coal transportation is part of its corporate Health, Safety and Environment Policy, and the Environmental Sustainability Policy. Efficiency is reflected in less use of fossil fuels and fewer environmental and social impacts as compared to road transportation.

To take the proper steps, it is important to have the appropriate planning; this poses new challenges and actions that lead to defining different actions to achieve the greatest possible efficiency. For this reason, the company has implemented convoys with 150 rail cars instead of 120, it acquired new locomotives with higher standards in terms of engine efficiency and noise generation, and it constantly trains its operations personnel to make the operations more and more secure

.The main verification mechanism is the technical monitoring conducted by the National Environmental Licensing Authority and the Regional Autonomous Corporations of Cesar and Magdalena, which, based on the Environmental Compliance Reports submitted by Fenoco and the sporadic monitoring conducted by the corporations, monitor the company's environmental compliance. From these results, monitoring and follow-up is conducted and reports are submitted to the Board of Directors, on which the company is a part of.

In addition, based on the air quality and noise reports submitted by the regional environmental authorities, the company has made technical exchanges with Fenoco to identify opportunities for improvement in which it can participate directly, based on improvements to the rail equipment, or suggested actions for implementation.

[DLTD-03]

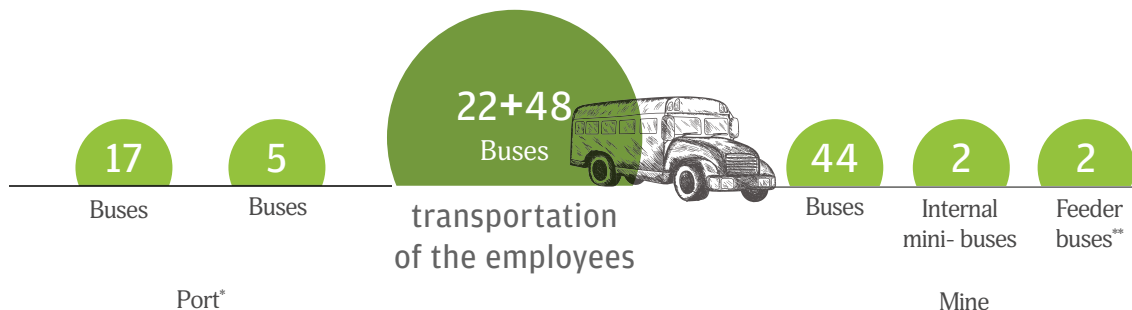
## Types of transportation

Drummond Ltd. identifies two types of transportation, one specializing in products and materials, and the other for the people who are part of the organization.



\* 17 with capacity for 23 people and 5 with capacity for 9 people, owned by the San Antonio transportation company.

\*\* 1 feeder bus to Chiriguaná and 1 feeder bus to La Jagua de Ibirico are used, all of which are owned by the company Copetrán.



## Impacts

In terms of significant environmental impacts identified in the operation of the fleet, noise emissions, particulate matter emissions and oil spills are relevant.<sup>27</sup>

Noise emissions are generated when there is an increase in maximum sound pressure levels, caused by the friction of the train's wheels on the tracks. Emissions of particulate matter are due to the force of the wind on the coal being

transported in the cars and the emissions from fuel combustion in the engine and spilling coal particles along the railroad tracks. Finally, potential oil spills are classified as significant due to the effects that they can have on the ecosystem and on natural resources. In transporting personnel, significant environmental impacts come from the bus fleet and the increased concentration of emissions of particulate matter caused by traveling on unpaved roads.

27. To determine the significant environmental impacts we use the criteria and methodology of the Guide: "General Methodology for the Presentation of Environmental Studies" of the Ministry of Environment, Housing and Territorial Development, published in the year 2010.

KILOGRAMS OF SCRAP  
by the coal transportation process

**461,910**  
during 2016

In the case of tires and other waste from the bus fleet, they were managed by the San Antonio and Copetrán transportation companies.



## Mitigation of impacts

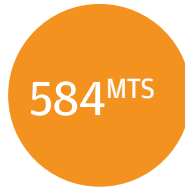
Mitigating the environmental impacts created during the coal transportation process takes place through various strategies; the reduction of noise emissions is addressed through operational

measures in regulating the trains, the application of speed restrictions, restrictions on use of the whistle and grinding the rails, which has allowed the company to reduce emissions from their source.

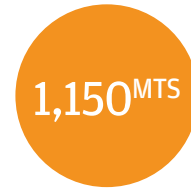
Fenoco has implemented the use of live barriers around the railroad near population centers:



live barriers in the town of Bosconia

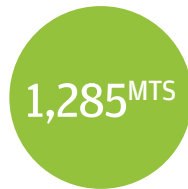


Gabions

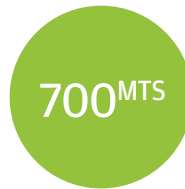


Dams

Additionally, Fenoco has installed mixed barriers (metal-transparent), as follows:



Loma Colorada



Algarrobo



Lleras

For the case of particulate matter in the atmosphere, the company uses coal wetting and compacting when it is deposited in the rail cars, which prevents the emission of particles during transportation. As a complement to this strategy, the coal is loaded without surpassing the top level of each rail car, given that the coal that is loaded is of a particular size that prevents it from being blown by the wind.

In terms of the particulate matter that is seen along the railroad tracks, the main control measure comes from the fact that all 1,896 rail cars are flat bottomed (without gates), with rotating ends for unloading, which prevents coal particles from falling during their journey due to gravity or rolling along the railroad tracks; as a complementary measure to reduce Drummond Ltd.'s contribution to the particulate matter on the track, it washes the exterior of the train before it leaves the mine and port terminals.

The impact created by the emissions from fuel combustion in the engine is mitigated through the implementation of a preventive, predictive and corrective maintenance program to optimize combustion, the operation of the train engines and fuel consumption. The engines strictly comply with international standards for gas emissions from rail stock; additionally, they have catalytic purifiers that control diesel emissions.

Finally, potential oil spills are a critical issue to which special attention is paid; for this reason, controls are implemented in which the equipment is checked and predictive and preventive maintenance is performed. As a result of this strategy, in 2016 no spills occurred.

For Drummond Ltd., mitigating the impacts generated by its activities is fundamental.

To do so, the company implements different strategies that include measures at the internal and external levels, applied as follows:

1

## INTERNAL MEASURES:

Sprinkler systems on coal loading and unloading facilities on the train to control emissions.

Washing the gondolas before leaving the Mine and Port terminals.

Constant watering of roads where the buses circulate.

Use of chemical suppressors to control emissions of particulate matter, mainly during the dry months (December to February), on perimeter roads or on the way out of the towns.

Speed control on buses.

Switching the material on the perimeter roads to a heavier material that generates less fine particle emissions from traffic.

Preventive maintenance on buses.

2

## EXTERNAL MEASURES:

Spraying of internal roads in the town of La Loma (50% of the buses transport personnel to this town) on an ongoing basis and with special emphasis on the roads used by the buses that transport our personnel, and during the times before shift changes.

Maintenance of internal roads in the towns in the area of influence.

Cleaning campaigns on the main roads in the population centers.

Speed control on buses and defensive driving courses.

By implementing these measures in synergy with the various strategies, Drummond Ltd. has reduced the impacts generated and, at the same time, it has committed itself to using greater efforts every year, which will result in the smallest possible impact.



[GRI 416-1]

[GRI 416-2]

It is important to mention that, with the goal of minimizing and controlling the risks and impacts regarding health and safety during the coal life cycle, Drummond Ltd. has certified its mining and transportation operations with management systems under international standards, which make it possible to ensure that the controls, procedures, standards and other actions taken in the actions are constantly being improved, which is reflected in decreases in the accident and occupational disease rates.

Finally, and as a result of the planning and management carried out by the company in 2016, there were no incidents arising from non-compliance with the standards or voluntary codes regarding the impact of the company's products and services on health and safety during its life cycle; as a result, no fines or penalties were generated.

### Material aspect case studies



As a result of the evaluation of some complaints by the communities located along the railroad corridor, a system was implemented to wash the railcars when leaving the mine and when leaving Puerto Drummond, in order to prevent coal particles from falling on the railroad tracks, which perceptively looked bad to residents of the towns, even though it posed no risk to their health.



In addition, work has been completed with Fenoco to implement an automatic traffic control system that will make use of the railroad track even more efficient, improving travel times, providing greater safety and better track availability. Additionally, the company supports Fenoco in the process for implementing the double track operation, which will significantly increase transportation availability, allowing for more coal exports, with socioeconomic benefits for the communities surrounding the operations and for the country in general.

#### MILESTONES

- Currently, a single train with 150 cars moves 7,500 tons, which is the same amount of cargo as 234 tractor trailers.
- Drummond Ltd.'s port is designed to move 60 million tons per year, making it the largest and most modern port in Colombia..



## F6. INNOVATION

[GRI 103-1]

[GRI 103-2]

[GRI 103-3]

As part of an effective environmental management scheme, which seeks to respond constantly and optimally to prevent, control and mitigate environmental impacts, innovation is particularly relevant in all phases of the process, from the implementation of appropriate management measures, to effective monitoring to generate alerts for decision-making, to taking all necessary actions to ensure the recovery of the affected area, after the end of the mining operations through coherent and sustainable strategies.

Therefore, innovation is considered the path necessary to face the large-scale operations on a daily basis that affect natural areas that are structurally complex, under climate conditions that are increasingly unpredictable and changing. By doing so, Drummond Ltd. has understood that its competitiveness and its environmental and social viability depend on its capacity to innovate in all fields, both in the mining and the port operations, seeking greater efficiency in all of the support areas where it is constantly looking for alternatives that are safer, more efficient and more profitable, and of course constant innovation in the environmental aspect. Otherwise, the company could see increases in the economic sustainability, environmental and social risks for all of the company's projects.

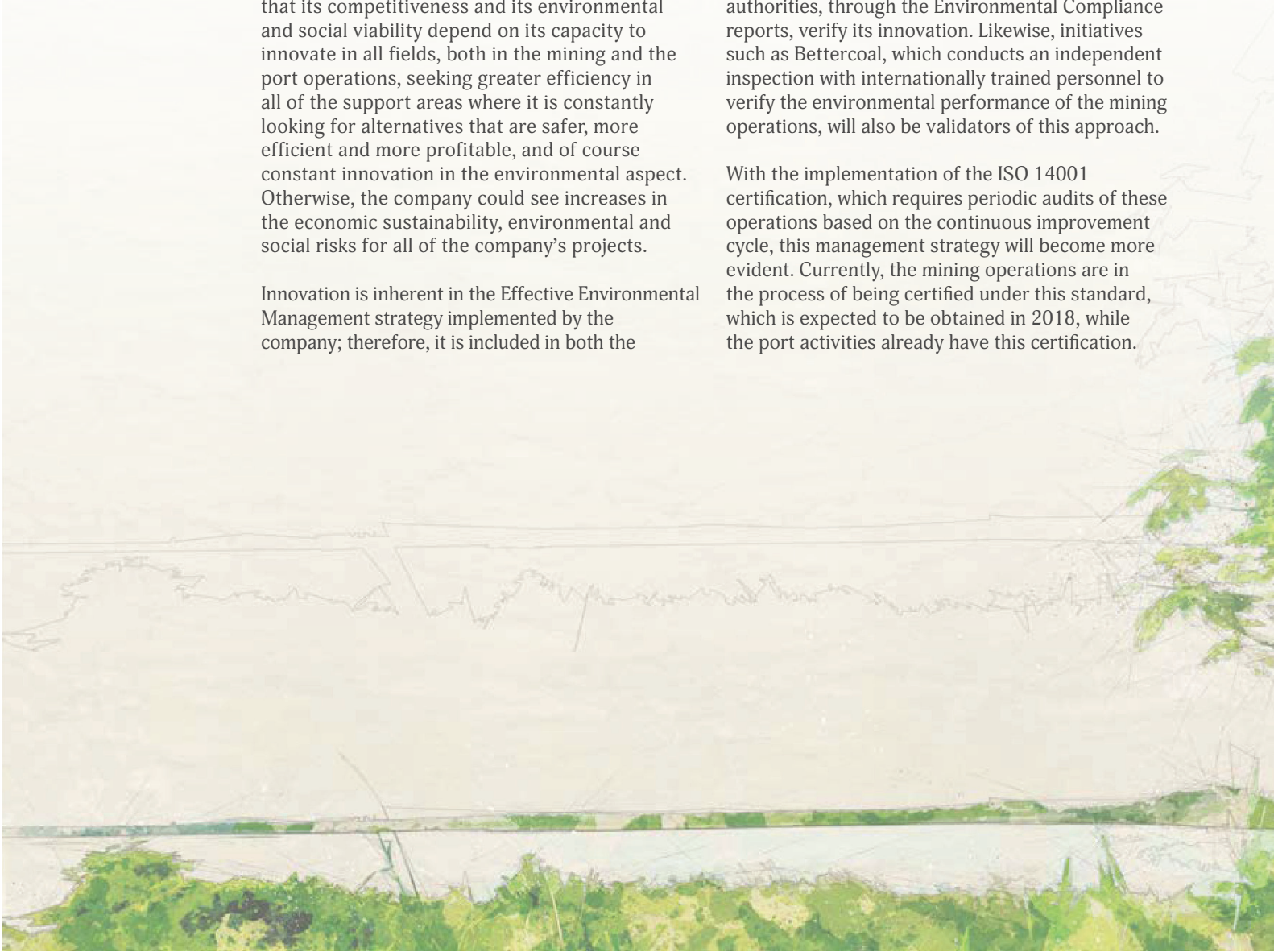
Innovation is inherent in the Effective Environmental Management strategy implemented by the company; therefore, it is included in both the

sustainability policy and in each and every one of the environmental management actions that seek to provide constant improvement.

All of the company's employees bear responsibility for ensuring that innovation is always present in its environmental management, and they maintain a vigilant and proactive attitude towards the environmental control measures in each of their activities, providing feedback to the Environmental Department about the improvement actions that could be implemented.

*A per se* assessment of this material issue can be completed through the results of the company's work and the recognition by external validators that corroborate this strategy. Therefore, the company believes that the environmental authorities, through the Environmental Compliance reports, verify its innovation. Likewise, initiatives such as Bettercoal, which conducts an independent inspection with internationally trained personnel to verify the environmental performance of the mining operations, will also be validators of this approach.

With the implementation of the ISO 14001 certification, which requires periodic audits of these operations based on the continuous improvement cycle, this management strategy will become more evident. Currently, the mining operations are in the process of being certified under this standard, which is expected to be obtained in 2018, while the port activities already have this certification.





## 1 Water component

### MITIGATING THE ENVIRONMENTAL IMPACT

- Measurement systems have been implemented that make it possible to capture information more accurately and more frequently, which facilitates better inter-year and multi-year analyses. The flow measurement equipment in the rivers capture information every 30 minutes, like the equipment that measures groundwater levels and those that measure water levels in the reservoirs and marshes. By doing this, the company has more information that is more accurate and more useful for decision making.
- The mining industrial water treatment systems have flocculent dosing systems to increase solid retention before discharges. This makes it possible to obtain better effluents, which often provide water of higher quality than the water carried by the natural channels themselves.

## 2 Air component

- The company has been a pioneer in Colombia in adjusting and implementing technological emissions control systems in the shovel-truck loading process, using water cannons and fog fans or DustBoss®, which substantially reduces this operation's air emissions.
- Networks to monitor particulate matter emissions in real time have been installed around the mining activities to have more effective control over the project's operating conditions, preventing effects on the communities. This makes it possible to make quick decisions and prevent impacts.

### 3

#### Biodiversity component

- The process of rehabilitating the affected areas that have undergone modifications from the traditional systems, creating bodies of water at the different levels of the dumping areas with their respective channels for managing runoff, working on planting the slopes with a plow on the diagonal to reduce water erosion, with the introduction of fast-growing species such as rice, beans and others to quickly attach the soil and improve nutrient availability, and with the use of hay collected from the same region to provide native seeds during the initial grass implantation processes.
- The areas around the operations are protected so that their diversity and richness can be a source of seeds and spores that, through wildlife, support the rehabilitation of the nearby affected areas, facilitating a natural recovery in the long term.
- The forestry compensation processes are tied in by strengthening the conservation corridors, to connect the areas of operation to strategic ecosystems in the region, such as the Serranía del Perijá and the swamp system in Zapatosá, promoting the connection of habitats for species with broad mobility.

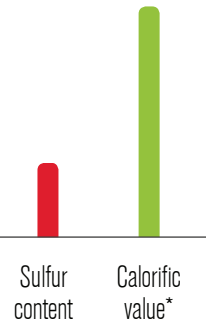




DLTD-02  
Mitigating the environmental  
impact of the products and services



All of the coal sold is mixed  
to improve its quality.



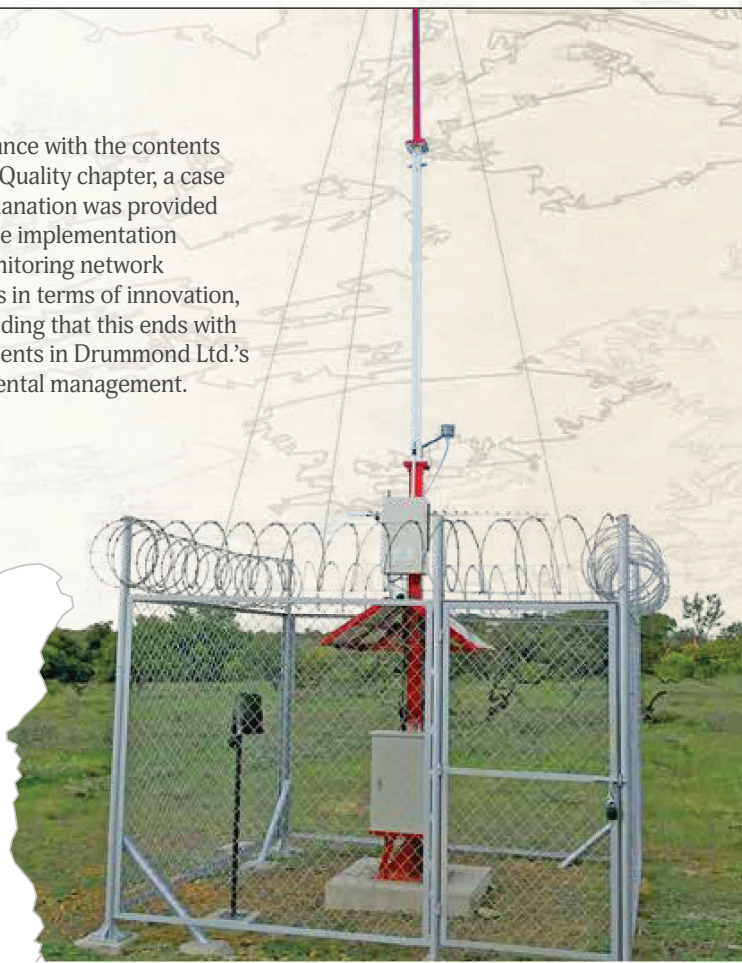
\* Individually there are types of coal in the deposit with good calorific values but high sulfur content, or vice versa; mixing them makes it possible to improve their qualities, to obtain greater energy and environmental benefits.



## NOTABLE MILESTONES AND CHALLENGES

- With the goal of improving response times and the efficiency of the measures to control emissions of particulate matter, starting in 2016 Drummond Ltd. has been implementing an advanced automatic monitoring network to measure the emissions generated at the La Loma and El Descanso Norte mining projects. This network is made up of autonomous equipment with the ability to measure both heavy fractions of particulate matter (PST) and finer particles (PM 10 and 2.5), simultaneously and in real time.
- The network is strategically distributed based on air quality modeling studies, in places close to the representative sources of emissions from the projects and in the direction toward the location of the communities in the area of influence. Additionally, each monitoring station has a meteorological station that records wind speed and direction measurements in real time.
- Both measurements (meteorological and particulate matter) studied together make it possible to take immediate measures if concentrations are reported that exceed the prevention levels and if atmospheric conditions are experienced that indicate possible effects in the nearby population centers, through a sophisticated information system that sends messages to the operations to intensify the material control measures on certain roads or work areas.
- The implementation of the real-time monitoring network for particulate matter emissions near the mining projects and in places far from the town centers has made it possible to distinguish the emissions generated by the mining projects from those from other sources, which was not possible with the measurements inside the towns. This, along with different studies completed by the mining companies in the area and those conducted by the environmental authorities, has improved their understanding of the emission sources which have the greatest effect on the towns and pose a challenge for focusing new emissions control measures on the most representative sources in the population centers.

In accordance with the contents of the Air Quality chapter, a case study explanation was provided of what the implementation of the monitoring network represents in terms of innovation, understanding that this ends with improvements in Drummond Ltd.'s environmental management.



Real-time monitoring station





• APPENDICES •



# Independent Assurance Statement

## Adherence to GRI Standards



BSD Consulting has conducted the Independent Assurance Statement for Drummond Ltd. Sustainability Report 2016. This assurance aims to provide an independent opinion on:

- The application of the principles for the definition of content in accordance with the GRI Standards in the report preparation process
- Compliance with the Standards in relation to the disclosure of the contents according to the chosen option of compliance.

### Independency

We work independently and ensure that no member of BSD holds consulting contracts or other commercial ties with Drummond Ltd.

### Proficiency

BSD Consulting is a global consultancy that provides knowledge and solutions for sustainable development and is a GRI certified training partner. This assurance has been conducted by experienced professionals with expertise in sustainability reporting, stakeholder engagement and external assurance.

### Drummond Ltd. and BSD Consulting responsibilities

The reporting, stakeholder engagement and materiality definition processes are Drummond Ltd. responsibility. The Report's evaluation based on the adherence to GRI Standards principles and indicators are BSD's responsibility

### Scope

The scope of this assurance corresponds to the nonfinancial information of Drummond Ltd. Sustainability Report 2016. The process of assurance was Type 1 and at moderate level. The application of the content and quality definition principles was verified for the preparation of the report as well as the inclusion of the general and thematic contents indicated in the GRI Standards

### Methodology

BSD Consulting assurance process included:

- Reviewing the quality and reliability of selected information
- Interviews with Drummond Ltd. employees who are in charge of the management of material topics
- Review of internal documents as well as quality and quantity management systems
- Review of industry's sustainability matters that were released by the media.

## GRI External Assurance

### Principles

BSD Consulting made a critical reading of the Drummond Ltd. Sustainability Report 2016, conducted interviews with the leaders of the reporting process and reviewed available documentation, concluding that it complies with the content principles (stakeholder inclusiveness, materiality, sustainability context, and completeness) and quality (balance, clarity, reliability, accuracy, timeliness, and comparability) established by the GRI.

The following are particularly observations and opportunities for improvement on the application of the principles.

### Stakeholder Inclusiveness

- The company has information on what is important for stakeholders based on existing and ongoing relationship channels. However, it is not clearly stated in the report the frequency of relationship with the identified stakeholders and how this information is used in the decision making of the company.

### Materiality

- During 2016, Drummond Ltd. reviewed its materiality analysis, using the GRI Standards, the socioeconomic study of the area of influence carried out by an external consultant and the results of the "Stakeholder Questionnaire Analysis of our customers opinion".
- The materiality analysis was supported by a third party that supported the identification of the most relevant topics for the company. 21 material topics were determined.
- The materiality review carried out in 2016 allowed the identification of 3 new stakeholders.
- On the 21 material topics, information on its context, management and performance is presented in a reasonable and sufficient manner. The coverage of topics within and outside the organization and the stakeholders for which the matter is important is presented.



# Independent Assurance Statement

## Adherence to GRI Standards



• Within the materiality analysis process and the available documentation, it is clearly evident that the importance of the topics for the stakeholders is evaluated. It also assesses the importance for Drummond Ltd. in terms of risks and opportunities, its management within the framework of policies and management systems and its internal and external communication. It is recommended to strengthen the materiality analysis for future reporting exercises, expanding the analysis beyond the assessment of the economic, social and environmental impacts for Drummond Ltd., in order to include an assessment of the significant impacts of the company on the economy, the environment and society.

### **Sustainability context**

The social, environmental and economic performance of the organization can be understood within a broader sustainable development for the sector, region and country context.

### **Completeness**

It was found that the report shows performance information for material topics within the framework of the coverage indicated for each one. This coverage is properly identified and disclosed.

### **Quality principles**

The critical reading of the Report, the documentary review and information management systems and the interviews carried out with the report leaders and process leaders allowed verifying the application of the principles of quality. The following are observations and conclusions on some of these principles.

### **Balance**

The main achievements of the company during the reporting period are presented in a balanced manner in the report. As well as the challenges the company faces in the short and medium term. It is recommended to strengthen the dissemination of information on the challenges, opportunities and risks in the long term and the measures to address them.

### **Clarity and Accuracy**

The report presents information in a clear language accessible to different audiences. The qualitative information is presented in a concise manner.

### **Reliability**

During the interviews with the reporting areas, the existence of information management systems, formats and records managed by the company was shown to continuously monitor the quantitative and qualitative information. Internal follow-up processes and quality control were evidenced.

### **Comparability and timeless**

The report is presented on a regular basis annually since 2010. The quantitative information presents historical information that allows comparing performance from one reporting period to another. The information related to the exploration operations of unconventional hydrocarbons (methane gas associated with coal) of the Caporo Norte development area is expanded. For the next fiscal year, it is recommended to publish the report on a date closer to the cut-off date of the information.

### **General and specific standard disclosures**

BSD Consulting reviewed in detail all the contents of the Report, in order to ensure that they complied with the technical requirements stipulated in the GRI Standards, finding that:

- Drummond Ltd. reports the general basic contents corresponding to the GRI Standard 102 (2016).
- The contents of the Management Approach, Standard GRI 103 (2016), were included for all the material topics as well as all the thematic contents associated to the material topics.
- Contents are included for the Management Approach and specific contents of the Mining and Metal Sector Guide.
- The general and thematic contents comply with the requirements established in the GRI standards.

In cases where it was deemed necessary, BSD requested Drummond Ltd. to include adjustments to the text of the report to align it with the contents required by the GRI Standards.

The contents that are not reported as required by the GRI Standards are mentioned below. In the GRI Content Index, Drummond Ltd. points out the reason for the omission:

- 305-7
- 401-1
- 404-3
- 405-1



## Independent Assurance Statement Adherence to GRI Standards



Additionally, BSD Consulting verified the traceability and quality of the information of all the contents included in the report, through interviews and review of supporting documents. BSD did not evidenced that the information came from unreliable sources or management systems, nor that the information reported lead the reader to misleading or erroneous conclusions about its performance.

### *In accordance option*

In line with the above, BSD Consulting states that the 2016 Sustainability Report of Drummond Ltd. meets the criteria corresponding to the "Core" compliance option of the GRI Standards of the Global Reporting Initiative.

**Marcela Romero Merino**  
Managing Director  
BSD Consulting Colombia

# GRI CONTENT INDEX DRUMMOND



GRI Content Index Drummond Ltd.			
General Contents 2016			
Contents	Description	Location and/or Comments	Page
<b>Organization's Profile</b>			
102-1	Name of the organization.	See section A3. Drummond Ltd. Overview	12
102-2	Primary brands, products, and services.	See section A3. Drummond Ltd. Overview	12
102-3	Location of the organization's headquarters.	Bogota, D.C.	Direct response in GRI Content index
102-4	Report the number of countries where the organization operates and name the countries where the organization has significant operations.	See section A3. Drummond Ltd. Overview	12
102-5	Describe the nature of ownership and its legal form.	Branch of a private foreign company	Direct response in GRI Content index
102-6	Report which markets are served (including breakdown by geography, by sector, and types of customers and beneficiaries).	See section A3. Drummond Ltd. Overview	12
102-7	Report the scale of the organization (employees, operations, sales, capitalization, products and services provided).	See section A3. Drummond Ltd. Overview	12 - 21
102-8	Number of employees, by employment contract and gender.	See section A3. Drummond Ltd. Overview	22
102-9	Describe the organization's supply chain.	See section 4.3. Supplier management	66
102-10	Report all significant changes that took place during the reporting period regarding the organization's size, structure, ownership, or its supply chain.	Garry Neil Drummond, CEO of Drummond Company, Inc., passed away on July 13, 2016. Mike Tracy was appointed CEO of Drummond Company, Inc. The Office of the Vice President of Corporate Social Responsibility was created. Carolina Riaño was appointed Vice President of Risk and CSR.	Direct response in GRI Content index
102-11	Report how the precautionary principle is addressed by the sector, if applicable.	The company's position on the precautionary principle is to refrain from performing operations that could presumably cause serious risk to public health or the environment, without yet having definitive scientific evidence of that risk.  For all other cases, the measures described in Chapter 4.3. <i>Environment</i> are taken.	Direct response in GRI Content index
102-12	Prepare a list of the charters, principles or other external initiatives of an economic, environmental and social nature that the organization has signed or adopted.	See section C2. <i>International standards and sustainability initiatives</i>	36
102-13	Prepare a list of the associations and national or international advocacy organizations to which the organization belongs.		36 - 37



GRI Content Index Drummond Ltd.			
General Contents 2016			
Contents	Description	Location and/or Comments	Page
<b>Strategy</b>			
102-14	Statement from the most senior decision-maker of the organization, about the relevance of sustainability to the organization.	See section A2. Letter from the president	9, 10
102-15	Describe the key impacts, risks and opportunities.	See section A2. Letter from the president	9, 10
<b>Ethics and Integrity</b>			
102-16	Describe the sector's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.	See section B2. Risk Management at Drummond	30
102-17	Describe mechanisms for advice and concerns about ethics.	See section B2. Risk Management at Drummond	31
<b>Governance</b>			
102-18	Report the governance structure of the organization, including committees of the highest governance body.	See section B1. Corporate governance	28
102-19	Report the process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees.	See section B1. Corporate governance	29
102-20	Report whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics.	See section B1. Corporate governance	28
102-26	Report the highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social impacts.	See section B1. Corporate governance	28
102-32	Report the highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all Material Aspects are covered.	See section A1. Report profile	7
102-33	Report the process for communicating critical concerns to the highest governance body.	See section B1. Corporate governance	29
102-34	Report the nature and total number of critical concerns that were communicated to the highest governance body and the mechanism(s) used to address and resolve them.	See section B1. Corporate governance <b>Note:</b> This does not include the number of critical concerns. We are currently working on identifying the number and reviewing their relevance for publication in the next report.	29
<b>Stakeholder Engagement</b>			
102-40	Provide a list of stakeholder groups engaged by the organization.	See section C3. Stakeholder engagement	38
102-41	Percentage of employees covered by collective bargaining agreements.	During 2016, Drummond Ltd. had 76.59% of its employees covered by collective bargaining agreements.	Direct response in GRI Content index

## GRI Content Index Drummond Ltd.

## General Contents 2016

Contents	Description	Location and/or Comments	Page
<b>Stakeholder Participation</b>			
102-42	<i>Report the basis for identification and selection of stakeholders with whom to engage.</i>		38
102-43	<i>Report the sector's approach to stakeholder engagement.</i>	See section C3. <i>Stakeholder engagement</i>	38
102-44	<i>Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.</i>		38
<b>Material Aspects and Boundaries</b>			
102-45	<i>All entities included in the organization's consolidated financial statements or equivalent documents, and which ones are not covered by the current report.</i>	- Company included in the sustainability report: Drummond Ltd. - Companies not included in the sustainability report: Drummond Coal Mining L.L.C., Transport Services L.L.C., American Port Company Inc., Coal Resources Colombia Ltd. C.I., Drummond USA Inc.	Direct response <b>in GRI Content index</b>
102-46	<i>Explain the process for defining the report content and the Aspect Boundaries.</i>	See section C4. <i>Materiality analysis</i>	46
102-47	<i>Prepare a list of the material aspects identified in the process for defining report content.</i>		48
102-48	<i>Report the effect of any restatements of information provided in previous reports, and the reasons for them.</i>	The figures from the Financial Statements were restated due to the adoption of the IFRS standards. The adoption of the IFRS standards took place in 2015 and there was a restatement of the Financial Statements for 2014.	Direct response <b>in GRI Content index</b>
102-49	<i>Señale todo cambio significativo en el alcance y la cobertura de cada aspecto con respecto a memorias anteriores.</i>	None for this report.	Direct response <b>in GRI Content index</b>
102-50	<i>Reporting period.</i>		6
102-51	<i>Date of most recent previous report.</i>		6
102-52	<i>Reporting cycle.</i>		6
102-53	<i>Contact point for questions regarding the report or its contents.</i>	See section A1. <i>Report profile</i>	7
102-54	<i>Report the 'in accordance' option the sector has chosen.</i>	The information presented in this report corresponds to the year 2016, the period between January 1 and December 31.	6
102-55	<i>GRI Content index.</i>		6
102-56	<i>Report the organization's policy and current practice with regard to seeking external assurance for the report.</i>		7



The GRI indicators will be presented by Drummond Ltd. Material Aspect, using the following table.

Drummond Ltd. Material aspect	GRI Material aspect	Indicator reported
Economic impact	Economic performance	201-1
	General (environmental expenses)	DLTD-01
	Financial implications and other risks and opportunities due to climate change	201-2
	Defined benefit plan obligations and other retirement plans	201-3
	Public policy	415-1
Financial feasibility of projects	N/A	Not defined
Supplier management	Environmental assessment of suppliers	308-1, 308-2
	Social assessment of suppliers	414-1, 414-2
	Procurement practices	204-1
Managing human talent	Employment	401-1, 401-2, 401-3
	Market Presence	202-1, 202-2
	Training and education	404-1, 404-2, 404-3
	Diversity and equal opportunities	405-1
	Equal pay for men and women	405-2
Workplace health and safety	Workplace health and safety	403-1, 403-2, 403-4
Relationships with unions	Relations between workers and management	402-1, G4-MM4
Managing local communities	Local communities	413-1, 413-2, G4-MM6, G4-MM7
	Indirect economic consequences	203-1, 203-2
	Artisanal and small-scale mining	G4-MM8
	Resettlement	G4-MM9
	Closure planning	G4-MM10
Human rights	Investment	412-2, 412-3
	Non-discrimination	406-1
	Freedom of association and collective bargaining	407-1
	Child labor	408-1
	Forced labor	409-1
	Safety measures	410-1
	Rights of the indigenous population	411-1, G4-MM5
	Evaluation	412-1
Protecting water resources	Water	303-1, 303-2, 303-3
	Effluents and waste (partial water)	306-1, 306-5
Optimizing energy resources	Energy	302-1, 302-3, 302-2, 302-4, 302-5
Air quality	Emissions of ozone-depleting substances	305-6
	Emissions (partial non-GEI)	305-7
Protecting the land	Biodiversity	304-1, 304-2, 304-3, 304-4, G4-MM1, G4-MM2
Impact on health and the environment in coal logistics and transportation	Transportation	DLTD-03
	Customer health and safety	416-1, 416-2
Innovation	Products and services	DLTD-02

## GRI Content index Drummond Ltd.

## Specific Contents for 2016

Indicator	Description	Location and/or comments	Page	Omissions
<b>Economic performance</b>				
103-1, 103-2, 103-3	<i>DMA Management Approach.</i>	See D1. <i>Economic performance</i>	54 -55	
201-1	<i>Direct economic value generated and distributed, including revenues, operating costs, employee wages, donations and other community investments, economic value retained and payments to providers of capital and to government.</i>	See D1. <i>Economic performance</i>	57	
201-2	<i>Financial implications and other risks and opportunities due to climate change.</i>	See D1. <i>Economic performance</i>	60	
DLTD-01	<i>Report total environmental protection expenditures and investments.</i>	See D1. <i>Economic performance</i>	58	
415-1	<i>Total value of political contributions by country and recipient/beneficiary.</i>	Drummond Ltd. does not make contributions to political parties.	Direct response in GRI Content index	
<b>Financial feasibility of projects</b>				
103-1, 103-2, 103-3	<i>DMA Management Approach.</i>	See D2. <i>Financial feasibility of projects</i>	62	
<b>Supplier management</b>				
103-1, 103-2, 103-3	<i>DMA Management Approach.</i>	See D3. <i>Supplier management</i>	63 -64 -70	
308-1	<i>New suppliers that were screened using environmental criteria.</i>	In all, 91 new suppliers were registered in 2016. During the preliminary registration of a supplier, there is no evaluation based on criteria related to environmental repercussions. The evaluations are made solely based on safety.	Direct response in GRI Content index	
308-2	<i>Negative environmental impacts in the supply chain and actions taken.</i>	See D3. <i>Supplier management</i>	72	
414-1	<i>New suppliers that were screened using social criteria.</i>	In all, 91 new suppliers were registered in 2016. During the preliminary registration of a supplier, there is no evaluation based on criteria related to social repercussions. The evaluations are made solely based on safety.	Direct response in GRI Content index	
414-2	<i>Negative social impacts in the supply chain and actions taken.</i>	See D3. <i>Supplier management</i>	72	
412-1	<i>Operations that have been subject to human rights reviews or impact assessments.</i>	See D3. <i>Supplier management</i>	117 - 123	
412-2	<i>Employee training on human rights policies or procedures.</i>	See D3. <i>Supplier management</i>	124	
204-1	<i>Proportion of spending on local suppliers.</i>	See D3. <i>Supplier management</i>	67	



GRI Content index Drummond Ltd.				
Specific Contents for 2016				
Indicator	Description	Location and/or comments	Page	Omissions
<b>Managing human talent</b>				
103-1, 103-2, 103-3	<i>DMA Management Approach.</i>	See E1. <i>Managing human talent</i>	76 - 77	
401-1	<i>New employee hires and employee turnover.</i>	See E1. <i>Managing human talent</i>	80	Drummond no reporta la tasa de nuevas contrataciones debido a que esta no es representativa en relación a la planta total de colaboradores y por lo anterior no considera procedente incluirla.
401-2	<i>Benefits provided to full-time employees that are not provided to temporary or part-time employees.</i>	See E1. <i>Managing human talent</i>	85	
401-3	<i>Parental leave</i>	See E1. <i>Managing human talent</i>	87	
202-1	<i>Ratios of standard entry level wage by gender compared to local minimum wage.</i>	See E1. <i>Managing human talent</i>	88	
202-2	<i>Proportion of senior management hired from the local community.</i>	See E1. <i>Managing human talent</i>	82	
201-3	<i>Defined benefit plan obligations and other retirement plans.</i>	See E1. <i>Managing human talent</i>	88	
404-1	<i>Average hours of training per year per employee.</i>	See E1. <i>Managing human talent</i>	91	
404-2	<i>Programs for upgrading employee skills and transition assistance programs.</i>	See E1. <i>Managing human talent</i>	92	
404-3	<i>Percentage of employees receiving regular performance and career development reviews.</i>	See E1. <i>Managing human talent</i>	90	Only salaried employees are considered, whose performance is assessed regularly. For hourly employees, it is not strategic to manage this information; however they receive regular feedback from their leader but it was not considered appropriate to include that in this report.
405-1	<i>Diversity of governance bodies and employees.</i>	See E1. <i>Managing human talent</i>	79	The information from the entire workforce is broken down, omitting information from the organization's governance bodies since, for security reasons in the country of operation, the company considers reporting of this information to be confidential.



## GRI Content index Drummond Ltd.

## Specific Contents for 2016

Indicator	Description	Location and/or comments	Page	Omissions
<b>Managing human talent</b>				
405-2	<i>Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation.</i>	See E1. <i>Managing human talent</i>	89	
<b>Workplace health and safety</b>				
103-1, 103-2, 103-3	<i>DMA Management Approach.</i>	See E2. <i>Workplace health and safety</i>	95 - 97	
403-1	<i>Workers representation in formal joint management–worker health and safety committees.</i>	See E2. <i>Workplace health and safety</i>	105	
403-2	<i>Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities.</i>	See E2. <i>Workplace health and safety</i>	98	
403-4	<i>Health and safety topics covered in formal agreements with trade unions.</i>	See E2. <i>Workplace health and safety</i>	105	
<b>Relationships with unions</b>				
103-1, 103-2, 103-3	<i>DMA Management Approach.</i>	See E3. <i>Relationships with unions</i>	112 - 114	
402-1	<i>Minimum notice periods regarding operational changes.</i>	See E3. <i>Relationships with unions</i>	114	
G4-MM4	<i>Number of strikes and lock-outs exceeding one week's duration, by country.</i>	During 2016, there were no strikes or work stoppages.	Direct response in GRI Content index	
<b>Human rights</b>				
103-1, 103-2, 103-3	<i>DMA Management Approach.</i>	See E4. <i>Human rights</i>	115 – 116 - 118	
412-2	<i>Employee training on human rights policies or procedures.</i>	See E4. <i>Human rights</i>	124	
412-3	<i>Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening.</i>	See E4. <i>Human rights</i>	125	
406-1	<i>Total number of incidents of discrimination and corrective actions taken.</i>	During 2016, there were no cases of discrimination.	Direct response in GRI Content index	
407-1	<i>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.</i>	See E4. <i>Human rights</i>	119	
408-1	<i>Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.</i>	See E4. <i>Human rights</i>	120	
409-1	<i>Operaciones y proveedores con riesgo significativo de casos de trabajo forzoso u obligatorio.</i>	See E4. <i>Human rights</i>	121	
410-1	<i>Personal de seguridad capacitado en políticas o procedimientos de derechos humanos.</i>	See E4. <i>Human rights</i>	116	



GRI Content index Drummond Ltd.				
Specific Contents for 2016				
Indicator	Description	Location and/or comments	Page	Omissions
<b>Human rights</b>				
411-1	<i>Incidents of violations involving rights of indigenous peoples.</i>	Drummond's operations are not performed in areas with the indigenous presence, so there have been no violations of this population's human rights.	Direct response <b>in GRI Content index</b>	
G4-MM5	<i>Total number of operations taking place in or adjacent to indigenous people's territories, and number and percentage of operations or sites where there are formal agreements with indigenous peoples' communities.</i>	Drummond's operations are not performed in areas with the indigenous presence, so there have been no violations of this population's human rights.	Direct response <b>in GRI Content index</b>	
<b>Human rights</b>				
412-1	<i>Operations that have been subject to human rights reviews or impact assessments.</i>	See E4. <i>Human rights</i>	117 - 123	
<b>Managing Local Communities</b>				
103-1, 103-2, 103-3	<i>DMA Management Approach.</i>	See E5. <i>Managing local communities</i>	128 - 130	
413-1	<i>Operations with local community engagement, impact assessments, and development programs.</i>	See E5. <i>Managing local communities</i>	132	
413-2	<i>Operations with significant actual and potential negative impacts on local communities.</i>	See E5. <i>Managing local communities</i>	146	
G4-MM6	<i>Number and description of significant disputes relating to land use, customary rights of local communities and indigenous peoples.</i>	See E5. <i>Managing local communities</i>	148	
G4-MM7	<i>The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and indigenous peoples, and the outcomes.</i>	See E5. <i>Managing local communities</i>	148	
203-1	<i>Infrastructure investments and services supported.</i>	See E5. <i>Managing local communities</i>	133	
203-2	<i>Significant indirect economic impacts.</i>	See E5. <i>Managing local communities</i>	146	
G4-MM8	<i>Number (and percentage) of company operating sites where artisanal and small-scale mining takes place on, or adjacent to, the site; the associated risks and the actions taken to manage and mitigate these risks.</i>	Drummond's operations are considered large-scale, so artisanal or small-scale mining activities do not take place at the company's facilities or nearby.	Direct response <b>in GRI Content index</b>	
G4-MM9	<i>Number of communities with resettlements, the number of households resettled in each, and how their livelihoods were affected in the process.</i>	See E5. <i>Managing local communities</i>	150	
G4-MM10	<i>Number and percentage of operations with closure plans.</i>	See E5. <i>Managing local communities</i>	148	

## GRI Content index Drummond Ltd.

## Specific Contents for 2016

Indicator	Description	Location and/or comments	Page	Omissions
<b>Protecting water resources</b>				
103-1, 103-2, 103-3	<i>DMA Management Approach.</i>	See F1. <i>Protecting water resources</i>	154 - 155	
303-1	<i>Total water withdrawal by source.</i>	See F1. <i>Protecting water resources</i>	156	
303-2	<i>Water sources significantly affected by withdrawal of water.</i>	See F1. <i>Protecting water resources</i>	157	
303-3	<i>Water recycled and reused.</i>	See F1. <i>Protecting water resources</i>	158	
306-1	<i>Water discharge by quality and destination.</i>	See F1. <i>Protecting water resources</i>	159 - 164	
306-5	<i>Water bodies affected by water discharges and/or runoff.</i>		165 - 168	
<b>Optimizing energy resources</b>				
103-1, 103-2, 103-3	<i>DMA Management Approach.</i>	See F2. <i>Optimizing energy resources</i>	169 -170 - 171	
302-1	<i>Energy consumption within the organization.</i>	See F2. <i>Optimizing energy resources</i>	172	
302-2	<i>Energy consumption outside of the organization.</i>	See F2. <i>Optimizing energy resources</i>	174	
302-3	<i>Energy intensity.</i>	See F2. <i>Optimizing energy resources</i>	59	
302-4	<i>Reduction of energy consumption.</i>	Drummond Ltd. does not have this information; however, it is working on implementing the first phase of the energy savings plan that is projected to be able to quantify results in the next three years.	Direct response in GRI Content index	
302-5	<i>Reductions in energy requirements of products and services.</i>	Drummond Ltd. does not have this information; however, it is working on implementing the first phase of the energy savings plan that is projected to be able to quantify results in the next three years.	Direct response in GRI Content index	
<b>Air Quality</b>				
103-1, 103-2, 103-3	<i>DMA Management Approach.</i>	See F3. <i>Air quality</i>	59	
305-6	<i>Emissions of ozone-depleting substances (ODS).</i>	Drummond Ltd. does not produce, import or export ozone-depleting substances.	Direct response in GRI Content index	
305-7	<i>Nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), and other significant air emissions.</i>	See F3. <i>Air quality</i>	59	The air quality information does not include other components that are not particulate material (for example, COP, COV, HAP), since this is the pollutant that Drummond believes to be a determining factor in its operations.



GRI Content index Drummond Ltd.				
Specific Contents for 2016				
Indicator	Description	Location and/or comments	Page	Omissions
<b>Protecting the land</b>				
103-1, 103-2, 103-3	<i>DMA Management Approach.</i>	See F4. <i>Protecting the land</i>	185 – 186 - 187	
304-1	<i>Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.</i>	Drummond Ltd. does not have operating facilities that are owned, leased or managed that are adjacent to, contain or are located in protected areas and areas of high biodiversity value outside protected areas.	Direct response <b>in GRI Content index</b>	
304-2	<i>Significant impacts of activities, products, and services on biodiversity.</i>	Drummond Ltd. does not generate significant impacts on the biodiversity of protected areas or areas of high biodiversity value arising from its activities, products and services.	Direct response <b>in GRI Content index</b>	
304-3	<i>Habitats protected or restored.</i>	See F4. <i>Protecting the land</i>	188	
304-4	<i>IUCN Red List species and national conservation list species with habitats in areas affected by operations.</i>	See F4. <i>Protecting the land</i>	190	
G4-MM1	<i>Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitate.</i>	See F4. <i>Protecting the land</i>	192	
G4-MM2	<i>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.</i>	To date, neither the mining nor the port operations have required a Biodiversity Management Plan (BPM), although recovery and compensation activities are included in the environmental management plans.	Direct response <b>in GRI Content index</b>	
<b>Impact on health and the environment in coal logistics and transportation</b>				
103-1, 103-2, 103-3	<i>DMA Management Approach.</i>	F5. Impact on health and the environment in coal logistics and transportation	196	
DLTD-03	<i>Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce.</i>	F5. Impact on health and the environment in coal logistics and transportation	196	
416-1	<i>Percentage of significant product and service categories for which health and safety impacts are assessed for improvement.</i>	F5. Impact on health and the environment in coal logistics and transportation	200	
416-2	<i>Number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes.</i>	F5. Impact on health and the environment in coal logistics and transportation	200	
<b>Innovation</b>				
103-1, 103-2, 103-3	<i>DMA Management Approach.</i>	See F6. <i>Innovation</i>	201	
DLTD-02	<i>Mitigation of the environmental impact of the products and services.</i>	See F6. <i>Innovation</i>	204	



