**2018** SUSTAINABLE DEVELOPMENT REPORT

# IRON ORE COMPANY OF CANADA

From mine to port, responsibly

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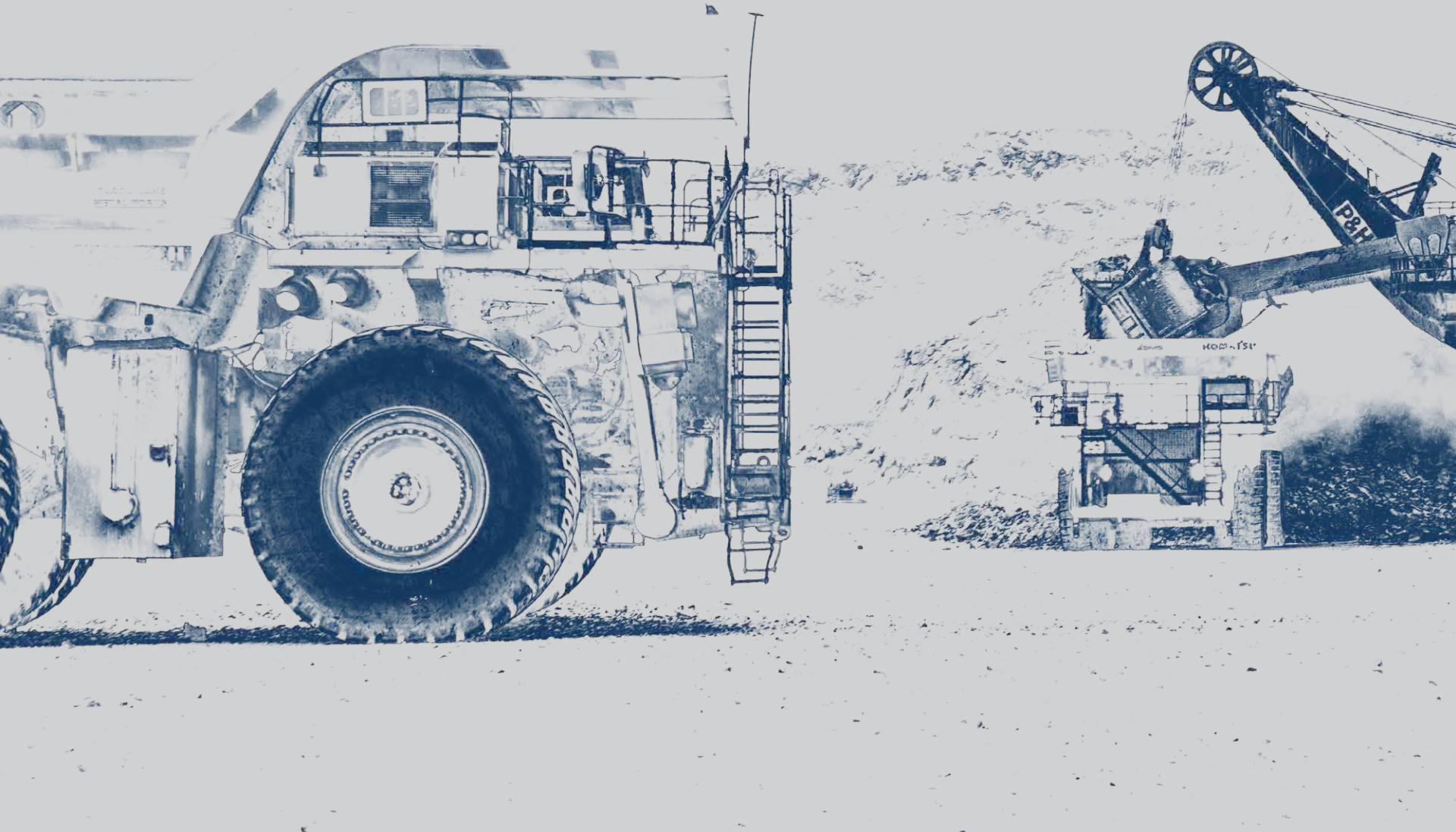
# THE COMPANY.



# ABOUT US

We are a major North American producer and supplier of superior-quality iron ore concentrate and iron ore pellets. We operate a mine with five operating pits, a concentrator and a pellet plant in Labrador City, in the province of Newfoundland and Labrador. IOC is located in a region called the Labrador Trough, which is known for its large deposits of high-grade iron ore.

We also operate a fully-owned 418-km-long railway, the QNS&L railway, which links our Labrador operations to our port terminal in Sept-Iles.

## ANNUAL NOMINAL PRODUCTION CAPACITY

**23 Mt**

of highgrade iron ore

including

**12,5 Mt**

can be pelletised to superior-quality pellets

Labrador City
Mine
Railway
418 km
Sept-Iles
Terminal
Montreal
Corporate office

A MESSAGE FROM OUR

# PRESIDENT

AND CEO

**The Iron Ore Company of Canada is proud to present its 2018 Sustainable Development Report. We are committed to business practices that prioritize our people and their safety; that respect the environment and the communities near our operations; and, most importantly, are sustainable and profitable. The year of 2018 was filled with many opportunities and challenges. We have grown from our experiences and are now better positioned to reach our objective of becoming the premier high-grade pellet and concentrate producer in the world.**

## SAFETY

Nothing is more important than coming home, in good health, at the end of the workday. That is why we strive every day to keep the health and safety of our employees and contractors a number one priority. We are working hard to reduce the number of injuries across the site. This will take continuous effort by all employees to ensure that we reach our goal of zero harm, starting with each one of us making the decision to come home safe each and every day. We must have the courage to care for not only ourselves but for each other as it is only by working together that we will improve our record. We must continue to learn from past incidents and do everything in our power to remove the risks to ensure that they do not happen again. In an industry like ours, there are many risks, and working together and eliminating risks is the way to succeed.

## COLLABORATION

As a responsible company, we make it a point to collaborate with our various stakeholders. Whether we are working with our employees, unions, governments, communities, universities, or our contractors, respect, and transparency are fundamental for us.

We want to communicate with our stakeholders regularly to understand their realities and explain ours. To do so, we hold formal and informal meetings throughout the year. We also circulate information in various publications and take part in important events in the Labrador City, Sept-Iles, and Montreal communities. We believe that these initiatives allow us to establish and maintain sustainable relationships.

Our employees are what make us a successful company. In 2018 we had collective agreement negotiations with three union locals. These negotiations required a significant amount of work and attention during the first half of the year. We are pleased to have entered into an agreement that benefits all parties. We now have a solid foundation to build upon and can focus on further developing the company and reaching our goals.

In 2018, we also continued our reconciliation work with the five Indigenous communities near our facilities. We recognize that there is more work to be done to improve our relationship with some of these communities and are continuing to work in this space.

## DEVELOPMENT

Our 2019 strategy is aligned with Rio Tinto's five priorities of safety, people, cash, partnership, and growth. These priorities guide our thoughts, choices, and communication and are always at the core of IOC's business decisions.

The opening of the Moss Pit, our new open pit, is just one example of how we are investing in our future. It brings many advantages for IOC, its employees, and the communities of Labrador West and Sept-Iles. By extending the life of the mine, reducing operating costs, increasing the production of superior-quality iron ore concentrate and pellets, and offering continued employment opportunities, we are positively contributing to economic development in these regions.

We are proud of what we achieved in 2018. I invite you to read our sustainable development report to learn more about the work we accomplished last year. Our employees played a key role in our success, and I remain confident about the future of our company.

**Be safe,**

**Clayton Walker**
President and CEO

# OUR SUSTAINABLE DEVELOPMENT VISION

Our approach to sustainable development is guided by Rio Tinto's global code of conduct, The Way We Work, which addresses corporate social responsibility and sustainable development. Its principles define how we approach the economic, social and environmental challenges connected to our operations and help us maintain our commitment to sustainable development.

To ensure that we respect this commitment, we integrate sustainable development into our business plans and decision-making processes.

By maintaining trusting relationships with our various stakeholders and encouraging more active collaboration with the communities in which we operate, we will sustain long-term business success.

# OUR VALUES

1 **SAFETY**

2 **RESPECT**

3 **INTEGRITY**

4 **TEAMWORK**

5 **EXCELLENCE**

# OUR TEAM.

# HUMAN RESOURCES

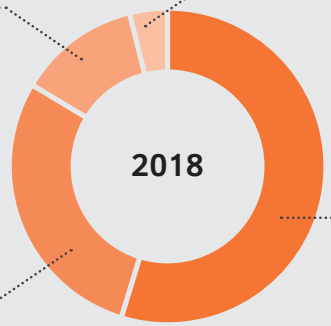
**Our employees are what make us succesful. With 4th generation employees, we are proud to be able to count on committed people who are vested in meeting the challenges of our industry.**

## NUMBER OF EMPLOYEES

| Labrador City | Sept-Iles | Montréal |
|---|---|---|
| **1 374** hourly employees | **373** hourly employees | **18** staff employees |
| **437** staff employees | **192** staff employees | |

## WHERE OUR EMPLOYEES COME FROM

Origins of new employees in 2018




**12,4 %** from other Canadian provinces

**3,8 %** from outside of Canada

**54,8 %** from Newfoundland and Labrador

**29 %** from Quebec

**Among our new employees from Newfoundland and Labrador, 83.3% are from Labrador West. Among our new employees from Quebec, 66.7% are from the Sept-Iles region.**

## % OF POSITIONS HELD BY WOMEN

**19,0** % total

**11,7** % Sept-Iles

**21,3** % Labrador City

## WAGES AND BENEFITS

IOC offers a full range of wage conditions and benefits, including a pension plan, a health plan, and short- and long-term incentive programs.

- **Labour negotiations, work stoppage and 5 year agreement reached**
  Labour negotiations between IOC and union locals 5795 and 6731 in Labrador City and 9344 in Sept-Iles took place between January and March. As no agreement was reached, the Labrador City locals went on strike on March 27, 2018.

  In Sept-Iles, though negotiations with local 9344 continued, production slowed as a result of the shutdown in Labrador City. This led the IOC team in Sept-Iles to lay off employees from two unions.

  After many discussions, five year collective agreements intended to benefit all parties were finally signed on May 28 and 29, 2018.

- **Summer student emplyment program**
  In summer 2018, IOC were pleased to welcome 89 students into our Labrador City and Sept-Iles teams. Students joined IOC employees in various areas of operation, from driving trucks to working in the plants. The students were easily recognizable thanks to their green hard hats, which made it possible for experienced employees to welcome them and coach them on how to work safely.

**Woman of honour**
Madam Heather Bruce-Veitch

# HIGHLIGHT IN 2018

**Heather Bruce-Veitch, Director, Communications and External Relations, received the Women in Mining Canada Trailblazer Award in recognition of her efforts to encourage the participation of women in the mining industry, particularly through mentorship.**

# TRAINING

## 2018 TRAINING HOURS

**74 007,25**
training hours, total

**19 334,15**
training hours, Sept-Iles

**54 166,6**
training hours, Labrador City

**506,5**
training hours, other

### SUCCESS HISTORY

In January 2018, Cégep de Sept-Iles and IOC/QNS&L launched a new railway training program for train engineers. In addition to donating a locomotive simulator and relocating locomotive simulators to the school, the two organizations combined their expertise to create a new, comprehensive training program. This project is an example of a win-win partnership that will help train and develop our employees, as well as grow our future workforce. It received a global Ground Breakers award from Rio Tinto.

**Employees receiving the Ground Breakers Award with IOC management and our partners at Cégep de Sept-Iles.**

# SAFETY, HEALTH AND HYGIENE

Workplace safety is one of IOC's top priorities. We aim to ensure that each person who works at IOC returns home safe at the end of every shift, every day. It is key that everyone starts and ends each workday protecting, promoting and enhancing their own safety and that of their colleagues. We have a number of workplace safety initiatives, including:

1. **Leadership in the field**
2. **Training on safety performance skills management**
3. **Contractor forums**

## HEALTH AND SAFETY INCIDENT STATISTICS

| Injury data | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|
| **All injury Frequency Rate (per 200 000 hours worked)** | 0,84 | 0,91 | 0,75 | 0,62 | 0,66 | 0,74 | 0,73 | 0,91 | 0,94 |
| **Lost time injuries** | 7 | 16 | 18 | 8 | 11 | 10 | 11 | 20 | 16 |
| **Medical treatment cases** | 20 | 23 | 22 | 12 | 11 | 13 | 11 | 11 | 15 |
| **FIrst Aid Injuries** | 382 | 448 | 687 | 521 | 631 | 552 | 401 | 363 | 302 |

## EMERGENCY SERVICES AND SECURITY

The Sept-Iles and Labrador City Emergency Services and Security teams are equipped to respond to emergency situations on site and , and to provide back up emergency support to the Labrador Grenfell Health and local fire department in Labrador West.

number of Sept-Iles security officers

**16**

**42**

number of Labrador City security officers

## SAFETY

- IOC leaders took part in Managing Safety Performance training which is built around “a day in the life” of a front line leader. From the beginning of the shift to the end of the shift, the workshop focuses on the predictable opportunities a front line leader has to lead and manage safety performance: beginning with running the tool box safety meeting, and finishing by “adding up the score” at the end of the day.

- In July, IOC launched a Link to Gate policy for all employees, which meant that, access to site(s) would be linked to the successful completion of five mandatory safety training courses. On day one, we were proud to report that across both sites we were 99.91% compliant. This policy will ensure our site remains safer for all our employees, contractors and visitors.

- In December the Business Resilience Team performed an exercise call Operation Shaky Ground. This exercise involved the self-reported injury of multiple persons within the PODS crusher area, specifically located adjacent to the ROM wall, a critical risk of the business. The Emergency Response Team (ERT) was deployed to conduct search and rescue operations, and the Business Resilience Team (BRT) was deployed to address the business continuity issues and support the ERT.

- Hazard Identification Training is ongoing in Labrador City. In 2018, the training was extended to all operational employees. It is four hours in length and takes place in two parts: the first is an online module that takes 30-45 minutes to complete; the second part takes place in a Hazard Park where examples of Health, Safety or Environment hazards are on display. Participants walk through a number of stations and try to identify as many hazards as they can. The training concludes in a classroom setting where the risks and controls are discussed.

## PREVENTION PROGRAM

- Installation of interlocks and emergency buttons on machines and tools (drill presses, vertical saws, machining lathes, etc.) and installation of access gates, nets and other guards on the conveyors.

- Launch of a campaign to raise awareness about exposure to noise and dust and the importance of wearing respiratory protection for hot work.

- Improvement of traffic management on work sites with the establishment of a working committee to identify the changes needed to better separate vehicles and pedestrians. New signage and barriers installed in appropriate areas.

- Implementation of the Annual Structure Inspection and Repair Program at the Sept-Iles Terminal, based on a system to prioritize deficiencies reported by Technical Services and workers. The goal of this program is to ensure the integrity of handrails, walkways and fixed ladders, which are critical safety controls.

# PROJECTS AND INITIATIVES.

**A number of projects and initiatives were launched in 2018. The most significant ones for the company are as follows:**

## MOSS PIT

On September 25, 2018, IOC proudly opened our newest pit after many years of planning for the development and operation of this new ore deposit. Named after Dr. A.E. Moss, who played a leading role during the 1950s in the initial exploration and development of IOC's mining operations, the Moss Pit will support our annual production capacity of 23 million tons per year.

**Newfoundland and Labrador Premier Dwight Ball with IOC leaders at the official opening of the Moss pit on September 25, 2018.**

It was a historic day for IOC as we celebrated alongside the NL Premier and Minister of Natural Resources, the significant benefits that the Moss Pit will deliver to our business, our employees and the communities of Labrador West and Sept-Iles for many years to come. It is the most significant investment in the Labrador Trough since 2013.

The Moss Pit will not only extend the life of IOC's operations, but will also play an important role in ramping up our production levels and increasing our competitiveness in the global market

With the new Moss Pit, we are proud to be building a strong future for IOC by extending the overall life of the mine and reducing costs through the use of existing infrastructure for exploitation, processing and transport.

## LUCE LAKE

The inflow of water from Luce Lake to the Luce Pit was causing major operational problems and presenting potential safety concerns. IOC followed Fisheries and Oceans Canada's habitat compensation procedure to dewater the lake with minimum impact on the fish habitat. A pump and a diversion channel, constructed in 2017, were used to lower the water level of the lake. It took almost a year to relocate the fish habitat. The fish were captured live using a combination of Fyke nets and were then relocated to Wabush Lake.

## RECOGNITION AND DRONE SAMPLING

The IOC Environment Team partnered with consultants to complete a successful research and development project using an Unmanned Aerial Vehicle (UAV) capable of landing and maneuvering on water to collect water samples. This new system allows the Environment Team to rapidly collect water samples without the need for a boat, or people next to open water, dangerous crossing areas and unstable ice conditions, therefore eliminating the Critical Risk – Drowning.

## SMOKEY MOUNTAIN SKI HILL

In connection with the Moss Pit project, IOC commited to replacing the ski lifts at the Smokey Mountain ski hill and redesign the trails to install them. In addition a quad chair lift and two surface lifts were built in 2018.

# ECONOMICS.

## ECONOMICS BENEFITS

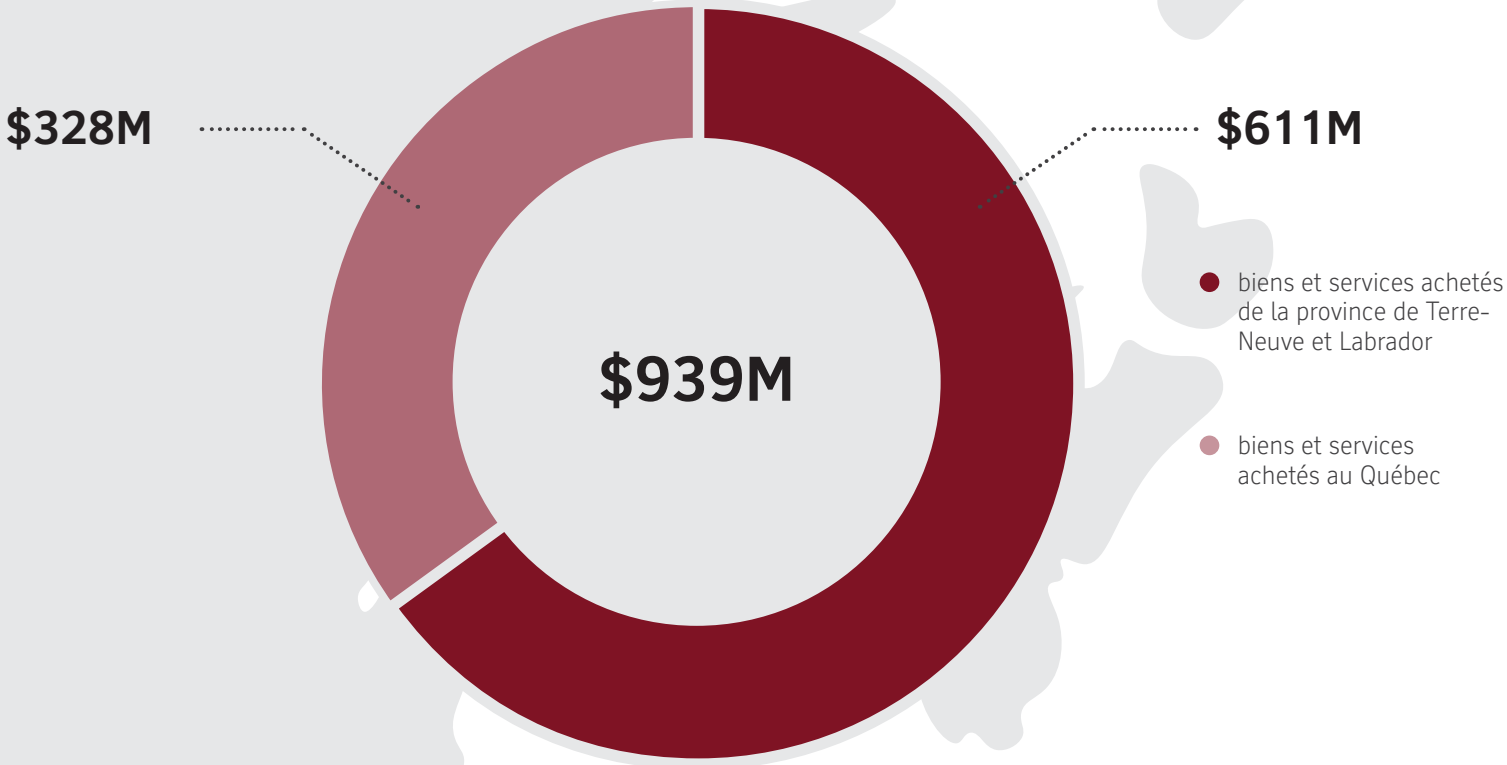
IOC is a major economic partner of Labrador City and Sept-Iles and generates significant economic benefits for these regions. In 2018, we spent a total of $939M on mining operations, of which $611M and $328M went toward purchasing goods and services from Labrador City and Sept-Iles, respectively.

**IN 2018**

total of mining operations
**$939M**

purchased goods and services from Newfoudland and Labrador
**$611M**

purchased goods and services from Québec
**$328M**



# ENVIRONMENT AND RESOURCES.

**IOC is subject to environmental laws, regulations and standards, which require close monitoring of its operations. In addition, the environment is one of IOC's top priorities, and the company demonstrates this through a number of actions.**

## WATER
management

Water management is a constant concern for us. Mine effluent management changes throughout a mining site's entire life cycle, as does the water treatment and compliance monitoring program.

### Paired Trawling - Fish Pilot Studies

In 2018, the IOC Environment Department established a pilot program to reduce fish mortality rates while conducting federally regulated scientific studies on the lake systems. Field trials commenced for 12 days in September 2018 with emphasis placed on Paired Trawling using both IOC's vessels (19.5' Silver Dolphins) and a four-person field team. The vessels were modified to accommodate deployment and retrieval of the trawling equipment and the initial focus was to develop the correct techniques for towing mid-column water. The study concluded that paired trawling was a success, and moving forward, IOC will continue to use these methods to have more of a positive impact on the ecosystem.

### Cowboy Creek Stream Rehabilitation

The Cowboy Creek fish offsetting project involved remediation activities and improving habitat productive capacity of a stream, Cowboy Creek, which was extensively burned by a forest fire in 2013. Activities included planting tree seedlings, seeding areas lacking ground cover, installing over hang structures along stream banks, installing boulder clusters in the stream channel, and adding spawning gravel. Reconstruction of the stream has been finalized and has commenced its 2nd year of regulatory monitoring under the Fisheries Authorization.

## AIR
management

The release of particulate into the atmosphere is one of the main impacts of mining operations on air quality. To minimize its particulate emissions, IOC has implemented procedures and programs for reduction at source, treatment, control and monitoring. With these initiatives, we aim to improve ambient air quality and continue to meet social, legal and government compliance.

### Air Quality Improvement Plan

In 2018 IOC installed the second (of six) Wet Scrubbers on one of the Induration Machines in the Pellet Plant. New Multiclones with a modified design were installed on another Induration Machine during a rebuild. The Wet Scrubber and Multiclones will reduce particulate matter in the emissions from the plant. This phased approach will result in all machines being modified by 2021.

## TAILINGS
management

### Tailings

In 2018, IOC continued with its progressive rehabilitation program and proceeded with the re-vegetation of 22 hectares or tailings.

# WASTE
management

IOC produces many types of waste as a result of the various operations from mine to port. Each type of waste has its own disposal method. It is our responsibility to ensure that waste is segregated and disposed of in accordance with established policies and procedures. Proper waste management is not only good practice; it is also our moral and legal obligation.

### Two teams drive savings through recycling

For IOC, a business with many different functional areas, strict safety and compliance standards and complex processing facilities, recycling can help the bottom line while also benefiting the environment. One recent example from QNS&L demonstrates how recycling can benefit the environment and IOC's savings targets.

### Re-purposing QNS&L's used rail lines

With a long railway and heavy haulage loads, QNS&L uses a lot of rail. Yet, when this rail reaches its end of life on QNS&L's heavy haul railway it still has significant value in other markets, such as light haul rail lines and the scrap metal market, where it is valued for its high-quality steel.

This year alone, QNS&L and the 2018 Track Program team safely removed over 6,000 Metric Tons of rail from its 418-kilometre railway. Once removed, the rail was shipped to Sept-Iles, where the Asset Disposal team successfully ran an auction and secured a sale valued at over $2M CAD. The rail was then removed from site by the buyer and shipped directly from Port-Cartier to a client in the Middle East. The disposal of this rail demonstrates the benefits of having an established asset lifecycle plan from purchase to disposal.
By doing so, QNS&L maximizes asset value and generates cash!

### Recycling Dewatering pipes in the Mine

Each year the dewatering team replaces damaged pipes in the pit due to leaks, cracks or other faults. These sections of pipe, which are made of plastic, are usually discarded and replaced with new piping. However, recently the dewatering team took the initiative to examine thousands of feet of discarded pipe to identify the damaged areas.

It revealed that long sections were being discarded, when in fact the damage was isolated to short areas of pipe. Having seen how much useful pipe was being discarded, the team decided they could cut out the damaged areas and fuse the sections that were still functional. So far this year, the team has fused 11,000 + feet of pipe, an approximate savings of $1.7M for the mine. By taking the initiative to understand the situation and looking outside of the box for solutions, the dewatering team has demonstrated that reducing waste is good for the environment and the bottom line.

## REHABILITATION AND RESTORATION
of mining sites

**Tailings Stephen's Lake dump Rehabilitation**

**Various methods of rehabilitation were completed in the Mine. 29.0 hectares on the closure of Steven's Lake Dump consisted of broadcast spreading of mulched hay and poultry manure partnered with direct drill seeding. Included was 2.4 hectares of planting live shrub seedlings, 2500 shrubs/ hectare that consisted of Alders, Silver Berry and Russet Buffaloberry. 10 hectares were successfully completed at the Carol Causeway, using the same techniques for broadcast/drill seeding as mentioned above. 2.4 hectares of hydro seeding was completed around Luce Lake for additional soil stability to prevent erosion.**

## THE IOC ENVIRONMENT DEPARTMENT IN NUMBERS

number of internal audits
**2**

number of external audits
**2**

number of environment employees
**14**

number of permits
**58** SEPT-ILES **27** LABRADOR CITY

budget
**8,5 M$**

**Environmental certification program**

As a leader in environmental stewardship, we are proud to be a member of the Mining Association of Canada (MAC) and to meet the requirements of its **Sustainable Mining Development (TSM)** initiative.

We are also a proud participant in the **Green Marine** program, which provides a well-known framework across North America, and allows shipping companies to measure and reduce their environmental footprint based on six key aspects:

GREENHOUSE GAS EMISSIONS

DRY BULK HANDLING AND STORAGE

COMMUNITY IMPACTS

ENVIRONMENTAL LEADERSHIP

GARBAGE AND WASTE MANAGEMENT

PREVENTION OF SPILLS AND LEAKAGES

# COMMUNITIES.

**We are very aware that our operations can impact nearby communities. We wish to ensure effective communication with our various stakeholders and have put in place several forums to do so:**

## Community
Advisory Panel

## Regional
Taskforce

## Phone line,
Email

## Social
Medias

## Consultations

## DONATIONS AND SPONSORSHIPS PROGRAM

The Iron Ore Company of Canada also wants to make a difference by supporting organizations that provide vital services to the Labrador City, Sept-Iles and Montréal communities.

# In 2018, we invested over **500 000 $** in some fifty organizations

We have an internal muti departmental  committee that evaluates all the requests received. Beyond financial support, we are committed to building real partnerships with the various organizations with which we connect.

Furthermore, we value our employees' contributions to their communities and have created programs to encourage volunteering, including Dollars for Doers and Small Gift, Big Lift. IOC is dedicated to providing employees who want to get involved in their communities with the support they need, and it gives us pride to highlight the range of volunteer work they do, from serving on boards of directors and coaching sports teams to promoting culture.

**IOC's donations and sponsorships program has five key areas. In 2018, we continued our community contributions:**

1. **Health and Wellness**
2. **Safety and Environment**
3. **Education**
4. **Innovation and technology**
5. **Inclusion and diversity**

### Health and Wellness

- United Way
- Canadian Cancer Society's Relay for Life
- Réseau du sport étudiant du Québec (RSEQ)
- Ministerial Association – Emergency Assistance Program and Food Bank

### Safety and Environment

- Conseil régional en environnement de la Côte-Nord (CRECN)
- Ressource de réinsertion Le Phare
- Institut Nordique de Recherche en Environnement et en Santé au Travail (INREST)
- Mothers Against Drunk Driving (MADD/RNC) - Snowmobile for trail patrols
- Hope Haven Womens' Shelter – Lock and door Project
- Regional Trail Phase 1 - Town of Labrador City
- Menihek Water Quality Monitoring Agreement

**IOC employees volunteering at the Labrador West Ministerial Association's food bank as part of the «Christmas Hamper Appeal» to prepare Christmas baskets for the less fortunate.**

**Employees of the Rehabilitation Center Le Phare, with the general manager of the organization, Éric Aubin, and Philippe Thériault, senior coordinator, Environment, when presenting the check highlighting IOC's commitment.**

**Education**

- Scholarships (Manikoutai, Queen Elizabeth High School, Fondation IESI, UQAC, College of the North Atlantic)
- Dragons 7-Rivières
- Salon du livre Côte-Nord
- Wetlands Education Program
- Labrador West Music Festival
- Atlantic Women in Law Enforcement (AWLE)
- WinSETT-Leadership Development Program

**Innovation and technology**

- Vélobus
- Technoscience
- J.R. Smallwood Middle School Chromebook and Trolley

**Inclusion and diversity**

- Christmas food hampers for the Uashat-Mak-mani-Utenam community
- Sept-Iles food bank
- Institut Tshakapesh
- Labrador West Association for Community Living Needs Assessment
- Labrador Winter Games-Sponsor
- Encore Community Arts Association
- Labrador West Pride Week

## INDIGENOUS PEOPLES

**At IOC, we aim to build sustainable, trusting relationships with Indigenous peoples in the communities near our operations. We believe that it is important to form meaningful partnerships with them.**

It was an excellent opportunity to learn more about the communities who share our everyday reality. In addition our teams travelled to the communites where our indigenous groups live to meet and discuss opportunities for partnerships. We also awarded scholarships to young Indigenous students to honour their commitment in their studies.

**Member of Parliament for Labrador Yvonne Jones, representative of Labrador West Indigenous Service Center Sherry Penny and Heater Bruce-Veitch.**

# IN 2018

**Representatives joined in celebration of National Indigenous Peoples Day, participating in events that recognise the culture, heritage and history of Indigenous communities.**

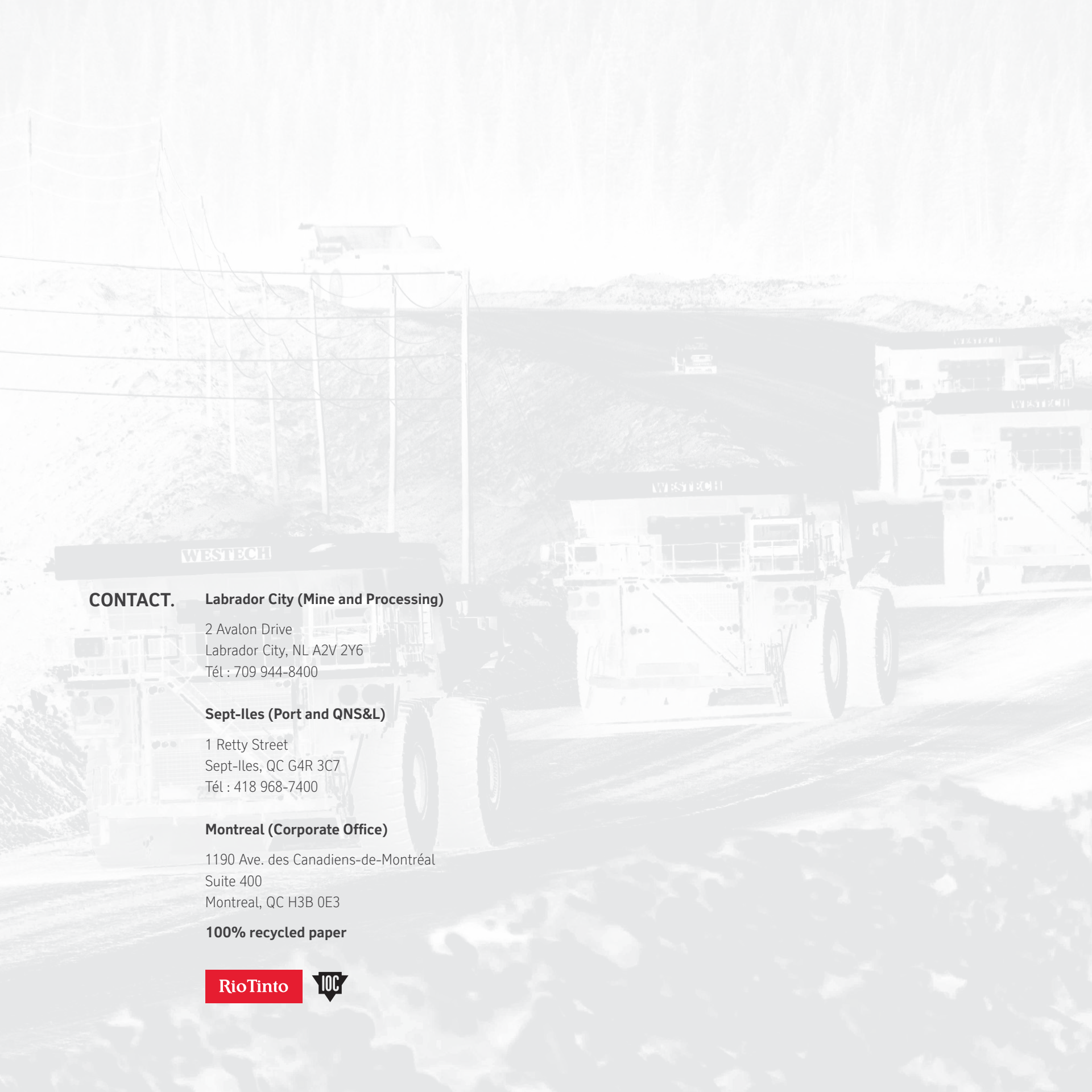
**As part of Small Gift Big Lift, a donation program we have during the holidays, Heather Bruce-Veitch and Marsha Power-Slade with representatives of the Association for New Canadians.**

# ACKNOWLEDGMENTS.

We would like to thank all of IOC's employees  for their commitment, determination and enthusiasm in the face of the everyday challenges of our work, in addition to their compliance with health and safety standards. It is your expertise that has positioned us to remain a leader in our industry.

We would also like to thank our many stakeholders , our contractors, citizens and town councils of Labrador City and Sept-Iles; the federal and provincial governments; and Indigenous communities. Without your collaboration, we would not have been able to achieve the success we enjoy today.

**Thank you!**

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