

IRON ORE COMPANY

IOCC

RioTinto



SUSTAINABLE DEVELOPMENT REPORT

2019

Message from the President and CEO



In 2019, our company had some great achievements. This Sustainable Development Report highlights the business practices that we have put in place to respect our employees and their health and safety, the environment, and the communities near our operations. We continue to learn from the opportunities and challenges of 2019, as we work toward our goal of becoming the world's leading producer of high-grade pellets and concentrate.

We are proud of this year's report. It shows our commitment to measuring our progress using the three pillars of sustainable development: environment, social and economic.

Engagement

Collaboration with the company's various internal and external stakeholders is key to our success. We are grateful for their contributions, as our employees and community partners took part in a number of initiatives in the past year :

- ▶ Organisation of a number of employee-focused activities, including discussion meetings with leaders, fun family days showcasing the company, recognition events, and more ;
- ▶ Signing of two five-year collective agreements with members of the United Transportation Union and the Canadian Merchant Service Guild ;
- ▶ Successful rollout of mandatory Indigenous cultural awareness training for staff employees with a plan to extend it to all hourly employees in 2020 ;
- ▶ Several successful customer visits that highlighted the value of the quality and consistency of our products ;
- ▶ Community investments totalling \$500,000 to support essential services in the Labrador City and Sept-Îles communities where IOC has its operations ;
- ▶ Advancement of a number of growth projects, including Remote Operations, Autonomous Drill System and Mill 11 Demonstration Plant, and the signing of an MOU with NL Hydro to secure additional power and commission SC3.

Health and safety

Our first priority is the health and safety of our employees and contractors. 2019 presented some health and safety challenges that have caused us to stop and reflect on what needs to change in our approach, including the spring railway accident, which was a difficult reminder of the risks associated with our industry. We are still learning from this unfortunate event and have taken measures to ensure that an incident like it never happens again.

Incidents like this do not leave us unscathed, as they affect what is most dear to us : our people. We launched Courage to Care to transform our safety culture and encourage our employees to participate in coming up with concrete ways to make our operations safer. This is one of IOC's greatest challenges and is at the forefront of our minds every day, as we continue working to ensure the health and safety of all our workers remains our collective priority.



Priorities for 2020

Market conditions were volatile in 2019 and are predicted to remain unstable in the short term. At IOC, this means we must continue to focus on what we can control. Our priorities throughout 2020 will remain centred around three main drivers: people, processes and assets. We will invest in our people and continue to transform our safety culture, focus on reducing complexities to deliver results, and work to balance asset integrity and the need for modernization.

IOC's future is looking bright, and we are confident that our great adaptability will help us withstand every challenge that comes our way.

Be safe,

Clayton Walker

Contents



06

company

Who we are
Our vision of sustainable development
Our values
Innovation and growth



12

team

Human resources
Training
Safety, health and hygiene



20

projects & initiatives

Autonomous drilling system (ADS)
Performance of the PODS
Remote controlled equipment in ore storage



24

economics

Economic breakdown



26

environment & resources

- Water management
- Air management
- Tailings management
- Waste management
- Rehabilitation and restoration of mining sites
- Biodiversity
- Performance data



40

communities

- Projects
- Donations and sponsorships
- Indigenous peoples

company

company

company



Who we are

- ▶ A mine in Labrador City with five operational pits and significant deposits for the supply of high-grade iron ore products;
- ▶ A processing centre with a concentrator and a pellet plant, allowing us to transform our ore into high grade iron ore products;
- ▶ A wholly owned 418-kilometre railway, the Quebec North Shore and Labrador Railway (QNS&L), which links our Labrador operations to our port facility in Sept-Îles;
- ▶ A port facility in Sept-Îles from where our products are shipped to customers around the world.

Annual nominal production capacity

23 Mt

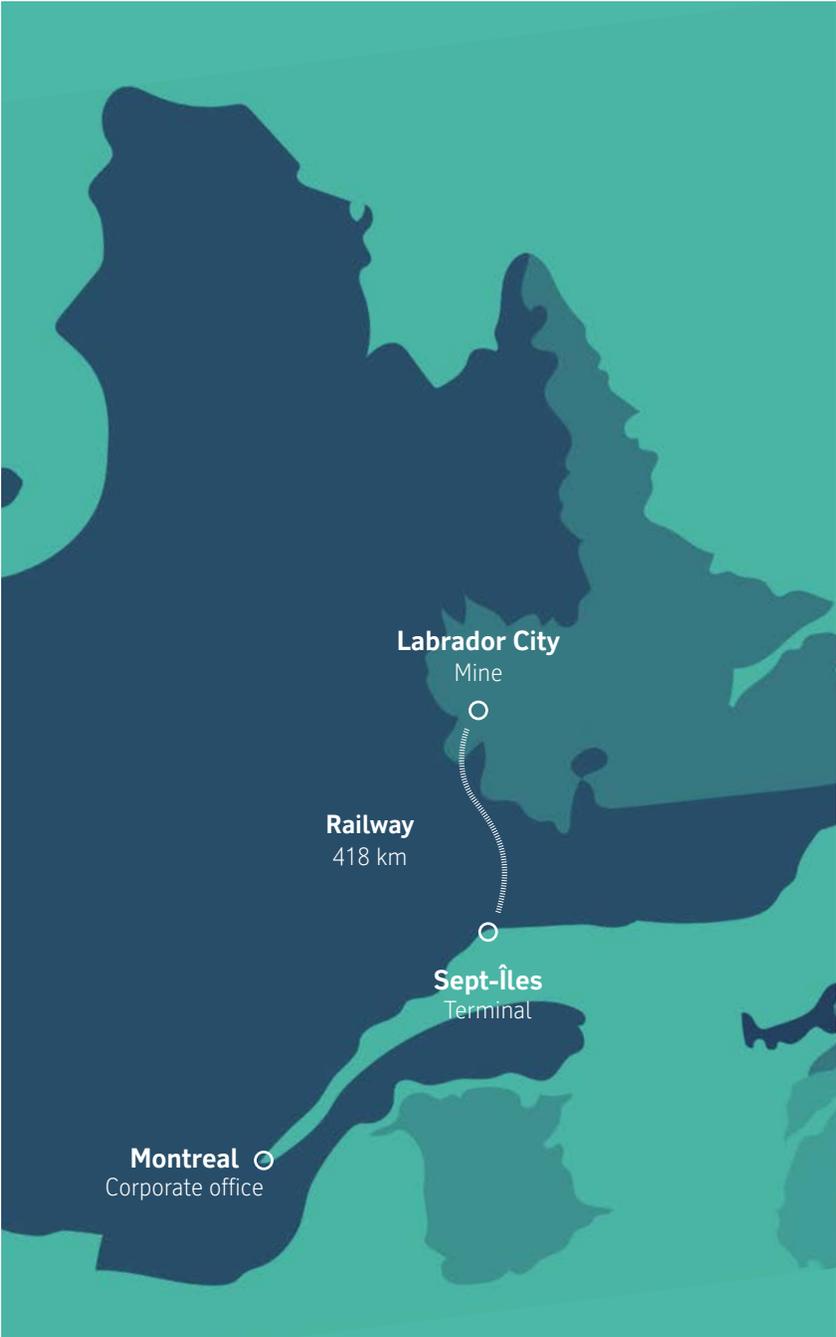
OF HIGHGRADE IRON ORE



including 12.5 Mt

CAN BE PELLETISED TO SUPERIOR-QUALITY PELLETS

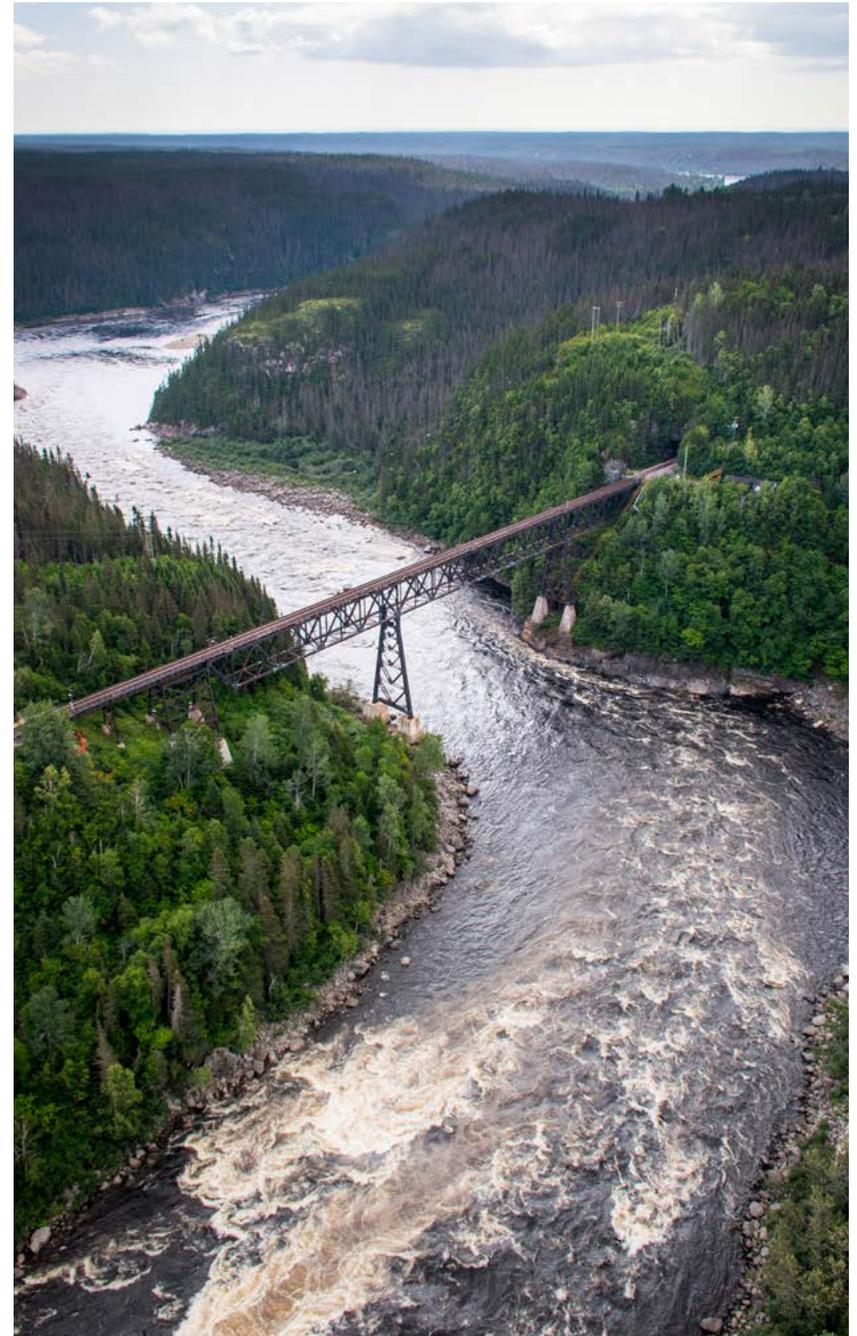
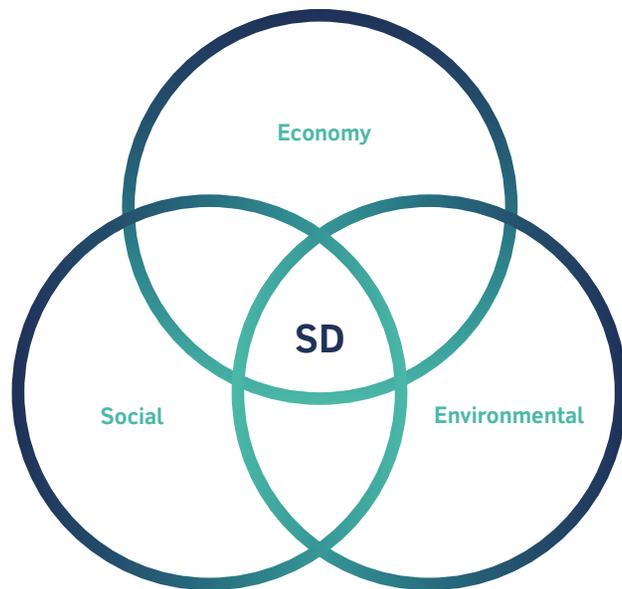




Our vision of sustainable development

Sustainable development is about acting responsibly and managing risks to protect the environment and the communities in which we operate for future generations. It secures our partnership to operate and frames a future that is economically viable, socially beneficial and environmentally sound.

Our people and partnerships continue to play an essential role in driving these outcomes. Feedback from our stakeholders is also important, as it helps us improve our social, environmental and economic performance.





Our values

At IOC, we are committed to becoming the premier high grade pellet and concentrate producer in the world. To achieve this goal, the way we do our work every day at IOC is just as important as the work that we deliver. Our commitment to health, safety, environment and communities (HSEC) is fundamental to how we do business.

Our success depends on the trust we have with each other and with all of our partners, including host communities, governments, business partners, suppliers and customers. We build this trust and set ourselves apart from our competitors through our actions, every day. Our HSEC commitments provide a clear framework for how we should conduct our business, as well as clear boundaries for which we hold ourselves and each other accountable and which help us make the right choices.

Whether as employees, consultants, contractors or suppliers, our commitment to HSEC is guided by our five values :



Security



Respect



Integrity



Teamwork



Excellence

Innovation

IOC's fully integrated business is supported by two operations centres in Labrador City and Sept-Îles. They allow us to ensure that our mine, processing facilities, and port and rail system work together efficiently to achieve maximum productivity.

The rail network is the link between the two sides of our business. All of our rail traffic is managed in real time using state-of-the-art technology and the latest computing, railway communications and signalling protocol technologies.

The mining industry is continuing to grow and evolve, so effective use of our assets is critical for us to remain competitive, reach our full potential and lay a solid foundation for our future.

In 2019, IOC made the decision to move forward with operating the concentrator and pellet plant remotely the next step in our journey toward ensuring a strong future for our business and our communities.

Our team continually innovates to improve safety and production. For example, a group of employees pioneered a drill bit changer that can easily lift, handle and move the tools required during a drill bit change-out, keeping people out of the line of fire

Growth

We have a high-quality iron ore reserve and long mine life. In 2018, we opened a new pit, the Moss pit, at our existing mine site in Labrador. This development will extend the life of our IOC operation, reduce operating costs and sustain production of our quality grade iron concentrates and pellets.

Within the broader iron ore market, our high-grade, low impurity products have seen an increase in demand from steel producers.



team
team
team

Human resources

IOC employees are central to the company's success. We are proud to be able to count on a team of over **2,500 employees** who effectively carry out our operations.



Number of employees

▶ Labrador City

HOURLY EMPLOYEES

1,412

STAFF EMPLOYEES

495

▶ Montréal

STAFF EMPLOYEES

19

▶ Sept-Îles

HOURLY EMPLOYEES

398

STAFF EMPLOYEES

221



Where our employees come from

▶ New employees in 2019

NEWFOUNDLAND AND LABRADOR

48.3%

QUEBEC

33.6%

OTHERS PROVINCES

15.1%

OUTSIDE OF CANADA

3.0%

Of the employees from Newfoundland and Labrador, 75.2% are from Labrador West. Of the new employees from Quebec, 62.1% are from the Sept-Îles region.



% of positions held by woman

▶ Total: 20.4%

LABRADOR CITY

23%

SEPT-ÎLES

12.5%



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.

Summer Student Employment Program

In summer 2019, IOC welcomed 118 students into the Labrador City and Sept-Îles teams. The students worked with IOC employees in different areas of company operations, from driving trucks to working in the plants.

Career opportunities

IOC representatives participated in various local, provincial and national events related to employment, career development and the presence of women in the mining industry.

HIGHLIGHTS

► **Five-year agreement reached with the United Transportation Union (UTU)**

The UTU collective agreement was signed in March 2019.

► **Agreement reached with the Canadian Merchant Service Guild**

The Canadian Merchant Service Guild collective agreement was signed in November 2019.

Training

Our employee training ensures the development of skills that are the key to our continued advancement towards the mining industry of the future.

2019 training hours

▶ Total: 78,295.73 training hours

LABRADOR CITY

54,791.7

SEPT-ÎLES

22,063.33

AUTRES

1,440.7

HIGHLIGHTS

▶ Indigenous culture awareness

Launch of Indigenous cultural awareness training, mandatory for all IOC staff employees

▶ Building Lean Six Sigma capability within IOC

For the past few years, IOC has been offering Yellow Belt Lean Six Sigma (LSS) training to all its employees in Labrador City and Sept-Îles, and 2019 was no exception. This training is a general introduction to the LSS method, proven and used worldwide as a business improvement strategy. It aims to enhance performance by systematically eliminating waste and reducing variations in processes. This powerful combination augments the company's capabilities by focusing on efficiency, productivity, low unit cost, high quality and safety. This in turn allows our business to remain competitive.

According to the LSS philosophy, all employees, regardless of their position or title, can contribute to business improvement. The Yellow Belt training provides participants with the necessary tools and techniques, which they can apply immediately in the course of their work. This program is designed for the entry-level user, and the training is now offered to all employees, taking into account personal development and improvement of business performance.

Number of trained employees* at IOC since training began :

▶ Yellow Belt

EMPLOYEES CERTIFIED AND ONGOING

274

▶ Green Belt

EMPLOYEES TRAINED

47

▶ Black Belt

EMPLOYEES TRAINED

15

*Some employees no longer work at IOC.



Safety, health and hygiene

Courage to care

In September, in light of incidents in recent years and in an effort to continue making improvements with regard to safety, IOC launched Courage to Care, a new approach to safety that engages frontline workers to raise risk awareness, from their point of view.

This peer-guide approach involves hourly employees through implementation in three phases. IOC hired Dupont Sustainable Solutions to ensure the rollout. As soon as Courage to Care launch meetings took place between Chief Operating Officer Chantal Lavoie, transformation leader Benoit Methot (General Manager, Port, Railway and Energy) and all our people, employees were engaged and involved in every step of the process. Members of the central teams for each department, chosen from among several volunteers, were responsible for helping their co-workers map tasks, identify and quantify risks, present priority initiatives to the management team and then implement them, and ensure the sustainability of the approach in their department. Regular communications from the transformation leader and internal coaches sporting the Courage to Care logo allowed the entire company to remain apprised of the progress.



In 2019, the first phase rolled out at the concentrator, the ore delivery system, and the port and shops in Sept-Îles made it possible to identify approximately 70 improvement initiatives, which either have been or are in the process of being completed. They include the following: waterproofing the concentrator electrical rooms; updating the ore delivery system's standard operating procedure to stop moving trains during snow removal on adjacent rail lines; removing residual materials that brought the equipment close to the power lines during work in the dredging areas near the concentrator; and purchasing an automatic packer and an adjustable delivery table at the central warehouse in Sept-Îles to eliminate ergonomic risks.



Mental health coalition

At IOC, we have a joint union and management committee that discusses health and wellness initiatives in the workplace to promote mental health and keep people safe at work.

Its mission is to promote optimal mental health through advocacy, education and support by delivering a wide variety of education materials and forums that will allow employees to seek support and understand mental health in the workplace.

The IOC team, along with the United Steelworkers Local 5795/6731, has provided a resource across IOC with support lines for people to call if they need help. The support lines can be used for assistance with issues such as gambling, smoking, mental health concerns, divorce and suicide prevention.

A new committee will start in Sept-Îles in 2020 to support and grow mental health awareness in the workplace.



RioTinto
IOC



UNITED STEELWORKERS
USW
UNITY AND STRENGTH FOR WORKERS
LOCALS 5795/6731

Did You Know We Can Help?

Below are people or places that can help!

MAKE THE CALL

EFAP program	1-866-398-9505	Hope Haven Women's Shelter	1-888-332-0000
Suicide Prevention 24 hr. hotline	1-888-737-4668	Social Services	282-5313
Mental Health	285-8251	Support Housing	280-5071
24 hr. crisis Mental Health line	1-888-737-4668	Daffodil Place (cancer patient St. John's accommodation)	1-709-753-6522
Peer to peer support group	1-855-753-2560	Air Daffodil (cancer patient airfare assistance)	1-709-757-8538
Alcoholics Anonymous	280-9856	Food bank	944-6444
Narcotics Anonymous (local meeting, rehab centres etc.)	1-877-254-3348	TEDD Traumatic event support	282-8996
Al-Anon	282-3932	Anglican Church	944-2260
Gambling Help Line	1-888-899-4357	Pentecostal Church	944-3636
Smoker's Help Line	1-800-363-5864	Roman Catholic Church	944-2289
Aftercare/Long-term Mental Health care support	285-8251	The Salvation Army	944-3200
Sexual Assault Line	1-800-726-2743	United Church	288-0340
Transgender / All Suicide Intervention Hot Line	1-877-330-6366	SOAR Retiree assistance group	Brian Corcoran 280-1340
Youth Outreach	944-2296	New Canadians to Area Support	944-7775
Parents Hotline	1-888-603-9100	Public Legal Aid	282-3425
Status of Women's Centre (men as well)	944-6562	Bankruptcy - Janes and Noseworthy	1-709-364-8148
Women Support Group	Cindy 280-1251 Frances 280-6975		





HIGHLIGHT

► 2019 FireFit Championships Participation

IOC Emergency Response Team (ERT) members from Labrador City entered the 2019 Scott FireFit Championships, a competition based on firefighting tasks commonly performed in emergency situations. The team had an amazing showing at the initial competition and qualified for the Canadian National and World Championships, which took place in Oshawa, Ontario. Several team members received medals, demonstrating that we have highly qualified ERT members ready to respond should the need arise.



projects & initiatives
projects & initiatives
projects & initiatives





Autonomous and drilling system (ADS)

In 2019, IOC successfully converted two P&H 320xpc drills with technology that allows drills to be operated autonomously from a remote location. This improves safety (by reducing exposure hours for operators in the mine) as well as unit cost and productivity.

IOC drills are all-electric and must withstand extreme winter conditions of -40° C. The technology solution implemented is one of the world's first autonomous, electric drills. The ADS solution platform (base machine control, sensors, situational awareness, drill automation, safety systems and operator consoles) is provided by Flanders.

The extensive test phase confirmed that the solution is both safe and resilient. The productivity improvement of autonomous drills is approximately +20% compared to manual drills. This uplift comes mostly from increased usage and improved penetration rates. Like many robotic machines, the ADS works particularly well on large drill patterns where the machine-driven repeatability without shift change, blast evacuations or weather-related breaks comes to full bear.

The key to the success of this pilot project was its operational readiness and change management approach. With the new technology, maintenance personnel needed training. Drillers, attendants, supervisors, planners and others needed assistance adapting to changes in processes and established practices.

The positive outcome of the pilot project will now lead to the conversion of the remaining drill fleet into ADSs.

Improved performance of the parallel ore delivery system (PODS)

The PODS was installed in 2014 with a designed capacity of 30 Mt and underperformed for the first five years due to major reliability issues. In 2015, the first full year of production, the PODS delivered 11.95 Mt, availability was 66.3%, scheduled losses (SL) were 26.7%, and unscheduled loss failures (ULF) were 26.98%.

Over the next few years, the operating team took on projects designed to target reduction of both SL and ULF events.

Successful projects included reducing ULF events due to bearing failures, pulley failures, wear material failures and belt failures. SL events and durations were reduced through improved wear materials and improved alignments for scheduled outages.

One of the biggest impact outages for the PODS is related to the concave liner change for the crusher. This event alone will take down the PODS for 96 hours minimum. The original interval for the PODS between liner changes was an average of 5 Mt. In 2019, the interval between required concave changes hit a record duration of 13.2 Mt.

In 2019, due to improved operating practices, maintenance practices and material improvements, the PODS delivered 20.4 Mt, availability increased to 79%, scheduled losses were at 8% and unscheduled loss failures were at 6%.



Remote controlled equipment in ore storage

At IOC, ore storage is the critical buffer between the ore delivery systems bringing material from the mine and the concentrator for processing. Material is dumped into the enclosed area from shuttles above and feeders draw material out from below.

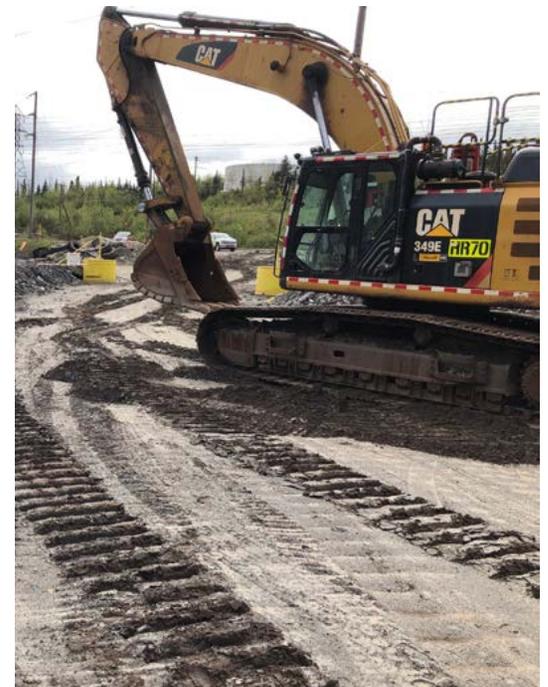
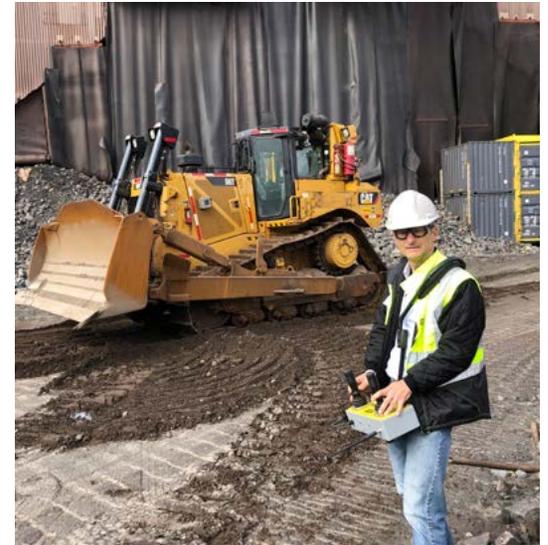
Heavy mobile equipment is required to work in this area and install isolation devices prior to performing maintenance on the feeders or to assist with material movements, especially during the winter months. When these tasks are completed with manned equipment, isolation and other production intrusive controls are required to protect operators from falling objects and exposure to hazardous substance (dust, silica, and exhaust fumes).

Remote controlled equipment was identified as an opportunity to use technology to remove operators from the line of fire and minimise exposure to safety risks in the environment and with equipment (such as slope failure or vehicle collision/rollover). Additionally, managing operator safety reduces the impact on production and the amount of downtime caused by the isolation process.

Completing this initiative required collaboration with many areas and levels within and outside our business. Involvement was required to assess and mitigate the risks, install or repair infrastructure, and engage, train and coordinate our workforce. We partnered with Hard-Line, a leader in tele-operation and remote-control technology for the mining industry, to provide the core infrastructure add-ons to complete the conversions from manual operation to remote operation.

Learnings from our initiative could be replicated in other locations or using a similar approach for applications that would improve the workflow in terms of safety or production by removing operators from the line of fire.

This process has been a learning curve for operators and the entire team involved. It is an exciting opportunity for our current workforce to build new skills and start preparing them for the jobs of the future. From all aspects, this project aligns with the vision for RT 4.0. Initiatives like this are creating a safer workplace, generating cash, engaging our work force, involving industrial partners and integrating new technology.





economics

economics

economics

Economic breakdown for 2019

In 2019, IOC contributed C\$121 million in total payments to federal, provincial and local governments, mainly through corporate income tax, municipal and social security taxes, and custom duties.

WAGES AND SALARIES

C\$439 million

PAYMENTS TO GOVERNMENTS

C\$121 million

TOTAL REVENUE

C\$2.606 million

HIGHLIGHT

► **Procurement forums**

IOC's Partner to Operate saw a focus on dialogue with our current and potential contractors in November 2019 at our operations in Labrador West and Sept-Îles. With a view to conveying the information on IOC's expectations with regard to its contractors and the potential work available in 2020, members of the procurement and operations teams participated in two forums, namely the IOC Contractor Forum in Labrador City and Rendez-vous des grands donneurs d'ordre de la Côte-Nord.



environment & resources

environment & resources

environment & resources

Water management

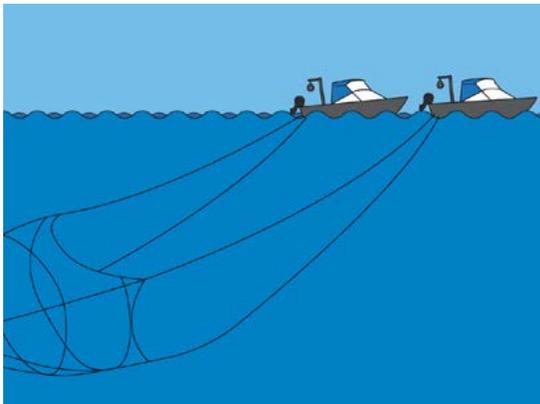
Cowboy Creek Habitation compensation

The year 2019 was the second year of monitoring the offsetting at Cowboy Creek, as required by Fisheries and Oceans Canada (DFO). There was noticeable increase in the brook trout component with substantial increase in the young-of-the-year component. This confirms successful spawning and egg incubation, which is likely related to the addition of spawning gravels during offsetting. Also, the planted vegetation cover increased. This confirms a substantial recolonisation of sites that had been burned in 2013.



Environment Effects Monitoring Cycle 6

The Environment Effects Monitoring (EEM) Cycle 6 field component was completed in summer 2019 as per the Metal and Diamond Mining Effluent Regulations. IOC's Environment Department established a fishing program to reduce fish mortality rates while conducting federally regulated scientific studies on the lake systems. All bycatch caught that were not a part of the study were successfully returned to the waters unharmed.



3D hydrodynamics modelling of Wabush lake

The Environment Department are constructing a preliminary 3D hydrodynamic model of Wabush Lake for turbidity conditions and evaluating flow and sediment transport patterns for several distinct scenarios. We have deployed a lake bottom profiler under the ice to better understand conditions during high water flow and lake turn during ice out conditions. The profiler will record water currents for approximately six months and then be retrieved from the lake bottom for data collection. This will synchronise with weekly lake water sampling for total suspended solids, turbidity and temperature.

Field data will be used to develop and calibrate a 3D hydrodynamic model of Wabush Lake, which will characterise existing flow patterns, suspended sediment transport (including travel times), and response to climatic and operational events.



Air management

Smokey Mountain story

In 2018, IOC completed construction of new ski lifts at Smokey Mountain as part of the Moss Pit Development Project. The work, however, was completed late in the year, and the snow cover did not allow for proper revegetation and erosion controls to be completed.

In 2019, IOC returned to Smokey Mountain to complete proper installation of sediment and erosion controls, which included resloping, ditching, hay matting, seeding and beaming, as appropriate.



Replacement of bentonite unloading equipment at dock number 1

The facilities for unloading ships transporting bentonite were causing issues due to fugitive dust emissions generated during operations. These dust emissions created certain operational constraints, generated raw material losses, ran the risk of not being compliant with regulations and caused complaints from the community.

In 2019, the three hoppers and the existing conveyors were replaced by modern equipment with better sealing properties and dust collection systems. The main transfer point of conveyor 5C was also modified. Improvements were made to the dock floor deck to assist with material recovery and help keep the area clean. Commissioning of the new equipment and enhancement of the existing facilities will limit dust emissions and material losses, thereby reducing risks for the company.



Tailings management

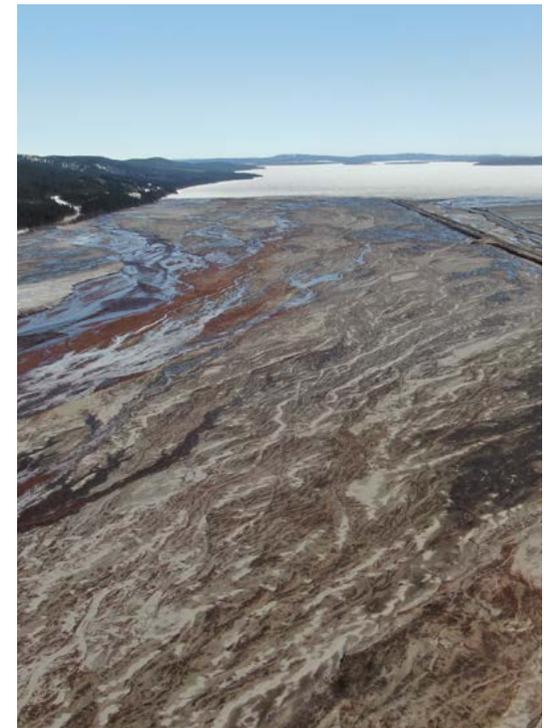
Tailings rehabilitation in Labrador City

Approximately 21.5 ha of progressive rehabilitation and refertilisation work was completed in 2019. To promote greater succession, 15 ha of the rehabilitated tailings were refertilised. The slopes of the tailings pumphouse holding pond were re-fertilised using a hydroseed mixture containing higher volumes of organic matter, native seeds, fertiliser and mulch to promote and protect bank stability of the already existing vegetation, covering approximately 1 ha. Hydroseeding methods were used as well to complete 5 ha of the Western Control Dyke located on the tailings near the end of the pipe discharge.



Central control dyke extension and maintenance

IOC maintains a number of structures on its tailings to ensure that discharge occurs within the authorised tailings impoundment area. In 2019, IOC performed repairs on the Central Control Dyke and added a 128-m extension. This will help confine the tailings and maintain our license to operate. In addition, IOC completed improvements to the flocculant system, making it easier to maintain and operate it. The flocculant system adds a product to the tailings before it is discharged, which makes it settle much faster within the tailings impoundment area. This protects the lakes downstream of our operations.



Waste management

Awareness campaign in partnership with Centre de réinsertion Le Phare

After IOC representatives first visited Le Phare sorting centre in May 2019, the need for awareness concerning the role of both the centre and its employees was clear. An awareness campaign was held for IOC employees at the Sept-Îles site and then published in the community newspaper. More specifically, the campaign focused on the importance of carefully sorting recyclable materials by featuring the people who receive them each day. This allowed IOC employees and the public to better understand how the sorting centre operates and to realise how poor recycling management can impact Le Phare employees.

The media initiative “Sort first! Don’t recycle just anything. There are people behind this bin,” highlighted the social reality of the organisation’s employees. Moreover, during an awareness visit to the site in summer 2019, in partnership with Éco-Patrouille of the Sept-Rivières regional country municipality, an employee from Centre de réinsertion Le Phare had the opportunity to speak with IOC employees on the ground, offer a few tips on waste management and learn more about the large company. This resulted in some valuable discussions and was rewarding for both parties. IOC is a major partner of the Port-Cartier organisation.



Rehabilitation and restoration of mining sites

Mine gas bar

IOC’s gas bar which was used to refuel light vehicles in the mine was outdated and therefore did not meet today’s regulations. In 2019, IOC constructed a new gas bar with a new system for tracking fuel usage and a concrete pad to catch any minor spills or drips. The location of the gas bar has also changed, which allows the mine to change the traffic going into the mine and mine maintenance facility.



Biodiversity

Biodiversity conservation strategy

The biodiversity conservation strategy (BCS) outlines a plan for implementing a comprehensive, quantitative and logic-based approach to biodiversity at IOC's operations in Labrador City, along the QNS&L railway to Sept-Îles, and at the port of Sept-Îles. The BCS provides the foundation for the persistence of ecosystems and ecosystem services, including components such as rare species and habitats, species at risk (SAR), connectivity, and genetic diversity, as well as services such as recreation, wild harvesting, water security, and natural resource extraction.

In 2019, IOC underwent a site wide bank swallow survey to identify locations and help avoid future industrial disturbance to this species at risk.



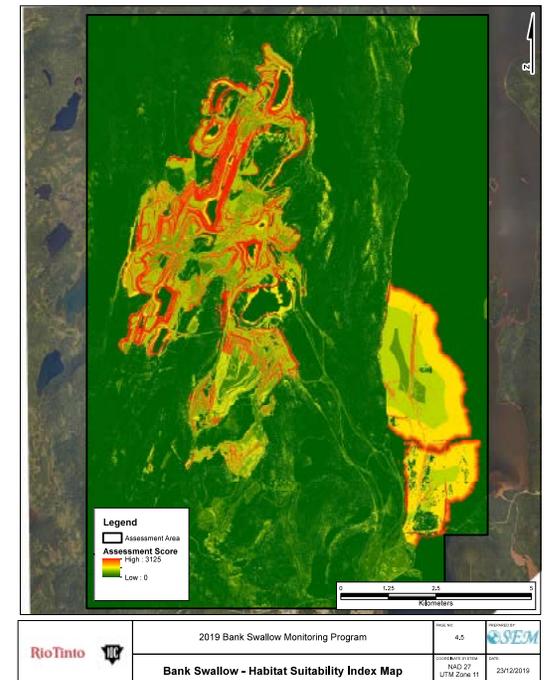
Bank swallows

Bank swallows are listed as threatened by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and in the Species at Risk Act. They are also protected federally by the Migratory Birds Convention Act.

IOC intends to implement a proactive and adaptive strategy for the bank swallow to minimise the possibility of nest destruction on IOC property.

Sikumiut Environmental Management Ltd. conducted a mapping exercise in a geographic information system and developed a habitat suitability index (HSI) map specific to IOC in Labrador City, Newfoundland. Developing the HSI required a comprehensive search of the literature to compile information from other studies in the province, studies from other jurisdictions and from peer-reviewed literature and determine the most important habitat variables for the bank swallow at IOC.

Areas of elevated potential for bank swallows at IOC coincided with steep rock or sediment faces, such as the walls of the pits, sheer roadside cuts, riverbanks and steep banks on the tailings. It is recommended that these areas be searched for nests in the future.



Sound beaver management and culvert protection

When beavers are present and establish their habitat, they can block culverts, interfering with the flow of water and putting rail traffic at risk. When this occurs, a team must be dispatched to the site to dismantle the beaver dam, free up the culvert and manage the harmful beaver to prevent breakdowns and the risk of railway accidents.

A number of devices and strategies can be incorporated into our work practices when installing culverts. Two preventive solutions were implemented in 2019 at miles 21.46 and 28.96 of the Northernland branch of the QNS&L railway. The goal was not to eliminate the beaver, but to prevent it from blocking the culverts.

These actions make it possible to reduce railway safety risks, lower the cost of unblocking the culverts and managing the harmful beaver as well as the costs of repairing the railway right-of-way, as well as maintain biodiversity and the beaver's presence near our facilities.



Performance data 2019

Table 1: Performance data

ENVIRONMENTAL STEWARDSHIP	
Energy use MWh	5 168 056
Absolute greenhouse gas emissions (Scope 1 and 2) tonnes of CO ₂ e	1 216 700
Emission intensity tonne of CO ₂ e / tonne of total saleable product	0,0674
Land rehabilitated ha	21,5
SOCIAL WELL-BEING	
All injury frequency rate (per 200,000 hours worked)	0,71
Lost time injuries	16
Medical treatment cases	10
New cases of occupational illness	1
Number of employees exposed to an 8-hour noise dose above 85 dB(A)	809
Community advisory panel or similar community meetings	8
ECONOMIC PROSPERITY	
Number of employees	2 545
Community investments	500 000 \$
Municipal, provincial and federal taxes	264 M\$
Total ore sales	2 466 M\$
Sales including QNS&L Railway	2 606 M\$
Salaries and benefits	439 M\$



Environmental certification program

Towards Sustainable Mining

Towards Sustainable Mining (TSM) is a program developed by the Mining Association of Canada (MAC) to improve the industry's social and environmental performance.

As a member of MAC, IOC adheres to its guiding principles and is committed to the implementation of extensive management processes in the MAC's TSM performance areas.

Chart 2 : Towards Sustainable Mining Green IOC 2019 ✓

ENERGY AND GREENHOUSE GAS MANAGEMENT	
Management System	B
Reporting System	AA
Performance Targets	B
TAILINGS MANAGEMENT	
Tailings management policy and commitment	A
Tailings management system	A
Assigned accountability and responsibility	A
Annual tailings management review	A
Operation, maintenance and surveillance manual	A
ABORIGINAL AND COMMUNITY OUTREACH	
Community of interest (COI) identification	AAA
Effective COI engagement and dialogue	AAA
COI response mechanism	AAA
Reporting	AAA
SAFETY & HEALTH	
Policy, Commitment & Accountability	AAA
Planning, Implementation & Operation	A
Training, Behavior & Culture	AAA
Monitoring & Reporting	B
Performance	AA

Chart 2 : Towards Sustainable Mining IOC 2019 ✓

BIODIVERSITY	
Corporate Biodiversity Conservation Policy, Accountability & Communications	AAA
Facility-Level Biodiversity Conservation Planning & Implementation	B
Biodiversity Conservation Reporting	A
WATER STEWARDSHIP	
Water Governance	A
Operational Water Management	B
Watershed Scale Planning	AA
Water Reporting & Performance	A

- ✓ Self-assessed.
- ☑ Externally verified.
- AAA Excellence and leadership.
- AA Integration into management decisions and business functions.
- A Systems/processes are developed and implemented.
- B Procedures exist but are not fully consistent or documented;
- C No systems in place; activities tend to be reactive; procedures may exist but they are not integrated into policies and management systems.

Table 3: Crisis management IOC 2019 ✓

Preparedness	Yes
Review	Yes
Training	Yes

- ✓ Auto-evaluation
- ☑ Self-assessed

Green Marine

The Green Marine is a voluntary commitment by marine industry companies to improve their environmental performance in tangible and measurable ways, above and beyond regulatory requirements. Continuous improvement is one of the Green Marine's fundamental principles. The program focuses on a variety of environmental issues, broken down into six categories.



Environmental leadership



Greenhouse gas emissions



Garbage and waste management



Prevention of spills and leakages



Community impacts



Dry bulk handling and storage

Each category has five performance levels (scores), with five being the highest :





Summary table of 2018-2019 results

Environmental issues	2018 Results External audit	2019 Results* Self-assessment
Greenhouse gases	3	3
Leak and spill prevention	4	5
Dry bulk handling and storage	5	5
Harmonisation of uses	5	5
Environmental leadership	5	5
Waste management	3	3

*Every two years, an external auditor conducts a performance audit to validate the accuracy of the self-assessment results.



communities
communities
communities

Projects

Management of red roads – action plan in Sept-Îles

For the past several years, due to third-party operations at IOC's facilities, an issue regarding the cleanliness of the roads at the facilities in Sept-Îles and on the property's nearby roads has arisen. Since the material being transported by these third parties contains more fine particulates than IOC's ore, it adheres more to vehicles, leaving visible traces on the paved roads. To adapt to this new reality and keep the roadways and vehicles clean, a working group of staff and unionised employees was formed in early 2019 to share ideas and find concrete solutions.

These workshops made it possible to implement effective corrective measures to manage the issue, here are a few great examples : operational procedures limiting traffic in certain activity zones, the addition of vehicle cleaning sites, increased awareness among employees and contractors, and the awarding of a service contract for the daily cleaning of roads with the help of an adapted truck.



Menihek Nordic Ski Club

Last year, IOC renewed an annual water quality monitoring agreement with the Menihek Nordic Ski Club. Because the stream running over the falls and through the cross country ski trails is downstream of Moss Pit, there is a potential for it to be impacted with suspended solids. IOC has many controls in place to ensure that this does not happen; however, routine monitoring is required to make sure that these controls are working properly. Members of the Menihek Nordic Ski Club use their trails to access Angel Falls and monitor the water for clarity on behalf of IOC. In return, IOC provides an annual donation to the club.



Intimate partner violence training

Employees from both Labrador City and Sept Îles, along with other community group members in Labrador West, participated in the intimate partner violence (IPV) training during Victims and Survivors of Crime Week 2019. The Royal Newfoundland Constabulary (RNC) Intimate Partner Violence Unit provided training in the Labrador West region on how to identify and investigate IPV cases, as well as cultural sensitivity training to effectively provide support for local Indigenous communities.



IOC virtual reality tour

In June 2019, IOC was very proud to launch its virtual reality tour (VRT). At IOC, safety is our top priority. By using virtual technology, we want to offer an immersive window into our operations from a controlled and safe environment. From now on, school groups, local residents, family members visiting the region and others will be able to better understand the value chain from mine to port. The VRT kiosk is located at the Gateway Labrador, one of IOC's valued community partners. The general public can choose to take the tour by using the VR goggles or the iPad. The location of the VRT kiosk for Sept-Îles will be announced in 2020.



2019 Pride Week

As part of our commitment to inclusion and diversity, IOC employees and community partners painted several picnic tables in rainbow colours at the Labrador City site and in the community and participated in the 2019 Pride Parade. During Pride Week, rainbow flags were raised at the Labrador City and Sept-Îles sites.



Donations and sponsorships

List of partner organisations in Labrador City and Sept-Îles

In 2019, **500 000\$** were invested in Labrador City, Sept-Îles and Montréal communities.

- ▶ Air Cadet League of Canada (NL)
- ▶ ALS Society of Canada
- ▶ Association de ringuette de Sept-Îles
- ▶ Association du hockey mineur de Sept-Îles
- ▶ Association for New Canadians
- ▶ Association paritaire pour la santé et sécurité secteur minier
- ▶ Association protection Rivière Moisie
- ▶ Canadian Association For Community Living Cain's Quest Inc.
- ▶ Canadian Institute of Mining
- ▶ Carrefour Jeunesse emploi Duplessis
- ▶ Centraide Duplessis
- ▶ Centre femmes aux 4 vents
- ▶ Centre éducatif l'ENVOL
- ▶ Club Optimiste
- ▶ Club Taekwando Sept-Îles
- ▶ CPE Ritourn'âles Sept-Îles
- ▶ Community Coalition for Mental Health & Wellness Community
- ▶ Food Sharing Association
- ▶ Comptoir alimentaire de Sept-Îles
- ▶ Conseil régional de l'environnement de la Côte-Nord
- ▶ Ducks Unlimited Labrador West Chapter
- ▶ École de ballet de Sept-Îles
- ▶ Élyme des sables
- ▶ Encore Community Arts Association
- ▶ Ensemble folklorique Tam ti delam
- ▶ Envol, maison de la famille
- ▶ Festival des hivernants
- ▶ Filantes du Nord
- ▶ Fondation régionale Hôpital de Sept-Îles
- ▶ Fondation Mira
- ▶ Francophone Association
- ▶ Gallixtrême
- ▶ Gateway Labrador
- ▶ Grand défi Pierre Lavoie
- ▶ Greffe toi à nous
- ▶ Groupe Scout de Sept-Îles
- ▶ Hockey Côte-Nord – volet féminin
- ▶ Indoor Play Labrador
- ▶ Jeux autochtones interbandes 2019
- ▶ J. R. Smallwood Middle School
- ▶ Kids Eat Smart



- ▶ Labrador West Chamber of Commerce
- ▶ Labrador West Employment Corp
- ▶ Labrador West Music Festival
- ▶ Labrador West Provincial Youth Ball Hockey
- ▶ Labrador West Winter Carnival
- ▶ Ressource de réinsertion Le Phare
- ▶ Memorial University Faculty of Engineering
- ▶ Memorial University Women in Science & Engineering Undergraduate Society (WISEUS)
- ▶ Menihek High School
- ▶ Menihek Nordic Ski Club
- ▶ Mining Industry (NL)
- ▶ Ministerial Association
- ▶ NL U19 Boys Ball hockey
- ▶ NunatuKavut Community Council
- ▶ Ordre Loyal des Mooses
- ▶ Patrouille canadienne de ski
- ▶ Queen Elizabeth High School



- ▶ Relais pour la vie
- ▶ Réseau du sport étudiant du Québec
- ▶ Salon du livre de la Côte-Nord
- ▶ Snowbirds Gymnastics
- ▶ Société canadienne de la sclérose en plaques - Côte-Nord
- ▶ Special Olympics Labrador West Big Landers Station Gallix
- ▶ Tamarack Golf Club
- ▶ Tournoi Anishenui
- ▶ Tournoi Orange Alouette
- ▶ Toys for Joys
- ▶ Université du Québec à Chicoutimi
- ▶ Vieux-Quai en fête
- ▶ Women in Science, Engineering, Trades and Technology (WinSETT)
- ▶ Women in Resource Development Corporation (WRDC)
- ▶ Vieux-Poste de Noël



HIGHLIGHTS

Clean-up blitz with the Côte-Nord Regional Environmental Council

In fall 2019, in collaboration with the Côte-Nord Regional Environmental Council, IOC took part in a clean-up blitz related to the campaign against illegal dumpsites. A team of IOC volunteers got together to clean up a site near Daigle Lake in the region and picked up various types of waste.



Wetlands Education Program in Labrador City

The partnership with JRS Middle School, which has been run by the Environment Department since 2005, is a great example of IOC working with our communities to protect and restore the environment where we live and work. The IOC program is designed to correspond with the Grade 4 “Healthy Habitats” Science Curriculum. The two-week long program demonstrates and teaches local children about ecosystems, and what creates a healthy habitat, as well as focuses on living and non-living organisms. The program is built on the belief that educating our youth is a powerful investment for the protection and sustainability of our environment.



2019 Aboriginal Interband Games

IOC is pleased to have sponsored the 2019 Aboriginal Interband Games in partnership with Rio Tinto. Many members of the management team were at the opening and closing ceremonies. The event was a success for both the members of the organising committee and the athletes from different Aboriginal communities, who made lasting memories.



Labrador Winter Games

IOC was a gold sponsor of the Labrador Winter Games held in Goose Bay and sponsored the uniforms for Team Labrador City and Team Wabush. Every three years, the Labrador Winter Games, which are nicknamed the “Olympics of the North” and the “Friendship Games,” are hosted by the community of Happy Valley-Goose Bay. With approximately 500 athletes, 600 volunteers and many more spectators, the Labrador Winter Games are one of the biggest events in all of Labrador. The Labrador Winter Games bring together people from all regions of Labrador, gathering in the spirit of sportsmanship and respect, competing for community pride, promoting the health benefits of active living and celebrating the rich, diverse culture of Labrador. A unique tool for the ice carving competition was also designed and fabricated by a team of employees in Central Services as an in-kind donation.



Centraide

The connection between Centraide Duplessis and IOC employees at the Sept-Îles site is stronger than ever, as the amount donated in 2019 reflects. Over \$100,000 was donated to the organisation during its funding campaign. Employees gave generously, and IOC matched the donation to support its workers' commitment. The mission of Centraide Duplessis is to help strengthen the community and improve the quality of life of people in vulnerable situations by focusing on mutual assistance, commitment and concerted action.



Labrador West Ministerial Association

The Labrador West Ministerial Association was a recipient of a \$25,000 donation from IOC. The association runs the local community food bank and offers an emergency assistance program, which funds individuals who need medical travel assistance and emergency shelter assistance, as well as assistance with travel for bereavement reasons or other crises that come about. The organisation also partners with other groups in town to assist with education around mental illness and suicide prevention, provides other necessary training that is beneficial for the overall health of the people in town, and invests in programs to help with children and youth. The organisation offers assistance to anyone in need. This is only possible because of the donations it receives in support of this meaningful community outreach program. Last year, it gave out over 200 Christmas hampers to local families in need. Many of our own IOC employees helped put the hampers together.



Indigenous peoples

At IOC, we are committed to sustainability, diversity and supporting Indigenous peoples with training, education, employment and business opportunities. The year 2019 was an exciting one! IOC launched our Indigenous Relations Approach, which is part of our focus in our Rio Tinto Partner to Operate plan. The Indigenous Relations Approach will continue to strengthen partnerships with the five Indigenous groups that claim and/or assert Indigenous rights in the regions where we live and operate, namely Labrador and Quebec.

An important part of this initiative is the implementation of the IOC Indigenous Cultural Awareness training. All staff employees completed the training in the first phase in 2019, and all employees will have completed the training by the end of 2020 in the second phase.

In addition, IOC representatives participated in and sponsored numerous Indigenous events. A few key highlights from the year included the National Indigenous Peoples Day celebrations, various procurement forums with Indigenous business development partners, the 2019 Indigenous Interband Games, which brought together athletes from across Quebec, sponsorship of the Wapikoni mobile film studio to combat isolation and suicide among young people, and the presentation made to students at the Sheshatshiu Innu School career fair, where students were able to experience life at IOC through our virtual tour.



Acknowledgments

The success of a business depends entirely on the engagement of its people. And so, the Iron Ore Company of Canada would like to thank all our employees, who demonstrate their know-how and uphold health, safety and environment standards each and every day. You truly make a difference in achieving our goals and allow us to improve year after year.

We also wish to thank all our stakeholders, our contractors, the citizens and municipal councils of Labrador City and Sept-Îles, the federal and provincial governments, and the Indigenous peoples. Your cooperation means we can aspire to become a leader in our industry.

Thank you!

Tell us what you think

We are committed to operating our business in a sustainable way to secure our future and the future of the communities where we work and live. Feedback from stakeholders is a key part of improving our social, environmental and economic performance, as well as our sustainable development reporting.

Please feel free to email us at IOCFeedback@ironore.ca to let us know how you think we're doing and help us identify areas where we can improve.

RioTinto

