**About us**

**CANADIAN NATURAL RESOURCES LIMITED (CANADIAN NATURAL)** is a senior independent oil and natural gas exploration, development and production company based in Calgary, Alberta, Canada. Our strong, diversified asset base is comprised of a balanced portfolio of heavy, light and synthetic crude oil and natural gas.

North America Exploration and Production (NA E&P)
- Light crude oil
- Thermal in situ heavy crude oil
- Heavy crude oil
- Natural gas

North Sea
- Light crude oil
- Natural gas

Offshore Africa
- Light crude oil
- Natural gas

Canadian Natural operates in Canada, the United Kingdom and Offshore Africa. Being a responsible and sustainable energy producer means that we take every opportunity to work with the communities where we operate. Our activities create value by providing employment, business development opportunities and essential resources for public services, including health, safety, education and training.

**2014 at a glance**

**Economic Contributions**
- Contributions to governments:
  - $2.4 billion royalties
  - $1.2 billion corporate taxes
  - $269 million property taxes
  - $161 million surface & mineral land leases
- Research and development: $450 million invested
- Goods and services from suppliers: over $11.8 billion spent globally

**Employment creation in Canada: 83,200 person-years**
Employment created by our NA E&P and Horizon operations and through our capital investment program, broken down as follows in person-years:
- Direct employment = 21,700
- Indirect employment (suppliers) = 42,900
- Induced employment (economy at large) = 18,600
(*) A ‘person-year’ of employment refers to the equivalent of one full-time job for one year.

**Safety and Asset Integrity**
- Reduced Total Recordable Injury Frequency (TRIF) by 50% at Horizon and 15% company-wide from 2013
- Improved Horizon reliability through focused Process Safety Management approach

**Environment**
- Conserved 16.5 million tonnes of carbon dioxide in the last five years, the equivalent of removing 696,000 cars from the road
- Over 90% water recycle rates in our thermal operations
- Invested in carbon capture and sequestration
- Reclaimed 790 hectares of land

**Community**
- Community investment: $10.6 million
- Aboriginal business development: $375 million
- Employee training and skills development: $24 million
- Our 7,600+ employees take pride in working together and doing it right to safely meet global energy needs


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We are pleased to take this opportunity to share the details of our successes from 2014 in this Stewardship Report to Stakeholders.

At Canadian Natural, we continue to build on our vision of growing a world-class company that delivers energy to Canada and the world in a safe, effective, efficient and environmentally responsible way. We are proudly Canadian and are committed to creating value for our shareholders, for our stakeholders, and the communities in which we operate.

These are challenging times for our industry. Commodity price fluctuations and Canada's high cost structure are important factors in our ability to compete globally and cannot be underestimated. Canadian Natural’s track record, combined with our goal of execution excellence and our long-life and low-decline asset base, will allow us to continue to successfully meet the challenges ahead by investing in people, processes, and innovation.

‘Working together to create value’ is a core belief embedded in our mission statement and we put that belief into action every day. We create value for stakeholders through our increased investment in people and the communities in which they live. In 2014, we invested more than $375 million in Aboriginal businesses and their development. We also invested over $10 million in education, training, employment opportunities, and local programs to support growth and generate new ideas. We believe this investment will pay dividends today and in the future. You will read more about our commitment to people throughout this report.

Canadian Natural continues to strive for new and improved ways to operate more effectively while also adhering to our core values of safety and environmental stewardship. As you will see in this report, empowering all employees to create and ensure a safe working environment has delivered positive results including driving innovative processes that make our operations more efficient. That kind of leadership leads to results. In fact, safety has improved company-wide in 2014 with a 15% reduction in the frequency of recordable incidents compared to 2013. The team at Horizon continues to deliver value through safe, steady, and reliable operations. Pit stop and expansion work at this world-class site were completed safely and ahead of schedule.

Our people continue to live our mission statement of ‘doing it right with fun and integrity’ by applying new approaches to existing projects such as our Kirby South thermal in situ operations, where we manage our operational footprint through highly efficient processes. We continue to improve our environmental performance by reducing greenhouse gas emissions through improved management of venting and flaring, improved tailings management, and carbon capture.

Our commitment to innovation is integral to our continued success. In 2014, we invested $450 million in research and development to continually improve our performance using leading edge technologies. We work hard to get better every day.

This message is a snapshot of the details to follow. As our stakeholders, we invite you to learn more about Canadian Natural’s commitment to innovation, continuous safety improvement, asset integrity, and improving our environmental performance. Ultimately, working together will ensure Canadian Natural’s continued success as a world-class operator serving Canadians for generations to come.

“To develop people to work together to create value for the Company’s shareholders by doing it right with fun and integrity.”

STEVE W. LAUT, PRESIDENT
TIM S. MCKAY, EXECUTIVE VICE-PRESIDENT & CHIEF OPERATING OFFICER
N. MURRAY EDWARDS, CHAIRMAN
Health and Safety

We take pride in delivering energy in a safe, effective, efficient, and environmentally responsible way across our operations.

Promoting a frontline driven safety culture
At Canadian Natural, safety is a core value that is reinforced from management down to each and every employee and contractor. We foster a front-line driven safety culture where everyone contributes to making the workplace safer. Personalizing safety allows individuals to make positive, respectful interventions that ensure mitigation is in place for any identified risks that might affect themselves or others in the workplace.

To ensure safe and reliable operations, we have an industry recognized Safety Management System (SMS) in place. Within the SMS, a Safety Excellence program supports continuous improvement through target setting and performance measurement. Our ultimate Safety Excellence goal is ‘No harm to people; No safety incidents’. To achieve this goal, we are committed to continuous improvement and applying innovation, leading to better processes and performance.

Our Safety and Asset Integrity departments integrate Management System frameworks for Personal Safety (safety of all workers), Asset Integrity (safety, compliance and reliability of our pipelines, pressure equipment, tanks and infrastructure) and Process Safety Management (PSM; integrity of processes for prevention and mitigation of unplanned hydrocarbon releases. Our PSM work is described in the Asset Integrity section, on page 8).

Reinforcing safety as a core value
Safety communications and access to information are of vital importance to keeping our workforce safe and well-informed. Senior Management actively participates and promotes our safety culture by leading Safety Excellence meetings for all field operations staff, supervisors, and contractors across Canadian Natural’s operations. In 2014, over 3,500 frontline workers from North America Exploration and Production (NA E&P) operations and Horizon Oil Sands (Horizon), and over 750 employees from our United Kingdom (UK) and Offshore Africa operations participated in Safety Excellence meetings.

“Our leadership’s commitment to Safety Excellence is demonstrated through our behaviours and having a visible presence in the field, where we listen to and understand the concerns and ideas of employees, contractors, and supervisors; this is a key foundation of our Safety culture.”
Pam Jones, Canadian Natural’s Vice-President of Safety and Asset Integrity

Another initiative that has proven successful in driving safety performance improvement is safety meetings with contractors and service providers that recorded the highest number of incidents. Management from our service providers and Canadian Natural work together to communicate safety expectations, enhance safety practices, and develop action plans. Through this collaborative effort, contractor and service provider safety performance has improved on a year-over-year basis, which in turn, strengthens our overall performance in reducing corporate injury frequency.

Managing emergency response
Canadian Natural has a comprehensive world-class corporate Emergency Response Plan (ERP) that enables quick, appropriate response and management of any incident that might occur at our sites. Continuous improvement of our emergency response processes reinforces our SMS programming and our commitment to the safety of our people and the public.

In 2014, we completed a thorough review of our ERP in our NA E&P operations to ensure that it meets regulatory requirements in the four provinces where we operate, as well as Canadian Natural’s emergency response needs.
50% reduction in Horizon TRIF from 2013

Improving safety through behavioural programs

By embedding safety into our daily conversations and encouraging our ‘working together’ philosophy, it helps promote a front-line driven culture that fosters safety excellence. The feedback we receive from our employees and contractors is improving our overall safety performance.

Every day, our staff engages in Worksite Safety Observations (WSOs), a frontline driven process where individuals observe and document on-the-job worksite behaviours. WSOs promote positive discussions between our frontline workers and our service providers to assist in the successful completion of the task they are performing without incidents. The goal of the WSOs is to change people’s behaviour and instill safe work habits by identifying and reinforcing positive safety actions, as well as ensuring compliance with safety regulations.

The WSO is now one of the most successful initiatives within our Safety Excellence program. It has helped improve our corporate Total Recordable Injury Frequency (TRIF) performance to a record low of 0.73 in 2014. With a downward trend in corporate TRIF, our programs are proving effective in reducing incidents at Canadian Natural during a time when total manhours worked continued to rise.

The implementation of the WSO program in our Horizon operations has helped reduce the Horizon TRIF by 50% (from 1.61 in 2013 to 0.81 in 2014). To support the program during 2014, WSO leadership and coaching sessions occurred at all our operations. These training sessions reinforced site leadership, allowing supervisors to take a more active role in engaging all workers on site. A similar behavioural-based observation process called “Doing it Right!” is being used in our Canadian Natural Resources International (CNRI) operations.

Lost Time Incidents (LTI) is another indicator we use to measure our performance. LTI is an occurrence where an injured worker is unable to return to work for a day/shift or more. Our corporate LTI increased slightly during 2014, as a result of a higher number of contractor slips and trips from trucking activities in our heavy oil operations. This is an area of focus during 2015.

Despite our best efforts to keep people safe, we are deeply saddened that one of our team members lost his life in a tragic accident at Horizon. In November 2014, the driver of a light vehicle was fatally injured when his vehicle was struck by a heavy haul truck. A thorough investigation of this accident has been completed and Canadian Natural has implemented measures to ensure that it does not happen again.
With the goal of providing safe working conditions during Horizon’s expansion and construction work, every project group established SimOps (Simultaneous Operations) agreements. SimOps are safety procedures designed to coordinate two or more potentially conflicting activities or processes occurring in the same location at the same time, such as many people working in close proximity, or live process areas immediately adjacent to facility tie-ins. SimOps outlined the safety precautions and measures required to simultaneously carry out these activities in a safe manner.

**STRIVE wellness program**

We take great care to ensure that our people have opportunities to improve their health and wellness. Our STRIVE wellness program, launched in 2012 in our North America operations and 2013 in CNRI, has increased participation each year with a corporate-wide rate of 45 per cent. STRIVE is incentivized and tied to direct benefits where financial rewards are generated and used towards healthcare and wellness expenses. To date, the program has been made available to 7,228 eligible employees in NA E&P, and 420 eligible employees at our International offices in the UK and Africa.

Strive is based on a long-term vision that starts by identifying health risks, a path for disease prevention and improved health, in addition to coaching for participants assessed as high-risk. The program includes a health screening process that provides valuable baseline data to shape the direction of our corporate wellness program. STRIVE promotes healthy lifestyle behaviours by raising awareness and promoting physical exercise, as well as involvement in community-based volunteering activities.

**Empowering our people through training and skills development**

Developing people strengthens our culture and drives us towards our goal of execution excellence. In addition to the skills and expertise that employees and contractors have when they are hired, they receive on-the-job training, as well as access to web and classroom-based learning. In 2014, Canadian Natural invested more than $24 million in education and training across all our operations.

Training offered by Canadian Natural includes required safety and competency courses, as well as continuous professional development opportunities. Competency training helps ensure all workers are competent to complete assigned tasks safely with minimal or no supervision across our different operational areas. In 2014, we offered close to 400 courses in our NA E&P field and Horizon operations, and recorded more than 76,000 employee and contractor registrations to training events.

To ensure the safety of individuals and those around them on worksites, we have systems in place that measure and track every employee’s safety competency and skills training for each operating area. In 2014, we formalized a centralized Learning Management System (LMS) for our North American operations to provide a single point of access for all training and manage records in a consistent way. The LMS implementation has started at Horizon and will continue in phases across the Company.

At our UK operations we use a Competence Management and Development System (CMDS) to track the development of our people. In 2014, we provided additional training to Competence Assessors at all offshore UK locations.

$24 million invested in employee training and skills development
# Health and Safety Highlights

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<th>PRIORITIES IN 2014</th>
<th>ACHIEVEMENTS IN 2014</th>
<th>PRIORITIES IN 2015</th>
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| **Safety Management System (SMS)** | - Implement action plans to improve awareness, knowledge, use, and implementation of the ‘frontline driven’ SMS.  
- Review SMS to ensure it remains fit for purpose and meets intentions of industry standards and regulations.  
- Conduct internal SMS audits across all divisions.  
- Use computer applications/business intelligence tools to help track safety information, interpret statistics, and identify areas where safety improvements can be made in all divisions.  
- Renewed Certificate of Recognition (COR) with a score of 95% in NA E&P and 85% at Horizon, and maintained the Partnerships in Injury Reduction (PIR) status through the Workers’ Compensation Board (WCB).  
- Developed a unified SMS for NA E&P and Horizon.  
- Completed internal SMS audits in all field areas in NA E&P with an average score of 95.5%.  
- Improved safety performance reporting through use of business intelligence software. | - Implement unified NA E&P and Horizon SMS.  
- Enhance SMS action plans for each division to ensure worker safety.  
- Maximize use of reporting software and develop action plans to address areas for improvement in all divisions.  
- Provide increased Safety, Health and Environment support to, and prepare for, the start-up of Offshore Africa drilling activities. |
| **Safety Excellence** | - Work with senior management to conduct meetings with all Production Operations and Development areas. Work to increase audience engagement.  
- Select 20 service providers with highest number of recordable incidents (including spills) – hold meetings, develop action plans, track follow-up actions and monitor safety performance.  
- Implement the regional ‘Get a Grip’ campaign to focus on prevention of slips, trips, and falls.  
- 15% reduction of corporate Total Recordable Injury Frequency (TRIF) from 2013 to 2014 – including a 50% reduction of Horizon’s TRIF.  
- Completed Safety Excellence meetings in all divisions.  
- Met with service providers to develop action plans focusing on worker safety, spills and regulatory compliance.  
- 10% decrease in slips, trips and falls, attributed to ‘Get a Grip’ campaign implemented at NA E&P and Horizon operations. | - Reduce injuries across all divisions.  
- Continue to deliver Safety Excellence Meetings with senior management in all divisions.  
- Reinforce safety awareness through industry recognized Safety Stand Down program. Conduct safety inspections and supervisor field visits in NA E&P operations.  
- Continue with Contractor Safety Excellence meetings program to improve service providers’ safety performance. |
| **Contractor Safety Management** | - Engage Production, Development, and Thermal Operations to focus on ‘Safety as a Core Value’. Includes monthly safety meetings and conducting field Worksite Safety Observations (WSOs).  
- Reinforce safety as a cornerstone of the SMS and as a starting point for WSO engagement with service providers.  
- Work with contractors on hazard awareness, control of work, procedural compliance, and safety behaviour intervention.  
- Work with Supply/Vendor Management to transition all vendors to approved status within ComplyWorks program.  
- WSO program continues to gain traction within the business units, improving safety awareness.  
- Conducted more than 18,000 WSOs at our NA E&P and Horizon operations.  
- Provided additional training for CNRI’s ‘Doing it Right’ program, focusing on quality observations and effective interventions.  
- Streamlined the process of incorporating vendors into one coordinated ComplyWorks program. | - Continue to focus on ‘Safety as a Core Value’ through monthly safety meetings and WSO inspections.  
- Develop Hazard Assessment workshop to supplement Safety Leadership and WSO Safety workshops.  
- Continue ERP training exercises with senior management.  
- Continue to conduct emergency preparedness exercises at each division. |
| **Safety Leadership** | - Strengthen engagement of managers and supervisors to demonstrate ‘Safety as a Core Value’ to increase focus on safety and reduce incidents.  
- Implement safety leadership workshops in NA E&P operations.  
- Continued ‘Leading with Safety’ workshops across all divisions.  
- Continue to strengthen leadership engagement to demonstrate ‘Safety as a Core Value’ and reduce incidents.  
- Develop quarterly Safety, Health and Environment themes to focus CNRI frontline safety awareness meetings. |  
| **Emergency Response** | - Conduct Emergency Response Plan (ERP) training exercise with senior management.  
- Complete gap analysis and implement necessary changes to ERP once Alberta Energy Regulator and Oil and Gas Commission of British Columbia (BC OGC) directives are finalized.  
- Finalize revamping of ERP at Horizon.  
- Review Emergency Response arrangements at CNRI onshore and offshore operations.  
- Completed Emergency Response Tabletop exercise with senior management.  
- Continued enhancing NA E&P as well as Horizon ERP, to build on strong ERP system.  
- Performed 86 emergency practice scenarios at NA E&P and Horizon.  
- Completed ERP training at CNRI in anticipation of our Offshore Africa drilling program.  
- Complete data analysis to evaluate effectiveness of Strive program.  
- Expand program awareness to increase employee participation. | - Continue ERP training exercises with senior management.  
- Continue to conduct emergency preparedness exercises at each division. |
| **Wellness** | - Implement Phase 3 of Strive employee health and wellness program at all North America operations and Phase 2 at CNRI.  
- Increase engagement of current participants to identify changes in health, risks and related costs from program inception to present.  
- Completed third year of Strive program in our NA E&P operations and second year at CNRI.  
- Strive program participation continues to remain higher than industry peer company programs.  
- Increased participation in online health education modules. |  

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**CANADIAN NATURAL 2014 Stewardship Report to Stakeholders**
Asset Integrity

Canadian Natural’s Asset Integrity Management System is in place to ensure the safety, compliance, and reliability of our pipelines, pressure equipment, tanks, and infrastructure.

We operate one of the largest inventories of upstream process equipment within Canada, including over 78,000 kilometres of pipeline and more than 50,000 pieces of registered pressure equipment.

Additionally, Canadian Natural Resources International (CNRI) has facilities located in the United Kingdom (UK) sector of the North Sea and Offshore Africa, including five offshore platforms and four Floating Production, Storage and Offtake (FPSO) vessels.

The focus of our Asset Integrity Management System is to drive continuous improvement to support our goal of safe, compliant and reliable operations. We proactively implement programs to help ensure worker safety and reduce environmental incidents by minimizing the exposure to risks. We complete risk-based evaluations and inspections, and implement appropriate monitoring and mitigation strategies to protect people, the environment, and the integrity of our assets.

Process Safety Management

At Canadian Natural, we focus on the integrity of our process equipment and structures across all of our operations as an integral part of ensuring safety company-wide.

We have an integrated and systematic approach to assuring the asset integrity of our operations through a Process Safety Management (PSM) framework. PSM is a management system that focuses on preventing hydrocarbon releases and it is based on major accident risk management. The release of hydrocarbons can present a potential risk to personnel, the environment and the facilities we operate.

PSM is based on the prevention and mitigation of, response and recovery from, unplanned hydrocarbon releases that could occur as a result of failures in processes, procedures, or equipment. Aligning technical, maintenance, operational, organizational and human (leadership and competency) aspects of our business under such a framework ensures we continue to focus on safe, compliant and reliable operations.

In 2014, our integrated and collaborative approach focusing on asset integrity delivered improvements in Horizon’s plant reliability. All groups involved (Operations, Maintenance and Engineering units) worked together to implement proactive prevention and mitigation measures.

Some of the initiatives implemented within the Horizon PSM framework in 2014 included:

- Training on major industry PSM incidents, as well as leadership coaching.
- Implementation of real-time monitoring to ensure equipment operation within defined parameters, allowing for immediate actions to be taken and mitigation of potential asset integrity risks.
- Streamlining of incident investigation process through better tracking and leadership involvement.

In our UK operations, our PSM efforts continue to focus on Incident Investigation, Management of Change (MOC) and the Aging and Life Extension (ALE) program. The ALE framework was developed to monitor the integrity of our offshore installations and comply with regulatory requirements of the UK Health, Safety and Environment (HSE) regulatory body.

Spill volume in our CNRI operations has been reduced by 85% compared to 2013, following a downward trend since 2010, and remaining within regulatory limits. We continue to focus our efforts in 2015 on improving our performance through key elements of our PSM system, including competency, hazard identification, incident investigation, MOC and technical audits.
Improved Horizon reliability through focused Process Safety Management approach

Pipeline Integrity
Our goal is to be proactive and prevent pipeline failures that lead to spills or leaks. Our pipeline integrity initiatives include risk assessments, ongoing enhancement and implementation of corrosion mitigation and monitoring programs, and regulatory engagement. Our activities range from inspections and internal audits, to incident investigation and analysis, repairs and training.

Pipeline Risk Assessment
Canadian Natural’s risk assessment program is a proactive initiative to ensure that our pipeline risks are understood and resources are focused appropriately. This program assigns a risk value to each pipeline based on the likelihood of failure and the potential consequences of that failure. Evaluations are ongoing as existing asset conditions change and new assets are acquired.

Our above ground pipelines at Horizon (including hydro-transport, underflows, and tailings pipelines) go through ongoing inspections to monitor their condition. In 2014, we increased the use of automated ultrasonic real-time monitoring to reduce pipeline failures and optimize costs.

At our UK operations, we conduct in-line pipeline inspections to identify opportunities to implement repairs before scheduled inspections. Ninian North Oil Export Pipeline and Espoir Gas Export Pipeline inspections confirmed no integrity issues.

Pipeline Water Crossing Management
For effective management of Canadian Natural’s pipelines that intersect water bodies, we utilize an annual detailed risk assessment methodology. Our ongoing engineering inspection program was executed on high consequence water crossings during 2014 and no immediate threats to pipeline integrity were found.

As part of our continuous improvement process, in 2014 our Pipeline Water Crossing Management program identified opportunities for improvement that were used to develop a more comprehensive pipeline water crossing inspection strategy for 2015.

In 2014, we saw an increase in total pipeline leak frequency due to sweet shallow natural gas pipeline releases in Saskatchewan, which were classified as low-risk incidents in our systems. Improvement plans are in place to reduce pipeline releases in 2015.

Kirby South thermal in situ oil sands operations

Pipeline Abandonment Program
Our Abandonment and Discontinuation program is aimed at reducing liabilities and meeting regulatory requirements associated with inactive pipelines. This program ensures pipelines are left in a safe and environmentally sound manner. In 2014, a total of 1,395 pipelines were abandoned or discontinued in Alberta, British Columbia, and Saskatchewan; 8 per cent more than 2013 (1,289 pipelines).

Pipeline Performance
Canadian Natural continues to perform better than industry average for pipeline leaks/1,000 km in Alberta, while operating over twice as much pipeline length than our nearest peer. Canadian Natural’s highest risk pipelines (primarily located in British Columbia and Alberta) exhibited the lowest frequency of leaks/1,000 km. This means that Canadian Natural’s risk-based assessments are working to ensure that we remain focused on pipelines carrying the highest potential impact.
Facilities Integrity
To manage the integrity of our pressure equipment in Canada, we have two quality assurance programs in place — a Pressure Equipment Integrity Management System (PEIMS) for our NA E&P operations, and another PEIMS for Horizon. Each of our PEIMS is registered with the regional jurisdictions in which we operate and subject to periodic audits.

One of the elements of the PEIMS is the Competency Based Training Program, which was developed to ensure all personnel and contractors involved with pressure equipment are properly trained. Each individual undergoes a rigorous competency assessment to ensure training and certification is focused on areas needed to perform their duties effectively and efficiently.

In 2014, the Alberta Boiler Safety Association (ABSA) audited our NA E&P PEIMS and renewed our certification approval for another three years based on their assessment of the program’s compliance with provincial regulation outlined within the Alberta Safety Codes Act.

Horizon expanded the PEIMS competency program during 2014 to include awareness training for users as well as individual competency assessments of our pressure equipment inspection staff. In 2015, ABSA will be auditing the Horizon PEIMS.

Pressure Equipment Assessment
In 2014, our Asset Integrity team implemented a risk-based assessment to enhance asset integrity and optimize the inspection intervals for pressure equipment in our NA E&P operations. The new methodology considers all data available and factors that validate reliability and facility integrity. This is a thorough technical review of our equipment to determine if we can extend inspection frequencies cost effectively, while maintaining safety and reliability of our facilities.

We conducted risk assessments at our facilities in Edson, Grande Prairie and Fairview (Alberta), and Fort St John (British Columbia). In 2015, pressure equipment risk assessments are planned for another 30 facilities in our NA E&P operations.

Corrosion Under Insulation Inspections
The Corrosion Under Insulation (CUI) inspections program is a key component of our Asset Integrity Management System at CNRI. When corrosion is undetected, it can lead to health, safety and environmental incidents and production losses.

As part of our Integrity Improvement Plan we have developed a CUI strategy which prioritizes the inspection and repair requirements for reducing the risk of leaks due to CUI. In 2014, this strategy was used to focus and support required inspections and repairs on our Tiffany platform as a result of corrosion issues identified during platform start-up in July. A CUI program will be conducted at Ninian Central Platform in 2015.

Structural Integrity
Structural Integrity programs work to maximize the integrity of all operational structures through careful design, safe operation and proper maintenance throughout the facilities’ lifecycle. When integrated into our Asset Integrity Management System, these programs ensure arrangements are in place to prevent significant incidents at structures that support our oil and natural gas production facilities.

Dropped Object Potential Surveys
Dropped Object Potential Surveys are conducted to inspect and ensure the asset integrity of our structures, and to avoid potential dropped objects that could occur, for example, from corroded structures. Dropped object audits make certain our work practices and procedures are industry compliant; if the audit process identifies any deviations, corrective actions are taken.

Our audit programs raise awareness within our workforce to the safety risks posed by dropped objects. By understanding potential threats, we keep safety at the forefront and are better able to have procedures and measures in place to prevent occurrences.

Dropped Object Potential Surveys completed on our Tiffany and Ninian platforms during 2014 helped us identify and remove corroded redundant items of equipment.

Mooring Chain Integrity Program
Our Floating Production, Storage and Offtake (FPSO) vessels in Offshore Africa are held on location by mooring systems. Mooring systems are critical pieces of equipment as they are the sole means of holding the vessel in place when oil and natural gas production is brought on board for processing and subsequent export.

In 2014, we completed the replacement of mooring chains on the Baobab FPSO. We also conducted integrity assessments of the Knock Allan FPSO. A similar detailed review is planned for the Banff FPSO in 2015.
Asset Integrity Highlights

### Process Safety Management (PSM)
- Continue to progress key areas of PSM at all operations.
- Continue to focus on Pre-Startup Safety Review (PSSR), Management of Change (MOC), leadership and incident investigation at Horizon.
- Remain focused on leadership, MOC, incident investigation, asset integrity system audits, and cumulative risk at CNRI.
- Establish a PSM steering committee and areas of focus at our thermal in situ operations.
- Continue to drive continuous improvement efforts.
- Develop tools to increase visibility of data trends.
- Improved Horizon operations reliability through focused PSM initiatives.
- Completed PSM audit on Ninian Central and incorporated recommendations into 2015 work plan.
- Finalized PSM Improvement Plan to enable key activities to be tracked at corporate level and shared with the UK regulator.
- Established PSM steering committee for thermal in situ operations.
- Implemented systematic, centralized tracking system that helped improve regulatory compliance, trend analysis and visibility of information.
- Continue to progress key areas of PSM at Horizon and thermal in situ operations.
- Focus on competency, hazard identification, cumulative risk, MOC, incident investigation and Technical Authority (TA) audits at CNRI.
- Continue to refine KPIs to ensure that they are driving continuous improvement within our programs.

### Pipeline Integrity
- Execution of the Pipeline Integrity Continuous Improvement plan.
- Ongoing management and continued risk reduction of our pipeline water crossings.
- Continue Pipeline Discontinuation and Abandonment liability reduction program.
- Conduct infield subsea pipeline surveys on offshore platforms.
- Canadian Natural performed better than peer company average for pipeline incidents per 1,000 kms.
- Completed planned pipeline in-line and high consequence water crossings inspections.
- Increased Pipeline Discontinuation and Abandonment by 8% compared to 2013.
- Completed subsea pipeline surveys on Ninians, Lyell, Murchison and T-Block platforms.
- Continue focus on pipeline integrity management and continuous improvement initiatives.
- Enhance Pipeline Water Crossing Management to develop an integrated system that can address all threats and mitigation plans.

### Facility Integrity
- Continuous improvement of NA E&P Pressure Equipment Integrity Management Systems (PEIMS) based upon 2013 audit findings.
- Continue to work to enhance and revise NA E&P Engineering Standards including Pipeline Standards.
- Preparation work for 2015 Horizon Turnaround.
- Integrity support for Murchison decommissioning project.
- Review of Baobab and Olowi Floating Production Storage and Offtake (FPSO) mooring systems, along with integrity system reviews of Banff FPSO.
- Continue to enhance and implement corrosion monitoring programs company-wide.
- Completed extensive revision of NA E&P Engineering Standards.
- Horizon PEIMS competency assessment program implemented for all inspection staff.
- Ongoing execution of Integrity Improvement plan in the North Sea, including Corrosion Under Insulation (CUI) inspections.
- Completed Horizon maintenance turnaround preparation work. Planned turnaround for 2015 was deferred, and a shorter shutdown for optimization work will take place instead.
- Supported ongoing Murchison decommissioning early phases.
- Completed mooring chain integrity assurance assessments of Knock Allan and Baobab FPSOs.
- Updated all corrosion control manuals, and expanded corrosion monitoring throughout Horizon’s operations.
- Conduct proactive risk assessments to optimize NA E&P Pressure Equipment inspections.
- Develop a plan for commissioning of new equipment coming on-line during 2015 at Horizon.
- Prepare for 2015 Horizon shutdown and execute risk assessment in support of the turnaround deferral.
- Complete integrity assessment of Banff FPSO mooring system in our North Sea operations.
- Deliver high-level integrity statements for each of our UK operating assets, including pressure systems, rotating equipment, pipelines and structures.
Environment

Canadian Natural’s approach to energy development focuses on continuous improvement and innovation to protect the environment across our operations.

Our Environmental Management System (EMS) provides the framework for managing each operating area and activity through performance objectives in the areas of air, land and water, as well as ensuring regulatory compliance. This proactive approach is helping us improve our performance and reduce our environmental footprint. We do this through effective implementation of comprehensive environmental practices and investments into research and development.

Reclaiming the land
Canadian Natural develops every project with a vision and plan to ensure the landscape is returned to a healthy ecosystem once our activities are complete. We work to minimize land disturbance and reduce our operational footprint through the use of existing roads and clearings, and constructing compact and highly efficient multi-well pads. Our land management practices are designed to progressively reclaim land throughout our operations while supporting the local biodiversity of each region.

To enhance our ability to reclaim large contiguous areas, our reclamation program aligns with our well and pipeline decommissioning programs. In 2014, we abandoned (cleaned, plugged and properly sealed) 545 inactive wells and submitted 337 reclamation certificates in NA E&P, representing more than 760 hectares (ha) of land.

At Horizon, 30 ha were reclaimed, for a total of 263 ha since 2009, when operations began. We also continue to enhance land and fisheries habitat at Wäpan Säkahikan, Canadian Natural’s lake developed at Horizon.

Innovative reclamation projects
In 2014, we invested in research to evaluate innovative alternatives that will accelerate reclamation timelines in native prairie ecosystems. One of our projects consisted of planting native seedling plugs in a group of well sites being reclaimed in southeast Alberta. A lightweight reusable panel system was designed to protect the seedlings from grazing wildlife while still allowing for normal grazing to continue on the rest of the site. Another example is our native plant revegetation trial using directly planted blueberry cuttings to restore well sites in Bonnyville, Alberta. The local planted species are adapting easily, preserving the biodiversity of the area.

Supporting wildlife through reclamation research
At Canadian Natural, wildlife management is considered in all phases of our projects to promote a healthy coexistence between our operations and species that live in or utilize the areas where we operate. We conduct and support research to improve land reclamation practices and minimize negative interactions with local wildlife. Independent scientists’ studies on moose, wolves and migratory birds have helped us improve mitigation strategies to manage the impact of mining and thermal operations on wildlife. They have also shown that local wildlife can successfully thrive close to our facilities.

At Horizon, an ongoing early successional wildlife monitoring program is helping us assess to what extent wildlife is returning to and re-establishing on reclaimed habitats. Results thus far have shown a return of small mammals, amphibians, songbirds, and bats. In 2014, this program was incorporated into similar initiatives being funded by industry, allowing for monitoring of wildlife on a regional scale. Results of these studies are incorporated into our wildlife management and reclamation programs to develop best practices in the years ahead.

Preventing spills
Reducing spills in our NA E&P operations is a continuous improvement priority at Canadian Natural. Measures implemented during 2014 have decreased our spill volume by 12 per cent compared to 2013. At Horizon, the volume of spills has decreased by 45 per cent from 2013. Spill volume at CNRI is at a record low level. Historical spill information is provided in our Performance Data section on page 23.
Reducing emissions
Canadian Natural has an integrated emissions reduction strategy for both greenhouse gas (GHG) emissions and air pollutants, such as sulphur dioxide (SO₂) and nitrogen oxide (NOx). We have programs in place to maintain high air quality standards through emission reduction. We also share best practices and innovations with industry partners to accelerate industry-wide environmental advancements.

Canadian Natural’s strategy for managing GHG emissions focuses on improving energy conservation and efficiency, reducing emissions intensity, supporting associated research and development, and adopting innovative technologies. To support this strategy, we have flaring, venting, fuel and natural gas conservation programs in place.

In 2014, more than 800 natural gas conservation projects were completed in our heavy crude oil operations, resulting in a total reduction of 4.4 million tonnes/year of carbon dioxide equivalent emissions (CO₂e), an improvement of 33 per cent over last year.

Our Horizon operations incorporate technological advancements that drive significant operational efficiencies to reach elevated standards of environmental performance. Technologies incorporated into Horizon’s plant include cogeneration, to meet steam and electricity demands, and sequestration of carbon dioxide (CO₂) in tailings to reduce GHG emissions. A CO₂ capture facility currently under construction is expected to be operational by 2016. See our Advancing Innovation section on page 16 of this report for more information on these technologies.

In 2014, Horizon achieved a 26 per cent decrease in SO₂ emissions and a 24 per cent reduction in total flaring volume compared to 2013. Future Horizon expansion phases will incorporate additional technology to increase efficiencies and further reduce air emissions.

Over the last 5 years Canadian Natural conserved 16.5 million tonnes of CO₂e = removing 696,000 from the road

Driving operational efficiencies at our Kirby South thermal in situ operations
Our commitment to proactive environmentally responsible operations is reflected throughout all phases of our projects and extends from planning through design, operation, and final reclamation.

At Kirby South, we are reducing our operational footprint and driving operational efficiencies by applying best practices and innovation. To reduce the total land disturbed, we designed more compact, highly efficient sites with multiple wells on a single pad, and re-utilized existing disturbed sites. Also, through the installation of evaporators for water treatment we have increased water recycling and, therefore, reduced fresh water use.

Protecting wildlife is another important aspect that we factor into our environmental practices. In 2014, Canadian Natural initiated work on woodland caribou habitat restoration at our Kirby South operations. By using a series of reforestation treatments we strive to discourage predator (wolves and bears) access on linear features (pipelines, roads, etc.) while reclaiming the landscape.
Managing Water Use
Through our water management strategies and operational design, we take steps to reduce the amount of fresh water we use, maximize the amount of water we recycle, and use non-potable brackish (saline) water instead of fresh water.

To reduce our overall water requirements, we maintain high produced water recycle rates throughout our operations. During 2014, our recycle rates remained above 90% throughout our thermal in situ, polymerflood and waterflood operations. We improved our recycle rates at Kirby South thermal in situ operations by 9 per cent, and at Primrose and Wolf Lake Oil Sands (PAW) thermal in situ operations by 2.8 per cent over the previous year. Our Nipisi light oil waterflood operations maintain a water recycle rate of more than 99 per cent.

In 2014, we also increased brackish water use at our thermal in situ operations. As a result of infrastructure investments at our Wolf Lake Central Processing facility, PAW’s use of brackish water to generate steam improved 25 per cent compared to 2013, reducing fresh water use. At Kirby South, 64 per cent of the water used to generate steam was brackish. This was a great achievement over 2013, when operations initially required more fresh water for start-up.

In our southeast Saskatchewan and Manitoba enhanced oil recovery operations, we use water from a brackish aquifer for waterflooding purposes.

At Horizon, our water use management strategies are proving effective. Fresh water use intensity was reduced by 12 per cent in 2014 compared to 2013, through increased recycling of tailings water and limiting fresh water withdrawals from the Athabasca River. Additionally, different water treatment options are being reviewed to further reduce our fresh water consumption.

In 2014, produced water management remained a key area of focus for CNRI’s offshore operations, where we are significantly below regulatory limits in the UK and Offshore Africa.

Regional Planning and Monitoring
Environmental monitoring allows us to continually measure our performance, establish targets, and work towards improvement. Monitoring of air emissions, water use and land disturbance occurs at our larger facilities. For example, site specific, real-time data collection allows us to minimize SO₂ emissions at PAW and Horizon through Continuous Emissions Monitoring Systems (CEMS).

Regionally, we also participate in monitoring programs, such as the Province of Alberta’s regional planning processes and management frameworks that set objectives to manage environmental impacts and improve air quality, water use and reclamation work.

For example, the information provided by independently operated regional programs helps us reduce operational impact on local fauna near our facilities.

Canadian Natural also supports multi-stakeholder and science-based initiatives such as the Alberta Environmental Monitoring, Evaluation and Reporting Agency (AEMERA) to monitor the environment, and specifically the oil sands region.
### PRIORITIES IN 2014

#### Environmental Management System (EMS)
- Ensure awareness and alignment of Environmental Excellence initiatives.
- Complete internal review of EMS, focus on implementation of EMS company-wide.
- At CNRI, continue to work with offshore supervisors to develop environmental competencies and ensure successful ISO 14001 recertification.

#### Regulatory
- Ongoing management of Primrose flow to surface events including reclamation and restoration work.

#### Water use
- Increase transition from fresh water use to brackish water use.

#### Reducing emissions
- Reduce our CO₂ emissions at a facility level through upgrades and new technology, in addition to funding Climate Change and Emissions Management Corporation.
- Reduce flaring and venting.

#### Abandonment and reclamation
- Pilot cost-effective alternative well and pipeline abandonment and reclamation programs to accelerate site closures.

#### Wildlife management
- Continue implementing wildlife management strategies including enhanced bird protection.

#### Research and Development
- Continue pilot projects of new technology that will improve environmental performance within key areas of land, water, and air.

#### Collaborative work
- Continue collaborating with Canada’s Oil Sands Innovation Alliance (COSIA) to accelerate the pace of environmental performance improvements in Canada’s oil sands.
- Ongoing collaborative work to finalize the biodiversity, surface water quantity and tailings management frameworks for Lower Athabasca Regional Plan in Alberta.

### ACHIEVEMENTS IN 2014

#### Environmental Management System (EMS)
- Reduced incidents through continuous improvement plan.
- Consolidated single corporate EMS for NA E&P and Horizon.
- Completed ISO 14001 recertification audit for CNRI’s EMS.
- Reviewed CNRI’s audit procedure and completed audit program.
- Completed emergency response training in Côte d’Ivoire as part of the offshore drilling campaigns.

#### Regulatory
- Effective containment of flow to surface sites at Primrose.
- Reduced number and volume of reportable spills in NA E&P and Horizon.
- 85% reduction in CNRI volume spilled compared to 2013.
- CNRI average oil-in-water levels continued to be below regulatory requirements.

#### Water use
- Increased produced water recycling rates and brackish water usage across NA E&P operations.
- 12% decrease in Horizon’s fresh water use intensity compared to 2013.

#### Reducing emissions
- Volume of natural gas conserved resulted in 4.4 MT CO₂ avoided from our NA E&P operations.
- 24% reduction in Horizon’s flaring volume from 2013 to 2014.
- Horizon’s sulphur recovery unit achieved a 99% recovery, well above regulatory requirements of 98.5%.

#### Abandonment and reclamation
- Abandoned 545 wells and submitted 337 reclamation certificates in NA E&P.
- Completed 30 hectares of progressive reclamation work at Horizon.
- Reduced operational footprint through efficient well site design.

#### Wildlife management
- Reduced wildlife interactions through effective waste management programs.
- Supported wildlife through reclamation and monitoring activities.
- Deployed additional shore and water-based bird deterrents.

#### Research and Development
- Tailings management technologies have increased Horizon water recycling rates and reduced GHG emissions.
- Advanced research to improve reclamation practices and evaluate ongoing reclamation work, including an early successional wildlife monitoring program.

#### Collaborative work
- Led 35 projects and participating in another 60 projects at COSIA. Shared with COSIA to date:
  - $12.7 million worth of reclamation research – 33 projects
  - $24.2 million worth of GHG research – 14 projects
  - $10.5 million worth of water technology research – 15 projects
  - $7.1 million worth of tailings technology research – 14 projects
- Worked with regulator and government to advance environmental management frameworks for water, biodiversity, wetlands, GHGs and tailings in Alberta.

### PRIORITIES IN 2015

#### Environmental Management System (EMS)
- Achieve continuous improvement within EMS key areas of air, water and land.
- Enhance field level performance tracking and reporting procedures.
- Implement improvements to CNRI’s EMS audit program.
- Implement the Safety of Offshore Oil and Gas Operations Directive at CNRI, as required by European Union wide safety standards.

#### Regulatory
- Reduce reportable incidents, including spills and air emissions.
- Maintain a high compliance rate in all operations.

#### Water use
- Explore opportunities for water use improvements in NA E&P operations.
- Maintain high water recycling rates in thermal in situ and Horizon operations.
- Improve fresh water use efficiency at our NA E&P and Horizon.

#### Reducing emissions
- Reduce GHG emissions through application of innovation and new technology.
- Continue construction of carbon capture facilities at Horizon.
- Continue CO₂ sequestration programs.
- Coordinate research in GHG reduction through COSIA.

#### Abandonment and reclamation
- Complete area-based abandonment programs.
- Continue decommissioning of inactive facilities.
- Implement cost-effective decommissioning and reclamation initiatives to accelerate site closure.

#### Wildlife management
- Continue to improve the use of deterrents to minimize wildlife interactions at all facilities.
- Continue to monitor and measure the effectiveness of our reclamation work for wildlife habitat restoration.

#### Research and Development
- Continue reclamation research at thermal in situ and Horizon operations.
- Undertake fisheries establishment research at Horizon compensation lake.
- Participate in caribou management research.
Advancing Innovation

We focus on advancing technology at all our operations to improve resource recovery and achieve operating efficiencies while improving our environmental performance and, ultimately, create value.

In 2014, Canadian Natural invested $450 million into R&D

Our Research and Development (R&D) investment dollars went towards a wide range of projects across our operating areas, including enhanced oil recovery, thermal in situ, mining and heavy oil operations.

Enhancing tailings management

Canadian Natural’s investment in tailings management technologies at Horizon further demonstrates our approach to R&D and how we take technologies from pilot project to commercialization.

Horizon has been adding carbon dioxide (CO$_2$) to tailings since 2009. A CO$_2$ recovery plant is currently being built, that will start capturing CO$_2$ from our operations in 2016 for use in our tailings management. The environmental benefits of this innovation include:

- reducing GHG emissions — the new plant will be capable of capturing 438,000 tonnes of CO$_2$ annually;
- increasing recycle of tailings pond water — CO$_2$ injection into tailings enhances solids settling rates;
- requiring less energy and greenhouse gases to reheat the recycled water for the bitumen extraction process — warm process water is recycled before it cools;
- decreasing fresh water usage; and
- keeping the tailings pond at half the size it would have been without this process.

We are also implementing non-segregating tailings (NST) technologies. NST are tailings that have been significantly dewatered by using thickeners and cyclones. Any water released from the NST process is combined with CO$_2$. The NST process and our ongoing pilots to reduce mature fine tailings (MFT) — mix of clay, silt and water – are enhancing the production of dry, solid tailings to ultimately reduce our environmental footprint and accelerate land reclamation.

The CO$_2$ capture plant under construction at Horizon site will also produce a total of 144 million standard cubic feet per day (MMSCFD) of hydrogen, doubling our current hydrogen capacity to address additional production. Hydrogen is used in upgrading to stabilize the synthetic crude oil and reduce impurities.

Canadian Natural is also developing a plan to further reduce MFT by decreasing the amount of fines going to the tailings pond. Fines are the clay particles (less than 44 microns) in the oil sands ore. It is expected that from 2014 to 2019, average fines will be reduced from approximately 21 to 17 per cent (or 25 million tonnes).

Bio-remediation for soil reclamation

Canadian Natural is working on a potential solution for reclamation projects, using a microorganism treatment process that employs purified bacteria capable of mineralizing petroleum hydrocarbons into carbon dioxide and water. This enhanced bio-treatment process allows for treatment of hydrocarbon affected soil without excavation (in situ) or following excavation (ex situ); often with only one application, removing the need for further soil aeration.

Bio-remediation was used at two remote locations within the Nipisi light oil waterflood field. The treated soil was piled on-site and left alone while the microbes effectively biodegrade the hydrocarbons in the soil. In 2015, the treatment piles will be sampled to determine if guideline criteria limits have been met for hydrocarbon levels. Preliminary results indicate that at least one site will likely meet criteria.

Microorganism soil remediation provides an environmental friendly solution as the soil is not taking up space in a landfill. Additionally, on site bio-treatment mitigates the safety risks associated with having numerous trucks on the road hauling materials long distances for landfill disposal. The treated soil can also be used for backfill once treated. The potential to use this treatment application across our operations builds in considerable value for Canadian Natural and the environment.
There is a steady bustle of activity on the University of Calgary's northern edge as a new engineering building is taking shape. The project is vast — a $158.3 million renovation and expansion that will change the face of engineering education in Calgary and beyond.

It's not the 18,300 gross square metres of new space that is generating excitement, but rather the possibilities this new building brings for the school as we focus on educating engineering leaders.

Schulich was already one of the top engineering schools in the country, but it was missing a unifying facility – a building to tie together our departments and centres and to showcase what engineering education and research can achieve. Moreover, we need additional space to accommodate more students, programs and research space as demand continues to grow.

At the Schulich School of Engineering, we are committed to student success, to fostering diversity and to conducting research that makes a difference. The school's renovation and expansion is going to help support school-wide efforts to achieve these goals.

For Schulich students, the new building will act as a central hub to gather and engage with one another. New collaborative spaces will offer more opportunities for working together as teams and assist learning experiences. Increased space for student clubs and teams will enhance hands-on learning as students design solar cars or build electric motorcycles. It will also help them prepare for national and international competitions such as the trivia-style challenge for petroleum engineering students known as the PetroBowl.

For our faculty members, the construction project will provide state-of-the-art laboratories to support research initiatives that will make a difference in the lives of others around the world. Labs will be clustered together based on project areas, breaking down silos so our researchers can work together to find new and innovative approaches to some of society's greatest challenges.

As the scaffolding rises, the entire Schulich School is eagerly looking to the fall of 2016, when the first phase of the renovation and expansion is set to be complete.

Canadian Natural Resources Limited has been one of our lead partners in making this project possible, providing $7 million to help the renovation and expansion take shape. We are honouring this relationship and our gratitude by naming the core engineering buildings the “Canadian Natural Resources Limited Complex”.

Canadian Natural sees the significance of this project, as we see it: what happens at the Schulich School of Engineering has a direct impact on the future of this province. Currently, 96 per cent of all Schulich graduates stay and work in Alberta. As this province grows, the need for more highly-skilled engineers to meet industry demand and drive innovation will also grow.

This renovation and expansion project will help us bring students into an environment where the programs, teachers and technologies will produce the highest caliber of graduates – individuals who can advance not only the science of engineering but also understand the needs and prospects of future generations.

At the Schulich School of Engineering, we’re building a space for future leaders, creating a heart and hub for our faculty and students, and providing collaborative labs to help researchers generate innovative solutions and research that make a difference.

Thanks to the support of the Government of Alberta, and of strong community leaders like Canadian Natural Resources Limited, the future of engineering education is taking shape all around us.
Engaging Stakeholders
Canadian Natural works with local stakeholders to build long-term relationships based on mutual respect. To this end, we aim to integrate community needs into project design and implementation by maintaining open communications with stakeholders.

We work together with the communities near our operations to identify opportunities for community investment, education and training, and business development. Examples of our stakeholder engagement efforts in 2014 are:

- **Working with First Nation Elders.**
  Built a gathering place for local Aboriginal people on the shores of Wapun Sakahikan (Horizon Lake). We also unveiled a memorial commemorating two Fort McKay First Nation Elders who had strong ties to the area and provided significant input into the design of the lake.

- **Tours of our operations.** Provided tours for students, landowners and trappers, to raise awareness and provide firsthand learning opportunities around resource development, its accomplishments and challenges.

- **Infrastructure projects.** Supported road improvements to ensure access for industry and residents near our areas of operations, such as the Rural Municipality of Britannia in Saskatchewan and in our heavy oil operations area.

Consultation
We worked closely with the more than 55 Aboriginal communities near our operations across Western Canada, to strengthen mutual understanding, enhance co-operation and build capacity for economic participation in our oil and natural gas projects. Our 2014 consultation highlights include:

- Consulted regarding more than 1,500 projects and development plans.
- Provided information and responded to questions from more than 20 Aboriginal communities regarding Kirby North Expansion and Grouse thermal in situ development projects, as well as Horizon’s environmental renewal applications.

Investing in Communities
We support initiatives that help improve the quality of life in the communities where we live and work. Working together with these communities is an important part of our commitment to responsible operations, which also promotes long-term local economic growth and prosperity.

In 2014, we provided $10.6 million in community investments including corporate sponsorships, cash donations, employee giving, in-kind donations, and funding for community-based economic development projects. We also supported significant cultural and social events in more than 40 communities where we operate. Highlights of our community investment include:

- **Health and wellness.** Supported organizations such as Stollery Children’s Hospital, Lois Hole Hospital for Women, Northern Lights Health Foundation, and Fort Chipewyan Elders Care Centre.
- **Education.** Funded computers and books across Abidjan, in Côte d’Ivoire, to make reading more accessible to the broader population, children in particular.
- **Sports and recreation.** Contributed towards many community facilities, such as the Fort St. John Pomeroy Sports Centre, AG Ross Arena in Elk Point, and the Aberdeen Football Club in the UK.
Community leadership and volunteerism at the heart of our corporate giving

Canadian Natural employees take pride in giving back to their communities. As members of the community they possess a first-hand perspective of their community needs as well as direct ties and connections to fellow community members. Through our Field Corporate Matching Donation Program, we provide direct funding to local agencies identified by our field-based employees.

In 2014, more than 35 local organizations across Alberta, British Columbia and Saskatchewan received funding through this program; among them, the Fort St. John Hospital Foundation and Big Brothers Big Sisters of Fort St. John (British Columbia), and Elizabeth School and the Dr. Margaret Savage Crisis Centre Society in Cold Lake (Alberta). The Company matched more than $200,000 raised by employees, and additional funding was contributed by local businesses.

Our CNRI employees actively support health, youth development and education, including organizations such as the Prince’s Trust, University of Aberdeen and Cancer Link Aberdeen.

Other longtime commitments to regional initiatives also illustrate our employees’ spirit of volunteerism. Our United Way campaigns across Alberta raised $2.3 million in combined employee giving and corporate matching in 2014. Also, our decade-long funding and volunteer work with Habitat for Humanity in Southern Alberta has grown through new projects in the communities of Cold Lake, Edson and Hinton, Alberta.

Making a difference in the communities where we work

As a sponsor of the Bonnyville Pontiacs, an ice hockey team in the Alberta Junior Hockey League, and their anti-bullying ‘RESPECT’ campaign, Canadian Natural contributes to a program where players engage with youth from the team’s hometown and neighboring communities to encourage fair play and respect.

KidSport Lac La Biche relies on bottle drives to fund its sports programs. With a donation from Canadian Natural, the organization was able to purchase a trailer to help with its bottle drives and improve fundraising capacity.

Investing in our employees living in Fort McMurray

Communities where we operate are also communities where we live and work. In 2007, Canadian Natural created the ‘Living Choices’ program to provide financial aid and encourage employees to reside in Fort McMurray.

To further support employees living in the area and working at Horizon site, our Company invested in the development of the Eagle Ridge affordable housing subdivision. Forty per cent of the homes constructed were for Canadian Natural employees, and today 300 employees and their families continue to reside in Eagle Ridge. In 2012, the Living Choices program was further expanded to include the fly in / fly out option, and stay in the Horizon on-site camp facilities during a worker’s shift.

Enhancing Local Business Development

At Canadian Natural, we believe that business development within the areas where we operate leads to sustainable community development. We promote local and regional business opportunities through the procurement of goods and services for our operations. We actively engage with community and business leaders to identify economic opportunities. We work with local businesses and contractors to ensure that they are pre-qualified to participate in our contracting and bidding process. In so doing, Canadian Natural and the communities where we operate benefit from oil and natural gas development.

When working with Aboriginal communities, Canadian Natural works hard to identify business and capacity-building opportunities. Canadian Natural awarded over $375 million in 2014 to Aboriginal businesses and contractors.

Over $375 million invested in Aboriginal business development

Canadian Natural Manager Surface Land and Stakeholder Relations, Adèle Thomson; Sakasteew Transportation Owner Marie Boucher; and Canadian Natural President, Steve Laut.

Sakasteew Transportation has provided our Horizon Oil Sands operation with shuttle bus service for the last decade. The company has grown from one employee and one bus to more than 60 people and a small fleet of buses and vans.
Supporting Education and Training
Our Company brings together skilled workers and innovative technologies to help meet the world’s growing energy needs. We work to achieve this through the continuous support of education and training programs in the communities where we operate, to enhance employability in industry and hire locally across all our operations.

Our business depends on a diverse workforce that is committed to ‘working together’ and ‘doing it right.’ To prepare the next generation, we offer summer/co-operative student opportunities as well as provide support for trades and apprenticeships. In 2014, we hired 264 university and college students for summer/co-operative work terms and, of those students, more than 65 received permanent employment.

Encouraging students to stay in school
Canadian Natural proactively contributes to stay in school initiatives across our operating areas. 2014 marks 10 years working with the Northeast British Columbia Stay-in-School Program, which encourages Aboriginal youth living in their communities to complete their Grade 12 education. Also, for the last three years, we have sponsored the Fort McKay Hockey Academy’s educational and athletic programs in the Wood Buffalo region. The academy teaches the students important life skills while encouraging them to stay in school.

Building Futures Scholarship
Our Building Futures Scholarship Program fosters the future of our industry by providing financial aid to students in oil and natural gas industry-related disciplines. Over 160 students received scholarships from the program in 2014, totaling $150,000.

“As a recipient of the Building Futures Scholarship, I was able to spend more time focusing on my undergraduate pursuits. Also, Canadian Natural’s co-op program gave me the exposure and training I needed to kick-start my career in the industry.” — Erin Matheson, Engineer-In-Training at Kirby South.

Trades and apprenticeships
Canadian Natural supports trades and apprenticeship programs to prepare local workers for careers in the oil and natural gas industry. Some of our long-term commitments in 2014 include:

- $7 million (over five years) to the University of Calgary’s Schulich School of Engineering for the development of a new engineering centre that will add 400 students per year.
- $500,000 commitment over five years to fund the Oilsands Power and Process Engineering Lab at Keyano College. Canadian Natural hired eight students from this program into permanent positions, and another 21 into temporary positions. Through our involvement with the college’s steering committee, we helped Keyano students find employment in the oil and natural gas industry.
- $300,000 commitment over three years to the Northeast Alberta Apprenticeship Initiative (NEAAI), a partnership between First Nations, industry, post-secondary institutions, and government to increase the number of skilled Aboriginal tradespeople in northeast Alberta.
- Partnered with Portage College to provide work practicums for Fishing Lake Métis Settlement and Elizabeth Métis Settlement students in the Environmental Land Management program.
- Supported the Women Building Futures’ Math Boot Camp in Central Alberta, which provides Aboriginal women with a solid mathematical background to enter fields such as welding, electrical, and heavy equipment operation.
- CNRI launched a new university scholarship program with the Robert Gordon University in Aberdeen. This initiative will provide three students each year with financial support, mentoring, and the opportunity to gain work experience at CNRI.

Creating employment opportunities
Education and training initiatives are one of the top priorities guiding Canadian Natural’s community investment decisions. Since 2012, we have sponsored 34 students to attend the Camp and Catering pre-employment program at Blue Quills First Nations College, including 10 students in 2014. All graduates are offered job placements with camp services providers working with the oil and natural gas, and construction sectors, as well as the Government of Alberta.

Cherisse Pruden is a member of Saddle Lake First Nation and recent 2014 graduate of the Camp Life Program at Blue Quills. She now works at Canadian Natural’s Primrose/Wolf Lake camp.

“I am very grateful that there are programs, like this one, available to help our Aboriginal people. Getting us where we want to be, to give us control in our life.”

Education and training initiatives are one of the top priorities guiding Canadian Natural’s community investment decisions.
## Community Highlights

### Engaging Stakeholders
- Continue to improve our consultation and communication strategies to meet community and stakeholder needs, as well as regulatory requirements.
- Discussed oil sands operations development with over 20 local Aboriginal groups.
- Consulted on more than 1,500 projects and proposed development plans.
- Participated in cultural events in more than 40 communities where we operate.
- Develop district plans for key operating areas to improve engagement.
- Maintain timely, accurate, and relevant communication with our stakeholders.

### Community Investment
- Work with communities near our operations to identify their priorities and opportunities for employment, education and training, community investment and business development.
- Provided $10.6 million in community investments.
- Aligned action plans with community priorities.
- Continued funding and employee involvement through our Field Corporate Matching Donation initiative.
- Reviewed community investment tracking and reporting tools.
- Invest in priority funding areas: education, health and wellness, sports, recreation and cultural programs.
- Improve community investment tracking and reporting.

### Education and Training
- Ensure education and training programs are aligned with future employment opportunities in the oil and natural gas industry.
- Enhance industry awareness through continued site tours at Horizon for post-secondary students and government trade delegations.
- Invested in education and training programs that support local employment.
- Funded stay-in-school programs across all operating areas.
- Provided tours of our oil sands operations for students.
- Continue to support significant education and training initiatives aligned with future employment opportunities in the oil and natural gas industry.

### Business Development
- Increase our community engagement activities to ensure communities are included in future growth plans.
- Awarded approximately $375 million in contracts and services to Aboriginal businesses.
- Discussed business and capacity building opportunities in our development projects with local suppliers.
- Enhance opportunities for local economic participation, including Aboriginal businesses and contractors.
### EMPLOYMENT

**DISTRIBUTION OF CANADIAN NATURAL EMPLOYEES**

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<th>2012</th>
<th>2013</th>
<th>2014</th>
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<td>3,537</td>
<td>3,875</td>
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<td>1,920</td>
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<td>420</td>
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<td>5,199</td>
<td>5,858</td>
<td>6,621</td>
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(1) UK numbers restated as calculations are now based on a 12-hour shift (versus a 24-hour shift) to be consistent with North America Exploration and Production (NA E&P) and Horizon reporting.
(2) Restated due to recalculations.

### SAFETY

**Recordable injury frequency (employees and contractors) per 200,000 hours worked**

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<th>2012</th>
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(1) Horizon TRIF numbers adjusted due to a number of incidents that were reclassified.
(2) Restated as UK calculations are now based on a 12-hour shift (versus a 24-hour shift) to be consistent with NA E&P and Horizon reporting.
(3) Restated due to recalculations.

**Fatalities – Employees**

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<th>2014</th>
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<td>International Exploration and Production</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Fatalities – Contractors**

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America Exploration and Production</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Horizon Oil Sands Mining</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>International Exploration and Production</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Regulatory inspections compliance (% satisfactory)**

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alberta</td>
<td>92.7</td>
<td>89.5</td>
<td>89.7</td>
<td>87.4</td>
</tr>
<tr>
<td>British Columbia</td>
<td>68.2</td>
<td>70.9</td>
<td>76.6</td>
<td>88.2</td>
</tr>
</tbody>
</table>

### ENVIRONMENT

**LAND**

**Well abandonment and reclamation**

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of active operated wells</td>
<td>31,093</td>
<td>31,735</td>
<td>36,092</td>
<td>42,279</td>
</tr>
<tr>
<td>Number of inactive operated wells</td>
<td>11,203</td>
<td>12,007</td>
<td>13,580</td>
<td>16,459</td>
</tr>
<tr>
<td>Number of wells abandoned</td>
<td>1,038</td>
<td>622</td>
<td>460</td>
<td>545</td>
</tr>
<tr>
<td>Number of reclamation certificates submitted</td>
<td>356</td>
<td>374</td>
<td>334</td>
<td>337</td>
</tr>
</tbody>
</table>

### WATER

**Total water withdrawal from source (m³)**

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>North America Exploration and Production</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh water</td>
<td>4,862,825</td>
<td>5,954,975</td>
<td>5,904,805</td>
<td>5,419,975</td>
</tr>
<tr>
<td>Brackish, non-potable</td>
<td>11,516,145</td>
<td>11,944,625</td>
<td>8,727,913</td>
<td>10,582,587</td>
</tr>
</tbody>
</table>

(1) Fresh water withdrawals remain well below our authorized withdrawal limits.
(2) Restated due to recalculations.
### WASTE

<table>
<thead>
<tr>
<th>Weight of waste (tonnes)</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America Exploration and Production</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazardous waste</td>
<td>291,307</td>
<td>116,337</td>
<td>76,264</td>
<td>50,258</td>
</tr>
<tr>
<td>Non-hazardous waste</td>
<td>771,487</td>
<td>1,153,075</td>
<td>713,747</td>
<td>925,169</td>
</tr>
<tr>
<td>Horizon Oil Sands Mining</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazardous waste</td>
<td>676</td>
<td>1,118</td>
<td>535</td>
<td>947</td>
</tr>
<tr>
<td>Non-hazardous waste</td>
<td>9,374</td>
<td>9,833</td>
<td>8,680</td>
<td>10,898</td>
</tr>
<tr>
<td>International Exploration and Production</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazardous waste</td>
<td>349</td>
<td>628</td>
<td>190</td>
<td>871</td>
</tr>
<tr>
<td>Non-hazardous waste</td>
<td>1,755</td>
<td>2,010</td>
<td>1,494</td>
<td>1,294</td>
</tr>
</tbody>
</table>

Hazardous waste includes tank clean out fluids and sludge, wastewater treatment and solids, filtercake, spent lubricating oil and filters and other products considered Dangerous Oilfield Waste by provincial regulations.

Non-hazardous waste includes oilfield waste such as hydrocarbon and salt impacted soils and produced sand that are not considered Dangerous Oilfield Waste and do not need to be manifested under the Canadian Environmental Protection Act.
## AIR AND GHG EMISSIONS

The company’s GHG emission estimates are prepared internally using reported production volumes and generic emission factors. Only a portion of the estimated emissions have been verified externally.

### Direct GHG emissions from fuel consumption (million tonnes CO₂e)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America Exploration and Production</td>
<td>6.58</td>
<td>7.29</td>
<td>6.82</td>
<td>7.65</td>
</tr>
<tr>
<td>Horizon Oil Sands Mining</td>
<td>1.00</td>
<td>2.06</td>
<td>2.28</td>
<td>2.27</td>
</tr>
<tr>
<td>International Exploration and Production</td>
<td>1.52¹</td>
<td>1.30¹</td>
<td>1.27</td>
<td>1.12</td>
</tr>
</tbody>
</table>

¹ Numbers re-stated; previous data represented total direct GHG emissions instead of fuel consumption only.

### Indirect GHG emissions (million tonnes CO₂e)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America Exploration and Production</td>
<td>1.67</td>
<td>1.76</td>
<td>1.70</td>
<td>2.26</td>
</tr>
<tr>
<td>Horizon Oil Sands Mining</td>
<td>0.154</td>
<td>0.064</td>
<td>0.114</td>
<td>0.239</td>
</tr>
<tr>
<td>International Exploration and Production</td>
<td>0.163</td>
<td>0.068</td>
<td>0.084</td>
<td>0.177</td>
</tr>
</tbody>
</table>

¹ Does not include GHG emissions generated from cogeneration plants (included as direct emissions).

### Direct GHG emissions (million tonnes)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America Exploration and Production</td>
<td>11.15</td>
<td>12.93</td>
<td>11.75</td>
<td>14.14</td>
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<tr>
<td>Horizon Oil Sands Mining</td>
<td>1.65</td>
<td>3.56</td>
<td>3.75²</td>
<td>3.71</td>
</tr>
<tr>
<td>International Exploration and Production</td>
<td>2.03</td>
<td>1.75</td>
<td>1.61</td>
<td>1.62</td>
</tr>
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</table>

¹ Includes total direct emissions from combustion, flaring, formation CO₂, and other venting and fugitive leaks from equipment.

### EMISSIONS INTENSITY

<table>
<thead>
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<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America Exploration and Production</td>
<td>0.061</td>
<td>0.067</td>
<td>0.061</td>
<td>0.060</td>
</tr>
<tr>
<td>Horizon Oil Sands Mining</td>
<td>0.098</td>
<td>0.103</td>
<td>0.094</td>
<td>0.083</td>
</tr>
<tr>
<td>International Exploration and Production</td>
<td>0.068</td>
<td>0.082</td>
<td>0.084</td>
<td>0.094</td>
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</tbody>
</table>

¹ Includes total direct emissions from combustion, flaring, formation CO₂, and other venting and fugitive leaks from equipment.

### FLARING AND VENTING

<table>
<thead>
<tr>
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<th>2011</th>
<th>2012</th>
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</thead>
<tbody>
<tr>
<td>North America Exploration and Production</td>
<td>95,725</td>
<td>78,912</td>
<td>131,006</td>
<td>132,917</td>
</tr>
<tr>
<td>Horizon Oil Sands Mining</td>
<td>32,127</td>
<td>46,397</td>
<td>43,152</td>
<td>32,942</td>
</tr>
<tr>
<td>International Exploration and Production</td>
<td>202,480</td>
<td>197,157</td>
<td>307,482</td>
<td>188,073</td>
</tr>
</tbody>
</table>

### Indirect GHG emissions (million tonnes CO₂e)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America Exploration and Production</td>
<td>1.62</td>
<td>1.73</td>
<td>1.17</td>
<td>1.52</td>
</tr>
<tr>
<td>Horizon Oil Sands Mining</td>
<td>0.163</td>
<td>0.068</td>
<td>0.084</td>
<td>0.177</td>
</tr>
</tbody>
</table>

¹ Includes total direct emissions from combustion, flaring, formation CO₂, and other venting and fugitive leaks from equipment.

### Direct GHG emissions from fuel consumption (million tonnes CO₂e)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America Exploration and Production</td>
<td>6.58</td>
<td>7.29</td>
<td>6.82</td>
<td>7.65</td>
</tr>
<tr>
<td>Horizon Oil Sands Mining</td>
<td>1.00</td>
<td>2.06</td>
<td>2.28</td>
<td>2.27</td>
</tr>
<tr>
<td>International Exploration and Production</td>
<td>1.52¹</td>
<td>1.30¹</td>
<td>1.27</td>
<td>1.12</td>
</tr>
</tbody>
</table>

¹ Numbers re-stated; previous data represented total direct GHG emissions instead of fuel consumption only.

### NOx emissions (tonnes)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America Exploration and Production</td>
<td>7,360</td>
<td>6,950</td>
<td>6,132</td>
<td>5,567</td>
</tr>
<tr>
<td>Horizon Oil Sands Mining</td>
<td>1,988</td>
<td>2,427</td>
<td>4,060</td>
<td>2,993</td>
</tr>
<tr>
<td>International Exploration and Production</td>
<td>386</td>
<td>247</td>
<td>263</td>
<td>260</td>
</tr>
</tbody>
</table>

¹ Restated to reflect revised data resubmitted to Government in 2014 and 2015, as a result of methodology improvements to measurement of fuel gas volumes allocation to compressors.

² Increase in emissions due to natural gas asset acquisitions.

³ Restated as a result of methodology improvements.
The Global Reporting Initiative (GRI) is a non-profit organization that provides companies and organizations with a comprehensive sustainability reporting framework that is widely used around the world. GRI disclosures not reported are not included in the index.

<table>
<thead>
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<th>GRI INDICATOR</th>
<th>DESCRIPTION</th>
<th>WHERE TO FIND IT</th>
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<tr>
<td><strong>STRATEGY AND ANALYSIS</strong></td>
<td></td>
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</tr>
<tr>
<td>1.1</td>
<td>Statement from the most senior decision-maker of the organization</td>
<td>SR / AR</td>
</tr>
<tr>
<td><strong>ORGANIZATIONAL PROFILE</strong></td>
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</tr>
<tr>
<td>2.1</td>
<td>Name of the organization</td>
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</tr>
<tr>
<td>2.2</td>
<td>Primary brands, products, and/or services</td>
<td>AR</td>
</tr>
<tr>
<td>2.3</td>
<td>Operational structure</td>
<td>AIF</td>
</tr>
<tr>
<td>2.4</td>
<td>Location of organization’s headquarters</td>
<td>AIF</td>
</tr>
<tr>
<td>2.5</td>
<td>Countries where Canadian Natural operates</td>
<td>SR</td>
</tr>
<tr>
<td>2.6</td>
<td>Nature of ownership and legal form</td>
<td>AIF</td>
</tr>
<tr>
<td>2.7</td>
<td>Markets served</td>
<td>AIF</td>
</tr>
<tr>
<td>2.8</td>
<td>Scale of the company</td>
<td>AR / AIF</td>
</tr>
<tr>
<td>2.9</td>
<td>Significant changes regarding size, structure or ownership</td>
<td>AR / AIF</td>
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<tr>
<td>2.10</td>
<td>Awards received in the reporting period</td>
<td>Website</td>
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<tr>
<td><strong>REPORT PARAMETERS</strong></td>
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<tr>
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<td>Reporting period</td>
<td>SR</td>
</tr>
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<td>3.2</td>
<td>Date of most recent previous report</td>
<td>Website</td>
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<tr>
<td>3.3</td>
<td>Reporting cycle (annual, biennial, etc.)</td>
<td>SR</td>
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<tr>
<td>3.4</td>
<td>Contact point for questions regarding this report or its contents</td>
<td>SR</td>
</tr>
<tr>
<td>3.5</td>
<td>Process for defining report content</td>
<td>Website</td>
</tr>
<tr>
<td>3.6</td>
<td>Boundary of report</td>
<td>Website</td>
</tr>
<tr>
<td>3.7</td>
<td>Limitations on the scope or boundary of the report</td>
<td>Website</td>
</tr>
<tr>
<td>3.9</td>
<td>Data measurement techniques and the bases of calculations</td>
<td>SR</td>
</tr>
<tr>
<td>3.10</td>
<td>Explanation of information re-statements</td>
<td>SR</td>
</tr>
<tr>
<td>3.11</td>
<td>Significant changes from previous reporting periods</td>
<td>SR</td>
</tr>
<tr>
<td>3.12</td>
<td>GRI content index</td>
<td>SR</td>
</tr>
<tr>
<td>3.13</td>
<td>Policy and current practice with regard to seeking external assurance for the report</td>
<td>Website</td>
</tr>
<tr>
<td><strong>GOVERNANCE, COMMITMENTS, AND ENGAGEMENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>Governance structure including major Board committees</td>
<td>MIC</td>
</tr>
<tr>
<td>4.2</td>
<td>Independence of Board chair</td>
<td>MIC</td>
</tr>
<tr>
<td>4.3</td>
<td>Independent, non-executive directors on Board</td>
<td>MIC</td>
</tr>
<tr>
<td>4.4</td>
<td>Mechanism for shareholder and employee participation</td>
<td>MIC</td>
</tr>
<tr>
<td>4.5</td>
<td>Link between Board compensation and company’s performance</td>
<td>MIC</td>
</tr>
<tr>
<td>4.6</td>
<td>Processes in place for the Board to avoid conflicts of interest</td>
<td>MIC</td>
</tr>
<tr>
<td>4.7</td>
<td>Process for determining qualifications and expertise of Board members</td>
<td>MIC</td>
</tr>
<tr>
<td>4.8</td>
<td>Mission and value statements, code of conduct and principles</td>
<td>SR / Website</td>
</tr>
<tr>
<td>4.9</td>
<td>Board procedures for sustainability management</td>
<td>MIC / Website</td>
</tr>
<tr>
<td>4.10</td>
<td>Process for evaluating Board performance</td>
<td>MIC</td>
</tr>
<tr>
<td>4.11</td>
<td>Precautionary approach or principle addressed by the organization</td>
<td>MIC / Website</td>
</tr>
<tr>
<td>4.12</td>
<td>Externally developed economic, environmental, and social principles</td>
<td>SR / Website</td>
</tr>
<tr>
<td>4.13</td>
<td>Associations memberships</td>
<td>Website</td>
</tr>
<tr>
<td>4.14</td>
<td>Stakeholder groups engaged</td>
<td>SR / Website</td>
</tr>
<tr>
<td>4.15</td>
<td>Basis for identification and selection of stakeholders with whom we engage</td>
<td>SR / Website</td>
</tr>
<tr>
<td>4.16</td>
<td>Approaches to stakeholder engagement</td>
<td>SR / Website</td>
</tr>
<tr>
<td>4.17</td>
<td>Key topics raised through stakeholder engagement and response to them</td>
<td>SR / Website</td>
</tr>
</tbody>
</table>

AIF = Annual Information Form  
AR = Annual Report  
MIC = Management Information Circular  
SR = Stewardship Report To Stakeholders  
PD = Public Data
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<th>DESCRIPTION</th>
<th>WHERE TO FIND IT</th>
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</tr>
<tr>
<td>EC1</td>
<td>Direct economic value generated (revenues)</td>
<td>AR / SR</td>
</tr>
<tr>
<td>EC2</td>
<td>Financial implications, risks, and opportunities due to climate change</td>
<td>AIF</td>
</tr>
<tr>
<td>EC3</td>
<td>Coverage of the organization’s defined benefit plan obligations</td>
<td>MIC</td>
</tr>
<tr>
<td>EC6</td>
<td>Policy and practices for spending on locally-based suppliers</td>
<td>SR / Website</td>
</tr>
<tr>
<td>EC7</td>
<td>Procedures for local hiring</td>
<td>SR / Website</td>
</tr>
<tr>
<td>EC8</td>
<td>Investments for public benefit</td>
<td>SR / Website</td>
</tr>
<tr>
<td>EC9</td>
<td>Significant indirect economic impacts</td>
<td>SR / Website</td>
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<td><strong>ENVIRONMENTAL PERFORMANCE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EN3</td>
<td>Direct energy use by primary source</td>
<td>SR</td>
</tr>
<tr>
<td>EN4</td>
<td>Indirect energy use by primary source</td>
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<td>EN5</td>
<td>Energy saved due to conservation</td>
<td>SR</td>
</tr>
<tr>
<td>EN6</td>
<td>Initiatives to provide energy-efficient or renewable energy</td>
<td>SR / Website</td>
</tr>
<tr>
<td>EN8</td>
<td>Total water withdrawal by source</td>
<td>SR</td>
</tr>
<tr>
<td>EN9</td>
<td>Water sources significantly affected by water withdrawal</td>
<td>SR / Website</td>
</tr>
<tr>
<td>EN10</td>
<td>Percentage and total volume of water recycled and reused</td>
<td>SR / Website</td>
</tr>
<tr>
<td>EN12</td>
<td>Significant impacts of activities on biodiversity in protected areas</td>
<td>SR / Website</td>
</tr>
<tr>
<td>EN13</td>
<td>Habitats protected or restored</td>
<td>SR / Website</td>
</tr>
<tr>
<td>EN14</td>
<td>Strategies for managing impacts on biodiversity</td>
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</tr>
<tr>
<td>EN16</td>
<td>Total direct GHG emissions</td>
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<tr>
<td>EN18</td>
<td>Initiatives to reduce GHG emissions and reductions achieved</td>
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<td>EN20</td>
<td>NOx, SOx, and other significant air emissions</td>
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<tr>
<td>EN21</td>
<td>Total water discharge by quality and destination</td>
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<tr>
<td>EN22</td>
<td>Total weight of waste by type and disposal method</td>
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<tr>
<td>EN23</td>
<td>Total number and volume of significant spills</td>
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<td>Weight of hazardous waste transported</td>
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<td>Monetary value of significant fines for non-compliance with environmental laws</td>
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<td><strong>LABOUR PRACTICES AND DECENT WORK</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LA1</td>
<td>Breakdown by workforce</td>
<td>SR</td>
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<tr>
<td>LA2</td>
<td>Total number and rate of new employee hires</td>
<td>SR / Website</td>
</tr>
<tr>
<td>LA3</td>
<td>Benefits provided to full-time employees</td>
<td>Website</td>
</tr>
<tr>
<td>LA7</td>
<td>Standard injury, lost day rates, and fatalities</td>
<td>SR</td>
</tr>
<tr>
<td>LA8</td>
<td>Education programs regarding serious diseases</td>
<td>SR / Website</td>
</tr>
<tr>
<td>LA 10</td>
<td>Employee training</td>
<td>SR</td>
</tr>
<tr>
<td>LA11</td>
<td>Programs for skills management and lifelong learning that support continued employability</td>
<td>Website</td>
</tr>
<tr>
<td>LA12</td>
<td>Percentage of employees receiving regular performance and career development reviews</td>
<td>SR / Website</td>
</tr>
<tr>
<td><strong>HUMAN RIGHTS</strong></td>
<td></td>
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<tr>
<td>HR1</td>
<td>Percentage and total number of significant investment agreements that include human right clauses</td>
<td>Website</td>
</tr>
<tr>
<td>HR2</td>
<td>Percentage of significant suppliers and contractors that have undergone screening on human rights</td>
<td>Website</td>
</tr>
<tr>
<td><strong>SOCIETY</strong></td>
<td></td>
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<tr>
<td>SO1</td>
<td>Programs to manage impacts on communities</td>
<td>SR / Website</td>
</tr>
<tr>
<td>SOS</td>
<td>Public policy positions and participation in public policy development and lobbying</td>
<td>Website</td>
</tr>
<tr>
<td><strong>PRODUCT RESPONSIBILITY</strong></td>
<td></td>
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</tr>
</tbody>
</table>

Canadian Natural is an upstream oil and natural gas company. We do not have a retail presence and do not sell directly to final customers. At Canadian Natural we are committed to responsible and sustainable resource development.

AIF = Annual Information Form
AR = Annual Report
MIC = Management Information Circular
SR = Stewardship Report To Stakeholders
PD = Public Data
OUR VISION
Canadian Natural is growing a world-class crude oil and natural gas company.

OUR APPROACH
We are helping meet global energy needs and we do this by conducting all of our operations in a way that identifies, minimizes and mitigates harm to the health and safety of employees, contractors, the public and the environment.

We work cooperatively and effectively with communities, government agencies and interested stakeholders to reduce potential impacts of our operations and to maximize opportunities for economic participation locally and regionally.

We are committed to a long-term presence in the communities where we operate. Our business activities and community investments contribute to the economies and quality of life where we do business. We work together with community and industry groups to ensure a better, sustainable energy industry.

We integrate health and safety, environment, asset integrity and community engagement into all aspects of our operations.

Find more online
We invite you to visit our Corporate Responsibility section on our website www.cnrl.com for complete information on sustainability reporting.

Canadian Natural produces a separate Annual Report, which is also available online.

We welcome your comments and suggestions on this report.