ABOUT THIS REPORT
This report is Shell Canada’s fifth Oil Sands Performance Report and covers the areas of safety, environment, reclamation and community.

This report only provides information on Shell’s operating performance for 2013 for:

- Muskeg River and Jackpine Mines;
- Scotford Upgrader; and
- In Situ operations (Peace River and Cold Lake oil sands).

Unless otherwise noted, all data presented for the Muskeg River Mine, Jackpine Mine and Scotford Upgrader is in reference to total Athabasca Oil Sands Project (AOSP) performance before division amongst the joint venture owners. The AOSP is a joint venture between Shell (60%), Chevron Canada Limited (20%), and Marathon Oil Canada Corporation (20%). Data presented for in situ operations is 100% Shell share.

All monetary amounts referred to in the report are in Canadian dollars unless otherwise noted.

PRODUCTION
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“AT SHELL WE BELIEVE IN A FUTURE WHERE CANADA CAN LEAD IN BOTH ENERGY AND THE ENVIRONMENT, AND WHERE IMPROVING ENVIRONMENTAL PERFORMANCE THROUGH TECHNOLOGY WILL BE KEY TO OUR LICENSE TO OPERATE.”
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Thank you for reading the 2013 Oil Sands Performance Report, the fifth consecutive year we have published this update. Although this is an annual publication, Shell’s commitment to developing Alberta’s oil sands in an economically, socially and environmentally responsible way is something that my colleagues and I work extremely hard at every day.

I hope you find this report informative and are able to take away a better understanding of our oil sands operations and the opportunities we have in front of us as Canadians. We always welcome questions and comments regarding the way Shell develops this important resource, so we can continue to work at improving our operations.

Canada’s oil sands are a strategic resource for Canada and for Shell. Making up the world’s third largest crude reserves, they represent one of the world’s greatest opportunities. The energy we produce from oil sands helps fuel our modern way of life, not only powering our cars, but also providing the energy that keeps our showers hot, our emergency services, schools and hospitals running. Billions of people don’t have access to the basics in life that we take for granted. We can use energy to bring the quality of life we all experience to those not as fortunate as we are today. According to the United Nations, in the next 40 years there could be 2 billion more people on the planet. Traditional energy sources are declining and while renewable energy will and must play a bigger part, we will need all energy sources to meet this demand. As one of the world’s most important remaining sources of oil, the oil sands has a role to play in meeting this challenge.

However, that opportunity also comes with the challenge to reduce the environmental impact of development. I believe we have a responsibility to develop energy responsibly, and to leave our children a world in better shape than we live in today. I am pleased to say that Canada has one of the toughest regulatory environments in the world, and that oil sands development is proceeding under comprehensive Federal and Provincial government regulations that govern all aspects of air, water, land, wildlife and socio-economic impacts to the oil sands region and the wider environment. Developing technology which will enable oil sands development with a lower environmental impact in a commercially viable way is the key to unlocking this resource, and something at Shell we are working extremely hard to deliver.

I am very proud of the many accomplishments both Shell, and the industry as a whole have made to date. In 2013 Shell celebrated a decade of oil sands operations. Over the last ten years Shell has built an oil sands mining and upgrading business capable of delivering a quarter of a million barrels per day, or approximately 1.5% of Canada’s total oil consumption, and employing over 4,000 staff and hundreds of contractors. As we look to the next ten years, we see opportunities to invest in our oil sands operations and increase production while lowering the environmental footprint.

Last year we announced our decision to proceed with the Carmon Creek project in Alberta, expected to produce up to 80,000 barrels of oil per day when operational. Our decision to invest in Carmon Creek was carefully studied with the goal of designing a project that is competitive in Canada and globally from an economic, technological and environmental perspective. Carmon Creek Project is designed to use zero river water at steady state for steam operations, which would make it Shell’s first large-scale oil sands asset to come very close to achieving our aspirational goal of zero river water use.

In 2013, we also received conditional regulatory approval for the Jackpine Mine Expansion (JIME). Following this approval we continue to review the conditions prior to any final investment decision. This would be a natural progression for our mining development, providing access to the northern leases which are
DEVELOPING TECHNOLOGY WHICH WILL ENABLE OIL SANDS DEVELOPMENT WITH A LOWER ENVIRONMENTAL IMPACT IN A COMMERCIALLY VIABLE WAY IS THE KEY TO UNLOCKING THIS RESOURCE, AND SOMETHING AT SHELL WE ARE WORKING EXTREMELY HARD TO DELIVER.
adjacent to our current operation and positioning us to build a long-term, integrated plan for the region from an environmental and economic standpoint.

At Shell we believe in a future where Canada can lead in both energy and the environment, and where improving environmental performance through technology will be key to our license to operate.

In 2013, we signed an agreement with Caterpillar to explore liquefied natural gas (LNG) fuelling options for mining trucks. Our companies will test a new engine and fuel mix using LNG that could reduce operating costs and lead to reduced emissions from oil sands mining.

I’m very proud that our company was a founding partner in Canada’s Oil Sands Innovation Alliance (COSIA), an unprecedented alliance of 13 companies who are sharing environmental intellectual property to accelerate advances in the environmental performance of the oil sands industry. An example of this sharing in practice can be seen with our Quest Carbon Capture and Storage (CCS) project. In 2012 Shell announced it would build the world’s first carbon capture and storage project in the oil sands, which is expected to store over one million tonnes of CO₂ per year more than 2km underground. Through COSIA, we are sharing this CCS technology with member companies and hope this will enable it to become more widespread in the future.

Despite all of this activity, safety is always our first priority. We aim to have zero fatalities and no incidents that harm people or put our neighbours or facilities at risk. This is something my colleagues and I are focused on achieving every single day.

I hope you find this information useful. Please contact me if you have any questions or comments regarding Shell’s oil sands business.

Lorraine Mitchelmore  
Executive Vice President, Heavy Oil  
President, Shell Canada
SAFETY IS ALWAYS OUR FIRST PRIORITY. WE AIM TO HAVE ZERO FATALITIES AND NO INCIDENTS THAT HARM PEOPLE OR PUT OUR NEIGHBOURS OR FACILITIES AT RISK. THIS IS SOMETHING MY COLLEAGUES AND I ARE FOCUSED ON ACHIEVING EVERY SINGLE DAY.
SHELL’S ENVIRONMENTAL STRATEGIES FOR OIL SANDS

In 2012, Shell developed an Environmental Performance Improvement (EPI) program to create a step change in environmental performance in Land, Greenhouse gas (GHG) (air) and Water. Below are Shell’s long-term and aspirational goals in each of these important areas. While we don’t know everything it will take to achieve these goals, we continue to strive towards them.

**LAND**

**Background and context**
Canada’s oil sands lie under approximately 142,200km² of land. Only 3% of that land could potentially be impacted by mining methods, which is approximately 0.1% of Canada’s boreal forest. To date, 0.02% of Canada’s boreal forest has been disturbed by oil sands mining operations. Alberta law requires all lands disturbed by oil sands operations to be reclaimed. All companies are required to develop a reclamation plan that spans the life of the project. An in situ well pad operation runs on average for 10 to 15 years – much of the reclamation activity is still in the early stages of development.

**Shell’s long-term goals**
- Reduce disturbance footprint.
- Increase temporary and permanent reclamation areas.
- Use conservation areas to bridge the disturbance gap.
- Integrate planning and execution of mining, waste disposal and reclamation.
- Continue to provide opportunities for stakeholder participation in reclamation, especially to Aboriginal communities.
- Improve tailings management technology to enhance reclamation.

**Aspirational goal:**
Land Neutrality (net neutral land disturbance)

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**GHG (AIR)**

**Background and context**
Significant emissions reductions have been achieved over the course of oil sands development. Oil sands GHG emissions per barrel decreased by 26% from 1990 to 2011. Today, the oil sands account for approximately 8% of total Canadian GHG emissions, and approx. 0.1% of global GHG emissions.

**Shell’s long-term goals**
- Improve existing assets through operational excellence and strategic capital investment.
- Future projects with improved performance through innovation and optimization across the value chain.
- Invest in research, development and demonstration to improve energy efficiency and reduce carbon capture storage costs.
- Acquire offsets to meet compliance with local regulation.

**Aspirational goal:**
To have a lifecycle CO₂ intensity no greater than the average crude oil refined in the U.S.

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1 According to the Canadian Association of Petroleum Producers

2 According to the Canadian Association of Petroleum Producers

3 Statistics from the Government of Canada
WATER

Background and context

The Government of Alberta closely regulates water use across many industries, such as irrigation/agricultural, commercial and the oil and gas industry. The oil sands industry represents about 7% of this total allocation. Water is recycled in oil sands operations and we continue to look for ways to reduce fresh water use. Independent and cooperative monitoring efforts – by government, industry and stakeholder groups – are also being enhanced.

Shell’s long-term goals

- Optimize/use more on-site water at the Muskeg River and Jackpine Mines to reduce the Athabasca River water use.
- Optimize/integrate water use and wastewater treatment at the Scotford Complex.
- Replace fresh water make-up with brackish water for in situ production.
- Develop technology to enable reduced river water requirements.

Aspirational goal:
Zero River Withdrawal
SHELL HAS ENVIRONMENTAL STRATEGIES FOR OIL SANDS

SHELL HAS DEVELOPED AN ENVIRONMENTAL PERFORMANCE IMPROVEMENT (EPI) PROGRAM TO CREATE A STEP CHANGE IN ENVIRONMENTAL PERFORMANCE IN LAND, GHG (AIR) AND WATER.

ASPIRATIONAL GOAL:
LAND NEUTRALITY (NET NEUTRAL LAND DISTURBANCE)
ASPIRATIONAL GOAL:
ZER0 RIVER WITHDRAWAL

ASPIRATIONAL GOAL:
TO HAVE A LIFECYCLE CO\textsubscript{2} INTENSITY NO GREATER THAN THE AVERAGE CRUDE OIL REFINED IN THE U.S.
OVERVIEW
OUR OIL SANDS OPERATIONS

Canada’s oil sands are a significant strategic energy resource for the country and the world. They are a secure, reliable source of energy and an economic engine which drives employment, training and business development across Canada and beyond.

Oil sands are a mixture of sand, water, clay, bitumen and other minerals. Bitumen is oil that is too heavy or thick to flow or be pumped without being diluted or heated. Some bitumen is found within 70 metres (200 feet) of the surface, but the majority is deeper underground. Canada’s oil sands are found in three deposits – the Athabasca, Peace River and Cold Lake areas in Alberta and part of Saskatchewan. The greatest quantity is found in the Athabasca deposit.

Shell’s Oil Sands business includes the Athabasca Oil Sands Project consisting of mining and extraction of the Muskeg River and Jackpine Mines, the Scotford Upgrader, and the Quest Carbon Capture and Storage project, and in situ operations.

In situ operations are located in the Athabasca region, Peace River and Cold Lake areas. In the Peace River area we produce bitumen from the Peace River Complex using thermal recovery methods and from the Cliffdale Field using cold production techniques. In the Cold Lake area we produce bitumen from the Orion Complex using thermal Steam Assisted Gravity Drainage (SAGD) recovery methods.

Oil sands operations have long life-spans, typically producing for several decades. Although reclamation work is constantly underway, full reclamation is a staged process and takes several decades to complete.

“OIL SANDS OPERATIONS HAVE LONG LIFE-SPANS, TYPICALLY PRODUCING FOR SEVERAL DECADES.”
MINING

The Athabasca Oil Sands Project (AOSP) uses large trucks and mechanical shovels to extract the oil sands mixture at its Muskeg River and Jackpine Mines, two adjacent open pit mines located north of Fort McMurray. Large trucks – each capable of carrying 400 tonnes – take the oil sands to crushers where it is prepared for bitumen extraction. The bitumen is separated from the sand and clay with warm water. Once separated, the bitumen is diluted with solvent for piping to the Scotford Upgrader, where it is converted into synthetic crude oil for refining into products. The synthetic crude is shipped to refineries, where it is further processed into fuel products like gasoline. A significant portion of Shell’s share from the Scotford Upgrader is sold to the Scotford refinery, as well as Shell’s Sarnia refinery in Ontario. The remainder is sold to the general marketplace.

Historically, Shell has had challenges meeting the bitumen recovery targets at Muskeg River Mine. In August 2012 Shell received a high risk enforcement action letter from the Energy Resources Conservation Board in Alberta for failure to meet bitumen recovery requirements. We are taking this very seriously and continue to work diligently to address the underlying performance of our facilities that has resulted in the letter. In the summer of 2013, the Alberta Energy Regulator accepted Shell’s plan to address the concerns, and Shell began a number of upgrades to its Muskeg River Mine operations, designed to improve the bitumen recovery. The plan deals with ore blend management, additional slurry conditioning length, and additional heat during the ore preparation process, with the possibility of additional settling capacity if needed. Although still early in the plan, results to date have shown improvements in bitumen recovery at Muskeg River Mine and Jackpine Mine.

SCOTFORD UPGRADE

The Upgrader, located north of Edmonton, processes bitumen mined from the Muskeg River and Jackpine Mines by adding hydrogen to the bitumen, breaking up the large hydrocarbon molecules to create synthetic crude oil. This hydrogen technology results in a slight volume gain during the upgrading process, which means the Upgrader yields approximately 103 barrels of synthetic crude from every 100 barrels of bitumen. It is integrated with Shell’s wholly owned Scotford Refinery, making it one of the most energy-efficient facilities of its kind. The Upgrader will also be home to Quest, our carbon capture and storage project.

CARBON CAPTURE AND STORAGE

To reduce CO₂ emissions from its Athabasca Oil Sands Project, Shell, on behalf of the AOSP joint venture owners and with the support of the Governments of Canada and Alberta, is constructing the Quest project – the world’s first carbon capture and storage project for an oil sands operation. Quest is expected to reduce direct CO₂ emissions from the Scotford Upgrader by up to 35% per year based on current emissions. Quest will use existing technologies that have been used by the oil and gas industry for decades to capture, transport and inject CO₂ underground.

THE AOSP IS A JOINT VENTURE BETWEEN SHELL (60%), CHEVRON CANADA LIMITED (20%), AND MARATHON OIL CANADA CORPORATION (20%).
Quest is expected to reduce emissions from the upgrader by more than one million tonnes a year – which is the equivalent to taking 175,000 North American cars off the road.
SHELL’S OIL SANDS IN SITU OPERATIONS INCLUDE A SAGD (STEAM ASSISTED GRAVITY DRAINAGE) PRODUCTION FACILITY IN THE COLD LAKE REGION AND TWO BITUMEN PRODUCTION FACILITIES IN THE PEACE RIVER AREA.
The 80% of Canada’s oil sands resources too deep to be mined may be recovered in place or in situ, by drilling wells.

Shell’s oil sands in situ operations include a SAGD production facility in the Cold Lake region and two bitumen production facilities in the Peace River area.

The Peace River Complex uses enhanced oil recovery methods. This involves injecting steam into the reservoir to reduce the viscosity of the bitumen and allow it to be pumped to the surface. The Cliffdale Battery uses cold production methods. It is referred to as cold production since the bitumen in some parts of the reservoir has lower viscosities and can be pumped to the surface unaided by steam.

Additional in situ bitumen resources and advanced recovery technologies are under evaluation on approximately 1,200km² in the Grosmont oil sands area, also in northern Alberta.
GROWTH PLANS

DEBOTTLENECKING
Debottlenecking remains a key focus area for oil sands operations to improve performance and optimize the investment in these assets. In 2013 the first phase of debottlenecking came on line, effectively delivering 10kbpd (100% Joint Venture; 6kbpd Shell share) while current debottlenecking activities are aimed at regulatory compliance and are not expected to deliver incremental production volume. Future investment in production growth debottlenecking opportunities will be analyzed and ranked relative to other investment opportunities and, subject to joint venture and regulator support, will be progressed when economically feasible to do so.

SHELL MAKES PROGRESS WITH JACKPINE MINE EXPANSION
The Jackpine Mine Expansion (JPME) would expand our current mining area and enable an eventual increase in production by up to 100,000 barrels per day (bpd). This is a natural progression from our mining development, providing access to the northern leases and adjacent to our current operation and positioning us to build a long-term, integrated plan for the region from an environmental and economic standpoint. Since 2007, Shell has strived to improve the public’s understanding of JPME through extensive engagement and consultation across the region, and has submitted more than 20,000 pages of information and evidence in responses to provincial and federal government, Aboriginal and public requests for supplementary information. Environmental monitoring and protection, as well as Aboriginal consultation, are fundamental to how we operate today and in the future. The Federal Minister of the Environment issued a Decision Statement in December 2013, setting out the conditions with which Shell must comply in proceeding with JPME. Shell is now reviewing the Decision Statement to fully understand the scope of the conditions. Proceeding with JPME is still subject to a final investment decision by the AOSP joint venture owners. In January 2014, the Athabasca Chipewyan First Nation (“ACFN”) filed a notice of application for Judicial Review of the Federal decision to approve JPME. Shell is participating in the process.

PIERRE RIVER MINE
Pierre River Mine is a proposed mining development of up to 200,000bpd. In February 2014 we requested a delay to the regulatory process while we re-evaluate the timing of the project startup. With our current focus on maintaining a competitive business and successful delivery of near-term growth projects, we felt it was appropriate to update the development timeline for this long-term growth project, and will continue to brief the Regulator accordingly.

CARMON CREEK
Shell announced its decision to develop the Carmon Creek project in October 2013. This thermal in situ project is expected to produce 80,000bpd of western Canadian crude oil. Our decision to invest in Carmon Creek was carefully studied with the goal of designing a project that is competitive in Canada and globally from an economic, technological and environmental perspective. The project will use vertical steam drive technology to produce bitumen. In light of the Carmon Creek startup plans, Shell intends to decommission the existing Peace River Complex processing facilities, reclaim the site to standards set by the Province and tie in producing wells to the new Carmon Creek facilities.
Since start-up, AOSP has produced over 500 million barrels of oil.

Celebrating 10 years of oil sands production.

Over $1.5 billion spent with Aboriginal businesses and contractors.
AOSP produces 15% of Canada’s total oil consumption.

AOSP employs over 4,000 staff and hundreds of contractors.

ISO 14001 recognition at Peace River and Oil Sands mining operations.
Shell is committed to developing the oil sands responsibly. With this commitment in mind, Shell participates in various associations, including the following:

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The Oil Sands Community Alliance (OSCA) has the mandate to pursue innovative solutions to build thriving communities and enable the responsible growth of Canada’s oil sands. The OSCA uses a collaborative approach that facilitates engagement, builds relationships, and creates measureable socio-economic benefits. The OSCA is focused on four core areas: aboriginal, community well-being, infrastructure and workforce. Within these committees, key issues will be prioritized through baseline research and stakeholder consultation.

The Cumulative Environmental Management Association (CEMA) is the leading multi-stakeholder group operating in the heart of Canada’s Boreal Forest – the Regional Municipality of Wood Buffalo, Alberta. CEMA is a key advisor to the provincial and federal governments committed to respectful, inclusive dialogue to make recommendations to manage the cumulative environmental effects of regional development on air, land, water and biodiversity.

The Wood Buffalo Environmental Association (WBEA) monitors the air in the Regional Municipality of Wood Buffalo, 24 hours a day, 365 days a year. This is done through a variety of air, land and human monitoring programs. The information collected is openly shared with stakeholders and the public.
The Regional Aquatics Monitoring Program (RAMP) is an industry-funded, multi-stakeholder environmental monitoring program initiated in 1997. The intent of RAMP is to integrate aquatic monitoring activities across different components of the aquatic environment, different geographical locations, and Athabasca oils sands and other developments in the Athabasca oil sands region so that long-term trends, regional issues and potential cumulative effects related to oil sands and other development can be identified and addressed.

The Canadian Association of Petroleum Producers (CAPP) represents companies, large and small, that explore for, develop and produce natural gas and crude oil throughout Canada. CAPP’s member companies produce about 90% of Canada’s natural gas and crude oil. CAPP’s associate members provide a wide range of services that support the upstream crude oil and natural gas industry. Together CAPP’s members and associate members are an important part of a national industry with revenues of about $100 billion/year. CAPP facilitates continued improvement in environment, health and safety performance and stewardship while maintaining a viable industry.

Canada’s Oil Sands Innovation Alliance (COSIA) is an alliance of oil sands producers focused on accelerating the pace of improvement in environmental performance in Canada’s oil sands through collaborative action and innovation. This industry coalition will help to enable responsible and sustainable growth of Canada’s oil sands while delivering accelerated improvement in environmental performance through collaborative action and innovation.

Shell’s Lorraine Mitchelmore (Executive Vice President Heavy Oil) addresses an audience on why COSIA is vital to our industry to move forward on environmental improvements.
COSIA
HELPING US ACHIEVE OUR EPI TARGETS

COSIA, ACCELERATING THE PACE OF IMPROVEMENT IN ENVIRONMENTAL PERFORMANCE
COSIA is an alliance of oil sands producers, representing 90% of production from the Canadian oil sands, who are innovating, collaborating and driving accelerated environmental performance improvement.

Dr. Dan Wicklum, Chief Executive, Canada’s Oil Sands Innovation Alliance (COSIA)
“COSIA is an alliance of oil sands producers, representing 90% of production from the Canadian oil sands, who are innovating, collaborating and driving accelerated environmental performance improvement. Through COSIA, oil sands producers have signed globally precedent setting legal agreements that allow them to share new technologies and launch new collaborative projects in four key Environmental Priority Areas (EPA): land, water, tailings and greenhouse gas emissions. Launched in 2012, COSIA companies have shared about 560 environmental technologies or innovations that cost over $900 million to develop. Under COSIA, 185 projects are moving forward. These figures make COSIA one of the most active collaborative innovation hubs in Canada. Some of the environmental technologies and innovations shared through COSIA are already being put to use. As Shell pursues its Carmon Creek oil sands project in northwest Alberta, it will draw on expertise shared through another member COSIA company, Devon Canada, in building pipelines that lower impact on land. Shell’s experience operating offshore, where space is tight, can also be used as an approach to reduce the amount of land disturbed for onshore projects. This is a great example of the level of collaboration that has emerged between COSIA’s member companies, collaboration that goes both deep and high. Deep in that member companies are sharing innovative environmental technologies and knowledge between them at a level that has never been done before. High because senior leaders of these companies have come together and signed a charter that carries commitments to address environmental performance in the oil sands region. As society’s expectations of industry continue to evolve over time, COSIA’s member companies will continue to strive to improve their environmental performance. World class excellence is as much a journey as a destination.”
In 2013, during the external verification process, Shell’s oil sands mining operations achieved AAA ranking (meaning Excellence and Leadership) across all categories in “Aboriginal and Community Outreach”, “Energy Use and GHG Emissions Management” and “Tailings Management”. In all other categories of biodiversity, Crisis Management, and Health & Safety, we ranked at A or higher, with the exception of one B in Health & Safety.

In 2013, during the external verification process, Shell’s oil sands mining operations achieved AAA ranking (meaning Excellence and Leadership) across all categories in “Aboriginal and Community Outreach”, “Energy Use and GHG Emissions Management” and “Tailings Management”. In all other categories of biodiversity, Crisis Management, and Health & Safety, we ranked at A or higher, with the exception of one B in Health & Safety.

Shell is part of the Integrated CO₂ Network (ICO₂N), a coalition of Canadian companies committed to the development of carbon capture and storage in Canada.

ISO 14001 is an international, externally verified standard for environmental management systems (EMS). Registration demonstrates that an organization has a sound environmental policy and an effective EMS to support that policy. The EMS system at Shell’s Peace River In Situ operations has been certified since 2001 and in 2004 the EMS at Shell’s oil sands mining operations was the first oil sands mining operation to be certified to the ISO 14001 standard. Although it does not set standards for actual environmental performance, ISO 14001 includes a commitment to continuous improvement in environmental performance, complying with environmental legislation and protecting the environment.
Shell is continually working to keep our employees and contractors safe by focusing on compliance and dealing with the safety culture issues that can lead to unsafe behaviours. Our Goal Zero program and supporting company-wide initiatives are helping to strengthen our safety culture.

Goal Zero captures the belief that we can operate without any safety incidents despite the often difficult conditions in which we operate. To support this aim, we continue to roll out and embed initiatives to strengthen our safety culture. This includes improving the safety leadership skills of staff, simplifying our requirements and rewarding successful performance.

While we still have work to do, we are making good progress.

**OUR 2013 SAFETY PERFORMANCE**

Two key measures of safety performance are total recordable case frequency (TRCF) and lost time injury frequency (LTIF). TRCF shows the rate of recordable injuries that required medical attention per one million hours worked by employees and contractors. In 2013, Shell Oil Sands Operations had 48 recordable injuries for a TRCF of 2.46, an improvement of around 20% compared to 2012, which saw 60 recordable injuries and a TRCF of 3.0.
Visible Safety leadership is about building the right behaviours and teaching leaders how to engage on safety.
VISIBLE SAFETY LEADERSHIP

Visible Safety Leadership is about building the right behaviours and teaching leaders how to engage on safety. The scale of the oil sands business, the differing work environments and processes at our sites in Alberta, along with the uniqueness of our operations, present safety challenges.

Following the implementation of the Visible Safety Leadership initiative in 2012, leaders at all levels are holding discussions with their teams about personal accountability for safety and have an opportunity to listen to front-line workers’ ideas to implement improvements. This has equipped leaders to help teams embed a continuous improvement culture with regular and increased time on the floor and in the field with teams to allow leaders to identify areas and changes that can be made that are key differentiators for our safety performance. The success of the Visible Safety Leadership program has led to leaders being more competent and confident when dialoguing about safety in the field and holding their team accountable for improving safety performance.

PROCESS SAFETY

We are reaching the conclusion of a 5-year effort to improve our Process Safety programs in response to significant industry incidents such as the Macondo blowout in the Gulf of Mexico in 2010 and the BP Texas City explosion and fire in 2005. These efforts are already producing results in the form of a 50% reduction in Tier 1 and Tier 2 ‘Process Safety Events’ (PSE) in 2013 compared to 2012. Tier 1 and Tier 2 represent the most serious potential incidents. PSEs are recorded throughout industry and bring additional focus on and learning from those events that have the potential for significant process safety incidents to further reduce the risk of these major events from happening.

SCOTFORD UPGRADE – TURNAROUND

GOAL ZERO INITIATIVE

Shell engaged JMJ Associates to assist with safety culture initiatives to engage people involved in the 2013 Scotford Upgrader Turnaround. The goal was to get everyone looking out for each other, and actively choosing to work safely. Shell realized a marked improvement in overall turnaround safety performance through ongoing and continuous commitment. This included an action log where items were closed out and communicated back to the workforce within 24 hours. Workers perceived an improved safety culture at site, as well as improved productivity. Multi-discipline, trade and union and non-union craft collaboration occurred. People were reminded every day why they choose to work safely by displaying photos of those things important to them.

John Rhind – Shell’s Vice President, Oil Sands Joint Venture believes building the right behaviours and teaching leaders how to engage on safety is critical.

6 A Tier 1 PSE typically involves an actual fire/ explosion or release that could have resulted in a fire or explosion; Tier 2 PSE is typically 1/10th the severity of a Tier 1 event.
At Shell, we believe the long-term success of oil sands in the energy mix depends not only on our ability to compete economically but also to advance improvements in our environmental performance.

The GHG intensity of oil sands production is expected to decline over the long-term through the deployment of new technology. According to the Cambridge Energy Research Associates, although oil sands are among the most GHG-intensive crudes, they are not the most intensive, nor are they as highly carbon intensive as many commonly cited estimates. On a wells-to-wheels basis —accounting for emissions produced during crude oil extraction, processing, distribution and combustion, including from upstream fuel consumed in crude production and processing facilities — the GHG emissions from oil sands are 4% to 23% higher than from the average crude consumed in the United States.

REGULATION AND CO₂

As we increase production, emissions from our operation also increase. We are focused on driving technology and innovation which will unlock new technologies and help us to bring down emissions over the long term in a sustainable way.

Other factors also affect our GHG emissions. In August 2012, Shell received a high risk enforcement action letter from the Energy Resources Conservation Board (ERCB) for failure to meet bitumen recovery requirements. To address this issue, in 2013 Shell began a number of upgrades to its Muskeg River Mine operations designed to improve the bitumen recovery. These actions, along with those necessary to comply with Directive 074, are expected to have the side-effect of increasing Shell oil sands medium-term GHG emissions footprint. To meet these challenges, Shell renewed its GHG strategy in 2013. Shell’s aspirational goal – to have a lifecycle CO₂ intensity no greater than the average crude oil refined in the U.S. – remains in place and moving forward in 2014. Shell will continue to invest in the development and deployment of technologies to improve the energy efficiency of our current and future assets that in turn would lead to lower GHG emissions. Some of the projects we are currently focused on to achieve this end are described below.

GHG VOLUNTARY OFFSETS

At the end of 2013, Shell took the decision to eliminate its own GHG voluntary offset program, which has an effect on the GHG intensity (including offsets) figure. Shell initiated this program back in 1999 in the absence of regulations and as a bridge until that regulation was in place. To date, AOSP has purchased 4.84 million tonnes of voluntary offsets. Since that time the regulatory environment has significantly changed. In 2007 Alberta implemented the Specified Gas Emitters Regulation (SGER) requiring large facilities to reduce their emissions intensity by 12% from an approved baseline. We fully comply with this regulation, which includes purchasing offsets. In 2013 Shell took the decision to stop purchasing further voluntary offsets as we believe that with regulation in place, investing in projects which will have a more valuable long term effect in delivering GHG reductions is more effective than purchasing offsets in unrelated area. For example, we are focused on delivering our Quest CCS project which will directly reduce emissions and provide technical expertise and learning which can be shared for similar projects across the world.
<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
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<tbody>
<tr>
<td>Total direct emissions (Mt CO₂e)</td>
<td>3.2</td>
<td>3.7</td>
<td>4.9</td>
<td>5.3</td>
<td>5.3</td>
</tr>
<tr>
<td>Total indirect emissions (Mt CO₂e)</td>
<td>1.5</td>
<td>1.3</td>
<td>1.9</td>
<td>1.7</td>
<td>1.9</td>
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<tr>
<td>Total emissions (Mt CO₂e)</td>
<td>4.7</td>
<td>5.0</td>
<td>6.7</td>
<td>7.0</td>
<td>7.2</td>
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<tr>
<td>Total CO₂e intensity (kg CO₂e/bbl)</td>
<td>82.8</td>
<td>88.5</td>
<td>86.2</td>
<td>82.2</td>
<td>80.9</td>
</tr>
<tr>
<td>Total CO₂e intensity (kg CO₂e/bbl) – Excluding construction emissions</td>
<td>–</td>
<td>–</td>
<td>80.0</td>
<td>82.2</td>
<td>80.9</td>
</tr>
<tr>
<td>Total CO₂e intensity including offsets (kg/bbl)*</td>
<td>74.5</td>
<td>45.2</td>
<td>53.5</td>
<td>56.4</td>
<td>74.7</td>
</tr>
<tr>
<td>Total CO₂e intensity including offsets (kg/bbl)* – Excluding construction emissions</td>
<td>–</td>
<td>–</td>
<td>47.3</td>
<td>56.4</td>
<td>74.7</td>
</tr>
<tr>
<td>Total direct emissions (Mt CO₂e) – In Situ</td>
<td>1.02</td>
<td>0.89</td>
<td>0.58</td>
<td>0.56</td>
<td>0.57</td>
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<tr>
<td>Total indirect emissions (Mt CO₂e) – In Situ</td>
<td>0.13</td>
<td>0.14</td>
<td>0.15</td>
<td>0.15</td>
<td>0.13</td>
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<tr>
<td>Total direct emissions (Mt CO₂e) – Scotford Upgrader</td>
<td>1.86</td>
<td>1.82</td>
<td>2.85</td>
<td>2.98</td>
<td>3.25</td>
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<td>Total indirect emissions (Mt CO₂e) – Scotford Upgrader</td>
<td>0.05</td>
<td>0.03</td>
<td>0.41</td>
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<tr>
<td>Total direct emissions (Mt CO₂e) – Jackpine and Muskeg River Mines</td>
<td>0.75</td>
<td>1.01</td>
<td>1.44</td>
<td>1.73</td>
<td>1.48</td>
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<tr>
<td>Total indirect emissions (Mt CO₂e) – Jackpine and Muskeg River Mines</td>
<td>1.01</td>
<td>1.11</td>
<td>1.32</td>
<td>1.21</td>
<td>1.34</td>
</tr>
</tbody>
</table>

* This data is intended to show the efforts we are making to offset the impact of emissions from our operations and does not suggest a physical reduction in overall emissions or emissions intensity.

**BACKGROUND AND CONTEXT**

Significant emissions reductions have been achieved over the course of oil sands development. Oil sands GHG emissions per barrel decreased by 26% from 1990 to 2011. Today, the oil sands account for approximately 8% of total Canadian GHG emissions, and approx. 0.1% of global GHG emissions. One of the world’s first industrial-scale carbon capture and storage projects is being built in the oil sands.

[Statistics from the Government of Canada]
SHELL’S QUEST PROJECT

To reduce CO₂ emissions from its Athabasca Oil Sands Project, Shell on behalf of the AOSP joint venture owners and with the support of the Governments of Canada and Alberta, is constructing the Quest project – the world’s first carbon capture and storage project for an oil sands operation. Quest is expected to reduce direct CO₂ emissions from the Scotford Upgrader by up to 35% per year based on current emissions. The execution of Quest continued during 2013 and is on schedule to begin safely storing CO₂ deep underground in 2015. Quest will use existing technologies that have been used by the oil and gas industry for decades to capture, transport and inject CO₂ underground. It is expected to:

- Capture more than one million tonnes of CO₂ per year from the Scotford Upgrader, which is equivalent to the emissions generated per year from 175,000 North American cars.
- Transport the CO₂ by an approximate 60km pipeline to three injection wells.
- Inject the CO₂ more than 2km underground into a porous rock formation for safe and permanent storage. Multiple layers of impermeable rock above the storage formation will ensure the CO₂ remains securely contained.

LNG IN HEAVY HAULER TRUCKS COULD REDUCE COSTS AND EMISSIONS AT OIL SANDS MINES

Shell Canada and Caterpillar have signed an agreement to test a new engine and fuel mix using liquefied natural gas (LNG) that could reduce operating costs and lead to reduced emissions from oil sands mining. Caterpillar will leverage its experience with LNG in other applications, and will continue development work to design and build a fully integrated mining truck where LNG displaces most of the diesel power – also known as dual fuel. Through this agreement, Caterpillar will test the design at our oil sands operations. In addition to the new truck Caterpillar is developing, Shell will also retrofit two existing trucks from its fleet with the new engine for the trial, as well as provide fuelling infrastructure. This trial follows a trend for Shell in looking at options to use Canada’s abundant natural gas as a fuel in marine and road transportation, and other industrial situations.

With heavy hauling being such a core part of our operation, success with this could make a real difference in our operations costs and emissions. Field testing of dual fuel powered mining trucks at Shell’s oil sands operations is expected to begin in 2016, with the trial expected to last up to one year.

Shell has long been at the forefront of transport fuel innovation. Caterpillar is the world’s leading manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives.
SheLL CANADA AND CATERPILLAR HAVE SIGNED AN AGREEMENT TO TEST A NEW ENGINE AND FUEL MIX USING LIQUEFIED NATURAL GAS (LNG) THAT COULD REDUCE OPERATING COSTS AND LEAD TO REDUCED EMISSIONS FROM OIL SANDS MINING.
Shell’s mining operations are located near the Athabasca River and upgrading operations near the North Saskatchewan River. Oil sands operations require water to separate bitumen from the sand.

At the Scotford Upgrader, we draw water to cool hydrocarbon fractions (streams) and produce hydrogen. Shell’s Peace River Complex withdraws water from the Peace River to generate steam for bitumen extraction. The low level of water needs at our cold production in situ operations are largely met by using fresh water.

While Shell has permits to withdraw 0.6% of the Athabasca River’s average annual flow, we used less than 0.08% in 2013.

In 2013, Shell used approximately 1.2 barrels of river water from the Athabasca River, supplemented by groundwater, precipitation and connate water (water that forms part of the ore) for every barrel of bitumen extracted from our mining operations. No water used in our mining and extraction processes is returned back to the river and our recycle rate is over 75%. In the winter months, Shell does supply a creek near the southern lease boundary called Jackpine Creek with water sourced from the Athabasca River. This is part of Shell’s commitment to maintain the habitat in the creek during the low flow period of winter, as our mining operations reduce the natural inflow of water from aquifers to this creek.

![Water Efficiency Diagrams](image-url)
Canada’s oil sands industry recycles water and continues to look for ways to reduce fresh water use. Independent and co-operative monitoring efforts – by government, industry and stakeholder groups – are also being enhanced. While Shell has permits to withdraw 0.6% of the Athabasca River’s average annual flow, we used less than 0.08% in 2013.
WATER CONTINUED

Shell also discharges some of the water that exists in the overburden above the ore body in the Jackpine Mine (JPM) site that requires dewatering prior to mining of the site. This water does not mix with mine waters and is discharged to surface waters as per our regulatory approvals.

In late 2010, we found water at the bottom of a section of a pit at the Muskeg River Mine. The water was confirmed to be saline and to originate from an aquifer below the mine pit. There has been no inflow from or outflow to the aquifer since January 2012 and we continue to work with industry experts to develop a permanent solution. The water is contained within a segregated area in the pit.

In 2013, Shell consumed approximately 0.4 barrels of river water from the North Saskatchewan River, supplemented by precipitation and dewatering activities, for every barrel of bitumen that was upgraded. About 90% of the wastewater from the upgrading process is reused in operations, and the final wastewater effluent is disposed of via deep well injection. Effluent from the treatment of raw river water is returned to the river after testing to meet environmental standards.

In 2013, Shell’s in situ operations required an average 1.4 barrels of water to produce one barrel of bitumen, the same as in 2012.

Shell implemented two projects to reduce river water intake from the Athabasca River in 2013 and there are additional projects being developed. Shell Scotford Upgrader undertook an Integrated Water and Wastewater Study to assess water optimization opportunities and selected one project for further assessment.

The Carmon Creek Project is designed to maximize the amount of water it recycles and to use zero river water at steady state for steam operations. A minimal amount of river water will be required for site operations that can’t use recycled water such as dust control, wash water or drilling water. We believe our plans for water conservation would mean that the project ranks amongst the best of all in situ operations in Alberta in terms of freshwater management.
The CARMOn CReek PROJeCT IS DeSIgneD TO USe zeRO RIVeR wATeR AT STeADy STATe FOR STeAM OPeRATIOnS, whICh wOULD MAke IT SheLL’S FIRST LARge-SCALe OIL SAnDS ASSeT TO COMe VeRy CLOSe TO AChIeVIng OUR ASPIRATIOnAL gOAL OF zeRO RIVeR wATeR USe.
Tailings can be found across a number of different mining industries. A byproduct of the extraction process, oil sands mining generates tailings, a mixture of water, sand, clay, heavy metals and residual bitumen.

Tailings contain naturally occurring chemicals. Tailings are toxic. We monitor them continuously, assess their potential environmental impact and take measures to protect wildlife, and to prevent contamination of surface water and ground water. Tailings can be stored either in an above ground tailings pond (known as an external tailings facility) or in previously mined out areas of the mine pit. Tailings ponds serve an important purpose, as they allow water to be reused, reducing the need for fresh water. Over 75% of the water used in Shell’s operations is recycled from the tailings ponds at our two mines.

Over time materials settle to the bottom of the pond, and the water is removed so the area can start to be reclaimed. While the sand settles to the bottom quickly, the tiny clay and silt particles (commonly referred to as “fines”) contained in the tailings can take up to 25 years to settle, increasing the amount of time it takes to reclaim land and the amount of space needed to store the tailings. Several technologies are being advanced to treat the silts and clays to accelerate their settling to allow for earlier reclamation.

There is a huge amount of work currently being undertaken across industry to improve tailings management and accelerate the pace of reclamation. This began with the launch of the Oil Sands Tailings Consortium (OSTC) in 2010, and the launch of COSIA in 2012. It will take time for the work and improvements being made through these initiatives to show in performance figures, but the scale of resources and time being invested in this area demonstrates the collective commitment of industry to bring about effective solutions for future environmental performance delivery.

<table>
<thead>
<tr>
<th>TAILINGS – Annual Fluid Fines*</th>
<th>Annual Calendar Year Volumes (Mm³)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Muskeg River Mine</strong></td>
<td></td>
</tr>
<tr>
<td>Fluid fine tailings</td>
<td>2009</td>
</tr>
<tr>
<td></td>
<td>9.97</td>
</tr>
<tr>
<td>Fines capture</td>
<td>0.00</td>
</tr>
</tbody>
</table>

| **Jackpine Mine****           | Annual Calendar Year Volumes (Mm³) |
| Fluid fine tailings           | 2009 | 2010 | 2011 | 2012 | 2013 |
| Fluid fine tailings           | 0.00 | 0.85 | 4.90 | 4.14 | 3.59 |
| Fines capture                 | 0.00 | 0.06 | 0.91 | 1.63 | 1.78 |

* Revised numbers have been provided from previous years to align with figures we report to the government.
** No historical information exists for Jackpine Mine in 2009 as 2010 is the first reporting year following startup of the mine.
THERE IS A HUGE AMOUNT OF WORK CURRENTLY BEING UNDERTAKEN ACROSS INDUSTRY TO IMPROVE TAILINGS MANAGEMENT AND ACCELERATE THE PACE OF RECLAMATION.
RESEARCH AND TECHNOLOGY
Since 2005, Shell has invested over $250 million in tailings research to develop technologies to speed up the drying process. Technologies Shell is currently investigating include Atmospheric Fines Drying, Thickened Tailings, Non-segregated Tailings and Composite Tailings. We have been pleased with the progress of our Atmospheric Fines Drying program from test facility to commercial application in a very short period of time. Located at Shell’s Muskeg River Mine, this technology has seen the time taken to dry tailings reduce from years to weeks.

In 2013, Shell’s Muskeg River Mine continued to meet its operational fines capture targets for its Atmospheric Fines Drying (AFD) technology. Several pilot tests were performed between Muskeg River Mine and Jackpine Mine, including PNST (a version of Non-segregated Tailings), Mini Filterpress and Centrifuge. Continuous improvement initiatives continued on existing tailings treatment units with a new smaller Thickend Tailings (TnT) line which was installed and tested at Jackpine Mine to help improve thickener performance.

CONTINUING WORK WITH THE ALBERTA ENERGY REGULATOR
Shell continues to work with the Alberta Energy Regulator (AER) on its tailings management plan for both the Muskeg River and Jackpine Mines, in order to speed reclamation. The AER Directive 074: Tailings Performance Criteria and Requirements for Oil Sands Mining Schemes requires that each oil sands mining operator submit a tailings management plan. Shell fully supports the long-term objective of Directive 074 to minimize and eventually eliminate long-term storage of fluid tailings, and we are committed to meeting its requirements. However, deploying new technology at a commercial scale can take several years to accomplish successfully. We have seen very good results from our AFD program and other pilots and believe a range of technology options will be key to accelerating the pace of tailings reclamation in the long term. The integrated mine and tailings plan for both mines is being updated for submission to the regulator this fall. It will incorporate results from the performance of technologies already deployed as well as credible estimates of technologies yet to be deployed and timing in order to meet the objectives of Directive 074.

In June 2013, the regulator issued the 2012 Tailings Management Assessment Report, which reviewed the performance of four oil sands operations, including Shell’s Jackpine and Muskeg River Mines, over two reporting periods (2010–2011 and 2011–2012). Only one non-Shell operation met the fines capture requirements of Directive 074 and only in the 2010–2011 reporting period.
1. Over time sand, silt and clay settle to the bottom of the pond.

2. Water is removed for use in the extraction process.

3. Overburden and top soil are replaced back into the tailings pond.

4. Native vegetation is reintroduced to the site.
LAND AND RECLAMATION

Canada’s oil sands lie under approximately 140,000km² of land. About 3% of that land could potentially be impacted by mining operations. That is approximately 0.1% of Canada’s Boreal Forest. The remaining land contains oil sands deposits that are too deep to mine and only recoverable through in situ methods which cause less land disturbance.

Oil sands operations have long life-spans, typically producing for over 40 years.

The decision to develop the oil sands has resulted in land being disturbed. Oil sands operations require land to access oil sands deposits and to house their extraction, processing and transportation equipment. Mining requires the removal of all material overlaying the oil sands deposits before mining can commence. This represents a temporary loss of the ecological function of the land for a period of time and highlights the importance of reclamation in returning the lands to productive use.

Reclamation involves refilling the mined-out areas with tailings and restoring the contours of natural landscape, then placing topsoil and planting suitable vegetation. We aim to reclaim land used in our oil sands mines to a condition that supports a self-sustaining, locally common boreal forest, as required by the Alberta government. The land will be able to support local plants and animals, although it will not be exactly the same as the previous landscape. Reclamation work is under way and will proceed in stages as we complete mining operations.

Although reclamation work is constantly under way, full reclamation is a staged process and takes several decades to complete. Although we’re a relatively new mine, to date we have reclaimed 324.1 hectares at our Muskeg River Mine and 57.1 hectares at our Jackpine Mine. These figures are the sum of the total reclamation to date for temporary plus permanent reclamation. Shell is committed to starting large-scale reclamation of our mining area within 20 years from the day of first land disturbance.

WITH THE SHELL TRUE NORTH FOREST, NORTH OF GRANDE PRAIRIE, ALBERTA, AND THE ADDITION OF THE SHELL BUFFALO HILLS CONSERVATION RANCH, SHELL CANADA HAS CONSERVED AROUND 3,642 HECTARES OF HABITAT IN ALBERTA, WHICH IS APPROXIMATELY ONE THIRD OF OUR CURRENT MINING DISTURBANCE FOOTPRINT.
BACKGROUND AND CONTEXT

Canada’s oil sands lie under approximately 142,200 km² of land, according to Alberta Environment. About 3% of that land could potentially be impacted by mining methods, which is approximately 0.1% of Canada’s boreal forest. Only 0.02% of Canada’s boreal forest has been disturbed by oil sands mining operations over the past 40 years. Alberta law requires all lands disturbed by oil sands operations be reclaimed. All companies are required to develop a reclamation plan that spans the life of the project.

[Statistics from the Canadian Association of Petroleum Producers (CAPP)]

### LAND AND RECLAMATION

#### Muskeg River Mine

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011**</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total active footprint – mine + plant size (ha)</td>
<td>5,900</td>
<td>6,246</td>
<td>7,165.3</td>
<td>8,156.4</td>
<td>8,281.2</td>
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<tr>
<td>Permanent reclamation (ha)</td>
<td>16</td>
<td>16</td>
<td>12</td>
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<td>Temporary reclamation (ha)</td>
<td>111</td>
<td>111</td>
<td>202</td>
<td>196.0</td>
<td>158.0</td>
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#### Jackpine Mine*

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<tr>
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<th>2011**</th>
<th>2012</th>
<th>2013</th>
</tr>
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<tbody>
<tr>
<td>Total active footprint – mine + plant size (ha)</td>
<td>–</td>
<td>3,541</td>
<td>4,301</td>
<td>4,925</td>
<td>5,178.5</td>
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<tr>
<td>Permanent reclamation (ha)</td>
<td>–</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Temporary reclamation (ha)</td>
<td>–</td>
<td>5.6</td>
<td>5.6</td>
<td>3.3</td>
<td>57.1</td>
</tr>
</tbody>
</table>

* No historical information exists for Jackpine Mine in 2009 as 2010 is the first reporting year following startup of the mine.

** Figures have been adjusted for 2011 from previous report to reflect the updated cumulative reclamation as of December 31, 2011, which considers both the historical (pre-2011) and the new reclamation (completed in 2011).
SHell buffalo hills Conservation Ranch

On September 4, 2013 Ducks Unlimited Canada (DUC), along with Shell Canada, celebrated the launch of the Shell Buffalo Hills Conservation Ranch, a conservation property located one hour southeast of Calgary.

Shell Buffalo Hills Conservation Ranch includes 1,671 hectares of pristine, native grasslands, as well as an additional 715 hectares of tame hay lands and represents around 2,428 hectares for the breeding, migration or wintering of 159 bird species that use both native prairie and the boreal forest of Alberta.

Shell Canada is proud to have a relationship with DUC which has developed over several decades and has successfully managed to protect land and wildlife throughout North America. Shell is committed to help mitigate habitat disturbances resulting from our existing mining operations.

Shell Canada has a land and reclamation strategy in place to guide environmental performance in its oil sands business. Although reclamation work is constantly underway, full oil sands reclamation takes decades to complete and conserving land like the Shell Buffalo Hills Conservation Ranch allows for action in the short term.

Only 26% of native grassland remains in Alberta and that remaining portion is in danger of being converted to agriculture crop production. Various waterfowl species use the grasslands as a staging or resting area before continuing their migration north to the Boreal Forest. These factors make the Shell Buffalo Hills Conservation Ranch a very unique and important conservation project for Shell’s oil sands business.

Recognizing the positive impact of this acquisition, Shell Canada contributed $3 million towards the land purchase, with the balance coming from DUC and the North American Wetlands Conservation Act partnership.

With the Shell True North Forest, north of Grande Prairie, Alberta, and the addition of the Shell Buffalo Hills Conservation Ranch, Shell Canada has conserved around 3,642 hectares of habitat in Alberta, which is approximately one third of our mining disturbance footprint.

Shell will seek to continue voluntarily conserving high value land in conjunction with conservation groups. We support the regulatory and policy development process around conservation offsets in Canada, recognizing the role of offsets as one tool to address impacts.

For more information on Shell’s land and reclamation programs, including the Shell True North Forest, visit www.shell.ca/truenorthforest.
1,671 HECTARES OF PRISTINE, NATIVE GRASSLANDS

159 BIRDS SPECIES
PEOPLE, COMMUNITY & ENGAGEMENT

Oil sands development is located close to First Nation communities. We aim to ensure development is mutually beneficial and that those close to our operations are able to benefit from development. A good working relationship with local communities is extremely important to us.

The average life cycle of an oil sands project is typically 40 years and we have a long-term interest in the development and wellbeing of the communities in which we operate. We seek opportunities to gain advice and input from people neighbouring our operations as well as those who take an active interest in Shell’s oil sands business.

ABORIGINAL RELATIONSHIPS

Shell has been working closely with Aboriginal peoples in Canada for many years. We are committed to working with communities that are affected by our projects and operations to mitigate our impacts and provide benefits to these communities. Shell works hard to provide opportunities to qualified local businesses and peoples, with emphasis on Aboriginal businesses and peoples, to participate in the contracting and employment processes.

Shell’s Aboriginal Content team within the Consultation and Indigenous Relations (CIR) team is a new group established specifically to provide focus and enhance opportunities and ways of working together, taking into consideration factors such as stakeholder engagement, non-technical risk, safety, environmental and technical capabilities, quality, price and scheduling requirements for Aboriginal businesses.

Between 2005 and 2013, the Athabasca Oil Sands Project invested over $1.5 billion with more than 70 Aboriginal businesses and contractors that provide a broad range of products and services to our operations. Aboriginal companies support us in a number of ways in our operations. We employ Aboriginal peoples and vendors from a wide skill set, ranging from general labour to highly technical roles. Shell has been working on identifying entrepreneurs and helping them to grow their business, in order to increase capacity and encourage diversity. Shell also expects its non-Aboriginal suppliers to develop their own local content plans to provide opportunities for Aboriginal people.

Shell consults extensively with Aboriginal communities and has successfully established agreements with several local First Nations and Metis communities. We consider and incorporate traditional environmental knowledge and other Aboriginal experience and perspectives into our development. Over the years of our operation we have met many times with local Aboriginal communities whether it be our consultation and project staff meeting with members of the Council and wider community, or our senior business leaders meeting with Elders and Band Leaders.

“Shell consults extensively with Aboriginal communities and has successfully established agreements with several local First Nations and Metis communities.”
BETWEEN 2005 AND 2013, THE ATHABASCA OIL SANDS PROJECT INVESTED OVER $1.5 BILLION WITH MORE THAN 70 ABORIGINAL BUSINESSES AND CONTRACTORS THAT PROVIDE A BROAD RANGE OF PRODUCTS AND SERVICES TO OUR OPERATIONS.
Since 2000, Shell in Canada has invested more than $89 million in a wide range of initiatives and we contribute our efforts in four main areas: Environment, Education, Employees and Community.

In 2013, Shell made around $4.2 million in contributions on behalf of the Athabasca Oil Sands project and our in situ operations.

**Shell and the AOSP Joint Venture Owners Invest in Fort McKay and Fort Chipewyan**

In 2013, Shell on behalf of the AOSP joint venture owners contributed to a number of important community programs. For example, $125,000 was invested in Fort McKay’s Steps Forward education program, the second instalment of a two-year commitment of $250,000. The program helps community members reach various education and career goals by offering counseling, workshops and assisting with job opportunities.

In addition to life management training, Steps Forward recognizes the critical importance of preparing community members for further academic education and long-term career employment.

In 2013, in Fort Chipewyan, $500,000 was invested in the Fort Chipewyan Elders Care Facility. The facility will open in 2014 and will house 12 units for Elders care and will have a cultural room and program to ensure the Elders are able to continue to share, practice and retain their culture. Contributions were also made in 2013 to the Athabasca Delta Community School Parent Resource Program. These contributions provide resources and programming to strengthen parental involvement with their children’s education.

**Social Investment**

Social investment is our voluntary contribution to communities in Canada. It is embedded in the way we carry out our day-to-day business to provide long-term sustainable programs. We seek to initiate, establish and support programs that are aligned with our business. Our social investment activities are themed around science, education, innovation and business skills.

**Shell Invests in Health Care in the Peace River Area**

In 2013, Shell Canada announced a significant investment in two initiatives that help support high-quality health care in the Peace River region.

The Rotary Club of Peace River will receive $500,000 towards the construction of a new health care support housing. Shell will also lend its name to the facility (Shell Rotary House), which will provide accommodations for patients who require medical supervision as outpatients, family members of patients who are receiving treatment in hospital and health care professionals. This is a commitment that will be paid over the course of three years.

Shell is also investing $125,000 in the Accredited Supportive Living Society for inside living spaces at its Designated Supportive Living Complex. This complex will offer specialized support for individuals who cannot safely live at home without dedicated care, and will reduce demand on acute care beds at the local hospital. Accredited Supportive Living Society is a charitable, not-for-profit organization providing a wide range of services across northwestern Alberta including a Regional Family Support Program and a Regional Brain Injury Program.
<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social investment spend (millions)</td>
<td>2.7</td>
<td>2.5</td>
<td>3.4</td>
<td>3.9</td>
<td>4.2</td>
</tr>
<tr>
<td>Aboriginal spend (millions)</td>
<td>222</td>
<td>185</td>
<td>159</td>
<td>175</td>
<td>206</td>
</tr>
</tbody>
</table>
INVESTING IN EDUCATION

In 2013, Shell provided $500,000 toward a new lab for the Peace River Regional Power Engineering Program of Northern Lakes College. In recognition of Shell’s donation, the lab will be named the Shell Canada Power Engineering and Technology Centre. The lab will be equipped with a Steam Electrical Generation Trainer, designed to provide hands-on training for fourth class and third class power engineering students.

Further details on Shell’s social investment program are available at www.shell.ca/community.
SHELL PROVIDED $500,000 TOWARD A NEW LAB FOR NORTHERN LAKES COLLEGE

THE ROTARY CLUB OF PEACE RIVER WILL RECEIVE $500,000 TOWARDS THE CONSTRUCTION OF A NEW LIVING FACILITY
### SAFETY

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure hours (millions)</td>
<td>46.6</td>
<td>45.7</td>
<td>23.5</td>
<td>20.1</td>
<td>19.5</td>
</tr>
<tr>
<td>Total recordable cases</td>
<td>119</td>
<td>155</td>
<td>42</td>
<td>60</td>
<td>48</td>
</tr>
<tr>
<td>Total recordable case frequency</td>
<td>2.6</td>
<td>2.5</td>
<td>1.8</td>
<td>3.0</td>
<td>2.5</td>
</tr>
<tr>
<td>Lost time injuries</td>
<td>3</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Lost time injury frequency</td>
<td>0.1</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
</tr>
</tbody>
</table>

### CO₂ (Oil Sands Operations – Muskeg River Mine, Jackpine Mine, Scotford Upgrader and In Situ)

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total direct emissions (Mt CO₂e)</td>
<td>3.2</td>
<td>3.7</td>
<td>4.9</td>
<td>5.3</td>
<td>5.3</td>
</tr>
<tr>
<td>Total indirect emissions (Mt CO₂e)</td>
<td>1.5</td>
<td>1.3</td>
<td>1.9</td>
<td>1.7</td>
<td>1.9</td>
</tr>
<tr>
<td>Total emissions (Mt CO₂e)</td>
<td>4.7</td>
<td>5.0</td>
<td>6.7</td>
<td>7.0</td>
<td>7.2</td>
</tr>
<tr>
<td>Total CO₂e intensity (kg CO₂e/bbl)</td>
<td>82.8</td>
<td>88.5</td>
<td>86.2</td>
<td>82.2</td>
<td>80.9</td>
</tr>
<tr>
<td>Total CO₂e intensity (kg CO₂e/bbl) – Excluding construction emissions</td>
<td>-</td>
<td>-</td>
<td>80.0</td>
<td>82.2</td>
<td>80.9</td>
</tr>
<tr>
<td>Total CO₂e intensity including offsets (kg/bbl)*</td>
<td>74.5</td>
<td>45.2</td>
<td>53.5</td>
<td>56.4</td>
<td>74.7</td>
</tr>
<tr>
<td>Total CO₂e intensity including offsets (kg/bbl) – Excluding construction emissions</td>
<td>-</td>
<td>-</td>
<td>47.3</td>
<td>56.4</td>
<td>74.7</td>
</tr>
<tr>
<td>Total direct emissions (Mt CO₂e) – In Situ</td>
<td>1.02</td>
<td>0.89</td>
<td>0.58</td>
<td>0.56</td>
<td>0.57</td>
</tr>
<tr>
<td>Total indirect emissions (Mt CO₂e) – In Situ</td>
<td>0.13</td>
<td>0.14</td>
<td>0.15</td>
<td>0.15</td>
<td>0.13</td>
</tr>
<tr>
<td>Total direct emissions (Mt CO₂e) – Scotford Upgrader</td>
<td>1.86</td>
<td>1.82</td>
<td>2.85</td>
<td>2.98</td>
<td>3.25</td>
</tr>
<tr>
<td>Total indirect emissions (Mt CO₂e) – Scotford Upgrader</td>
<td>0.05</td>
<td>0.03</td>
<td>0.41</td>
<td>0.38</td>
<td>0.39</td>
</tr>
<tr>
<td>Total direct emissions (Mt CO₂e) – Jackpine and Muskeg River Mines</td>
<td>0.75</td>
<td>1.01</td>
<td>1.44</td>
<td>1.73</td>
<td>1.48</td>
</tr>
<tr>
<td>Total indirect emissions (Mt CO₂e) – Jackpine and Muskeg River Mines</td>
<td>1.01</td>
<td>1.11</td>
<td>1.32</td>
<td>1.21</td>
<td>1.34</td>
</tr>
</tbody>
</table>

* This data is intended to show the efforts we are making to offset the impact of emissions from our operations and does not suggest a physical reduction in overall emissions or emissions intensity.
### WATER

#### Scotford Upgrader

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total water use (million m³)</td>
<td>6.3</td>
<td>5.5</td>
<td>7.4</td>
<td>7.3</td>
<td>7.6</td>
</tr>
<tr>
<td>Net fresh water consumption (million m³)</td>
<td>3.7</td>
<td>3.4</td>
<td>4.8</td>
<td>5.6</td>
<td>5.4</td>
</tr>
<tr>
<td>Total effluent treated and returned to the river (million m³)</td>
<td>2.6</td>
<td>2.1</td>
<td>2.6</td>
<td>1.7</td>
<td>2.2</td>
</tr>
<tr>
<td>Percentage net fresh water consumption</td>
<td>58%</td>
<td>57%</td>
<td>65%</td>
<td>76%</td>
<td>71%</td>
</tr>
<tr>
<td>Percentage total effluent treated and returned to the river</td>
<td>42%</td>
<td>43%</td>
<td>35%</td>
<td>24%</td>
<td>29%</td>
</tr>
<tr>
<td>Fresh water intensity (bbl water consumed/bbl MRM and JPM bitumen)</td>
<td>0.5</td>
<td>0.5</td>
<td>0.4</td>
<td>0.5</td>
<td>0.4</td>
</tr>
</tbody>
</table>

#### Muskeg River Mine and Jackpine Mine**

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total water use – freshwater from the Athabasca, freshwater from other sources and recycled pond water (million m³)</td>
<td>94.7</td>
<td>93.4</td>
<td>130.8</td>
<td>142.6</td>
<td>139.9</td>
</tr>
<tr>
<td>Total freshwater consumption (million m³)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>34.2</td>
</tr>
<tr>
<td>Mine recycle water use (million m³)</td>
<td>74.2</td>
<td>69.6</td>
<td>101.9</td>
<td>117.5</td>
<td>105.7</td>
</tr>
<tr>
<td>Athabasca River water withdrawal (million m³)</td>
<td>15.2</td>
<td>17.5</td>
<td>23.0</td>
<td>14.6</td>
<td>15.6</td>
</tr>
<tr>
<td>Groundwater and surface runoff consumption (million m³)</td>
<td>5.3</td>
<td>6.3</td>
<td>5.8</td>
<td>10.5</td>
<td>18.9</td>
</tr>
<tr>
<td>Percentage freshwater consumed</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>24%</td>
</tr>
<tr>
<td>Percentage recycled pond water</td>
<td>78%</td>
<td>74%</td>
<td>78%</td>
<td>82%</td>
<td>76%</td>
</tr>
<tr>
<td>Percentage Athabasca River water consumed</td>
<td>16%</td>
<td>19%</td>
<td>18%</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>Percentage groundwater and surface runoff consumption</td>
<td>6%</td>
<td>7%</td>
<td>4%</td>
<td>7%</td>
<td>14%</td>
</tr>
<tr>
<td>Athabasca River water intensity (bbl river water/bbl bitumen)</td>
<td>2.0</td>
<td>2.4</td>
<td>2.0</td>
<td>1.2</td>
<td>1.2</td>
</tr>
</tbody>
</table>

#### In Situ

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total freshwater consumption (million m³)</td>
<td>2.1</td>
<td>1.9</td>
<td>2.2</td>
<td>1.7</td>
<td>1.6</td>
</tr>
<tr>
<td>Fresh water intensity (bbl water consumed/bbl in situ bitumen)</td>
<td>1.5</td>
<td>1.6</td>
<td>2.2</td>
<td>1.4</td>
<td>1.4</td>
</tr>
</tbody>
</table>

---

* This data is intended to show the efforts we are making to offset the impact of emissions from our operations and does not suggest a physical reduction in overall emissions or emissions intensity.

** Better accounting of water use at our mine sites in 2010 has seen the inclusion of freshwater from other sources.
### TAILINGS – Annual Fluid Fines*

<table>
<thead>
<tr>
<th></th>
<th>Annual Calendar Year Volumes (Mm³)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009</td>
</tr>
<tr>
<td><strong>Muskeg River Mine</strong></td>
<td></td>
</tr>
<tr>
<td>Fluid fine tailings</td>
<td>9.97</td>
</tr>
<tr>
<td>Fines capture</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Jackpine Mine</strong></td>
<td></td>
</tr>
<tr>
<td>Fluid fine tailings</td>
<td>0.00</td>
</tr>
<tr>
<td>Fines capture</td>
<td>0.00</td>
</tr>
</tbody>
</table>

* Revised numbers have been provided from previous years to align with figures we report to the government.

** Figures have been adjusted for 2011 from previous report to reflect the updated cumulative reclamation as of December 31, 2011, which considers both the historical (pre - 2011) and the new reclamation (completed in 2011).

### LAND AND RECLAMATION

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011 **</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Muskeg River Mine</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total active footprint – mine + plant size (ha)</td>
<td>5,900</td>
<td>6,246</td>
<td>7165.3</td>
<td>8156.4</td>
<td>8281.2</td>
</tr>
<tr>
<td>Permanent reclamation (ha)</td>
<td>16</td>
<td>16</td>
<td>12</td>
<td>38.7</td>
<td>166.1</td>
</tr>
<tr>
<td>Temporary reclamation (ha)</td>
<td>111</td>
<td>111</td>
<td>202</td>
<td>196.0</td>
<td>158.0</td>
</tr>
</tbody>
</table>

** Figures have been adjusted for 2011 from previous report to reflect the updated cumulative reclamation as of December 31, 2011, which considers both the historical (pre - 2011) and the new reclamation (completed in 2011).

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011 **</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Jackpine Mine</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total active footprint – mine + plant size (ha)</td>
<td>–</td>
<td>3,541</td>
<td>4,301</td>
<td>4,925</td>
<td>5178.5</td>
</tr>
<tr>
<td>Permanent reclamation (ha)</td>
<td>–</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Temporary reclamation (ha)</td>
<td>–</td>
<td>5.6</td>
<td>5.6</td>
<td>3.3</td>
<td>57.1</td>
</tr>
</tbody>
</table>

* No historical information exists for Jackpine Mine in 2009 as 2010 is the first reporting year following startup of the mine.

### COMMUNITY

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social investment spend (millions)</td>
<td>2.7</td>
<td>2.5</td>
<td>3.4</td>
<td>3.9</td>
<td>4.2</td>
</tr>
<tr>
<td>Aboriginal spend (millions)</td>
<td>222</td>
<td>185</td>
<td>159</td>
<td>175</td>
<td>206</td>
</tr>
</tbody>
</table>
Athabasca Oil Sands Project (AOSP)
A joint venture among Shell Canada Limited (60%), Chevron Canada Limited (20%) and Marathon Oil Canada Corporation (20%), the AOSP consists of the Muskeg River and Jackpine Mines located north of Fort McMurray, Alberta and the Scotford Upgrader and Quest carbon capture and storage project, located near Edmonton, Alberta.

Bitumen
A thick hydrocarbon, referred to as heavy oil.

CO₂,e
Carbon dioxide equivalent. The 100-year time horizon global warming potential of a specified gas expressed in terms of equivalency to CO₂.

Cogeneration
Combined production of heat for use in industrial facilities and the production of electricity as a by-product.

Cold Production
An in situ production technique used when the bitumen is less viscous and does not require heating to make it fluid enough to be pumped to the surface.

Direct Emissions
The release of specified gases from sources under the direct control of the operating facility expressed in tonnes CO₂,e.

Effluent
Wastewater (treated or untreated) that flows out of a treatment plant, sewer, or industrial facility.

Emissions Intensity
The quantity of specified gases released by a facility per unit of production from that facility.

Emission Offset
A reduction in one or more specified gases (regulated greenhouse gas emissions) occurring at sites not covered by the Specified Gas Emitters Regulation.

Emission Performance Credit (EPCS)
Generated when a facility reduces its Net Emissions Intensity below its Net Emissions Intensity Limit. EPCs are awarded on a tonne CO₂,e reduction basis.

Greenhouse Gas (GHG)
Mainly, carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), all of which contribute to the warming of the Earth's atmosphere.

HA
Hectare. A unit of surface area equal to a square that is 100 metres on each side.

Indirect Emissions
Emissions that are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity.

In Situ
Refers to various methods used to recover deeply buried bitumen deposits, including steam injection, solvent injection, electrical heating and cold production.

JPM
Jackpine Mine.

Km²
Square kilometre. A unit of surface area equal to a square that is one kilometre on each side.

Lost-Time Injury Frequency
Refers to the rate of recordable injuries requiring time off work per one million exposure hours worked.

MRM
Muskeg River Mine.

m³
Cubic metre. A unit of volume or capacity equal to 1000 litres.

Mt (Megatonne)
Megatonne. A unit of mass equal to one million tonnes.

Reclamation
Returning disturbed land to a land capability equivalent to what it was prior to disturbance. Reclaimed property is returned to the Province of Alberta at the end of operations.

Certified Reclamation
Reclaimed areas for which a certificate has been issued under the terms of the Alberta Environmental Protection and Enhancement Act (EPEA), signifying that the terms and conditions of the EPEA approval have been complied with and the lease is returned to the Crown.

Permanent Reclamation
Landform construction and contouring, placement of capping and reclamation materials and re-vegetation for terrestrial or wetlands areas. Land cannot be listed under the permanent reclamation category until re-vegetation has occurred that is reflective of the approved Reclamation Plans.

Temporary Reclamation
Includes seeding, planting or natural regrowth of vegetation in areas slated to be redistributed by future mining or construction activities. This is often done to control erosion and achieve slope stability.

Seepage
The slow movement of water or other fluids through a process medium, or through small openings in the surface of unsaturated soil.
**Specified Gas Emitters Regulation**
Regulates six GHG species – carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), PFCs, HFCs and sulphur hexafluoride (SF₆) – for facilities emitting over 100,000 tonnes of CO₂ per annum in Alberta.

**Steam Assisted Gravity Drainage (SAGD)**
A method of producing bitumen which involves two horizontal wellbores, one above the other; steam is injected into the upper wellbore and softened bitumen is recovered from the lower wellbore.

**Synthetic Crude Oil**
A mixture of hydrocarbons, similar to crude oil, derived by upgrading bitumen from oil sands.

**Tailings**
The residual by-product that remains after the bitumen is separated from the mined oil sands ore; tailings are composed of water, sand, clay, heavy metals and residual bitumen.

**Thermal Production**
A bitumen recovery technique that includes injecting high-pressure steam underground to mobilize the bitumen, which is then pumped to the surface, leaving the sand in place.

**Total GHG Emissions**
Includes GHG emissions from direct and indirect sources.

**Total Recordable Case Frequency**
Refers to the rate of recordable injuries that required medical attention per one million exposure hours worked.
OVERALL

Data cited in this report has been confirmed as of March 2014. If substantial data changes occur after preparation of this report, they will be updated in next year’s publication.

CO₂

Total CO₂e intensity is calculated on the basis of operational emissions. CO₂ intensity including offsets – this data is intended to show the efforts we are making to offset the impact of emissions from our operations and does not suggest a physical reduction in overall emissions or emissions intensity.

SOCIAL INVESTMENT

Shell’s social investment spend does not include funding provided by Shell to Aboriginal neighbours as part of impact benefit agreements.

CAUTIONARY NOTE

The companies in which Royal Dutch Shell plc directly and indirectly owns investments are separate entities. In this report, “Shell group” and “Royal Dutch Shell” are sometimes used for convenience where references are made to Royal Dutch Shell plc and its subsidiaries in general. In this report all references to “Shell” refer specifically to Shell’s oil sands businesses in Canada. Likewise, the words “we,” “us” and “our” are also used to refer to Shell’s oil sands businesses in Canada as well as to those who work for them. These expressions are also used where no useful purpose is served by identifying the particular company or companies. “Subsidiaries,” “Shell subsidiaries” and “Shell companies” as used in this report refer to companies over which Royal Dutch Shell plc either directly or indirectly has control. Companies over which Royal Dutch Shell has joint control are generally referred to as “joint ventures” and companies over which Royal Dutch Shell has significant influence but neither control nor joint control are referred to as “associates.” In this report joint ventures and associates may also be referred to as “equity-accounted investments.” The term “Shell interest” is used for convenience to indicate the direct and/or indirect (for example, through our 23% shareholding in Woodside Petroleum Ltd) ownership interest held by Royal Dutch Shell in a venture, partnership or company, after exclusion of all third-party interests.

This report contains forward-looking statements concerning the financial condition, results of operations and businesses of Royal Dutch Shell. All statements other than statements of historical fact are, or may be deemed to be, forward-looking statements. Forward-looking statements are statements of future expectations that are based on management’s current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in these statements. Forward-looking statements include, among other things, statements concerning the potential exposure of Royal Dutch Shell to market risks and statements expressing management’s expectations, beliefs, estimates, forecasts, projections and assumptions. These forward-looking statements are identified by their use of terms and phrases such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “goals,” “intend,” “may,” “objectives,” “outlook,” “plan,” “probably,” “project,” “risks,” “schedule,” “seek,” “should,” “target,” “will” and similar terms and phrases. There are a number of factors that could affect future operations of Royal Dutch Shell and could cause those results to differ materially from those expressed in the forward-looking statements included in this report, including (without limitations): (a) price fluctuations in crude oil and natural gas; (b) changes in demand for Shell’s products; (c) currency fluctuations; (d) drilling and production results; (e) reserves estimates; (f) loss of market share and industry competition; (g) environmental and physical risks; (h) various domestic and international economic conditions and factors affecting the financial markets; (i) the risk of doing business in developing countries and countries subject to international sanctions; (j) legislative, fiscal and regulatory developments including regulatory measures addressing climate change; (k) economic and financial market conditions in various countries and regions; (l) political risks, including the risks of expropriation and renegotiation of the terms of contracts with governmental entities; (m) delays or advancements in the approval of projects and delays in the reimbursement for shared costs; and (n) changes in trading conditions. All forward-looking statements contained in this report are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Readers should not place undue reliance on forward-looking statements. Additional risk factors that may affect future results are contained in Royal Dutch Shell’s 2013 annual report filed with the U.S. Securities and Exchange Commission and available at www.shell.com/investor and www.sec.gov. These risk factors also expressly qualify all forward-looking statements contained in this report and should be considered by the reader. Each forward-looking statement speaks only as of the date of this report, April 9, 2014. Neither Royal Dutch Shell plc nor any of its subsidiaries undertake any obligation to publicly update or revise any forward-looking statement as a result of new information, future events or other information. In light of these risks, results could differ materially from those stated, implied or inferred from the forward-looking statements contained in this report.

We may have used certain terms, such as “resources,” in this report that United States Securities and Exchange Commission (SEC) strictly prohibits us from including in our filings with the SEC. U.S. Investors are urged to consider closely the disclosure in our Form 20-F, File No 1-32575, available on the SEC website www.sec.gov. You can also obtain these forms from the SEC by calling 1-800-SEC-0330.
FEEDBACK
We welcome your input.
Stakeholder feedback is an integral part of our sustainability reporting. Your feedback on this report or Shell's oil sands activity is important to us.

E-mail: generalpublicenquiries-ca@shell.com
Phone: 1-800-250-4355

www.shell.ca/oilsands