

# Framing the next conversation

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Report on sustainability  
Summary report 2014

## About the 2014 Report on sustainability

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Our 2014 report includes consolidated social, economic and environmental data. For more information, refer to the Performance Data section in the online version of our report. Economic data is consistent with that reported in our 2013 Annual Report unless otherwise noted.

This report on sustainability was created using the Global Reporting Initiative (GRI) G3.1 Guidelines and Oil and Gas Sector Supplement (O&GSS) to the GRI checked A+ application level. GRI's Application Level Check Statement, along with our boundary conditions, can be found online at [sustainability.suncor.com](http://sustainability.suncor.com) in the Performance Data section. Selected performance indicators for the year 2013 were independently reviewed using the GRI G3.1 Guidelines and O&GSS. The results of this review can be found on the online version of our report within the Third Party Assurance section.

Stakeholder feedback is an integral part of developing this report. We enlisted the guidance of Ceres, a network of investors, labour representatives, environmentalists and other public interest groups, to help ensure our report is relevant and meaningful. We thank Ceres and the participating stakeholders for their assistance in creating the *2014 Report on sustainability*.

For a full report, including performance data as well as a discussion of challenges and opportunities, visit [sustainability.suncor.com](http://sustainability.suncor.com).

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# The next conversation

Energy provides us with countless advantages. It also comes with a unique set of challenges. Addressing those challenges means we must engage in open, honest and authentic conversations. How we deliver the energy the world needs is influenced by each of us through what we think, do and say. The next conversation about our energy future begins today. Together, we can find a better way to get things done.



## Sustainability at Suncor

We pursue a triple bottom line vision of sustainability. That means developing resources in a way that delivers economic prosperity, improves social well being and creates a healthy environment for today and tomorrow. We re striving to continuously improve our performance. It s through our annual *Report on sustainability* that we are able to share with you the progress we ve made, the challenges we face and how we can work together to deliver on our goals.

# A message from our CEO



While the global energy landscape is always evolving, some things remain constant and certain. Healthy economies require a healthy supply of energy. And with a global population expected to grow to nine billion before the middle of this century, we are more challenged than ever to develop the energy the world needs while minimizing our impact on the environment.

When it comes to discussing our shared energy future, we must openly address the risks of our energy choices, including the challenge of global climate change. How we produce, deliver and use energy has a very real impact on our planet. At the same time, we need to recognize the equally real benefits responsible energy development continues to generate – including jobs, mobility and a better quality of life for millions of people around the world.

Sadly, solution-oriented discussions about our energy future are in short supply these days. We've become very good at demonizing, rather than deliberating. We excel at confrontation, but we seem to have lost the ability to have honest, direct, human conversations about energy choices that touch all of our lives, every day.

I'm convinced there is a better path forward. Instead of trying to prove who is right and who is wrong, we need to work together on practical solutions. Simply put, there is no room for villains or heroes when we are looking at our collective energy future.

We know we can't resolve this impasse on our own. But we can contribute to building a better future by striving to become the best company we can be. What does that mean?

## “There is no room for villains or heroes when we are looking at our collective energy future.”

Among other things:

- making safety our top priority
- working toward continuous improvements in our economic, social and environmental performance
- being bold about setting goals and transparently reporting on our successes and failures
- investing in technology and innovation
- collaborating on solutions.

Our aspirations are rooted in our values, one of which stands above the rest: if a job can't be done safely, don't do it. Five separate fatalities (three employee and two contractor) near our Oil Sands site earlier this year were a sad reminder that we can never let up on our commitment to ensure every worker goes home safely. Incidents like these are unprecedented and not acceptable. We have assembled a major task force to intensify safety efforts and ensure tragedies like these never happen again.

Nearly two decades ago, as part of our sustainability journey, we launched a corporate-wide plan to manage our greenhouse gas (GHG) emissions. Guided by that plan, we continue to invest in technology and innovation to reduce our emissions intensity and ultimately 'bend the curve' on absolute emissions growth. Our aim is for the emissions from our product to be on par with, or lower than, other sources of oil. We've also made investments in renewable energy sources, primarily wind power and biofuels. These investments reflect our belief that all energy sources will be part of the energy mix going forward, and our commitment to producing energy that has less impact on the environment.

Technology and innovation are also allowing us to significantly lower our freshwater draw and look at ways to recycle and reuse this water across our operations. By sharing many of these advances with industry peers, we expect to have an even greater impact.

Five years ago, we set an industry precedent by adopting performance goals on water consumption, reclamation of disturbed lands, energy efficiency and air emissions. As we continue to focus on achieving our 2015 objectives, we are looking to our business and stakeholders in an effort to draw up ambitious sustainability goals for beyond 2015 that will address our environmental and social performance.

The reason for broadening our targets is simple: we believe companies like Suncor have a unique opportunity – and obligation – to advance the well-being of the communities where we operate and to try to address complex social problems.

But we also recognize we can do so much more on all of these fronts when we collaborate on solutions.

One example is Canada's Oil Sands Innovation Alliance (COSIA), a network of 13 companies focused on improving industry-wide environmental performance. In its first year alone, COSIA shared more than 560 technologies worth nearly \$1 billion.

Another kind of collaboration is the work Suncor and seven other companies have done to launch a United Nations Global Compact (UNGC) Local Network in Canada. This is part of our continuing support for the UNGC and its 10 Principles, which guide our approach to human rights, labour, environment and anti-corruption – wherever in the world we operate.

We need to take collaboration to the next level. We need to start having open and honest conversations across the stakeholder spectrum about the kind of society we all want to create – and the energy choices that will get us there.

Consider the climate change challenge. As an energy producer, our starting point is that we

have a responsibility to do whatever we can to reduce our carbon footprint. But to make a significant global impact on GHG emissions, we will all need to have a much bigger discussion about how we plan our cities, heat our homes, grow our food and access transportation.

Similarly, while I'm very proud of the investments we make every year in the communities where we operate, I can't help thinking how much more could be achieved if industry, policymakers and stakeholders could come together and use their collective talents and skills to tackle some of our social challenges, whether it's building capacity in the non-profit sector or improving educational outcomes for Aboriginal youth.

Collaboration isn't easy, and neither are the challenges we face. To get to solutions, we'll need to check our personal agendas at the door, realize our way is not always the best way – and focus on the common good.

I believe there's reason for optimism. If we can start to imagine a better energy future, we can begin to work together to make it a reality. As we do so, we need to recognize that not everything we attempt will lead directly to success.

However, here's another certainty: if we don't try, we will fail. And that will be on us – all of us – to explain to future generations.

The next conversation on our energy future begins today. Let's strive to make it a constructive and respectful discussion about both the benefits and risks of energy development. Together, we can begin to build a more sustainable society.



**Steve Williams**  
president and chief executive officer

# Performance at a glance



Our vision is to be trusted stewards of valuable natural resources. Guided by our values, we lead the way to deliver economic prosperity, improved social well-being and a healthy environment for today and tomorrow. Here is a snapshot of our priorities in 2013 and how we performed.

## 1,500

cubic metres per day of tailings water used in our in situ operations

## 8,600+

vendors worldwide from whom we purchase goods and services

## 5%

reduction in recordable injury frequency among employees and contractors

### Pursue zero injuries

We always rank workplace safety as our top priority, with the goal of eliminating all workplace incidents. In 2013, we continued the rollout of new company-wide safety awareness and injury reduction campaigns. However, five separate fatalities (three employee and two contractor) near our Oil Sands site earlier this year were sad reminders that we can never let up on our journey toward ensuring everyone goes home safely at the end of the day. Incidents like these are tragic and unacceptable – and we are determined to do all we can to prevent any reoccurrence.

### Reduce our environmental footprint

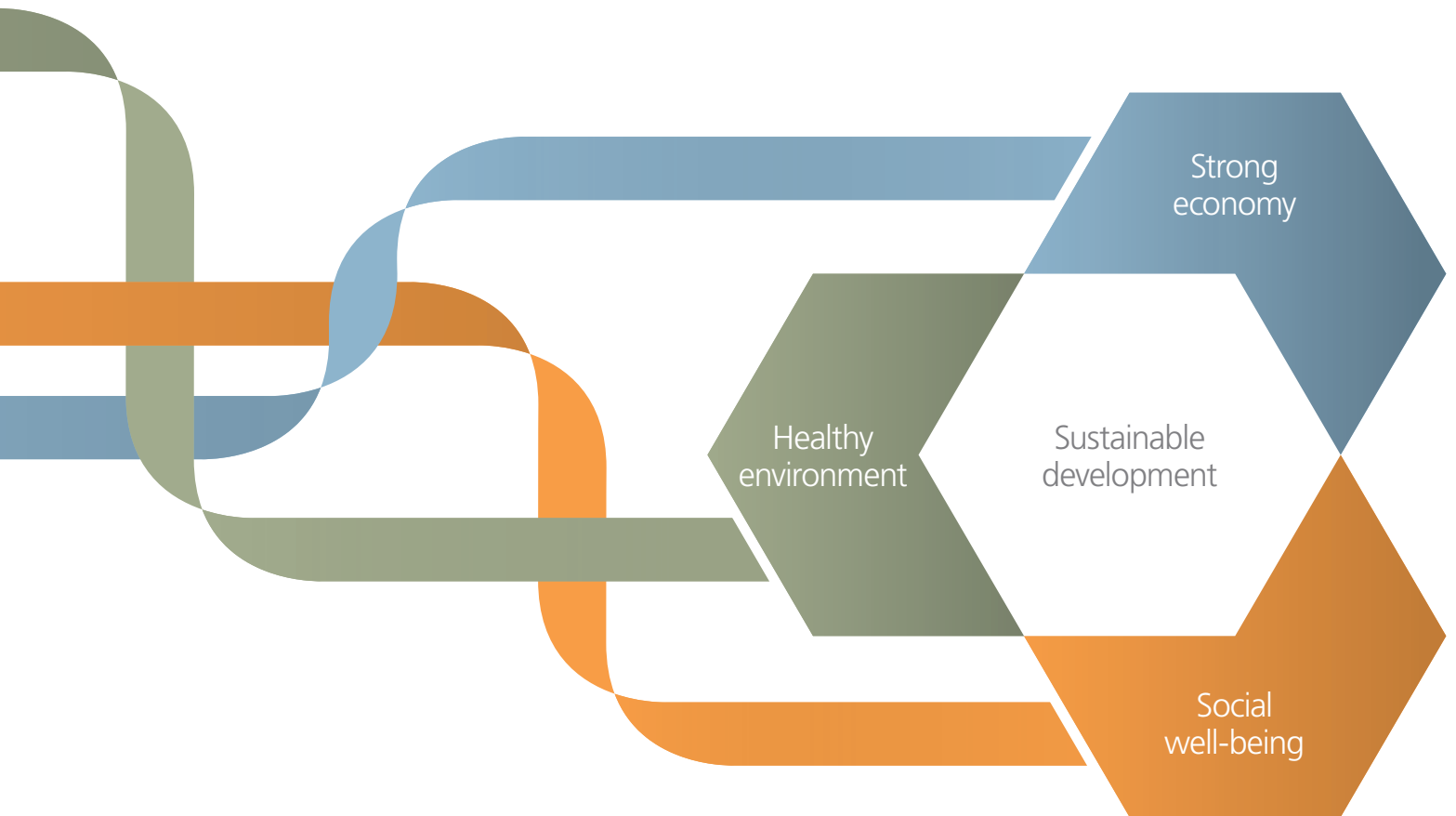
We continued to make progress on achieving our four environmental performance goals to improve energy efficiency, achieve absolute reductions in freshwater consumption and air emissions, and increase land reclaimed by 2015. Our Oil Sands Water Management strategy is helping us achieve dramatic reductions in freshwater withdrawal through a number of initiatives, including reusing tailings water as makeup water and recycling upgrading wastewater for reuse in our operations or for return to the environment.

In 2013, we also marked a reclamation milestone: the official opening of a reconstructed fen near our Oil Sands base plant, which is designed to emulate the properties of a natural fen watershed. Our fen – one of the first reclaimed fen watersheds in the world – is the culmination of 10 years of collaborative research.

We also continued to work through Canada's Oil Sands Innovation Alliance (COSIA) to accelerate industry-wide performance improvements in four environmental priority areas: tailings, water, land and greenhouse gas (GHG) emissions.

### Address the climate change challenge

Our absolute GHG emissions increased while emissions intensity slightly decreased. The increase in absolute emissions can be attributed to significant new production from the ramp-up of Firebag 4. We see GHG management as a challenge requiring multiple responses. We continued to implement measures that conserve energy and lower GHG emissions while investing in longer-term technologies aimed at reducing emissions intensity and potentially 'bending the curve' on absolute emissions. We also continued to



engage in and encourage a broader public conversation on energy production and use as well as options for creating a more sustainable energy future.

**Promote social responsibility**

Our innovative community investment strategy is rooted in collaboration; by working with the social sector and others, we believe we can help address complex social challenges. In 2013, we continued to deliver targeted investments to help communities near our operations grow, thrive and become sustainable. This included programs to address skilled labour shortages and improve educational opportunities for Aboriginal youth.

We accelerated efforts to engage and partner with Aboriginal Peoples in the Wood Buffalo region and across Canada. We spent more than \$431 million with Aboriginal business in 2013 and continued to implement an Aboriginal Economic Collaboration strategy that seeks to build the winning conditions for long-term, mutually beneficial economic development. Recognizing that many Aboriginal residents continue to express concerns about the impact of resource

development, we are making renewed efforts to maintain open and respectful two-way communication.

**Generate prosperity and opportunity**

In 2013, we contributed a combined \$4 billion in taxes and royalties for governments – revenues that were then available to fund vital public sector programs. We also purchased \$11.5 billion in goods and services in 2013 from more than 8,600 vendors worldwide.

**Invest in technology and innovation**

We are committed to making investments in new technologies, several of which hold the potential to reduce carbon emissions, water use and the overall environmental footprint of our business. In 2013, we spent approximately \$150 million to support technology research and development.

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 We pursue a ‘triple bottom line vision’ of sustainable development.

**On the web:** For our full report on our performance, including performance data, visit [sustainability.suncor.com](http://sustainability.suncor.com)



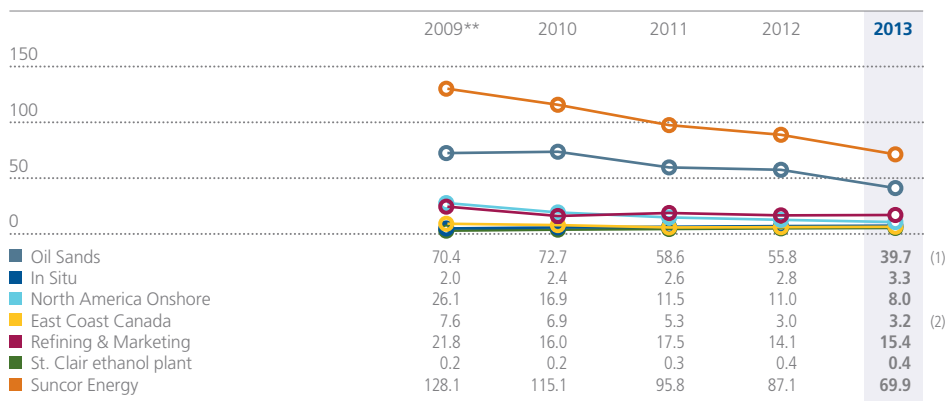
# Performance at a glance continued

Key focus areas for air emissions management include air quality monitoring, sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs). Suncor's total reported emissions to air in 2013 decreased by almost 20 per cent compared to 2012 levels, primarily due to reduction in emissions from Oil Sands and the divestiture of North America Onshore facilities.

- (1) There was considerable reduction in VOC emissions values in 2013 compared to previous years due to extensive sampling conducted in the mining and dedicated disposal areas and increase in VOC emissions testing frequencies. There was also a reduction in SO<sub>2</sub> and NO<sub>x</sub> emissions from Oil Sands energy and utilities (E&U) plant and can be attributed to the use of alternate fuels and major outages that occurred at the E&U Plant.
- (2) Referred to in previous reports as International & Offshore. Historical data prior to 2010 included other international assets operated at that time. Since 2010 only air emissions from Terra Nova off the east coast of Canada has been included.

## AIR EMISSIONS\*

(thousand tonnes/year)



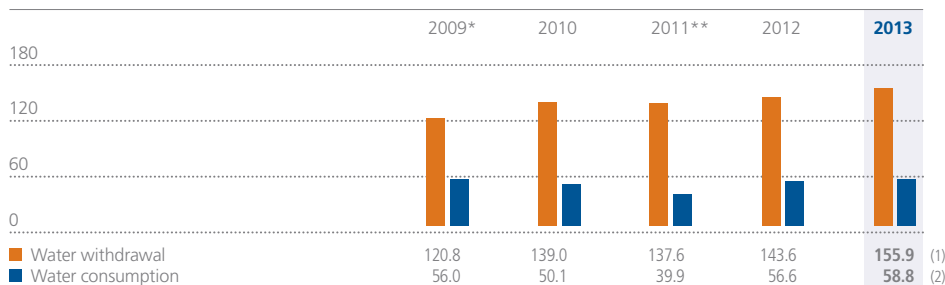
\* Air emissions include SO<sub>2</sub>, NO<sub>x</sub> and VOC emissions.  
 \*\* Beginning in 2009, includes consolidated post-merger data.

Key focus areas for water management include implementing water management strategies and conducting water risk assessments in specific facilities and/or business units as well as designing more systems to treat and recycle tailings from our oil sands operations. Suncor's total water consumption increased by four per cent compared to 2012 levels.

- (1) Water withdrawal can potentially be subject to variances year over year based on environmental factors (e.g., precipitation).
- (2) Water consumption is defined as the quantity of water used and not returned to its proximate source or no longer available in its original form.

## WATER WITHDRAWAL AND CONSUMPTION

(million m<sup>3</sup>)



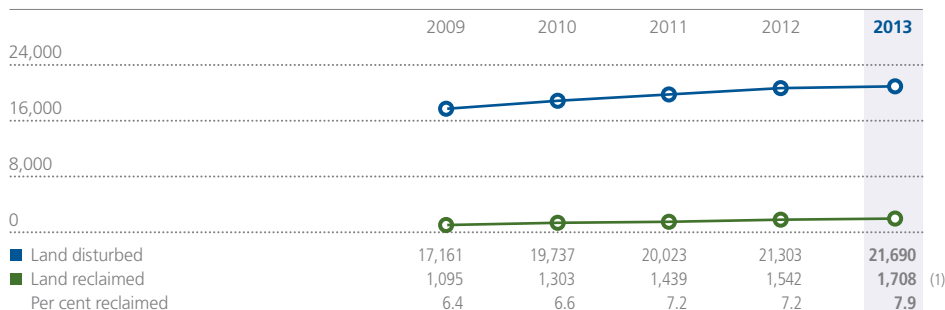
\* Beginning in 2009, includes consolidated post-merger data.  
 \*\* Beginning in 2011, the methodology for calculating the water withdrawal metric for Oil Sands, In Situ and Refining & Marketing was updated to include industrial runoff volumes as described in the Performance Indicators section of the *Report on sustainability*. Data and process improvements implemented since 2012 improved the understanding of site conditions for specific facilities.

Since Suncor opened Canada's first oil sands mine in 1967, our oil sands operations have disturbed approximately 21,690 hectares of land. As of the end of 2013, the company had reclaimed approximately 1,708 hectares, or nearly eight per cent of the total land disturbance of our oil sands operations to date.

- (1) Following Alberta Environment & Sustainable Resource Development's issuance of standards for Geographic Information Systems spatial data reporting in 2010, Suncor re-digitized all permanent reclamation areas and removed disturbance feature types (such as roads, power lines, pipelines, etc.) that occurred post-reclamation. This resulted in a removal of 96.3 hectares of re-disturbance from the total of reclaimed areas prior to 2010. As such, the changes in the reclamation areas for each year and the total area permanently reclaimed to the end of 2010 have been updated to reflect these changes. Reclaimed lands have not been certified as such. For further details on the definition of reclaimed, see the legal notice at the end of this publication.

## LAND USE AT OIL SANDS

(cumulative hectares)





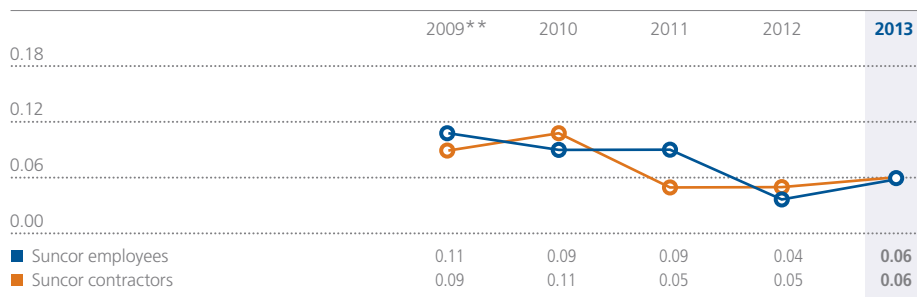


**On the web:** Further details on our environmental and social progress are available at [sustainability.suncor.com](http://sustainability.suncor.com)

The lost time injury frequency among Suncor employees and contractors increased slightly from a rate of 0.05 in 2012 to a rate of 0.06 in 2013 because the number of hours worked decreased while the number of injuries stayed the same from 2012.

### LOST TIME INJURY FREQUENCY\*

(injuries per 200,000 hours worked)

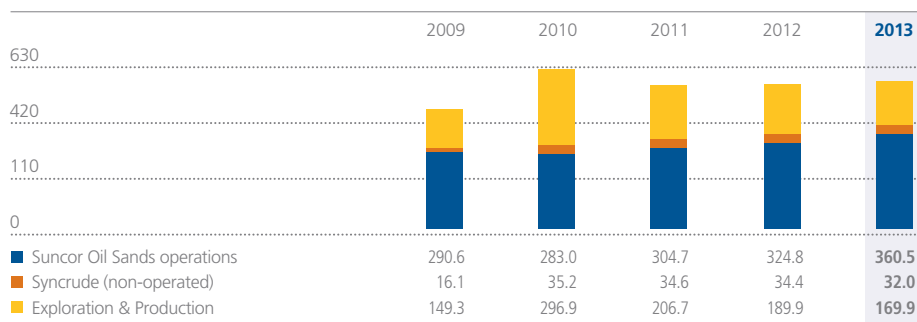


\* Exposure hours and lost time injuries data.  
 \*\* Beginning in 2009, includes consolidated post-merger data.

Production volumes for 2013 increased for Oil Sands relative to 2012, primarily due to strong project execution, improved reliability and completion of the ramp-up of production from Firebag. Exploration & Production experienced a decrease in production in 2013 primarily due to the sale of the conventional natural gas business. Suncor Oil Sands volumes are inclusive of In Situ production volumes for consistency with our Annual Report. Syncrude volumes are included here (consistent with our Annual Report) but are not included in the performance indicator sections in the *Report on sustainability*. Upstream production represented here does not include Refining & Marketing production.

### UPSTREAM PRODUCTION VOLUMES

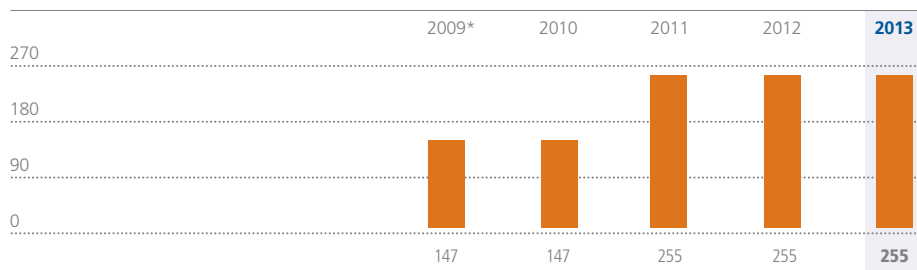
(thousands of boe/day)



Suncor is currently involved in six operating wind farm projects – two of which are operated by Suncor and four which are non-operated. The total installed wind capacity of these operations is 255 megawatts (MW), enough to power about 100,000 Canadian homes per year. Suncor is pursuing two additional wind power projects that are expected to increase total installed wind capacity to 395 MW.

### INSTALLED WIND CAPACITY\*

(megawatts)



\* Production capacity at wind farms in which Suncor is a partner or operator.

# Performance goals – our journey



A conversation with Arlene Strom, vice president, sustainability & communications, about our journey on performance goals

In 2009, we set an industry precedent by adopting corporate-wide performance goals in four key environmental areas. With the 2015 deadline for achieving the goals fast approaching, we are preparing to launch a set of post-2015 performance goals that will include, for the first time, social goals. We asked Arlene Strom to talk about the lessons learned over the last five years – and the new challenges that lay ahead.

## Why did Suncor adopt these goals back in 2009?

**Arlene:** There were a couple of things driving us. One was what we were hearing from our stakeholders, including an organization called Ceres, which is a network of investors, labour, environmentalists and other public interest groups we've been engaging with for a number of years. They urged us to set firm targets and goals. This dovetailed with the second driver – a renewed determination by our own leadership group to drive performance improvements across the company. We wanted to raise the bar and saw the setting of goals as a way to push ourselves to achieve more.

At the heart of it, we were being asked to lead. In fact, that's exactly how Ceres put it –

that we had the opportunity to lead and bring others with us. And I think it did influence the rest of the industry. Over the past five years, the whole scope of collaboration within the industry has changed and we've seen the level of ambition and aspiration increase across the board.

## At the time, was there any discussion that you were taking a risk – that if you didn't meet these targets, there would be consequences?

Nobody likes to set a goal they don't meet, whether it's a training goal for a race you're running or declaring you're on a diet and then falling short. So whenever you set goals, there's always the risk of not meeting them. But if you don't aspire, you don't really know what you can achieve. And with these performance goals, we've already achieved a lot by challenging ourselves to do better.

## So how close is Suncor to achieving these goals?

I think we are very close. We expect to meet the water and land reclamation goals and we believe we can meet the emissions one as well. The energy intensity target is going to be the hardest to hit, and that's for a couple of reasons.

First, shortly after we declared these goals, our growth strategy introduced additional in situ projects which have higher energy intensities. Second, Suncor merged with Petro-Canada, introducing offshore production to our portfolio. While the energy intensity of offshore operations is relatively low during peak production, we've seen an increase in intensity over the goal period as wells have depleted. It's the addition of these significant assets to our base that has made our energy efficiency and air emission goals a lot more ambitious.

## The energy efficiency goal is a critical one when it comes to reducing greenhouse gas emissions. If you fail to meet that one, do you expect Suncor to be penalized by investors or other stakeholders?

Most of our investors want us to operate in the most effective and efficient way possible. Many also want us to be a leader in terms of our environmental performance. I think they recognize that, even if we don't fully meet that goal, we've made a lot of progress. And they also understand that, when it comes to long-term assets like the oil sands, the kind of game-changing technologies required to really 'bend the curve' on GHG emissions take time to be tested, commercialized and implemented.

“If you don’t aspire,  
you don’t really know  
what you can achieve.”



So I don’t think we’ll be penalized. There will be some who criticize us, and that’s okay. We are going to keep engaging with all of our stakeholders and listening to their concerns as we continue to develop and pursue long-term goals.

**What’s been the impact of this kind of goal setting on Suncor employees and how have they responded to the challenge?**

There’s been a lot of enthusiasm. Our employees want to see us being ambitious, aspirational – and making a difference. That’s the kind of vision that gets people up in the morning and gives us all an extra push to do a little better.

And sometimes, you know, the results are just so affirming. Just look at our water reduction goal, where we’ve already surpassed our target corporate-wide and exceeded our own expectations in our Oil Sands operations. When you have that level of success, it just motivates you to try to achieve even more.

**As you’ve worked toward a set of post-2015 goals, what have you learned from the last five years?**

The importance of being and staying engaged with all of our stakeholders, as well as our

in-house experts and leaders. We’ve also learned the importance of integrating our sustainability goals at every level of our business – so it becomes part of the fibre of our company. And while we’ve made some real progress in that area, I believe we can do more.

**Why did you decide to include social goals this time?**

Not that long ago, we clarified and reaffirmed our vision and mission. That vision is focused on being trusted stewards of valuable natural resources and, guided by our values, leading the way in creating economic prosperity, social well-being and a healthy environment for today and tomorrow.

If we are living that vision – if that’s truly how we want to operate our business – then we need to have social goals. That piece was missing.

And it’s not like we’re starting from scratch. We have a well-defined community investment strategy that’s rooted in collaboration. We have long-term and important Aboriginal partnerships. So why not take this to the next level by declaring the outcomes we hope to drive?

**Suncor has talked a lot recently about the need for greater collaboration; given that, why pursue corporate performance goals rather than goals pursued in collaboration with others?**

The two are not mutually exclusive. In fact, the opposite is true: they are mutually supportive. We are pursuing collaborative goals through the work we’re doing with Canada’s Oil Sands Innovation Alliance, among others. And setting our own goals helps to ensure that our entire organization is aligned and stewarding our progress toward those goals. We are a better collaborative partner if we lead by example.

It’s about having the confidence we can make a difference – and the commitment to see that through.

**Arlene Strom**

vice president, sustainability & communications



On the web: Read the full conversation with Arlene Strom at [sustainability.suncor.com](http://sustainability.suncor.com)





# Environmental performance

22,500 - 43,222

litres of water per minute recycled  
in our new wastewater treatment plant

As we develop energy, we're focused on minimizing our impact on shared water, land and air resources.

## Water

Water affects every aspect of our business, and we continuously raise the bar on our water performance, management and quality control practices. As we pursue our goal of reducing freshwater consumption by 12 per cent by 2015 (as compared to 2007), all our operations are realizing opportunities to use less water. We are paying particular attention to our oil sands mining operations, which represent our biggest draw on freshwater resources.

A key benchmark – particularly during periods of production growth – is the amount of water consumed for each barrel of oil produced. We continue to make significant progress in this area.

In 2013, our oil sands mining operation consumed 2.01 cubic metres of water to produce one cubic metre of oil – a 13 per cent reduction in water consumption intensity since 2007.



We expect to make further improvements as we implement our Oil Sands Water Management Strategy. For example, with the commissioning of a wastewater treatment facility, we expect to achieve an overall reduction in our river water withdrawal of about 65 per cent compared to 2007.



In 2013, we took significant steps to put our water management strategy into action. That strategy is guided by three major principles:

- eliminate or reduce water use
- reuse water where possible
- return water back to the environment.

The first major phase of our water strategy, formally commissioned in 2013, involves

sending treated tailings water from our oil sands base plant to our Firebag in situ facility for reuse as makeup water. The result is a system designed to allow 10,000 cubic metres of tailings water per day (or four Olympic-sized swimming pools) to be used as in situ makeup water instead of being stored in tailings ponds. In 2013, we transferred 1,500 cubic metres of tailings water per day. An equivalent amount of water will be recycled at our mining site, reducing the amount of fresh water we need to withdraw from the Athabasca River.

Reusing tailings water in the in situ extraction process is new not only to us, but also to the entire industry. Reusing the water from the end of one project's cycle to the ongoing work of another part of the business serves to improve Suncor's water management practices over a larger geographical area. This Industry-leading initiative is a major step toward improved regional water management.

Our new \$190 million wastewater treatment facility represents the second phase of our strategy. The plant, which opened in 2014, is designed to take wastewater from our upgrading pond and remove solids and oils, so we can reuse that water in our operations or return it to the environment. The plant can recycle all of the upgrading wastewater – between 22,500 and 43,222 litres (or the equivalent of 12 to 35 Olympic-sized swimming pools) of water per minute, depending on the time of the year – and could offset the need for river water by an equivalent amount.

This project, which is also an industry first, could virtually eliminate wastewater flow

## Environmental performance continued

from upgrading to our tailings ponds – and contribute to our long-term tailings pond reclamation projects.

The third phase of our strategy will target further reductions by designing more systems to reduce and reuse water (tailings or wastewater) from operations for a variety of purposes, further reducing the amount of fresh water we require.

We closely monitor our operations to ensure we meet or exceed existing and future water quality standards and environmental monitoring requirements. We strongly support recent moves by the Alberta and Canadian governments to strengthen environmental monitoring of the oil sands region.

### Air

We are committed to managing air quality near our operations and are working on achieving a 10 per cent absolute reduction in air emissions (nitrogen oxides, sulphur oxides and volatile organic compounds) by 2015 as compared to 2007.

We are a member of the Wood Buffalo Environmental Association, which monitors air quality across the Wood Buffalo region 365 days a year, 24 hours a day. We also support air monitoring through a number of other multi-stakeholder air shed organizations in Alberta, Ontario and Quebec.

Overall, total reported air emissions decreased by 20 per cent compared to 2012 levels. This was primarily due to a decrease in emissions from Oil Sands and the divestiture of the majority of our conventional natural gas business\*.

In 2013, we undertook efforts to more accurately quantify fugitive emissions from operations. This has resulted in lower VOC emission values as compared to previous years.

We also saw a reduction in SO<sub>2</sub> and NO<sub>x</sub> emissions from our Oil Sands energy and utilities (E&U) plant in 2013. This can be attributed to the use of alternate fuels and major outages that occurred at the E&U plant. Extensive sampling in our Oil Sands mining areas, dedicated disposal sites and ponds, along with increased testing frequency, provided better representative data and allowed for more accurate quantification of fugitive VOC emissions from mining operations.

\* Note: In September 2013, we closed the previously announced sale of our conventional natural gas business in Western Canada. Excluded from the sale were the majority of our unconventional natural gas properties in British Columbia.

### Land disturbance, reclamation and biodiversity

Our land stewardship is focused in three key areas:

- reducing the impact of our operations on land resources through scientific research and best management practices
- accelerating the pace of progressive reclamation of disturbed lands, including the reclamation of tailings ponds
- working internally and with industry peers to conserve and promote natural habitat for birds, mammals and fish species.

Since oil sands production began in 1967, we have disturbed 21,690 hectares of land through our mining operations. As of the end of 2013, we had reclaimed\* 1,708 hectares, or about eight per cent of the total. Our goal is to ultimately return all disturbed lands to a self-sustaining, boreal forest ecosystem.



590,000

seedlings planted at our oil sands site in 2013



\$1.3 billion

to implement tailings technology



As of the end of 2013, we had completed more than \$1.3 billion of work to implement the TRO™ tailings management process in our oil sands mining operations. In the years ahead, we expect this process will help us reduce the number of tailings ponds at our current mine site. Progressively reclaiming tailings ponds will allow us to reclaim the entire mine site faster – resulting in a more rapid return of natural habitats.

In 2013, we marked a milestone: the official opening of a reconstructed fen, a prevalent type of boreal wetland, near our Oil Sands base plant that is designed to emulate the properties of a natural fen watershed. Our fen – one of the first reclaimed fen watersheds in the world – is the culmination of 10 years of collaborative research.

Our partnership with the Alberta Conservation Association entered its second decade in 2013. Together, we have secured the protection of more than 23.4 square kilometres (5,777 acres) of select areas in boreal forest to date. The goal is to offset habitat affected by oil sands operations.

Planting and nurturing of vegetation that matures and helps support a healthy self-sustaining ecosystem is a key part of reclaiming disturbed lands and habitat. By the end of 2013, we had planted more than 6.5 million trees, shrubs and aquatic plants on our oil sands site – including 590,000 in the previous 12 months alone. Together with industry peers, we have also helped plant an additional 2.2 million trees and shrubs in disturbed areas across the oil sands region since 2009.

Indicator	Environmental performance goal*
Water	Reduce freshwater consumption by 12% by 2015
Land	Increase reclamation of disturbed land area by 100% by 2015
Energy efficiency**	Improve energy efficiency by 10% by 2015
Air	Reduce air emissions by 10% by 2015

**Our environmental performance goals**

In 2009, we committed to a series of strategic environmental performance goals. These goals are challenging and require significant resources (capital investments and people) and focus.

Our approach is to assign the right resources at the right time. Project execution and operational excellence are key to closing gaps and achieving the goals.

\* The base year for the planned improvements is 2007. The goals were established in 2009, and our business units address them in the annual business and capital allocation planning cycles.

\*\* Suncor has developed a 2015 energy efficiency performance target and a complementary longer-term energy intensity goal.



\* Reclaimed lands have not been certified as such by government regulators. For further details on the definition of reclaimed, see the legal notice at the end of this publication.

™ Trademark of Suncor Energy Inc.



**On the web:** More details on our environmental performance, including water strategies, our TRO process, new reclamation advances and collaborative efforts to protect biodiversity at [sustainability.suncor.com](http://sustainability.suncor.com)

# 2014 environment progress report

## ENVIRONMENT

FOCUS AREA	2013 - 14 PLANNED ACTIVITIES
<b>Environmental Excellence Plan (EEP)</b>	<ul style="list-style-type: none"> <li>– Support and steward the EEP process to achieve environmental excellence goals.</li> <li>– Plan and execute 2015 goal gap closure plan (focus on energy and air goals) and strive to continue improvements in water and land goal areas.</li> <li>– Develop next round of sustainability goals.</li> </ul>
<b>Water</b>	<ul style="list-style-type: none"> <li>– Achieve further reductions by designing more systems to treat and recycle tailings water from operations.</li> <li>– Reduce the net effect of water use in the oil sands region by sharing lessons learned with industry peers through COSIA.</li> <li>– Finish implementing Environmental Information Management System (EIMS) water configuration by end of 2013.</li> <li>– Complete EIMS implementation for sustainability reporting in Q1 2014.</li> </ul>
<b>Land and biodiversity</b>	<ul style="list-style-type: none"> <li>– Develop and implement reclamation techniques through investment in technology and people.</li> <li>– Participate in COSIA Land Environmental Priority Area (EPA) projects that address key issues of footprint reduction, reclamation acceleration and biodiversity preservation.</li> </ul>
<b>Energy efficiency and greenhouse gas emissions</b>	<ul style="list-style-type: none"> <li>– Energy Management System (EMS) implementation to be completed for extraction, energy utilities and upgrading at Oil Sands base plant.</li> <li>– Gap assessment of oil sands facility GHG measurement and reporting to meet anticipated higher regulatory stringency.</li> <li>– Implement fuel gas equalization line at Commerce City refinery to optimize energy balance.</li> </ul>
<b>Air</b>	<ul style="list-style-type: none"> <li>– Implement EIMS for sustainability reporting in Q1 2014.</li> <li>– EIMS in sustainment state for all sites for air emissions.</li> <li>– Invest in equipment and technology to achieve emissions reductions.</li> <li>– Improve air emissions inventory.</li> </ul>

## RENEWABLE ENERGY

- Progress the Renewable Energy Applications for our Cedar Point II and Adelaide wind power projects and secure approval to bring the projects online in 2015.
- Review and develop renewable energy portfolio. This includes progressing the Alberta Hand Hills application and evaluation of ongoing renewable energy opportunities, including evaluation of a pilot scale battery storage opportunity.
- Evaluate opportunities for improved product yields and efficiencies at St. Clair ethanol plant.

## TAILINGS

- Work toward fluid tailings reduction targets, and advance tailings management through collaboration with groups like COSIA.



These progress reports provide details on our environmental performance. For detailed information about our economic performance, visit [suncor.com](http://suncor.com) and read our 2013 Annual Report.



**On the web:** Further details on our environmental and social progress are available at [sustainability.suncor.com](http://sustainability.suncor.com)

## 2013 - 14 RESULTS

- Improved stewardship and communication of EEP process and prioritization of projects to meet environmental excellence goals.
- Environmental Excellence Fund usage increased in 2013.
- Post-2015 sustainability goal teams identified. Groups continue to work through the process to develop performance goals and metrics.

- Members of the COSIA Water Environmental Priority Area (EPA) have shared 145 technologies for water treatment with an estimated value of \$184M.
- Furthered system designs for treatment and reuse of tailings water for Firebag utility water, extraction utility water and production of boiler feedwater.
- EIMS implementation for managing water data was temporarily postponed in 2013 to focus on finishing air/GHG data.
- The ability to manage *Report on sustainability* environmental data in the EIMS was completed in 2013.

- Continued reclamation of available areas, adding 169.9 hectares (ha) of permanent terrestrial reclamation and 5.7 ha of permanent wetland and aquatic reclamation.
- Worked with 12 other COSIA member companies to advance approximately 100 joint industry projects related to footprint reduction, reclamation acceleration and biodiversity preservation.
- COSIA member companies contributed more than 300 land-related technologies to collectively advance land management practices in the oil sands.
- Synthesized lessons learned from completed reclamation research projects and shared the new standards and recommendations internally.
- Completed construction and re-vegetation of the Nikanotee Fen watershed, one of the first to be reclaimed in the world.
- Completed second-largest seedling planting program, bringing the total number of seedlings planted at our base plant to just over 6.5 million.
- Installed more than 130,000 wick drains in tailings pond 5 to accelerate reclamation.

- Completed implementation of Energy System Management tools across extraction, upgrading, energy and utilities at Oil Sands base plant.
- Completed gap assessment of oil sands facility GHG measurement and reporting with work underway to incorporate learnings from new industry reports.
- Fuel gas equalization line is anticipated to be operational in Q3 2014.

- Completed EIMS configuration of all *Report on sustainability* environmental indicators at applicable sites.
- EIMS in sustainment at most sites for air emissions.
- Achieve emissions reductions that meet anticipated heightened regulatory stringency through investments in equipment and technology.
- Rollout of annual air pollutant and GHG reporting standard.

- Renewable Energy Approval received for the Adelaide wind power project. Adelaide is anticipated to be operational in late 2014.
- Cedar Point II application deemed complete in 2013 and is progressing through the approval process.
- Hand Hills project is progressing through the regulatory approvals in Alberta.
- Progressed battery storage pilot project in Alberta.

- Continued construction of assets to support improved TRO™ performance.
- Spent more than \$1.3 billion to date to research and develop new tailings technology across operations.

## 2014 - 15 PLANNED ACTIVITIES

- Develop and communicate post-2015 sustainability goals.
- Continue planning and execution of 2015 goal gap closure plan (focus on energy and air goals) and continue improvement in water and land goal areas.

- Reduce the net effect of water use in the oil sands region by sharing lessons learned with industry peers through COSIA.
- Implement EIMS to manage water data at remaining business areas.
- Test EIMS reporting process for *Report on sustainability* environmental data will be tested in 2014 with full implementation expected for 2015.

- Accelerate available lands for reclamation.
- Progress development and implementation of oil sands reclamation best management practices through investment in technology and people.
- Participate in COSIA Land Environmental Priority Area (EPA) projects that address key issues of footprint reduction, reclamation acceleration and biodiversity preservation.
- Transfer lessons learned through technology into reclamation best management practices.

- Complete EMS implementation at MacKay River, Firebag and Sarnia refinery.
- Formalize GHG forecasting standard to ensure consistency across facilities and with historical GHG volumes over time.
- Review effectiveness of EMS at all operated sites through a continuous improvement process.
- Develop opportunities for energy efficiency improvements at commercial and retail sites.

- Continue testing, training and rollout of the EIMS sustainability reporting process.
- Sustain sites where EIMS implementation is complete.
- Strengthen collaboration across facilities through Air Network.

- Progress Adelaide wind power project through construction to operation.
- Advance Cedar Point II wind power project through regulatory process. Commission anticipated in late 2015 – subject to regulatory approvals.
- Progress Hand Hills wind power project through regulatory process in Alberta.
- Ongoing evaluation of renewable energy opportunities.

- Work toward fluid tailings reduction targets, and advance tailings management through collaboration with groups like COSIA.

# 2013 greenhouse gas performance

*Our Report on sustainability* provides an annual accounting of our greenhouse gas (GHG) emissions, both in terms of absolute emissions and emissions intensity. The latter is calculated by using full-year net production and the carbon dioxide equivalent (CO<sub>2</sub>e) emitted from operated facilities.

## Production

As reported in our 2013 Annual Report, total upstream production averaged 562,400 barrels of oil equivalent per day (boe/d) in 2013, compared to 549,100 boe/d in 2012. Oil Sands production (excluding Syncrude) averaged 360,500 barrels per day in 2013.

20.3 million tonnes in 2012 – a 1.4 per cent or 0.3 megatonne increase. This was mainly due to 1.2 megatonnes of CO<sub>2</sub>e emissions from the ramp-up of Firebag expansion phases 3 and 4. This was partially offset by the sale of most of our onshore conventional oil and gas properties in late 2013.

Production numbers in our Annual Report are for upstream volumes only, and include production from non-operated assets. This differs from production numbers used in the *Report on sustainability*, which includes 100 per cent of the production at Suncor-operated upstream facilities only, and also includes downstream throughput volumes of salable refined products from Suncor-operated refineries and Lubricants plant. For the purposes of our sustainability report, total production in 2013 was approximately 49.8 million cubic metres, compared to 49.1 million cubic metres in 2012.

Using globally accepted GRI protocols, our 2013 corporate GHG emissions intensity remained relatively flat as compared to 2012 (0.1 per cent decrease). Upstream intensity increases at our MacKay River in situ facility were offset by intensity decreases at the Terra Nova offshore operation, Firebag in situ facility and Oil Sands base plant. Downstream, intensity increases at the Montreal refinery, Edmonton refinery, Commerce City refinery and St. Clair ethanol plant were offset by intensity decreases at the Sarnia refinery and Mississauga-based Lubricants facility.

Improvements in the reliability of our base plant operations also helped to offset intensity increases. These improvements were achieved even with the completion of planned upgrader maintenance and unexpected third-party fuel supplier outages.

## Overall energy use and energy intensity

GHG emissions are closely linked to energy use with approximately 89 per cent of direct GHG emissions being related to the consumption of energy for operations.

Please note: The sum of the individual Suncor facilities production will not equal the reported net corporate production. Inter- and intra-business unit product transfers (hydrocarbon streams that pass through more than one Suncor facility) are removed from the corporate and business unit totals to give the net production. This is done to prevent double-counting of hydrocarbon streams sent for further processing within the company. Individual facility intensities are calculated based on net facility production; business unit intensities are calculated based on net facility production totals minus intra-business unit material transfers; and the corporate GHG intensity is calculated based on net corporate production, which also removes inter-business unit transfers.

## Overall absolute emissions and emissions intensity

Absolute full-year CO<sub>2</sub>e emissions in 2013 totalled 20.6 million tonnes, compared to





# 8.6%

decrease in absolute emissions from Oil Sands



Our energy and energy intensity graphs show similar year-over-year trends to our GHG emissions and GHG emissions intensity graphs. One of the key differences, however, is how energy generated as electrical power is treated.

Power generated by our cogeneration facilities (a highly efficient technology used to generate electricity from what would otherwise be waste heat) and wind farms is sold to provincial grids in the regions where facilities are located. This power is converted to an equivalent amount of energy and is deducted from our total energy use since it is sold as a product. Associated GHG emissions are not deducted from our total.

Please note: All numbers included are for material operated facilities and properties only. They represent 100 per cent of the direct and indirect energy use at these facilities. Data is not broken down by working interest and does not include non-operated facilities.

### Oil Sands

Absolute emissions from our mine and upgrading operations decreased by 8.6 per cent in 2013 as compared to 2012 because of lower fugitive emissions measurements.

Emissions intensity also decreased by 10.4 per cent over the same period. This was due to improved reliability. Reliability improvements were achieved even with the completion of planned upgrader maintenance and unexpected third-party fuel supplier outages. We also saw record production during this time.

### In Situ

The overall absolute emissions and emissions intensity at our in situ oil sands operations increased in 2013. Absolute emissions increased by 32 per cent compared to 2012, and emissions intensity increased slightly by 0.8 per cent. Emissions increases were the result of the ramp-up of our Firebag 3 and 4 expansion phases, with a majority of the increase coming from the Firebag 4 phase. The rise in absolute emissions reflects added steam generation required for increased production.

The slight increase in emissions intensity compared to the large increase in absolute emissions reflects the ramp-up of the Firebag 3

and 4 expansions. Once reservoirs reach desired production levels and steady-state operation, emissions intensity typically decreases.

MacKay River absolute emissions and emissions intensity increased in 2013. This increase can be attributed to the addition of new wells that are still in preliminary steaming stage (similar to the Firebag expansions mentioned above) and have not yet reached their optimal production capacity.

In addition, a third-party cogeneration facility that is connected to our MacKay River in situ operation recently completed maintenance that required the facility to remain offline for a longer-than-normal period of time. This contributed to the increase in MacKay River's emissions as steam demand was met locally rather than by the more efficient third-party cogeneration facility.

### Exploration & Production

#### East Coast Canada

Terra Nova emissions increased by 33 per cent over 2012. This is largely due to a significant maintenance shutdown period in 2012 which resulted in lower-than-average annual emissions. Due to time required to complete the turnaround, we recorded fewer operational days in 2012 than in 2013. Production in 2013 was also higher than in 2012. As a result of the 2013 increase in operational days, emissions intensity per cubic metre of oil decreased by 18 per cent. With this decrease, emission intensity levels are similar to 2011 – a more representative year than 2012.

Currently, Terra Nova is the only East Coast Canada asset we operate. Our other international and offshore production interests are joint ventures and not within our direct operational control. These joint venture operations are not included in this report.

#### North America Onshore

North America Onshore (NAO)\* emissions decreased as we completed the sale of the majority of our conventional natural gas business

in the third quarter of 2013. Absolute emissions dropped by 37 per cent and intensity decreased by 10 per cent over 2012.

Reported numbers for NAO represent properties that were owned throughout the year as well as divested properties up to their date of sale.

### Refining & Marketing

In 2013, GHG emissions and emissions intensity at our Refining & Marketing facilities remained relatively unchanged. Compared to 2012, emissions experienced a slight decrease of 0.3 per cent while emission intensity increased by 0.2 per cent. Completion of planned maintenance at several facilities resulted in a small decrease to production. This contributed to the incremental increase to emission intensity.

### Renewable Energy

Absolute emissions and emissions intensity from the St. Clair ethanol plant remained relatively flat from 2012 to 2013 with only slight increases of 1.4 per cent and 0.8 per cent respectively.

We are currently involved in six operating wind farm projects – five of which are joint arrangements. Emissions from operated wind farms which include the 20 MW Kent Breeze farm in Ontario and the 88 MW Wintering Hills farm in Alberta, were only 159 tonnes of CO<sub>2</sub>e in 2013. An equivalent size natural gas power plant would emit more than 120,000 CO<sub>2</sub>e annually.

\* In September 2013, Suncor announced it had closed the previously announced sale of the conventional portion of its natural gas business in Western Canada. Excluded from the sale were the majority of Suncor's unconventional natural gas properties in British Columbia and the company's Wilson Creek, Alta. unconventional oil assets.

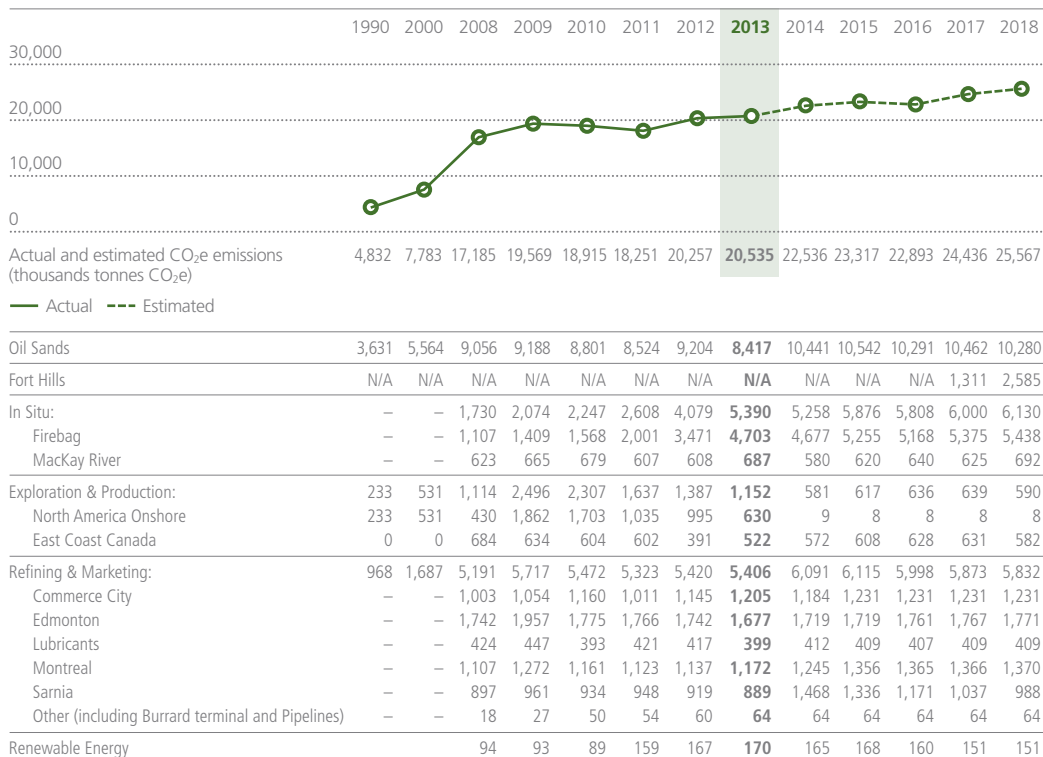


**On the web:** For more information on our GHG performance, see our web report at [sustainability.suncor.com](http://sustainability.suncor.com)

# 2013 greenhouse gas performance continued

## SUNCOR-WIDE ABSOLUTE GHG EMISSIONS ACTUAL (1990 – 2013) AND ESTIMATES (2014 – 2018) <sup>(1)(2)(3)(4)(5)(6)(7)</sup>

thousands tonnes CO<sub>2</sub>e equivalents (CO<sub>2</sub>e)



- Estimates are based on current production forecasts and methodologies. The tables contain forward-looking estimates and users of this information are cautioned that the actual GHG emissions and emission intensity may vary materially from the estimates contained in the table.
- Data from 1990 and 2000 do not include Suncor's U.S. operations, and only include business areas in operation during these years. These data points have been provided for historical comparability, consistent with previous sustainability reports.
- Data here includes both direct and indirect CO<sub>2</sub>e emissions, whereas the data included in the Alberta SGER reports and other regulatory reports are direct emissions only. No credit is taken for GHG reductions due to cogen credits or purchased offsets. Emissions have been calculated using facility-specific methodologies; various reference methodologies accepted by jurisdictions where each facility is required to report GHG emissions. Where a jurisdiction has a prescribed methodology, it is followed and if none exists, the most applicable and accurate methods available are used to quantify each emission source. Beginning with 2013 data, the latest global warming potentials issued by the Intergovernmental Panel on Climate Change in their 2007 or Fourth Assessment report have been used to calculate CO<sub>2</sub>e. Historical data has not been updated to reflect this change as it does not impact corporate-wide emissions materially.
- Data and estimates have changed from previous years' reports due to Oil Sands methodology changes that reflect the inclusion of biomass, a methodology change in the calculation of fugitive emissions using flux chamber data, and revisions to emissions factors and calculations based upon AESRD's request. These changes are also consistent with the methodology used for SGER Bill 3 reporting. Also, previous years' emission updated numbers reflect changes including classifying purchased hydrogen emissions at Refining & Marketing facilities as an indirect scope 3 instead of an indirect scope 2, and a revised indirect scope 2 methodology for MacKay River.
- Data for 2009 and future years include the full-year emissions for all Petro-Canada operated properties acquired in the 2009 merger, even though the merger did not close until Aug. 1, 2009. This is to allow for a consistent comparison to past and future years.  
(For certain business units, combined Suncor / Petro-Canada data is provided for some years prior to 2009 but this is not reflected in the Suncor-wide rollout reported here.)
- The Suncor-wide emissions intensity uses Net Production, which is the sum of Net Facility Production minus all internal intra- and inter-BU product transfers, to remove any double counting. The sum of the BU intensities will therefore not equal the Suncor-wide intensity.
- Refining & Marketing emissions are inclusive of emissions from the pipeline from Oil Sands to the Edmonton refinery, which is included in the Pipelines entity within R&M. The emission total for this source for 2013 was 51,304 tonnes CO<sub>2</sub>e.

### Definitions:

**Direct GHG emissions:** Emissions from sources that are owned or controlled by the reporting company.

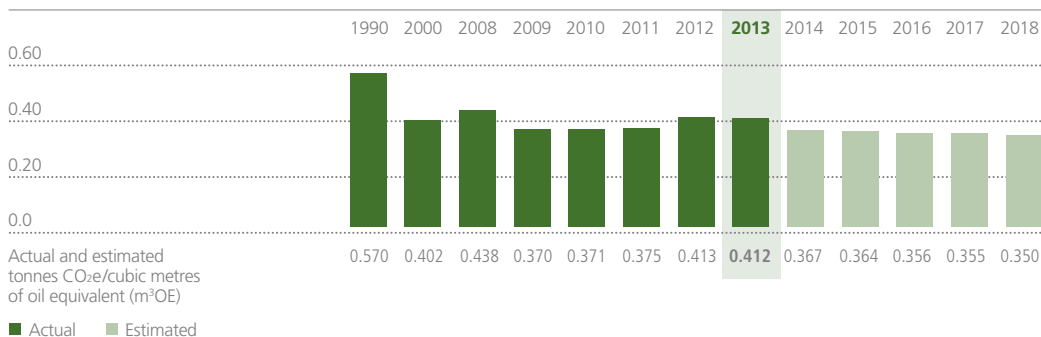
**Indirect GHG emissions:** Energy-related emissions that are a consequence of the operations of the reporting company, but occur at sources owned or controlled by another company (e.g., purchased electricity or steam).

**Absolute (total) emissions:** The total GHG emissions (sum of direct and indirect emissions) of a facility or reporting company.



**SUNCOR-WIDE GHG EMISSIONS INTENSITY  
ACTUAL (1990 – 2013) AND ESTIMATES (2014 – 2018)** <sup>(1)(2)(3)(4)(5)(6)(7)</sup>

tonnes CO<sub>2</sub>e/cubic metres of oil equivalent (m<sup>3</sup>OE)



	1990	2000	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Oil Sands	1.196	0.817	0.667	0.569	0.587	0.510	0.561	<b>0.503</b>	0.556	0.542	0.548	0.530	0.524
Fort Hills	-	-	-	-	-	-	-	-	-	-	-	0.507	0.324
In Situ	-	-	0.474	0.458	0.455	0.502	0.535	<b>0.540</b>	0.473	0.475	0.461	0.448	0.471
Exploration & Production	-	-	0.137	0.163	0.174	0.170	0.157	<b>0.154</b>	0.201	0.236	0.199	0.207	0.236
Refining & Marketing	0.225	0.193	0.214	0.222	0.208	0.202	0.199	<b>0.200</b>	0.214	0.208	0.203	0.197	0.196
Renewable Energy	-	-	0.784	0.788	0.712	0.684	0.662	<b>0.668</b>	0.662	0.662	0.629	0.595	0.595

- (1) Estimates are based on current production forecasts and methodologies. The tables contain forward-looking estimates and users of this information are cautioned that the actual GHG emissions and emission intensity may vary materially from the estimates contained in the table.
- (2) Data from 1990 and 2000 do not include Suncor's U.S. operations, and only include business areas in operation during these years. These data points have been provided for historical comparability, consistent with previous sustainability reports.
- (3) Data here includes both direct and indirect CO<sub>2</sub>e emissions, whereas the data included in the Alberta SGER reports and other regulatory reports are direct emissions only. No credit is taken for GHG reductions due to cogen credits or purchased offsets. Emissions have been calculated using facility-specific methodologies; various reference methodologies accepted by jurisdictions where each facility is required to report GHG emissions. Where a jurisdiction has a prescribed methodology, it is followed and if none exists, the most applicable and accurate methods available are used to quantify each emission source. Beginning with 2013 data, the latest global warming potentials issued by the Intergovernmental Panel on Climate Change in their 2007 or Fourth Assessment report have been used to calculate CO<sub>2</sub>e. Historical data has not been updated to reflect this change as it does not impact corporate-wide emissions materially.
- (4) Data and estimates have changed from previous years' reports due to Oil Sands methodology changes that reflect the inclusion of biomass, a methodology change in the calculation of fugitive emissions using flux chamber data, and revisions to emissions factors and calculations based upon AESRD's request. These changes are also consistent with the methodology used for SGER Bill 3 reporting. Also, previous years' emission updated numbers reflect changes including classifying purchased hydrogen emissions at Refining & Marketing facilities as an indirect scope 3 instead of an indirect scope 2, and a revised indirect scope 2 methodology for MacKay River.
- (5) Data for 2009 and future years include the full-year emissions for all Petro-Canada operated properties acquired in the 2009 merger, even though the merger did not close until Aug. 1, 2009. This is to allow for a consistent comparison to past and future years.  
(For certain business units, combined Suncor / Petro-Canada data is provided for some years prior to 2009 but this is not reflected in the Suncor-wide rollup reported here.)
- (6) The Suncor-wide emissions intensity uses Net Production, which is the sum of Net Facility Production minus all internal intra- and inter-BU product transfers, to remove any double counting. The sum of the BU intensities will therefore not equal the Suncor-wide intensity.
- (7) Refining & Marketing emissions are inclusive of emissions from the pipeline from Oil Sands to the Edmonton refinery, which is included in the Pipelines entity within R&M. The emission total for this source for 2013 was 51,304 tonnes CO<sub>2</sub>e.

**Definitions:**

**Emission intensity:** Ratio that expresses GHG emissions per unit of physical activity or unit of economic value (e.g., here it is total tonnes of CO<sub>2</sub>e emissions per unit of net processed volume in cubic metres).



\$150 million

to support research  
and development



# Technology development strategy

Technology is fundamental to how we do business. Our investments in incremental and game-changing technologies target higher production, enhanced profitability and lower environmental impacts.

Our company-wide technology and innovation strategy is focused in three key areas:

- continuous improvement – applying known techniques to existing issues (e.g., ongoing energy efficiency across our business units)
- operations technology – applying new technologies to existing assets and issues (e.g., our SAGD LITE project to improve in situ steam/oil ratios)
- strategic technology – applying breakthrough technologies in assets, processes and businesses (e.g., potential advances such as Oxyfuel, ESEIEH and N-Solv).

While all kinds of technology development are important and ongoing priorities for us, we are placing a renewed focus on breakthrough technologies. With these technologies, we aim for performance improvements of at least 25 per cent in production, profitability, operational efficiency or environmental impact.

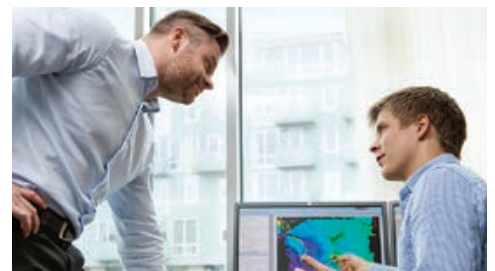
Timelines for technology development vary. Continuous improvement means exactly that. Operations technologies typically take one to three years to test and implement. By their very nature, strategic technologies are longer-term propositions that take decades from conception to implementation.

“The common thread to all this,” says Gary Bunio, general manager, technology development, “is an emphasis on achieving tangible performance improvements. We need to focus our technology and innovation efforts where we know they will make a difference.”

In 2013, we spent approximately \$150 million to support research and development of technology.



**On the web:** Details on specific Suncor technology initiatives, including potential environmental and economic benefits at [sustainability.suncor.com](http://sustainability.suncor.com)





Six

wind farm projects in  
which we're involved

# An integrated approach to climate change

We believe addressing the climate change challenge is both a corporate and a societal responsibility. We work within our plant gates to improve energy efficiency, advance renewable energy projects, and research and develop new technologies to better manage our greenhouse gas (GHG) emissions.



We collaborate with industry peers, governments, researchers, academics and other stakeholders on emissions-reducing technologies and opportunities. We understand that making meaningful progress on climate change involves fundamental choices about how societies produce, use and distribute energy.

## Our climate change action plan

We recognized early on that climate change would be an important issue for our company and our stakeholders. That's why we introduced a seven-point action plan in 1997. Guided by this plan, we've made progress in reducing the overall carbon intensity of our operations.



On the web: More details on all of the above at [sustainability.suncor.com](http://sustainability.suncor.com)



# A snapshot of our seven-point plan in 2013

01

## MANAGE OUR OWN EMISSIONS

Absolute emissions increased while emissions intensity decreased slightly. This was mainly due to significant new production from the ramp-up of Firebag 4. Emission increases were the result of added steam generation required for greater production. Once reservoirs reach desired production levels and steady-state operation, emission intensity typically decreases. Absolute emissions growth in In Situ was offset somewhat by the mid-year sale of the majority of our onshore conventional oil and gas production. Our most effective near-term opportunity for reducing our GHG emissions and emissions intensity continues to be improved energy efficiency and plant reliability. In 2013, we continued to implement a comprehensive Energy Management System (EMS) across our onshore operated facilities, a process we expect to complete by the end of 2014. EMS monitors, benchmarks and improves the energy efficiency of our facilities through operational discipline and targeted projects.

02

## DEVELOP RENEWABLE SOURCES OF ENERGY

We operate Canada's largest ethanol production plant, and we are currently involved in six operating wind farms – five of which are joint arrangements. Our seventh wind power project is expected to be operational in late 2014 and, subject to regulatory approvals, an eighth project is expected to follow in 2015.

03

## INVEST IN TECHNOLOGY AND INNOVATION

We continued to play a leading role in developing long-term bitumen extraction technologies that could significantly reduce the GHG emissions intensity of oil sands production. We also continued to work through organizations like Integrated CO<sub>2</sub> Network, Carbon Management Canada and the CO<sub>2</sub> Capture Project to advance other potential long-term climate change solutions, including carbon capture and storage. As a member of Canada's Oil Sands Innovation Alliance, we are sharing knowledge and expertise and helping to advance new technologies and innovation in four key environmental areas, including GHG emissions.

04

## USE DOMESTIC AND INTERNATIONAL OFFSETS

Our wind farms continued to generate offset credits. Similar to our participation in the Industry Provincial Offsets Group, an organization dedicated to the design of a domestic offset system, we are also an active member of the International Emissions Trading Association, which is working to develop an international framework for trading in GHG emission reductions.

05

## COLLABORATE ON POLICY DEVELOPMENT

We continued to consult with provincial, state and federal governments on energy and climate change policy. When it comes to climate change regulations, we continue to press for clarity and certainty; fair and equitable application; flexibility in compliance mechanisms; harmonization across jurisdictions; and international regulation that promotes sustainability reporting and transparency. We also believe that, to be effective, climate change policy must encourage consistent and patient investment in new technologies that could lead to deep emissions reductions.

06

## EDUCATE EMPLOYEES AND THE PUBLIC

We supported energy literacy programs by organizations like Pollution Probe and The Pembina Institute. We also sponsored several initiatives to expand the conversation on energy choices and challenges, including the Walrus Talks Energy and Student Energy. Our employees continued to take individual accountability for reducing waste and improving energy efficiency as part of our employee engagement initiative.

07

## MEASURE AND REPORT OUR PROGRESS

We file annually on our GHG emissions to provincial, state and federal authorities. We report our overall progress on managing GHG emissions to stakeholders through our annual *Report on sustainability* and the Carbon Disclosure Project.



80%

GHG emissions from a barrel of oil, generated at the point of consumption

# Climate change: a different kind of tipping point

The phrase ‘tipping point’ is frequently invoked when it comes to the challenge of addressing global climate change. Typically, this refers to a point, or points, at which the earth’s systems would irreversibly change as a result of human impact.

Developing these projections, and striving to understand the societal choices that could determine whether or not these scenarios come to pass, is important and valued work.

Currently, though, we are at risk of triggering a different kind of tipping point. It’s the point at which the climate change challenge seems so complex, and positions so polarized, that we can no longer find the collective desire to seek constructive solutions.

To avoid this tipping point, we need to start a new and different type of conversation. It will require the courage to ask some tough questions – and the humility to recognize that none of us have a monopoly on wisdom when it comes to providing answers.

## Energy choices

So what are those tough questions? Here’s just a few of them:

- What does the future hold in terms of energy demand given the growing population?
- How can we best meet that demand while also addressing the environmental impact of energy production and consumption?
- What role can technology and innovation play in this?
- Is there still room for constructive collaboration on our energy future?

The International Energy Agency (IEA) projects global energy demand will grow by one-third by 2035. While renewables will play a more important role, fossil fuels remain dominant – still forecasted to account for 76 per cent of the global energy mix in 2035. Oil is expected to remain the primary source of transportation fuels.

The bulk of the growth in energy demand will come from the growing populations – and emerging economies – of Asia.

These projections reinforce the strong connection between energy development and economic progress. Since 1990, global energy demand has grown by 45 per cent; over that same period, the size of the global economy tripled and some 700 million people moved from poverty to the global middle class. Greater access to energy has also meant greater access to everything from health care and clean water to cell phones and transportation vehicles.

Yet for all of that, 1.3 billion people still lack access to electricity, while double that number continue to rely on wood or other biomass for cooking. The scale of the global energy challenge is daunting indeed.

But so, too, are the environmental challenges associated with energy development.





1.3 billion

people who still lack  
access to electricity



45%

growth in global energy  
demand since 1990



### Environmental challenges

The IEA has developed a number of scenarios. According to one of those scenarios, energy-related CO<sub>2</sub> emissions are projected to rise by 20 per cent by 2035, putting the world on track for a long-term average temperature increase of 3.6° C – far above the widely cited target of limiting global warming to no more than 2° C.

Moreover, the IEA has calculated that no more than one-third of proven reserves of fossil fuels can be consumed prior to 2050 if the world is to achieve the 2° C goal (unless carbon capture and storage technology is widely implemented).

Significantly, however, the IEA does not advocate abandoning any existing energy source. Instead, it argues for a suite of solutions, including the accelerated development of renewables; limiting (but not eliminating) coal-fired electricity generation; improving energy efficiency standards; encouraging energy conservation; and investing in environmental technologies.

We also support an all-of-the-above approach. We believe energy, in all its forms, needs to be responsibly developed. We believe energy efficiency and conservation must be a top priority for producers and consumers alike. And – to no one's surprise, we are sure – we believe the oil sands can play a positive role in building our shared energy future.

### Are the oil sands a responsible source of energy?

Canada's oil sands are expected to attract more than \$2 trillion\* of investment over the next 25 years. That capital is being drawn to a country with a stable political climate, strong regulatory oversight and an open economy that helps drive investment in technology and innovation.

These kinds of investments have already allowed our industry to reduce per-barrel greenhouse gas (GHG) emissions intensity (i.e., the amount of emissions per barrel of production). Ongoing research and development initiatives hold the potential to ultimately 'bend the curve' on absolute emissions growth. Our goal is for emissions from oil sands production to be on par with, or lower than, other common sources of oil.

Moreover, oil sands development is driving economic growth, which, in turn, makes it possible for governments and industry to invest in new environmental technologies that could help make all forms of energy development more productive and sustainable.

We believe it's necessary to balance our industry's emissions footprint (currently less than 0.15 per cent of global CO<sub>2</sub> emissions) against our potential to drive technology, innovation and capital investment in ways that can facilitate the transition to a cleaner energy future.

That is the lens through which we view the industry.

Others view the industry through a very different lens. They maintain oil sands development is an inherently 'dirty' form of energy production that results in a disproportionate degree of GHG emissions, water consumption and land disturbance. Many want to slow the pace of oil sands development and some would like to shut the industry down entirely.

There are some points on which we may likely never agree. But the question remains: can we summon the energy to work towards solutions or will we 'tip over' to the point where polarization results in paralysis?

### The next energy conversation

On the specific challenge of climate change, our starting point is that we must do all we can to improve our own operational and energy efficiency and reduce our carbon footprint.

However, when it comes to making a significant impact on reducing global GHG emissions, we know we'll need to be part of a much larger conversation. And given that up to 80 per cent of the GHG emissions from a barrel of oil are generated at the point of consumption, that discussion will have to be as much about the choices we all make when we use energy as it is about primary production.

That is why we have reached out to a number of large automobile manufacturers to learn about their technology development processes. We see the potential to reduce transportation-related GHG emissions through the products we sell.

Dialogues such as these allow us to start having a serious discussion about the mix of primary energy sources that can best bridge us to a more sustainable future – and the policy options and investments that will help get us there.

We continue to believe our core oil sands resource – along with our other conventional and renewable energy assets – can play a constructive role in delivering the energy the world needs to grow and progress.

Others strongly disagree, and that's okay. Let's get beyond polarization to the next conversation and see if it can get us to a better place.

\* Source: Canadian Energy Research Institute

# Social performance

**\$4.2 million**

total contribution to Southern Alberta flood relief efforts



We strive to be a responsible corporate citizen. That includes ensuring workplace safety, engaging with stakeholders, partnering with Aboriginal businesses and investing in the communities where we operate.

## Safety

We always rank safety as our top priority.

We believe no job is so urgent or routine that it can't be done safely. We seek to eliminate all workplace incidents – a goal summed up in the title of our Journey to Zero safety program.

Our recordable injury rate frequency declined by five per cent in 2013 compared to 2012, while our lost time injury frequency rate increased slightly, from 0.05 to 0.06. We also marked several safety milestones in 2013. Among them:

- In April, our St. Clair ethanol plant celebrated five years injury free.
- In July, our In Situ operations marked 15 million exposure hours and two years without a lost time incident.
- In September, turnaround work in Upgrader 1 and Energy & Utilities reported zero lost time incidents in more than 3.5 million hours worked.

Five separate fatalities near our Oil Sands site earlier this year were sad reminders that we can never let up on our journey toward ensuring every employee and contractor goes home safely at the end of the day. Incidents like these are tragic and unacceptable – and we are determined to learn all we can to prevent any reoccurrence.

## Our stakeholders

Developing and maintaining positive, meaningful relationships with all of our stakeholders is critical to beginning the next conversation that will help us find better, more sustainable solutions. We strive to understand the interests, issues, needs and concerns of our stakeholders – and we engage with them based

on principles of transparency, timeliness, mutual respect and mutual benefit.

## Community investment

Our core purpose is to create energy for a better world. Our commitment to community investment is at the heart of that mission.

In 2013, we, along with our charitable organization, the Suncor Energy Foundation (SEF), continued to make targeted investments in five key areas:

- strengthen communities by cultivating community leaders
- support building skills and knowledge for the current and future workforce
- foster the ability to think creatively through inspiring innovation
- build employee and volunteer capability by engaging citizens in community activities
- engage employees and communities in collaborating for the energy future.

Collaboration is central to our community investment strategy. We are here to connect and support, as well as learn from, our partners. We believe we can be an effective partner in supporting sustainable communities and addressing complex social challenges by working collaboratively.

Some examples of this strategy in action:

- Social Prosperity Wood Buffalo (SPWB) is a five-year partnership between stakeholders in the Wood Buffalo region, the SEF and the University of Waterloo. The goal is to improve the quality of life in rapidly growing Wood Buffalo through community-driven strategies to strengthen the social profit sector.





## Social performance continued



Since SPWB began, the project team has observed a number of key shifts, including a renewed focus on collaboration and collective action.

- We are targeting investment in institutions like the Southern Alberta Institute of Technology and Sarnia, Ont.'s Lambton College that are helping graduate the next generation of skilled workers our industry requires. We are also longtime supporters of Women Building Futures, an Edmonton-based program that prepares unemployed and underemployed women for new careers by taking them through an intense pre-trades program.
- We are collaborating with independent organizations to encourage an inclusive national conversation about energy choices and challenges. This includes our support for Student Energy, a global not-for-profit that is helping to create the next generation of leaders committed to transitioning the world to a sustainable energy future.
- After devastating floods struck Southern Alberta in June 2013, we responded quickly to support community strength and resilience. By year's end, our total contribution to flood relief efforts (including cash donations, volunteer hours and in-kind services and equipment) totalled \$4.2 million. That included a significant amount of giving and volunteering by our employees, which made this particular community investment all the more poignant.

"Our goal is to work collaboratively to make a difference on some of the big issues that impact both society and Suncor," says Lori Gammell, project manager, social innovation

and the Suncor Energy Foundation (SEF). "Our investments have the potential to be truly transformative."

### Aboriginal relations

Many of our operations are located on or near the traditional lands of Aboriginal Peoples. We know our operations have an impact on the environment and the communities where we operate, and we work with our Aboriginal stakeholders to understand and mitigate those impacts. We are also committed to finding ways to ensure Aboriginal businesses and communities share in the economic and social benefits of resource development.

In 2013, we spent more than \$431 million with Aboriginal businesses. But we recognize supporting Aboriginal businesses is about much more than our 'direct spend.' That's why, in 2013, we continued to implement an Aboriginal Economic Collaboration strategy based on four strategic pillars:

- proactive Aboriginal business development
- respectful relationships and capability development
- community-driven economic development
- meaningful partnership and collaboration.

We were proud to partner with the Canadian Council for Aboriginal Business in 2013 to launch a national directory that links industry, government and other organizations with businesses that are certified as 51 per cent or more owned and controlled by Aboriginal persons.

Along with the SEF, we are also making support of educational opportunities for Aboriginal

48%

increase in SunCares employee program participation



15

years the Suncor Energy Foundation has been in operation



300

employees who completed Aboriginal awareness training



youth a key community investment priority. It's the right thing to do – and, given our industry's growing need for skilled workers, it's also smart business.

In 2013, the SEF worked with our partner, Indspire, to launch the Indspire Institute, a new online meeting place and resource for those engaged in Aboriginal education in the K-12 grades. Other initiatives we supported included the Banff Centre's highly respected Indigenous Leadership and Management program as well as efforts by Ottawa-based Actua to deliver culturally relevant science, technology, engineering and mathematics programs to Aboriginal youth across Canada.

Recognizing the ongoing concerns many Aboriginal residents express about a range of issues, including community health and wellness and the environmental impact of oil sands development, we strive to maintain open, respectful two-way communication through vehicles like the advisory committee groups we've established with the Fort McKay, Athabasca Chipewyan and Mikisew Cree First Nations.

"The way forward is about forging meaningful and authentic partnerships with Aboriginal communities," says Mary Pat Campbell, manager, stakeholder and Aboriginal relations. "It's about both sides bringing their expertise and voice to the table to find a better way."

**Human rights and social risk**

Our Human Rights policy recognizes we have a corporate responsibility to respect

human rights and to ensure we are not complicit in human rights abuses. This responsibility applies to all our activities and to our business relationships with others.

We continue to embed our Human Rights policy into employee policies and practices, our approach to community and stakeholder engagement, and the way we manage employee and facility security. This process is part of a broader effort to better understand the social risks associated with our business and to build that understanding into our decision-making processes. In 2013, we piloted new human rights and corporate social risk tools in Libya with the goal that, if they could work in a conflict-afflicted nation, they would be robust enough to apply across our global operations.

We are a member of the United Nations Global Compact (UNGC) and we are committed to advancing the UNGC's 10 Principles with respect to human rights, labour, environment and anti-corruption. We also support the Voluntary Principles on Security and Human Rights. We are one of seven Canadian companies leading an engagement effort to establish a UN Global Compact Local Network in Canada.

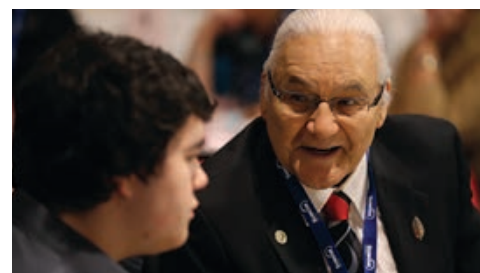
As at May 2014, production in Libya continued to be shut down due to political unrest.

**Our employees**

Our employees are an essential part of our sustainability journey. In 2013, we continued to implement a wide range of initiatives to recruit, retain and reward many of the best and brightest in our industry. Every day, our

employees demonstrate their commitment and passion to do their jobs the right way and with integrity. They understand we are all connected and part of something bigger.

**On the web:** More details on all aspects of Suncor's social performance at [sustainability.suncor.com](http://sustainability.suncor.com)



# 2014 social progress report

## SOCIAL

FOCUS AREA	2013 14 PLANNED ACTIVITIES
<b>Safety, health and security</b>	<ul style="list-style-type: none"> <li>– Seek to eliminate all workplace incidents.</li> <li>– Implement and sustain Journey to Zero through networks, leading/lagging metrics and governance.</li> <li>– Focus on the sustainability of process safety practices over the long term.</li> </ul>
<b>Human rights and social risk</b>	<ul style="list-style-type: none"> <li>– Review and update Human Rights policy with accompanying standards and guidelines.</li> </ul>
<b>Stakeholder and Aboriginal relations</b>	<ul style="list-style-type: none"> <li>– Finalize complaint and grievance mechanism and develop rollout plan.</li> <li>– Finalize social risk assessment tool.</li> <li>– Target more than 250 people to receive Aboriginal awareness training.</li> <li>– Aboriginal employment strategy completed and implementation plans drafted.</li> <li>– Establish regular cross-enterprise reporting on Aboriginal economic collaboration.</li> <li>– Develop and implement Aboriginal Procurement Guideline.</li> <li>– Conduct survey of our Aboriginal business partners and communicate results.</li> <li>– External issues management process finalized and rollout plan in place.</li> <li>– Share results of stakeholder research and develop plans to address feedback.</li> <li>– Complete third-party audit of our Aboriginal Relations program to receive Progressive Aboriginal Relations (PAR) certification through the Canadian Council for Aboriginal Business.</li> </ul>
<b>Community investment</b>	<ul style="list-style-type: none"> <li>– Complete long-term community investment plans for key operating communities.</li> <li>– Work with key partners and community leaders to collaborate on long-term priorities.</li> <li>– Celebrate the Suncor Energy Foundation's 15-year anniversary.</li> <li>– Explore initiatives that engage Aboriginal youth.</li> <li>– Find new way to encourage skilled trades as a first-choice career.</li> <li>– Work with social innovation experts who are pushing boundaries and exploring possibilities for the future.</li> <li>– Launch new priority funding area entitled Collaborating for the Energy Future.</li> <li>– Increase employee participation in the SunCares program.</li> <li>– Launch formalized employee volunteer program.</li> </ul>



These progress reports provide details on our social performance. For detailed information about our economic performance, visit [suncor.com](http://suncor.com) and read our 2013 Annual Report.



**On the web:** Further details on our environmental and social progress are available at [sustainability.suncor.com](http://sustainability.suncor.com)

#### 2013 14 RESULTS

- The lost time injury frequency among Suncor employees and contractors increased slightly from 0.05 in 2012 to 0.06 in 2013.
- The recordable injuries frequency rate declined, from 0.59 in 2012 to 0.56 in 2013 – a 5% improvement.
- Integration of process safety standards across all of Suncor's major facilities is complete.
- Integrating human rights considerations into many project implementation processes.
- Conducted corporate social responsibility assessment on Libyan operations.
- Completed human rights training for Libya-based employees.
- Implemented a grievance mechanism across Libyan operations.
- Complaint and grievance mechanism developed with implementation underway across refinery operations.
- Social risk models developed for project-specific application.
- More than 300 employees completed Aboriginal awareness training.
- Cross functional team initiated to develop an Aboriginal workforce strategy.
- Standard reporting processes in place for Aboriginal Relations steering committees and monthly contract spending.
- Standard language and criteria established for evaluating Aboriginal contracts and proposal.
- Work to establish external issues management process underway.
- External Aboriginal business partner survey conducted with results under analysis.
- Stakeholder research findings have been communicated. Feedback is being incorporated into stakeholder-specific engagement plans.
- Applied to become PAR certified in 2014.
- 70% of community investment plans complete.
- Deepened relationships with key partners such as The Natural Step, Engineers without Borders, Indspire and the Banff Centre.
- Celebrated 15-year anniversary with a gathering of 110 partners and thought leaders on social innovation.
- Continued to partner with organizations supporting Aboriginal youth and encouraging careers in skilled trades.
- Worked closely with Social Innovation Generation Waterloo for 15-year anniversary gathering as well as training for Community Investment team.
- Collaborating for our Energy Future priority funding area nearing launch.
- Launched renewed volunteer program.
- SunCares employee grants program saw a 48% increase in participation.

#### 2014 15 PLANNED ACTIVITIES

- Seek to eliminate all workplace incidents.
- Implement and sustain Journey to Zero through networks, leading/lagging metrics and governance.
- Focus on the sustainability of process safety practices over the long term.
- Roll out updated Human Rights policy with accompanying standards and guidelines.
- Fully integrate human rights considerations into project implementation process.
- Implement, assess and report on complaint and grievance mechanism.
- Finalize social risk framework and incorporate into existing processes.
- Develop an online Aboriginal Awareness training module.
- Progress Aboriginal workforce strategy development.
- Streamline Aboriginal Relations reporting across the organization and align with PAR performance categories and key metrics.
- Align business development and PAR performance measures.
- Partner with community-driven initiatives to build local Aboriginal business capacity and leverage partnerships.
- Implement external issues management process.
- Evaluate the effectiveness of local engagement plans through third-party reputational research.
- Celebrate PAR certification and analyze feedback to understand areas for improvement.
- 100% of long-term community investment plans complete.
- Convene partners on key community issues identified during 15-year anniversary gathering. Focus will be on Aboriginal Youth engagement.
- Continue to partner with social innovation leaders nationally and internationally.
- Launch Collaborating for our Energy Future priority funding area.
- Launch Petro-Canada retail community investment plan.
- Refresh online presence for community investment.
- Increase employee participation in SunCares program with emphasis on employee team volunteering.



\$431 million

spent with Aboriginal  
businesses



\$11.5 billion

spent on goods  
and services



# Economic performance

We are committed to delivering profitable growth and strong shareholder value. At the same time, the success of our business also has a significant impact on the larger economy.



Our investment in energy production and marketing creates well-paying jobs, promotes economic growth, and provides governments and suppliers with valuable revenues. Our economic success also allows us to make investments in our renewable energy business and in new technologies that improve performance.

In all these ways, we continue to create value – for our shareholders and society at large.

## Corporate performance

We had another strong financial year in 2013. The company continued to demonstrate consistent cash flow, a strong balance sheet and an ability to fund growth from internal resources while steadily increasing the return of cash to shareholders.

## Other developments:

- Total upstream production averaged 562,400 barrels of oil equivalent per day (boe/d) in 2013, compared to 549,100 boe/d in 2012. Oil sands production (excluding Syncrude) averaged 360,500 barrels per day (bbls/d) in 2013, compared to 324,800 bbls/d in 2012.
- Driven by strong project execution and improved reliability, our Oil Sands business achieved an 11 per cent increase in annual production in 2013 as well as record annual synthetic crude oil (SCO) production. These results were achieved despite a major turnaround in the second quarter as well as third-party outages that impacted Oil Sands operations during the year.
- Our recorded net earnings of \$3.911 billion in 2013, compared to \$2.740 billion in 2012. Operating earnings\* for 2013 were

\$4.700 billion, compared to \$4.847 billion in 2012.

- Cash flow from operations\* for 2013 was \$9.412 billion, compared to \$9.733 billion in 2012.

## Contribution to the economy

The benefits of our success extend well beyond the returns we provide to shareholders. In 2013, we contributed a combined \$4 billion in royalties and taxes for governments – revenues that were then available to help fund public sector programs, including education, health care and vital infrastructure.

We also generate economic growth and prosperity through our supply chain purchases. Our combined spending on goods and services in 2013 totalled \$11.5 billion. We had more than 8,600 vendors worldwide.

- In 2013, royalties totalled just over \$2 billion, including \$859 million directed to the Alberta government related to oil sands royalties. As well, current income taxes totalled approximately \$2 billion to governments in Canada and internationally.
- Capital spending in 2013 totalled \$6.8 billion, compared to \$7.0 billion in 2012.
- A look at our supply chain spending shows we had more than 6,500 Canadian vendors spanning all 10 provinces as well as the Northwest Territories and the Yukon. The United States was our next biggest supplier (more than 1,600 vendors), although we also purchased from 50-plus other countries. The range of goods and services is extensive and includes heavy equipment, drilling, construction, engineering, environmental services,

## Economic performance continued



“To have a healthy society, you need a healthy economy. And to have a healthy economy, you need a healthy energy supply. There isn’t a single example since the Industrial Revolution where that sequence hasn’t been true.”

**Steve Williams**  
president and chief executive officer

chemicals, steel products, mining services, electrical, catering, pipes and marine services.

- In 2013, we spent more than \$431 million on direct purchases from Aboriginal businesses.

### Growth plans

Our focus is on smart, profitable growth. Cost and quality, rather than schedules, are the key drivers of our growth strategy.

Our decision in 2013 to sanction the Fort Hills mining project fits well within this strategy. We expect Fort Hills to be a significant source of cash flow and contribute strong returns for the long term. We are also pursuing a number of low-cost ‘debottlenecking’ projects that are expected to deliver significant production growth through equipment, infrastructure and performance improvements at existing operations.

We are also well positioned for sustained and profitable growth from our Exploration & Production division, including our working interest in the Golden Eagle project in the U.K. North Sea and the Hebron project off the east coast of Canada. First oil is expected from Golden Eagle in late 2014 or early 2015, and from Hebron in 2017.

Another part of our growth strategy is to focus on our core assets and identify business options that no longer meet profitability thresholds. In 2013, we completed a four-year divestment program to sell our conventional natural gas assets in Western Canada. Our portfolio is now 99 per cent crude oil-weighted.

As we grow, we continue to invest in technology and innovation that we expect will help lower the costs and energy intensity associated with production.

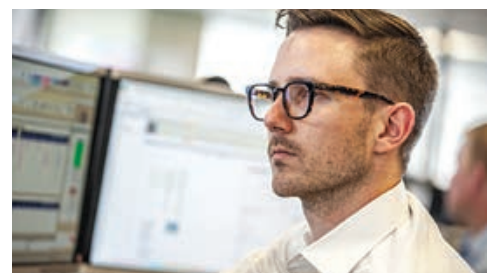
### Expanding market access

As our oil sands production grows, we continue to strategically enhance our access to global markets and premium pricing for our product. For example, we commenced rail shipments of inland crudes to our Montreal refinery in 2013, enabling us to take advantage of the price differentials between inland and Brent crudes. And in early 2014, we commenced shipments of heavy crude on the Gulf Coast Pipeline, providing the company with more than 70,000 barrels per day of heavy crude shipping capacity to the U.S. Gulf Coast.

\* Non-GAAP financial measure. Refer to the legal notice in this publication.



**On the web:** More on our economic performance, contribution to the economy and growth plans at [sustainability.suncor.com](http://sustainability.suncor.com)



## Join the conversation

We believe the best conversations start by listening to other people's points of view. While our opinions may differ, with everyone in the conversation we can work toward solutions that create shared value for all of us.

Join the energy conversation at [talkingyes.suncor.com](http://talkingyes.suncor.com) and share your thoughts.



# Where we are in the world



- Head office
- Regional office
- Operated
- ⊙ Non-operated
- ⊙ Proposed
- Refining capacity

*Circles are scaled to relative net capacity*

Suncor Energy's vision is to be trusted stewards of valuable natural resources. Guided by our values, we will lead the way to deliver economic prosperity, improved social well-being and a healthy environment for today and tomorrow.

Suncor's operations include oil sands development and upgrading, offshore oil and natural gas production, petroleum refining, and product marketing under the Petro-Canada brand. While working to develop petroleum resources responsibly, Suncor is also developing a renewable energy portfolio.

**50+**

countries from which we purchase goods and services

**\$4 billion**

total royalties and taxes in 2013

**2013**

official opening of reconstructed fen wetland

**Legal notice**

**Forward-looking statements** – Suncor’s 2014 *Report on sustainability*, including the print and online version (the “publication”), contains certain forward-looking information and forward-looking statements (collectively referred to herein as “forward-looking statements”) within the meaning of applicable Canadian and U.S. securities laws. Forward-looking statements and other information is based on Suncor’s current expectations, estimates, projections and assumptions that were made by the company in light of information available at the time the statement was made and consider Suncor’s experience and its perception of historical trends, including: expectations and assumptions concerning the accuracy of reserves and resources estimates; commodity prices and interest and foreign exchange rates; capital efficiencies and cost savings; applicable royalty rates and tax laws; future production rates; the sufficiency of budgeted capital expenditures in carrying out planned activities; the availability and cost of labour and services; and the receipt, in a timely manner, of regulatory and third-party approvals. In addition, all other statements and other information that address expectations or projections about the future, and other statements and information about Suncor’s strategy for growth, expected and future expenditures or investment decisions, commodity prices, costs, schedules, production volumes, operating and financial results, future financing and capital activities, and the expected impact of future commitments are forward-looking statements. Some of the forward-looking statements and information may be identified by words like “expects”, “anticipates”, “will”, “estimates”, “plans”, “scheduled”, “intends”, “believes”, “projects”, “indicates”, “could”, “focus”, “vision”, “goal”, “outlook”, “proposed”, “target”, “objective”, “continue”, “should”, “may” and other similar expressions.

Forward-looking statements in the publication include references to: Suncor’s missions, visions and strategies, including to be Canada’s premier integrated energy company and to get the most value from its resources; developments around renewable energy, technology and innovation (including planned investments and Suncor’s aim for performance improvements when it comes to new technology of at least 25 per cent in production, profitability, operational efficiency or environmental impact, and that technology and innovation will help lower the costs and energy intensity associated with production); Suncor’s environmental goals to be achieved by 2015 (as compared to a baseline year of 2007), including improving energy efficiency by 10 per cent, achieving absolute reductions in fresh water consumption by 12 per cent and air emissions (nitrogen oxides, sulphur oxides and volatile organic compounds) by 10 per cent and increasing land reclaimed by 100 per cent; Suncor’s goals and expectations around the rollout of EMS, EIMS and OEMS; Suncor’s TRO™ tailings management approach, which is expected to, among other things, reduce the number of tailings ponds at our current mine site and that progressively reclaiming tailings ponds will allow us to reclaim the entire mine site faster; Suncor’s environmental, renewable energy and tailings goals and planned activities for 2014-2015 identified on pages 14 and 15 of the print version of the publication and Suncor’s social goals and planned activities identified on pages 30 and 31 of the print version of the publication; Suncor’s expectations (including results) around technologies being introduced or that may be introduced across Suncor, including those related to the re-use of tailings waters, surfactants, lubricants, oxyfuel and carbon capture, waterless extraction and electromagnetic technology; plans to be undertaken by organizations Suncor is involved with, including COSIA; the goal to return all disturbed lands to a self-sustaining, boreal forest ecosystem; Suncor’s belief that it will have two additional wind power projects in 2015, which are expected to increase total installed wind capacity to 395 MW; anticipated future emissions and intensities of emissions, including GHG emissions; Suncor’s views around market access for its production; Suncor’s expectation that its seventh wind power project will be operational in late 2014, and, subject to regulatory approvals, its eighth wind power project is expected to follow in 2015; Suncor’s goal for emissions from its production to be on par with, or lower than, other sources of oil; Suncor’s goals around safety; Suncor’s expectation that it will achieve an overall reduction in its river water withdrawal of about 65 per cent as compared to 2007; the plan for Fort Hills to begin producing in 2017, that it will be a significant source of cash flow, contribute strong returns over the long-term and that it is one of the best undeveloped oil sands mining assets in the Athabasca region; plans around Suncor’s Water Technology Development Centre, including that its construction is to begin in 2015 and certain targeted benefits identified herein; capacity increases at Oil Sands are expected to be achievable through low-cost ‘debottlenecking’ and expansion projects; first oil from Golden Eagle is expected in late 2014 or early 2015; and first oil from Hebron is expected in 2017.

Forward-looking statements and information are not guarantees of future performance and involve a number of risks and uncertainties, some that are similar to other oil and gas companies and some that are unique to Suncor. Suncor’s actual results may differ materially from those expressed or implied by its forward-looking statements, so readers are cautioned not to place undue reliance on them.

Risks, uncertainties and other factors that could influence financial and operating performance of all of Suncor’s operating segments and activities include, but are not limited to, changes in general economic, market and business conditions, such as commodity prices, interest rates and currency exchange rates; fluctuations in supply and demand for Suncor’s products; the successful and timely implementation of capital projects, including growth projects and regulatory projects; competitive actions of other companies, including increased competition from other oil and gas companies or from companies that provide alternative sources of energy; labour and material shortages; actions by government authorities, including the imposition of taxes or changes to fees and royalties, and changes in environmental and other regulations; the ability and willingness of parties with whom we have material relationships to perform their obligations to us; the occurrence of unexpected events such as fires, equipment failures and other similar events affecting Suncor or other parties whose operations or assets directly or indirectly affect Suncor; the potential for security breaches of Suncor’s information systems by computer hackers or cyberterrorists, and the unavailability or failure of such systems to perform as anticipated as a result of such breaches; our ability to find new oil and gas reserves that can be developed economically; the accuracy of Suncor’s reserves, resources and future production estimates; market instability affecting Suncor’s ability to borrow in the capital debt markets at acceptable rates; maintaining an optimal debt to cash flow ratio; the success of the company’s risk management activities using derivatives and other financial instruments; the cost of compliance with current and future environmental laws; risks and uncertainties associated with closing a transaction for the purchase or sale of an oil and gas property, including estimates of the final consideration to be paid or received, the ability of counterparties to comply with their obligations in a timely manner and the receipt of any required regulatory or other third-party approvals outside of Suncor’s control that are customary to transactions of this nature; and the accuracy of cost estimates, some of which are provided at the conceptual or other preliminary stage of projects and prior to commencement or conception of the detailed engineering that is needed to reduce the margin of error and increase the level of accuracy. The foregoing important factors are not exhaustive.

Suncor’s management’s discussion and analysis (“MD&A”) for the first quarter of 2014 dated April 28, 2014 and its Annual Information Form dated February 28, 2014, Form 40-F and Annual Report to Shareholders and other documents it files from time to time with securities regulatory authorities describe the risks, uncertainties, material assumptions and other factors that could influence actual results and such factors are incorporated herein by reference. Copies of these documents are available without charge from Suncor at 150 6th Avenue S.W., Calgary, Alberta T2P 3E3, by calling 1-800-558-9071, or by email request to info@suncor.com or by referring to the company’s profile on SEDAR at sedar.com or EDGAR at sec.gov. Except as required by applicable securities laws, Suncor disclaims any intention or obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

**Non-GAAP measures** – Certain financial measures in the publication – namely cash flow from operations, operating earnings and oil sands cash operating costs (excluding Syncrude) per barrel – are not prescribed by Canadian generally accepted accounting principles (“GAAP”). These non-GAAP measures are defined and reconciled in Suncor’s MD&A for the year ended Dec. 31, 2013.

These non-GAAP financial measures do not have any standardized meaning and therefore are unlikely to be comparable to similar measures presented by other companies. These non-GAAP financial measures are included because management uses the information to analyze operating performance, leverage and liquidity, and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with GAAP.

**Reclamation** – Reclamation at Suncor is a carefully monitored process with two distinct components: (i) transformation of the area, including tailings ponds, into a solid material that can support vegetation, wildlife and landscape restoration, which includes landform design and soil placement; and (ii) re-vegetation in a way that the reclaimed landscape can support vegetation and wildlife as a self-sustaining ecosystem. When Suncor claims that it has reclaimed land or plans to reclaim land, the reclaimed land will have met or is intended to meet the two distinct components identified in this paragraph.

**BOEs** – Certain natural gas volumes have been converted to barrels of oil equivalent (boe) on the basis of one barrel to six thousand cubic feet. Any figure presented in boe may be misleading, particularly if used in isolation. A conversion ratio of one barrel of crude oil or natural gas liquids to six thousand cubic feet of natural gas is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. Given that the value ratio based on the current price of crude oil as compared to natural gas is significantly different from the energy equivalency of 6:1, utilizing a conversion on a 6:1 basis may be misleading as an indication of value.

**Partnerships** – The use of Partnership throughout the document does not necessarily mean a partnership in the legal context.

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Suncor is proud of our involvement with the following organizations:



In 2007, Suncor became the first Canadian energy company to join Ceres, a coalition of investors, environmental groups and other public interest organizations working with companies to address sustainability challenges.



Suncor is a member of the Canadian Association of Petroleum Producers (CAPP). CAPP’s stewardship initiative is a commitment to responsible resource development and continuous improvement that all CAPP members uphold.



**MEMBER OF**  
**Dow Jones Sustainability Indices**  
In Collaboration with RobecoSAM

We are a registered Organizational Stakeholder of the Global Reporting Initiative (GRI) and support the mission of the GRI to develop globally accepted sustainability reporting guidelines through a global, multi-stakeholder process.

The Dow Jones Sustainability Index (DJSI) follows a best-in-class approach comprising the sustainability leaders from each industry. Suncor has been part of the index since the DJSI was launched in 1999.





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OSQAR strives to be current and topical while covering a diverse range of energy-related issues. Editions of the e-newsletter and blog are unique in that they’re written in a less formal style, use humour and ‘step out’ on a range of topics that some may consider controversial.

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If you have comments or questions about this report, contact:

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