



our sustainability report 2018

TO OUR STAKEHOLDERS

At the core of our business is a responsibility to develop and produce oil and natural gas safely and profitably, while making a positive contribution to society. We believe this sustainable approach is central to the long-term success of our company.

Our continued focus on operating safely and limiting environmental impacts remains paramount and is deeply integrated into how we conduct our operations. In 2018, we found new ways to improve our environmental risk management through creativity and leveraging technology, and while our Lost Time Injury (LTI) performance is not where we want it to be – we are owning these results and taking steps to improve. Our culture is grounded in accountability – it is key to how we address our challenges and continues to be instrumental to our ability to achieve results.

We believe the communities we work in should benefit directly from our presence. Creating positive and sustainable impacts in these communities has had a meaningful connection to our ability to execute our business strategy. We continue to be an active partner through engagement, respect and social investments. You will find updates in this report on some of our activities to further strengthen these relationships and contribute to the communities in which we work.

Our company remains well positioned. In 2018, we continued our plan to deliver profitable and sustainable production growth while maintaining the financial resilience to navigate uncertainty in this time of constant change. It is with pride that we present our fifth consecutive Sustainability Report, summarizing how our people, our commitment to responsible operations and our business strategy combined for a successful 2018.



Elliott Pew
Chairman of
the Board



Ian C. Dundas
President & CEO

safety

We believe everyone is responsible for safety.

This means our employees and contractors share ownership of building a workplace where all injuries can be prevented. Enerplus' goal is zero incidents. Our people work hard each day to look out for one another so that everyone gets home safely.

Some of the key components of our day-to-day safety program include:

- Setting annual safety targets and monitoring our performance throughout the year;
- Holding regular safety conversations and all-operations stand-downs; and
- Providing safety training and encouraging all workers on our sites to identify, report and act on all hazards.

As we have been working specifically to address contractor safety, we are pleased to report our contractor Total Recordable Injuries (TRI) decreased from 16 in 2017 to 14 in 2018. We are continuing to prioritize contractor safety in 2019.

We had a total of six Lost-Time Injuries (LTI) in 2018, an increase from three in 2017. We are addressing this challenge in 2019 by enhancing our safety leadership activities and increasing attention and education around our most common injuries.



Building on our Off-the-Job Safety Program

In 2018, we continued to build on our Off-the-Job Safety program by highlighting BBQ home safety, providing infant safety care packages to employees and giving home-use fire extinguishers to our approximately 400 employees. The fire extinguisher program was so well-received that we are expanding it in 2019 to include residents near our operations as a demonstration of our commitment to their safety.

people and culture



Our culture of accountability is foundational to how we operate at Enerplus. Our people take personal accountability and ownership to act consistently with our values and cultural beliefs, driving actions aligned with achieving our key results. We now measure our progress through an organization-wide, real-time culture measurement and feedback tool implemented in 2018.

Enerplus creates an inclusive environment where employees feel encouraged to share their ideas, perspectives and thinking. In 2018, we launched a technology platform to provide the opportunity for all employees to contribute and discuss new

ideas to help advance our business and culture. In 2018, 236 ideas were contributed from all areas of the company.

Employees had multiple opportunities to learn more about our business and culture throughout 2018. We held an Explore Technology Forum to foster the cross-pollination of ideas and information across functional and geographic areas while providing employees the opportunity to showcase their work. Throughout 2018, executive team members held culture conversations with small groups of employees from across the company. These conversations created an avenue for storytelling and sharing feedback.

stakeholder engagement

We work hard to maintain strong, mutually-beneficial relationships with our stakeholders. We believe communication must be based on honesty, trust and – above all – respect. It is the alignment between what we say and what we do that instills confidence. Our people are often members of the community where they work and share a vested interest in the community's development. We connect regularly with our stakeholders to provide updates, seek input, help identify opportunities and find ways to address potential concerns.

Because we often work on or near traditional Indigenous land, connecting with our neighbours regularly to learn about traditional culture, wildlife and each community's connection to the environmental landscape is critical to our understanding of how best to operate in the area. In North Dakota, Tribal



Leadership regularly share their culture, history and customs with our people. We have also honoured our neighbours' culture by sponsoring the Mandaree Celebration in Fort Berthold, North Dakota since 2011.



Temporary Water Lines Reduce Water Truck Traffic

By installing temporary water lines and open water tanks at well locations across North Dakota, we were able to reduce our truck traffic by 42,000 truck trips in 2018. Resulting in safer roads for community members, a reduction in air emissions and more economical wells for our company.

community investment

We care about being an active partner in our communities.

We provide support through donations, sponsorships, in-kind contributions and the volunteer efforts of our people.

- Increased diversity of thought around our community investments by including employees from various parts of the company on our community investment advisory committee.
- Launched our non-profit bonus contest, which encourages employees to submit their volunteer hours for a chance to win a donation from Enerplus to the non-profit of their choice. Over 800 volunteer hours were reported by employees in 2018, and our second contest winner chose the Edgerton, Alberta skating arena to receive a donation from Enerplus.
- We matched over \$34,000 in donations made by our employees in Canada and the United States to charities and non-profit organizations they care about.

400+

FIRE EXTINGUISHERS PROVIDED TO EMPLOYEES AS PART OF OUR OFF-THE-JOB SAFETY PROGRAM

\$735K

CONTRIBUTED IN SUPPORT OF OUR COMMUNITIES THROUGH DONATIONS AND SPONSORSHIPS

800

EMPLOYEE VOLUNTEER HOURS IN 2018



air emissions and climate change

In addition to being good for the environment, reducing our emissions positively impacts our economic and operational performance, too.

Our industry has a role to play in addressing the contribution of human activities to climate change, and Enerplus engages with our peers around this topic. In 2018, our greenhouse gas (GHG) emissions intensity ratio remained relatively flat compared to 2017, and we continue to look for ways to improve this performance.

We monitor the landscape of evolving carbon policies in North America and have developed plans to manage potential impacts to our business that may stem from policy change. Our view is that policies relating to the management of air emissions and climate change must be grounded in science, sound policy and be designed in consideration of economic implications. We manage and monitor our emissions to evolve our own management program and report data to all required regulators. We also voluntarily report metrics to CDP. We strive to continually improve the accuracy of our emissions data, as methods and technology improve. As part of this continual improvement process, we have revised select historical metrics to reflect more accurate data.



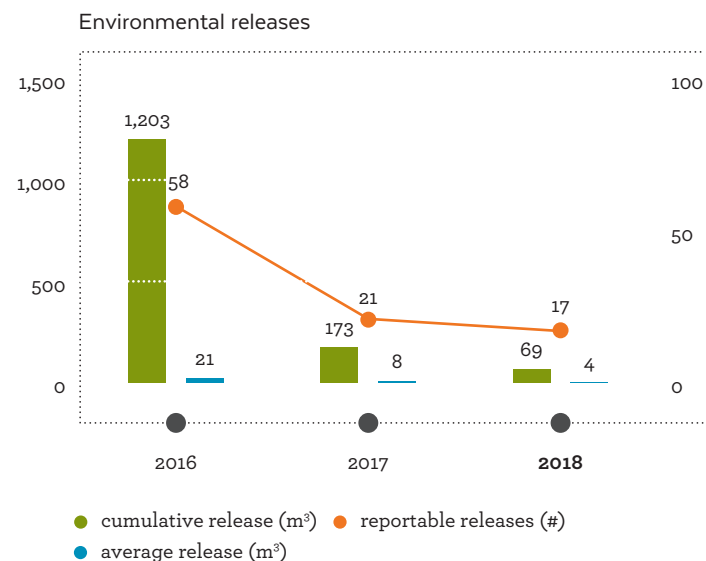
Ongoing Technological Improvements in Leak Detection

We expanded our leak detection program in 2018 to include more of our operations in Alberta. In Medicine Hat, we've completed the installation of wireless technology through our entire injection system on the east side of the river. In Giltedge, near Wainwright, we have installed Emergency Shut Down (ESD) system valves and pressure sensing casings on all five lines running under the Battle River.



Long-term Relationships in Radville

While we have reduced our capital activity in southeast Saskatchewan in recent years due to lower commodity prices, it remains important to us that our stakeholders in and around the town of Radville know we are a part of their community throughout the lifecycle of our operations. We maintain a steady operation in this community and have contributed over \$450,000 in the last eight years to initiatives in southeast Saskatchewan.



water

Extensive project planning and risk assessments are conducted to help us understand water issues around our various operations. Using this knowledge, we look for ways to reduce our freshwater use requirements by using non-potable water and other alternatives wherever possible.

We reused approximately 99% of water produced from the wellhead in our Canadian waterflood operations in 2018. In all other areas of operation, Enerplus seeks to reuse produced water where possible. For example, we reuse produced water during workover operations, pumping down plugs during completion operations and during hot water treatments for well maintenance. We continue to assess new technologies and identify methods to increase water reuse.

Participating in Energy Efficiency Alberta

Enerplus became involved with three Energy Efficiency Alberta programs in 2018 – each offering capital funding to any project that will reduce our energy consumption. In our first year with the program, we benefited from funding for an in-house energy manager, a leak detection and repair (LDAR) study that identified 119 TCO₂e of greenhouse gas savings at our Ante Creek operations and an energy audit at our Medicine Hat operations to identify energy savings opportunities that are now under internal review.

80%

OF OUR WATER SUPPLY
ACROSS OUR OPERATIONS
WAS RECYCLED AND REUSED

545 km

OF PIPELINE ABANDONED
(208 SEGMENTS)

712

ABANDONED WELLS
IN ACTIVE RECLAMATION
OR REMEDIATION IN 2018



environmental footprint

We carefully consider environmental impacts at every stage of development and work to minimize our impact to the lands we use for operations.

Preserving and restoring biodiversity is a key factor in our planning cycle. When wells are at the end of their life and production has declined, we safely decommission them, abandoning each site and reclaiming the land to pre-disturbance conditions.

Highlights of our 2018 well abandonment program include:

- 545 kilometres of pipeline (208 segments) abandoned,
- 232 wells safely abandoned (cut and capped), and
- An additional 179 wells abandoned, and surface reclaimed in one large scale project, resulting in economic benefits and project efficiencies.

In North Dakota, where Enerplus is actively drilling and completing new wells, we use surface piping to transfer water for completions operations, reducing our overall environmental footprint by taking water hauling trucks off the road.



economic performance

We believe that a financially resilient company, focused on generating robust financial returns on invested capital, will create long-term value for our shareholders.

In 2018 we continued to execute on our strategy focused on maximizing financial returns, generating profitable growth and ensuring we maintained our significant financial strength.

Contributing to our strong performance was the ongoing advancement of our performance culture, which prioritizes accountability, the health and safety of our people and progressing creative and

innovative solutions to drive continuous improvement. All combined, we delivered highly competitive results across our organization.

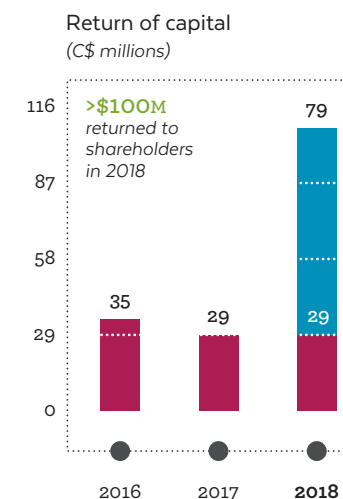
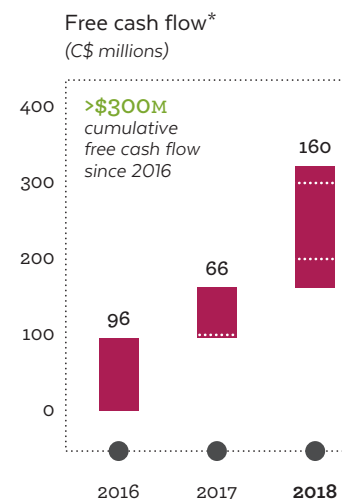
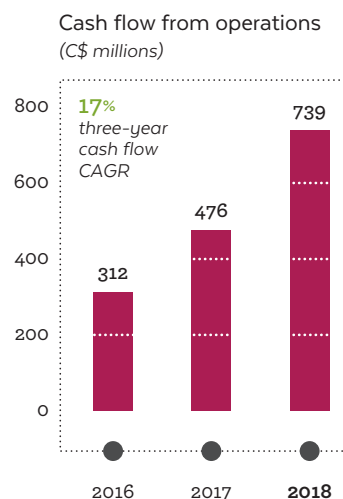
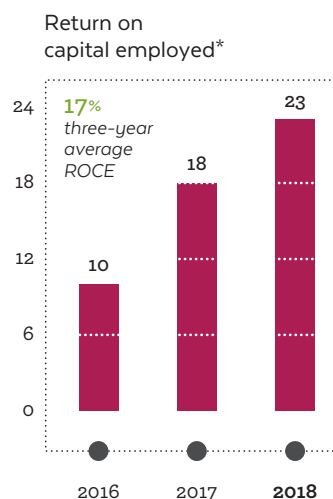
With our strong balance sheet, low-cost structure and high-quality assets, we are well positioned to compete and succeed in a volatile commodity price environment.

supply chain

We are proud to work with landowners and contractors across Western Canada, North Dakota, Montana and Colorado to develop our energy resources responsibly.

One of the most important ways we work with the communities around our operations is by the purchase of local goods and services to support our capital projects and ongoing operations.

Our contractors provide a wide range of goods and services supporting our engineering, drilling, completions, construction, and abandonment and reclamation of our facilities. Contractors must meet or exceed our rigorous criteria for health and safety, insurance and be financially stable to work for us.



* Non-GAAP measure. See "Supplemental Information" and "Advisories" sections in our latest investor presentation.

● dividends
● share repurchases

regulatory compliance



We pride ourselves on operating at a high level of compliance, particularly given the stringent nature of our industry's regulatory environment.

Our approach to maintaining compliance includes:

- Ensuring we are aware of potential regulatory updates or changes and planning for any identified impacts to our business, by taking a proactive and participative stance early on during the policy-making, stakeholder and legislative processes.
- Setting annual compliance targets to measure and drive performance, with internal compliance goals and targets often exceeding industry benchmarks.
- An internal audit and inspection program to proactively identify opportunities for improvement and potential risks.
- Employee education around changes to regulations in their operating areas to ensure compliance.

This approach has resulted in Enerplus achieving a 90% average compliance rating from 2016 through 2018. In jurisdictions like Alberta where benchmarking data is available, Enerplus continues to exceed industry average compliance rates.

55%

INCREASED CASH FLOW
FROM OPERATIONS 55%
TO \$739 MILLION IN 2018

488

WORKED WITH 488 LOCAL
CONTRACTORS ACROSS OUR
OPERATIONS

\$2.2M

RECOVERED THROUGH SALES
AND DONATIONS OF SURPLUS
EQUIPMENT MATERIALS



Recycling and Reuse

Wherever possible, we look to reduce our waste. If we cannot use a piece of equipment, we look for someone who can.

- In 2018, we were able to recover over \$2.2 million through the sale or donation of surplus equipment materials.
- We successfully decommissioned, abandoned, and completed environmental assessments and remediation on a 35-year-old facility located in northern Alberta in only four months by working with the landowners to reuse the surface, and recycle onsite buildings and select equipment.



about Enerplus

We are a responsible developer of high-quality crude oil and natural gas assets in Canada and the United States.

We focus on three distinct areas that provide access to some of the best plays in North America: high margin U.S. oil production in the Williston Basin in North Dakota; stable, low decline Canadian oil production from a portfolio of properties across Alberta and Saskatchewan under waterflood; and an interest in U.S. natural gas assets concentrated in the northeast Marcellus shale region in Pennsylvania.

OPERATIONS IN 2018

1,410 Active Operated Wells 9 Office Locations \$739M Cash Flow From Operations

\$593.9M Capital Spending 93,216 BOE/d Average Production

Annual Average Production Volume Mix

54% + 46%
Crude Oil & NGLs Natural Gas

Geographic Production Split

84% + 16%
United States Canada

Materiality

We continually seek to understand what matters most to our stakeholders through engagement activities and feedback requests. The topics of highest importance to our stakeholders are grouped into the following areas within this report: our people, our responsibility and our business. While many issues are important to Enerplus, those addressed within these sections represent most of our reporting efforts in 2018, with additional issues referenced in the Data Tables. This report has been prepared in accordance with the GRI Standards: Core option.

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Our shares trade on the Toronto and New York stock exchanges under the symbol "ERF."

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With this report, we hope to increase your knowledge of Enerplus and our operations. The information in this report is based on our company interest production and is reported in Canadian dollars and metric units. This document does not provide investment advice, and readers are responsible for making their own financial decisions. To learn more about sustainability at Enerplus and view the latest data, visit enerplus.com.

