



2022

Sustainability Report

Clean, sustainable energy.

Proudly producing low-emissions, low-cost Canadian energy, for the world.



Table of Contents

Introduction	3
Message from Our President and CEO	4
2022 Sustainability Highlights	5
About Advantage	6
About Entropy	7
About This Report	8
Accomplishments and Sustainability Targets	9
Materiality	10
Risks and Opportunities	11
Environment	15
Air	16
Emissions Management	16
Methane Reductions	19
Carbon Capture and Storage (CCS)	19
Carbon Emissions Regulatory Offsets	19
Water	20
Water in Our Operations	20
Water Use	21
Produced Water	22
Water Returned to the Environment	22
Waste	23
Land	24
Biodiversity	24
Multi-Well Pad Drilling	24
Environmental Reclamation	25
Spill Prevention and Management	26
Social	27
Health and Safety	28
Safety Culture	28
Health and Safety Management System	28

Safety Training	28
Hazard and Risk Management	29
Safety Performance	30
Communication	30
Emergency Preparedness	31
Stakeholder Engagement	32
Community	32
Investors	32
Investment	32
Membership Associations	33
Indigenous Engagement	34
Our People	35
Diversity and Inclusion	35
Employee Engagement	35
Employee Rewards	36
Training and Development	36
Governance	37
Board Oversight	38
Management Oversight	39
Strategy	39
Scenario Analysis	39
Risk Management	39
Board Diversity	40
Business Ethics	40
Cyber Security	40
Supply Chain Management	41
Political Contributions	41
Appendix	42
Data Table	43
Task Force on Climate-Related Financial Disclosures (TCFD)	49
SASB Index	50
GRI Index	52
Glossary of Terms and Acronyms	56
Forward-Looking Statements	58



Introduction

Proudly producing low-emissions,
low-cost Canadian energy, for the world



Message from Our President and CEO

At Advantage, sustainability is built into our DNA. This is easy to see when you look at our emissions performance, our leading investments in carbon capture and storage (CCS) through our subsidiary Entropy Inc., our low surface impacts and our conservative development approach. But beyond the more obvious factors, our commitment to sustainability is based on how we view the world and the growing demand for all types of energy. We've built our business around doing something that is good for society: producing reliable, affordable, low-carbon energy. 'Reliable' means our energy is available when families need to warm their homes or hospitals need their lights and equipment to run, but it also means our customers have energy security that is immune to geopolitical disputes. 'Affordable' means that in Canada people pay less for their fuel than they do for their carbon tax, while around the world people use it to lift themselves out of poverty. 'Low-carbon' means that the energy we produce displaces higher-carbon fuels like coal, reducing emissions by as much as 50-60% for the vast majority of countries. These are global priorities that Advantage is proud to contribute to, not because they feel good but because they *are good*.

As expected, 2022 was another great year of achievement for Advantage. Our Scope 1 and 2 greenhouse gas emissions intensity decreased 8% while methane emissions intensity decreased 10%. Advantage anticipates its emissions intensity will continue to decrease over the coming years due to the successful deployment of proprietary carbon capture technology developed by Entropy Inc. Entropy's technology is being deployed at the Glacier Gas Plant in a phased approach.

Phase 1a came onstream in 2022 as the world's first commercial-scale CCS project on natural gas combustion. Since commissioning, Advantage and Entropy have been optimizing and increasing the efficiency of the system, delivering unmatched performance and helping reduce the costs of capturing emissions. The operational experience that Entropy is gathering by operating this commercial CCS facility continues to build our competitive advantage, demonstrating global leadership in this vital technology.



In 2021 Advantage set the ambitious target of achieving "net-zero" Scope 1 and 2 emissions. To accomplish this, Entropy intends to develop negative carbon emissions that exceed Advantage's emissions through CCS investments at Glacier and third-party facilities. Although Advantage remains committed to "net-zero" with tangible investments lined up to achieve it, the functional regulatory framework required to make this possible in Canada has yet to be delivered, so the date of achieving this goal is unlikely to be within two years. In addition to the great strides in Entropy's technology and projects, Advantage continues to focus on many other sustainability achievements including a relentless emphasis on the health and safety of our staff, no reportable spills impacting the environment, continued abandonment and reclamation spending well in excess of regulatory requirements, and investment in our people and our communities. We wish to thank everyone who shares our vision and understands that operating a sustainable business is "good business".

Mike Belenkie



2022 Sustainability Highlights

Business Activity

56,353 boe/d*

15% increase in operated production

Emissions

0.016 Scope 1 & 2
emissions intensity

8% decrease from 2021

0.035 Methane
emissions intensity

10% decrease from 2021

16,785 tCO₂e
carbon capture
& sequestered

Over 83,500 tCO₂e captured &
sequestered since 2015

Environment

\$2.2 million

spent on abandonment
and reclamation

0
reportable spills

Health & Safety

99%
COR Audit score

0.89
total recordable
injury frequency

Economic Impact

\$233,000

donated to various charities, programs,
advocacy initiatives, & organizations

5 scholarships
provided as part of our
Indigenous Scholarship Program

People

Less than
2%
turnover

13
internal
promotions

33%
female representation
on the Board of Directors

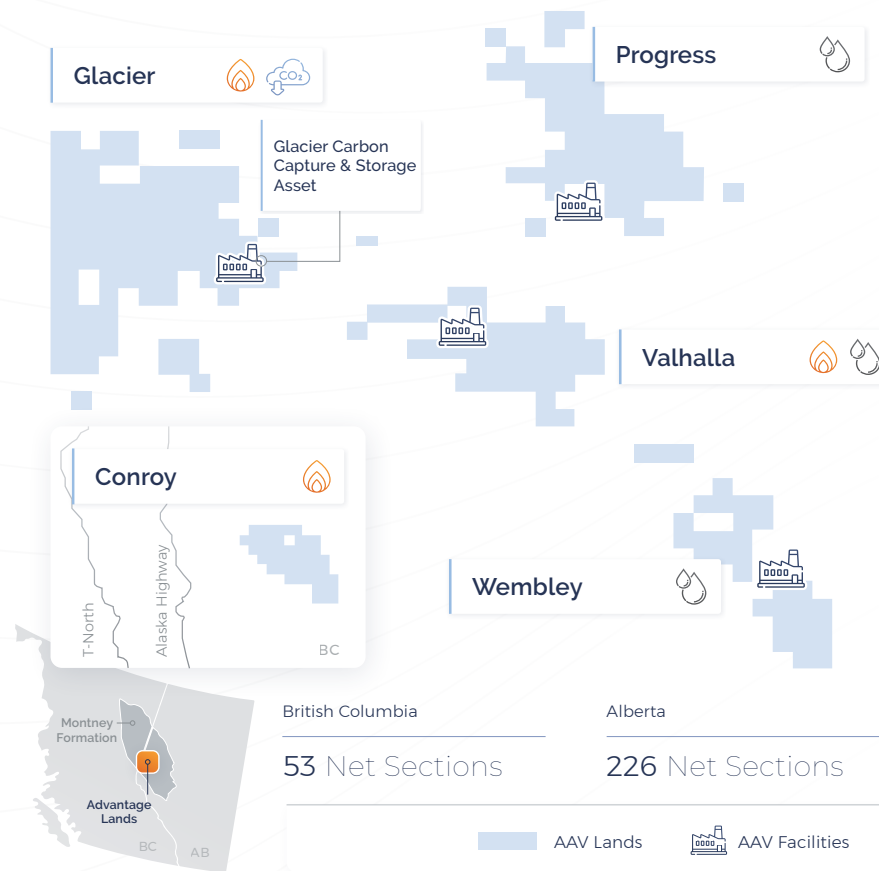
* Refer to Data Table for production information



About Advantage

Advantage Energy Ltd. is a growth-oriented corporation focused entirely on the development of our significant position in the Montney natural gas and liquids resource at Glacier, Wembley/Pipestone, Valhalla, and Progress, Alberta. Across these properties, Advantage holds a total of 226 net sections (144,640 net acres) of Doig/Montney rights. Subsequent to 2022, Advantage purchased 53 equivalent net sections of land in the Conroy area of British Columbia, bringing our total land holdings to approximately 279 net sections. All our operating areas have the potential for liquids-rich and multi-layer development, and we intend to increase liquids content with the purpose of diversifying production and enhancing long-term sustainability.

Sustainability at Advantage includes delivering attractive, long-term economic returns for our shareholders. We achieve this through our commitment and dedication to the highest standards of environmental protection and care, support for our employees, contractors, and local communities, and strong corporate governance. Operating a sustainable business has always been central to Advantage's success, and we strive for a well-balanced approach to risk management and integrating what is important to us as the business and industry evolves.



AAV



Proud Winner



Barrels of oil equivalent
production per day (boe/d)

55,769

Petroleum and
natural gas sales

\$950MM

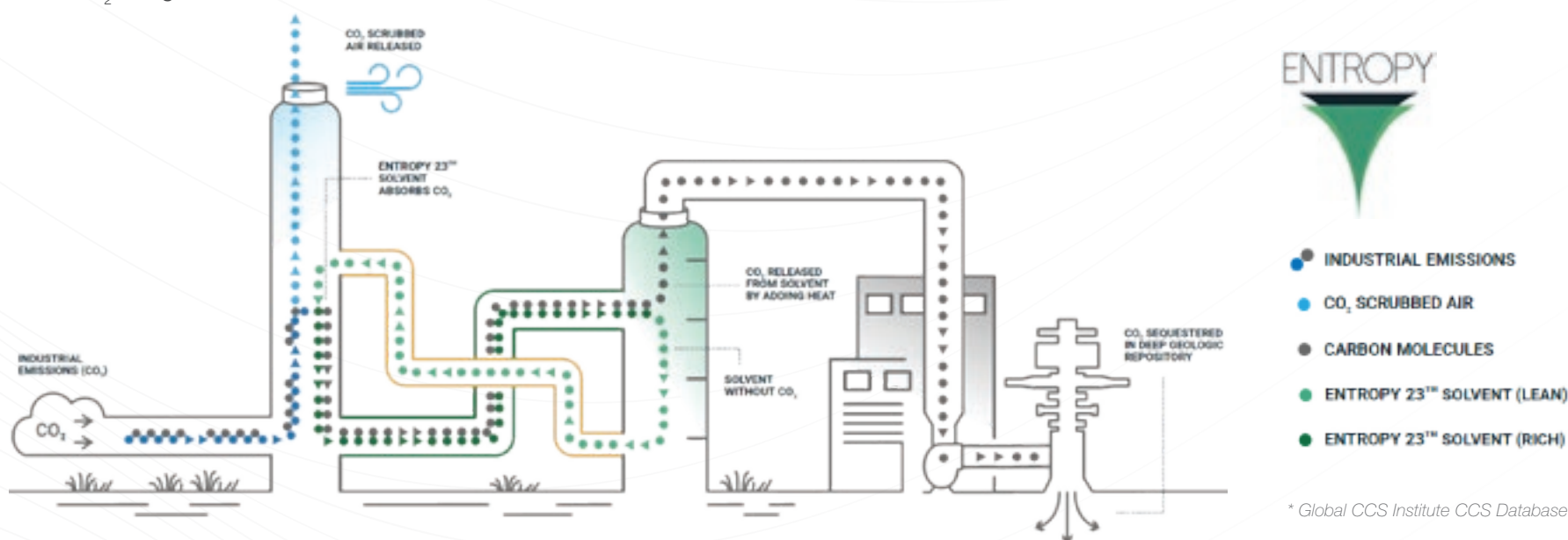
Head Office

Calgary, Alberta, Canada

About Entropy

Entropy Inc., a subsidiary of Advantage, is a global leader in Modular Carbon Capture and Storage™ (MCCS™) solutions. Entropy offers energy-efficient integration of multiple patented and patent-pending technologies to provide full-cycle solutions for customers. Entropy has designed, built, and operates the only natural gas post-combustion CCS facility in the World*. The implementation of Entropy's technology at Advantage's Glacier Gas Plant for flue gas carbon capture from gas-fired compressor engines has been taken in a phased approach. Glacier Phase 1a was commissioned in July 2022 with industry-leading performance and has consistently reinforced the global efficiency benchmark of 2.4 GJ/tonne at 90% capture rate on 5.3% CO₂ flue gas.

Phase 1b is expected to come online on a second compressor in Q4 2023 and deliver additional reductions on stationary fuel combustion through the first iCCS™ project. Phase 2 plans to capture emissions from the remaining compressors at the Glacier Gas Plant, which is anticipated to mitigate approximately 90% of Advantage's midstream emissions. Entropy's strategy is heavily focused on research and development and investing capital into operational optimization to maximize emission reductions for its customers. In 2022, Entropy received the Hydrocarbon Processing Award for Sustainability for our MCCS™ and was nominated for the 2023 Carbon Capture Canada Awards. For more information, see: www.entropyinc.com.



* Global CCS Institute CCS Database 2023

About This Report

Advantage's 2022 Sustainability Report was effective as of November 7, 2023, and prepared by Advantage, reflecting key sustainability and operational data for the period between January 1st, 2022, and December 31st, 2022. The Data Table includes metrics for 2022 and the two prior years.

Entropy was introduced in March 2021 as a subsidiary of Advantage. All Entropy performance metrics are included in Advantage's performance metrics in this report on a consolidated basis unless otherwise noted.

Standards and Frameworks

The environment, social, and governance (ESG) factors in this report are aligned with the following internationally recognized reporting methodologies:

- ▣ Sustainability Accounting Standards Board (SASB)
 - EM-EP-Oil & Gas Exploration & Production
- ▣ Global Reporting Initiative (GRI) Standards
 - GRI 11: Oil and Gas Sector 2021
- ▣ Task Force on Climate-Related Financial Disclosures (TCFD)

All financial data is prepared and reported in accordance with International Financial Reporting Standards (IFRS), representing generally accepted accounting principles (GAAP) for publicly accountable enterprises in Canada. For further details on financial and operating performance, please refer to Advantage's Consolidated Financial Statements, Management's Discussion and Analysis (MD&A), Annual Information Form (AIF), and Management Information Circular, all of which are available on Advantage's website at www.advantageog.com and on SEDAR+ at www.sedarplus.ca.



Conventions

The terms "Advantage", "Advantage Energy Ltd.", the "Company", the "Corporation", "we", "us", "our", and similar terms refer to Advantage Energy Ltd. and its subsidiaries, including Entropy Inc. All references to dollars are to Canadian dollars unless otherwise indicated. All other ESG performance metrics have units noted.

Assurance

Advantage's reported emissions for 2022 were verified by Brightspot Climate Inc., an accredited body to the ISO Standard 14065:2013. All other data is collected and managed internally by Advantage, aligning with reporting standards and frameworks. Advantage is continuously improving our data capture process to ensure accurate information is reported. We conduct internal audits to ensure compliance with all regulatory requirements in addition to overall accuracy and alignment with industry best practices. If there are any questions about Advantage's Sustainability Report or reported information, please contact: ir@advantageog.com.



Accomplishments and Sustainability Targets

Advantage established near- and long-term targets, formalizing our commitment to exceptional ESG performance. The following table details our progress against these targets:

Note: 2021 is the base year, chosen based on the most accurate data inventory.

	Commitment	Progress
Net-Zero	<p>Advantage is committed to positive action on emissions reduction. Advantage's Scope 1 and 2 emissions are expected to be reduced by approximately 20% with the full implementation of Phase 1a and 1b Entropy CCS equipment at the Glacier Gas Plant with a further 30% reduction once Phase 2 is complete.</p> <p>To achieve a net-zero emissions profile, Advantage's subsidiary Entropy Inc. is pursuing a carbon capture and storage business plan that will result in negative carbon emissions in excess of Advantage's emissions, assuming appropriate capitalization and commercial agreements, and effective carbon policies are established in Canada.</p>	<p>Advantage achieved an initial 8% decrease in emission intensity in 2022. We did not experience the full anticipated emissions reduction due to a delay in the integration of Entropy's CCS and waste heat recovery technology to Q4 2022. The delay related to unplanned facility maintenance, equipment failures (which were rectified), and general setbacks related to first-of-its-kind technology. Entropy spent additional time and funding on optimization, learning, research, and development well into 2023 and expects to realize the full emissions reductions from Phase 1a coinciding with the commissioning of Phase 1b in Q4 2023.</p> <p>The timing to achieve net-zero is currently uncertain, due to continued Canadian government delays in advancing carbon policy including regulatory clarity on the federal investment tax credit. Advantage remains committed to net-zero and will establish a new timeline upon increased governmental and regulatory certainty.</p>
Minimize Flaring	<p>Continue to target minimal flaring through in-line testing new production on all well pads and the proactive construction of infrastructure.</p> <p>Such initiatives have resulted in flaring that represents an insignificant portion of our Scope 1 emissions.</p>	<p>Flaring continues to be minimal and represents only 4% of our total Scope 1 emissions for 2022 as a result of Advantage policy and practice:</p> <ul style="list-style-type: none"> • Flowback philosophy has always been don't flare, we minimize flaring to what is absolutely necessary for safe operations. • Advantage was an early adopter of in-line well testing directly into gathering pipelines that minimizes flaring.
Indigenous Support	Implement Indigenous Scholarship Program	Awarded five scholarships in 2022, with additional scholarships to be awarded in 2023.
Active Site Management	Target to reduce sites under active management and remediation by over 40% between 2021 and 2025.	Original sites under active management in 2020 reduced from 134 to 115 (14%). We are on track to meet the target by 2025.

Materiality

Advantage identifies relevant ESG factors using global reporting standards and frameworks and prioritizes those factors based on their impact to our financial and operational condition, and therefore what is most material to our stakeholders.

A continuous materiality assessment allows for regular identification of risks and opportunities, and the quantification of impact and likelihood of occurrence for integration into our overall strategy.



Risks and Opportunities

Advantage regularly assesses risks and opportunities that are most pertinent to our business and strategy through our integrated Enterprise Risk Management process.

An overview of the potential climate related risks and opportunities is summarized in the following table:

Category	Impacts	Mitigation
Physical Risks		
Acute	Increased severity and frequency of extreme weather events such as fires, drought, flooding, or severe storms, and changing precipitation patterns causing extreme temperature variations will negatively impact Advantage. These events pose risk to the health and safety of our people, the environment, property, and assets. There is a particularly higher risk to Advantage as operating facilities are concentrated in a localized Montney region of Alberta. Business interruptions due to weather events may increase operating or capital costs, and negatively impact revenue generation.	<ul style="list-style-type: none"> • Robust Emergency Response Plans (ERP) that take into consideration weather events to mitigate and prevent significant loss to people, environment, property, and assets. • Asset management program designed with systems and processes to proactively mitigate potential climate and weather-related impacts to our inventory of assets, with sophisticated equipment monitoring. • Facility locations built with extreme temperature specifications. • Diversification of physical and financial gas sales points, and connectivity to multiple third-party gas processing facilities. • Maintaining insurance in accordance with industry standards, with high-quality insurers, including Business Interruption insurance. • Evaluation of asset and corporate acquisitions outside of core operating areas.
Chronic	<p>Likelihood: Very likely Timeframe: Short-, Medium-, and Long-term</p>	

Category	Impacts	Mitigation
Transitional Risks		
Policy & Legal	<p>Foreign or domestic governments that implement policies, legislation, and regulations related to restricting GHG emissions and promoting adaptation to climate change have the potential to increase expenditures due to the cost of compliance and the potential for fines or penalties for breaches. Any delay in necessary licenses or permits could also impact any existing or planned projects. Specifically with the Canadian federal government's taxes on carbon emissions, which is aimed to incentivize the use of alternative fuels, any taxes on carbon emission may have the effect of decreasing the demand for oil and natural gas, while also increasing expenditures. Each may have a material adverse effect on profitability and financial conditions.</p> <p>Entropy:</p> <ul style="list-style-type: none"> CCS projects are dependent on prevailing government policies, which if not supportive could lead to CCS projects not being economical. CCS projects are dependent on regulatory approval to obtain sequestration sites for CO₂. <p>Likelihood: Likely Timeframe: Short-, Medium-, and Long-term</p>	<ul style="list-style-type: none"> Maintain awareness of potential and upcoming changes to policy and legislation and remain engaged with governments through industry organizations (i.e., EPAC). Changes in capital allocation and strategic planning to align with a low-carbon economy. Design and build low-emitting facilities. Entropy mitigates Advantage's carbon pricing risk through the installation of industry-leading emissions reduction technologies at Advantage facilities and through plans to develop CCS projects for third-party emitters. Exploring diversification opportunities across provincial boundaries. <p>Entropy:</p> <ul style="list-style-type: none"> Entropy has the ability to execute projects in Canada, the United States, and other jurisdictions, and for many different industries, which lessens the risk of possible regulatory changes broadly impacting the business.
Technology	<p>Advantage competes with numerous other entities in the industry, some of which have greater financial resources, staff, and facilities to invest in new technology, which requires expertise and capital.</p> <p>Entropy:</p> <ul style="list-style-type: none"> Entropy's current process and other technology under development may not prove to be commercially viable, efficient, or operationally effective, and there is no guarantee competitors won't develop technology superior to Entropy's which would have negative implications for the business. The low-carbon, renewable, and clean technologies energy sector is developing rapidly, and unexpected positive results from competing energy technologies may reduce the market potential for CCS and reduce demand for Entropy's products and services. <p>Likelihood: Likely Timeframe: Medium-, and Long-term</p>	<ul style="list-style-type: none"> Securing external investor funding for new technology such as Entropy's MCCS™ technology to mitigate emissions from operations. <p>Entropy:</p> <ul style="list-style-type: none"> Entropy owns a leading solvent for carbon capture and has committed to further research and development in conjunction with partners to position itself as a unique provider in the industry as it develops.



Category	Impacts	Mitigation
Transitional Risks		
Market	<p>Shifting consumer demand for oil and natural gas products with higher consideration for lower-emission products and services, where certain jurisdictions have implemented policies and incentives to decrease the use of fossil fuels, has the potential to put downward pressure on commodity prices. Any substantial or extended decline in the price of oil and natural gas will have an effect on Advantage's carrying value of reserves, borrowing capacity, revenues, profitability, and cash flows, and may have a material effect on the business, financial condition, results of operations, and prospects.</p> <p>There is risk associated with securing services and equipment that are necessary for Advantage's operations for the expected price, on the expected timeline, or at all. This may have an adverse effect on our ability to operate, impacting financial performance and cash flows.</p> <p>Entropy:</p> <ul style="list-style-type: none"> Operational risks related to supply chain interruptions may impact Entropy's ability to carry out projects or successfully implement a CCS low project cost strategy or achieve the forecasted CCS cost. <p>Likelihood: Likely Timeframe: Medium-, to Long-term</p>	<ul style="list-style-type: none"> We anticipate that in the future, oil and natural gas will be sourced from the lowest carbon-intensive producers, and as such, we have secured CCS technology within our operations to abate emissions, as well as setting ambitious climate targets. Forward commodity prices, hedging strategies, market diversification, optimization strategies, and capital allocation are regularly reviewed among the executive team and the Board. Continuous monitoring of business risks and market conditions to assess/adjust corporate strategy to remain within acceptable risk tolerance limits. Proactive planning, sourcing, securing costs for key projects and utilizing multiple suppliers. Treat all suppliers fairly during all cycles of pricing and build positive relationships. <p>Entropy:</p> <ul style="list-style-type: none"> Proactive planning, sourcing, securing costs for key projects and utilizing multiple suppliers. Treat all suppliers fairly during all cycles of pricing and build positive relationships.
Reputation	<p>Stigmatization of the oil and natural gas industry from the public, could expose Advantage to higher costs, delays, or even project cancellations due to increased pressure on governments and regulators from special interest groups, which may lead to increased regulatory oversight, reduced government support, and potential climate-related litigation, all of which could lead to increased costs, or cost overruns. There is a particularly higher risk associated with reputation if Advantage is unable to deliver on climate-related goals and targets. Perceptions of the industry also impact our ability to attract and retain skilled employees and consultants, which may result in decreased production capacity.</p> <p>There is also a risk related to changing investor sentiment towards the oil and natural gas industry, where investors are beginning to announce they will no longer invest in the industry. This may result in limited access to capital, and a decrease in the price and liquidity of Advantage's securities.</p> <p>Likelihood: Likely Timeframe: Short- to Medium-term</p>	<ul style="list-style-type: none"> Annual ESG reporting with targets and goals, demonstrating our commitment to being a climate-oriented organization. Achieving net-zero is within our development plans (Phase 1a, Phase 1b, Phase 2, and Entropy third-party projects). Maintain a good corporate reputation with all stakeholders through communication strategies, engagement and consultation, community donations, hiring programs, and education scholarships. Ensuring our organization has a robust, market-competitive compensation and benefits program including training and career development for employees. Clear and consistent communication with shareholders and investment analysts.



Category	Impacts	Mitigation
Opportunities		
Resource Efficiency	There is an opportunity for Advantage to identify and utilize new or emerging technology to aid in more efficient operations and deliver low emissions, low cost natural gas.	<p>Relevant teams are continuously identifying and evaluating new technologies and how they can be applied to our business. Some examples include:</p> <ul style="list-style-type: none"> • Entropy's CCS technology to reduce emissions. • Deployment of solar panels to aid in methane emission reductions. • Waste heat recovery. • Electrification of facilities. • Utilization of bi-fuel engines to displace diesel with natural gas.
Energy Source	With an increase in global demand for lower-emission energy, as well as renewable energy, Advantage has an opportunity to market our carbon capture and storage utilization and plant electrification to consumers. Participation in the carbon market provides an additional opportunity for Advantage to monetize emissions reductions.	<ul style="list-style-type: none"> • Evaluating initiatives to reduce absolute emissions, including the use of CCS technology. • Currently active in the Alberta carbon market.
Products & Services	<p>Entropy:</p> <ul style="list-style-type: none"> • Entropy has the opportunity to diversify service offerings into other industries outside of the oil and gas sector. The MCCS™ technology can be retrofitted to most point-source industry emissions, including sectors such as power generation, blue hydrogen, liquified natural gas (LNG), and production of cement and steel. 	<p>Entropy:</p> <ul style="list-style-type: none"> • Entropy is currently in the planning stage of Phase 2 at the Glacier Gas Plant and plans to market a proportion of production as "blue natural gas" once the project is complete.



Note: Short-term = less than 5 years, Medium-term = 5 to 10 years, and Long-term = more than 10 years.
For additional risks, please refer to Advantage's Annual Information Form.



Environment

Proud to improve our world
with clean Canadian energy

Air

Advantage strives to be a leader in the production of responsible, low-emission energy through our early adoption of emission reduction technology and compliance with strict provincial and federal regulations. We believe the energy transition to a low carbon economy creates an opportunity for Advantage to provide responsible, clean, and sustainable Canadian energy to the world.

Emissions Management

In 2022, our Scope 1 and 2 emissions, including pre- and post-combustion carbon capture, were 330,474 tonnes of CO₂e, which is a 6% increase compared to 2021. This increase is attributed to a 15% increase in operated production during the year and expansion of our Glacier Gas Plant with additional infrastructure. Advantage's overall Scope 1 and 2 emission intensity decreased 8% from 2021 and has remained low at 0.016 tCO₂e/boe. Our strategy has been more liquids-focused production, which improves business sustainability but generally requires more energy.



Diesel Displacement

Advantage has been utilizing bi-fuel engines for our operations for many years, with a converted drilling rig and TIER 4 Dynamic Gas Blending (DGB) engines for our frac fleet. Bi-fuel engines displace 85% of diesel with natural gas, reducing CO₂ and particulate matter emissions. In 2022, there was approximately **1,492 tCO₂e** avoided, with an estimated **\$2 million** in savings.



Waste Heat Recovery

Advantage implemented a waste heat recovery system to capture large quantities of heat contained in the exhaust of our compressor fleet. This heat is then reused in our processing operations to reduce the amount of fuel gas combusted. In 2022, this technology mitigated an estimated **2,585 tCO₂e**.



Solar Panels

In 2022, at our Progress Facility, we installed a zero emissions solar panel array which is used to power pumps, electric actuators, SCADA, and other equipment. We continue to evaluate opportunities to introduce solar as a primary power source into the remainder of our operations and assess appropriate generator power supply.





Scope 1 emissions at Advantage are primarily derived from combustion activities, associated with utilization of our own fuel gas to operate compressors, generate electricity, operate drilling and completions equipment, and heat facilities.

The remaining minor emissions are from flaring, venting, and fugitives:

Flaring

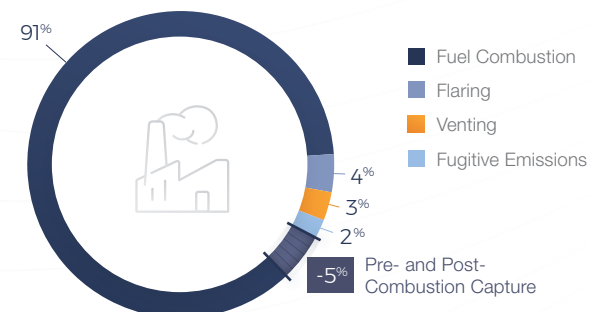
Flaring was 4% of total direct emissions and includes any flaring at facilities during new well testing or in the event of a facility shut-down for safety purposes. Advantage was an early adopter of in-line well testing directly into our gathering pipelines, which significantly reduces flaring that may otherwise be necessary. Our flowback philosophy has always been *don't flare*, where we minimize flaring to what is absolutely necessary for line pressure testing and safety protocol.

Venting

Venting was 3% of total direct emissions associated with routine operations. In 2022, we invested capital into reducing venting to align with or exceed the AER's Directive 060 regulatory requirements. 99 pneumatic devices were converted from high- to low-bleed. Use of pneumatic pumps were rationalized, and either removed, replaced with electric pumps, or service modified to use existing electric pump heads.

Scope 1 Emission Sources

tonnes CO₂e/boe

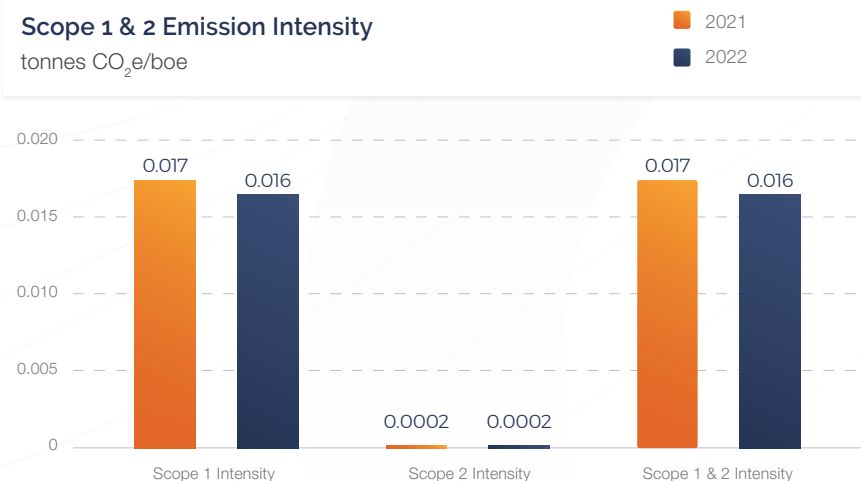


Fugitive emissions

Fugitive emissions were 2% of total direct emissions related to unplanned equipment leaks. Such leaks are subject to stringent monitoring requirements, which Advantage aims to meet or exceed with quarterly surveys at all major facilities, and annual wellsite, pipeline, and riser surveys, all using ground-based optical or flyover detection equipment. When discovered, any such leaks are immediately repaired to prevent fugitive emissions.

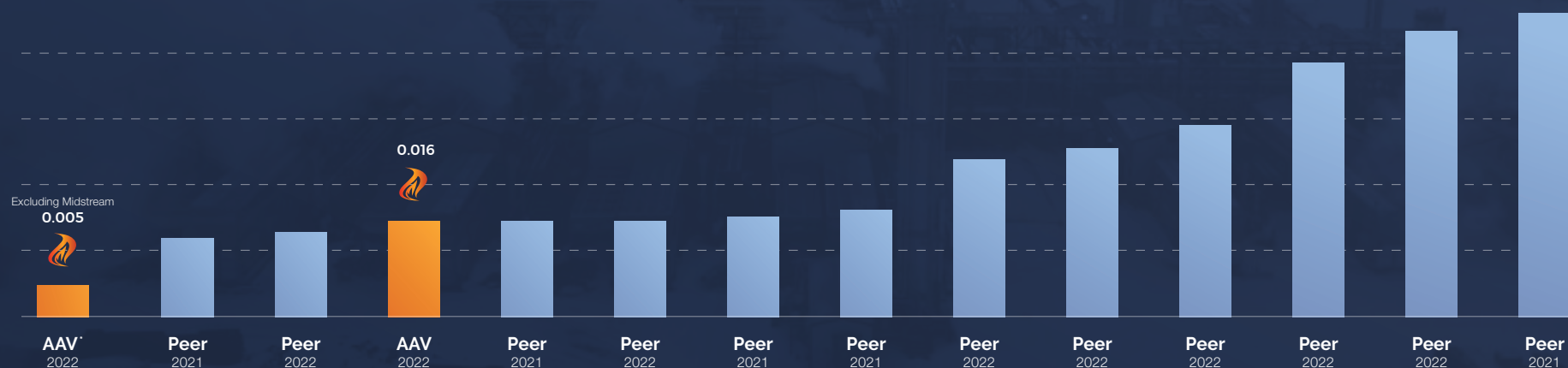
Scope 1 & 2 Emission Intensity

tonnes CO₂e/boe



Peer Emission Intensity

Advantage is proud of its low emissions intensity where we remain well below the average as compared to our peers, even with the inclusion of emissions related to processing activity. Many oil and gas companies will use a third-party midstream company for processing their natural gas, the emissions from which are excluded from their Scope 1 and 2 emissions and are significantly more emissions intensive than upstream operating activities. Advantage generally owns facilities and infrastructure for processing and therefore has higher absolute emissions than companies that do not make such investments and exclude the emissions from their reporting. If we were to exclude processing activity (i.e., midstream), Advantage would have an emission intensity of 0.005 tCO₂e/boe.

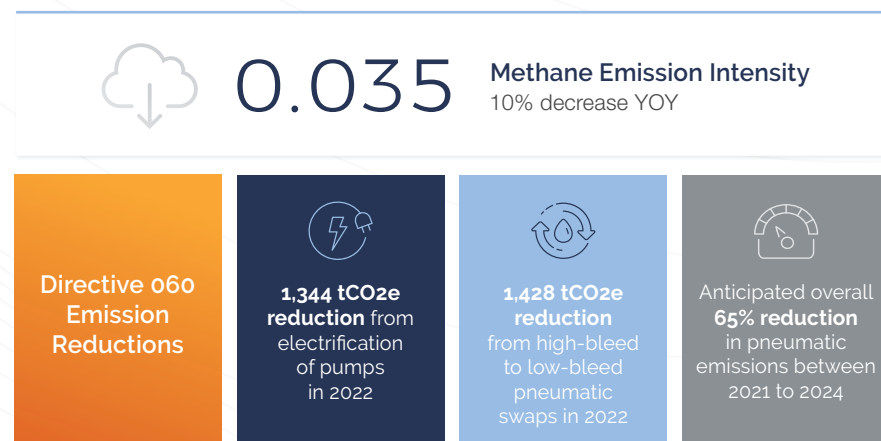


* Peers included are ARC Resources Ltd., Athabasca Oil Corp., Baytex Energy Corp., Birchcliff Energy Ltd., Enerplus Corp., Kelt Resources Ltd., NuVista Energy Ltd., Payto Exploration & Development Corp., Surge Energy Inc., Tamarack Valley Energy Ltd., Tourmaline Oil Corp., Whitecap Resources Inc.

Scope 2 emissions are significantly lower compared to Scope 1 as our Glacier Gas Plant generates its own electricity with a portion of any excess power sold back to the electricity grid. In 2022, Scope 2 emissions were 3,125 tonnes of CO₂e, which have remained relatively flat over the last 3 years despite facility electrification initiatives and electricity used for Entropy's carbon capture and storage technology.

Methane Reductions

Methane reduction is critical in the journey to emission mitigation as methane has 25 times the global warming potential of CO₂*. Provincial regulatory requirements have changed over the last few years to address methane emissions, some of which include measurement, monitoring, and reporting of methane. Our strategy to reduce methane emissions includes the use of instrument air, solar panel installation, pneumatic device replacement, fugitive emissions management, and elimination of unintended venting. All these initiatives contributed to a 10% decrease in our methane emission intensity to 0.035 tCO₂e in 2022.



* Source - Government of Canada - Reducing methane emissions - Canada.ca

Carbon Capture and Storage (CCS)

Advantage has been utilizing pre-combustion carbon capture and storage technologies since 2011 at our Glacier Gas Plant, injecting both CO₂ and H₂S that has been removed from our raw gas stream into acid gas disposal wells. Post-combustion modular carbon capture and storage is new to Advantage. Entropy's Phase 1a of the CCS project at the Glacier Gas Plant captured its first carbon off the exhaust of one of our inlet compressors in August 2022, nine months after initial construction. A total of 16,785 tCO₂e of pre- and post-combustion CO₂ was captured and sequestered in 2022. As we continue to optimize the facility and technology, we anticipate this number will increase in 2023 and beyond with the commissioning of additional phases. In 2022, we additionally implemented Entropy's proprietary software, EntropyIQ™ to report sequestration values in real-time and improve operational performance, fully able to be audited by third parties which ensures accurate and improved overall data validity.

Carbon Emissions Regulatory Offsets

All of Advantage's operations are located in Alberta and governed by the provincial legislation regulating carbon emissions targets, reporting, and taxes. Our Glacier Gas Plant exceeds the 100,000 tonnes of CO₂e threshold for the Technology Innovation and Emissions Reduction Regulation (TIER) and is therefore subject to separate reporting from our remaining aggregate facilities. The Glacier Gas Plant is in the top 10% of Alberta facilities for low emission intensity (before carbon capture and storage) and continues to be used in the High Performance Benchmark calculation for the TIER program. In 2022, we received emission performance credits for beating the High Performance Benchmark, which included the implementation of emissions reducing efforts such as Entropy's waste heat recovery and MCCS™ technologies at the Glacier Gas Plant.

Water

Water is a critical resource, and Advantage recognizes the importance of water sustainability and management for the communities in which we live and operate. Water sourcing and disposal is a significant challenge for industries involved in resource extraction, and we continue to explore opportunities to reduce, reuse, or recycle water in our operations as it is in the best interest of all stakeholders and the environment.

Water is primarily used in our drilling and completions activities, as it is a key component of hydraulic fracturing.

Water in Our Operations

During the drilling stage, the well is encased in steel and cement to ensure all fluids used in operations are isolated from groundwater or surface water contamination. Water is reused between wells for drilling, although some water is lost in the permeability of the rock formation.

During the completions phase of operations, fluid consisting of 96% water, additives, and proppant (typically sand), is pumped into the wellbore to hydraulically fracture the targeted rock and stimulate production. Unconventional wells use water during the initial fracturing process, but not during the production life of the well, which decreases overall water use intensity of the well over time.

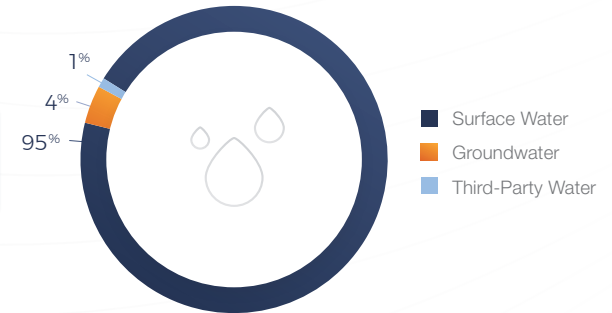


Water Use

In 2022, 630,653 m³ of water was withdrawn or purchased for industrial purposes, which is a 32% increase compared to 2021. This increase is attributed to longer lateral lengths for wells and higher fracturing intensity completions. In 2022, we drilled 23 wells, which is a 8% decrease from the previous year, but the total lateral length of wells was 67,669 meters, a 31% increase from 2021. Longer wells require more water to complete but have yielded higher initial productivity and ultimate recovery.

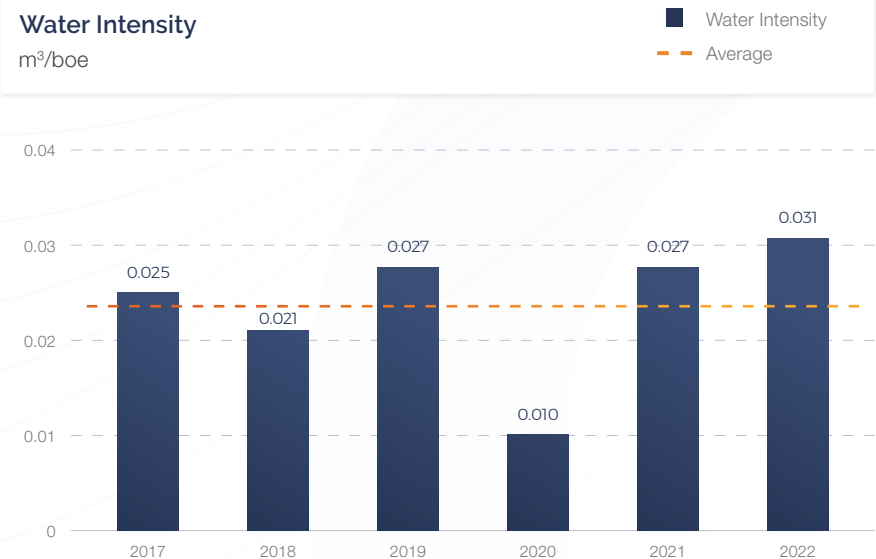
Advantage owns two fresh water surface ponds with temporary diversion licenses (TDLs), used for operation capacity at our Wembley and Glacier locations. Any other surface or groundwater is withdrawn from lakes, rivers, run-off, dugouts, and water wells, using TDLs managed by a third-party to ensure we remain within our allowable withdrawal limits and expiry dates. TDLs are chosen based on geographic location, being closest to our operations to reduce cost and emissions associated with trucking water.

Water Sources 2022



The remaining 1% of third-party water is sourced as secondary-use, from municipal treated greywater and from a supplier that uses water in their operations. Advantage does not withdraw water from regions with high or extremely high baseline water stress.

Water Intensity m³/boe



Produced Water

Produced water, including flowback, recovered from Advantage's drilling and completion activities has a sour makeup (contains H_2S) and is transported through pipelines and injected into deep underground saline reservoirs through Advantage owned water disposal wells. Utilizing onsite disposal wells helps to reduce the costs and emissions associated with trucking excess amounts of water offsite. There was 577,241 m³ of produced water in 2022, which is a 17% increase compared to the previous year with increased drilling and completion activity. Advantage ensures all produced water meets applicable regulatory disposal requirements. We continue to evaluate possible opportunities to reduce or recycle sour produced water.

Water Returned to the Environment

Water vapour is generated during the processing of natural gas from internal combustion engines at our Glacier Gas Plant, which is returned to the atmosphere. The Glacier Gas Plant generates significant water vapour, with approximately 50,000 horsepower of natural gas driven compression, contributing to approximately 63%, or 398,649 m³, of our total water usage being returned to the atmosphere. In the event that surface water collects onsite in berm areas around tanks and leases, or in ditches and low spots, water is collected and discharged off-site in a controlled manner. Prior to discharging water offsite, it must be tested and satisfy, at a minimum, the discharge criteria set out by the governing regulatory bodies



Waste

The primary waste streams come from our drilling and completions activities and includes both hazardous (DOW) and non-hazardous (non-DOW) waste. We follow applicable provincial regulatory requirements for handling, storage, disposal, and documentation of wastes.

In 2022, there was 108 tonnes of oilfield waste which was disposed of at an approved oilfield waste management facility.

Advantage continuously seeks opportunities to minimize waste production, wherever possible (reduce, reuse, recycle, and recover), such as actively reusing materials for wellbore construction, including tubing and wellhead valves from abandoned wells. This is a meaningful way to reduce our scrap metal waste and cost of materials.



Land

Land use and impact are a significant consideration in our operations, from planning to execution to returning to its natural state. We believe environmental stewardship is everyone's responsibility, and that is why we strive to meet or exceed all regulatory requirements, minimizing our impact on the environment.

Biodiversity

Advantage recognizes the importance of protecting biodiversity near our operations, and we take reasonable steps to mitigate potential impacts. In the planning stage of site selection and lease preparation, environmental issues are thoroughly considered such as:

- ▣ Watercourse crossings,
- ▣ Soil and vegetation management,
- ▣ Land status (grazing areas, access management, etc.),
- ▣ Consultations with stakeholders,
- ▣ Wildlife concerns, including species at risk, proximity to protected or sensitive areas, and
- ▣ Historical/Cultural significance.

Prior to development, an environmental protection plan is completed in conjunction with any environmental assessments to identify areas of environmental concern and specific measures we will take to mitigate our impact on the environment, such as Caribou Protection Plans. Once operations begin, we continuously monitor for potential impacts, aligning with or exceeding regulatory requirements. Biodiversity requirements are evolving, and Advantage is committed to staying informed, and further integrating these considerations into our operations.



Advantage's 16 well pad with two rigs.

Multi-Well Pad Drilling

Advantage prioritizes drilling wells utilizing drilling techniques where multiple wells are drilled from single pad sites. This development technique significantly reduces community impact and the magnitude of surface land disturbances from our operations, which includes the quantity of surface equipment required, access roads, pipelines, gathering systems, and other infrastructure, and allows us to centralize services.

Environmental Reclamation

We are committed to being a responsible operator, and as such, we believe that producers must meet their obligations and return lands to their natural state. Our **Liability Management Rating (LMR)** is in the top tier and leading-edge as compared against the industry average, despite an increased well count, highlighting our history of proactively directing funding towards abandonment and reclamation activities that exceed regulatory requirements. In 2022, we spent \$2.2 million on abandonment and reclamation activities, including four wells cut and capped, 123 sites under active, ongoing reclamation and remediation, and six reclamation certificates received. We spent 375% more than our 2022 mandatory regulatory requirement.



Advantage LMR

28.4



Industry Average LMR

5.2



Our Process



Decommissioning

Ensure well is secure and remove all infrastructure onsite.



Environmental Assessment

Understand the environmental impact and implications.



Reclamation

Management and removal of any contaminants based on regulatory requirements.



Remediation

Soil re-distribution and re-vegetation, with continuous monitoring to return land to natural state.



Certification

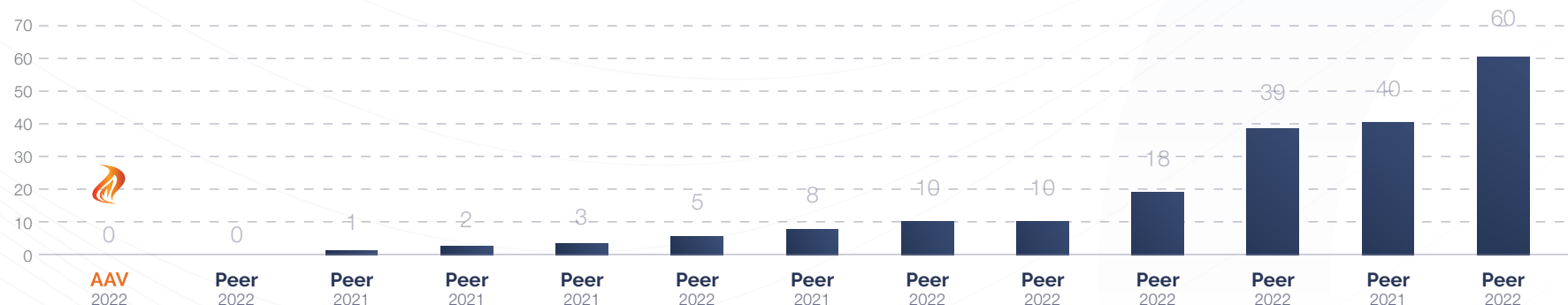
Apply for certification from the Alberta Energy Regulator.



Spill Prevention and Management

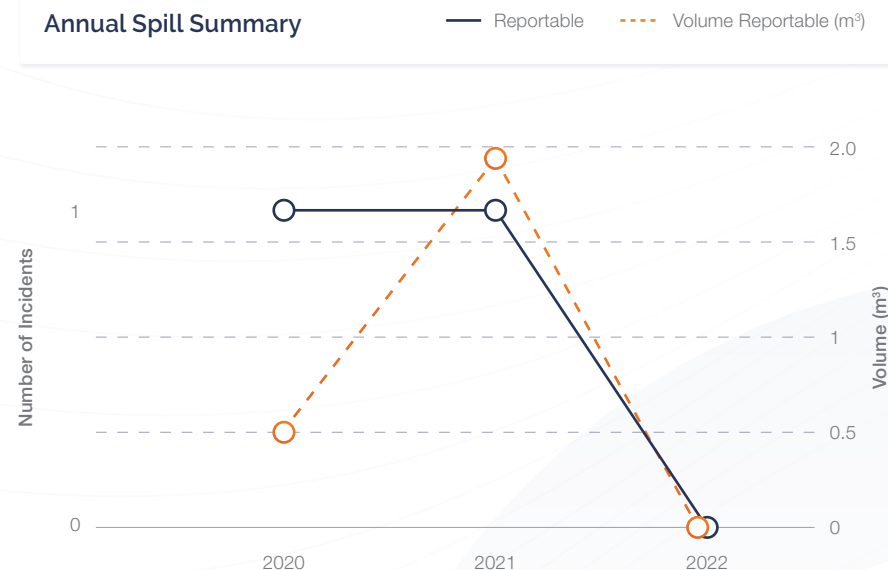
Spills and releases have the potential to impact local communities, the environment, reputation, and may have financial implications. Proactive prevention is key in mitigating the potential risks, including our 24-hour monitoring, preventative maintenance, inspections, training, and detailed response plans in place to immediately address spills and releases if they do occur. Our employees and contractors are expected to report all spills and releases regardless of the product or volume so the incident can be investigated and have corrective actions assigned to prevent recurrence. In the event of a spill, we endeavor to recover or neutralize as much of the spill as possible. Advantage has been a proud member of the Western Canada Spill Services (WCSS) for over 20 years, where we actively participate in the Oil Spill Co-op exercises annually. We are also engaged with the Emergency Response Assistance Canada (ERAC) Environmental Emergency (E2) plan, which provides support to spills related to petroleum gas or liquid natural gas via truck or rail.

Number of Reportable Spills



* Peers included are ARC Resources Ltd., Athabasca Oil Corp., Baytex Energy Corp., Birchcliff Energy Ltd., Enerplus Corp., Kelt Exploration Ltd., NuVista Energy Ltd., Peyto Exploration & Development Corp., Surge Energy Inc., Tamarack Valley Energy Ltd., Tourmaline Oil Corp., Whitecap Resources Inc.

Annual Spill Summary





Social

Creating a better world for everyone
involves looking after one another

Health and Safety

Safety Culture

At Advantage, we are committed to fostering an environment where safety is top priority, above everything else. All employees and contractors, at every level within the organization, are responsible for safety and integrating considerations into their everyday activities, not just when it may be deemed necessary. Our goal is for everyone to go home safe *every day*.

Health and Safety Management System

A comprehensive Health and Safety Management System is in place and applies to all staff conducting work on behalf of Advantage. The system was developed to meet or exceed regulatory and industry standards and is guided by our Corporate Health and Safety Policy statement, along with the Petroleum Industry Guiding Principles for Worker Safety.

The Health and Safety Management System is developed and approved by the Health and Safety Team, along with support from all departments, and all staff are encouraged to remain actively engaged in providing feedback to ensure the alignment with changing operations, which drives our continuous improvement efforts.

Advantage participates in the Certificate of Recognition (COR) program, where a third-party audit was conducted on the Health and Safety Management System which was evaluated for alignment with provincial standards. Advantage received a score of 99%, where we have consistently achieved a score greater than 97% over the last six years.



Safety Training

Prior to performing work on behalf of Advantage, all staff will complete training relevant to their role. Training and skills development is a critical aspect of the health and safety program at Advantage, as staff with appropriate skills and competencies contribute to a safe and productive work environment through their technical competence, reduction in injury accidents, and equipment damage, all of which can reduce costs.

Training is delivered through a variety of methods, including industry developed training courses, site and corporate orientations, safety meetings, on-the-job training (site-specific operating procedures), personal coaching, and refresher training. Any staff conducting safety-sensitive work will receive on-the-job training from their supervisor or qualified designate, where it is the supervisor's responsibility to establish and document competency on any critical tasks using our Competency Management and Development System (CMDS).

This includes future evaluations during performance reviews to ensure staff are acquiring or maintaining the competency levels outlined in Advantage's Training Matrix. These training requirements are monitored through an online tracking system to ensure expiration validity for each individual staff member.

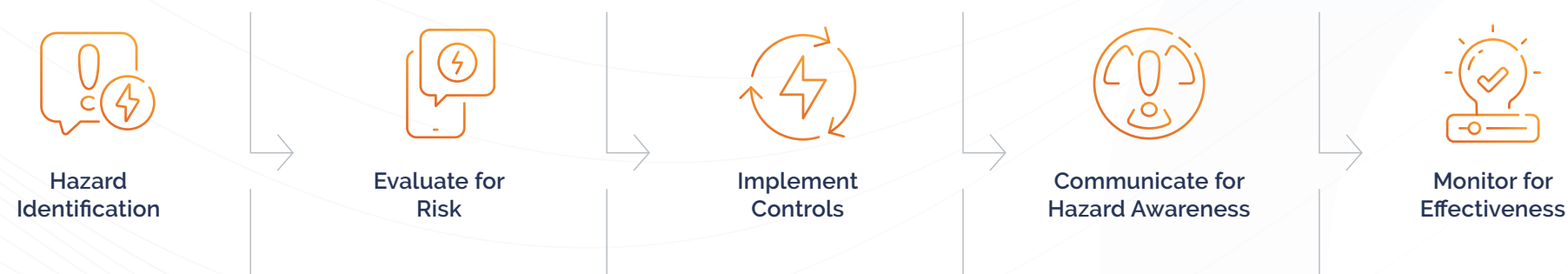
Hazard and Risk Management

Engaging in proactive hazard identification is not only a priority but is the core of our safety culture at Advantage and necessary for identifying, assessing, and controlling hazards before they become incidents. Hazard identification is a regular part of our site inspection process and staff are encouraged to be continuously aware of and report potential hazards throughout the day.

Advantage offers a variety of tools to assist in the identification of hazards, including Hazard IDs, Job Safety Analysis', Job Task Observations, and Site Inspections. Once a hazard has been identified, it is assessed for risk based on the potential severity impact to people, environment, compliance, reputation, and assets/operations, and the potential probability of occurrence, and categorized in terms of high, medium, and low risk. All identified hazards requiring some form of mitigation will have controls applied using the hierarchy of controls, following the priority sequence of elimination, substitution, engineering controls, administrative controls, and personal protective equipment.

Where a hazard cannot be eliminated, it is preferred that a combination of the controls be used. All worksite hazards and control methods will be documented and communicated to affected staff to ensure awareness. Newly implemented controls will be monitored for their effectiveness and to ensure the control has not introduced a new hazard.

Promoting hazard awareness is a key component of our safety program, recognizing that achieving a high frequency of leading indicators such as Hazard ID's and Job Observations will result in a heightened awareness of risk evaluation from staff, thereby lowering actual incidents. In 2022, our staff completed 3,443 Hazard ID's and Job Observations, which was a 43% increase from 2021 in leading indicator reporting.



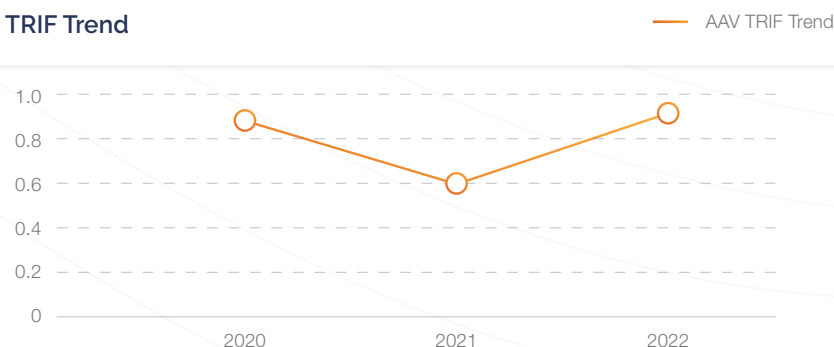


Safety Performance

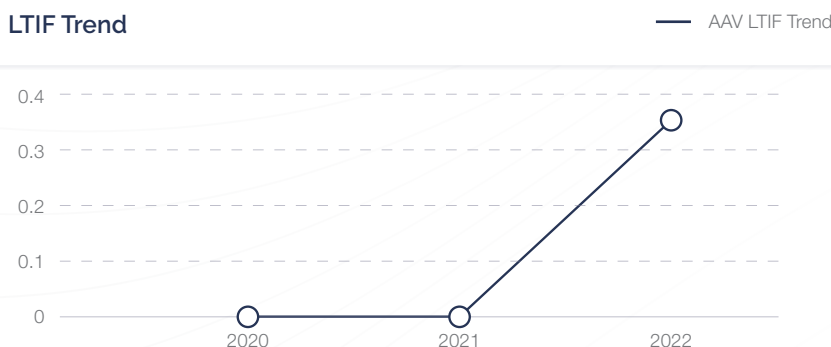
Safety performance is measured using frequency metrics, which are used to set a baseline for evaluating and monitoring the effectiveness of our Health and Safety Management System. In 2022, our Total Recordable Injury Frequency (TRIF) increased to 0.89. Incident severity was low with the exception of one lost time incident. A thorough review of all the incidents in 2022 indicated a trend toward hand injuries, and we have since prioritized hand safety during safety meetings and in the hazard assessment process, in addition to procedural changes to alleviate such risk.

As part of the Health and Safety Management System, all staff are expected to report any incident, near miss, or illness, regardless of the severity so they can be investigated using a root cause analysis, where appropriate corrective actions are assigned. Investigations are led by the Health and Safety Team but require participation from all staff. All managers and supervisors are trained in incident investigations to assist in accurate investigations and provide expertise in determining whether new policies or procedures are required.

TRIF Trend



LTIF Trend



** Injury frequencies are calculated based on 200,000 hours & include both employee & contractor statistics*



Site Visits in 2022

35 Executive & Board
523 Management

Communication

Every month, Advantage conducts a monthly safety meeting with health and safety, leadership, and operations staff to review health and safety statistics, incidents, job observations, hazard identifications, and other pertinent information. These meetings are used to exchange critical information between all facility locations and provide an opportunity for training. The Health and Safety Team also communicates safety and regulatory compliance and statistical information via email to all staff monthly. Other communication methods include annual stand-up safety meetings, joint health and safety committee meetings, contractor meetings, bulletins, alerts, and safety newsletters.

Emergency Preparedness

We have detailed emergency response plans for our well sites, facilities, and infrastructure to prepare for all operational and non-operational emergencies and minimize potential impacts to people, environment, and property. These plans are developed and managed through our partnered external emergency assistance organization, who makes sure we keep pace with best practices, in addition to providing tools and support for training exercises and real emergency events, if necessary.

Each year, we conduct emergency response training with the intention of ensuring effectiveness, preparedness, and in-depth knowledge of our emergency response plans & procedures, establishing competency from our employees.

In 2022, we organized one tabletop exercise and one full-scale emergency response exercise at our Wembley Liquids Hub with participation from field leadership and other cross functional field staff, including corporate employees. In addition, there were 26 man-down exercises deployed over the year, across all facilities, which took climate events such as wildfires into consideration.





Stakeholder Engagement

Advantage is committed to creating a positive impact where we operate, practicing a transparent and respectful approach to engagement with stakeholders, including surrounding communities, Indigenous communities, government and regulatory bodies, and our investors.

Community

We are proud of the meaningful and consistent relationships we have with our landowners and all stakeholders throughout the lifespan of an asset or facility. We work to understand the needs of impacted individuals and the communities in which we operate, listening and responding to all concerns directly and in a timely manner. We are also an active member in the communities where we operate. In 2022, Advantage attended local monthly meetings through the Wapiti Area Synergy Partnership with the purpose of facilitating communication and cooperation between petroleum industry partners, regulators, and community members regarding energy development in the area.

Investors

Advantage regularly engages with our Shareholders on an ongoing basis in a variety of ways, tailored to the specific needs of each Shareholder group. This includes, attending and participating in numerous investor conferences throughout the year with attendance from members of our executive team, conducting roadshows in a variety of cities, and instances where representatives of our Board of Directors engage directly with Shareholders. Additional information is provided to investors through Advantage's website at www.advantageog.com and investors may contact the Investor Relations department by mail, email (ir@advantageog.com), or phone (1-866-393-0393).

Investment

In 2022, Advantage contributed over \$230,000 to various charities, advocacy initiatives, and organizations. We like to focus on giving initiatives that will have the greatest positive impact towards the communities in which we operate, with three core areas of giving, including Family and Community, Health and Wellness, and Education.



Supporting Ukraine

Over **\$40,000** raised through employee contributions and company matching for the Canadian Red Cross in Support of Ukraine.



Valhalla School Donations

Since 2014, Advantage has donated over **\$28,000** to the Valhalla School for their lunch program, bus sponsorships, and general support.



Hospital Contributions

Advantage has contributed over **\$34,000** to various hospitals including Calgary Children's Hospital, Beaverlodge Hospital, and Dawson Creek & District Hospital foundations since 2014.



Membership Associations

Advantage is a member of the following associations:

- ▣ The Explorers and Producers Association of Canada “EPAC”
- ▣ Peace Airshed Zone Association “PAZA”
- ▣ Alberta Boiler Safety Association “ABSA”
- ▣ Emergency Response Assistance Canada “ERAC”
- ▣ Canadian Propane Association “CPA”
- ▣ Alberta Energy Regulator (AER) One Stop
- ▣ Energy Safety Canada
- ▣ Western Canadian Spill Services – Oil Spill Coop “WCSS”

Our Employees are members of various associations, including:

- ▣ Canadian Society of Exploration Geophysicists “CSEG”
- ▣ Association of Professional Engineers and Geoscientists of Alberta “APEGA”
- ▣ Canadian Association of Land and Energy Professionals “CALEP”
- ▣ Canadian Association of Petroleum Land Administration “CAPLA”
- ▣ Chartered Professional Accountants of Canada “CPA”



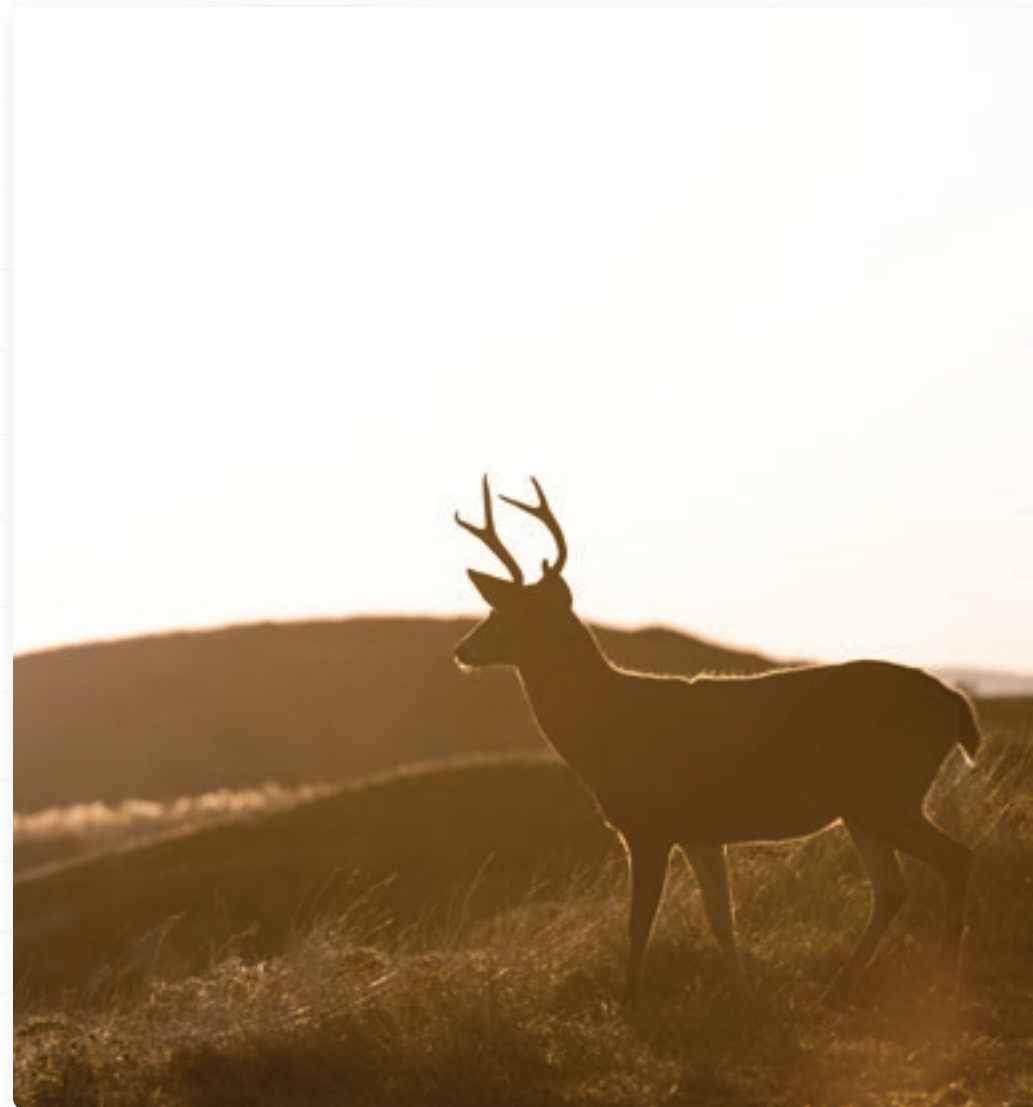
Indigenous Engagement

Advantage respects the unique interests and rights of Indigenous Peoples in the areas where we operate and recognize the importance of consultation and engagement with communities, working closely to maintain a respectful relationship. As part of our regular consultation protocol, we work in conjunction with Alberta's Aboriginal Consultation Office to consult with Indigenous communities throughout the lifecycle of our operations. In an effort to reinforce collaboration with the communities we operate near, Advantage makes voluntary payments for site visits, inviting community members to observe our operations and proposed projects.

In 2022, Advantage launched our Indigenous Scholarship Program to support Indigenous students who are members of the communities near our core operations.

This year, we awarded five students scholarships to pursue post-secondary education opportunities.

As the program continues to evolve, we are looking to create more awareness to prospective students and increase the number of awarded scholarships.



Our People

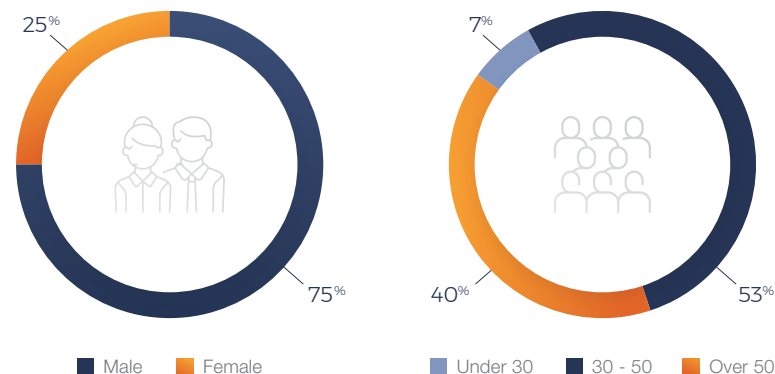
At Advantage, we value a progressive corporate culture that is built upon the principle of collaboration and innovation. Employees are our most valuable resource, and we foster an environment of inclusivity and respect, where everyone has the opportunity they deserve to make an impact on the organization.



Diversity and Inclusion

Advantage recognizes the importance of having a diverse workforce as it offers a variety of perspectives which has enabled better problem solving and decision making. As such, we employ individuals from various demographics, along with a wide breadth of skills and experience. We have an established Diversity, Equity and Inclusion Policy which encourages diversity and inclusion throughout the organization. This policy reinforces our belief that considering the broadest group of individuals who have skills, knowledge, experience, and character to provide the leadership expertise needed to achieve business objectives is in the best interest of Advantage and our stakeholders.

53 Permanent Employees



42% of female employees

work in STEM positions



7% increase in female representation

from 2020 to 2022



Employee Engagement

Annually, Advantage conducts an anonymous engagement survey issued to all our employees and contractors to monitor satisfaction and engagement while also providing feedback on corporate performance from an employee perspective. We recognize that our people are critical to the success of the business and as such, we want their genuine feedback so it can be considered when planning for the future. In 2022, 78% of employees completed the survey, and the results of this survey were shared with leadership and the Board of Directors.

Employee Rewards

Maintaining a competitive compensation and benefits program is a priority in retaining, motivating, and supporting the health and wellness of our employees. Each year, Advantage conducts compensation reviews for every employee using independent, third-party compensation survey results and other external sources to ensure all employees are fairly compensated for their given positions, responsibilities, and tasks. Employee benefits include:

- ▣ Medical, dental, and vision coverage for employees and their families,
- ▣ Income protection for short-term disability leave,
- ▣ Basic and dependent life insurance,
- ▣ Health Care Spending account allowing for customization of health and wellness priorities,
- ▣ Employee and Family Assistance Program (EAP) to assist with a wide range of issues including stress, depression, relationships, alcohol and drug misuse, family matters, and crisis counselling, which is available to all employees, consultants, and individual contractors,
- ▣ Annual fitness subsidy to promote employee fitness, health, and wellness objectives,
- ▣ Advantage share purchase program with significant matching contributions from the company to support employee financial wellness and alignment of employee interests with shareholders,
- ▣ Monthly transportation allowance for employees to subsidize the cost of transportation and parking, and
- ▣ Annual designated flex-days.

Training and Development

Attracting, retaining, and developing a skilled and dedicated workforce is a top priority as we believe investing in our employees' knowledge and skills will lead to collective, sustainable success. Advantage offers training, leadership support, and career progression, with 25% of employees receiving a promotion in 2022. Employees are actively encouraged to participate in external training courses and seminars, in addition to attaining and maintaining professional memberships in applicable associations, that are subject to reimbursement by Advantage. The total spending on training and seminars for employees increased 131% from 2021.



\$35,391

Total spent on training



\$668

Per employee

Formal annual performance reviews are conducted for each employee with their respective supervisor, providing an opportunity to discuss objectives and achievements, as well as future career development and training needs, ensuring alignment with our company strategy. Performance evaluations are also meant to drive financial recognition for outstanding employee performance through our short-term incentive program.

We are proud of the culture at Advantage, and believe it is a direct result of a focus on employee development and promotion from within the organization.



Governance

Advantage is committed to the highest standards with our governance practices



Governance

Strong corporate governance is essential for our organizational strategy of driving long-term shareholder value. Advantage is committed to the highest standards with our governance practices to ensure our policies and processes are in alignment with our core values of ethical, responsible, and transparent operations.

Board Oversight

Specific to climate governance, the Board has four committees that are responsible for the oversight on ESG-related matters. Committee mandates are reviewed annually and can be found on our website at www.advantageog.com.



Audit Committee: Has oversight of accounting and financial reporting and information security. The committee oversees both internal and external auditing of financial or security systems to ensure their integrity and recommends or implements relevant policies or procedures. The committee provides overall oversight of risks, including those related to climate and the environment as part of a holistic enterprise risk management review. The Audit Committee meets on a quarterly basis.

Compensation Committee: Conducts reviews of compensation and incentive programs for employees and annually evaluates CEO and executive performance and corporate performance criteria to ensure alignment with corporate goals and objectives. The Compensation Committee meets at least twice a year.

Reserves & Health, Safety, Environment Committee: Ensures regulatory compliance with all disclosures related to oil and gas activities and reviewing the appointment of an independent reserves evaluator. Provides additional oversight to matters related to health, safety, and environment as well as operational excellence. This includes proactively identifying and monitoring proposed or emerging legislation, regulations, or policies that may pose risks to the organization. The Reserves and Health, Safety, Environment Committee meets at least twice a year.

Governance & Sustainability Committee: Oversees matters related to corporate governance, including succession planning, board composition, and executive capacity, ensuring compliance. Additional risk oversight in the areas of Corporate Social Responsibility and sustainability, including ESG factors, the integration of ESG factors into Advantage's business strategy and decision making, and review and approval of public disclosure on ESG and sustainability matters. The Governance and Sustainability Committee meets at least twice a year.



Management Oversight

Advantage's CEO has ultimate accountability with respect to our ESG performance and ensures that any identified climate-related risks or opportunities are appropriately integrated with alignment to the organizational strategy. All members of the executive team share responsibility for the progress or delivery on climate-related corporate performance targets and metrics. Management is responsible for taking reasonable steps to adequately address identified risks, integrating sustainability opportunities into decision-making within each area of the business. This requires the implementation of policies, procedures, or systems to manage or mitigate identified risks.

Strategy

Advantage regularly monitors risks and opportunities to our business and aims to further integrate climate-related considerations into our assessments. Findings from these assessments will guide our organizational strategy, business activities, and financial planning, ensuring that identified risks have mitigation measures in place, and we capitalize on opportunities.

Scenario Analysis

Our business as an energy producer is directly affected by commodity prices which are in turn heavily influenced by climate, notably weather patterns. We leverage long-term supply/demand scenario analysis from a multitude of third-party organizations with differing perspectives to stress test our business plans. Advantage is evaluating a specific 2°C or lower scenario analysis to further our understanding of climate-related risks and opportunities over future decades and utilize that information to better direct our organizational strategy.



Risk Management

Risk management is critical in the monitoring and mitigation of factors that pose risk to our business operations. Advantage utilizes our Enterprise Risk Management (ERM) framework and a multidisciplinary group of internal employees to regularly identify and assess potential risks and opportunities across the organization, some of which are related to climate impacts. Through discussion and industry qualitative analysis of historical, present, and future factors, risks are categorized and assessed based on pre-defined criteria of likelihood and severity, where they are prioritized as minor, moderate, major, and catastrophic. For each identified risk, executive leadership provides insights on what the most important risks are to our business and assist in the establishment of appropriate mitigation controls. Each risk is assigned an accountable Executive responsible for the management of that risk.

Top priority risks are presented to the Audit Committee on a quarterly basis and is made available to the Board to drive discussion around corporate strategy.



Board Diversity

Advantage recognizes the value of a diverse Board and as such, implemented a Board and Management Diversity Policy which supports the appointment of Directors that have the skills, knowledge, experience, and character required to provide leadership needed to achieve business objectives. In 2022, we successfully achieved our goal of 30% female representation on the Board. Annually, the Governance and Sustainability Committee will review the Board and Management Diversity Policy and evaluate the composition and diversity of both the Board and executive officer positions.



Business Ethics

We require the highest standards of professional and ethical conduct from our directors, officers, and employees, as our reputation for honesty and integrity among our stakeholders is key to the success of our business. The following policies outline our expectations and reflect our commitment to ethical business conduct:

- ❑ Code of Business Conduct and Ethics,
- ❑ Conflict of Interest and Procurement Policy,
- ❑ Disclosure Confidentiality and Trading Policy,
- ❑ Drug and Alcohol Policy,
- ❑ IT Usage Policy and Practices,
- ❑ Whistleblower Policy, and
- ❑ Workplace Harassment Policy.

All employees are expected to review Advantage's corporate policies upon hire and will continue to annually review and acknowledge the Code of Business Conduct and Ethics, Whistleblower Policy, IT Usage Policy and Practices, and Workplace Harassment Policy. Advantage is establishing a Human Rights Policy to be implemented in 2023.

Cyber Security

Protection of Advantage's proprietary data and Information Technology (IT) assets are a critical corporate responsibility, and that is why we have implemented processes and procedures to effectively prevent, detect, and respond to potential threats.



Each year, Advantage assesses for security risks at both a corporate and field level, in conjunction with relevant stakeholders to manage mitigation strategies. With increasing risks surrounding cyber threats, Advantage has prioritized our IT security program through protection mechanisms such as:

- ▣ Third-party cyber security services support,
- ▣ Phishing simulations,
- ▣ System monitoring,
- ▣ Two-factor authentication,
- ▣ Restricted administrative privileges,
- ▣ Anti-virus software,
- ▣ System patching,
- ▣ Offline backups,
- ▣ Next generation firewalls,
- ▣ Cyber emergency response playbook with regular incident response exercises,
- ▣ IT Usage Policy, and
- ▣ Cyber awareness training courses required for all employees.

Advantage's Audit Committee oversees the IT security program, as cyber security is part of our risk management. Quarterly, the committee is briefed on cyber security matters, including internally tracked data metrics related to IT security, which are then used to guide corporate strategy.

Supply Chain Management

We utilize a third-party compliance management solution to prequalify our contractors prior to them conducting work on behalf of Advantage. All contractors are required to provide proof of insurance and WCB coverage and will be evaluated on their safety performance. The purpose of this evaluation is to ensure all contractors have a safety program in place that has processes to identify potential hazards, maintenance expectations for their equipment, and a means to assess and ensure competency of their workforce.

With evolving expectations when it comes to an organization's supply chain, Advantage is committed to staying informed, and continuing to integrate environmental, social, and governance considerations into our supply chain.

Political Contributions

Advantage did not make any political contributions in 2022.





Appendix

Data Table • TCFD • SASB Index • GRI Index
Glossary of Terms and Acronyms • Forward-Looking Statements

Data Table

		Units	2020	2021	2022
Overview					
Economic Benefits	Petroleum and natural gas sales ¹	\$000	245,085	492,035	950,458
	Royalties ¹	\$000	10,474	27,530	106,257
	Net Capital Expenditures ²	\$000	157,935	149,403	241,790
	Operating expense ¹	\$000	40,005	44,893	64,269
Production ³⁰	Natural gas	mcf/d	243,081	269,710	298,053
	Liquids	bbls/d	4,408	4,493	6,093
	Total production (reported)	boe/d	44,922	49,445	55,769
	Total production (operated)	boe/d	44,978	48,792	56,353
Drilling Activity	Number of net wells drilled	#	13	25	23
	Total lateral length	Metres	28,851	51,711	67,669
	Average lateral length per well	Metres	2,219	2,068	2,942
Environment					
Energy Use	Direct energy consumption	GJ	4,451,157	4,706,882	5,291,578
	Total energy consumption	GJ	4,463,348	4,723,776	5,309,158
	Total energy consumption intensity ⁴	GJ/boe	0.272	0.265	0.258
Emissions	Upstream ³				
	Direct GHG emissions (scope 1)	Tonnes CO ₂ e	68,591	91,341	96,381
	Indirect GHG emissions (scope 2)	Tonnes CO ₂ e	2,088	3,080	3,125
	GHG emissions (scope 1 and 2)	Tonnes CO ₂ e	70,679	94,421	99,506
	Emissions intensity (scope 1) ⁴	Tonnes CO ₂ e/boe	0.004	0.005	0.005
	Emissions intensity (scope 1 and 2) ⁴	Tonnes CO ₂ e/boe	0.004	0.005	0.005



		Units	2020	2021	2022
Emissions	Environment				
	Midstream ⁵				
	Direct GHG emissions (scope 1) ³²	Tonnes CO ₂ e	199,020	216,160	230,968
	Indirect GHG emissions (scope 2)	Tonnes CO ₂ e	209	64	0
	GHG emissions (scope 1 and 2) ³²	Tonnes CO ₂ e	199,229	216,224	230,968
	Emissions intensity (scope 1) ^{4 32}	Tonnes CO ₂ e/boe	0.012	0.012	0.011
	Emissions intensity (scope 1 and 2) ^{4 32}	Tonnes CO ₂ e/boe	0.012	0.012	0.011
	Total				
	Direct GHG emissions (scope 1) ³²	Tonnes CO ₂ e	267,611	307,501	327,349
	Fuel Combustion	Tonnes CO ₂ e	263,494	281,374	313,513
	Pre- and Post-Combustion Carbon Capture ⁶	Tonnes CO ₂ e	-16,482	-15,773	-16,785
	Flared gas	Tonnes CO ₂ e	6,493	8,692	12,257
	Vented gas	Tonnes CO ₂ e	5,919	23,193	10,234
	Fugitives	Tonnes CO ₂ e	8,187	10,015	8,130
	Indirect GHG emissions (scope 2)	Tonnes CO ₂ e	2,303	3,144	3,125
	GHG emissions (scope 1 and 2) ³²	Tonnes CO ₂ e	269,914	310,645	330,474
	Emissions intensity (scope 1) ^{4 32}	Tonnes CO ₂ e/boe	0.016	0.017	0.016
	Emissions intensity (scope 1 and 2) ^{4 32}	Tonnes CO ₂ e/boe	0.016	0.017	0.016
	Air Emissions				
	Carbon Dioxide (CO ₂)	Tonnes	225,258	239,113	270,461
	Nitrogen Oxides (NO _x)	Tonnes	504	813	527
	Sulphur Dioxide (SO ₂)	Tonnes	260	486	584
	Methane (CH ₄)	Tonnes	2,147	2,728	2,745
	Volatile Organic Compounds (VOC)	Tonnes	220	432	318
	Particulate Matter (PM)	Tonnes	8	10	16
	Methane (CH ₄) Intensity ⁴	Tonnes CO ₂ e/boe	0.033	0.039	0.035
	% covered under emissions-limiting regulations	%	100	100	100

		Units	2020	2021	2022
Environment					
Water	Fresh surface water withdrawal	m ³	80,683	375,766	598,249
	Fresh ground water withdrawal	m ³	3,809	20,915	25,684
	Third-party water	m ³	87,117	82,593	6,720
	Total water used	m ³	171,609	479,274	630,653
	Produced water (including flowback)	m ³	372,319	492,248	577,241
	Total water used intensity ⁴	m ³ /boe	0.010	0.027	0.031
	Fresh water as % of total water use	%	47	78	95
	Water consumed in areas with High or Extremely High Baseline Water Stress ⁷	m ³	0	0	0
	Water vapour returned to atmosphere	m ³	342,132	358,301	398,649
	Hydraulically fractured wells for which there is public disclosure of all fracturing fluid chemicals used	%	100	100	100
	Hydraulic fracturing sites where ground or surface water quality deteriorated compared to a baseline	%	0	0	0
Land	Number of producing wells ⁸	#	249	267	285
	Number of non-producing wells ⁸	#	15	43	50
	Total net wells	#	264	310	335
	LMR rating	#	24.7	25.5	28.4
	Net wells abandoned	#	1	4	4
	Active site reclamation ongoing	#	126	126	123
	Abandonment and reclamation spending ⁹	\$000	1,080	1,033	2,215
	Reclamation certificates received	#	12	4	6
	Proved & probable reserves in sites with protected conservation status or endangered species habitat ¹⁰	%	0	0	0
Security, Human Rights, & Rights of Indigenous Peoples	Proved and probable reserves in areas of conflict	%	0	0	0
	Proved and probable reserves in Indigenous land ¹¹	%	0	0	0
Waste	DOW	Tonnes	N/A	35	108
	Non-DOW ²⁹	Tonnes	N/A	N/A	N/A



		Units	2020	2021	2022
Environment					
Spill Prevention/Management	Reportable spills and releases ¹²	#	1	1	0
	Non reportable spills and releases	#	0	2	6
	Total volume of reportable spills and releases ¹²	m ³	0.5	1.9	0
	Total volume of non reportable spills and releases	m ³	0	5.0	1.0
	Volume of liquid handled	bbls	3,950,807	3,981,832	4,922,231
	Spill intensity (reportable and non-reportable) ⁴	bbls/1000 bbls handled	0.001	0.011	0.001
Community Engagement					
Value Distributed	Suppliers ¹³	\$000	269,964	256,600	378,998
	Providers of capital ¹⁴	\$000	17,800	20,081	18,040
	Government & Regulatory ¹⁵	\$000	14,269	33,451	108,732
	Employees ¹⁶	\$000	22,093	26,459	29,668
	Landowners ¹⁷	\$000	1,125	1,312	7,305
	Communities ²²	\$000	58	161	829
Health and Safety					
Total Recordable Injury Frequency (TRIF) ¹⁸	Contractor	per 200,000 man hours	0.83	0.60	0.89
	Employee	per 200,000 man hours	0.00	0.00	0.00
	Total recordable injury rate	per 200,000 man hours	0.83	0.60	0.89
Lost Time Injury Frequency (LTIF) ¹⁹	Contractor	per 200,000 man hours	0.00	0.00	0.34
	Employee	per 200,000 man hours	0.00	0.00	0.00
	Total lost time injury rate	per 200,000 man hours	0.00	0.00	0.34
Disabling Injury Frequency ²⁰	Contractor	per 200,000 man hours	0.83	0.15	0.56
	Employee	per 200,000 man hours	0.00	0.00	0.00
	Total disabling injury rate	per 200,000 man hours	0.83	0.15	0.56
Fatalities	Contractor	#	0	0	0
	Employee	#	0	0	0



		Units	2020	2021	2022
Health and Safety					
Leading Indicator Frequency	Total hours worked	Hours	1,355,463	1,123,830	1,788,010
	Hazard ID and job observations	#	1,924	2,410	3,443
	Leading Indicator frequency rate ²¹	per 200,000 man hours	284	429	385
Site Visits	Executive and Board site/field visits	#	1	6	35
	Management site/field visits	#	112	502	523
Governance					
Board Diversity	Female	%	17	25	33
	Male	%	83	75	67
	Age 30-50	#	1	2	1
	Age 51-70	#	6	5	6
	Age Over 70	#	1	1	2
	Independent	#	7	6	7
	Not Independent	#	1	2	2
	Tenure 0-5 years	#	2	4	5
	Tenure 6-10 years	#	0	1	1
	Tenure Over 11 years	#	4	3	3
Our People					
Employee Profile	Full time employees ²³	#	39	43	53
	Part time employees	#	0	0	0
	Total employees ²³	#	39	43	53
	Total contractors	#	51	55	53
	New employees hired	#	4	7	10
	Average employee tenure	Years	8	8	6
	Voluntary turnover ²⁴	#	1	3	0
	Involuntary turnover	#	2	0	1



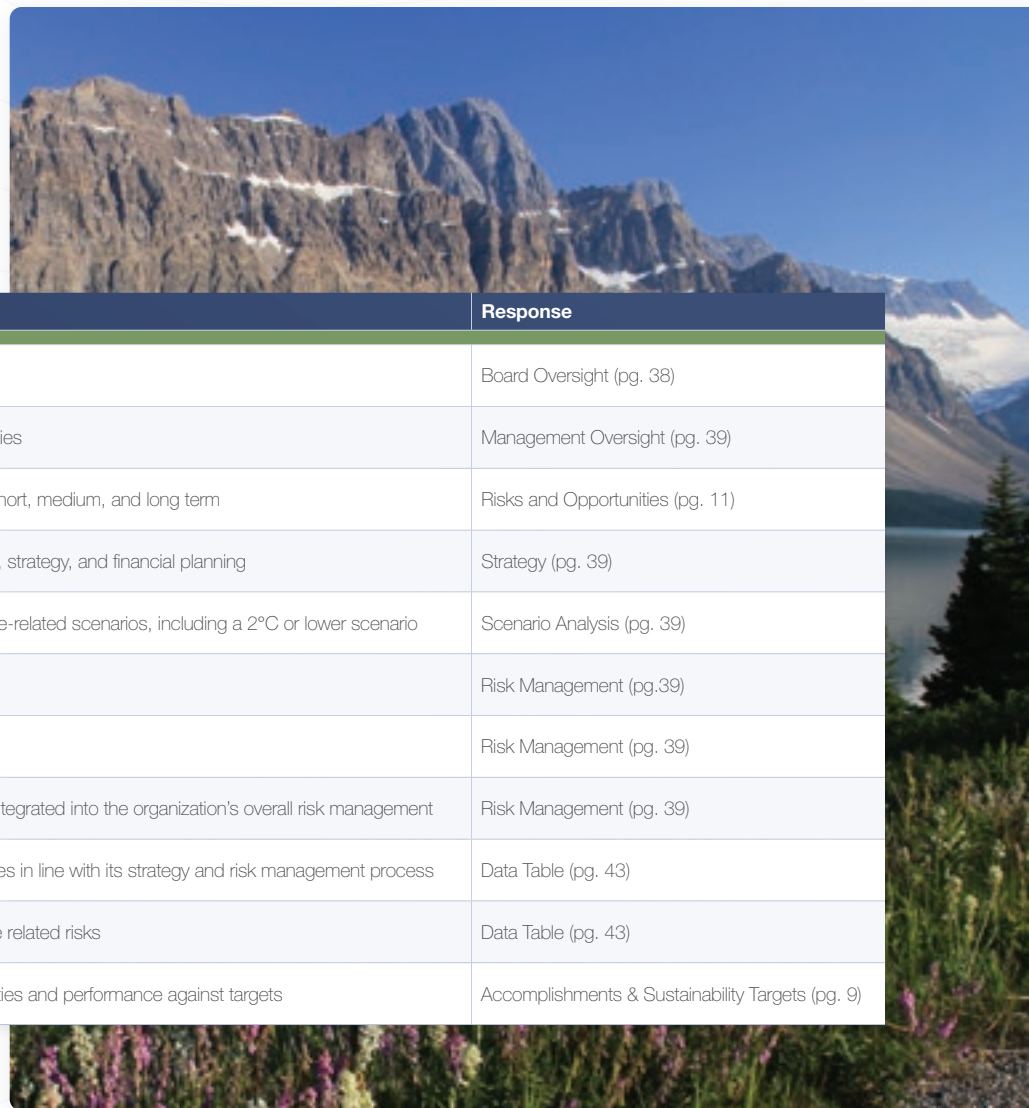
		Units	2020	2021	2022
Our People					
Employee Diversity	Total female	%	18	21	25
	Total male	%	82	79	75
	Age under 30 ²⁴	%	8	5	7
	Age 30-50 ²⁵	%	51	51	53
	Age over 50 ²³	%	41	44	40
	Visible minority employees ²⁶	%	18	19	17
	Females in senior leadership positions (above manager)	#	0	0	1
	Females in leadership positions (manager and above)	#	0	0	1
	Females in STEM positions ²⁷	%	40	38	42
	Total new female employee hires	#	0	3	4
	Total new visible minority employee hires	#	0	0	2
	Total new hires under 30	#	0	0	1
	Total new hires 30-50	#	1	2	2
	Total new employee hires over 50	#	0	1	1
	Total internal promotions	#	1	1	13
	Total internal female promotions	#	1	0	1
	Total internal visible minority promotions	#	1	1	3
Parental Leave	Total employees entitled to parental leave	#	39	43	53
	Total employees that took parental leave	#	0	2	1
Training	Spending on training	\$	30,493	15,316	35,391
	Training per employee ²⁵	\$/person	782	356	668
	Training per staff ²³	\$/person	339	156	334

- Financial data is reported in accordance with International Financial Reporting Standards (IFRS), representing generally accepted accounting principles (GAAP) for publicly accountable enterprises in Canada.
- Non-GAAP financial measures which may not be comparable to similar non-GAAP financial measures used by other entities. Please see "Non-GAAP Measures".
- Upstream is defined as production facilities including wells, gathering stations and lines, and field compression.
- All intensity calculations use "Operated Production" volume.
- Midstream is defined as processing facilities such as gas plants.
- 2020 and 2021 information has been restated to align with financial disclosures.
- Locations determined using the World Resources Institute's (WRI) Water Risk Atlas Tool.
- Number of producing and non-producing wells include only "net" oil and gas wells as stated in Advantage's Annual Information Form.
- 2020 and 2021 information has been restated to align with financial disclosures.
- Determined using the IBAT Alliance Mapping within 50 km of protected areas (Natura2000, Regional Seas, World Heritage, Ramsar, MAB, Emerald Network)

- While Advantage does not have any of our core operations within Indigenous lands, a portion lies within the traditional territory occupied by Treaty 8 lands.
- Reportable spills and releases are defined by AER's Release Reporting Requirements.
- Value distributed to suppliers includes operating and transportation expenses and capital expenditures paid to suppliers other than employees, government, landowners, and for the purpose of charitable donations.
- Value distributed to provider of capital includes interest.
- Value distributed to government includes crown royalty, property tax, tax levy, crown surface and mineral rentals, and crown land sales.
- Value distributed to employees include salaries, benefits, bonus, long-term incentives, and stock based compensation.
- Value distributed to landowners includes royalty and lease obligations associated with non-Crown owned lands.
- Total recordable injury frequency is the ratio of recordable injuries to hours worked, normalized based on 100 workers over the year.
- Lost time injury frequency is the ratio of lost time injuries to hours worked, normalized based on 100 workers over the year.

- Disabling injury frequency is the ratio of disabling injuries to hours worked, normalized based on 100 workers over the year.
- Leading indicator frequency is a calculation of number of hazard IDs and Job Observations by 200,000 hours worked over the total employee hours.
- Includes all donations, advocacy initiatives, scholarships, and payments to universities.
- 2021 information has been restated based on improved data collection methodology.
- 2020 information has been restated based on improved data collection methodology.
- 2020 and 2021 information has been restated based on improved data collection methodology.
- Minority is defined as persons, other than Aboriginal Peoples, who are non-Caucasian in race or non-white in colour (Statistics Canada 2021, Visible minority of person).
- Science, Technology, Engineering, and Math (Statistics Canada 2016 Census definition). Percent of females in STEM positions against total number of females in the company.
- 2020 and 2021 information has been restated to include pre-combustion carbon capture.
- Non-DOW is not currently tracked.
- Please refer to Advantage's MD&A for 2020, 2021, 2022 for more information on production

Task Force on Climate-Related Financial Disclosures (TCFD)



Category	Disclosure	Response
Governance (a)	Describe the board's oversight of climate-related risks and opportunities	Board Oversight (pg. 38)
Governance (b)	Describe management's role in assessing and managing climate related risks and opportunities	Management Oversight (pg. 39)
Strategy (a)	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term	Risks and Opportunities (pg. 11)
Strategy (b)	Describe the impact of climate-related risks and opportunities on the organization's business, strategy, and financial planning	Strategy (pg. 39)
Strategy (c)	Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	Scenario Analysis (pg. 39)
Risk Management (a)	Describe the organization's processes for identifying and assessing climate-related risks	Risk Management (pg.39)
Risk Management (b)	Describe the organization's processes for managing climate-related risks	Risk Management (pg. 39)
Risk Management (c)	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management	Risk Management (pg. 39)
Metrics & Targets (a)	Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process	Data Table (pg. 43)
Metrics & Targets (b)	Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas emissions and the related risks	Data Table (pg. 43)
Metrics & Targets (c)	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets	Accomplishments & Sustainability Targets (pg. 9)



SASB Index

Advantage Energy Ltd. reports in accordance with the SASB Sustainable Industry Classification System from EM - Extractives and Minerals Processing Sector: Oil and Gas - Exploration and Production (EP).

Code	Metric	Category	Unit of Measure	Response
Greenhouse Gas Emissions				
EM-EP-110a.1	Gross global Scope 1 emissions, percentage methane, percentage covered under emissions-limiting regulations	Quantitative	Metric tons CO ₂ e (t), Percentage (%)	Data Table (pg. 43) Emissions Management (pg. 16)
EM-EP-110a.2	Amount of gross global Scope 1 emissions from: (1) flared hydrocarbons, (2) other combustion, (3) process emissions, (4) other vented emissions and (5) fugitive emissions	Quantitative	Metric tons CO ₂ e	Data Table (pg. 43)
EM-EP-110a.3	Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	N/A	Emissions Management (pg. 43) Targets (pg. 16)
Air Quality				
EM-EP-120a.1	Direct energy consumption	Quantitative	Metric tons (t)	Data Table (pg. 43)
Water Management				
EM-EP-140a.1	Total energy consumption intensity	Quantitative	Thousand cubic metres (m ³), Percentage (%)	Data Table (pg. 43) Water (pg. 20)
EM-EP-140a.2	Direct GHG emissions (scope 1)	Quantitative	Thousand cubic metres (m ³), Percentage (%), Metric tons (t)	Data Table (pg. 43) Water (pg. 20)
EM-EP-140a.3	Direct GHG emissions (scope 1)	Quantitative	Percentage (%)	Data Table (pg. 43)
EM-EP-140a.4	Indirect GHG emissions (scope 2)	Quantitative	Percentage (%)	Data Table (pg. 43)
Biodiversity Impacts				
EM-EP-160a.1	Description of environmental management policies and practices for active sites	Discussion and Analysis	N/A	Biodiversity (pg. 24)
EM-EP-160a.2	Number and aggregate volume of hydrocarbon spills, volume in Arctic, volume impacting shorelines with ESI rankings 8-10, and volume recovered	Quantitative	Number, Barrels (bbls)	Data Table (pg. 43)
EM-EP-160a.3	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	Quantitative	Percentage (%)	Data Table (pg. 43)

Code	Metric	Category	Unit of Measure	Response
Security, Human Rights and Rights of Indigenous Peoples				
EM-EP-210a.1	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	Quantitative	Percentage (%)	Data Table (pg. 43)
EM-EP-210a.2	Percentage of (1) proved and (2) probable reserves in or near Indigenous land	Quantitative	Percentage (%)	Data Table (pg. 43)
EM-EP-210a.3	Discussion of engagement processes and due diligence practices with respect to human rights, Indigenous rights, and operation in areas of conflict	Discussion and Analysis	N/A	Indigenous Engagement (pg. 34)
Community Relations				
EM-EP-210b.1	Discussion of process to manage risks and opportunities associated with community rights and interests	Discussion and Analysis	N/A	Community (pg. 32)
Workforce Health and Safety				
EM-EP-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate, (3) near miss frequency rate (NMFR), and (4) average hours of health, safety, and emergency response training for (a) full-time employees, (b) contract employees, and (c) short-service employees	Quantitative	Rate, Hours (h)	Data Table (pg. 43) Safety Performance (pg. 30) Emergency Preparedness (pg. 31)
EM-EP-320a.2	Discussion of management systems used to integrate a culture of safety throughout the exploration and production lifecycle	Discussion and Analysis	N/A	Health and Safety (pg. 28)
Reserves Valuation and Capital Expenditures				
EM-EP-420a.4	Discussion of how price and demand for hydrocarbons or climate regulation influence the capital expenditure strategy for exploration, acquisition and development of assets	Discussion and Analysis	N/A	Risks and Opportunities (pg. 11)
Business Ethics and Transparency				
EM-EP-510a.2	Description of the management system for prevention of corruption and bribery throughout the value chain	Discussion and Analysis	N/A	Business Ethics (pg. 40) Code of Business Conduct and Ethics
Management of the Legal and Regulatory Environment				
EM-EP-530a.1	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Discussion and Analysis	N/A	Advantage's Annual Information Form
Critical Incident Risk Management				
EM-EP-540a.1	Process Safety Event (PSE) rates for Loss of Primary Containment (LOPC) of greater consequence (Tier 1)	Quantitative	Rate	Data Table (pg. 43)
EM-EP-540a.2	Description of management systems used to identify and mitigate catastrophic and tail-end risks	Discussion and Analysis	N/A	Spill Prevention & Management (pg. 26) Health and Safety (pg. 28)
Activity Metrics				
EM-EP-000.A	Production of: (1) oil, (2) natural gas, (3) synthetic oil, and (4) synthetic gas	Quantitative	Thousand barrels per day (Mbbl/day); Million standard cubic feet per day (MMscf/day)	Data Table (pg. 43)
EM-EP-000.B	Number of offshore sites	Quantitative	Number	Not applicable
EM-EP-000.C	Number of terrestrial sites	Quantitative	Number	Advantage's Operations Advantage's Annual Information Form



GRI Index

Advantage Energy Ltd. has reported in accordance with the GRI Standards for the period January 1, 2022 to December 31, 2022.

Number	Disclosure	Response
GRI 2: General Disclosures 2021		
1. The Organization and its Reporting Practices		
2-1	Organizational Details	About Advantage (pg. 6)
2-2	Entities included in the organization's sustainability reporting	Advantage's Annual Information Form
2-3	Reporting period, frequency and contact point	About this Report (pg. 8)
2-4	Restatements of information	All restated information is noted.
2-5	External assurance	About this Report (pg. 8)
2. Activities and Workers		
2-6	Activities, value chain and other business relationships	Advantage's Annual Information Form
2-7	Employees	Data Table (pg. 43) Our People (pg. 35)
2-8	Workers who are not employees	Data Table (pg. 43)
3. Governance		
2-9	Governance structure and composition	Advantage's Management Information Circular
2-10	Nomination and selection of the highest governance body	
2-11	Chair of the highest governance body	
2-12	Role of the highest governance body in overseeing the management of impacts	
2-13	Delegation of responsibility for managing impacts	
2-14	Role of the highest governance body in sustainability reporting	
2-15	Conflicts of interest	
2-16	Communication of critical concerns	
2-17	Collective knowledge of the highest governance body	
2-18	Evaluation of the performance of the highest governance body	
2-19	Remuneration policies	
2-20	Process to determine remuneration	
2-21	Annual total compensation ratio	



Number	Disclosure	Response
GRI 2: General Disclosures 2021		
4. Strategy, Policies and Practices		
2-22	Statement on sustainable development strategy	Message from the President and CEO (pg. 4)
2-23	Policy commitments	Advantage Energy's Code of Business Conduct and Ethics
2-24	Embedding policy commitments	Advantage's Annual Information Form
2-26	Mechanisms for seeking advice and raising concerns	Advantage Energy's Code of Business Conduct and Ethics
2-28	Membership associations	Membership Associations (pg. 33)
5. Stakeholder Engagement		
2-29	Approach to stakeholder engagement	Stakeholder Engagement (pg. 32)
GRI 3: Material Topics 2021		
3-1	Process to determine material topics	Materiality (pg. 10)
3-2	List of material topics	
3-3	Management of material topics	
GRI 201: Economic Performance 2016		
201-1	Direct economic value generated and distributed	Data Table (pg. 43)
201-2	Financial implications and other risks and opportunities due to climate change	Risks and Opportunities (pg. 11) Advantage's Annual Information Form
201-4	Financial assistance received from government	Advantage's Financial Statements
GRI 205: Anti-Corruption 2016		
205-2	Communication and training about anti-corruption policies and procedures	Business Ethics (pg. 40)
GRI 302: Energy 2016		
302-1	Energy consumption within the organization	Data Table (pg. 43) Emissions Management (pg. 16)
302-3	Energy intensity	Data Table (pg. 43) Emissions Management (pg. 16)
302-4	Reduction of energy consumption	Data Table (pg. 43) Accomplishments and Sustainability Targets (pg. 9) Emissions Management (pg. 16)



Number	Disclosure	Response
GRI 303: Water and Effluents 2018		
303-1	Interactions with water as a shared resource	Water (pg. 20)
303-2	Management of water discharge-related impacts	Produced Water (pg. 22) Water Returned to the Environment (pg. 22)
303-3	Water withdrawal	Data Table (pg. 43) Water Use (pg. 21)
303-4	Water discharge	Produced Water (pg. 22) Water Returned to the Environment (pg. 22)
303-5	Water consumption	Data Table (pg. 43) Water Use (pg. 21)
GRI 304: Biodiversity 2016		
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	About Advantage (pg. 6)
304-2	Significant impacts of activities, products, and services on biodiversity	Biodiversity (pg. 24)
304-3	Habitats protected or restored	Environmental Reclamation (pg. 25)
GRI 305: Emissions 2016		
305-1	Direct (Scope 1) GHG emissions	Data Table (pg. 43) Emissions Management (pg. 16)
305-2	Energy indirect (Scope 2) GHG emissions	Data Table (pg. 43) Emissions Management (pg. 16)
305-4	GHG emission intensity	Data Table (pg. 43) Emissions Management (pg. 16)
305-5	Reduction of GHG emissions	Data Table (pg. 43) Accomplishments and Sustainability Targets (pg. 9) Emissions Management (pg. 16)
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Data Table (pg. 43)
GRI 306: Waste 2020		
306-1	Waste generation and significant waste-related impacts	Waste (pg. 23)
306-2	Management of significant waste-related impacts	
306-3	Waste generated	
306-4	Waste diverted from disposal	
306-5	Waste directed to disposal	



Number	Disclosure	Response
GRI 401: Employment		
401-1	New employee hires and employee turnover	Data Table (pg. 43) Our People (pg. 35)
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Employee Rewards (pg. 36)
401-3	Parental leave	Data Table (pg. 43)
GRI 403: Occupational Health and Safety 2018		
403-1	Occupational health and safety management system	About Advantage (pg. 6)
403-2	Hazard identification, risk assessment, and incident investigation	Biodiversity (pg. 24)
403-4	Worker participation, consultation, and communication on occupational health and safety	Environmental Reclamation (pg. 25)
403-5	Worker training on occupational health and safety	Data Table (pg. 43) Emissions Management (pg. 16)
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Data Table (pg. 43) Emissions Management (pg. 16)
403-8	Workers covered by an occupational health and safety management system	Data Table (pg. 43) Emissions Management (pg. 16)
403-9	Work-related injuries	Data Table (pg. 43) Accomplishments and Sustainability Targets (pg. 9) Emissions Management (pg. 16)
GRI 404: Training and Education 2016		
404-1	Average hours of training per year	Data Table (pg. 43) Training and Development (pg. 36)
404-2	Programs for upgrading employee skills and transition assistance programs	Training and Development (pg. 36) Employee Engagement (pg. 35)
404-3	Percentage of employees receiving regular performance and career development reviews	Training and Development (pg. 36)
GRI 405: Diversity and Equal Opportunity 2016		
405-1	Diversity of governance bodies and employees	Board Diversity (pg. 40)
GRI 413: Local Communities 2016		
413-1	Operations with local community engagement, impact assessments, and development programs	Stakeholder Engagement (pg. 32)
GRI 414: Supplier Social Assessment 2016		
414-1	New suppliers that were screened using social criteria	Supply Chain Management (pg. 41)
GRI 415: Public Policy 2016		
415-1	Political contributions	Political Contributions (pg. 41)



Glossary of Terms and Acronyms

Acid Gas Disposal Well	A deep disposal method for H ₂ S and CO ₂ , termed acid gas, that has been removed from the raw production gas stream.
AER	Alberta Energy Regulator
AIF	Annual Information Form
Barrel of Oil Equivalent (BOE)	A BOE conversion ratio of six thousand cubic feet of natural gas equivalent to one barrel of oil (6 Mcf: 1 bbl).
bbl(s)	Barrels
boe/d	Barrels of oil equivalent per day
Carbon Capture and Storage (CCS)	The process of recovering and capturing carbon dioxide from industrial processes and permanently storing it underground, with the purpose of preventing its release into the atmosphere.
CMDS	Competency Management and Development System
Compressor	A mechanical device that increases the pressure of a gas by reducing its volume, used for various purposes such as powering pneumatic devices, cooling systems, and producing compressed air for industrial purposes.
Certificate of Recognition (COR)	Certificate of recognition that is awarded to employers who develop efficient health and safety management systems which meet the provincial standards.
Critical Tasks	Tasks that, if performed improperly, are likely to result in serious injury, major equipment damage and/or loss of production.
DOW	Dangerous Oilfield Waste
Emission Intensity	A measure of the amount of greenhouse gas emissions per unit of activity, production, or output.
EAP	Employee and Family Assistance Program
EPAC	The Explorers and Producers Association of Canada
ERAC	Emergency Response Assistance Canada
ERM	Enterprise Risk Management
ERP	Emergency Response Plan
ESG	Environment, Social, and Governance

Flaring	The controlled burning that takes place during production and processing. Fuel or waste gas is ignited at the end of a flare stack.
Flowback	The recovered hydraulic fracturing fluid that returns to the surface during a hydraulic fracturing operation that may often be mixed with produced water.
Fugitive Emissions	Emissions that are not physically controlled but result from intentional or unintentional releases of greenhouse gas emissions.
Full-Scale Emergency Response Exercise	An emergency response exercise that provides a more realistic simulation of an emergency, typically conducted in a classroom setting or a designated site. Participants will make decisions, simulate the deployment of resources, and respond to any new developments.
GAAP	Generally Accepted Accounting Principles
GJ	Gigajoules
Greenhouse Gas (GHG)	Gas that contributes to the greenhouse effect by absorbing infrared radiation.
H₂S	Hydrogen Sulphide
Hazard ID	A tool used to report physical hazards or conditions.
Hierarchy of Controls	The hierarchy of controls provided in ISO 45001 Occupational Health and Safety Management Systems Requirements. The hierarchy, in order of priority for implementation for all hazards, is elimination, substitution, engineering, administrative, and personal protective equipment (PPE).
Hydraulic Fracturing	The process of injecting high-pressure liquid into an oil-or gas-bearing rock formation to create fractures for extraction.
IFRS	International Financial Reporting Standards
Internal Promotion	Transfers to roles with increased responsibility and accountability.
Liability Management Rating (LMR)	A ratio of a company's deemed assets (production) to its deemed liabilities (abandonment and reclamation costs).
LTIF	Lost-Time Incident Frequency



Job Task Observation	Observations conducted by a supervisor or competent person to verify if employees are performing tasks safely and in accordance with operating procedures.
Leading Indicator Frequency	(Number of Hazard IDs + Number of Job Observations) * 200,000 hours worked / Total number of hours worked
m³	Metres cubed
Man-Down Exercise	An emergency response exercise simulation that affects one individual who needs immediate medical intervention.
Mcf/d	Thousand cubic feet per day
MD&A	Management Discussion and Analysis
Midstream	The processing, storing, transporting, and marketing of oil and gas.
Montney Formation	The stratigraphical unit of Lower Triassic age in the Western Canadian Sedimentary Basin in Alberta and British Columbia.
Net-Zero Emissions	Achieving an overall balance between greenhouse gas emissions produced and greenhouse gas emissions taken out of the atmosphere.
Pneumatic Device	A type of device that regulates the supply of pressure to an actuator or control loop, which opens, closes, or positions a valve to regulate the flow of oil, gas, or any other production/process fluid.
Pre-Combustion Carbon Capture	Removal and capture of CO ₂ occurring as a byproduct of chemical, metallurgical and mineral transformation.
Produced Water	Water (brine) that is obtained from the hydrocarbon bearing formation strata during the extraction of oil and gas. Produced water can include formation water, injection water, and any chemicals added downhole or during the oil/water separation process.
Post-Combustion Carbon Capture	Removal and capture of CO ₂ emissions occurring from combustion of fuel.
Reclamation	The process of reconvertng disturbed land to its former or other productive state.
Remediation	The removal, reduction, or neutralization of substances, wastes, or hazardous material from a site so as to prevent or minimize any adverse effects on the environment now or in the future.

Reportable Spill

	A spill that requires reporting to an external regulatory agency based on the regulatory definition of a reportable spill in the jurisdiction where the spill occurred.
SASB	Sustainability Accounting Standards Board
SCADA	Supervisory Control and Data Acquisition
Scenario Analysis	A method for developing strategic plans that are more flexible or robust to a range of plausible future states.
Staff	Staff includes employees and contracted personnel.
STEM	Technical disciplines of Science, Technology, Engineering, and Math.
Tabletop Emergency Response Exercise	An emergency response exercise that is presented by a facilitator in an informal setting with no hands-on practice. The purpose is to generate discussion surrounding various issues regarding a hypothetical, simulated emergency.
tCO₂e	Tonnes of carbon dioxide equivalent
TCFD	Task Force on Climate-Related Disclosures
TDL	Temporary Diversion License
TIER	Alberta Technology Innovation and Emissions Reduction Regulation
TRIF	Total Recordable Incident Frequency
Turnover	Employees who leave the organization voluntarily or due to dismissal or retirement.
Upstream	The exploration, development, and production of oil and gas.
Venting	A controlled release of gases into the atmosphere during production.
Waste Heat Recovery	The process of recovering thermal energy discharged by industrial equipment and reusing the heat energy that would otherwise be expelled to the environment.
Water Intensity	A measure of the amount of water used per unit of activity, production, or output.
WCSS	Western Canada Spill Services



Forward-Looking Statements

This Sustainability Report contains certain forward-looking statements and forward-looking information (collectively, "forward-looking statements"), which are based on our current internal expectations, estimates, projections, assumptions and beliefs. These forward-looking statements relate to future events or our future performance. All statements other than statements of historical fact may be forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek", "anticipate", "plan", "continue", "estimate", "expect", "may", "will", "project", "predict", "potential", "targeting", "intend", "could", "might", "should", "believe", "would" and similar or related expressions. These statements are not guarantees of future performance.

In particular, forward-looking statements in this Sustainability Report include, but are not limited to, statements about our strategy, plans, objectives, priorities and focus and the benefits to be derived therefrom; Advantage's expectations that its emissions intensity will continue to decrease over the coming years; that Advantage will continue to focus on sustainability achievements; that Advantage's areas have potential for liquids-rich and multi-layer development; Advantage's ability to diversify production and enhance long-term sustainability; Advantage's plans to achieve "net-zero" scope 1 and 2 emissions; Entropy's strategy and focus and its ability to maximize emissions reductions for its customers; Advantage's expectations that emissions from scope 1 and 2 sources will continue to be reduced; the anticipated timing of the completion and onstream dates for the commissioning of Glacier Gas Plant Phase 1b and the anticipated benefits to be derived therefrom; that Advantage will continue to target minimal

flaring; Advantage's strategy to reduce methane emissions; Advantage's expectations that its pre- and post-combustion CO₂ captured will increase; the anticipated benefits to be derived from the Glacier Gas Plant Phase 1 and Phase 2 project, including the effect of Entropy's CCS technology on emissions; that Entropy will develop third-party CCS projects; Advantage's expectations that additional scholarships will be awarded under its Indigenous Scholarship Program in 2023; Advantage's targeted reduction in sites under active management and remediation and the anticipated timing thereof; Advantage's anticipated reduction in pneumatic emissions and the anticipated timing thereof; Advantage's ability to lower work place incidents and injuries; Advantage's ability to mitigate certain climate, political, technological, reputational, market access/ volatility, operational and cybersecurity risks; the resource efficiency, energy source and products and services opportunities available to Advantage; the anticipated benefits to be derived from Advantage's Health and Safety Management System, including its hazard and risk management procedures and emergency response plans; Advantage's plans to market a proportion of its production as "blue natural gas" once the Glacier Gas Plant Phase 2 project is complete; and other matters.

With respect to forward-looking statements contained in this Sustainability Report, in addition to other assumptions identified herein, Advantage has made assumptions regarding, but not limited to: future commodity prices including oil and natural gas; conditions in general economic and financial markets; effects of regulation by governmental agencies; receipt of required stakeholder and regulatory approvals; royalty regimes; future exchange rates; royalty rates; future operating costs; availability of skilled labour; availability of drilling and related equipment; timing and amount of capital expenditures; the impact of increasing competition; that Advantage will have sufficient cash flow, debt or equity sources or other financial resources required to fund its capital and operating expenditures and requirements as needed; that Advantage's conduct and results of operations will be



consistent with its expectations; that Advantage will have the ability to develop Advantage's crude oil and natural gas properties in the manner currently contemplated; availability of pipeline capacity; that current or, where applicable, proposed assumed industry conditions, laws and regulations will continue in effect or as anticipated as described herein; the availability of government initiatives to Entropy; that Entropy will achieve effective capitalization and commercial agreements; that effective carbon policies will be established in Canada; the timing and amount of capital expenditures; that Entropy will have the ability to develop projects in the manner currently contemplated; the performance of Entropy's proprietary novel carbon capture solvent; that Entropy's carbon capture technology will lower Advantage's emissions intensity; that the estimates of Entropy's cost structure and the assumptions related thereto are accurate in all material respects; that Entropy will be able to develop third party CCS projects; and that the estimates of Advantage's production, reserves and resources volumes and the assumptions related thereto (including commodity prices and development costs) are accurate in all material respects.

These forward-looking statements involve substantial known and unknown risks and uncertainties, many of which are beyond our control, including, but not limited to, risks related to changes in general economic, market and business conditions; volatility in market prices for oil and natural gas; the impact of significant declines in market prices for oil and natural gas; stock market volatility; changes to legislation and regulations and how they are interpreted and enforced; Advantage's ability to comply with current and future environmental or other laws; actions by governmental or regulatory authorities including increasing taxes, regulatory approvals, changes in investment or other regulations; changes in tax laws, royalty regimes and incentive programs relating to the oil and gas industry; the effect of acquisitions; our success at acquisition, exploitation and development of reserves; unexpected drilling results; failure to achieve production targets on timelines anticipated or at all; changes in commodity prices, currency

exchange rates, capital expenditures, reserves or reserves estimates and debt service requirements; the occurrence of unexpected events involved in the exploration for, and the operation and development of, oil and gas properties; hazards such as fire, explosion, blowouts, cratering, and spills, each of which could result in substantial damage to wells, production facilities, other property and the environment or in personal injury; changes or fluctuations in production levels; individual well productivity; delays in anticipated timing of drilling and completion of wells; lack of available capacity on pipelines; delays in obtaining stakeholder and regulatory approvals; the failure to extend the credit facilities at each annual review; competition from other producers; the lack of availability of qualified personnel or management; ability to access sufficient capital from internal and external sources; current and future carbon prices and royalty regimes; the risk that Entropy may not achieve effective capitalization or commercial agreements; the risk that effective carbon policies may not be established in Canada; the price of and market for carbon credits and offsets; the risk that Entropy's conduct and results of operations may not be consistent with its expectations; the risk that Entropy may not develop and deploy its projects in the manner currently contemplated; credit risk; the risk that Advantage's emissions intensity may increase; the risk that Glacier Phase 1b may not come online when anticipated, or at all; the risk that Advantage's methane and pneumatic emissions may be greater than anticipated; the risks disclosed under "Risks and Opportunities" in this Sustainability Report; and the risks and uncertainties described in the Corporation's Annual Information Form which is available at www.sedarplus.com and www.advantageog.com. Readers are also referred to risk factors described in other documents Advantage files with Canadian securities authorities.

Management has included the above summary of assumptions and risks related to forward-looking information provided in this Sustainability Report in order to provide a more complete perspective on Advantage's future operations and such information may not be appropriate for other



purposes. Advantage's actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking statements and, accordingly, no assurance can be given that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do so, what benefits that Advantage will derive there from. Readers are cautioned that the foregoing lists of factors are not exhaustive. These forward-looking statements are made as of the date of this Sustainability Report and Advantage disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise, other than as required by applicable securities laws.

Non-GAAP Measures

Throughout this presentation and in other documents disclosed by the Corporation, Advantage discloses several financial and performance measures to analyze financial performance, financial position and cash flow. These non-GAAP and other financial measures do not have any standardized meaning prescribed under IFRS and therefore may not be comparable to similar measures presented by other entities. Non-GAAP and other financial measures should not be considered to be more meaningful than GAAP measures, which are determined in accordance with IFRS, such as cash used in investing activities. Refer to "Specified Financial Measures" in the Corporation's Consolidated Management's Discussion & Analysis for the year ended December 31, 2022 and for the year ended December 31, 2021, which are available at www.sedarplus.com and www.advantageog.com, for additional information about certain financial measures, including reconciliations to the nearest GAAP measures, as applicable.

Net Capital Expenditures

Net capital expenditures include total capital expenditures related to property, plant and equipment, exploration and evaluation assets and intangible assets. Management considers this measure reflective of actual capital activity for the period as it excludes changes in working capital related to other periods and excludes cash receipts on government grants. A reconciliation of the most directly comparable financial measure has been provided below:

(\$000)	December 31, 2022	December 31, 2021	December 31, 2020
Cash used in investing activities	269,585	117,782	158,621
Changes in non-cash working capital	(27,800)	11,564	(686)
Project funding received	5	20,057	-
Net capital expenditures	241,790	149,403	157,935

Oil & Gas Information

The term "boe" or barrels of oil equivalent and "Mcf" or thousand cubic feet equivalent may be misleading, particularly if used in isolation. A boe or Mcfe conversion ratio of six thousand cubic feet of natural gas equivalent to one barrel of oil (6 Mcf: 1 bbl) is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. As the value ratio between natural gas and crude oil based on the current prices of natural gas and crude oil 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.



No Offer or Solicitation Regarding Securities

This Sustainability Report is provided for informational purposes only and does not constitute an offer to sell or a solicitation of an offer to buy any security in Canada, the United States or any other jurisdiction. Advantage does not intend to solicit and is not soliciting, any action with respect to any security or any other contractual relationship with Advantage.

The contents of this Sustainability Report have not been approved or disapproved by any securities commission or regulatory authority in Canada, the United States or any other jurisdiction, and Advantage expressly disclaims any duty on Advantage to make disclosure or any filings with any securities commission or regulatory authority, beyond that imposed by applicable laws. The contents of this report are neither sufficient for, nor intended by Advantage to be used in connection with, any decision relating to the purchase or sale of any existing or future securities. Advantage does not intend to provide financial, investment, tax, legal, or accounting advice. Persons considering the purchase or sale of any securities should consult with their own independent professional advisors.

Third Party Information

Certain market, third party and industry data contained in this summary is based upon information from government or other industry publications and reports or based on estimates derived from such publications and reports. Government and industry publications and reports generally indicate that they have obtained their information from sources believed to be reliable, but Advantage has not conducted its own independent verification of such information. This Sustainability Report also includes certain data derived from certain industry participants, including information as to the Scope 1 and Scope 2 emissions intensity and reportable spills of the Corporation's peers, which has been retrieved from the public record of such industry participants. No representation or warranty of any kind, express or implied, is made by Advantage as to the accuracy or completeness of the information contained in this document, and nothing contained in this report is, or shall be relied upon as, a promise or report by Advantage.



Millennium Tower, Suite 2200
440 2 Avenue SW, Calgary, AB
Canada T2P 5E9

ir@advantageog.com
+ 1 (866) 393 0393
www.advantageog.com