

### **ANNUAL INFORMATION FORM**

YEAR ENDED DECEMBER 31, 2022 February 23, 2023

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### **APPENDICES**

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#### **GLOSSARY OF TERMS**

#### **Selected Defined Terms**

"ABCA" means the *Business Corporations Act* (Alberta), together with any or all regulations promulgated thereunder, as amended from time to time;

"Advantage" or the "Corporation" means Advantage Energy Ltd., a corporation amalgamated under the ABCA. All references to "Advantage" or the "Corporation", unless the context otherwise requires, are references to Advantage Energy Ltd. and its predecessors and subsidiaries;

"Board of Directors" or "Board" means the board of directors of Advantage;

"CCS" means carbon capture and storage;

"Common Shares" means the common shares of Advantage;

**"CPV"** has the meaning ascribed thereto under the heading "General Development of the Business – Three Year History – 2020 – Long-Term Natural Gas Supply Agreement for CPV Three Rivers Energy Center";

"CPV Three Rivers" has the meaning ascribed thereto under the heading "General Development of the Business – Three Year History – 2020 – Long-Term Natural Gas Supply Agreement for CPV Three Rivers Energy Center";

"Credit Facilities" has the meaning ascribed thereto under the heading "General Development of the Business – Three Year History – 2020 – Credit Facilities";

"Entropy" means Entropy Inc., a corporation incorporated under the ABCA and a subsidiary of Advantage;

"IFRS" means International Financial Report Standards as issued by the International Accounting Standards Board;

"NI 52-110" means National Instrument 52-110 - Audit Committees;

"NYMEX" means New York Mercantile Exchange;

"**OPEC**" has the meaning ascribed thereto under the heading "*General Development of the Business – Three Year History - 2020 – Response to the COVID-19 Pandemic*";

"Shareholders" means the holders from time to time of one or more Common Shares, as shown on the register of such holders maintained by the Corporation or by the transfer agent of the Common Shares, on behalf of the Corporation;

"TSX" means the Toronto Stock Exchange; and

"U.S." means the United States of America.

#### **Selected Defined Oil and Gas Terms**

"abandonment and reclamation costs" means all costs associated with the process of restoring a property that has been disturbed by oil and gas activities to a standard imposed by applicable government or regulatory authorities;

"API" means the American Petroleum Institute;

"API gravity" means the API gravity expressed in degrees in relation to liquids, which is a measure of how heavy or light a petroleum liquid is compared to water. If a petroleum liquid's API gravity is greater than 10, it is lighter and floats on water; if less than 10, it is heavier than water and sinks. API gravity is thus a measure of the relative density of a petroleum liquid and the density of water and is used to compare the relative densities of petroleum liquids;

"COGE Handbook" means the "Canadian Oil and Gas Evaluation Handbook" maintained by the Society of Petroleum Evaluation Engineers (Calgary Chapter), as amended from time to time;

"conventional natural gas" means natural gas that has been generated elsewhere and has migrated as a result of hydrodynamic forces and is trapped in discrete accumulations by seals that may be formed by localized structural, depositional or erosional geological features;

"developed non-producing reserves" are those reserves that either have not been on production, or have previously been on production, but are shut-in, and the date of resumption of production is unknown;

"developed producing reserves" are those reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty;

"developed reserves" are those reserves that are expected to be recovered from existing wells and installed facilities or, if facilities have not been installed, that would involve a low expenditure (for example, when compared to the cost of drilling a well) to put the reserves on production. The developed category may be subdivided into developed producing reserves and developed non-producing reserves;

"development costs" means costs incurred to obtain access to reserves and to provide facilities for extracting, treating, gathering and storing the oil and gas from reserves. More specifically, development costs, including applicable operating costs of support equipment and facilities and other costs of development activities, are costs incurred to:

- (a) gain access to and prepare well locations for drilling, including surveying well locations for the purpose of determining specific development drilling sites, clearing ground, draining, road building, and relocating public roads, gas lines and power lines, to the extent necessary in developing the reserves;
- (b) drill and equip development wells, development type stratigraphic test wells and service wells, including the costs of platforms and of well equipment such as casing, tubing, pumping equipment and wellhead assembly;
- (c) acquire, construct and install production facilities such as flow lines, separators, treaters, heaters, manifolds, measuring devices and production storage tanks, natural gas cycling and processing plants, and central utility and waste disposal systems; and
- (d) provide improved recovery systems;

"exploration costs" means costs incurred in identifying areas that may warrant examination and in examining specific areas that are considered to have prospects that may contain oil and gas reserves, including costs of drilling exploratory wells and exploratory type stratigraphic test wells. Exploration costs may be incurred both before acquiring the related property (sometimes referred to as "prospecting costs") and after acquiring the property. Exploration costs, which include applicable operating costs of support equipment and facilities and other costs of exploration activities, are:

- (a) costs of topographical, geochemical, geological and geophysical studies, rights of access to properties to conduct those studies, and salaries and other expenses of geologists, geophysical crews and others conducting those studies (collectively referred to as "geological and geophysical costs");
- (b) costs of carrying and retaining unproved properties, such as delay rentals, taxes (other than income and capital taxes) on properties, legal costs for title defence, and the maintenance of land and lease records;
- (c) dry hole contributions and bottom hole contributions;
- (d) costs of drilling and equipping exploratory wells; and
- (e) costs of drilling exploratory type stratigraphic test wells;

"forecast prices and costs" means future prices and costs that are:

- (a) generally accepted as being a reasonable outlook of the future; or
- (b) if, and only to the extent that, there are fixed or presently determinable future prices or costs to which the Corporation is legally bound by a contractual or other obligation to supply a physical product, including those for an extension period of a contract that is likely to be extended, those prices or costs rather than the prices and costs referred to in subparagraph (a);

"future net revenue" means a forecast of revenue, estimated using forecast prices and costs, arising from the anticipated development and production of resources, net of the associated royalties, operating costs, development costs, and abandonment and reclamation costs;

### "gross" means:

- (a) in relation to an entity's interest in production and reserves, its "company gross reserves", which are such entity's working interest (operating or non-operating) share before deduction of royalties and without including any royalty interest of such entity;
- (b) in relation to wells, the total number of wells in which an entity has an interest; and
- (c) in relation to properties, the total area of properties in which an entity has an interest;

"hydrocarbon" means a compound consisting of hydrogen and carbon, which, when naturally occurring, may also contain other elements such as sulphur;

"light crude oil" means crude oil with a relative density greater than 31.1 degrees API gravity;

"medium crude oil" means crude oil with a relative density greater than 22.3 degrees API gravity and less than or equal to 31.1 degrees API gravity;

"natural gas" means a naturally occurring mixture of hydrocarbon gases and other gases;

"natural gas liquids" or " NGLs" means those hydrocarbon components that can be recovered from natural gas as a liquid including, but not limited to, ethane, propane, butanes, pentanes plus, and condensates;

#### "net" means:

- (a) in relation to an entity's interest in production and reserves, such entity's working interest (operating or nonoperating) share after deduction of royalty obligations, plus the entity's royalty interests in production or reserves;
- (b) in relation to an entity's interest in wells, the number of wells obtained by aggregating an entity's working interest in each of its gross wells; and
- (c) in relation to an entity's interest in a property, the total area in which an entity has an interest multiplied by the working interest owned by it;

"**NGTL**" means the natural gas gathering and transportation system in Alberta and northeastern British Columbia, owned by Nova Gas Transmission Ltd., a subsidiary of TC Energy Corporation;

"NI 51-101" means National Instrument 51-101 - Standards of Disclosure for Oil and Gas Activities;

"probable reserves" are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable reserves;

"property" includes: (a) fee ownership or a lease, concession, agreement, permit, licence or other interest representing the right to extract oil or gas subject to such terms as may be imposed by the conveyance of that interest; (b) royalty interests, production payments payable in oil or gas, and other non-operating interests in properties operated by others; and (c) an agreement with a foreign government or authority under which a reporting issuer participates in the operation of properties or otherwise serves as "producer" of the underlying reserves (in contrast to being an independent purchaser, broker, dealer or importer). A property does not include supply agreements, or contracts that represent a right to purchase, rather than extract, oil or gas;

"proved reserves" are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated proved reserves;

"reserves" are estimated remaining quantities of oil and natural gas and related substances anticipated to be recoverable from known accumulations, as of a given date, based on: (a) analysis of drilling, geological, geophysical and engineering data; (b) the use of established technology; and (c) specified economic conditions, which are generally accepted as being reasonable. Reserves are classified according to the degree of certainty associated with the estimates;

"resource play" refers to drilling programs targeted at regionally distributed crude oil or natural gas accumulations; successful exploitation of these reservoirs is dependent upon technologies such as horizontal drilling and multi-stage fracture stimulation to access large rock volumes in order to produce economic quantities of oil or natural gas;

"Sproule" has the meaning ascribed thereto under the heading "Statement of Reserves Data and Other Oil and Gas Information – Disclosure of Reserves Data";

"Sproule Report" has the meaning ascribed thereto under the heading "Statement of Reserves Data and Other Oil and Gas Information – Disclosure of Reserves Data"; and

"undeveloped reserves" are those reserves expected to be recovered from known accumulations where a significant expenditure (for example, when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the reserves classification (proved, probable) to which they are assigned.

Words importing the singular number only include the plural, and *vice versa*, and words importing any gender include all genders. All dollar amounts set forth in this annual information form are in Canadian dollars, except where otherwise indicated.

### ABBREVIATIONS AND OIL AND GAS ADVISORIES

Crude Oil and Natural Gas Liquids Natural Gas			as	
bbl	barrel	Mcf	thousand cubic feet	
bbls	barrels	MMcf	million cubic feet	
Mbbls	thousand barrels	bcf/d	billion cubic feet per day	
NGLs	natural gas liquids	Mcf/d	thousand cubic feet per day	
BOE or boe	barrel of oil equivalent	MMcf/d	million cubic feet per day	
Mboe	thousand barrels of oil equivalent	Mcfe	thousand cubic feet of natural gas equivalent	
MMboe	million barrels of oil equivalent	MMcfe/d	million cubic feet of natural gas equivalent per day	
boe/d	barrels of oil equivalent per day	MMbtu	million British Thermal Units	
bbls/d	barrels of oil or liquids per day	GJ/d	Gigajoules per day	
Other	_			
AECO	a notional market point on the N where the purchase and sale of r	•	, located at the AECO 'C' hub in Southeastern Alberta, s transacted	
Henry Hub	•			
WTI				

The term "boe" or barrels of oil equivalent and "Mcfe" 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 to one barrel of oil equivalent (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.

This annual information form contains certain oil and gas metrics, which do not have standardized meanings or standard methods of calculation and therefore such measures may not be comparable to similar measures used by other companies and should not be used to make comparisons. Such metrics have been included herein to provide readers with additional measures to evaluate the Corporation's performance; however, such measures are not reliable indicators of the future performance of the Corporation and future performance may not compare to the performance in previous periods and therefore such metrics should not be unduly relied upon.

Certain other terms used herein but not defined herein are defined in NI 51-101 and, unless the context otherwise requires, shall have the same meanings herein as in NI 51-101.

#### **CONVERSION**

The following table sets forth certain conversions between Standard Imperial Units and the International System of Units (or metric units).

To Convert From	То	Multiply By
N 4 - £	audia matura	20 247
Mcf	cubic metres	28.317
cubic metres	cubic feet	35.315
Bbls	cubic metres	0.159
cubic metres	bbls	6.289
Feet	metres	0.305
Metres	feet	3.281
Miles	kilometres	1.609
kilometres	miles	0.621
Acres	hectares	0.405
hectares	acres	2.471
gigajoules	MMbtu	0.950
MMbtu	gigajoules	1.0526

#### FORWARD-LOOKING STATEMENTS

Certain statements contained in this annual information form constitute forward-looking statements. These 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" and similar expressions. These statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements. Advantage believes the expectations reflected in those forward-looking statements are reasonable but no assurance can be given that these expectations will prove to be correct and such forward-looking statements included in, or incorporated by reference into, this annual information form should not be unduly relied upon. These statements speak only as of the date of this annual information form.

In particular, this annual information form contains forward-looking statements pertaining to, but not limited to, the following:

- the Corporation's strategy, focus and plans;
- the performance characteristics of the Corporation's assets;
- crude oil, natural gas and NGL production levels;
- the anticipated date that the CPV Three Rivers will be completed;
- that the Corporation will increase liquids revenue and make infrastructure investments;
- the Corporation's plans to be net-zero by 2025;
- the anticipated benefits to be derived from Entropy's existing MOUs and NDAs and the expectation that they will result in completed CCS projects;
- the Corporation's intended use of Entropy's technology and the anticipated benefits to be derived therefrom;
- the effects of the COVID-19 pandemic;
- anticipated growth in world oil demand in 2023;
- the Corporation's 2023 capital budget and the focus thereof;
- the Corporation's three-year strategic plan, including its anticipated production and targeted investment;
- projections of market prices and costs and supply and demand for crude oil, natural gas and NGLs;

# **FORWARD-LOOKING STATEMENTS (CONTINUED)**

- the anticipated timing of the construction at Progress and the anticipated benefits to be derived therefrom;
- expectations regarding the ability to raise capital or access long-term debt to finance any acquisitions;
- expectations that interest or other funding costs would not make further development of the Corporation's assets uneconomic;
- drilling and future development plans for the Corporation's assets, including the anticipated timing thereof and estimated production therefrom and capital expenditures related thereto;
- expectations that the raw gas capacity of the Glacier Gas Plant will be expanded, the anticipated timing thereof and the anticipated benefits to be derived therefrom;
- expectations that the Corporation will maintain a safe and environmentally responsible workplace and that it will provide training, equipment and procedures to all individuals in adhering to its policies;
- timing of development of undeveloped reserves and associated future capital expenditures;
- the Corporation's expectations that its development plan will optimize the operation and deliver natural gas supply over the life of its Glacier Gas Plant;
- the expected multi decade life span of the Glacier Gas Plant;
- future abandonment and reclamation costs;
- the Corporation's hedging activities;
- tax horizons and treatment under governmental regulatory regimes and tax laws;
- Advantage's expectations that it will not be subject to cash taxes until calendar year 2025;
- terms of the Credit Facilities, including the effect of revisions or changes in reserve estimates and commodity prices on the borrowing base of the Credit Facilities;
- dividend policy and timing of any future dividend;
- expected land expiries;
- anticipated benefits to be derived from the United States-Mexico-Canada Agreement;
- the anticipated benefits to be derived from Entropy's strategic \$300 million investment agreement with Brookfield;
- that no anticipated material changes in the Corporation's business will occur in 2023;
- the Corporation's financial risk management strategy;
- that the Corporation will continue using all financing alternatives available to it to continue pursuing its development strategy;
- that the Corporation does not anticipate that interest or other funding costs would make further development of any of the Corporation's assets uneconomic; and
- anticipated growth in Entropy's business and in the CCS industry as a whole.

Statements relating to "reserves" are deemed to be forward-looking statements, as they involve the implied assessment, based on certain estimates and assumptions, that the reserves described can be profitably produced in the future. The forward-looking statements contained in this annual information form are expressly qualified by this cautionary statement.

The actual results could differ materially from those anticipated in these forward-looking statements as a result of the risk factors set forth below and elsewhere in this annual information form. Such risks include, but are not limited to: risks related to changes in general economic conditions (including as a result of demand and supply effects resulting from the COVID-19 pandemic and the actions of OPEC and non-OPEC countries) which will, among other things, impact demand for and market prices of the Corporation's products, market and business conditions; continued volatility in market prices for crude oil, NGLs and natural gas; the impact of significant declines in market prices for crude oil, NGLs and natural gas; stock market volatility; changes to legislation and regulations, including environmental regulations, and how they are interpreted and enforced; the Corporation's ability to comply with current and future environmental or other laws; actions by governmental or regulatory authorities including increasing taxes, changes in investment or other regulations; changes in tax laws, royalty regimes and incentive programs relating to the crude oil and natural gas

### FORWARD-LOOKING STATEMENTS (CONTINUED)

industry; the effect of acquisitions; Advantage's success at acquisition, exploitation and development of reserves; unexpected drilling results; failure to achieve production targets on timelines anticipated or at all; the potential for management and reserves evaluators estimates and assumptions to be inaccurate; 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, crude oil and natural 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; geological, technical, drilling and processing problems and other difficulties in producing petroleum reserves; changes or fluctuations in production levels; individual well productivity; delays in anticipated timing of drilling and completion of wells; the failure to extend the Credit Facilities at each annual review; potential disruption of the Corporation's operations as a result of the COVID-19 pandemic through potential loss of manpower and labour pools resulting from quarantines in the Corporation's operating areas, risk of the financial capacity of the Corporation's contract counterparties and potentially their ability to perform contractual obligations; competition from other producers for, among other things, capital, acquisitions of reserves, undeveloped lands and skilled personnel; the lack of availability of qualified personnel or management; the lack of available capacity on pipelines; ability to access sufficient capital from internal and external sources; credit risk; public health risks including impact of the COVID-19 pandemic; the Corporation will not increase liquids revenue or make infrastructure investments; the Corporation will not be net-zero by 2025; that Entropy's existing memoranda of understanding ("MOU") and non disclosure agreements ("NDA") may will not result in completed CCS projects; the risk that the price of and market for carbon credits and offsets is different than anticipated; current and future carbon prices and royalty regimes; the risk that the global demand for oil may decrease; the risk that Entropy may not realize the anticipated benefits to be derived from Entropy's strategic \$300 million investment agreement with Brookfield; the risk that the raw gas capacity of the Glacier Gas Plant may not be expanded when anticipated, or at all; the risk that the construction at Progress may not be completed when anticipated, or at all the other factors discussed under "Risk Factors"; and other factors, many of which are beyond the control of the Corporation. Readers are cautioned that the foregoing list of factors is not exhaustive.

Although the forward-looking statements contained in this annual information form are based upon assumptions which Advantage believes to be reasonable, Advantage cannot assure Shareholders that actual results will be consistent with these forward-looking statements. With respect to forward-looking statements contained in this annual information form, Advantage has made assumptions regarding, but not limited to: the impact (and duration thereof) that the COVID-19 pandemic will have on (i) the demand for crude oil, NGLs and natural gas, (ii) the supply chain, including the Corporation's ability to obtain the equipment and services it requires, and (iii) the Corporation's ability to produce, transport and/or sell its crude oil, NGLs and natural gas; that the current commodity price and foreign exchange environment will continue or improve; conditions in general economic and financial markets; current and future commodity prices, carbon prices and royalty regimes; the price of and market for carbon credits and offsets; availability of skilled labour; timing and amount of capital expenditures; future exchange rates; availability of pipeline capacity; the impact of increasing competition; conditions in general economic and financial markets; availability of drilling and related equipment; effects of regulation by governmental agencies; royalty rates; future operating costs; that the Corporation 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 the Corporation's conduct and results of operations will be consistent with its expectations; that the Corporation will have the ability to develop the Corporation's crude oil and natural gas properties in the manner currently contemplated; that current or, where applicable, proposed assumed industry conditions, laws and regulations will continue in effect or as anticipated as described herein; that the estimates of the Corporation's reserves volumes and the assumptions related thereto (including commodity prices and development costs) are accurate in all material respects; that Entropy's existing MOUs and NDAs will lead to completed CCS projects; that Entropy will benefit from the strategic investment with Brookfield; and other matters.

Advantage has included the above summary of assumptions and risks related to forward-looking information provided in this annual information form in order to provide Shareholders with a more complete perspective on the Corporation's

### FORWARD-LOOKING STATEMENTS (CONTINUED)

current and future operations and such information may not be appropriate for other purposes. The Corporation'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 Advantage will derive therefrom.

These forward-looking statements are made as of the date of this annual information form 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.

The future acquisition by the Corporation of Common Shares pursuant to its share buyback program (including through its NCIB), if any, and the level thereof is uncertain. Any decision to acquire Common Shares pursuant to the share buyback program will be subject to the discretion of the board of directors of the Corporation and may depend on a variety of factors, including, without limitation, the Corporation's business performance, financial condition, financial requirements, growth plans, expected capital requirements and other conditions existing at such future time including, without limitation, contractual restrictions and satisfaction of the solvency tests imposed on the Corporation under applicable corporate law. There can be no assurance of the number of Common Shares that the Corporation will acquire pursuant to its share buyback program, if any, in the future.

This annual information form contains information that may be considered a financial outlook under applicable securities laws about the Corporation's potential financial position, including, but not limited to, Advantage's 2023 capital budget; Advantage's expectations that it will not be subject to cash taxes until calendar year 2025; and Advantage's targeted investment per annum for the next three years; all of which are subject to numerous assumptions, risk factors, limitations and qualifications, including those set forth in the above paragraphs. The actual results of operations of the Corporation and the resulting financial results will vary from the amounts set forth in this annual information form and such variations may be material. This information has been provided for illustration only and with respect to future periods are based on budgets and forecasts that are speculative and are subject to a variety of contingencies and may not be appropriate for other purposes. Accordingly, these estimates are not to be relied upon as indicative of future results. Except as required by applicable securities laws, the Corporation undertakes no obligation to update such financial outlook. The financial outlook contained in this annual information form was made as of the date of this annual information form and was provided for the purpose of providing further information about the Corporation's potential future business operations. Readers are cautioned that the financial outlook contained in this annual information form is not conclusive and is subject to change.

#### **ADVANTAGE ENERGY LTD.**

#### General

The Corporation was formed pursuant to the amalgamation of Advantage Oil & Gas Ltd., 1335703 Alberta Ltd., SET Resources Inc. and Sound ExchangeCo Ltd. under the ABCA on September 5, 2007. On July 9, 2009, the articles of the Corporation were amended to change the number of issued and outstanding Common Shares to equal the number of trust units of Advantage Energy Income Fund (the "**Trust**") outstanding immediately prior to the plan of arrangement pursuant to Section 193 of the ABCA, which closed on July 9, 2009 and pursuant to which, among other things, the Trust was dissolved and the Corporation became Advantage Oil & Gas Ltd. On May 18, 2021, the Corporation amended its articles to change its name from Advantage Oil & Gas Ltd. to Advantage Energy Ltd.

The Corporation is a reporting issuer in each of the provinces of Canada and the Common Shares are listed on the TSX under the symbol "AAV".

The head office of Advantage is located at Suite 2200,  $440 - 2^{nd}$  Avenue S.W., Calgary, Alberta T2P 5E9 and its registered office is located at 2400,  $525 - 8^{th}$  Avenue S.W., Calgary, Alberta T2P 1G1.

#### GENERAL DEVELOPMENT OF THE BUSINESS

#### **Corporate Structure**

As at December 31, 2022, the Corporation did not have any material direct or indirect subsidiaries, as the total assets and revenues of the Corporation's subsidiaries (including Entropy), on a combined basis, does not exceed 10% of the consolidated assets and the consolidated revenues, respectively, of the Corporation.

#### General

The Corporation is engaged in the business of natural gas, crude oil and NGLs exploitation, development, acquisition and production in the Province of Alberta. The Corporation is focused on development and growth of its extensive Montney resources play at Glacier, Valhalla, Progress and Pipestone/Wembley, Alberta. See "Description of our Business and Operations".

From 2012 to 2014, Advantage executed on a number of significant transactions with the objective of positioning the Corporation to successfully deliver on its long-term development plan. Advantage's transformation included the disposition of non-core assets, simplifying the business to focus on its extensive Montney resource play, strengthening the balance sheet through utilization of net proceeds from dispositions reducing indebtedness, and realigning the Board, management and staff to achieve the Corporation's development plan.

In 2021, the Corporation announced the creation of Entropy, a private cleantech company focused on commercializing energy-transition technologies. See "General Development of the Business – Three Year History – 2021 – Creation of Entropy Inc.".

### **Three Year History**

A detailed description of the historical development of the business of the Corporation for the years ended December 31, 2020, 2021 and 2022 is outlined below. Unless the context otherwise requires, references to "we", "us", "our" or similar terms refer to the Corporation.

#### 2020

#### 2020 Capital Budget and Development Plan

In January 2020, Advantage announced its capital budget which targeted investment between \$170 million and \$200 million.

#### Response to the COVID-19 Pandemic

During the first quarter of 2020, crude oil benchmark prices decreased substantially due to decreased global crude oil demand triggered by the impact of the COVID-19 pandemic on the global economy, and the adequacy of supply management efforts by the Organization of Petroleum Exporting Countries ("OPEC") and non-OPEC partners to address such dramatic changes. The Corporation incurred a large net loss in the first quarter of 2020 due to an impairment charge which was triggered by the COVID-19 pandemic impact on anticipated future commodity prices due to supply and demand outlooks. In response to the decrease in crude oil prices, in April 2020, Advantage reduced its capital budget to target investment between \$130 million and \$145 million.

#### Sale of 12.5% Interest in Glacier Gas Plant for \$100 Million

In April 2020, Advantage announced it has reached a definitive agreement to sell a 12.5% interest in the Glacier Gas Plant for \$100 million cash proceeds. The transaction closed on July 2, 2020. In conjunction with the transaction, Advantage entered into a 15-year volume commitment agreement for 50 MMcf/d at a fee of \$0.66/Mcf.

# **GENERAL DEVELOPMENT OF THE BUSINESS (CONTINUED)**

#### **Appointment of Director**

On June 16, 2020, Mr. Donald Clague was appointed as a director of the Corporation.

#### **Credit Facilities**

Upon closing the sale of the 12.5% interest in the Glacier Gas Plant for \$100 million (see "General Development of the Business – Three Year History – 2020 – Sale of 12.5% Interest in Glacier Gas Plant for \$100 Million"), the borrowing base under the Corporation's credit facilities with a syndicate of financial institutions (the "Credit Facilities") was adjusted in accordance with the terms of the Credit Facility renewal, to \$350 million, from \$400 million, comprised of a \$30 million extendible revolving operating loan facility and a \$320 million extendible revolving loan facility. In October 2020, the semi-annual redetermination of the Credit Facilities was completed with no changes to the borrowing base of \$350 million.

### Long-Term Natural Gas Supply Agreement for CPV Three Rivers Energy Center

In September 2020, Advantage and Competitive Power Ventures ("CPV") announced that the companies agreed to a long-term gas supply agreement for the CPV Three Rivers Energy Center ("CPV Three Rivers") in Grundy County, Illinois. Advantage will supply 25,000 MMbtu per day of natural gas for a 10-year period, commencing upon CPV Three Rivers reaching commercial operation which is expected to occur in 2023.

#### 2020 Capital Budget and Development Plan

In October 2020, Advantage announced an increase in its 2020 capital guidance, as a result of continued strengthening of the Corporation's outlook to target investment between \$147 million and \$162 million, primarily to accelerate a four-well pad into the fourth quarter of 2020 and augment natural gas production through the winter season.

#### 2021 Capital Budget and Development Plan

In October 2020, Advantage announced its 2021 capital budget which targeted investment between \$125 million and \$150 million. Advantage announced that it anticipated spending roughly three-quarters of its 2021 capital on Glacier gas-weighted development with 20% directed towards future development initiatives, including oil and liquids developments at Valhalla, Progress and Pipestone/Wembley.

#### 2021

#### 2021 Capital Budget and Development Plan

In February 2021, Advantage reduced its 2021 capital guidance range to between \$115 million and \$135 million (from between \$125 million and \$150 million), while increasing its 2021 production guidance range between 48,000 and 51,000 boe/d.

#### Creation of Entropy Inc.

In March 2021, Advantage and Allardyce Bower Consulting Ltd. ("ABC") announced a jointly developed CCS technology, with the first deployment of the technology being implemented at Advantage's Glacier Gas Plant. In partnership with ABC, Advantage established Entropy, a company incorporated under the ABCA of which Advantage owns 90% of its voting securities, which will own the technology with the intent of deploying it widely in the global effort to decarbonize.

#### Appointment and resignation of directors

In May 2021, Ms. Deirdre M. Choate and Mr. Norman W. MacDonald were each appointed as a director of the Corporation. Mr. Grant Fagerheim who did not stand for re-election at the May 6, 2021 annual general and special meeting of shareholders, ceased to be a director.

### **GENERAL DEVELOPMENT OF THE BUSINESS (CONTINUED)**

#### 2021 Capital Budget and Development Plan

In August 2021, Advantage announced a \$20 million increase in its 2021 capital guidance resulting in a 2021 capital guidance range of between \$140 million and \$150 million.

#### 2022 Capital Budget and Development Plan

In December of 2021, Advantage announced its 2022 capital budget which targeted investment between \$170 million and \$200 million. Such capital budget had an emphasis on increasing liquids revenue and making infrastructure investments that either expand third-party processing revenue or advance Advantage's net-zero 2025 target.

#### Senior Management Appointments

In December 2021, Advantage appointed Mr. Darren Tisdale as Vice President, Geosciences, transitioning from his previously held role as Chief Geoscientist. Additionally, Advantage appointed Mr. Geoff Keyser as Vice President, Corporate Development, transitioning from his previously held role as Director of Corporate Development.

#### **Credit Facilities**

In November 2021, the semi-annual redetermination of the Corporation's Credit Facilities was completed with no changes to the borrowing base of \$350 million.

#### **Entropy Strategic Financing Agreement**

In December 2021, Entropy and a leading energy transition investor agreed to the terms of an exclusive, non-binding financing agreement expected to provide sufficient capital for the execution of Entropy's near-term growth plan, including a structured initial commitment of \$300 million. See "General Development of the Business – Three Year History – 2022 – Entropy Strategic Financing Agreement".

#### Retirement and appointment of CEO

On December 31, 2021, Mr. Andy Mah retired from his role of Chief Executive Officer as the Corporation and Mr. Michael Belenkie was appointed to the role of President and Chief Executive Officer of the Corporation effective January 1, 2022, transitioning from his previously held role as President and Chief Operating Officer.

#### 2022

#### **Entropy Strategic Financing Agreement**

On March 28, 2022, Entropy announced that it had entered into a strategic investment agreement with Brookfield Global Transition Fund ("**Brookfield**") to scale up deployment of Entropy's CCS technology globally. Under the terms of the strategic investment agreement, Brookfield provided a capital commitment of \$300 million, and Entropy will issue a hybrid security in the form of an unsecured debenture to fund CCS projects that reach final investment decision as certain predetermined return thresholds are met. On April 5, 2022, Entropy received an initial \$25 million and issued an unsecured debenture to Brookfield.

#### Normal Course Issuer Bid

On April 7, 2022, Advantage announced that the Toronto Stock Exchange (the "TSX") approved the Corporation commencing a normal course issuer bid ("NCIB"). Pursuant to the NCIB, Advantage is able to purchase for cancellation, from time to time, as it considers advisable, up to a maximum of 18,704,019 Common Shares between April 13, 2022, and April 12, 2023. The Corporation also entered into an automatic share purchase plan with a broker in order to facilitate repurchases of Common Shares under the NCIB.

#### Resignation of director

Mr. Ronald A. McIntosh, who did not stand for re-election at the May 5, 2022, annual general and special meeting of Shareholders, ceased to be a director.

### **GENERAL DEVELOPMENT OF THE BUSINESS (CONTINUED)**

#### Appointment of director

In October 2022, Ms. Janine J. McArdle was appointed as a director of the Corporation.

#### Substantial Issuer Bid

On November 10, 2022, the Corporation commenced a substantial issuer bid ("SIB") pursuant to which it offered to purchase for cancellation up to \$100 million of its Common Shares through a modified Dutch auction. The SIB was completed on December 20, 2022, with the Corporation taking up 8,928,571 Common Shares at a price of \$11.20 per Common Share, representing an aggregate purchase of \$100 million and 4.9% of the total number of Advantage's issued and outstanding Common Shares as at the time the SIB was commenced on November 10, 2022.

### 2023 Capital Budget and Development Plan and Three-Year Strategic Plan

In December of 2022, Advantage announced its 2023 capital budget which targets investment between \$250 million and \$280 million. The Corporation's 2023 capital budget is focused on high rate-of-return development drilling into existing infrastructure and achieving 11% top-line production growth. Also in December 2022, Advantage announced its three-year strategic plan. Under the Corporation's three-year strategic plan, annual production is expected to grow by at least 10% in each of the next three years, exceeding 75,000 boe/d by 2025, with targeted investment between \$250 and \$300 million per year.

#### **Anticipated Changes in the Business**

As at the date hereof and other than as disclosed herein, the Corporation does not anticipate that any material change in its business will occur during the balance of the 2023 financial year.

#### **Significant Acquisitions**

Neither the Corporation nor any of its subsidiaries completed any acquisitions during the year ended December 31, 2022 for which disclosure is required under Part 8 of National Instrument 51-102 - *Continuous Disclosure Obligations*.

As part of its ongoing business, the Corporation evaluates potential acquisitions of all types of petroleum and natural gas assets. The Corporation is normally in the process of evaluating various potential acquisitions at any one time which individually or together could be material. As of the date hereof, the Corporation has not reached agreement on the price or terms of any potential material acquisitions. The Corporation cannot predict whether any current or future opportunities will result in one or more acquisitions for the Corporation.

#### **DESCRIPTION OF OUR BUSINESS AND OPERATIONS**

#### General

Advantage is engaged in the business of natural gas, crude oil, and NGLs exploitation, development, acquisition and production in the Province of Alberta.

Advantage's current exploitation and development program is focused on its liquids-rich natural gas, crude oil and NGLs Montney resources in the Glacier, Valhalla, Pipestone/Wembley and Progress areas of Alberta. As current and future practice, Advantage has established a financial risk management strategy and may manage the risk associated with changes in commodity prices by entering into derivatives. See "Risk Factors". Although Advantage has a significant capital development program, it also actively evaluates growth opportunities through crude oil and natural gas asset acquisitions, as well as through corporate acquisitions. Advantage targets acquisitions that support and augment its Montney development and long-term strategy. It is currently intended that Advantage will finance any acquisitions and investments through the Credit Facilities, the issuance of additional Common Shares from treasury, or accessing long-term debt instruments to maintain prudent leverage. In addition, Advantage may pursue other long-term financing mechanisms to finance oil and gas reserves development including its liquids development program.

### **DESCRIPTION OF OUR BUSINESS AND OPERATIONS (CONTINUED)**

Entropy is a privately-owned company, founded by Advantage to apply sophisticated science and engineering to commercialize CCS. Entropy intends to deploy its technology in the global effort to reduce and eventually eliminate carbon emissions.

The first deployment of Entropy's technology was at Advantage's Glacier Gas Plant. Phase 1 of the CCS project was commissioned in July 2022 and has been running steadily since, other than a series of planned reconfigurations for research and development.

Entropy is currently working with numerous third-party emitters to advance the deployment of its proprietary technology on projects in both Canada and the United States. From these established and developing relationships, Entropy is focused on advancing CCS projects with Athabasca Oil Sands Corp., California Resources Corporation and several other strategic partners. Pre-FEED ("front-end engineering design"), engineering, and subsurface evaluations are underway for each project, and final investment decisions for several are pending, subject to financing, commercial agreements, and regulatory approval. Additionally, Entropy, with its partners, have been awarded the rights to evaluate two carbon storage hubs in Alberta. The first, in partnership with Inter Pipeline Ltd., is located north of Calgary, Alberta. The second, in partnership with NorthRiver Midstream Inc. and Keyera Corp. is located north of Grande Prairie, Alberta. Entropy and its partners have commenced capital spending related to the planned evaluation activities for each hub.

#### Reorganizations

As at the date hereof, there have been no material reorganizations of Advantage and/or any of its subsidiaries within the three most recently completed financial years and there are currently no material reorganizations of Advantage proposed for the current financial year.

#### **Bankruptcy and Similar Procedures**

There have been no bankruptcy, receivership or similar proceedings against the Corporation or any of its subsidiaries or related entities, or any voluntary bankruptcy, receivership or similar proceeding by the Corporation or any of its subsidiaries or related entities since the inception of the Corporation or during or proposed for the current financial year.

#### Specialized Skill and Knowledge

Advantage and Entropy employ individuals with various professional skills in the course of pursuing its business plan. These professional skills include, but are not limited to, geology, geophysics, engineering, financial and business skills, which are widely available in the industry. Drawing on significant experience in the oil and gas business, Advantage believes its management team has a demonstrated track record of bringing together all of the key components to a successful exploration and production company, including: strong technical skills; expertise in planning and financial controls; ability to execute on business development opportunities; capital markets expertise; and an entrepreneurial spirit that allows Advantage to effectively identify, evaluate and execute on its business plan. Individuals that provide services to Entropy have a strong track record that lends to the development of CCS, through their experience with Advantage and other oil and gas production companies.

### **Intellectual Property, Patents and Trademarks**

Entropy is the owner of all intellectual property rights related to: (i) clean technologies; waste heat recovery and recycling technologies related to carbon capture; and CCS inventions, technologies and processes designed by ABC; and (ii) the patent-pending solvent class developed in conjunction with the University of Regina, which includes the solvent Entropy23<sup>TM</sup>. Entropy has filed provisional patent applications for its CCS process and its class of solvents that includes Entropy23<sup>TM</sup>.

#### **Human Resources**

As at December 31, 2022, the Corporation employed 52 full-time employees, 47 of which are located in the head office and 5 of which are located in the field. The Corporation also retained 9 consultants in the head office. Certain employees of Advantage provide services to Entropy, for a fee, pursuant to a Management Services Agreement between Advantage and Entropy.

The statement of reserves data and other oil and gas information set forth below is dated February 22, 2023, with the effective date being December 31, 2022.

#### **Disclosure of Reserves Data**

The reserves data set forth below is based upon an evaluation by Sproule Associates Limited ("Sproule") with an effective date of December 31, 2022 contained in a report of Sproule dated February 22, 2023 (the "Sproule Report"). The Sproule Report evaluated, as at December 31, 2022, the crude oil, NGLs and conventional natural gas reserves of Advantage. The reserves data summarizes Advantage's crude oil, NGLs and conventional natural gas reserves and the net present values of future net revenue for these reserves using forecast prices and costs. All of the Corporation's reserves are in Canada and, specifically, in the Province of Alberta. The Sproule Report has been prepared in accordance with the standards contained in the COGE Handbook and the reserve definitions contained in NI 51-101 and the COGE Handbook. Additional information not required by NI 51-101 has been presented to provide continuity and additional information which the Corporation believes is important to readers of this annual information form. Sproule was engaged to provide evaluations of proved and proved plus probable reserves and no attempt was made to evaluate possible reserves.

The report of management and directors on oil and gas disclosure in Form 51-101F3 and the report on reserves data by Sproule in Form 51-101F2 are attached as Appendix "A" and "B" to this annual information form, respectively, which forms are incorporated herein by reference.

There are numerous uncertainties inherent in estimating quantities of crude oil, NGLs and conventional natural gas reserves and the future cash flows attributed to such reserves. The reserves and associated cash flow information set forth herein are estimates only. In general, estimates of economically recoverable crude oil, NGLs and conventional natural gas reserves and the future net cash flows therefrom are based upon a number of variable factors and assumptions, such as historical production from the properties, production rates, ultimate reserve recovery, timing and amount of capital expenditures, marketability of oil and natural gas, royalty rates, the assumed effects of regulation by governmental agencies and future operating costs, all of which may vary materially from actual results. For those reasons, estimates of the economically recoverable crude oil, NGL and conventional natural gas reserves attributable to any particular group of properties, classification of such reserves based on risk of recovery and estimates of future net revenues associated with reserves prepared by different engineers, or by the same engineers at different times, may vary. The Corporation's actual production, revenues, taxes and development and operating expenditures with respect to its reserves will vary from estimates thereof and such variations could be material.

It should not be assumed that the estimates of future net revenues presented in the tables below represent the fair market value of the reserves. There is no assurance that the forecast prices and costs assumptions will be attained and variances could be material. The recovery and reserve estimates of our crude oil, NGLs and conventional natural gas reserves provided herein are estimates only and there is no guarantee that the estimated reserves will be recovered. Actual crude oil, NGLs and conventional natural gas reserves may be greater than or less than the estimates provided herein.

The information relating to the Corporation's consolidated crude oil, NGLs and conventional natural gas reserves contains forward-looking statements relating to future net revenues, forecast capital expenditures, future development plans and costs related thereto, forecast operating costs, anticipated production and abandonment costs. See "Forward-Looking Statements", "Industry Conditions" and "Risk Factors – Reserves Estimates".

In certain of the tables set forth below, the columns may not add due to rounding.

# Summary of Oil and Gas Reserves as at December 31, 2022 – Forecast Prices and Costs

### Reserves

	Light Crude Medium C		Conventional Natural Gas	
Reserves Category	Gross (Mbbls)	Net (Mbbls)	Gross (MMcf)	Net (MMcf)
Proved				
Developed Producing	3,074.2	2,369.7	768,058	693,195
Developed Non-Producing	47.6	41.7	28,687	26,472
Undeveloped	9,310.4	7,551.3	1,482,033	1,317,723
Total Proved	12,432.3	9,962.8	2,278,778	2,037,390
Probable	7,023.9	5,244.6	907,549	774,360
Total Proved Plus Probable	19,456.2	15,207.4	3,186,329	2,811,750

#### **Reserves**

	Neset ves						
	Natural Ga	s Liquids	Total Oil Equivalent				
Reserves Category	Gross (Mbbls)	Net (Mbbls)	Gross (Mboe)	Net (Mboe)			
Proved							
Developed Producing	7,820.8	5,928.2	138,904.8	123,830.3			
Developed Non-Producing	254.2	201.0	5,082.9	4,654.8			
Undeveloped	16,575.1	13,181.7	272,891.1	240,353.6			
Total Proved	24,650.1	19,310.8	416,878.8	368,838.7			
Probable	10,486.6	7,650.4	168,768.8	141,955.0			
Total Proved Plus Probable	35,136.6	26,961.2	585,647.6	510,793.7			

Summary of Net Present Values of Future Net Revenue of Oil and Gas Reserves as at December 31, 2022 – Forecast Prices and Costs<sup>(1)(2)(3)</sup>

	Before Income Tax Discounted at (%/year)					Unit Value Before Income Tax
Reserves Category	0% (\$000s)	5% (\$000s)	10% (\$000s)	15% (\$000s)	20% (\$000s)	Discounted at 10%/year <sup>(4)</sup> (\$/Boe)
Proved						
Developed Producing	3,067,918	2,138,246	1,661,348	1,377,090	1,188,787	13.42
Developed Non-Producing	121,378	76,901	56,199	44,540	37,086	12.07
Undeveloped	5,300,607	2,757,559	1,666,337	1,091,351	746,925	6.93
Total Proved	8,489,903	4,972,706	3,383,883	2,512,981	1,972,797	9.17
Probable	4,515,559	2,222,949	1,361,282	938,053	694,898	9.59
Total Proved Plus Probable	13,005,462	7,195,655	4,745,165	3,451,035	2,667,695	9.29

# After Income Tax Discounted at (%/year)<sup>(5)</sup>

Reserves Category	0% (\$000s)	5% (\$000s)	10% (\$000s)	15% (\$000s)	20% (\$000s)
Proved					
Developed Producing	2,580,949	1,846,313	1,464,164	1,233,282	1,078,374
Developed Non-Producing	93,509	59,288	43,400	34,474	28,780
Undeveloped	4,065,260	2,089,625	1,233,243	781,654	512,097
Total Proved	6,739,719	3,995,226	2,740,807	2,049,410	1,619,252
Probable	3,473,238	1,705,595	1,041,040	715,544	529,240
Total Proved Plus Probable	10,212,957	5,700,821	3,781,847	2,764,954	2,148,492

- (1) Advantage's light crude oil and medium crude oil, conventional natural gas and NGL reserves were evaluated using an average evaluator price forecast effective as of December 31, 2022, which was derived as an average of the price forecasts published by three major oil and gas evaluation consultant companies, prior to interests, debt service charges and general and administrative expenses. It should not be assumed that the future net revenue estimated by Sproule represents the fair market value of the reserves.
- (2) Assumes that development of corporate reserves will occur, without regard to the likely availability to the Corporation of funding required for that development.
- Future net revenue incorporates management's estimates of required abandonment and reclamation costs, including expected timing such costs will be incurred, associated with all wells (including undrilled wells that have been attributed reserves), facilities and infrastructure. No abandonment and reclamation costs have been excluded.
- (4) The unit values are based on net reserve volumes.
- (5) Values are calculated by considering existing tax pools for Advantage in the evaluation of Advantage's oil and gas properties, and take into account current federal tax regulations. Values do not represent an estimate of the value at the business entity level, which may be significantly different. For information at the business entity level, please see Advantage's Consolidated Financial Statements and Management's Discussion and Analysis for the year ended December 31, 2022, which are available on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a> and the Corporation's website at <a href="https://www.advantageog.com">www.advantageog.com</a>.

Total Future Net Revenue (Undiscounted) as at December 31, 2022 – Forecast Prices and Costs<sup>(1)(2)</sup>

Reserves Category	Revenue (\$000s)	Royalties (\$000)	Operating Cost (\$000)	Development Cost (\$000s)
Proved	15,099,020	1,856,441	2,848,622	1,749,527
Total Proved Plus Probable	21,829,790	2,988,601	3,548,254	2,116,967

Abandonment and Reclamation Reserves Category Cost <sup>(3)</sup> (\$000s)		Future Net Revenue Before Future Income Taxes (\$000s)	Future Income Taxes (\$000s)	Future Net Revenue After Future Income Taxes <sup>(4)</sup> (\$000s)
Proved	154,527	8,489,903	1,750,184	6,739,719
Total Proved Plus Probable	170,506	13,005,462	2,792,505	10,212,957

- (1) Advantage's light crude oil and medium crude oil, conventional natural gas and NGL reserves were evaluated using an average evaluator price forecast effective as of December 31, 2022, which was derived as an average of the price forecasts published by three major oil and gas evaluation consultant companies, prior to interests, debt service charges and general and administrative expenses. It should not be assumed that the future net revenue estimated by Sproule represents the fair market value of the reserves.
- (2) Assumes that development of corporate reserves will occur, without regard to the likely availability to the Corporation of funding required for that development.
- Future net revenue incorporates management's estimates of required abandonment and reclamation costs, including expected timing such costs will be incurred, associated with all wells (including undrilled wells that have been attributed reserves), facilities and infrastructure. No abandonment and reclamation costs have been excluded.
- (4) Values are calculated by considering existing tax pools for Advantage in the evaluation of Advantage's oil and gas properties, and take into account current federal tax regulations. Values do not represent an estimate of the value at the business entity level, which may be significantly different. For information at the business entity level, please see Advantage's Consolidated Financial Statements and Management's Discussion and Analysis for the year ended December 31, 2022, which are available on SEDAR at <a href="www.sedar.com">www.sedar.com</a> and the Corporation's website at <a href="www.advantageog.com">www.advantageog.com</a>.

# Future Net Revenue by Product Type as at December 31, 2022 – Forecast Prices and Costs

	Net Present Value of Future Net Revenue (before deducting Future Income Taxes), Discounted at 10%/year (\$000s)	Net Present Value of Future Net Revenue (before deducting Future Income Taxes), Discounted at 10%/year (\$/Boe)(3)
Proved Reserves		
Light Crude Oil and Medium Crude Oil (1)	351,802	14.55
Natural Gas Liquids	-	-
Conventional Natural Gas (2)	3,032,081	8.80
Total Proved Reserves	3,383,883	
Proved Plus Probable Reserves		
Light Crude Oil and Medium Crude Oil (1)	566,712	15.20
Natural Gas Liquids	-	-
Conventional Natural Gas (2)	4,178,453	8.82
Proved Plus Probable Reserves	4,745,165	

<sup>&</sup>lt;sup>(1)</sup> Including solution gas and other by-products.

<sup>(2)</sup> Including by-products, but excluding solution gas and by-products from oil wells.

<sup>(3)</sup> Unit values are based on net reserve volumes.

### **Pricing Assumptions**

The following tables set forth the benchmark reference prices, as at December 31, 2022, reflected in the reserves data. The forecast of prices, inflation and exchange rates provided in the table below were computed using the average of the forecasts ("IQRE Average Forecast") by McDaniel & Associates Consultants Ltd., GLJ Petroleum Consultants and Sproule. The IQRE Average Forecast is dated January 1, 2023. The inflation forecast was applied uniformly to prices beyond the forecast interval, and to all future costs.

### Summary of Pricing and Inflation Rate Assumptions as at December 31, 2022 – Forecast Prices and Costs

	Canadian Light				
9	Sweet Crude Oil	AECO-C	<b>Edmonton</b>	Edmonton	Edmonton
	40° API	Spot	Pentanes Plus	Butane	Propane
Year	(\$Cdn/bbl)	(\$Cdn/MMbtu)	(\$Cdn/bbl)	(\$Cdn/bbl)	(\$Cdn/bbl)
2023	103.76	4.23	106.22	53.88	39.80
2024	97.74	4.40	101.35	52.67	39.14
2025	95.27	4.21	98.94	51.42	39.74
2026	95.58	4.27	100.19	51.61	39.86
2027	97.07	4.34	101.74	52.39	40.47
2028	99.01	4.43	103.78	53.44	41.28
2029	100.99	4.51	105.85	54.51	42.11
2030	103.01	4.60	107.97	55.60	42.95
2031	105.07	4.69	110.13	56.71	43.81
2032	106.69	4.79	112.33	57.56	44.47
2033	108.83	4.88	114.58	58.71	45.35
Thereafter	+2% per year	+2% per year	+2% per year	+2% per year	+2% per year

	Operating		
	<b>Cost Inflation</b>	<b>Capital Cost</b>	Exchange
	Rate	Inflation Rate	Rate
Year	%/year	%/year	(\$US/\$Cdn) <sup>(3)</sup>
2023	-	-	0.75
2024	2.33	2.33	0.77
2025	2.00	2.00	0.77
2026	2.00	2.00	0.77
2027	2.00	2.00	0.78
2028	2.00	2.00	0.78
2029	2.00	2.00	0.78
2030	2.00	2.00	0.78
2031	2.00	2.00	0.78
2032	2.00	2.00	0.78
2033	2.00	2.00	0.78
Thereafter	2.00	2.00	0.78

<sup>&</sup>lt;sup>(1)</sup> This summary table identifies benchmark reference pricing schedules that might apply to a reporting issuer.

Weighted average historical prices, excluding derivatives, realized by the Corporation for the year ended December 31, 2022, were \$113.84/bbl for light crude oil and medium crude oil, \$83.88/bbl for NGLs and \$6.82/Mcf for conventional natural gas.

<sup>(2)</sup> Product sale prices will reflect these reference prices with further adjustments for quality and transportation to point of sale.

<sup>(3)</sup> Exchange rates used to generate the benchmark reference prices in this table.

#### **Reconciliations of Changes in Reserves**

December 31, 2022

12,432.3

The following table sets forth a reconciliation of the Corporation's total gross proved, total gross probable and total gross proved plus probable reserves as at December 31, 2022 against such reserves as at December 31, 2021 based on forecast prices and cost assumptions.

Light Crude Oil and

7,023.9

	LI	gnt Crude Oil an	a					
	N	1edium Crude O	il	Natural Gas Liquids				
	Proved	Probable	Proved Plus Probable	Proved	Probable	Proved Plus Probable		
FACTORS	(Mbbl)	(Mbbl)	(Mbbl)	(Mbbl)	(Mbbl)	(Mbbl)		
December 31, 2021	8,354.8	9,211.5	17,566.3	22,709.4	10,378.6	33,088.0		
Extensions and improved recovery (1)	2,887.3	(406.7)	2,480.6	3,152.7	166.0	3,318.7		
Technical revisions (2)	1,785.3	(1,825.1)	(39.8)	130.7	9.8	140.5		
Discoveries	-	-	-	-	-	-		
Acquisitions	-	-	-	-	-	-		
Dispositions	-	-	-	-	-	-		
Economic factors (3)	124.8	44.2	169.0	161.3	(67.9)	93.4		
Production	(719.9)		(719.9)	(1,504.0)		(1,504.0)		

19,456.2

24,650.1

10,486.5

35,136.6

	Conv	Oil Equivalent				
FACTORS	Proved	Probable (MANA)	Proved Plus Probable	Proved	Probable (MPage)	Proved Plus Probable (MBoe)
Pasambar 21, 2021	(MMcf)	(MMcf)	(MMcf)	(MBoe)	(MBoe)	
December 31, 2021	2,177,121	839,142	3,016,263	393,917.7	159,447.1	553,364.8
Extensions and improved recovery (1)	122,015	21,262	143,276	26,375.6	3,303.0	29,678.6
Technical revisions (2)	69,470	57,387	126,858	13,494.3	7,749.3	21,243.6
Discoveries	-	-	-	-	-	-
Acquisitions	-	-	-	-	-	-
Dispositions	-	-	-	-	-	-
Economic factors (3)	18,963	(10,241)	8,722	3,446.6	(1,730.6)	1,716.0
Production	(108,789)		(108,789)	(20,355.4)		(20,355.4)
December 31, 2022	2,278,778	907,549	3,186,329	416,878.8	168,768.8	585,647.6

Reserve additions for Infill Drilling, Extensions and Improved Recovery are combined and reported as "Extensions and Improved Recovery". Extensions and Improved Recovery changes: (i) Revisions to the Glacier development plan with well optimization that combined or added proved or proved plus probable future drilling locations. (ii) As per COGE Handbook guidance: Glacier/Valhalla/Progress future proved locations were scheduled to be developed within seven years (two including a plant expansion plus five) and probable future locations were developed within nine years of the required ten years for probable reserves. (iii) Wembley/Pipestone future proved locations were scheduled within the requirement to be developed within five years and probable future locations within ten years for probable reserves.

<sup>(2)</sup> Technical revisions changes: (i) Increased well performance of existing and future drilling locations; and (ii) minor upward adjustments to NGL yields for gas processed through the Glacier Gas Plant.

<sup>(3)</sup> Economic factor changes were primarily related to higher forecasted prices for Conventional Natural Gas, associated NGLs and Light Crude Oil.

### **Additional Information Relating to Reserves Data**

#### **Undeveloped Reserves**

Undeveloped reserves are attributed by Sproule in accordance with standards and procedures contained in the COGE Handbook. Proved undeveloped reserves are those reserves that can be estimated with a high degree of certainty and are expected to be recovered from known accumulations where a significant expenditure is required to render them capable of production. Probable undeveloped reserves are those reserves that are less certain to be recovered than proved reserves and are expected to be recovered from known accumulations where a significant expenditure is required to render them capable of production. Proved and probable undeveloped reserves have been assigned in accordance with engineering and geological practices as defined under NI 51-101.

In general, undeveloped reserves are planned to be developed over the next nine years. There are a number of factors that could result in delayed or cancelled development, including the following: (i) changing economic conditions (due to pricing, operating and capital expenditure fluctuations); (ii) changing technical conditions (including production anomalies, such as water breakthrough or accelerated depletion); (iii) multi-zone developments (for instance, a prospective formation completion may be delayed until the initial completion is no longer economic); (iv) a larger development program may need to be spread out over several years to optimize capital allocation and facility utilization; and (v) surface access issues (including those relating to land owners, weather conditions and regulatory approvals). For more information, see "Statement of Reserves Data and Other Oil and Gas Information — Additional Information Relating to Reserves Data — Proved Undeveloped Reserves" and "Statement of Reserves Data and Other Oil and Gas Information — Additional Information Relating to Reserves Data — Probable Undeveloped Reserves" below and "Risk Factors" herein.

The following tables set forth the proved undeveloped reserves and the probable undeveloped reserves, each by product type, first attributed to us in each of the following financial years.

#### **Proved Undeveloped Reserves**

	and Mediu	rude Oil m Crude Oil bbl)	Natur	ntional al Gas Mcf)	NGLs (Mbbl)		
Year	First Attributed	Cumulative at Year End	First Attributed	Cumulative at Year End	First Attributed	Cumulative at Year End	
2020	2,461.8	6,862.9	78,715	1,522,632	1,537.6	15,974.5	
2021	229.2	7,079.8	53,299	1,471,397	272.4	15,859.9	
2022	1,654.8	9,310.4	75,483	1,482,033	1,784.1	16,575.1	

Sproule has assigned 272.9 MMboe of gross proved undeveloped reserves in the Sproule Report under forecast prices and costs, together with \$1.7 billion of associated undiscounted future capital expenditures. Proved undeveloped capital spending in the first two forecast years of the Sproule Report accounts for \$670.7 million, or 39%, of the total forecast. These figures increase to \$1,393.2 million or 81%, during the first five years of the Sproule Report. These figures increase to \$1,702.0 million or 99%, during the first seven years of the Sproule Report.

For proved undeveloped reserves, Sproule assigns reserves based on a 90% probability that the estimated reserves will be recovered. Advantage's expectation is to develop the reserves in a similar timeframe as forecasted by Sproule, which approximates drilling over the next seven years. As at December 31, 2022, proved undeveloped reserves represented approximately 65% of the Corporation's total proved reserves.

The Corporation has a large inventory of development opportunities in its portfolio and its capital spending activities are prioritized to optimize development plans, achieve strategic goals and maximize shareholder value. Advantage is focused on developing the proved undeveloped reserves in all properties. The vast majority (92%) of the proved undeveloped reserves are in its Glacier/Valhalla/Progress areas where available processing capacity exists, and future processing capacity expansions are forecast to take place. Scheduling of the proved undeveloped locations takes place over seven years which is greater than the 5-year period normally expected for resource plays. In the development forecast, Sproule has included capital costs and scheduling that accommodates throughput capacity expansion of the Corporations' Glacier Gas Plant from 400 MMcf/d of raw gas to 550 MMcf/d. The work required for the expansion takes place over the first two years of the forecast with the increased capacity to 550MMcf/d immediately available end of 2024. All proved undeveloped locations are developed within 5 years of the expanded Glacier Gas Plant start-up as per the COGE Handbook. The expansion of the Glacier Gas Plant is required to support development of the significant inventory of drilling locations targeting multiple layers across the Corporation's extensive Montney resource play that has been under development for the last 13 years with multi-stage hydraulically fractured horizontal wells. The reserves are serviced by significant gathering and gas processing infrastructure; egress infrastructure; long term transportation contracts; and ongoing long term emission reduction investments. The Glacier Gas Plant services production, via an integrated design with an expected multi decade life span, from Glacier, Valhalla, and Progress properties while the Wembley property production is serviced by third party processing plants with long term contracted processing capacity.

#### **Probable Undeveloped Reserves**

	and Mediu	rude Oil m Crude Oil bbl)	Natur	ntional al Gas Vicf)	NGLs (Mbbl)		
	First	<b>Cumulative at</b>	First	<b>Cumulative at</b>	First	<b>Cumulative at</b>	
Year	Attributed	Year End	Attributed	Year End	Attributed	Year End	
2020	3,554.0	5,457.5	111,184	614,313	2,184.2	6,483.1	
2021	3,764.9	8,861.1	133,085	660,254	2,064.0	8,603.5	
2022	406.1	6,246.2	28,228	711,292	761.0	8,518.2	

Sproule has assigned 133.3 MMboe of gross probable undeveloped reserves in the Sproule Report under forecast prices and costs, together with \$367.5 million of associated undiscounted future capital expenditures. Probable undeveloped capital spending in the first five forecast years of the Sproule Report accounts for \$28.3 million, or 8%, of the total forecast. These figures increase to \$350.0 million or 95%, during the first nine years of the Sproule Report.

For proved plus probable reserves, Sproule assigns reserves based on a 50% probability that at least the sum of the estimated proved reserves plus probable reserves will be recovered. Advantage's expectation is to develop the reserves in a similar timeframe as forecasted by Sproule, which approximates drilling over the next nine years. As at December 31, 2022, probable undeveloped reserves represented approximately 23% of the Corporation's total probable reserves.

The Corporation has a large inventory of development opportunities in its portfolio and its capital spending activities are prioritized to optimize development plans, achieve strategic goals and maximize shareholder value. Advantage is focused on developing the probable undeveloped reserves in all properties. The vast majority (89%) of the probable undeveloped reserves are in its Glacier/Valhalla/Progress areas where available processing capacity exists, and future processing capacity expansions are forecast to take place. Scheduling of the probable undeveloped locations takes place over nine years which is within the 10-year expectation for resource plays. In the development forecast, Sproule has included capital costs and scheduling that accommodates a throughput capacity expansion of the Corporation's Glacier Gas Plant from 400 MMcf/d of raw gas to 550 MMcf/d.

The work required for the expansion takes place over the first two years of the forecast with the increased capacity to 550MMcf/d immediately available in 2025. All probable undeveloped locations are developed within nine years. The expansion of the Glacier Gas Plant is required to support development of the significant inventory of drilling locations targeting multiple layers across the Corporation's extensive Montney resource play that has been under development for the last 14 years with multi-stage hydraulically fractured horizontal wells. The reserves are serviced by significant gathering and gas processing infrastructure; egress infrastructure; long term transportation contracts; and ongoing long term emission reduction investments. The Glacier Gas Plant services production, via an integrated design with an expected multi decade life span, from the Glacier, Valhalla, and Progress properties while the Wembley property production is serviced by third party processing plants with long term contracted processing capacity.

Approximately 20% of the proved undeveloped locations are forecast on production within the first two years of the forecast period. The remainder of the proved undeveloped locations are forecast to be on production within the five years following the start-up of the expanded Glacier Gas Plant. All the proved undeveloped locations are developed within a seven-year time frame. Approximately 2% of the probable undeveloped locations are forecast to be drilled within the first five years of the forecast period. The remainder of the probable undeveloped locations are forecast to be drilled over the following four years.

#### **Significant Factors or Uncertainties**

#### General

The process of estimating reserves is complex. It requires significant judgments and decisions based on available geological, geophysical, engineering, and economic data. These estimates may change substantially as additional data from ongoing development activities and production performance becomes available and as economic conditions impacting oil and gas prices and costs change. The reserve estimates contained herein are based on production forecasts, prices and economic conditions. The Corporation's reserves are evaluated by Sproule.

As circumstances change and additional data become available, reserve estimates also change. Estimates made are reviewed and revised, either upward or downward, as warranted by the new information. Revisions are often required due to changes in well performance, commodity prices, economic conditions and governmental restrictions.

Although every reasonable effort is made to ensure that reserve estimates are accurate, reserve estimation is an inferential science. As a result, the subjective decisions, new geological or production information and a changing environment may impact these estimates. Revisions to reserve estimates can arise from changes in year-end oil and gas prices, and reservoir performance. Such revisions can be either positive or negative.

#### **Abandonment and Reclamation Costs**

Abandonment and reclamation costs are based on management's estimate of costs to abandon, remediate and reclaim all of its surface leases, wells (including undrilled wells that have been attributed reserves), facilities, and pipelines based on its working interest, the current regulatory standards, actual abandonment cost history, estimated timing of such expenditures and excludes salvage values. These costs relate to wells and facilities in properties that may or may not have reserves attributed to them. Abandonment and reclamation costs include the Corporation's existing crude oil and natural gas activities and costs associated with future development activities including all development drilling, and dedicated gathering and processing facility expansions or builds, required to enable production of the forecast development in Sproule's report. All existing and future abandonment and reclamation costs are reflected in Sproule's estimate of future net revenue.

The approximate net cost to abandon and reclaim all wells and facilities, discounted at 10%, totals \$13.5 million (\$170.5 million undiscounted and inflated at 2.0% per annum), all of which are included in the estimate of future net revenue. Management has estimated the net cost to abandon and reclaim all existing wells and facilities totalling \$62.8 million undiscounted and uninflated, along with the cost to abandon and reclaim all future facilities and undrilled wells that have been attributed reserves, which has been reviewed by Sproule for reasonableness. Undiscounted, uninflated abandonment and reclamation costs expected to be paid over the next three years aggregate \$6.2 million, the expectation is that the majority of the remaining costs are expected to be incurred between 2046 and 2072.

#### **Future Development Costs**

The following table sets forth development costs deducted in the estimation of the Corporation's future net revenue attributable to the reserve categories noted below.

	Forecast Prices and Cost				
		Proved Plus Probable			
	Proved Reserves	Reserves			
Year	(\$ millions)	(\$ millions)			
2023	243.1	249.1			
2024	447.3	461.9			
2025	271.7	274.8			
2026	251.5	253.3			
2027	207.9	210.7			
Total: Undiscounted for all years	1,749.5	2,117.0			

To fund Advantage's capital program, including future development costs, the Corporation has many financing alternatives available, including partial retention of cash provided by operating activities, bank debt financing, issuance of additional Common Shares and other financial instruments. Advantage evaluates the appropriate financing alternatives closely and has made use of all these options dependent on the given investment situation and the capital markets. The Corporation maintains a capital structure that is intended to maximize the investment return to Shareholders as compared to the cost of financing. Advantage expects to continue using all financing alternatives available to continue pursuing its development strategy. The assorted financing instruments have certain inherent costs which are considered in the economic evaluation of pursuing any development opportunity.

There can be no guarantee that funds will be available or that we will allocate funding to develop all of the reserves attributed in the Sproule Report. Failure to develop those reserves would have a negative impact on future production and cash flow and could result in negative revisions to reserves. The interest or other costs of external funding are not included in the reserves and future net revenue estimates set forth above and would reduce the reserves and future net revenue to some degree depending upon the funding sources utilized. The Corporation does not anticipate that interest or other funding costs would make further development of any of the Corporation's assets uneconomic.

#### Other Oil and Gas Information

Advantage is a natural gas, crude oil and NGLs growth-oriented Corporation with a significant position in the Montney resource play at Glacier, Valhalla, Progress and Pipestone/Wembley, Alberta. The Corporation operates 100% of its Glacier assets, which allows the Corporation to control the nature and timing of the capital investments necessary to maximize the potential in developing this asset.

#### **Property Descriptions**

The following property descriptions are as of December 31, 2022 unless otherwise noted and reserves quoted are as reported in the Sproule Report.

### Glacier, Valhalla, Pipestone/Wembley, and Progress - Alberta

The Glacier, Valhalla, Pipestone/Wembley and Progress properties lie along the Alberta side of the border with British Columbia between Grande Prairie, Alberta and Dawson Creek, British Columbia. The primary zones of interest are within the Triassic Montney and Doig formation siltstones. All of the Corporation's properties are onshore properties. Advantage holds a total of 226 net sections (144,640 net acres) of Doig/Montney rights with 129 of those sections being in the Valhalla, Progress and Pipestone/Wembley areas that have potential for liquids-rich, multi-layer development and each area having at least 32 contiguous sections supporting scalable development. At Valhalla, Pipestone/Wembley and Progress ongoing industry drilling and production activity has demonstrated attractive liquid yields and gas rates. Drilling on and adjacent to our lands have targeted multiple Montney layers with results demonstrating liquids-rich gas accumulations in all layers to date. The remaining 100 net sections are held at Glacier where the total thickness of the Lower Doig/Montney is up to 300 metres which has been well delineated and can support multiple layers of development which contributes to the significant inventory of undrilled wells across all our properties. Since the spud of the first horizontal well in 2008 to the end of December 2022, Advantage has drilled and completed approximately 309 (294 net) horizontal wells on our properties.

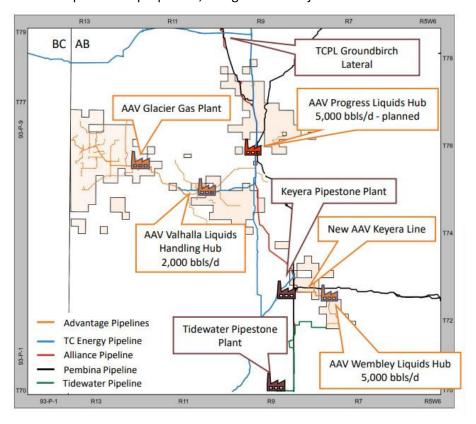
During 2022, Advantage continued its focus on natural gas development at Glacier and Valhalla, and liquids development at Pipestone/Wembley and Progress. Production at Advantage's Glacier gas property has continued to grow, surpassing a peak production level of 50,000 boe/d during the first half of 2022 after being the focus of our 2021 capital program. During the first half of 2022, well activity was limited to 5.0 gross (3.0 net) wells brought on production. Drilling resumed during the second half of 2022 with 12 wells rig released and 10 wells completed. All 10 of these wells were placed on production later in the fourth quarter with production climbing and surpassing 2022 levels in January 2023. Production is expected to continue to grow into the first half of 2023 when raw gas capacity of the Glacier Gas Plant will be expanded to 425 MMcf/d and wells drilled during the first quarter of 2023 are brought on production. Advantage drilled 4.0 gross (4.0 net) wells at Valhalla during 2022. Two wells were placed on production during the second quarter and two wells placed on production in the third quarter. At Wembley, development of this oil-weighted property was weighted to the first half of 2022 with an active program consisting of 3.0 gross (3.0 net) wells drilled, 6.0 gross (6.0 net) wells completed and 6.0 gross (6.0 net) wells placed on production. Drilling resumed in the third quarter with 3.0 gross (1.5 net) wells rig released, completed and placed on production later in the fourth quarter. One of the wells on the pad has targeted a new development layer that will be evaluated by Advantage for the first time in Wembley to further evaluate this multilayer oil-weighted property. Following up on the success of 2022, seven additional wells are scheduled to be drilled during the first half of 2023 and will utilize existing capacity in our 100% owned Wembley compressor site and liquids handling hub.

At Progress, construction of the first phase (inlet separation and compression) of our 100% owned Progress compressor site and liquids handling hub was completed early in the second quarter providing additional gas and liquids handling at Progress, generating processing income with a 5-year commitment from a third-party that will utilize excess capacity at this facility and the Glacier Gas Plant, while freeing up capacity at Valhalla. Construction of Phase 2, which will add water handling and disposal is taking place in the first quarter of 2023 and will accommodate additional production from two wells drilled during the fourth quarter. These wells will be placed on production during the second quarter of 2023 following the commissioning of the expanded site.

Advantage owns and operates the following major facilities:

- Glacier: 87.5% working interest gas plant with 400 MMcf/d raw gas and 6,800 bbls/d hydrocarbon liquid capacity
- Valhalla: 100% working interest liquid hub with 40 MMcf/d raw gas and 2,000 bbls/d hydrocarbon liquid capacity
- Wembley: 100% working interest liquid hub with 36 MMcf/d raw gas and 5,000 bbls/d hydrocarbon liquid capacity
- Progress: 100% working interest liquid hub (under construction) with 25 MMcf/d raw gas and 5,000 bbls/d hydrocarbon liquid capacity

The below map outlines the Corporation's properties, along with its major facilities:



Advantage's strategy of owning and operating the majority of our infrastructure has helped us achieve a low-cost structure and provides opportunities to diversify revenue streams for the Corporation. The operating cost structure of the Corporation is very favorable with operating costs averaging \$3.16/boe in 2022.

Gas is sold through Advantage's sales pipeline system into the NGTL system and the Alliance pipeline system.

#### Oil and Gas Wells

The following table sets forth the number and status of wells as at December 31, 2022 in which the Corporation has a working interest.

	Oil Wells				Natural Gas Wells			
	Produ	ucing	Non-Pro	ducing <sup>(3)</sup>	Producing		Non-Producing <sup>(3)</sup>	
	Gross <sup>(1)</sup>	Net <sup>(2)</sup>	Gross	Net	Gross <sup>(1)</sup>	Net <sup>(2)</sup>	Gross	Net
Alberta, Canada	17	15.5	2	1.4	280	269.8	54	48.3

<sup>(1) &</sup>quot;Gross" wells means the number of wells in which the Corporation has a working interest.

#### **Properties with no Attributed Reserves**

The following table sets out our unproved properties as at December 31, 2022.

	Gross Acres	Net Acres
Alberta, Canada	77,308	70,762

There are 16.94 sections (10,841 net acres) of our undeveloped land holdings that are scheduled to expire by December 31, 2023. However, the land expiries do not take into account the Corporation's 2023 exploitation and development program that should result 14.75 sections (9,440 net acres) being continued. This will be accomplished by validation of lands using banked earned sections or continuations based on prior drillings or new drills that will eliminate such potential expirations. We closely monitor land expiries and plan our development program with the strategy of minimizing expiries of undeveloped lands. Development of the Corporation's properties with no attributed reserves are subject to current industry conditions and uncertainties as indicated under "Industry Conditions" and "Risk Factors" herein.

<sup>&</sup>quot;Net" wells means the aggregate number of wells obtained by multiplying each gross well by the Corporation's percentage working interest therein.

<sup>3)</sup> Non-producing includes wellbores shut-in for economic reasons, wellbores not capable of production and wellbores used for disposal.

#### **Forward Contracts**

The Corporation's financial results and condition are impacted primarily by the prices received for natural gas, crude oil and NGLs production. Natural gas, crude oil and NGLs prices have fluctuated widely and are determined by supply and demand factors, including available access to pipelines and markets, weather, general economic conditions in natural gas consuming and producing regions throughout North America and political factors. Any upward or downward movement in crude oil, NGLs and natural gas prices could have an effect on our financial condition and capital development. Additionally, the Corporation is exposed to fluctuations in foreign exchange rates as a portion of the Corporation's revenues are earned in United States Dollars ("USD"). Finally, the Corporation's Credit Facilities are exposed to fluctuations in interest rates posted by the lenders thereunder, which impacts the amount of finance expense charged to the Corporation.

Advantage has an approved hedging policy that utilizes, amongst others, floors, puts, swaps, swaptions, calls, costless collars and fixed price swaps to hedge up to 75% of its gross crude oil, NGLs and natural gas production for a period of three years and 50% over the fourth and fifth years. In addition, Advantage is able to enter into basis swap arrangements to any natural gas price point in North America for up to 100,000 MMbtu/day with a maximum term of seven years. Basis swap arrangements do not count against the limitations on hedged production. The Corporation will limit the total corporate interest amounts hedged to no more than 50% of such interest, along with limiting the total corporate foreign exchange amounts hedged to no more than 50% of such foreign exchange, unless prior Board approval to exceed these limits is received.

These commodity, foreign exchange and interest rate risk management activities could expose the Corporation to losses or gains. To the extent that the Corporation engages in risk management activities related to commodity prices, foreign exchange and interest rates, it will be subject to credit risk associated with the parties with which it contracts. This credit risk will be mitigated by entering into contracts with only stable and creditworthy parties and through the frequent review of the Corporation's exposure to these entities. See "Risk Factors".

Advantage has the following commodity derivatives in place:

<b>Description of Derivative</b>	Term	Volume	Price
Natural gas – AECO 7A			
Fixed price swap	April 2023 to October 2023	18,956 Mcf/d	Cdn \$4.35/Mcf
Natural gas – Henry Hub NYN	MEX		
Fixed price swap	November 2022 to March 2023	105,000 Mcf/d	US \$4.98/Mcf
Fixed price swap	April 2023 to October 2023	25,000 Mcf/d	US \$3.35/Mcf
Natural gas - AECO/Henry Hu	ub Basis Differential		
Basis swap	April 2023 to December 2024	40,000 Mcf/d	Henry Hub less US \$1.19/Mcf
Basis swap	January 2023 to March 2023	5,000 Mcf/d	Henry Hub less US \$0.98/Mcf
Natural gas – Dawn			
Fixed price swap	April 2023 to October 2023	15,000 Mcf/d	US \$2.92/Mcf (1)

<sup>&</sup>lt;sup>(1)</sup> Contract entered into subsequent to December 31, 2022.

#### Tax Horizon

In 2022, Advantage did not pay any income related taxes and it is expected, based on current legislation that no cash income taxes are to be paid by Advantage prior to 2024. See "Risk Factors".

### **Capital Expenditures**

The following tables summarize capital expenditures (including capitalized general and administrative expenses) related to our activities for the year ended December 31, 2022:

	Year ended
(\$000s)	December 31, 2022
Property Acquisition Cost	-
Proved Properties	-
Unproved Properties	-
Exploration Cost	-
Development Cost <sup>(1)</sup>	237,094
Corporate Capital Expenditures	827
Entropy Capital Expenditures	2,849
Total	240,770

<sup>(1)</sup> Includes \$19.0 million of development cost related to the Corporation's Phase 1a CCS project.

#### **Exploration and Development Activities**

The following table sets forth the gross and net wells in which we participated during the year ended December 31, 2022:

	Develop	ment	Total			
	Gross	Net	Gross	Net		
Oil wells	8	6.5	8	6.5		
Gas wells	16	16.0	16	16.0		
Service wells	-	-	-	-		
Stratigraphic test wells	-	-	-	-		
Dry holes				-		
Total	24	22.5	24	22.5		

The Corporation did not participate in any exploratory wells during the year ended December 31, 2022.

Subject to, among other things, the availability of drilling rigs and weather that permits access to drill sites, in the first 6 months of 2023, we plan to drill 15.5 net wells and complete 17.0 net wells. See "Other Oil and Gas Information – Property Descriptions" for a description of the Corporation's exploration and development activities.

### **Production Estimates**

The following table sets out the volume of our production estimated for the year ended December 31, 2023 reflected in the estimate of future net revenue disclosed in the tables contained under "Disclosure of Reserves Data".

	Light Crude Oil and Medium Crude Oil (bbls/d)		and Medium Conventional Natural Crude Oil Gas		Natural Gas Liquids (bbls/d)		Total (Boe/d)	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Proved Developed Producing	1,361	1,036	265,726	241,889	3,167	2,421	48,816	43,772
Proved Developed Non-Producing	-	-	4,784	4,501	37	27	834	778
Proved Undeveloped	1,362	1,294	29,364	27,993	885	841	7,141	6,800
Total Proved	2,723	2,329	299,874	274,383	4,089	3,290	56,791	51,349
Total Probable	493	439	17,592	16,085	389	333	3,814	3,453
Total Proved Plus Probable	3,216	2,769	317,466	290,468	4,478	3,622	60,605	54,802

The following table indicates our production estimated from our important fields for the year ended December 31, 2023:

	Light Cr and M Crud (bbl	edium le Oil	Natur	ntional al Gas :f/d)	Natur Liqu (bbl	uids	To (Boo	
Alberta:	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Glacier Property	-	-	270,110	247,147	2,325	1,826	47,343	43,018
Valhalla Property	-	-	27,134	24,795	722	598	5,245	4,730
Pipestone/Wembley Property	2,997	2,579	16,466	15,068	1,313	1,097	7,055	6,187
Progress Property	219	190	3,756	3,458	118	102	963	868
Total Production	3,216	2,769	317,466	290,468	4,478	3,622	60,605	54,802

### **Production History**

The following tables summarize certain information in respect of production, prices received, royalties paid, operating expenses and resulting netback for the periods indicated below:

	Quarter Ended				Year Ended
	Mar. 31	Jun. 30	Sep. 30	Dec. 31	Dec. 31, 2022
Average Daily Production (1)					
Light Crude Oil and Medium Crude Oil (bbls/d)	2,055	3,986	3,217	2,946	3,054
NGLs (bbls/d)	2,854	3,392	3,230	2,680	3,039
Conventional Natural Gas (Mcf/d)	288,226	317,976	286,328	299,684	298,053
Combined (boe/d)	52,946	60,374	54,168	55,573	55,769
Average Prices Received (3)					
Light Crude Oil and Medium Crude Oil (\$/bbl)	113.30	135.23	105.90	102.24	115.78
NGLs (\$/bbl)	64.57	81.93	69.46	67.05	71.26
Conventional Natural Gas (\$/Mcf)	5.40	8.29	6.96	6.49	6.82
Combined (\$/boe)	37.26	57.21	47.23	43.66	46.69
Royalties Paid					
Light Crude Oil and Medium Crude Oil (\$/bbl)	17.90	21.36	14.59	20.83	18.86
NGLs (\$/bbl)	10.25	17.20	18.85	17.24	16.04
Conventional Natural Gas (\$/Mcf)	0.40	0.72	0.72	0.63	0.62
Combined (\$/boe)	3.42	6.17	5.80	5.31	5.22
Production Costs (4)(5)		<del>-</del>			
Light Crude Oil and Medium Crude Oil (\$/bbl)	2.79	2.75	3.72	3.39	3.17
NGLs (\$/bbl)	2.79	2.75	3.72	3.39	3.16
Conventional Natural Gas (\$/Mcf)	0.46	0.46	0.62	0.57	0.53
Combined (\$/boe)	2.79	2.75	3.72	3.39	3.16
Transportation Costs					
Light Crude Oil and Medium Crude Oil (\$/bbl)	3.69	3.45	4.80	3.84	3.94
NGLs (\$/bbl)	3.69	3.45	4.80	3.84	3.95
Conventional Natural Gas (\$/Mcf)	0.74	0.76	0.74	0.75	0.75
Combined (\$/boe)	4.36	4.44	4.48	4.43	4.43
Netback Received (2)(6)					
Light Crude Oil and Medium Crude Oil (\$/bbl)	88.92	107.67	82.79	74.18	89.81
NGLs (\$/bbl)	47.84	58.53	42.09	42.57	48.11
Conventional Natural Gas (\$/Mcf)	3.80	6.35	4.88	4.55	4.92
Combined (\$/boe)	26.69	43.85	33.23	30.53	33.88
	-				-

<sup>(1)</sup> Before deduction of royalties.

<sup>(2)</sup> Netbacks are calculated by subtracting royalties, production costs and transportation costs from revenues.

<sup>(3)</sup> Before gains (losses) on derivatives.

<sup>(4)</sup> This figure includes all field operating expenses.

The Corporation does not record operating expenses on a commodity basis. Information in respect of operating expenses for crude oil and NGLs (\$/bbl) and natural gas (\$/Mcf) has been determined by allocating expenses on a relative volume of crude oil, NGLs and natural gas production basis.

Information in respect of netbacks received for crude oil and NGLs (\$/bbl) and natural gas (\$/Mcf) is calculated using operating expense figures for crude oil and NGLs (\$/bbl) and natural gas (\$/Mcf), which figures have been estimated. See note (5) above.

## STATEMENT OF RESERVES DATA AND OTHER OIL AND GAS INFORMATION (CONTINUED)

The following table indicates our approximate average daily production from our important fields for the year ended December 31, 2022:

Alberta:	Light Oil and Medium Crude Oil (bbls/d)	Conventional Natural Gas (Mcf/d)	Natural Gas Liquids (bbls/d)	Total (Boe/d)	
Glacier Property	-	258,549	2,192	45,284	
Valhalla Property	-	26,002	857	5,190	
Pipestone/Wembley Property	1,863	11,990	1,051	4,913	
Progress	109	1,497	20	379	

#### Marketing

Our natural gas, oil and NGL production is primarily sold through marketing companies at current market prices. Risk management price hedging is done outside of our marketing contracts. Advantage has a portfolio of natural gas contracts with various terms and delivery locations. As at December 31, 2022, the Corporation has the following physical natural gas contracts in place for the purpose of diversifying a portion of its natural gas sales portfolio with additional production sold into the AECO market:

Physical Market			
Diversification	Term	Volume	Price
Dawn, Ontario	November 2017 to October 2027	52,706 Mcf/d	Dawn
Emerson, Manitoba	November 2022 to October 2032	26,823 Mcf/d	Emerson
Empress, Alberta	November 2021 to October 2025	49,002 Mcf/d	Empress
Empress, Alberta	November 2025 to October 2032	25,307 Mcf/d	Empress
Empress, Alberta	November 2032 to March 2046	52,133 Mcf/d	Empress
Chicago, Illinois	April 2020 to October 2024	15,000 Mcf/d	Chicago Citygate less US \$1.15/Mcf
Chicago, Illinois	November 2022 to March 2023	12,500 Mcf/d	Chicago Citygate less US \$1.02/Mcf
Ventura, Iowa	April 2020 to October 2024	15,000 Mcf/d	Ventura less US \$1.05/Mcf
PJM Power	April 2023 to May 2033	25,000 mcf/d	PJM Power Price

In 2020, Advantage agreed to a long-term gas supply agreement for the currently under construction CPV Three Rivers Energy Center in Grundy County, Illinois. Advantage will supply 25,000 MMbtu per day of natural gas for a 10-year period, commencing upon CPV Three Rivers reaching commercial operation which is expected to occur in 2023. Commercial terms of the agreement are based upon a spark-spread pricing formula, providing Advantage revenue diversification through exposure to PJM power prices, back-stopped with a natural gas price collar.

Additional physical natural gas is sold at AECO, where the Corporation enters contracts for one year or less. Oil and NGL contracts are typically renegotiated annually and run for one year.

## STATEMENT OF RESERVES DATA AND OTHER OIL AND GAS INFORMATION (CONTINUED)

#### Cyclical and Seasonal Impact of Industry

Our operational results and financial condition will be dependent on the prices received for oil, NGLs and natural gas production. Oil, NGLs and natural gas prices have fluctuated widely during recent years and are determined by supply and demand factors, including available access to transportation, weather, general economic conditions in consuming and producing regions throughout North America and political factors. Any decline in oil, NGL and natural gas prices could have an adverse effect on our financial condition. We mitigate such price risk through closely monitoring the various commodity markets, diversifying our sales portfolio and establishing hedging programs, as deemed necessary, to fix netbacks on production volumes. See "Statement of Reserves Data and Other Oil and Gas Information – Forward Contracts" for our current hedging program.

#### **Environmental Considerations**

Advantage is pro-active in its approach to environmental concerns. Procedures are in place to ensure that significant care is taken in the day-to-day management of its oil and gas properties. Government regulations and procedures are followed in strict adherence to the law. We believe in well abandonment and site restoration in a timely manner to ensure minimal damage to the environment and lower overall costs to us. Our Environmental Management System is continuously updated and meets or exceeds the Canadian Association of Petroleum Producers Environmental Management Guidelines.

#### Health, Safety and Environmental

Advantage is committed to a comprehensive and effective health, safety and environmental program that meets or exceeds regulatory and corporate requirements.

The Reserves and Health, Safety, Environmental Committee (the "Reserves Committee") is responsible for developing the Corporation's approach to, among others, matters concerning health, safety and the environment, and, from time-to-time, to review and make recommendations to the Board as to such matters. With respect to health, safety and environmental matters, the Reserves Committee reviews the Corporation's policies, programs and internal control systems regarding health, workforce safety, asset integrity, process safety and environmental protection and monitors the Corporation's performance relative to internal improvement objectives and industry practices. Further, the Reserves Committee reviews the Corporation's policies, programs and internal control systems with respect to field operations and monitors the Corporation's field operating capabilities, field operating practices and process safety practices.

## STATEMENT OF RESERVES DATA AND OTHER OIL AND GAS INFORMATION (CONTINUED)

The Reserves Committee also reviews and reports to the Board:

- on the Corporation's performance in the areas of health, workforce safety, process safety, environmental protection, field operations and compliance with codes, standards, regulations and applicable laws;
- on emerging trends, issues and regulations related to health, workforce safety, process safety, environmental protection and field operations;
- the findings of any significant report by regulatory agencies, external health, safety and environmental
  consultants or auditors concerning the Corporation's performance in health, safety and environment and any
  necessary corrective measures taken to address issues and risks with regards to the Corporation's performance
  in the areas of health, safety and environment that have been identified by the Corporation, external auditors
  or by regulatory agencies;
- the results of any review with management, outside accountants and legal advisors of the implications of major corporate undertakings such as the acquisition or expansion of facilities or decommission of facilities;
- a framework for management's decisions on abandonment and reclamation, including appropriate asset retirement obligation determination; and
- policies and other directives of the Corporation relating to security and the safeguarding of the Corporation's premises, installations, assets and personnel.

Advantage participates in the Certificate of Recognition ("COR") Safety Program and has received certification for the last nine years, achieving first-quartile results in each year. The COR Health and Safety Auditing and the COR Safety Program require commitment to continuous improvement in environment, health and safety management practices, including sound planning and implementation. The program is externally audited every three years and internally audited every other year. The program ensures open communication and measured performance to maintain such program.

Management, employees and all contractors are responsible and accountable for the overall health, safety and environmental program. Advantage operates in compliance with all applicable regulations and ensures all staff and contractors employ sound practices to protect the environment and to ensure employee and public health and safety.

In 2022, the Corporation participated in multiple enhanced production audits, all of which it passed. Advantage's incident ratings in 2021 were significantly below industry averages. In addition, a total of 6 reclamation certificates were received by Advantage in 2022. Over the last eight years, Advantage's spill volumes were negligible.

The Corporation maintains and will continue to maintain a safe and environmentally responsible workplace, and will continue to provide training, equipment and procedures to all individuals in adhering to our policies. The Corporation will also solicit and take into consideration input from our neighbours, communities and other stakeholders in regard to protecting people and the environment.

#### **Competitive Conditions**

There is considerable competition in the worldwide oil and natural gas industry, including the Province of Alberta where the Corporation's assets, activities, and employees are located. We are a member of the petroleum industry, which is highly competitive at all levels. We compete with other companies for all of our business inputs, including exploitation and development prospects, access to commodity markets, acquisition opportunities, available capital and staffing. We strive to be competitive by maintaining a strong financial condition and by utilizing current technologies to enhance exploitation, development and operational activities. See "*Risk Factors*".

### **DIRECTORS AND OFFICERS**

The following table sets forth the name, place of residence, date first elected as a director of Advantage and positions for each of the directors and officers of Advantage as at the date hereof, together with their principal occupations during the last five years.

Name, Province and Country of Residence	Position Held and Period Served as a Director or Officer <sup>(5)(6)</sup>	Principal Occupations During Past Five Years	
Michael Belenkie Alberta, Canada  Director Since January 1, 2022, President since November, 2019 and Chief Executive Officer since January 1, 2022		Mr. Belenkie joined Advantage in October 2018 as Chief Operating Officer and was promoted to President and Chief Operating Officer in November 2019 and then to President and Chief Executive Officer in January 2022. From 2012 to 2018, Mr. Belenkie was founder and Vice President of Engineering of Modern Resources Inc., a successful private oil and gas company in Alberta's Deep Basin. Between 2008 and 2011, Mr. Belenkie held various roles at Painted Pony Energy Ltd., including Vice President of Reservoir Engineering and Corporate Development. Prior thereto, he held various roles at Talisman Energy (1995 to 2008) within their North American assets, including Team Lead of Montney and northeastern British Columbia. During 2006 and 2007, Mr. Belenkie also developed and implemented strategic realignment and operational excellence strategies with leadership teams in two major producers in Alaska and Canada while working with the management consulting firm, RLG International, during his tenure at Talisman. Received his BSc. in Mechanical Engineering from University of Calgary in 1997 and is a registered professional engineer with the Association of Professional Engineers and Geoscientists of Alberta.	
Stephen E. Balog <sup>(3)(4)</sup> Alberta, Canada	Director since August 16, 2007, Chairman since May 5, 2022	President of West Butte Management Inc., a private consulting company that provides business and technical advisory services to oil and gas operators. Formerly Principal of Alconsult International Ltd. and prior thereto, President & Chief Operating Officer and a Director of Tasman Exploration Ltd. from 2001 to 2007. Mr. Balog has extensive oil and gas industry experience in the management and operation of senior and junior production companies, including Wascana Energy Inc., Alberta Energy Company, and Murphy Oil. Mr. Balog was a key contributor to the development and use of the Canadian Oil & Gas Evaluation Handbook as an industry standard for reserves evaluation, and has previously served on the Petroleum Advisory Committee, Alberta Securities Commission. He	

holds a B.Sc. in Chemical Engineering from the University of Calgary.

# Name, Province and Country of Residence

## Position Held and Period Served as a Director or Officer<sup>(5)(6)</sup>

#### **Principal Occupations During Past Five Years**

Andy J. Mah<sup>(3)</sup> Alberta, Canada

Director since June 23, 2006

Mr. Mah is a corporate director with over 40 years of experience in the oil and gas industry. Mr. Mah was the Chief Executive Officer of Advantage from January 27, 2009 to December 31, 2021. Mr. Mah remains active with larger energy industry initiatives and advocacy and serves as a director of other issuers. Mr. Mah's significant executive level experience includes all facets of the Canadian upstream oil and gas industry including U.S. and international assignments. Mr. Mah has transformed Corporations, led large successful capital investment programs including acquisitions & divestitures, fund raising and advanced innovation in all facets of the industry with large multinational and junior oil and gas companies. In addition to Advantage, his career included leadership at Ketch Resources Trust, Unocal Corporation, Northrock Resources Ltd., and BP Canada.

Mr. Mah is a graduate of the University of Saskatchewan, B. Sc. Chemistry in 1980 and B. Sc. Chemical Engineering in 1982. He is a member of APEGA and has served on the Board of Governors of the Canadian Association of Petroleum Producers (CAPP) and numerous volunteer associations including being a representative on the Canada Olympic Committee.

Paul G. Haggis<sup>(1)(2)(3)(4)</sup> Alberta, Canada Director since November 7, 2008 Paul Haggis is a corporate Director with extensive financial and operating experience. He is currently risk committee chair of Home Capital, Director of Alberta Teachers Retirement Fund, Director of Sunshine Village Corporation, and advisor and investor to the Balfour Pacific PE Fund. Past directorships include The Bank of Canada, Governance Chair of PIRET Income Trust, Investment Chair of Insurance Corporation of British Columbia, UBC Investment Management Trust, Canadian Tire Bank, Pargesa Corp Brussels, HR Chair of the Public Sector Pension Investment Board and interim CEO, and Chairman of the Canadian Pacific Railway. Past management experience includes EVP risk and strategy at Manulife Financial, Chief Operating Officer of MetLife Canadian operations, CEO of ATB Financial (formerly, Alberta Treasury Branches) and CEO of Ontario Municipal Retirement System (OMERS), and Chairman and interim CEO of CABancorp Inc.. He is a graduate of Western University, the Directors College of McMaster University and was commissioned in the Canadian Armed Forces.

## Name, Province and Country of Residence

## Position Held and Period Served as a Director or Officer<sup>(5)(6)</sup>

#### **Principal Occupations During Past Five Years**

## Jill T. Angevine<sup>(1)(2)(4)</sup> Alberta, Canada

Director since May 27, 2015

President of Brownstone Asset Management since August 2021. Prior thereto Managing Director, Palisade Capital Management Ltd. and prior thereto Vice President and Portfolio Manager, Matco Financial Inc. Director of Tourmaline Oil Corp. Since November 2015. Director of Grey Wolf Animal Health Corp. since November 2022. Director of Ero Copper Corp. since August 2022. Director of Chinook Energy Inc. from November 2014 to April 2020.

## Donald M. Clague<sup>(1)(2)(3)(4)</sup> Alberta, Canada

Director since June 16, 2020

Mr. Clague is a corporate director and has had an extensive 35 year working career in oil and gas, including diverse experience in North American domestic and frontier areas, as well as internationally in North Africa, Norway and the United Kingdom.

His experience includes a broad range of technical and leadership roles with Dome Petroleum, Amoco Canada, Alberta Energy, Amerada Hess Canada, Hardy Oil and Gas Canada, Petro-Canada and Suncor Energy. In 2002, he became VP, Production (North American Natural Gas) at Petro-Canada, responsible for the safe, efficient operations in all field locations across Alberta and BC, including all engineering functions supporting those areas. He spent 3 years in Denver as President, Petro-Canada Resources (USA) focused on tight oil and coalbed methane assets. Upon returning to Canada, he became VP, In Situ Development and Operations, and after the merger with Suncor was appointed VP, Firebag Operations. In 2012, Mr. Clague became the Senior VP, In Situ Business Unit. He moved to the role of Senior VP, Oil Sands Technical and Upstream Services in 2015. In 2018, he retired as the Senior VP, Exploration and Production Business Unit, with personnel in Calgary, St. John's, Aberdeen, Tripoli, and Stavanger.

Mr. Clague graduated from the University of Calgary in 1983 with a BSc. in Geophysics. He remains active at the university, sitting on the Dean of Engineering's Schulich Industry Advisory Council. He is a registered Professional Geophysicist with APEGA, obtained the Institute of Corporate Directors ICD.D designation in 2022, and has served on executive policy groups with the Canadian Association of Petroleum Producers (CAPP) and the Colorado Oil and Gas Association (COGA).

Name, Province
and Country of
Residence

## Position Held and Period Served as a Director or Officer<sup>(5)(6)</sup>

#### **Principal Occupations During Past Five Years**

## Deirdre M. Choate<sup>(1)(2)(4)</sup> Alberta , Canada

Director since May 6, 2021

Ms. Choate is a corporate director with over 30 years of experience and knowledge on international tax, treasury, insurance, governance and risk management. From 2007 to March 2021, Ms. Choate was General Manager, VP Tax, and subsequently VP Tax & Treasurer at Husky Energy Inc. Prior thereto, Ms. Choate was an Associate Partner in International Tax Services at PricewaterhouseCoopers LLP. Ms. Choate is a Chartered Professional Accountant in Alberta and Fellow Chartered Accountant in Ireland and obtained the Institute of Corporate Directors ICD.D designation in 2020. Ms. Choate holds a Bachelor of Civil Law degree from the University College Dublin.

### Norman W. MacDonald<sup>(1)(3)</sup> Ontario, Canada

Director since May 6, 2021

Mr. MacDonald is Partner, Natural Resources at Fort Capital since April 2021. Prior to this, Mr. MacDonald was a Senior Portfolio Manager at Invesco from 2008 to 2020. Mr. MacDonald began his investment career at Ontario Teachers Pension Plan Board, where he worked for three years in progressive roles from Research Assistant to Portfolio Manager. His next role was as a VP and Partner at Beutel, Goodman & Co. Ltd. Prior to joining Invesco, Mr. Macdonald was a VP and Portfolio Manager at Salida Capital. Mr. MacDonald earned a Bachelor of Commerce Degree from the University of Windsor and is a CFA Charter holder.

## Janine J. McArdle<sup>(1)(4)</sup> Texas, United States

Director since October 14, 2022 Janine J. McArdle has been an executive in the oil and gas industry for over 30 years with extensive experience in engineering, marketing, business development, finance and risk management. Ms. McArdle is founder and CEO of Apex Strategies LLC, which is a global consultancy company providing advisory services to companies engaged in the midstream and downstream sectors of the energy industry. Prior to forming her own company in 2016, Ms. McArdle was an executive officer at Apache Corporation from 2002 to 2015, serving in senior leadership positions across LNG and Global Oil and Gas Marketing. Prior to Apache, Ms. McArdle served as President and Managing Director for Aquila Europe Ltd. from 2001 to 2002 and held executive and management positions with Aquila Energy Marketing from 1993 to 2001. Ms. McArdle was a partner in Hesse Gas from 1991 to 1993. Ms. McArdle currently serves as a Director on the Board of Directors of Santos Ltd. and Antero Midstream, and previously served as a Director on the Boards of Halcon Resources and the Intercontinental Exchange until 2019. Ms. McArdle holds a Bachelor of Science degree in Chemical Engineering from the University of Nebraska and a Master of Business Administration from the University of Houston.

Name, Province and Country of Residence	Position Held and Period Served as a Director or Officer <sup>(5)(6)</sup>	Principal Occupations During Past Five Years
Craig Blackwood Alberta, Canada	Chief Financial Officer since August 1, 2013	Chief Financial Officer of Advantage since August 1, 2013. Vice President, Finance of Advantage from January 27, 2009 to August 1, 2019. Chief Financial Officer of Longview Oil Corp. from March 4, 2010 to February 4, 2014. Mr. Blackwood is a Chartered Professional Accountant and was the Director of Finance of Advantage from November 2004 to January 27, 2009.
Neil Bokenfohr Alberta, Canada	Senior Vice President, since March 27, 2014	Senior Vice President of Advantage since March 27, 2014. Vice-President, Exploitation of Advantage from June 23, 2006 to March 27, 2014. Vice-President, Exploitation of Longview Oil Corp. from May 13, 2011 to November 7, 2013. Prior thereto, Vice President Exploitation and Operations of Ketch Resources Ltd. from January 2005 to June 2006; Vice President, Engineering of Bear Creek Energy Ltd. (and Crossfield Gas Corp. prior thereto) from March 2002 to January 2005. Prior thereto, Director of Exploitation for Calpine Canada Natural Gas Company from December 2000 to March 2002.
David Sterna Alberta, Canada	Vice President, Marketing and Commercial, since April 15, 2018	Vice President, Marketing and Commercial of Advantage since April 15, 2018. Director, Strategy & Commercial at Progress Energy, a wholly owned subsidiary of Petroliam Nasional Berhad (PETRONAS), from May 2015 to April 2018. Vice President, Commodities & Transportation at PennWest Exploration Ltd. between 2008 and 2014, Vice President, Corporate Planning & Marketing at Canetic Resources Inc. between 2004 and 2008 and Director of Marketing at Calpine Canada between 2001 and 2004. Mr. Sterna has a Bachelor of Arts, Economics from the University of Manitoba and a Diploma of Arts in Business Administration from the Southern Alberta Institute of Technology.
John Quaife Alberta, Canada	Vice President, Finance, since August 1, 2019	Vice President, Finance of Advantage since August 1, 2019. Mr. Quaife is a Chartered Professional Accountant and joined Advantage in 2008 as Manager of Taxation, progressing through positions of increasing responsibility from Manager of Finance and Taxation, Controller and was Director of Finance of Advantage from April 2017 to August 1, 2019.

Name, Province and Country of Residence	Position Held and Period Served as a Director or Officer <sup>(5)(6)</sup>	Principal Occupations During Past Five Years		
Darren Tisdale Alberta, Canada Vice President, Geosciences, since January 1, 2022		Vice President, Geosciences of Advantage since January 1, 2022. Mr. Tisdale joined Advantage in August 2019 as Chief Geologist prior to being promoted to Vice President, Geosciences. Prior to this he was a founding member and Vice President Geosciences of Modern Resources, a Deep Basin producer. Mr. Tisdale has over 20 years of experience as a geologist including an extensive knowledge of the Montney. Mr. Tisdale led the initial development of Painted Pony's Montney Assets in NEBC leading to the corporate shift to a Montney focused company. Earlier experiences included a range of unconventional resource exploration and development and international base metal exploration. He received his BSc. in Geology from the University of Saskatchewan and is a registered professional Geologist with APEGA.		
Geoff Keyser Alberta, Canada	Vice President, Corporate Development, since January 1, 2022	Vice President, Corporate Development of Advantage since January 1, 2022. Mr. Keyser joined Advantage in November 2020 as Director of Corporate Development prior to being promoted to Vice President, Corporate Development. Prior to this he was Vice President Engineering at Modern Resources. Prior to this, he has held business development, reservoir, exploitation, completions and facility engineering roles at Painted Pony Energy, Cenovus, and EnCana. He is graduate of Mechanical Engineering from Queen's University and a licensed member of APEGA.		
Jay P. Reid Alberta, Canada	Corporate Secretary, since April, 2001	Mr. Reid is a partner at the Calgary based law firm of Burnet, Duckworth & Palmer LLP and has practiced corporate and securities law since 1990. Mr. Reid has served, and continues to serve, as a director or Corporate Secretary of a number of private and publicly listed issuers.		

#### Notes:

- (1) Member of the Audit Committee.
- (2) Member of the Compensation Committee.
- (3) Member of the Reserves and Health, Safety and Environment Committee.
- (4) Member of the Governance & Sustainability Committee.
- (5) Advantage does not have an executive committee of the Board.
- (6) Advantage's directors shall hold office until the next annual general meeting of Shareholders or until each director's successor is appointed or elected pursuant to the ABCA.

As at February 23, 2023, the directors and executive officers of Advantage, as a group, beneficially owned, directly or indirectly, or exercised control or direction over 4,717,800 Common Shares, or approximately 2.8% of the issued and outstanding Common Shares.

#### **Cease Trade Orders, Bankruptcies, Penalties or Sanctions**

Other than as set forth below:

- (a) no director or executive officer of Advantage has, within the last ten years prior to the date of this annual information form, been a director, chief executive officer or chief financial officer of any issuer (including Advantage) that, (i) while the person was acting in the capacity as director, chief executive officer or chief financial officer, was the subject of a cease trade or similar order or an order that denied the company access to any exemption under securities legislation, that was in effect for a period of more than thirty (30) consecutive days; or (ii) was subject to an order that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer of an issuer, in the issuer being the subject of a cease trade or similar order or an order that denied the relevant issuer access to any exemption under securities legislation, for a period of more than thirty (30) consecutive days, which resulted from an event that occurred while that person was acting as a director, chief executive officer or chief financial officer of the issuer;
- (b) no director or executive officer of Advantage or security holder holding a sufficient number of securities of Advantage to affect materially the control of Advantage is, as at the date of this annual information form, or has, within the last ten years prior to the date of this annual information form, been a director or executive officer of any company (including Advantage) that, while such person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement for compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets;
- (c) no director or executive officer of Advantage or securityholder holding a sufficient number of securities of Advantage to affect materially the control of Advantage has, within the last ten years prior to the date of this document, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, officer or securityholder; and
- (d) no director or executive officer of Advantage or securityholder holding a sufficient number of securities of Advantage to affect materially the control of Advantage has been subject to: (i) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or (ii) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

Janine McArdle was a director of Halcon Resources Corporation ("Halcon") from June 2018 until October 2019. On July 22, 2019, Halcon was notified by the New York Stock Exchange ("NYSE") that due to "abnormally low" trading price levels, pursuant to Section 802.01D of the NYSE Listed Company Manual, the NYSE determined to commence delisting proceedings to delist Halcon's common stock under the symbol "HK" and warrants exercisable for Halcon's common stock. Trading in Halcon's securities was suspended on July 22, 2019. On July 23, 2019, Halcon's common stock commenced trading on the OTC Pink marketplace under the symbols "HKRS" and "HKRSQ." On August 7, 2019, Halcon and its subsidiaries filed voluntary petitions for relief under chapter 11 of the United States Bankruptcy Code in the U.S. Bankruptcy Court for the Southern District of Texas (the "Bankruptcy Court") to pursue a prepackaged plan of reorganization (the "Plan"). Halcon's chapter 11 proceedings were administered under the caption In re Halcon Resources Corporation, et al. (Case No. 19-34446). On September 24, 2019, the Bankruptcy Court entered an order confirming the Plan and on October 8, 2019, the Plan became effective and Battalion Oil Corporation ("Battalion"), successor to Halcon, emerged from chapter 11 bankruptcy. On October 8, 2019, upon emergence from chapter 11 bankruptcy, all of the existing members of the Halcon board of directors resigned and all existing shares of Halcon common stock were cancelled and Battalion issued shares of new common stock which traded on the OTC Pink marketplace under the symbol "HALC" until it subsequently listed on the NYSE American under the symbol "BATL".

#### **Conflicts of Interest**

The directors and officers of Advantage may, from time-to-time, be involved in the business and operations of other issuers, in which case a conflict may arise. The ABCA provides that in the event a director has an interest in a contract or proposed contract or agreement, the director shall disclose his interest in such contract or agreement and shall refrain from voting on any matter in respect of such contract or agreement unless otherwise provided under the ABCA. To the extent that conflicts of interests arise, such conflicts will be resolved in accordance with the provisions of the ABCA.

As at February 23, 2023, other than as disclosed herein, the Corporation was not aware of any existing or potential material conflicts of interest between the Corporation and a director or officer of the Corporation.

#### **DIVIDEND POLICY**

Neither the Corporation nor any of its subsidiaries paid any dividends during the years ended December 31, 2022, 2021, and 2020, does not anticipate paying dividends in the immediate future and will instead direct cash flow to capital expenditures, share buybacks and debt reduction. The amount of future cash dividends, if any, is not assured and will be subject to the discretion of the Board of Directors and the board of directors of Advantage's subsidiaries, as applicable, and may vary depending on a variety of factors, including fluctuations in commodity prices, production levels, capital expenditure requirements, debt service requirements, operating costs, royalty burdens, foreign exchange rates, contractual restrictions (including under the Credit Facilities), financing agreement covenants, solvency tests imposed by corporate law and other factors that the Board of Directors and the board of directors of Advantage's subsidiaries, as applicable, may deem relevant. See "Risk Factors".

#### **DESCRIPTION OF THE CORPORATION'S SECURITIES**

#### **Share Capital**

The Corporation is authorized to issue an unlimited number of Common Shares, non-voting shares, preferred shares and exchangeable shares. As of December 31, 2022, there were 171,652,768 Common Shares issued and outstanding and there were no non-voting shares, preferred shares or exchangeable shares issued and outstanding.

The following is a description of the rights attaching to the Common Shares, non-voting shares and the preferred shares.

#### **Common Shares**

Each Common Share entitles its holder to receive notice of and to attend all meetings of the shareholders of Advantage and to one vote at such meetings. The holders of Common Shares are, at the discretion of the Advantage Board of Directors and subject to applicable legal restrictions, entitled to receive any dividends declared by the Board of Directors on the Common Shares. The holders of Common Shares are entitled to share equally in any distribution of the assets of Advantage upon the liquidation, dissolution, bankruptcy or winding-up of Advantage or other distribution of its assets among its shareholders for the purpose of winding-up its affairs. Such participation is subject to the rights, privileges, restrictions and conditions attaching to any instruments having priority over the Common Shares.

#### Non-Voting Shares

The non-voting shares have identical rights to the Common Shares except that holders of non-voting shares are not generally entitled to receive notice of or attend at meetings of shareholders of Advantage or to vote their shares at such meetings.

## **DESCRIPTION OF THE CORPORATION'S SECURITIES (CONTINUED)**

#### **Preferred Shares**

The preferred shares may be issued, from time-to-time, in one or more series, each series consisting of such number of preferred shares as determined by the Board of Directors, who may also fix the designations, rights, privileges, restrictions and conditions attached to the shares of each series of preferred shares. The preferred shares of each series shall, with respect to payment of dividends and distributions of assets in the event of liquidation, dissolution or winding-up of Advantage, whether voluntary or involuntary, or any other distribution of the assets of Advantage among its shareholders for the purpose of winding-up its affairs, rank on a parity with the preferred shares of every other series and shall be entitled to preference over the Common Shares and the shares of any other class ranking junior to the preferred shares.

#### PRICE RANGE AND TRADING VOLUME OF SECURITIES

#### **Common Shares**

The Common Shares are listed and trade on the TSX and commenced trading under the symbol "AAV" on July 9, 2009. The following table sets forth the trading history of the Common Shares for the periods indicated.

Period	od High		Volume
	(\$)	(\$)	_
<u>2022</u>			
January	7.94	6.29	15,686,200
February	7.42	5.98	24,077,500
March	9.04	6.54	24,595,200
April	11.34	8.68	27,772,300
May	11.75	9.51	17,376,900
June	12.00	7.54	22,843,000
July	11.12	7.27	18,300,100
August	12.18	10.25	18,274,700
September	11.52	9.24	17,248,700
October	10.97	9.45	11,342,600
November	12.19	10.33	19,200,500
December	11.92	9.10	22,586,300
2023			
January	9.35	7.92	24,253,500
February (1 to 22)	8.69	7.79	14,276,500

#### **Prior Sales**

During the year ended December 31, 2022, the Corporation granted 716,668 performance share units pursuant to the Corporation's restricted and performance award incentive plan.

## ESCROWED SECURITIES AND SECURITIES SUBJECT TO CONTRACTUAL RESTRICTIONS ON TRANSFER

There are presently no Advantage securities held in escrow or subject to contractual restrictions on transfer.

#### **LEGAL PROCEEDINGS**

There are no outstanding legal proceedings and Advantage and its subsidiaries were not involved in any legal proceedings during the year ended December 31, 2022, which involved claims in excess of 10% of the Corporation's current asset value and to which Advantage or its subsidiaries were a party or in respect of which any of its properties are subject, nor are there any such proceedings known to be contemplated.

#### **REGULATORY ACTIONS**

During the year ended December 31, 2022 there were: (i) no penalties or sanctions imposed against Advantage or its subsidiaries by a court relating to securities legislation or by a securities regulatory authority; (ii) no other penalties or sanctions imposed by a court or regulatory body against Advantage or its subsidiaries that would likely be considered important to a reasonable investor in making an investment decision; and (iii) no settlement agreements Advantage or its subsidiaries entered into before a court relating to securities legislation or with a securities regulatory authority.

#### INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

There were no material interests, direct or indirect, of directors and executive officers of Advantage or its subsidiaries or nominees for director of Advantage or its subsidiaries, any Shareholder who beneficially owns or directs or controls more than 10% of the Common Shares or any known associate or affiliate of such persons in any transaction during the year ended December 31, 2022 or in any proposed transaction which has materially affected or would materially affect Advantage or its subsidiaries.

#### MATERIAL CONTRACTS

Except for contracts entered into by the Corporation in the ordinary course of business or otherwise disclosed herein, the only agreement which is material to Advantage or its subsidiaries is the Credit Facilities, a copy of which is available on SEDAR at www.sedar.com. See "General Development of the Business – Three Year History – 2020 – Credit Facilities".

#### **INTEREST OF EXPERTS**

There is no person or company whose profession or business gives authority to a statement made by such person or company and who is named as having prepared or certified a statement, report or valuation described or included in a filing, or referred to in a filing, made under National Instrument 51-102 - Continuous Disclosure Obligations by Advantage during, or related to, the most recently completed financial year other than Sproule, our independent engineering evaluator and PricewaterhouseCoopers LLP, our current external auditors. As at the date hereof, none of the principals of Sproule had any registered or beneficial interests, direct or indirect, in any securities or other property of Advantage or of its associates or affiliates either at the time they prepared the statement, report or valuation prepared by it, at any time thereafter or to be received by them. The Corporation's independent auditors are PricewaterhouseCoopers LLP, Chartered Professional Accountants, who have issued an independent auditor's report dated February 23, 2023 in respect of the Corporation's consolidated financial statements as at December 31, 2022 and 2021 and for the years then ended. PricewaterhouseCoopers LLP has advised that they are independent with respect to the Corporation within the meaning of the Rules of Professional Conduct with Guidance of the Chartered Professional Accountants of Alberta.

In addition, none of the aforementioned persons or companies, nor any director, officer or employee of any of the aforementioned persons or companies, is or is expected to be elected, appointed or employed as a director, officer or employee of Advantage or of any associate or affiliate of Advantage.

#### **AUDITORS, TRANSFER AGENT AND REGISTRAR**

Advantage's auditors are PricewaterhouseCoopers LLP, Calgary, Alberta.

Computershare Trust Company of Canada at its offices in Calgary, Alberta and Toronto, Ontario acts as the transfer agent and registrar for the Common Shares.

#### **AUDIT COMMITTEE INFORMATION**

NI 52-110 has mandated certain disclosures for inclusion in this annual information form. The text of the charter of the Corporation's audit committee (the "Audit Committee") is attached as Appendix "C" to this annual information form.

#### **Composition of the Audit Committee**

The Audit Committee is comprised of Paul Haggis (Chair), Jill Angevine, Donald Clague, Deirdre Choate, Norman MacDonald and Janine McArdle. The following chart sets out the assessment of each Audit Committee member's independence, financial literacy and relevant educational background and experience supporting such financial literacy

Name, Province and Country of Residence	Independent	Financially Literate	Relevant Education and Experience
Paul G. Haggis Alberta, Canada	Yes	Yes	Mr. Haggis is a corporate director. Currently, Mr. Haggis is a director and Audit Chair of Home Capital Group Inc., a director of the Bank of Canada and was appointed director of the Alberta Teachers Retirement Funds in September 2019. Mr. Haggis has extensive financial markets and public board experience having served as Chairman of Alberta Enterprise Corp. from March 2009 until September 2019, director of Canadian Tire Bank, director and Chair of the Investment Committee of the Insurance Corporation of British Columbia, Chair of the Audit Committee of C.A. Bancorp and Prime Restaurants Inc., Chair of Canadian Pacific Railway, and director of UBC Investment Management Inc. He was Chief Operating Officer of Metlife Canadian operations, Chief Executive Officer of ATB Financial, Chief Executive Officer of Ontario Municipal Employees Retirement System (OMERS), and director and Interim Chief Executive Officer of the Public Sector Pension Investment Board (PSPIB). Mr. Haggis is a graduate of the University of Western Ontario and is certified as a Chartered Director through the Directors College at McMaster University. He was a Commissioned Officer in the Royal Canadian Air Force Reserve.
Jill T. Angevine Alberta, Canada	Yes	Yes	President of Brownstone Asset Management since August 2021. Prior thereto Managing Director, Palisade Capital Management Ltd. and prior thereto Vice President and Portfolio Manager, Matco Financial Inc. Director of Tourmaline Oil Corp. Since November 2015. Director of Grey Wolf Animal Health Corp. since November 2022. Director of Ero Copper Corp. since August 2022. Director of Chinook Energy Inc. from November 2014 to April 2020.

## **AUDIT COMMITTEE INFORMATION (CONTINUED)**

Name, Province and Country of Residence	Independent	Financially Literate	Relevant Education and Experience
Donald M. Clague Alberta, Canada	Yes	Yes	Mr. Clague is a corporate director and has an extensive 35 year working career in oil and gas, including diverse experience in North American domestic and frontier areas, as well as internationally in North Africa, Norway and the United Kingdom. His experience includes a broad range of technical and leadership roles with Dome Petroleum, Amoco Canada, Alberta Energy, Amerada Hess Canada Hardy Oil and Gas Canada, Petro-Canada and Suncor Energy. In 2002, he became VP, Production (North American Natural Gas) and Petro-Canada, responsible for the safe, efficient operations in a field locations across Alberta and BC, including all engineering functions supporting those areas. He spent 3 years in Denver and President, Petro-Canada Resources (USA) focused on tight oil and coalbed methane assets. Upon returning to Canada, he became VP In Situ Development and Operations, and after the merger with Suncor was appointed VP, Firebag Operations. In 2012, Mr. Clague became the Senior VP, In Situ Business Unit. He moved to the role of Senior VP, Oil Sands Technical and Upstream Services in 2015. In 2018, he retired as the Senior VP, Exploration and Production Business Unit, with personnel in Calgary, St. John's, Aberdeen Tripoli, and Stavanger. He is a registered Professional Geophysicis with APEGA and obtained the Institute of Corporate Directors ICD. It designation in 2022.
Deirdre M. Choate Alberta , Canada	Yes	Yes	Ms. Choate is a corporate director with over 30 years of experience and knowledge on international tax, treasury, insurance governance and risk management. From 2007 to March 2021, Ms Choate was General Manager, VP Tax, and subsequently VP Tax &

of experience y, insurance, arch 2021, Ms. quently VP Tax & Treasurer at Husky Energy Inc. Prior thereto, Ms. Choate was an Associate Partner in International Tax Services at PricewaterhouseCoopers LLP. Ms. Choate is a Chartered Professional Accountant in Alberta and Fellow Chartered Accountant in Ireland and obtained the Institute of Corporate Directors ICD.D designation in 2020. Ms. Choate holds a Bachelor of Civil Law degree from the University College Dublin.

## **AUDIT COMMITTEE INFORMATION (CONTINUED)**

Name, Province and Country of Residence	Independent	Financially Literate	Relevant Education and Experience		
Norman W. MacDonald Ontario, Canada	Yes	Yes	Mr. MacDonald is Partner, Natural Resources at Fort Capital since April 2021. Prior to this, Mr MacDonald was a Senior Portfolio Manager at Invesco from 2008 to 2020. Mr. MacDonald began his investment career at Ontario Teachers Pension Plan Board, where he worked for three years in progressive roles from Research Assistant to Portfolio Manager. His next role was as a VP and Partner at Beutel, Goodman & Co. Ltd. Prior to joining Invesco, Mr. MacDonald was a VP and Portfolio Manager at Salida Capital. Mr. MacDonald earned a Bachelor of Commerce Degree from the University of Windsor and is a CFA charter holder.		
Janine J. McArdle Texas, United States	Yes	Yes	Janine J. McArdle has been an executive in the oil and gas industry for over 30 years with extensive experience in engineering, marketing, business development, finance and risk management. Ms. McArdle is founder and CEO of Apex Strategies LLC, which is a global consultancy company providing advisory services to companies engaged in the midstream and downstream sectors of the energy industry. Prior to forming her own company in 2016, Ms. McArdle was an executive officer at Apache Corporation from 2002 to 2015, serving in senior leadership positions across LNG and Global Oil and Gas Marketing. Prior to Apache, Ms. McArdle served as President and Managing Director for Aquila Europe Ltd. from 2001 to 2002 and held executive and management positions with Aquila Energy Marketing from 1993 to 2001. Ms. McArdle was a partner in Hesse Gas from 1991 to 1993. Ms. McArdle currently serves as a Director on the Board of Directors of Santos Ltd. and Antero Midstream, and previously served as a Director on the Boards of Halcon Resources and the Intercontinental Exchange until 2019. Ms. McArdle holds a Bachelor of Science degree in Chemical Engineering from the University of Nebraska and a Master of Business Administration from the University of Houston.		

#### **Pre-Approval of Policies and Procedures**

We have adopted policies and procedures with respect to the pre-approval of audit and permitted non-audit services to be provided by PricewaterhouseCoopers LLP as set forth in item 24 of the Audit Committee charter, which is attached as Appendix "C" to this annual information form. The Audit Committee has approved the provision of a specified list of audit and permitted non-audit services that the audit committee believes to be typical, reoccurring or otherwise likely to be provided by PricewaterhouseCoopers LLP during the current fiscal year. The list of services is sufficiently detailed as to the particular services to be provided to ensure that the audit committee knows precisely what services it is being asked to pre-approve and it is not necessary for any member of management to make a judgment as to whether a proposed service fits within pre-approved services.

#### **AUDIT SERVICE FEES**

#### **Auditor Services Fees**

The following table discloses fees billed to us by our auditors, PricewaterhouseCoopers LLP.

Type of Services Provided	2022	2021
Audit Fees (1)	276,000	244,500
Audit-Related Fees (2)	54,000	45,000
Tax Fees (3)	-	-
All Other Fees	-	-
Total	330,000	289,500

<sup>(1) &</sup>quot;Audit Fees" include fees necessary to perform the annual audit of the Corporation's consolidated financial statements.

<sup>(2) &</sup>quot;Audit-Related Fees" include services that are traditionally performed by the auditor. These audit-related services include quarterly reviews of the Corporation's consolidated financial statements.

<sup>(3) &</sup>quot;Tax Fees" include fees for all tax services other than those included in "Audit Fees" and "Audit-Related Fees". This category includes fees for tax compliance, tax planning and general tax advice, including the preparation and filing of Scientific Research & Experimental Development Tax Credits.

#### INDUSTRY CONDITIONS

Companies operating in the Canadian oil and gas industry are subject to extensive regulation and control of operations (including with respect to land tenure, exploration, development, production, refining and upgrading, transportation, and marketing) as a result of legislation enacted by various levels of government as well as with respect to the pricing and taxation of petroleum and natural gas through legislation enacted by, and agreements among, the federal and provincial governments of Canada, all of which should be carefully considered by investors in the Western Canadian oil and gas industry. All current legislation is a matter of public record and the Corporation is unable to predict what additional legislation or amendments governments may enact in the future.

The Corporation's assets and operations are regulated by administrative agencies that derive their authority from legislation enacted by the applicable level of government. Regulated aspects of the Corporation's upstream oil and natural gas business include all manner of activities associated with the exploration for and production of oil and natural gas, including, among other matters: (i) permits for the drilling of wells and construction of related infrastructure; (ii) technical drilling and well requirements; (iii) permitted locations and access to operation sites; (iv) operating standards regarding conservation of produced substances and avoidance of waste, such as restricting flaring and venting; (v) minimizing environmental impacts, including by reducing emissions; (vi) storage, injection and disposal of substances associated with production operations; and (vii) the abandonment and reclamation of impacted sites. In order to conduct oil and natural gas operations and remain in good standing with the applicable federal or provincial regulatory scheme, producers must comply with applicable legislation, regulations, orders, directives and other directions (all of which are subject to governmental oversight, review and revision, from time to time). Compliance in this regard can be costly and a breach of the same may result in fines or other sanctions.

The discussion below outlines some of the principal aspects of the legislation, regulations, agreements, orders, directives and a summary of other pertinent conditions that impact the oil and gas industry in Western Canada, specifically in the province of Alberta, where the Corporation's assets are primarily located. While these matters do not affect the Corporation's operations in any manner that is materially different than the manner in which they affect other similarly-sized industry participants with similar assets and operations, investors should consider such matters carefully.

#### **Pricing and Marketing in Canada**

#### Crude Oil

Oil producers are entitled to negotiate sales contracts directly with purchasers. As a result, macroeconomic and microeconomic market forces determine the price of oil. Worldwide supply and demand factors are the primary determinant of oil prices, but regional market and transportation issues also influence prices. The specific price that a producer receives will depend, in part, on oil quality, prices of competing products, access and distance to market, availability of transportation, value of refined products, supply/demand balance and contractual terms of sale.

Global oil markets have recovered significantly from price drops resulting from the COVID-19 pandemic. In 2022, oil prices rose to the highest levels since 2014 due to tight supply and a resurgence in demand. OPEC forecasts robust growth in world oil demand in 2023, spurred by the relaxation of China's zero-COVID policy, OPEC predicts global oil demand to rise by 2.25 million barrels per day in 2023, despite newly emerging COVID-19 variants, interest rate increases in major economies and other uncertainties with respect to the world economy.

In February 2022, Russian military forces invaded Ukraine. Ongoing military conflict between Russia and Ukraine has significantly impacted the supply of oil and gas from the region. In addition, certain countries including Canada and the United States have imposed strict financial and trade sanctions against Russia, which sanctions may have far reaching effects on the global economy in addition to the near term effects on Russia. The long-term impacts of the conflict remain uncertain.

#### **Natural Gas**

Negotiations between buyers and sellers determine the price of natural gas sold in intra-provincial, interprovincial and international trade. The price received by a natural gas producer depends, in part, on the price of competing natural gas

supplies and other fuels, natural gas quality, distance to market, availability of transportation, length of contract term, weather conditions, supply/demand balance and other contractual terms of sale. Spot and future prices can also be influenced by supply and demand fundamentals on various trading platforms.

#### **NGLs**

The pricing of condensates and other NGLs such as ethane, propane and butane sold in intra-provincial, interprovincial and international trade is determined by negotiation between buyers and sellers. The profitability of NGLs extracted from natural gas is based on the products extracted being of greater economic value as separate commodities than as components of natural gas and therefore commanding higher prices. Such prices depend, in part, on the quality of the NGLs, price of competing chemical stock, distance to market, access to downstream transportation, length of contract term, supply/demand balance and other contractual terms of sale.

#### **Exports from Canada**

The Canada Energy Regulator (the "CER") regulates the export of oil, natural gas and NGLs from Canada through the issuance of short-term orders and longer-term licences pursuant to its authority under the *Canadian Energy Regulator Act* (the "CERA"). Exporters are free to negotiate prices and other terms with purchasers, provided that the export contracts continue to meet certain criteria prescribed by the CER and the federal government. The Corporation does not directly enter into contracts to export its production outside of Canada.

#### **Transportation Constraints and Market Access**

Capacity to transport production from Western Canada to Eastern Canada, the United States and other international markets has been, and continues to be, a major constraint on the exportation of crude oil, natural gas and NGLs. Although certain pipeline and other transportation projects have been announced or are underway, many proposed projects have been cancelled or delayed due to regulatory hurdles, court challenges and economic and socio-political factors. Due in part to growing production and a lack of new and expanded pipeline and rail infrastructure capacity, producers in Western Canada have experienced pricing discounts relative to other markets in the last several years.

#### **Oil Pipelines**

Under Canadian constitutional law, the development and operation of interprovincial and international pipelines fall within the federal government's jurisdiction and, under the CERA, new interprovincial and international pipelines require a federal regulatory review and Cabinet approval before they can proceed. However, recent years have seen a perceived lack of policy and regulatory certainty in this regard such that, even when projects are approved, they often face delays due to actions taken by provincial and municipal governments and legal opposition related to issues such as Indigenous rights and title, the government's duty to consult and accommodate Indigenous peoples and the sufficiency of all relevant environmental review processes. Export pipelines from Canada to the United States face additional unpredictability as such pipelines also require approvals from several levels of government in the United States.

Producers negotiate with pipeline operators to transport their products to market on a firm, spot or interruptible basis depending on the specific pipeline and the specific substance. Transportation availability is highly variable across different jurisdictions and regions. This variability can determine the nature of transportation commitments available, the number of potential customers and the price received.

#### Specific Pipeline Updates

The Trans Mountain Pipeline expansion received Cabinet approval in November 2016. Following a period of political opposition in British Columbia, the federal government acquired the Trans Mountain Pipeline in August 2018. Following the resolution of a number of legal challenges and a second regulatory hearing, construction on the Trans Mountain Pipeline expansion commenced in late 2019. Earlier estimated at \$12.6 billion, the project budget has risen to \$21.4 billion as of February 2022. The pipeline is expected to be in service in the third quarter of 2023, an extension from Trans Mountain's initial December 2022 estimate. The budget increase and in-service date delay have been attributed to, among other things, the ongoing effects of the COVID-19 pandemic and the widespread flooding in British Columbia in late 2021.

In November 2020, the Attorney General of Michigan filed a lawsuit to terminate an easement that allows the Enbridge Line 5 pipeline system to operate below the Straits of Mackinac, attempting to force the lines comprising this segment of the pipeline system to be shut down. Enbridge Inc. stated in January 2021 that it intends to defy the shut down order, as the dual pipelines are in full compliance with U.S. federal safety standards. The Government of Canada invoked a 1977 treaty with the United States on October 4, 2021, triggering bilateral negotiations over the pipeline. In August 2022, the United States District Court for Western Michigan rejected the Attorney General of Michigan's efforts to move the dispute to Michigan state court, citing important federal interests at stake in having the dispute heard in federal court. Michigan's Attorney General intends to appeal the decision.

In September 2022, the District Court of Wisconsin ruled in favour of the Bad River Band in its dispute with Enbridge Inc. over the Enbridge Line 5 pipeline system in that state. Stopping short of ordering the system to be shut down, the Court ruled that the Bad River Band is entitled to financial compensation, and ordered Enbridge Inc. to reroute the pipeline around Bad River territory within five years.

#### Natural Gas and LNG

Natural gas prices in Western Canada have been constrained in recent years due to increasing North American supply, limited access to markets and limited storage capacity. Companies that secure firm access to infrastructure to transport their natural gas production out of Western Canada may be able to access more markets and obtain better pricing. Companies without firm access may be forced to accept spot pricing in Western Canada for their natural gas, which is generally lower than the prices received in other North American regions. The Corporation has entered into firm service commitments in order to mitigate its exposure to AECO pricing. Firm service agreements provide the Corporation with geographical diversification across North America, including Empress, Emerson and Dawn.

Required repairs or upgrades to existing pipeline systems in Western Canada, specifically in the summer months, have also led to reduced capacity and apportionment of access, the effects of which have been exacerbated by storage limitations. In October 2020, TC Energy Corporation received federal approval to expand the NGTL System and the expanded NGTL System.

#### Specific Pipeline and Proposed LNG Export Terminal Updates

While a number of LNG export plants have been proposed in Canada, regulatory and legal uncertainty, social and political opposition and changing market conditions have resulted in the cancellation or delay of many of these projects. Nonetheless, in October 2018, the joint venture partners of the LNG Canada LNG export terminal announced a positive final investment decision. Once complete, the project will allow producers in northeastern British Columbia to transport natural gas to the LNG Canada liquefaction facility and export terminal in Kitimat, British Columbia via the Coastal GasLink pipeline (the "CGL Pipeline"). With more Alberta and northeastern British Columbia gas egressing through the CGL Pipeline, the NGTL System will have more capacity, which may result in a tighter spread between AECO and NYMEX gas prices. The Corporation anticipates it will see higher AECO pricing, more in line with the United States market, and generally, higher gas prices overall. Phase 1 of the LNG Canada project reached 70% completion in October 2022, with a completion target of 2025.

In May 2020, TC Energy Corporation sold a 65% equity interest in the CGL Pipeline to investment companies KKR & Co Inc. and Alberta Investment Management Corporation while remaining the pipeline operator. Despite its regulatory approval, the CGL Pipeline has faced legal and social opposition. For example, protests involving the Hereditary Chiefs of the Wet'suwet'en First Nation and their supporters have delayed construction activities on the CGL Pipeline, although construction is proceeding. As of November 2022, construction of the CGL Pipeline is approximately 80% complete.

Woodfibre LNG Limited issued a notice to proceed with construction of the Woodfibre LNG project to its prime contractor in April 2022. The Woodfibre LNG project is located near Squamish, British Columbia, and upon completion will produce approximately 2.1 million tonnes of LNG per year. Major construction is set to commence in 2023, with substantial completion of the project expected in late 2027. In November 2022, Enbridge Inc. completed a transaction with Pacific Energy Corporation Limited, the owner of Woodfibre LNG Limited, to retain a 30% ownership stake in the project.

In addition to LNG Canada and the Woodfibre LNG project, a number of other LNG projects are underway at varying stages of progress, though none have reached a positive final investment decision.

#### **Marine Tankers**

The *Oil Tanker Moratorium Act* (Canada), which was enacted in June 2019, imposes a ban on tanker traffic transporting crude oil or persistent crude oil products in excess of 12,500 metric tonnes to and from ports located along British Columbia's north coast. The ban may prevent pipelines from being built to, and export terminals from being located on, the portion of the British Columbia coast subject to the moratorium.

#### **International Trade Agreements**

Canada is party to a number of international trade agreements with other countries around the world that generally provide for, among other things, preferential access to various international markets for certain Canadian export products. Examples of such trade agreements include the Comprehensive Economic and Trade Agreement ("CETA"), the Comprehensive and Progressive Agreement for Trans-Pacific Partnership and, most prominently, the United States-Mexico-Canada Agreement (the "USMCA"), which replaced the former North American Free Trade Agreement ("NAFTA") on July 1, 2020. Because the United States remains Canada's primary trading partner and the largest international market for the export of oil, natural gas and NGLs from Canada, the implementation of the USMCA could impact Western Canada's oil and gas industry as a whole, including the Corporation's business.

While the proportionality rules in Article 605 of NAFTA previously prevented Canada from implementing policies that limit exports to the United States and Mexico relative to the total supply produced in Canada, the USMCA does not contain the same proportionality requirements. This may allow Canadian producers to develop a more diversified export portfolio than was possible under NAFTA, subject to the construction of infrastructure allowing more Canadian production to reach Eastern Canada, Asia and Europe.

Canada is also party to the CETA, which provides for duty-free, quota-free market access for Canadian crude oil and natural gas products to the European Union. Following the United Kingdom's departure from the European Union on January 31, 2020, the United Kingdom and Canada entered into the Canada-United Kingdom Trade Continuity Agreement ("CUKTCA"), which replicates CETA on a bilateral basis to maintain the status quo of the Canada-United Kingdom trade relationship.

While it is uncertain what effect CETA, CUKTCA or any other trade agreements will have on the petroleum and natural gas industry in Canada, the lack of available infrastructure for the offshore export of crude oil and natural gas may limit the ability of Canadian crude oil and natural gas producers to benefit from such trade agreements.

#### **Land Tenure**

#### Mineral rights

With the exception of Manitoba, each provincial government in Western Canada owns most of the mineral rights to the oil and natural gas located within their respective provincial borders. Provincial governments grant rights to explore for and produce oil and natural gas pursuant to leases, licences and permits (collectively, "leases") for varying terms, and on conditions set forth in provincial legislation, including requirements to perform specific work or make payments in lieu thereof. The provincial governments in Western Canada conduct regular land sales where oil and natural gas companies bid for the leases necessary to explore for and produce oil and natural gas owned by the respective provincial governments. These leases generally have fixed terms, but they can be continued beyond their initial terms if the necessary conditions are satisfied.

In response to COVID-19, the Government of Alberta, among others, announced measures to extend or continue Crown leases and permits that may have otherwise expired in the months following the implementation of pandemic response measures.

All of the provinces of Western Canada have implemented legislation providing for the reversion to the Crown of mineral rights to deep, non-productive geological formations at the conclusion of the primary term of a disposition. In addition,

Alberta has a policy of "shallow rights reversion" which provides for the reversion to the Crown of mineral rights to shallow, non-productive geological formations for new leases and licences. British Columbia has a policy of "zone specific retention" that allows a lessee to continue a lease for zones in which they can demonstrate the presence of oil or natural gas, with the remainder reverting to the Crown.

In addition to Crown ownership of the rights to oil and natural gas, private ownership of oil and natural gas (i.e. freehold mineral lands) also exists in Western Canada. Rights to explore for and produce privately owned oil and natural gas are granted by a lease or other contract on such terms and conditions as may be negotiated between the owner of such mineral rights and companies seeking to explore for and/or develop oil and natural gas reserves.

#### Surface rights

To develop oil and natural gas resources, producers must also have access rights to the surface lands required to conduct operations. For Crown lands, surface access rights can be obtained directly from the government. For private lands, access rights can be negotiated with the landowner. Where an agreement cannot be reached, however, each province has developed its own process that producers can follow to obtain and maintain the surface access necessary to conduct operations throughout the lifespan of a well, including notification requirements and providing compensation to affected persons for lost land use and surface damage. Similar rules apply to facility and pipeline operators.

#### **Royalties and Incentives**

#### General

Each province has legislation and regulations in place to govern Crown royalties and establish the royalty rates that producers must pay in respect of the production of Crown resources. The royalty regime in a given province is in addition to applicable federal and provincial taxes and is a significant factor in the profitability of oil sands projects and oil, natural gas and NGL production. Royalties payable on production from lands where the Crown does not hold the mineral rights are negotiated between the mineral freehold owner and the lessee, though certain provincial taxes and other charges on production or revenues may be payable. Royalties from production on Crown lands are determined by provincial regulation and are generally calculated as a percentage of the value of production.

Producers and working interest owners of oil and natural gas rights may create additional royalties or royalty-like interests, such as overriding royalties, net profits interests and net carried interests, through private transactions, the terms of which are subject to negotiation.

Occasionally, both the federal government and the provincial governments in Western Canada create incentive programs for the oil and gas industry. These programs often provide for volume-based incentives, royalty rate reductions, royalty holidays or royalty tax credits and may be introduced when commodity prices are low to encourage exploration and development activity. Governments may also introduce incentive programs to encourage producers to prioritize certain kinds of development or utilize technologies that may enhance or improve recovery of oil, natural gas and NGLs, or improve environmental performance. In addition, from time-to-time, including during the COVID-19 pandemic, the federal government creates incentives and other financial aid programs intended to assist businesses operating in the oil and gas industry as well as other industries in Canada.

#### Alberta

#### Crown royalties

In Alberta, oil and natural gas producers are responsible for calculating their royalty rate on an ongoing basis. The Crown's royalty share of production is payable monthly and producers must submit their records showing the royalty calculation.

In 2016, the Government of Alberta adopted a modernized Crown royalty framework (the "Modernized Framework") that applies to all conventional oil (i.e., not oil sands) and natural gas wells drilled after December 31, 2016 that produce Crown-owned resources. The previous royalty framework (the "Old Framework") will continue to apply to wells producing Crown-owned resources that were drilled prior to January 1, 2017 until December 31, 2026, following which time they will become subject to the Modernized Framework. The *Royalty Guarantee Act* (Alberta), came into effect on

July 18, 2019, and provides that no major changes will be made to the current oil and natural gas royalty structure for a period of at least 10 years.

Royalties on production from wells subject to the Modernized Framework are determined on a "revenue-minus-costs" basis. The cost component is based on a Drilling and Completion Cost Allowance formula that relies, in part, on the industry's average drilling and completion costs, determined annually by the Alberta Energy Regulator (the "AER"), and incorporates information specific to each well such as vertical depth and lateral length.

Under the Modernized Framework, producers initially pay a flat royalty of 5% on production revenue from each producing well until payout, which is the point at which cumulative gross revenues from the well equals the applicable Drilling and Completion Cost Allowance. After payout, producers pay an increased royalty of up to 40% that will vary depending on the nature of the resource and market prices. Once the rate of production from a well is too low to sustain the full royalty burden, its royalty rate is gradually adjusted downward as production declines, eventually reaching a floor of 5%.

Under the Old Framework, royalty rates for conventional oil production can be as high as 40% and royalty rates for natural gas production can be as high as 36%. Similar to the Modernized Framework, these rates vary based on the nature of the resource and market prices. The natural gas royalty formula also provides for a reduction based on the measured depth of the well, as well as the acid gas content of the produced gas.

Oil sands production in Alberta is also subject to a royalty regime. Prior to payout of an oil sands project, the royalty is payable on gross revenues and, depending on market prices, the applicable rates are capped at 9%. After payout, the royalty payable is the greater of the gross revenue royalty (described above) and a net revenue royalty based on rates that range from 25% - 40%.

In addition to royalties, producers of oil and natural gas from Crown lands in Alberta are also required to pay annual rentals to the Government of Alberta.

#### Freehold royalties and taxes

Royalty rates for the production of privately owned oil and natural gas are negotiated between the producer and the resource owner. Producers and working interest participants may also pay additional royalties to parties other than the freehold mineral owner where such royalties are negotiated through private transactions.

The Government of Alberta levies annual freehold mineral taxes for production from freehold mineral lands. On average, the tax levied in Alberta is 4% of revenues reported from freehold mineral title properties and is payable by the registered owner of the mineral rights.

#### **Incentives**

The Government of Alberta has from time to time implemented drilling credits, incentives or transitional royalty programs to encourage crude oil and natural gas development and new drilling. In addition, the Government of Alberta has implemented certain initiatives intended to accelerate technological development and facilitate the development of unconventional resources, including coalbed methane wells, shale gas wells and horizontal crude oil and natural gas wells.

#### **Regulatory Authorities and Environmental Regulation**

#### General

The Canadian oil and gas industry is subject to environmental regulation under a variety of Canadian federal, provincial, territorial, and municipal laws and regulations, all of which are subject to governmental review and revision from time to time. Such regulations provide for, among other things, restrictions and prohibitions on the spill, release or emission of various substances produced in association with certain oil and gas industry operations, such as sulphur dioxide and nitrous oxide. The regulatory regimes set out the requirements with respect to oilfield waste handling and storage, habitat protection and the satisfactory operation, maintenance, abandonment and reclamation of well, facility and pipeline sites. Compliance with such regulations can require significant expenditures and a breach of such requirements

may result in suspension or revocation of necessary licences and authorizations, civil liability, and the imposition of material fines and penalties. In addition, future changes to environmental legislation, including legislation related to air pollution and greenhouse gas ("GHG") emissions (typically measured in terms of their global warming potential and expressed in terms of carbon dioxide equivalent ("CO<sub>2</sub>e")), may impose further requirements on operators and other companies in the oil and gas industry.

#### **Federal**

Canadian environmental regulation is the responsibility of both the federal and provincial governments. While provincial governments and their delegates are responsible for most environmental regulation, the federal government can regulate environmental matters where they impact matters of federal jurisdiction or when they arise from projects that are subject to federal jurisdiction, such as interprovincial transportation undertakings, including pipelines and railways, and activities carried out on federal lands. Where there is a direct conflict between federal and provincial environmental legislation in relation to the same matter, the federal law prevails.

The CERA and the *Impact Assessment Act* (the "**IAA**") provide a number of important elements to the regulation of federally regulated major projects and their associated environmental assessments. The CERA separates the CER's administrative and adjudicative functions. The CER has jurisdiction over matters such as the environmental and economic regulation of pipelines, transmission infrastructure and certain offshore renewable energy projects. In its adjudicative role, the CERA tasks the CER with reviewing applications for the development, construction and operation of many of these projects, culminating in their eventual abandonment.

The IAA relies on a designated project list as a trigger for a federal assessment. Designated projects that may have effects on matters within federal jurisdiction will generally require an impact assessment administered by the Impact Assessment Agency (the "IA Agency") or, in the case of certain pipelines, a joint review panel comprised of members from the CER and the IA Agency. The impact assessment requires consideration of the project's potential adverse effects and the overall societal impact that a project may have, both of which may include a consideration of, among other items, environmental, biophysical and socio-economic factors, climate change, and impacts to Indigenous rights. It also requires an expanded public interest assessment. Designated projects specific to the oil and gas industry include pipelines that require more than 75 kilometer of new rights of way and pipelines located in national parks, large scale *in situ* oil sands projects not regulated by provincial GHG emissions caps and certain refining, processing and storage facilities.

The federal government has stated that an objective of the legislative changes was to improve decision certainty and turnaround times. Once a review or assessment is commenced under either the CERA or IAA, there are limits on the amount of time the relevant regulatory authority will have to issue its report and recommendation. Designated projects will go through a planning phase to determine the scope of the impact assessment, which the federal government has stated should provide more certainty as to the length of the full review process.

In May 2022, the Alberta Court of Appeal released its decision in response to the Government of Alberta's submission of a reference question regarding the constitutionality of the IAA. The Court found the IAA to be unconstitutional in its entirety, stating that the legislation effectively granted the federal government a veto over projects that were wholly within provincial jurisdiction. Shortly after the decision was released, the Government of Canada announced its intention to appeal the decision to the Supreme Court of Canada.

#### Alberta

The AER is the principal regulator responsible for all energy resource development in Alberta. It derives its authority from the *Responsible Energy Development Act* and a number of related statutes including the *Oil and Gas Conservation Act* (the "**OGCA**"), the *Oil Sands Conservation Act*, the *Pipeline Act*, and the *Environmental Protection and Enhancement Act*. The AER is responsible for ensuring the safe, efficient, orderly and environmentally responsible development of hydrocarbon resources, including allocating and conserving water resources, managing public lands, and protecting the environment. The AER's responsibilities exclude the functions of the Alberta Utilities Commission and the Land and Property Rights Tribunal, as well as the Alberta Ministry of Energy's responsibility for mineral tenure.

The Government of Alberta relies on regional planning to accomplish its resource development goals. Its approach to natural resource management provides for engagement and consultation with stakeholders and the public and examines the cumulative impacts of development on the environment and communities. While the AER is the primary regulator for energy development, several other governmental departments and agencies may be involved in land use issues, including the Alberta Ministry of Environment and Parks, the Alberta Ministry of Energy, the Aboriginal Consultation Office and the Land Use Secretariat.

The Government of Alberta's land-use policy sets out an approach to manage public and private land use and natural resource development in a manner that is consistent with the long-term economic, environmental and social goals of the province. It calls for the development of seven region-specific land-use plans in order to manage the combined impacts of existing and future land use within a specific region and the incorporation of a cumulative effects management approach into such plans.

The AER monitors seismic activity across Alberta to assess the risks associated with, and instances of, earthquakes induced by hydraulic fracturing. Hydraulic fracturing involves the injection of water, sand or other proppants and additives under pressure into targeted subsurface formations to fracture the surrounding rock and stimulate oil and natural gas production. In recent years, hydraulic fracturing has been linked to increased seismicity in the areas in which hydraulic fracturing takes place, prompting regulatory authorities to investigate the practice further.

The AER has developed monitoring and reporting requirements that apply to all oil and natural gas producers working in certain areas where the likelihood of an earthquake is higher, and implemented the requirements in *Subsurface Order Nos. 2, 6,* and 7. The regions with seismic protocols in place are Fox Creek, Red Deer, and Brazeau (the "**Seismic Protocol Regions**"). The Corporation does not have operations in the Seismic Protocol Regions.

#### **Liability Management**

#### Alberta

The AER administers the Liability Management Framework (the "AB LM Framework") and the Liability Management Rating Program (the "AB LMR Program") to manage liability for most conventional upstream oil and natural gas wells, facilities and pipelines in Alberta. The AER is in the process of replacing the AB LMR Program with the AB LM Framework. This change was effected under key new AER directives in 2021 and further updates released in 2022. Broadly, the AB LM Framework is intended to provide a more holistic approach to liability management in Alberta, as the AER found that the more formulaic approach under the AB LMR Program did not necessarily indicate whether a company could meet its liability obligations. New developments under the AB LM Framework include a new Licensee Capability Assessment System (the "AB LCA"), a new Inventory Reduction Program (the "AB IR Program") and a new Licensee Management Program ("AB LM Program"). Meanwhile, some programs under the AB LMR Program remain in effect, including the Oilfield Waste Liability Program (the "AB OWL Program"), the Large Facility Liability Management Program (the "AB LF Program") and elements of the Licensee Liability Rating Program (the "AB LR Program"). The mix between active programs under the AB LM Framework and the AB LMR Program highlights the transitional and dynamic nature of liability management in Alberta. While the province is moving towards the AB LM Framework and a more holistic approach to liability management, the AER has noted that this will be a gradual process that will take time to complete. In the meantime, the AB LMR Program continues to play an important role in Alberta's liability management scheme.

Complementing the AB LM Framework and the AB LMR Program, Alberta's OGCA establishes an orphan fund (the "Orphan Fund") to help pay the costs to suspend, abandon, remediate and reclaim a well, facility or pipeline included in the AB LLR Program and the AB OWL Program if a licensee or working interest participant becomes insolvent or is unable to meet its obligations. Licensees in the AB LLR Program and the AB OWL Program fund the Orphan Fund through a levy administered by the AER. However, given the increase in orphaned oil and natural gas assets, the Government of Alberta has loaned the Orphan Fund approximately \$335 million to carry out abandonment and reclamation work. In response to the COVID-19 pandemic, the Government of Alberta also covered \$113 million in levy payments that licensees would otherwise have owed to the Orphan Fund, corresponding to the levy payments due for the first six months of the AER's fiscal year. A separate orphan levy applies to persons holding licences subject to the AB LF Program. Collectively, these programs are designed to minimize the risk to the Orphan Fund posed by the unfunded liabilities of licensees and to

prevent the taxpayers of Alberta from incurring costs to suspend, abandon, remediate and reclaim wells, facilities or pipelines.

The Supreme Court of Canada's decision in *Orphan Well Association v Grant Thornton* (also known as the "**Redwater**" decision), provides the backdrop for Alberta's approach to liability management. As a result of the Redwater decision, receivers and trustees can no longer avoid the AER's legislated authority to impose abandonment orders against licensees or to require a licensee to pay a security deposit before approving a licence transfer when any such licensee is subject to formal insolvency proceedings. This means that insolvent estates can no longer disclaim assets that have reached the end of their productive lives (and therefore represent a net liability) in order to deal primarily with the remaining productive and valuable assets without first satisfying any abandonment and reclamation obligations associated with the insolvent estate's assets. In April 2020, the Government of Alberta passed the *Liabilities Management Statutes Amendment Act*, which places the burden of a defunct licensee's abandonment and reclamation obligations first on the defunct licensee's working interest partners, and second, the AER may order the Orphan Fund to assume care and custody and accelerate the clean-up of wells or sites which do not have a responsible owner. These changes came into force in June 2020.

One important step in the shift to the AB LM Framework has been amendments to *Directive 067*: *Eligibility Requirements for Acquiring and Holding Energy Licences and Approvals* ("**Directive 067**"), which deals with licensee eligibility to operate wells and facilities. All licence transfers and the granting of new well, facility and pipeline licences in Alberta are subject to AER approval. Previously under the AB LMR Program, as a condition of transferring existing AER licences, approvals and permits, all transfers required transferees to demonstrate that they had a liability management rating of 2.0 or higher immediately following the transfer. If transferees did not have the required rating, they would have to otherwise prove to the satisfaction of the AER that they could meet their abandonment and reclamation obligations, through means such as posting security or reducing their existing obligations. However, amendments from April 2021 to Directive 067 expanded the criteria for assessing licensee eligibility. Notably, the recent amendments increase requirements for financial disclosure, detail new requirements for when a licensee poses an "unreasonable risk" of orphaning assets, and adds additional general requirements for maintaining eligibility.

Alongside changes to Directive 067, the AER introduced *Directive 088: Licensee Life-Cycle Management* ("**Directive 088**") in December 2021 under the AB LM Framework. Directive 088 replaces, to an extent, the AB LLR Program with the AB LCA. Whereas the AB LLR Program previously assessed a licensee based on a liability rating determined by the ratio of a licensee's deemed asset value relative to the deemed liability value of its oil and gas wells and facilities, the AB LCA now considers a wider variety of factors and is intended to be a more comprehensive assessment of corporate health. Such factors are wide reaching and include: (i) a licensee's financial health; (ii) its established total magnitude of liabilities, (iii) the remaining lifespan of its mineral resources and infrastructure; (iv) the management of its operations; (v) the rate of closure activities and spending, and pace of inactive liability growth; and (vi) and its compliance with administrative and regulatory requirements. These various factors feed into a broader holistic assessment of a licensee under the AB LM Framework. In turn, that holistic assessment provides the basis for assessing risk posed by licence transfers, as well as any security deposit that the AER may require from a licensee in the event that the regulator deems a licensee at risk of not being able to meet its liability obligations. However, the liability management rating under the AB LLR Program is still in effect for other liability management programs such as the AB OWL Program and the AB LF Program, and will remain in effect until a broadened scope of Directive 088 is phased in over time.

In addition to the AB LCA, Directive 088 also implemented other new liability management programs under the AB LM Framework. These include the AB LM Program and the AB IR Program. Under the AB LM Program the AER will continuously monitor licensees over the life-cycle of a project. If, under the AB LM Program, the AER identifies a licensee as high risk, the regulator may employ various tools to ensure that a licensee meets its regulatory and liability obligations. In addition, under the AB IR Program the AER sets industry-wide spending targets for abandonment and reclamation activities. Licensees are then assigned a mandatory licensee specific target based on the licensee's proportion of provincial inactive liabilities and the licensee's level of financial distress. Certain licensees may also elect to provide the AER with a security deposit in place of their closure spend target. The AER has also indicated that it will implement a closure nomination program (the "CN Program") in 2023. Under the program, those who qualify may nominate certain

oil and gas sites for closure. Details regarding the CN Program and the mechanism through which nominated sites will be abandoned and reclaimed are forthcoming.

The Government of Alberta followed the announcement of the AB LM Framework with amendments to the *Oil and Gas Conservation Rules* and the *Pipeline Rules* in late 2020. The changes to these rules fall into three principal categories: (i) they introduce "closure" as a defined term, which captures both abandonment and reclamation; (ii) they expand the AER's authority to initiate and supervise closure; and (iii) they permit qualifying third parties on whose property wells or facilities are located to request that licensees prepare a closure plan.

To address abandonment and reclamation liabilities in Alberta, the AER also implements, from time to time, programs intended to encourage the decommissioning, remediation and reclamation of inactive or marginal oil and natural gas infrastructure. In 2018, for example, the AER announced a voluntary area-based closure programs ("ABC Program"). The ABC Program is designed to reduce the cost of abandonment and reclamation operations though industry collaboration and economies of scale. Parties seeking to participate in the program must commit to an inactive liability reduction target to be met through closure work performed on inactive assets.

#### Climate Change Regulation

Climate change regulation at each of the international, federal and provincial levels has the potential to significantly affect the future of the oil and gas industry in Canada. These impacts are uncertain and it is not possible to predict what future policies, laws and regulations will entail. Any new laws and regulations (or additional requirements to existing laws and regulations) could have a material impact on the Corporation's operations and cash flow.

#### Federal

Canada has been a signatory to the United Nations Framework Convention on Climate Change (the "UNFCCC") since 1992. Since its inception, the UNFCCC has instigated numerous policy changes with respect to climate governance. On April 22, 2016, 197 countries, including Canada, signed the Paris Agreement, committing to prevent global temperatures from rising more than 2° Celsius above pre-industrial levels and to pursue efforts to limit this rise to no more than 1.5° Celsius. To date, 189 of the 197 parties to the UNFCCC have ratified the Paris Agreement, including Canada. In 2016, Canada committed to reducing its emissions by 30% below 2005 levels by 2030. In 2021, Canada updated its original commitment by pledging to reduce emissions by 40-45% below 2005 levels by 2030, and to net-zero by 2050.

During the course of the 2021 United Nations Climate Change Conference in Glasgow, Scotland, Canada's Prime Minister Justin Trudeau made several pledges aimed at reducing Canada's GHG emissions and environmental impact, including: (i) reducing methane emissions in the oil and gas sector to 75% of 2012 levels by 2030; (ii) ceasing the export of thermal coal by 2030; (iii) imposing a cap on emissions from the oil and gas sector; (iv) halting direct public funding to the global fossil fuel sector by the end of 2022; and (v) committing that all new vehicles sold in the country will be zero-emission on or before 2040.

In line with the Prime Minister's pledge to impose a cap on emissions from the oil and gas sector, the federal government published a discussion paper on July 18, 2022 that outlines two potential regulatory options for such a cap. Those proposed options are either to: (i) implement a new cap-and-trade system that would set a limit on emissions from the sector; or (ii) modify the existing pollution pricing benchmark (as discussed below) to limit emissions from the sector. These options are currently under review and interested parties had the opportunity to make submissions regarding the proposed cap, ending in September 2022. The form of emissions cap on the oil and gas sector and the overall effect of such a cap remain uncertain.

The Government of Canada released the Pan-Canadian Framework on Clean Growth and Climate Change in 2016, setting out a plan to meet the federal government's 2030 emissions reduction targets. On June 21, 2018, the federal government enacted the *Greenhouse Gas Pollution Pricing Act* (the "**GGPPA**"), which came into force on January 1, 2019. This regime has two parts: an output-based pricing system ("**OBPS**") for large industry (enabled by the *Output-Based Pricing System Regulations*) and a fuel charge (enabled by the *Fuel Charge Regulations*), both of which impose a price on CO<sub>2</sub>e emissions. This system applies in provinces and territories that request it and in those that do not have their own equivalent emissions pricing systems in place that meet the federal standards and ensure that there is a uniform price on emissions

across the country. Originally under the federal plans, the price was set to escalate by \$10 per year until it reached a maximum price of \$50/tonne of  $CO_2e$  in 2022; however, on December 11, 2020, the federal government announced its intention to continue the annual price increases beyond 2022. Commencing in 2023, the benchmark price per tonne of  $CO_2e$  will increase by \$15 per year until it reaches \$170/tonne of  $CO_2e$  in 2030. Effective January 1, 2023, the minimum price permissible under the GGPPA rose to \$65/tonne of  $CO_2e$ .

While several provinces challenged the constitutionality of the GGPPA following its enactment, the Supreme Court of Canada confirmed its constitutional validity in a judgment released on March 25, 2021.

On April 26, 2018, the federal government passed the *Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compounds (Upstream Oil and Gas Sector)* (the "**Federal Methane Regulations**"). The Federal Methane Regulations seek to reduce emissions of methane from the oil and natural gas sector, and came into force on January 1, 2020. By introducing a number of new control measures, the Federal Methane Regulations aim to reduce unintentional leaks and the intentional venting of methane and ensure that oil and natural gas operations use low-emission equipment and processes. Among other things, the Federal Methane Regulations limit how much methane upstream oil and natural gas facilities are permitted to vent. The federal government anticipates that these actions will reduce annual GHG emissions by about 20 megatonnes by 2030.

The federal government has enacted the *Multi-Sector Air Pollutants Regulation* under the authority of the *Canadian Environmental Protection Act, 1999*, which regulates certain industrial facilities and equipment types, including boilers and heaters used in the upstream oil and gas industry, to limit the emission of air pollutants such as nitrogen oxides and sulphur dioxide.

In the November 23, 2021 Speech from the Throne, the federal government restated its commitment to achieve net-zero emission by 2050. In pursuit of this objective, the government's proposed actions include: (i) moving to cap and cut oil and gas sector emissions; (ii) investing in public transit and mandating the sale of zero-emission vehicles; (iii) increasing the federally imposed price on pollution; (iv) investing in the production of cleaner steel, aluminum, building products, cars, and planes; (v) addressing the loss of biodiversity by continuing to strengthen partnerships with First Nations, Inuit, and Métis, to protect nature and the traditional knowledge of those groups; (vi) creating a Canada Water Agency to safeguard water as a natural resource and support Canadian farmers; (vii) strengthening action to prevent and prepare for floods, wildfires, droughts, coastline erosion, and other extreme weather worsened by climate change; and (viii) helping build back communities impacted by extreme weather events through the development of Canada's first-ever National Adaptation Strategy.

The Canadian Net-Zero Emissions Accountability Act (the "CNEAA") received royal assent on June 29, 2021, and came into force on the same day. The CNEAA binds the Government of Canada to a process intended to help Canada achieve net-zero emissions by 2050. It establishes rolling five-year emissions-reduction targets and requires the government to develop plans to reach each target and support these efforts by creating a Net-Zero Advisory Body. The CNEAA also requires the federal government to publish annual reports that describe how departments and Crown corporations are considering the financial risks and opportunities of climate change in their decision-making. A comprehensive review of CNEAA is required every five years from the date CNEAA came into force.

The Government of Canada introduced its 2030 Emissions Reduction Plan (the "2030 ERP") on March 29, 2022. In the 2030 ERP, the Government of Canada proposes a roadmap for Canada's reduction of GHG emissions to 40-45% below 2005 levels by 2030. As the first emissions reduction plan issued under the CNEAA, the 2030 ERP aims to reduce emissions by incentivizing electric vehicles and renewable electricity, and capping emissions from the oil and gas sector, among other measures.

On June 8, 2022 the Canadian Greenhouse Gas Offset Credit System Regulations were published in the Canada Gazette. The regulations establish a regulatory framework to allow certain kinds of projects to generate and sell offset credits for use in the federal OBPS through Canada's Greenhouse Gas Offset Credit System. The system enables project proponents to generate federal offset credits through projects that reduce GHG emissions under a published federal GHG offset protocol. Offset credits can then be sold to those seeking to meet limits imposed under the OBPS or those seeking to meet voluntary targets.

On June 20, 2022, the Clean Fuel Regulations came into force, establishing Canada's Clean Fuel Standard. The Clean Fuel Standard will replace the former Renewable Fuels Regulation, and aims to discourage the use of fossil fuels by increasing the price of those fuels when compared to lower-carbon alternatives. Coming into force in 2023, the Clean Fuel Standard will impose obligations on primary suppliers of transportation fuels in Canada and require fuels to contain a minimum percentage of renewable fuel content and meet emissions caps calculated over the life cycle of the fuel. The Clean Fuel Regulations also establish a market for compliance credits. Compliance credits can be generated by primary suppliers, among others, through carbon capture and storage, producing or importing low-emission fuel, or through end-use fuel switching (for example, operating an electric vehicle charging network).

The Government of Canada is also in the midst of developing a carbon capture utilization and storage ("**CCUS**") strategy. CCUS is a technology that captures carbon dioxide from facilities, including industrial or power applications, or directly from the atmosphere. The captured carbon dioxide is then compressed and transported for permanent storage in underground geological formations or used to make new products such as concrete. Beginning in 2022, the federal government plans to spend \$319 million over seven years to ramp up CCUS in Canada, as this is expected to be a critical element of the plan to reach net-zero by 2050.

#### Alberta

In December 2016, the *Oil Sands Emissions Limit Act* came into force, establishing an annual 100 megatonne limit for GHG emissions from all oil sands sites, but the regulations necessary to enforce the limit have not yet been developed. The delay in drafting these regulations has been inconsequential thus far, as Alberta's oil sands emit roughly 70 megatonnes of GHG emissions per year, well below the 100 megatonne limit.

In June 2019, the fuel charge element of the federal backstop program took effect in Alberta. On January 1, 2023, the carbon tax payable in Alberta increased from \$50 to \$65 per tonne of  $CO_2e$ , and will continue to increase at a rate of \$15 per year until it reaches \$170 per tonne in 2030. In December 2019, the federal government approved Alberta's *Technology Innovation and Emissions Reduction* ("**TIER**") regulation, which applies to large emitters. The TIER regulation came into effect on January 1, 2020 (as amended on January 1, 2023) and replaced the previous *Carbon Competitiveness Incentives Regulation*. The TIER regulation meets the federal benchmark stringency requirements for emissions sources covered in the regulation, but the federal backstop continues to apply to emissions sources not covered by the regulation.

The TIER regulation applies to emitters that emit more than 100,000 tonnes of CO₂e per year in 2016 or any subsequent year. The initial target for most TIER-regulated facilities is to reduce emissions intensity by 10% as measured against that facility's individual benchmark, with a further 2% reduction in each subsequent year. The facility-specific benchmark does not apply to all facilities, such as those in the electricity sector, which are compared against the good-as-best-gas standard. Similarly, for facilities that have already made substantial headway in reducing their emissions, a different "high-performance" benchmark is available. Under the TIER regulation, certain facilities in high-emitting or trade exposed sectors can opt-in to the program in specified circumstances if they do not meet the 100,000 tonne threshold. To encourage compliance with the emissions intensity reduction targets, TIER-regulated facilities must provide annual compliance reports. Facilities that are unable to achieve their targets may either purchase credits from other facilities, purchase carbon offsets, or pay a levy to the Government of Alberta.

The Government of Alberta aims to lower annual methane emissions by 45% by 2025. The Government of Alberta enacted the *Methane Emission Reduction Regulation* on January 1, 2020, and in November 2020, the Government of Canada and the Government of Alberta announced an equivalency agreement regarding the reduction of methane emissions such that the Federal Methane Regulations will not apply in Alberta.

#### **Indigenous Rights**

Constitutionally mandated government-led consultation with and, if applicable, accommodation of, the rights of Indigenous groups impacted by regulated industrial activity, as well as proponent-led consultation and accommodation or benefit sharing initiatives, play an increasingly important role in the Western Canadian oil and gas industry. In addition, Canada is a signatory to the *United Nations Declaration of the Rights of Indigenous Peoples* ("**UNDRIP**") and the principles set forth therein may continue to influence the role of Indigenous engagement in the development of the oil and gas

industry in Western Canada. For example, in November 2019, the *Declaration on the Rights of Indigenous Peoples Act* ("**DRIPA**") became law in British Columbia. The DRIPA aims to align British Columbia's laws with UNDRIP. In June 2021, the *United Nations Declaration on the Rights of Indigenous Peoples Act* ("**UNDRIP Act**") came into force in Canada. Similar to British Columbia's DRIPA, the UNDRIP Act requires the Government of Canada to take all measures necessary to ensure the laws of Canada are consistent with the principles of UNDRIP and to implement an action plan to address UNDRIP's objectives. On June 21, 2022, the Minister of Justice and Attorney General issued the First Annual Progress Report on the implementation of the UNDRIP Act (the "**Progress Report**"). The Progress Report provides that, as of June 2022, the federal government has sought to implement the UNDRIP Act by, among other things, creating a Secretariat within the Department of Justice to support Indigenous participation in the implementation of UNDRIP, consulting with Indigenous peoples to identify their priorities, drafting an action plan to align federal laws with UNDRIP, and implementing efforts to educate federal departments on UNDRIP's principles.

Continued development of common law precedent regarding existing laws relating to Indigenous consultation and accommodation as well as the adoption of new laws such as DRIPA and the UNDRIP Act are expected to continue to add uncertainty to the ability of entities operating in the Canadian oil and gas industry to execute on major resource development and infrastructure projects, including, among other projects, pipelines. The Government of Canada has expressed that implementation of the UNDRIP Act has the potential to make meaningful change in how Indigenous peoples collaborate in impact assessment moving forward, but has confirmed that the current IAA already establishes a framework that aligns with UNDRIP and does not need to be changed in light of the UNDRIP Act.

On June 29, 2021, the British Columbia Supreme Court issued a judgement in Yahey v British Columbia (the "Blueberry Decision"), in which it determined that the cumulative impacts of industrial development on the traditional territory of the Blueberry River First Nation ("BRFN") in northeast British Columbia had breached the BRFN's rights guaranteed under Treaty 8. The Blueberry Decision may have significant impacts on the regulation of industrial activities in northeast British Columbia, and may lead to similar claims of cumulative effects across Canada in other areas covered by numbered treaties, as has been seen in Alberta.

On January 18, 2023, the Government of British Columbia and the BRFN signed the Blueberry River First Nations Implementation Agreement (the "BRFN Agreement"). The BRFN Agreement aims to address the cumulative effects of development on BRFN's claim area through restoration work, establishment of areas protected from industrial development, and a constraint on development activities. Such measures will remain in place while a long-term cumulative effects management regime is implemented. Specifically, the BRFN Agreement includes, among other measures, the establishment of a \$200-million restoration fund by June 2025, an ecosystem-based management approach for future land-use planning in culturally important areas, limits on new petroleum and natural gas development, and a new planning regime for future oil and gas activities. The BRFN will receive \$87.5 million over three years, with an opportunity for increased benefits based on petroleum and natural gas revenue sharing and provincial royalty revenue sharing in the next two fiscal years.

The BRFN Agreement has acted as a blueprint for other agreements between the Government of British Columbia and Indigenous groups in Treaty 8 territory. In late January 2023, the Government of British Columbia and four Treaty 8 First Nations — Fort Nelson, Salteau, Halfway River and Doig River First Nations — reached consensus on a collaborative approach to land and resource planning (the "Consensus Agreement"). The Consensus Agreement implements various initiatives including a "cumulative effects" management system linked to natural resource landscape planning and restoration initiatives, new land-use plans and protection measures, and a new revenue-sharing approach to support the priorities of Treaty 8 First Nations communities.

In July 2022, Duncan's First Nation filed a lawsuit against the Government of Alberta relying on similar arguments to those advanced successfully by the BRFN. Duncan's First Nation claims in its lawsuit that Alberta has failed to uphold its treaty obligations by authorizing development without considering the cumulative impacts on the First Nation's treaty rights. The long-term impacts of the Blueberry Decision and the Duncan's First Nation lawsuit on the Canadian oil and gas industry remain uncertain.

#### **RISK FACTORS**

The following is a summary of certain risk factors relating to the business of Advantage. The following information is a summary only of certain risk factors and is qualified in its entirety by reference to, and must be read in conjunction with, the detailed information appearing elsewhere in this annual information form.

Investors should carefully consider the risk factors set out below and consider all other information contained herein and in the Corporation's other public filings before making an investment decision. The risks set out below are not an exhaustive list and should not be taken as a complete summary or description of all the risks associated with the Corporation's business and the oil and natural gas business generally.

#### Prices, Markets and Marketing

Various factors may adversely impact the marketability of oil, natural gas and NGLs, affecting net production revenue, production volumes and development and exploration activities.

The Corporation's ability to market its oil and natural gas may depend upon its ability to acquire capacity in pipelines that deliver oil, NGLs and natural gas to commercial markets or contract for the delivery of oil and NGLs by rail. Numerous factors beyond the Corporation's control do, and will continue to, affect the marketability and price of oil and natural gas acquired, produced, or discovered by the Corporation, including:

- deliverability uncertainties related to the distance the Corporation's reserves are from pipelines, railway lines and processing and storage facilities;
- operational problems affecting pipelines, railway lines and processing and storage facilities; and
- government regulation relating to prices, taxes, royalties, land tenure, allowable production and the export of oil and natural gas.

Oil and natural gas prices may be volatile for a variety of reasons including market uncertainties over the supply and demand of these commodities due to the current state of the world economies, the COVID-19 pandemic, OPEC actions, political uncertainties, sanctions imposed on certain oil producing nations by other countries and conflicts in the Middle East. Prices for oil and natural gas are also subject to the availability of export markets and the Corporation's ability to access such markets. A material decline in prices could result in a reduction of the Corporation's net production revenue. The economics of producing from some wells may change because of lower prices, which could result in reduced production of oil or natural gas and a reduction in the volumes and the value of the Corporation's reserves. The Corporation might also elect not to produce from certain wells at lower prices. Any substantial and extended decline in the price of oil and natural gas would have an adverse effect on the Corporation's carrying value of its reserves, borrowing capacity, revenues, profitability and cash flows from operations and may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects. See "Industry Conditions – Transportation Constraints and Market Access".

Volatile oil and natural gas prices make it difficult to estimate the value of producing properties for acquisitions and often cause disruption in the market for oil and natural gas producing properties, as buyers and sellers have difficulty agreeing on such value. Price volatility also makes it difficult to budget for, and project the return on, acquisitions and development and exploitation projects. In addition, bank borrowings available to the Corporation may, in part, be determined by the Corporation's borrower base. A sustained material decline in prices from historical average prices could reduce the Corporation's borrowing base, therefore reducing the bank credit available to the Corporation, which could require that a portion, or all, of the Corporation's bank debt be repaid.

#### COVID-19 and Its Effect on the Global Economy

The COVID-19 pandemic continues to cause disruptions in economic activity in Canada and internationally and impact demand for oil, natural gas liquids and natural gas.

In March 2020, the World Health Organization declared COVID-19 a global pandemic, prompting many countries around the world to close international borders and order the closure of institutions and businesses deemed non-essential. This

resulted in a swift and significant reduction in economic activity in Canada and internationally along with a sudden drop in demand for oil, liquids and natural gas. Since 2020, oil prices have recovered from their historic lows, but price support from future demand cannot be assured as countries continue to experience varying degrees of virus outbreak and newly emerging virus variants. Low commodity prices resulting from reduced demand associated with the impact of COVID-19 has had, and may continue to have, a negative impact on the Corporation's operational results and financial condition. Low prices for oil, liquids and natural gas would reduce the Corporation's funds from operations, and impact the Corporation's level of capital investment and may result in the reduction of production at certain producing properties.

While the duration and full impact of the COVID-19 pandemic is not yet known, any resurgence of COVID-19 may cause disruptions to production operations, reduced access to materials and services, increased employee absenteeism from illness, and temporary closures of the Corporation's facilities.

The extent to which the Corporation's operational and financial results are affected by COVID-19 will depend on various factors and consequences beyond its control such as the duration and scope of the pandemic; additional actions taken by business and government in response to any resurgence of the pandemic, and the speed and effectiveness of responses to combat any resurgence of the virus. Additionally, COVID-19 and its effect on local and global economic conditions stemming from the pandemic could also aggravate the other risk factors identified herein, the extent of which is not yet known.

#### **Political Uncertainty**

#### Russian Ukrainian Conflict.

In February 2022, Russian military forces invaded Ukraine. In response, Ukrainian military personnel and civilians are actively resisting the invasion. Many countries throughout the world have provided aid to the Ukraine in the form of financial aid and in some cases military equipment and weapons to assist in their resistance to the Russian invasion. The North Atlantic Treaty Organization ("NATO") has also mobilized forces to NATO member countries that are close to the conflict as deterrence to further Russian aggression in the region. The outcome of the conflict is uncertain and may have wide-ranging consequences on the peace and stability of the region and the world economy.

In addition, certain countries including Canada and the United States, have imposed strict financial and trade sanctions against Russia, which sanctions may have far reaching effects on the global economy. As part of the sanctions package, the German government paused the certificate process for the 1,200 km Nord Stream 2 natural gas pipeline that was built to carry natural gas from Russia to Germany. Russia is a major exporter of oil and natural gas. Disruption of supplies of oil and natural gas from Russia could cause a significant worldwide supply shortage of oil and natural gas and have a significant impact on worldwide prices of oil and natural gas. A lack of supply of energy and high prices of oil and natural gas could have a significant adverse impact on the world economy. The long-term impacts of the conflict and the sanctions imposed on Russia remain uncertain.

## The Corporation's business may be adversely affected by political and social events and decisions made in Canada and elsewhere.

The Corporation's results can be adversely impacted by political, legal, or regulatory developments in Canada and elsewhere that affect local operations and local and international markets. Changes in government, government policy or regulations, changes in law or interpretation of settled law, third-party opposition to industrial activity generally or projects specifically, and duration of regulatory reviews could impact the Corporation's existing operations and planned projects. This includes actions by regulators or other political actors to delay or deny necessary licenses and permits for the Corporation's activities or restrict the operation of third-party infrastructure that the Corporation relies on. Additionally, changes in environmental regulations, assessment processes or other laws, and increasing and expanding stakeholder consultation (including Indigenous stakeholders), may increase the cost of compliance or reduce or delay available business opportunities and adversely impact the Corporation's results.

Other government and political factors that could adversely affect the Corporation's financial results include increases in taxes or government royalty rates (including retroactive claims) and changes in trade policies and agreements. Further, the adoption of regulations mandating efficiency standards, and the use of alternative fuels or uncompetitive fuel

components could affect the Corporation's operations. Many governments are providing tax advantages and other subsidies to support alternative energy sources or are mandating the use of specific fuels or technologies. Governments and others are also promoting research into new technologies to reduce the cost and increase the scalability of alternative energy sources, and the success of these initiatives may decrease demand for the Corporation's products.

A change in federal, provincial or municipal governments in Canada may have an impact on the directions taken by such governments on matters that may impact the oil and natural gas industry including the balance between economic development and environmental policy. The oil and natural gas industry has become an increasingly politically polarizing topic in Canada, which has resulted in a rise in civil disobedience surrounding oil and natural gas development—particularly with respect to infrastructure projects. Protests, blockades and demonstrations have the potential to delay and disrupt the Corporation's activities. See "Industry Conditions – Regulatory Authorities and Environmental Regulation" and "Industry Conditions – Transportation Constraints and Market Access".

#### **Exploration, Development and Production Risks**

The Corporation's future performance may be affected by the financial, operational, environmental and safety risks associated with the exploration, development and production of oil and natural gas.

Oil and natural gas operations involve many risks that even a combination of experience, knowledge and careful evaluation may not be able to overcome. The long-term commercial success of the Corporation depends on its ability to find, acquire, develop and commercially produce oil and natural gas reserves. Without the continual addition of new reserves, the Corporation's existing reserves, and the production from them, will decline over time as the Corporation produces from such reserves. A future increase in the Corporation's reserves will depend on both the ability of the Corporation to explore and develop its existing properties and its ability to select and acquire suitable producing properties or prospects. There is no assurance that the Corporation will be able to continue to find satisfactory properties to acquire or participate in. Moreover, management of the Corporation may determine that current markets, terms of acquisition, participation or pricing conditions make potential acquisitions or participation uneconomic. There is also no assurance that the Corporation will discover or acquire further commercial quantities of oil and natural gas.

Future oil and natural gas exploration may involve unprofitable efforts from dry wells or from wells that are productive but do not produce sufficient petroleum substances to return a profit after drilling, completing (including hydraulic fracturing), operating and other costs. Completion of a well does not ensure a profit on the investment or recovery of drilling, completion and operating costs.

Drilling hazards, environmental damage and various field operating conditions could greatly increase the cost of operations and adversely affect the production from successful wells. Field operating conditions include, but are not limited to, delays in obtaining governmental approvals or consents, shut-ins of wells resulting from extreme weather conditions, insufficient storage or transportation capacity or geological and mechanical conditions. While diligent well supervision and effective maintenance operations and the development of enhanced oil recovery technologies can contribute to maximizing production rates over time, it is not possible to eliminate production delays and declines from normal field operating conditions, which can negatively affect revenue and cash flow levels to varying degrees.

Oil and natural gas exploration, development and production operations are subject to all the risks and hazards typically associated with such operations, including, but not limited to, fire, explosion, blowouts, cratering, sour gas releases, spills and other environmental hazards. These typical risks and hazards could result in substantial damage to oil and natural gas wells, production facilities, other property and the environment and cause personal injury or threaten wildlife. Particularly, the Corporation may explore for and produce sour natural gas in certain areas. An unintentional leak of sour natural gas could result in personal injury, loss of life or damage to property and may necessitate an evacuation of populated areas, all of which could result in liability to the Corporation.

Oil and natural gas production operations are also subject to geological or seismic risks, including encountering unexpected formations or pressures, premature decline of reservoirs and the invasion of water into producing formations. Losses resulting from the occurrence of any of these risks may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

As is standard industry practice, the Corporation is not fully insured against all risks, nor are all risks insurable. Although the Corporation maintains liability insurance and business interruption insurance in an amount that it considers consistent with industry practice, liabilities associated with certain risks could exceed policy limits or not be covered. See "Risk Factors – Insurance". In either event, the Corporation could incur significant costs.

#### Gathering and Processing Facilities, Pipeline Systems and Rail

Lack of capacity and/or regulatory constraints on gathering and processing facilities, pipeline systems and railway lines may have a negative impact on the Corporation's ability to produce and sell its oil and natural gas.

The Corporation delivers its products through gathering and processing facilities, pipeline systems and, in certain circumstances, by rail. The amount of oil and natural gas that the Corporation can produce and sell is subject to the accessibility, availability, proximity and capacity of these gathering and processing facilities, pipeline systems, trucking and railway lines. Unexpected shut downs or curtailment of capacity of pipelines for maintenance or integrity work or because of actions taken by regulators could also affect the Corporation's production, operations and financial results.

A portion of the Corporation's production may, from time to time, be processed through facilities owned by third parties and over which the Corporation does not have control. From time to time, these facilities may discontinue or decrease operations either as a result of normal servicing requirements or as a result of unexpected events. A discontinuation or decrease of operations could have a material adverse effect on the Corporation's ability to process its production and deliver the same to market. Midstream and pipeline companies may take actions to maximize their return on investment, which may in turn adversely affect producers and shippers, especially when combined with a regulatory framework that may not always align with the interests of particular shippers.

#### **Pipeline Systems**

Pipeline interruptions or capacity constraints may have a negative impact on the Corporation's ability to transport and market its products.

The interruption of firm pipeline transportation has and may continue to affect the oil and natural gas industry and limit the ability to fully produce and market oil and natural gas production. In addition, the pro-rationing of capacity on interprovincial pipeline systems may also affect the ability to export oil and natural gas. Unexpected shut downs or curtailment of capacity of pipelines for maintenance or integrity work or because of actions taken by regulators may also affect the Corporation's production, operations and financial results. The Corporation's production could be adversely impacted by both firm and interruptible transportation service curtailments on TransCanada's NGTL and Canadian Mainline systems.

#### **Project Risks**

The success of the Corporation's operations may be negatively impacted by factors outside of its control resulting in operational delays and cost overruns.

The Corporation manages a variety of small and large projects in the conduct of its business. Project interruptions may delay expected revenues from operations. Significant project cost overruns could make a project uneconomic. The Corporation's ability to execute projects and to market oil, natural gas and NGLs depends upon numerous factors beyond the Corporation's control, including:

- availability of processing capacity;
- availability and proximity of pipeline capacity;
- availability of storage capacity;
- availability of, and the ability to acquire, water supplies needed for drilling and hydraulic fracturing, or the Corporation's ability to dispose of water used or removed from strata at a reasonable cost and in accordance with applicable environmental regulations;
- effects of inclement and severe weather events, including fire, drought and flooding;
- the availability of drilling and related equipment;
- unexpected cost increases;

- accidental events;
- currency fluctuations;
- regulatory changes;
- availability and productivity of skilled labour; and
- regulation of the oil and natural gas industry by various levels of government and governmental agencies.

Because of these factors, the Corporation could be unable to execute projects on time, on budget, or at all.

#### **Reserves Estimates**

## The Corporation's estimated reserves are based on numerous factors and assumptions which may prove incorrect and which may affect the Corporation.

There are numerous uncertainties inherent in estimating quantities of oil, natural gas and NGLs reserves and the future cash flows attributed to such reserves. The reserves and associated cash flow information set forth in this document are estimates only. Generally, estimates of economically recoverable oil, natural gas and NGLs reserves (including the breakdown of reserves by product type) and the future net cash flows from such estimated reserves are based upon a number of variable factors and assumptions, such as:

- historical production from properties;
- production rates;
- ultimate reserve recovery;
- timing and amount of capital expenditures;
- marketability of oil, natural gas and NGLs;
- royalty rates; and
- the assumed effects of regulation by governmental agencies and future operating costs (all of which may vary materially from actual results).

For those reasons, estimates of the economically recoverable oil, natural gas and NGLs reserves attributable to any particular group of properties, classification of such reserves based on risk of recovery and estimates of future net revenues associated with reserves prepared by different engineers, or by the same engineers at different times may vary. The Corporation's actual production, revenues, taxes and development and operating expenditures with respect to its reserves will vary from estimates and such variations could be material.

The estimation of proved reserves that may be developed and produced in the future is often based upon volumetric calculations and upon analogy to similar types of reserves rather than actual production history. Recovery factors and drainage areas are often estimated by experience and analogy to similar producing pools. Estimates based on these methods are generally less reliable than those based on actual production history. Subsequent evaluation of the same reserves based upon production history and production practices will result in variations in the estimated reserves. Such variations could be material.

In accordance with applicable securities laws, the Corporation's independent reserves evaluator has used forecast prices and costs in estimating the reserves and future net cash flows as summarized herein. Actual future net cash flows will be affected by other factors, such as actual production levels, supply and demand for oil, natural gas and NGLs, curtailments or increases in consumption by oil and natural gas purchasers, changes in governmental regulation or taxation and the impact of inflation on costs.

Actual production and cash flows derived from the Corporation's oil, natural gas and NGLs reserves will vary from the estimates contained in the reserve evaluation, and such variations could be material. The reserve evaluation is based in part on the assumed success of activities the Corporation intends to undertake in future years. The reserves and estimated cash flows to be derived therefrom and contained in the reserve evaluation will be reduced to the extent that such activities do not achieve the level of success assumed in the reserve evaluation. The reserve evaluation is effective as of a specific effective date and, except as may be specifically stated, has not been updated and therefore does not reflect changes in the Corporation's reserves since that date.

#### Hedging

#### Hedging activities expose the Corporation to the risk of financial loss and counter-party risk.

From time to time, the Corporation may enter into agreements to receive fixed prices on its oil and natural gas production to offset the risk of revenue losses if commodity prices decline. However, to the extent that the Corporation engages in price risk management activities to protect itself from commodity price declines, it may also be prevented from realizing the full benefits of price increases above the levels of the derivative instruments used to manage price risk.

In addition, the Corporation's hedging arrangements may expose it to the risk of financial loss in certain circumstances, including instances in which:

- production falls short of the hedged volumes or prices fall significantly lower than projected;
- there is a widening of price-basis differentials between delivery points for production and the delivery point assumed in the hedge arrangement;
- counterparties to the hedging arrangements or other price risk management contracts fail to perform under those arrangements; or
- a sudden unexpected event materially impacts oil and natural gas prices.

Similarly, from time to time the Corporation may enter into agreements to fix the exchange rate of Canadian to United States dollars or other currencies in order to offset the risk of revenue losses if the Canadian dollar increases in value compared to other currencies. However, if the Canadian dollar declines in value compared to such fixed currencies, the Corporation will not benefit from the fluctuating exchange rate.

#### **Credit Facility Arrangements**

## Failing to comply with covenants under the Credit Facilities could result in restricted access to additional capital or being required to repay all amounts owing thereunder.

The amount authorized under the Credit Facilities is dependent on the borrowing base determined by its lenders. The Corporation is required to comply with covenants under the Credit Facilities which may, in certain cases, include certain financial ratio tests, which from time to time either affect the availability, or price, of additional funding and in the event that the Corporation does not comply with these covenants, the Corporation's access to capital could be restricted or repayment could be required. Events beyond the Corporation's control may contribute to the failure of the Corporation to comply with such covenants. A failure to comply with covenants could result in default under the Credit Facilities, which could result in the Corporation being required to repay amounts owing thereunder. The acceleration of the Corporation's indebtedness under one agreement may permit acceleration of indebtedness under other agreements that contain cross default or cross-acceleration provisions. In addition, the Credit Facilities may impose operating and financial restrictions on the Corporation that could include restrictions on, the payment of dividends, or making other distributions with respect to the Corporation's securities, incurring additional indebtedness, providing guarantees, the assumption of loans, making capital expenditures, entering into amalgamations, mergers, take-over bids or disposition of assets, among others.

The Corporation's lenders under the Credit Facilities use the Corporation's reserves, commodity prices, applicable discount rate and other factors to determine periodically the Corporation's borrowing base. Any decrease in commodity prices could reduce the Corporation's borrowing base, reducing the funds available to the Corporation under the Credit Facilities. This could result in the requirement to repay a portion, or all, of the Corporation's indebtedness.

If the Corporation's lenders require repayment of all or portion of the amounts outstanding under its credit facilities for any reason, including for a default of a covenant or the reduction of a borrowing base, there is no certainty that the Corporation would be in a position to make such repayment. Even if the Corporation is able to obtain new financing in order to make any required repayment under its credit facilities, it may not be on commercially reasonable terms or terms that are acceptable to the Corporation. If the Corporation is unable to repay amounts owing under credit facilities,

the lenders under the credit facilities could proceed to foreclose or otherwise realize upon the collateral granted to them to secure the indebtedness.

# **Forward-Looking Information**

# Forward-looking information may prove inaccurate.

Shareholders and prospective investors are cautioned not to place undue reliance on the Corporation's forward-looking information. By its nature, forward-looking information involves numerous assumptions, known and unknown risks and uncertainties, of both a general and specific nature, that could cause actual results to differ materially from those suggested by the forward-looking information or contribute to the possibility that predictions, forecasts or projections will prove to be materially inaccurate. Additional information on the risks, assumption and uncertainties are found under "Forward-Looking Statements".

#### **Substantial Capital Requirements**

The Corporation's access to capital may be limited or restricted as a result of factors related and unrelated to it, impacting its ability to conduct future operations, acquire and develop reserves.

The Corporation anticipates making substantial capital expenditures for the acquisition, exploration, development and production of oil, natural gas and NGLs reserves in the future. As future capital expenditures will be financed out of cash generated from operations, borrowings and possible future equity sales, the Corporation's ability to do so is dependent on, among other factors:

- the overall state of the capital markets;
- the Corporation's credit rating (if applicable);
- commodity prices;
- interest rates;
- royalty rates;
- tax burden due to current and future tax laws; and
- investor appetite for investments in the energy industry and the Corporation's securities in particular.

Further, if the Corporation's revenues or reserves decline, it may not have access to the capital necessary to undertake or complete future drilling programs. The conditions in, or affecting the oil and gas industry have negatively impacted the ability of oil and gas companies, including the Corporation, to access additional financing and/or the cost thereof. There can be no assurance that debt or equity financing, or cash generated by operations will be available or sufficient to meet these requirements or for other corporate purposes or, if debt or equity financing is available, that it will be on terms acceptable to the Corporation. The Corporation may be required to seek additional equity financing on terms that are highly dilutive to existing shareholders. The inability of the Corporation to access sufficient capital for its operations could have a material adverse effect on the Corporation's business financial condition, results of operations and prospects.

### **Additional Funding Requirements**

The Corporation may require additional financing from time to time to fund the acquisition, exploration and development of properties and its ability to obtain such financing in a timely fashion and on acceptable terms may be negatively impacted by the current economic and global market volatility.

The Corporation's cash flow from its reserves may not be sufficient to fund its ongoing activities at all times and from time to time, the Corporation may require additional financing in order to carry out its oil and natural gas acquisition, exploration and development activities. Failure to obtain financing on a timely basis could cause the Corporation to forfeit its interest in certain properties, miss certain acquisition opportunities and reduce its operations. Due to the conditions in the oil and gas industry and/or global economic and political volatility, the Corporation may from time to time have restricted access to capital and increased borrowing costs. The current conditions in the oil and gas industry have negatively impacted the ability of oil and gas companies to access, or the cost of, additional financing.

As a result of global economic and political conditions and domestic lending landscape, the Corporation may from time to time have restricted access to capital and increased borrowing costs. Failure to obtain suitable financing on a timely basis could cause the Corporation to forfeit its interest in certain properties, miss certain acquisition opportunities and reduce or terminate its operations. If the Corporation's revenues from its reserves decrease as a result of lower oil and natural gas prices or otherwise, it will affect the Corporation's ability to expend the necessary capital to replace its reserves or to maintain its production. To the extent that external sources of capital become limited, unavailable or available on onerous terms, the Corporation's ability to make capital investments and maintain existing assets may be impaired, and its assets, liabilities, business, financial condition and results of operations may be affected materially and adversely as a result. In addition, the future development of the Corporation's petroleum properties may require additional financing and there are no assurances that such financing will be available or, if available, will be available upon acceptable terms. Alternatively, any available financing may be highly dilutive to existing shareholders. Failure to obtain any financing necessary for the Corporation's capital expenditure plans may result in a delay in development or production on the Corporation's properties.

#### **Asset Concentration**

# The Corporation's operations and drilling activity is vulnerable to risks associated with operating in a limited geographic area.

The Corporation's producing properties are geographically concentrated. As a result, to the extent demand for and costs of personnel, equipment, power, services, and resources in such geographic area are high it could result in a delay or inability to secure the personnel, equipment, power, services, and resources. Any delay or inability to secure the personnel, equipment, power, services, and resources could result in crude oil, liquids and natural gas production volumes being below the Corporation's forecasted production volumes. In addition, any such negative effect on production volumes, or significant increases in costs, could have a material adverse effect on the Corporation's financial conditions, results of operations, cash flow, and profitability.

As a result of this concentration, the Corporation may be disproportionately exposed to the impact of delays or interruptions of operations or production in this area caused by external factors such as governmental regulation, provincial politics, market limitations, supply shortages, or extreme weather-related conditions.

#### **Royalty Regimes**

#### Changes to royalty regimes may negatively impact the Corporation's cash flows.

There can be no assurance that the governments in the jurisdictions in which the Corporation has assets will not adopt new royalty regimes or modify the existing royalty regimes which may have an impact on the economics of the Corporation's projects. An increase in royalties would reduce the Corporation's earnings and could make future capital investments, or the Corporation's operations, less economic. See "Industry Conditions – Royalties and Incentives".

#### **Geo-Political Risks**

# Global political events may adversely affect commodity prices which in turn affect the Corporation's cash flow.

Political changes in North America and political instability in the Middle East and elsewhere may cause disruptions in the supply of oil that affects the marketability and price of oil and natural gas acquired or discovered by the Corporation. Conflicts, or conversely peaceful developments, arising outside of Canada, including changes in political regimes or parties in power, may have a significant impact on the price of oil and natural gas. Any particular event could result in a material decline in prices and result in a reduction of the Corporation's net production revenue.

### **Non-Governmental Organizations**

#### The Corporation's properties may be subject to action by non-governmental organizations or terrorist attack.

The oil and natural gas exploration, development and operating activities conducted by the Corporation may, at times, be subject to public opposition. Such public opposition could expose the Corporation to the risk of higher costs, delays

or even project cancellations due to increased pressure on governments and regulators by special interest groups including Indigenous groups, landowners, environmental interest groups (including those opposed to oil and natural gas production operations) and other non-governmental organizations, blockades, legal or regulatory actions or challenges, increased regulatory oversight, reduced support from the federal, provincial or municipal governments, delays in, challenges to, or the revocation of regulatory approvals, permits and/or licenses, and direct legal challenges, including the possibility of climate-related litigation. There is no guarantee that the Corporation will be able to satisfy the concerns of the special interest groups and non-governmental organizations and attempting to address such concerns may require the Corporation to incur significant and unanticipated capital and operating expenditures.

In addition, the Corporation's oil and natural gas properties, wells and facilities could be the subject of a terrorist attack. If any of the Corporation's properties, wells or facilities are the subject of terrorist attack it may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects. The Corporation does not have insurance to protect against the risk from terrorism.

#### **Management of Growth**

### The Corporation may not be able to effectively manage the growth of its business.

The Corporation may be subject to growth related risks including capacity constraints and pressure on its internal systems and controls. The ability of the Corporation to manage growth effectively will require it to continue to implement and improve its operational and financial systems and to expand, train and manage its employee base. If the Corporation is unable to deal with this growth, it may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

#### Reliance on a Skilled Workforce and Key Personnel

# An inability to recruit a skilled workforce and key personnel may negatively impact the Corporation.

The operations and management of the Corporation require the recruitment and retention of a skilled workforce, including engineers, technical personnel and other professionals. The loss of key members of such workforce, or a substantial portion of the workforce as a whole, could result in the failure to implement the Corporation's business plans which could have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

Competition for qualified personnel in the oil and natural gas industry is intense and there can be no assurance that the Corporation will be able to continue to attract and retain all personnel necessary for the development and operation of its business. The Corporation does not have any key personnel insurance in effect. Contributions of the existing management team to the immediate and near term operations of the Corporation are likely to be of central importance. In addition, certain of the Corporation's current employees may have significant institutional knowledge that must be transferred to other employees prior to their departure from the workforce. If the Corporation is unable to: (i) retain current employees; (ii) successfully complete effective knowledge transfers; and/or (iii) recruit new employees with the requisite knowledge ad experience, the Corporation could be negatively impacted. In addition, the Corporation could experience increased costs to retain and recruit these professionals.

### Information Technology Systems and Cyber-Security

# Breaches of the Corporation's cyber-security and loss of, or access to, electronic data may adversely impact its operations and financial position.

The Corporation is increasingly dependent upon the availability, capacity, reliability and security of our information technology infrastructure, and our ability to expand and continually update this infrastructure, to conduct daily operations. The Corporation depends on various information technology systems to estimate reserve quantities, process and record financial data, manage the Corporation's land base, manage financial resources, analyze seismic information, administer contracts with operators and lessees and communicate with employees and third-party partners.

Further, the Corporation is subject to a variety of information technology and system risks as a part of its operations including potential breakdown, invasion, virus, cyber-attack, cyber-fraud, security breach, and destruction or interruption of the Corporation's information technology systems by third parties or insiders. Unauthorized access to these systems by employees or third parties could lead to corruption or exposure of confidential, fiduciary or proprietary information, interruption to communications or operations or disruption to business activities or the Corporation's competitive position. In addition, cyber phishing attempts, in which a malicious party attempts to obtain sensitive information such as usernames, passwords, and credit card details (and money) by disguising as a trustworthy entity in an electronic communication, have become more widespread and sophisticated in recent years. If the Corporation becomes a victim to a cyber phishing attack it could result in a loss or theft of the Corporation's financial resources or critical data and information, or could result in a loss of control of the Corporation's technological infrastructure or financial resources. The Corporation's employees are often the targets of such cyber phishing attacks, as they are and will continue to be targeted by parties using fraudulent "spoof" emails to misappropriate information or to introduce viruses or other malware through "Trojan horse" programs to the Corporation's computers. These emails appear to be legitimate emails, but direct recipients to fake websites operated by the sender of the email or request recipients to send a password or other confidential information through email or to download malware.

Increasingly, social media is used as a vehicle to carry out cyber phishing attacks. Information posted on social media sites, for business or personal purposes, may be used by attackers to gain entry into the Corporation's systems and obtain confidential information. The Corporation restricts the social media access of its employees and periodically reviews, supervises, retains and maintains the ability to retrieve social media content. Despite these efforts, there are significant risks that the Corporation may not be able to properly regulate social media use and preserve adequate records of business activities and client communications conducted through the use of social media platforms.

The Corporation maintains policies and procedures that address and implement employee protocols with respect to electronic communications and electronic devices and conducts annual cyber-security risk assessments. The Corporation also employs encryption protection of its confidential information, all computers and other electronic devices. Despite the Corporation's efforts to mitigate such cyber phishing attacks through education and training, cyber phishing activities remain a serious problem that may damage its information technology infrastructure. The Corporation applies technical and process controls in line with industry-accepted standards to protect its information, assets and systems, including a written incident response plan for responding to a cyber-security incident. However, these controls may not adequately prevent cyber-security breaches. Disruption of critical information technology services, or breaches of information security, could have a negative effect on the Corporation's performance and earnings, as well as its reputation, and any damages sustained may not be adequately covered by the Corporation's current insurance coverage, or at all. The significance of any such event is difficult to quantify, but may in certain circumstances be material and could have a material adverse effect on the Corporation's business, financial condition and results of operations.

#### **Market Price of Common Shares**

# The trading price of the Common Shares may be adversely affected by factors related and unrelated to the oil and natural gas industry.

The trading price of the securities of oil and natural gas issuers is subject to substantial volatility often based on factors related and unrelated to the financial performance or prospects of the issuers involved. Factors unrelated to the Corporation's performance could include macroeconomic developments nationally, within North America or globally, domestic and global commodity prices and/or current perceptions of the oil and gas market, including governmental regulatory actions or adverse changes in general market conditions or economic trends. In recent years, the volatility of commodities has increased due, in part, to the implementation of computerized trading and the decrease of discretionary commodity trading. In addition, the volatility, trading volume and share price of issuers have been impacted by increasing investment levels in passive funds that track major indices, as such funds only purchase securities included in such indices. In addition, in certain jurisdictions institutions, including government sponsored entities, have determined to decrease their ownership in oil and gas entities which may impact the liquidity of certain securities and may put downward pressure on the trading price of those securities. Similarly, the market price of the Common Shares could be subject to significant fluctuations in response to variations in the Corporation's operating results, financial

condition, liquidity and other internal factors. Accordingly, the price at which the Common Shares will trade cannot be accurately predicted.

#### Impact of Future Financings on Market Price

# The Corporation's future financings may negatively impact the market price of the Common Shares.

In order to finance future operations or acquisition opportunities, the Corporation may raise funds through the issuance of Common Shares or the issuance of debt instruments or securities convertible into Common Shares. The Corporation cannot predict the size of future issuances of Common Shares or the issuance of debt instruments or other securities convertible into Common Shares or the effect, if any, that future issuances and sales of the Corporation's securities will have on the market price of the Common Shares.

#### Dilution

#### The Corporation may issue additional Common Shares or other dilutive securities, diluting current Shareholders.

The Corporation may make future acquisitions or enter into financings or other transactions involving the issuance of securities of the Corporation which may be dilutive to Shareholders.

# Competition

# The Corporation competes with other oil and natural gas companies, some of which have greater financial and operational resources.

The oil and gas industry is competitive in all of its phases. The Corporation competes with numerous other entities in the exploration, development, production and marketing of oil and natural gas. The Corporation's competitors include oil and natural gas companies that have substantially greater financial resources, staff and facilities than those of the Corporation. Some of these companies not only explore for, develop and produce oil and natural gas, but also carry on refining operations and market oil and natural gas on an international basis. As a result of these complementary activities, some of these competitors may have greater and more diverse competitive resources to draw on than the Corporation. The Corporation's ability to increase its reserves in the future will depend not only on its ability to explore and develop its present properties, but also on its ability to select and acquire other suitable producing properties or prospects for exploratory drilling. Competitive factors in the distribution and marketing of oil and natural gas include price, process, and reliability of delivery and storage.

#### **Environmental**

# Compliance with environmental regulations requires the dedication of a portion of the Corporation's financial and operational resources.

All phases of the oil and natural gas business present environmental risks and hazards and are subject to environmental regulation pursuant to a variety of federal, provincial and local laws and regulations. Environmental legislation provides for, among other things, the initiation and approval of new oil and natural gas projects restrictions and prohibitions on the spill, release or emission of various substances produced in association with oil and gas industry operations. In addition, such legislation sets out the requirements with respect to oilfield waste handling and storage, habitat protection and the satisfactory operation, maintenance, abandonment and reclamation of well and facility sites. New environmental legislation at the federal and provincial levels may increase uncertainty among oil and natural gas industry participants as the new laws are implemented, and the effects of the new rules and standards are felt in the oil and natural gas industry. See "Industry Conditions – Regulatory Authorities and Environmental Regulation".

Compliance with environmental legislation can require significant expenditures and a breach of applicable environmental legislation may result in the imposition of fines and penalties, some of which may be material. Environmental legislation is evolving in a manner expected to result in stricter standards and enforcement, larger fines and liability and potentially increased capital expenditures and operating costs. The discharge of oil, natural gas or other pollutants into the air, soil or water may give rise to liabilities to governments and third parties and may require the Corporation to incur costs to remedy such discharge.

Although the Corporation believes that it is in material compliance with current applicable environmental legislation, no assurance can be given that environmental compliance requirements will not result in a curtailment of production or a material increase in the costs of production, development or exploration activities or otherwise have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

#### **Disposal of Fluids used in Operations**

Regulations regarding the disposal of fluids used in the Corporation's operations may increase its costs of compliance or subject it to regulatory penalties or litigation.

The safe disposal of the hydraulic fracturing fluids (including the additives) and water recovered from oil and natural gas wells is subject to ongoing regulatory review by the federal and provincial governments, including its effect on fresh water supplies and the ability of such water to be recycled, amongst other things. While it is difficult to predict the impact of any regulations that may be enacted in response to such review, the implementation of stricter regulations may increase the Corporation's costs of compliance.

### **Carbon Pricing Risk**

Taxes on carbon emissions affect the demand for oil and natural gas, the Corporation's operating expenses and may impair the Corporation's ability to compete.

The majority of countries across the globe have agreed to reduce their carbon emissions in accordance with the Paris Agreement. In Canada, the federal government implemented legislation aimed at incentivizing the use of alternative fuels and in turn reducing carbon emissions. The federal system currently applies in provinces and territories without their own system that meets federal standards. The federal regime is subject to a number of court challenges. See "Industry Conditions — Climate Change Regulation". Any taxes placed on carbon emissions may have the effect of decreasing the demand for oil and natural gas products while at the same time, increasing the Corporation's operating expenses, each of which may have a material adverse effect on the Corporation's profitability and financial condition. Further, the imposition of carbon taxes puts the Corporation at a disadvantage with its counterparts who operate in jurisdictions where there are less costly carbon regulations. Retaining ownership of Entropy mitigates the Corporation's carbon pricing risk if the subsidiary can execute its plans to develop CCS project for third party emitters.

### **Climate Change**

Climate change concerns could result in increased operating costs and reduced demand for the Corporation's products and shares, while the potential physical effects of climate change could disrupt the Corporation's production and cause it to incur significant costs in preparing for or responding to those effects.

Global climate issues continue to attract public and scientific attention. Numerous reports, including reports from the Intergovernmental Panel on Climate Change, have engendered concern about the impacts of human activity, especially hydrocarbon combustion, on global climate issues. In turn, increasing public, government, and investor attention is being paid to global climate issues and to emissions of GHG, including emissions of carbon dioxide and methane from the production and use of oil, liquids and natural gas. The majority of countries across the globe, including Canada, have agreed to reduce their carbon emissions in accordance with the Paris Agreement. In addition, during the course of the 2021 United Nations Climate Change Conference in Glasgow, Scotland, Canada's Prime Minister Justin Trudeau made several pledges aimed at reducing Canada's GHG emissions and environmental impact. As discussed below, the Corporation faces both transition risks and physical risks associated with climate change and climate change policy and regulations.

# **Transition risks**

Foreign and domestic governments continue to evaluate and implement policy, legislation, and regulations focused on restricting emissions commonly referred to as GHG emissions and promoting adaptation to climate change and the transition to a low-carbon economy. It is not possible to predict what measures foreign and domestic governments may implement in this regard, nor is it possible to predict the requirements that such measures may impose or when such measures may be implemented. However, international multilateral agreements, the obligations adopted thereunder

and legal challenges concerning the adequacy of climate-related policy brought against foreign and domestic governments may accelerate the implementation of these measures. Given the evolving nature of climate change policy and the control of GHG emissions and resulting requirements, including carbon taxes and carbon pricing schemes implemented by varying levels of government, it is expected that current and future climate change regulations will have the effect of increasing the Corporation's operating expenses, and, in the long-term, potentially reducing the demand for oil, liquids, natural gas and related products, resulting in a decrease in the Corporation's profitability and a reduction in the value of its assets. The Corporation believes that natural gas production with low emissions through CCS will be a key component to addressing climate change by abating coal emissions.

Claims have been made against certain energy companies alleging that GHG emissions from oil and natural gas operations constitute a public nuisance under certain laws or that such energy companies provided misleading disclosure to the public and investors of current or future risks associated with climate change. As a result, individuals, government authorities, or other organizations may make claims against oil and natural gas companies, including the Corporation, for alleged personal injury, property damage, or other potential liabilities. While the Corporation is not a party to any such litigation or proceedings, it could be named in actions making similar allegations. An unfavorable ruling in any such case could adversely affect the demand for and price of securities issued by the Corporation, impact its operations and have an adverse impact on its financial condition.

Given the perceived elevated long-term risks associated with policy development, regulatory changes, public and private legal challenges, or other market developments related to climate change, there have also been efforts in recent years affecting the investment community, including investment advisors, sovereign wealth funds, banks, public pension funds, universities and other institutional investors, promoting direct engagement and dialogue with companies in their portfolios on climate change action (including exercising their voting rights on matters relating to climate change) and increased capital allocation to investments in low-carbon assets and businesses while decreasing the carbon intensity of their portfolios through, among other measures, divestments of companies with high exposure to GHG-intensive operations and products. Certain stakeholders have also pressured insurance providers and commercial and investment banks to reduce or stop financing, and providing insurance coverage to oil and natural gas and related infrastructure businesses and projects. The impact of such efforts require the Corporation's management to dedicate significant time and resources to these climate change-related concerns, may adversely affect the Corporation's operations, the demand for and price of the Corporation's securities and may negatively impact the Corporation's cost of capital and access to the capital markets.

Emissions, carbon and other regulations impacting climate and climate-related matters are constantly evolving. With respect to environmental, social, governance and climate reporting, the International Sustainability Standards Board has issued an IFRS Sustainability Disclosure Standard with the aim to develop sustainability disclosure standards that are globally consistent, comparable and reliable. In addition, the Canadian Securities Administrators published for comment Proposed National Instrument 51-107 – Disclosure of Climate Related Matters, intended to introduce climate-related disclosure requirements for reporting issuers in Canada with limited exceptions. If the Corporation is not able to meet future sustainability reporting requirements of regulators or current and future expectations of investors, insurance providers, or other stakeholders, its business and ability to attract and retain skilled employees, obtain regulatory permits, licences, registrations, approvals, and authorizations from various governmental authorities, and raise capital may be adversely affected. See "Industry Conditions – Regulatory Authorities and Environmental Regulation – Climate Change Regulation".

# Regulatory

Modification to current or implementation of additional regulations may reduce the demand for oil and natural gas and/or increase the Corporation's costs and/or delay planned operations.

The implementation of new regulations or the modification of existing regulations affecting the oil and natural gas industry could reduce demand for oil and natural gas and increase the Corporation's costs, either of which may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects. Further, the ongoing third-party challenges to regulatory decisions or orders has reduced the efficiency of the regulatory regime,

as the implementation of the decisions and orders has been delayed resulting in uncertainty and interruption to business of the oil and natural gas industry. See "Industry Conditions – Climate Change Regulation".

In order to conduct oil and natural gas operations, the Corporation will require regulatory permits, licenses, registrations, approvals and authorizations from various governmental authorities at the municipal, provincial and federal level. There can be no assurance that the Corporation will be able to obtain all of the permits, licenses, registrations, approvals and authorizations that may be required to conduct operations that it may wish to undertake. In addition, certain federal legislation such as the Competition Act and the Investment Canada Act could negatively affect the Corporation's business, financial condition and the market value of its Common Shares or its assets, particularly when undertaking, or attempting to undertake, acquisition or disposition activity. See "Industry Conditions – Liability Management".

#### **Hydraulic Fracturing**

Implementation of new regulations on hydraulic fracturing may lead to operational delays, increased costs and/or decreased production volumes, adversely affecting the Corporation's financial position. The Corporation's operations are dependent upon the availability of water and its ability to dispose of produced water from drilling and production activities.

Hydraulic fracturing involves the injection of water, sand, and small amounts of additives under high pressure into tight rock formations that were previously unproductive to stimulate the production of oil, liquids and natural gas. Concerns about seismic activity, including earthquakes, caused by hydraulic fracturing has resulted in regulatory authorities implementing additional protocols for areas that are prone to seismic activity or completely banning hydraulic fracturing in other areas. Any new laws, regulations, or permitting requirements regarding hydraulic fracturing could lead to operational delays, increased operating costs, third-party or governmental claims, and could increase the Corporation's costs of compliance and doing business, as well as delay the development of oil, liquids and natural gas resources from shale formations, which are not commercial without the use of hydraulic fracturing. Restrictions or bans on hydraulic fracturing in the areas where the Corporation operates could result in the Corporation being unable to economically recover its oil and gas reserves and reserves, which would result in a significant decrease in the value of the Corporation's assets.

Water is an essential component of the Corporation's drilling and hydraulic fracturing processes. Limitations or restrictions on the Corporation's ability to secure sufficient amounts of water (including limitations resulting from natural causes such as drought), could materially and adversely impact its operations. Severe drought conditions can result in local water authorities taking steps to restrict the use of water in their jurisdiction for drilling and hydraulic fracturing in order to protect the local water supply. If the Corporation is unable to obtain water to use in its operations from local sources, it may need to be obtained from new sources and transported to drilling sites, resulting in increased costs, which could have a material adverse effect on its financial condition, results of operations, and cash flows.

In addition, the Corporation must dispose of the fluids produced from oil, liquids and natural gas production operations, including produced water, which it does directly or through the use of third-party vendors. The legal requirements related to the disposal of produced water into a non-producing geologic formation by means of underground injection wells are subject to change based on concerns of the public or governmental authorities regarding such disposal activities.

Another consequence of seismic events may be lawsuits alleging that disposal well operations have caused damage to neighboring properties or otherwise violated laws and regulations regarding waste disposal. These developments could result in additional regulation and restrictions on the use of injection wells by the Corporation or by commercial disposal well vendors that the Corporation may use from time to time to dispose of produced water. Increased regulation and attention given to induced seismicity could also lead to greater opposition, including litigation to limit or prohibit oil and natural gas activities utilizing injection wells for produced water disposal. Any one or more of these developments may result in the Corporation or its vendors having to limit disposal well volumes, disposal rates and pressures or locations, or require the Corporation or its vendors to shut down or curtail the injection of produced water into disposal wells,

which events could have a material adverse effect on the Corporation's business, financial condition, and results of operations.

#### Variations in Foreign Exchange Rates and Interest Rates

# Variations in foreign exchange rates and interest rates could adversely affect the Corporation's financial condition.

World oil and natural gas prices are quoted in United States dollars. The Canadian/United States dollar exchange rate, which fluctuates over time, consequently, affects the price received by Canadian producers of oil and natural gas. Material increases in the value of the Canadian dollar relative to the United States dollar will negatively affect the Corporation's production revenues. Accordingly, exchange rates between Canada and the United States could affect the future value of the Corporation's reserves as determined by independent evaluators. Although a low value of the Canadian dollar relative to the United States dollar may positively affect the price the Corporation receives for its oil and natural gas production, it could also result in an increase in the price for certain goods used for the Corporation's operations, which may have a negative impact on the Corporation's financial results.

To the extent that the Corporation engages in risk management activities related to foreign exchange rates, there is a credit risk associated with counterparties with which the Corporation may contract. An increase in interest rates could result in a significant increase in the amount the Corporation pays to service debt, resulting in a reduced amount available to fund its exploration and development activities, and if applicable, the cash available for dividends. Such an increase could also negatively impact the market price of the Common Shares.

# **Changing Investor Sentiment**

# Changing investor sentiment towards the oil and gas industry may impact the Corporation's access to, and cost of, capital.

A number of factors, including the effects of the use of hydrocarbons on climate change, the impact of oil and gas operations on the environment, environmental damage relating to spills of petroleum products during production and transportation and Indigenous rights, have affected certain investors' sentiments towards investing in the oil and gas industry. As a result of these concerns, some institutional, retail and governmental investors have announced that they no longer are willing to fund or invest in oil and gas properties or companies or are reducing the amount thereof over time. In addition, certain institutional investors are requesting that issuers develop and implement more robust social, environmental and governance policies and practices. Developing and implementing such policies and practices can involve significant costs and require a significant time commitment from the Board, management and employees of the Corporation.

Failing to implement the policies and practices as requested by institutional investors may result in such investors reducing their investment in the Corporation or not investing in the Corporation at all. Any reduction in the investor base interested or willing to invest in the oil and gas industry and more specifically, the Corporation, may result in limiting the Corporation's access to capital, increasing the cost of capital, and decreasing the price and liquidity of the Corporation's securities even if the Corporation's operating results, underlying asset values or prospects have not changed.

#### Insurance

# Not all risks of conducting oil and natural gas opportunities are insurable and the occurrence of an uninsurable event may have a materially adverse effect on the Corporation.

The Corporation's involvement in the exploration for and development of oil and natural gas properties may result in the Corporation becoming subject to liability for pollution, blowouts, leaks of sour natural gas, property damage, personal injury or other hazards. Although the Corporation maintains insurance in accordance with industry standards to address certain of these risks, such insurance has limitations on liability and may not be sufficient to cover the full extent of such liabilities. In addition, certain risks are not, in all circumstances, insurable or, in certain circumstances, the Corporation may elect not to obtain insurance to deal with specific risks due to the high premiums associated with such insurance or other reasons. The payment of any uninsured liabilities would reduce the funds available to the Corporation. The occurrence of a significant event that the Corporation is not fully insured against, or the insolvency of the insurer of

such event, may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

The Corporation's insurance policies are generally renewed on an annual basis and, depending on factors such as market conditions, the premiums, policy limits and/or deductibles for certain insurance policies can vary substantially. In some instances, certain insurance may become unavailable or available only for reduced amounts of coverage. Significantly increased costs could lead the Corporation to decide to reduce or possibly eliminate, coverage. In addition, insurance is purchased from a number of third-party insurers, often in layered insurance arrangements, some of whom may discontinue providing insurance coverage for their own policy or strategic reasons. Should any of these insurers refuse to continue to provide insurance coverage, the Corporation's overall risk exposure could be increased, and the Corporation could incur significant costs.

# **Third Party Credit Risk**

#### The Corporation is exposed to credit risk of third-party operators or partners of properties in which it has an interest.

The Corporation may be exposed to third party credit risk through its contractual arrangements with its current or future joint venture partners, marketers of its oil, natural gas and NGLs production and other parties. In addition, the Corporation may be exposed to third party credit risk from operators of properties in which the Corporation has a working or royalty interest. In the event such entities fail to meet their contractual obligations to the Corporation, such failures may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects. In addition, poor credit conditions in the industry and of joint venture partners may affect a joint venture partner's willingness to participate in the Corporation's ongoing capital program, potentially delaying the program and the results of such program until the Corporation finds a suitable alternative partner. To the extent that any of such third parties go bankrupt, become insolvent or make a proposal or institute any proceedings relating to bankruptcy or insolvency, it could result in the Corporation being unable to collect all or a portion of any money owing from such parties. Any of these factors could materially adversely affect the Corporation's financial and operational results.

#### **Tax Horizon**

# The Corporation's projections regarding its tax horizons may be inaccurate, resulting in a requirement to pay taxes sooner than expected.

It is expected, based upon current legislation, the projections contained in the Sproule Report and various other assumptions that no cash income taxes are to be paid by the Corporation prior to 2024. A lower level of capital expenditures than those contained in the Sproule Report or should the assumptions used by the Corporation prove to be inaccurate, the Corporation may be required to pay cash income taxes sooner than anticipated, which will reduce cash flow available to the Corporation.

### **Operational Dependence**

# The successful operation of a portion of the Corporation's properties is dependent on third parties.

Other companies operate some of the assets in which the Corporation has an interest. The Corporation has limited ability to exercise influence over the operation of those assets or their associated costs, which could adversely affect the Corporation's financial performance. The Corporation's return on assets operated by others depends upon a number of factors that may be outside of the Corporation's control, including, but not limited to, the timing and amount of capital expenditures, the operator's expertise and financial resources, the approval of other participants, the selection of technology and risk management practices.

In addition, due to volatile commodity prices, many companies, including companies that may operate some of the assets in which the Corporation has an interest, may be in financial difficulty, which could impact their ability to fund and pursue capital expenditures, carry out their operations in a safe and effective manner and satisfy regulatory requirements with respect to abandonment and reclamation obligations. If companies that operate some of the assets in which the Corporation has an interest fail to satisfy regulatory requirements with respect to abandonment and reclamation obligations the Corporation may be required to satisfy such obligations and to seek reimbursement from

such companies. To the extent that any of such companies go bankrupt, become insolvent or make a proposal or institute any proceedings relating to bankruptcy or insolvency, it could result in such assets being shut-in, the Corporation potentially becoming subject to additional liabilities relating to such assets and the Corporation having difficulty collecting revenue due from such operators or recovering amounts owing to the Corporation from such operators for their share of abandonment and reclamation obligations. Any of these factors could have a material adverse affect on the Corporation's financial and operational results. See "Industry Conditions – Regulatory Authorities and Environmental Regulation – Liability Management".

# Title to and Right to Produce from Assets

### Defects in the title or rights to product the Corporation's properties may result in a financial loss.

The Corporation's actual title to and interest in its properties, and its right to produce and sell the oil and natural gas therefrom, may vary from the Corporation's records. In addition, there may be valid legal challenges or legislative changes that affect the Corporation's title to and right to produce from its oil and natural gas properties, which could impair the Corporation's activities and result in a reduction of the revenue received by the Corporation.

If a defect exists in the chain of title or in the Corporation's right to produce, or a legal challenge or legislative change arises, it is possible that the Corporation may lose all, or a portion of, the properties to which the title defect relates and/or its right to produce from such properties. This may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

#### **Expiration of Licenses and Leases**

# The Corporation or its working interest partners may fail to meet the requirements of a licence or lease, causing its termination or expiry.

The Corporation's properties are held in the form of licences and leases and working interests in licences and leases. If the Corporation or the holder of the licence or lease fails to meet the specific requirement of a licence or lease, the licence or lease may terminate or expire. There can be no assurance that any of the obligations required to maintain each licence or lease will be met. The termination or expiration of the Corporation's licences or leases or the working interests relating to a licence or lease and the associated abandonment and reclamation obligations may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

### Failure to Realize Anticipated Benefits of Acquisitions and Dispositions

# The anticipated benefits of acquisitions may not be achieved, and the Corporation may dispose of non-core assets for less than their carrying value on the financial statements as a result of weak market conditions.

The Corporation considers acquisitions and dispositions of businesses and assets in the ordinary course of business. Achieving the benefits of acquisitions depends on successfully consolidating functions and integrating operations and procedures in a timely and efficient manner and the Corporation's ability to realize the anticipated growth opportunities and synergies from combining the acquired businesses and operations with those of the Corporation. The integration of acquired businesses and assets may require substantial management effort, time and resources diverting management's focus from other strategic opportunities and operational matters. Management continually assesses the value and contribution of services provided by third parties and assets required to provide such services. In this regard, non-core assets may be periodically disposed of so the Corporation can focus its efforts and resources more efficiently. Depending on the market conditions for such non-core assets, certain non-core assets of the Corporation may realize less on disposition than their carrying value on the financial statements of the Corporation.

### Reputational Risk Associated with the Corporation's Operations

#### The Corporation relies on its reputation to continue its operations and to attract and retain investors and employees.

The Corporation's business, operations or financial condition may be negatively impacted as a result of any negative public opinion towards the Corporation or as a result of any negative sentiment toward, or in respect of, the Corporation's reputation with stakeholders, special interest groups, political leadership, the media or other entities.

Public opinion may be influenced by certain media and special interest groups' negative portrayal of the industry in which the Corporation operates as well as their opposition to certain oil and natural gas projects. Potential impacts of negative public opinion or reputational issues may include delays or interruptions in operations, legal or regulatory actions or challenges, blockades, increased regulatory oversight, reduced support for, delays in, challenges to, or the revocation of regulatory approvals, permits and/or licenses and increased costs and/or cost overruns. The Corporation's reputation and public opinion could also be impacted by the actions and activities of other companies operating in the oil and natural gas industry, particularly other producers, over which the Corporation has no control. Similarly, the Corporation's reputation could be impacted by negative publicity related to loss of life, injury or damage to property and environmental damage caused by the Corporation's operations. In addition, if the Corporation develops a reputation of having an unsafe work site it may impact the ability of the Corporation to attract and retain the necessary skilled employees and consultants to operate its business. Opposition from special interest groups opposed to oil and natural gas development and the possibility of climate related litigation against governments and fossil fuel companies may impact the Corporation's reputation. See "Risk Factors – Climate Change".

Reputational risk cannot be managed in isolation from other forms of risk. Credit, market, operational, insurance, regulatory and legal risks, among others, must all be managed effectively to safeguard the Corporation's reputation. Damage to the Corporation's reputation could result in negative investor sentiment towards the Corporation, which may result in limiting the Corporation's access to capital, increasing the cost of capital, and decreasing the price and liquidity of the Corporation's securities.

# **Issuance of Debt**

# Increased debt levels may impair the Corporation's ability to borrow additional capital on a timely basis to fund opportunities as they arise.

From time to time, the Corporation may enter into transactions to acquire assets or shares of other entities. These transactions may be financed in whole or in part with debt, which may increase the Corporation's debt levels above industry standards for oil and natural gas companies of similar size. Depending on future exploration and development plans, the Corporation may require additional debt financing that may not be available or, if available, may not be available on favourable terms. Neither the Corporation's articles nor its by-laws limit the amount of indebtedness that the Corporation may incur. The level of the Corporation's indebtedness from time to time could impair the Corporation's ability to obtain additional financing on a timely basis to take advantage of business opportunities that may arise.

#### **Conflicts of Interest**

# Conflicts of interest may arise for the Corporation's directors and officers who are also involved with other industry participants.

Certain directors or officers of the Corporation may also be directors or officers of other oil and natural gas companies and as such may, in certain circumstances, have a conflict of interest. Conflicts of interest, if any, will be subject to and governed by procedures prescribed by the ABCA which require a director of officer of a corporation who is a party to, or is a director or an officer of, or has a material interest in any person who is a party to, a material contract or proposed material contract with the Corporation to disclose his or her interest and, in the case of directors, to refrain from voting on any matter in respect of such contract unless otherwise permitted under the ABCA. See "Directors and Officers – Conflicts of Interest".

#### **Cost of New Technologies**

# The Corporation's ability to successfully implement new technologies into its operations in a timely and efficient manner will affect its ability to compete.

The petroleum industry is characterized by rapid and significant technological advancements and introductions of new products and services utilizing new technologies. Other companies may have greater financial, technical and personnel resources that allow them to implement and benefit from technological advantages. There can be no assurance that the Corporation will be able to respond to such competitive pressures and implement such technologies on a timely basis or at an acceptable cost. If the Corporation does implement such technologies, there is no assurance that the Corporation

will do so successfully. One or more of the technologies currently utilized by the Corporation or implemented in the future may become obsolete. If the Corporation is unable to utilize the most advanced commercially available technology, or is unsuccessful in implementing certain technologies, its business, financial condition and results of operations could also be adversely affected in a material way.

#### **Alternatives to and Changing Demand for Petroleum Products**

Changes to the demand for oil and natural gas products and the rise of petroleum alternatives may negatively affect the Corporation's financial condition, results of operations and cash flow.

Fuel conservation measures, alternative fuel requirements, increasing consumer demand for alternatives to oil and natural gas and technological advances in fuel economy and renewable energy generation systems could reduce the demand for oil, natural gas and liquid hydrocarbons. Recently, certain jurisdictions have implemented policies or incentives to decrease the use of fossil fuels and encourage the use of renewable fuel alternatives, which may lessen the demand for petroleum products and put downward pressure on commodity prices. Advancements in energy efficient products have a similar affect on the demand for oil and gas products. The Corporation cannot predict the impact of changing demand for oil and natural gas products, and any major changes may have a material adverse effect on the Corporation's business, financial condition, results of operations and cash flows by decreasing the Corporation's profitability, increasing its costs, limiting its access to capital and decreasing the value of its assets.

# Litigation

The Corporation and its subsidiaries may be involved in litigation in the course of its normal operations and the outcome of the litigation may adversely affect the Corporation and its subsidiaries and their reputations.

In the normal course of the Corporation's and its subsidiaries' operations, they may become involved in, named as a party to, or be the subject of, various legal proceedings, including regulatory proceedings, tax proceedings and legal actions, relating to personal injuries, including resulting from exposure to hazardous substances, property damage, property taxes, land and access rights, environmental issues, including claims relating to contamination or natural resource damages and contract disputes. The outcome with respect to outstanding, pending or future proceedings cannot be predicted with certainty and may be determined adversely to the Corporation and its subsidiaries, and as a result, could have a material adverse effect on the Corporation's and its subsidiaries' assets, liabilities, business, financial condition and results of operations. Even if the Corporation or its subsidiaries, as applicable, prevails in any such legal proceedings, the proceedings could be costly and time-consuming and may divert the attention of management and key personnel from business operations, which could have an adverse affect on the Corporation's or its subsidiaries' financial condition.

### **Breach of Confidentiality**

Breach of confidentiality by a third party could impact the Corporation's competitive advantage or put it at risk of litigation.

While discussing potential business relationships or other transactions with third parties, the Corporation may disclose confidential information relating to the business, operations or affairs of the Corporation. Although confidentiality agreements are generally signed by third parties prior to the disclosure of any confidential information, a breach could put the Corporation at competitive risk and may cause significant damage to its business. The harm to the Corporation's business from a breach of confidentiality cannot presently be quantified, but may be material and may not be compensable in damages. There is no assurance that, in the event of a breach of confidentiality, the Corporation will be able to obtain equitable remedies, such as injunctive relief, from a court of competent jurisdiction in a timely manner, if at all, in order to prevent or mitigate any damage to its business that such a breach of confidentiality may cause.

#### **Internal Controls**

Material weaknesses in the Corporation's internal controls may negatively affect the Corporation and the market price of the Common Shares.

Effective internal controls are necessary for the Corporation to provide reliable financial reports and to help prevent fraud. Although the Corporation will undertake a number of procedures in order to help ensure the reliability of its financial reports, including those imposed on it under Canadian securities laws, the Corporation cannot be certain that such measures will ensure that the Corporation will maintain adequate control over financial processes and reporting. Failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm the Corporation's results of operations or cause it to fail to meet its reporting obligations. If the Corporation or its independent auditors discover a material weakness, the disclosure of that fact, even if quickly remedied, could reduce the market's confidence in the Corporation's financial statements and harm the trading price of the Common Shares.

#### **Income Taxes**

#### Taxation authorities may reassess the Corporation's tax returns.

The Corporation files all required income tax returns and believes that it is in full compliance with the provisions of the *Income Tax Act* (Canada) and all other applicable provincial tax legislation. However, such returns are subject to reassessment by the applicable taxation authority. In the event of a successful reassessment of the Corporation, whether by re-characterization of exploration and development expenditures or otherwise, such reassessment may have an impact on current and future taxes payable.

Income tax laws relating to the oil and natural gas industry, such as the treatment of resource taxation or dividends, may in the future be changed or interpreted in a manner that adversely affects the Corporation. Furthermore, tax authorities having jurisdiction over the Corporation may disagree with how the Corporation calculates its income for tax purposes or could change administrative practices to the Corporation's detriment.

#### **Availability of Drilling Equipment and Access**

Restrictions on the availability of and access to drilling equipment may impede the Corporation's exploration and development activities.

Oil and natural gas exploration, development and operating activities are dependent on the availability and cost of specialized materials and equipment (typically leased from third parties) in the areas where such activities are conducted. The availability of such material and equipment is limited. An increase in demand or cost, or a decrease in the availability of such materials and equipment may impede the Corporation's exploration, development and operating activities.

#### **Seasonality and Extreme Weather Conditions**

Oil and natural gas operations are subject to seasonal and extreme weather conditions and the Corporation may experience significant operational delays as a result.

The level of activity in the Canadian oil and natural gas industry is influenced by seasonal weather patterns. Wet weather and spring thaw may make the ground unstable. Consequently, municipalities and provincial transportation departments may enforce road bans that restrict the movement of rigs and other heavy equipment, thereby reducing activity levels. Roads bans and other restrictions generally result in a reduction of drilling and exploratory activities and may also result in the shut-in of some of the Corporation's production if not otherwise tied-in. Certain oil and natural gas producing areas are located in areas that are inaccessible other than during the winter months because the ground surrounding the sites in these areas consists of muskeg. In addition, extreme cold weather, heavy snowfall and heavy rainfall may restrict the Corporation's ability to access its properties, cause operational difficulties including damage to machinery or contribute to personnel injury because of dangerous working conditions.

#### **Inflation and Cost Management**

A failure to secure the services and equipment necessary to the Corporation's operations for the expected price, on the expected timeline, or at all, may have an adverse effect on the Corporation's financial performance and cash flows.

The Corporation's operating costs could escalate and become uncompetitive due to supply chain disruptions, inflationary cost pressures, equipment limitations, escalating supply costs, commodity prices, and additional government

intervention through stimulus spending or additional regulations. The Corporation's inability to manage costs may impact project returns and future development decisions, which could have a material adverse effect on its financial performance and cash flows.

The cost or availability of oil and gas field equipment may adversely affect the Corporation's ability to undertake exploration, development and construction projects. The oil and gas industry is cyclical in nature and is prone to shortages of supply of equipment and services including drilling rigs, geological and geophysical services, engineering and construction services, major equipment items for infrastructure projects and construction materials generally. These materials and services may not be available when required at reasonable prices. A failure to secure the services and equipment necessary to the Corporation's operations for the expected price, on the expected timeline, or at all, may have an adverse effect on the Corporation's financial performance and cash flows.

### Physical risks

Based on the Corporation's current understanding, the potential physical risks resulting from climate change are long-term in nature and associated with a high degree of uncertainty regarding timing, scope, and severity of potential impacts. Many experts believe global climate change could increase extreme variability in weather patterns such as increased frequency of severe weather, rising mean temperature and sea levels, and long-term changes in precipitation patterns. Extreme hot and cold weather, heavy snowfall, heavy rainfall, and wildfires may restrict the Corporation's ability to access its properties and cause operational difficulties, including damage to equipment and infrastructure. Extreme weather also increases the risk of personnel injury as a result of dangerous working conditions. Certain of the Corporation's assets are located in locations that are proximate to forests and rivers and a wildfire or flood may lead to significant downtime and/or damage to the Corporation's assets or cause disruptions to the production and transport of its products or the delivery of goods and services in its supply chain.

### **Indigenous Land and Rights Claims**

# Opposition by Indigenous groups to the conduct of the Corporation's operations, development or exploratory activities may negatively impact the Corporation.

Opposition by Indigenous groups to the conduct our operations, development or exploratory activities in any of the jurisdictions in which the Corporation conducts business may negatively impact it in terms of public perception, diversion of management's time and resources, legal and other advisory expenses, and could adversely impact the Corporation's progress and ability to explore and develop properties.

Some Indigenous groups have established or asserted Indigenous treaty, title and rights to portions of Canada. Although there are no Indigenous and treaty rights claims on lands where the Corporation operates, no certainty exists that any lands currently unaffected by claims brought by Indigenous groups will remain unaffected by future claims. Such claims, if successful, could have a material adverse impact on its operations or pace of growth.

The Canadian federal and provincial governments have a duty to consult with Indigenous people when contemplating actions that may adversely affect the asserted or proven Indigenous or treaty rights and, in certain circumstances, accommodate their concerns. The scope of the duty to consult by federal and provincial governments varies with the circumstances and is often the subject of ongoing litigation. The fulfillment of the duty to consult Indigenous people and any associated accommodations may adversely affect the Corporation's ability to, or increase the timeline to, obtain or renew, permits, leases, licenses, and other approvals, or to meet the terms and conditions of those approvals. For example, a British Columbia Supreme Court decision determined that the cumulative impacts of government sanctioned industrial development on the traditional territories of a First Nations group in northeast British Columbia breached that group's treaty rights. Going forward, this decision may have significant impacts on the regulation of industrial activities in northeast British Columbia. Further, it may lead to similar claims of cumulative effects across Canada in other areas covered by numbered treaties. The long-term impacts of and associated risks of the decision on the Canadian oil and natural gas industry and the Corporation remain uncertain.

In addition, the federal government has introduced legislation to implement the UNDRIP. Other Canadian jurisdictions, including British Columbia, have also introduced or passed similar legislation, or begun considering the principles and

objectives of UNDRIP, or may do so in the future. The means and timelines associated with UNDRIP's implementation by government is uncertain; additional processes may be created or legislation amended or introduced associated with project development and operations, further increasing uncertainty with respect to project regulatory approval timelines and requirements. See "Industry Conditions – Indigenous Rights".

#### **Share Buybacks**

### There is no assurance that the Corporation will repurchase its Common Shares in the future.

The future acquisition by the Corporation of Common Shares pursuant to its share buyback program (including through its NCIB), if any, and the level thereof is uncertain. Any decision to acquire Common Shares pursuant to the share buyback program will be subject to the discretion of the board of directors of the Corporation and may depend on a variety of factors, including, without limitation, the Corporation's business performance, financial condition, financial requirements, growth plans, expected capital requirements and other conditions existing at such future time including, without limitation, contractual restrictions and satisfaction of the solvency tests imposed on the Corporation under applicable corporate law. There can be no assurance of the number of Common Shares that the Corporation will acquire pursuant to its share buyback program, if any, in the future.

#### **Dividends**

#### The Corporation does not pay dividends and there is no assurance that it will do so in the future.

The Corporation has not paid any dividends on its outstanding shares. The amount of future cash dividends paid by the Corporation, if any, will be subject to the discretion of the Board of Directors of the Corporation and will depend on a variety of factors and conditions existing from time to time, including fluctuations in commodity prices, production levels, capital expenditure requirements, debt service requirements, operating costs, royalty burdens, foreign exchange rates and the satisfaction of the liquidity and solvency tests imposed by applicable corporate law for the declaration and payment of dividends. See "Dividend Policy".

### **Expansion into New Activities**

#### Expanding the Corporation's business exposes it to new risks and uncertainties.

The operations and expertise of the Corporation's management are currently focused primarily on oil and gas production, exploration and development in the Western Canada Sedimentary Basin. In the future the Corporation may acquire or move into new industry related activities or new geographical areas, may acquire different energy related assets and as a result may face unexpected risks or alternatively, significantly increase the Corporation's exposure to one or more existing risk factors, which may in turn result in the Corporation's future operational and financial conditions being adversely affected.

#### **RISK FACTORS – ENTROPY**

# Risks Relating to Entropy and the Industry in which Entropy Operates

Entropy is subject to CCS market risk, including risk that the market in which Entropy operates may not develop at sufficient speed.

Entropy is subject to various market specific risks related to the CCS market, as further outlined below, and should these risks materialize, they may have a material adverse effect on Entropy.

The market outlook for CCS has been steadily increasing over time, driven by a global desire to mitigate the adverse climate effects associated with industrial emissions. However, the CCS market risks materializing in respect of a slow ramp-up of CCS in the global market, reduced or delayed CO<sub>2</sub> tax and incentive increases, and/or uncertainty in respect of availability of supplier base, supplier capacity and logistical, and supply chain challenges in new market conditions may have a negative impact on Entropy's operations and development.

The political and regulatory environment in Entropy's key markets is important to drive growth, scale and revenue faster than what would be possible without government support for CCS solutions. Evolving climate targets and stronger investment incentives are expected to add momentum to the CCS industry; however, should such favorable regulatory policies and financial support no longer be available or be reduced, such change(s) may have an adverse effect on development of the market in which Entropy operates, which in turn may have an adverse effect on Entropy's ability to expand its operations and ultimately on Entropy's financial position and results. The speed of the transition into a low-carbon economy will also affect the realization of carbon capture projects and governmental support and environmental regulation are key factors that will influence the speed of this transition.

Entropy will derive revenue from the sale of environmental attributes including emission performance credits, emission offset credits, and other instruments created by governments to represent a price on carbon. Entropy will vend these instruments in the open market and the price received is therefore subject to typical market risks including, but not limited to, supply, demand and general lack of available markets and liquidity.

# Entropy may not be able to successfully implement its CCS low project cost strategies or achieve its forecasted CCS cost.

Carbon capture is a cost-competitive alternative to reduce  $CO_2$  emitted during various industrial processes such as gas processing, power generation, fractionation, cement, steel and chemicals production. It can also be more cost-effective to retrofit CCS to existing facilities than building new capacity with alternative technologies. However, in order for CCS to remain a competitive alternative, it is necessary to deliver projects at or close to projected costs using the Corporation's low-cost technology. The Corporation's low-cost model is viewed as a key strategic pillar to execute Entropy's strategy to deliver economic returns. Should Entropy fail to successfully implement strategies for delivering low-cost CCS projects, such failure may have a material adverse effect on Entropy's ability to stay in business and be competitive, which in turn could have a material adverse effect on its financial results and position, as well as on the CCS industry as a whole.

### Entropy is operating in a rapidly changing technological environment.

The low-carbon, renewable and clean technologies energy sector is developing rapidly. Unexpected positive results from competing energy technologies may reduce the market potential for CCS and reduce demand for Entropy's products and services. This may have a material adverse effect on Entropy's business and future opportunities.

Carbon capture technology is also under development around the world and, as such, there are alternative potential solutions offered in the market. Market changes and developments may be driven by competitors of Entropy with substantially greater resources than those of Entropy and the attractiveness of Entropy's solutions relative to other providers' solutions is uncertain. Additionally, an increased number of competitors seeking low-cost applications could result in reduced market share in the CCS industry. In particular, more effective or more cost-efficient technologies than Entropy's technology solution may be made available. This may ultimately have a material adverse effect on Entropy's financial results and position.

Entropy's current technology, and any further technology under development by it, may prove not to be commercially viable, efficient, or operationally effective and efforts to respond to technological innovations may require significant financial investments and resources. Additionally, CCS projects are dependent on prevailing carbon prices. A reduction in prevailing carbon prices could lead to CCS projects not being economical. Failure by Entropy to respond to changes in technology and innovations may render Entropy's operations non-competitive and may have a material, negative effect on Entropy's results of operations, financial condition and future prospects.

#### Entropy has a small organization and is dependent on third-parties.

Entropy has a limited number of employees and is therefore vulnerable to key employees leaving Entropy, which in turn may have a material adverse effect on Entropy and its operations. Entropy will also be dependent on third-parties, such as Advantage, ABC and the University of Regina's Clean Energy Technology Research Institute, providing Entropy with access to various services and for resources required for development of its business and execution of its projects. If Entropy is not able to employ or retain qualified personnel, including certain key employees, it may experience difficulties in its project execution, risk delays in its current projects, cost overruns and ultimately risk that it is not able to obtain its operational and financial targets. This may in turn have a material adverse effect on Entropy's financial results and position, in addition to its growth ambitions.

# Entropy is subject to general counterparty risk.

Entropy is dependent on service providers as sub-contractors to execute its projects. Suppliers within the industry in which Entropy operates are limited and Entropy may not be able to engage technological or commercial suitable sub-contractors or partners to secure contracts and execute the business as anticipated. Should any of these circumstances occur, it may have an adverse effect on Entropy's ability to execute its projects on time or at all, and ultimately affect the financial performance and results of Entropy negatively. Additionally, Entropy plans to undertake CCS projects which require long-term, flue gas supply from counterparties. Entropy is therefore subject to risk that counterparties fail to supply the required flue gas as forecasted. Should this occur, it will negatively affect the financial performance of Entropy.

# Entropy is newly established with limited operating history.

Entropy was established in November 2020. Therefore, Entropy has a limited operating history. Accordingly, there may not be a reliable basis for evaluating Entropy's business prospects. Entropy may experience fluctuations in its results, which may vary from those projected by management. Entropy's business strategy may not be successful, and, if unsuccessful, Entropy may be unable to modify it in a timely and successful manner. Entropy cannot give any assurance that it will be able to continue to implement its strategy on a timely basis, if at all. Entropy may also be subject to both transition and growth-related risks, including capacity constraints and pressure on its internal systems and controls. Entropy's lack of operating history and track record also means that a number of policies, procedures and business systems, that are not currently in place, will be developed and instituted to govern and effectively manage operations.

Although Entropy has gained experience and its founders have decades of related experience, Entropy may be subject to various risks in relation to its limited operating history which may have an adverse effect on Entropy, its operations, its financial position and results should they materialize. Entropy has continued to develop its CCS business and has entered into MOUs and NDAs with numerous counterparties with respect to future projects. However, there is a risk that Entropy's existing MOUs, NDAs and other business development initiatives may not lead to new commercial projects.

# Entropy is subject to risk related to the volatility of global economic and social conditions.

The uncertainties and recent downturn of the global economy and other macroeconomic factors, including but not limited to the COVID-19 pandemic (as described below), could adversely affect Entropy's business. The prospects for global economic growth remain uncertain and this may impact the availability of credit and terms thereof, liquidity more generally, interest rates and exchange rates, which in turn could have a material adverse effect on Entropy's financial position and its ability to grow. In addition, volatility in the global economy may have an adverse impact on the market's

interest in technology development and funding of such. Without a stable and/or growing global economy, the business of Entropy may therefore be adversely affected, both financially and operationally.

# Entropy is subject to risk related to local development resistance and local opinion.

Entropy plans to be involved in projects of varying sizes across numerous jurisdictions. The projects will have an impact on local interests and the public, therefore, Entropy may be subject to risk in respect of local development resistance and local opinion. Despite Entropy working to ensure minimal impact on local population and environment during construction and operation, there is a risk that public perception may slow down the market development in certain geographies, which in turn may affect Entropy's ability to expand its operations. This may in turn have a material adverse effect on Entropy's financial results and position.

#### The COVID-19 pandemic could have a material adverse effect on Entropy.

The COVID-19 pandemic has impacted companies and markets globally. It is currently not possible to predict the consequences for Entropy, its customers, suppliers or business partners with any reasonable degree of accuracy. The global CCS industry and market may experience adverse negative effects that may be long-term, such as more uncertain markets, operations becoming more vulnerable to interruptions and policy makers around the world may gravitate towards stricter regulations impacting international trade. Such consequences may also impact Entropy and its current and planned operations and projects – as well as its customers, suppliers of goods and services – including Entropy's ability to raise capital or secure financing, future customers' ability to buy Entropy's products and services, and contractors' ability to provide goods and services required for Entropy's construction projects at the agreed terms, or at all. Any future outbreak of COVID-19 is beyond Entropy's control and there is no assurance that any future outbreak of COVID-19 or other contagious diseases occurring in areas in which Entropy or its suppliers, partners or customers operate, or even in areas in which Entropy does not operate, will not seriously interrupt Entropy's business. Any such interruptions may have a material adverse effect on Entropy's operations, and in turn adversely affect Entropy's financial position and results.

# **Risks Relating to Entropy's Operations**

#### Entropy may fail to execute, or change, its strategy.

Entropy may, due to external factors, such as regulatory or market conditions, and/or internal factors and decisions, change its current strategy and pursue alternative strategies. Entropy may also fail to execute its strategy due to changed market conditions, regulatory framework(s), available expertise and resources, and funding. Entropy's failure to execute its strategy, including an amendment of the current strategy, may have a material adverse effect on the business, results of operations and financial condition of Entropy.

# Entropy is dependent on the use of certain technology and intellectual property rights, which may be difficult or costly to defend and maintain.

Entropy's business is dependent upon its proprietary technology, including its solvent and process designs. Entropy's technology is based on a combination of provisional patents, trade secrets, know-how and confidential procedures and contractual provisions to maintain secrecy and prevent un-authorized use. Entropy cannot guarantee that its measures for preserving the secrecy of its know-how and trade secrets are sufficient to prevent others from obtaining such information and use the know-how.

The extent of Entropy's intellectual property rights may vary in different countries, and filing, prosecuting, maintaining and defending Entropy's patents throughout the world could be highly expensive. Consequently, Entropy may be unable to prevent third-parties from using its inventions in certain countries, especially in jurisdictions offering no or little protection of intellectual property rights, or in jurisdictions where enforcement may be difficult. Competitors could potentially also use Entropy's technology in jurisdictions where Entropy has not obtained patent protection.

In particular, proceedings to enforce Entropy's intellectual property rights could result in substantial costs and divert Entropy's efforts and attention from other aspects of its business, put its patents at risk of being invalidated or interpreted narrowly and its patent applications at risk of not being issued. Proceedings could furthermore provoke

third-parties to assert patent infringement or other claims against Entropy and Entropy may be liable for damages or other remedies for any lawsuits that Entropy initiates. Accordingly, Entropy's efforts to enforce its intellectual property rights may be inadequate to obtain a significant commercial advantage from the intellectual property that Entropy develops or licenses from third-parties.

There is also a risk that third-parties may claim that Entropy does not have rights or exclusive rights to the intellectual property it uses. Entropy may, as a consequence of this, be a party to litigation to determine the scope and validity of its intellectual property, which, if resolved adversely to Entropy, could invalidate or render unenforceable its intellectual property or generally preclude Entropy from using such intellectual property, or Entropy could be forced to pay substantial royalties. A successful claim of infringement against Entropy, or its failure or inability to develop non-infringing technology or license the infringed technology could materially and adversely affect its business and results of operations, and/or prospects.

Entropy cannot assure that its know-how and trade secrets will provide Entropy with any competitive advantage, as the know-how and trade secrets may become known to or be independently developed by others including Entropy's competitors, regardless of measures Entropy may take to try to preserve the confidentiality. Entropy cannot give assurance that its measures for preserving the secrecy of its trade secrets and confidential information are sufficient to prevent others from obtaining such information.

If Entropy's proprietary technology, trade secrets, know-how, etc. becomes known to the public, or third-parties develop similar technology, or the patents are held to be invalid, this could have a material adverse effect on Entropy, its financial position and future prospects.

# Entropy may not be able to develop new technology that may be required to expand and/or keep up with competitors.

Entropy has a growth strategy and is targeting an expansion of its customer base for existing and new projects. Research and development can be expensive, time-consuming, and generally entails considerable uncertainty with respect to both achieving positive results and, if successful, the ability to commercially deploy such technology. Due to long development processes, changing regulatory requirements, changing market conditions and customer preferences and other factors, new variants of existing technologies or new technologies may take longer and cost more to develop and may be less successful than Entropy anticipates. It is expected that an increased target market and customer base will result in increased competition, and also attract established industrial companies and other potential customers to develop their own CCS technologies and solutions, which in turn may reduce the potential client base of Entropy. Furthermore, Entropy may be unable to reduce costs as required to maintain its competitive position. No assurance can be given that any new technologies under research and development will be commercially successful. If Entropy is unable to keep up with competitors, develop new technology or have commercial success with its technology under research and development, this could adversely affect the future development of Entropy's business, financial condition, results of operations and/or prospects.

# Entropy is subject to project execution and contractual risk associated with the engineering and construction of facilities.

There are numerous risks associated with engineering and construction of facilities, including but not limited to risks of delay and failure to deliver according to the agreed or required specifications (including any potential performance levels guaranteed), risks of early termination of contracts by customers and suppliers, risk of changes to the scope of work and amendments due to design development resulting in extension of time and increased cost.

The agreed pricing model in customer contracts is to a certain extent based on prevailing carbon prices and other project specific details. The estimates used for setting the prices may be based on wrong or inaccurate assumptions and facts which may result in cost over-run and reduced profit or loss for Entropy.

If Entropy is unable to meet certain requirements under contracts, the customers may be able to terminate their contracts or, pursuant to the term of the contracts, require Entropy to compensate them for losses. In the event that Entropy does not satisfy its obligations or commitments under such contracts, Entropy's business, results of operations,

financial position, cash flows and/or prospects could be materially adversely affected if one or more long-term customers terminate their contracts with Entropy, or if Entropy is obligated to compensate them for losses.

Entropy must comply with comprehensive requirements and practices relating to its development of carbon capture facilities, including health, safety and environmental ("HSE") requirements and training of employees. There is a risk that Entropy, subcontractors or other third-parties with responsibility for the operations may not be able to meet applicable standards, which may disrupt the operations (e.g. due to suspension or closing of operations). In addition, there is an inherent risk of delay or hindrances in production due to mechanical or manual failure or malfunction, human error or other unforeseen events, which could result in delays of whole or parts of the operations, leading to costs or damages. Any failure in the operations could have a material adverse effect on Entropy's business, financial condition, results of operations, reputation and/or prospects.

Entropy may also, as part of certain contractual commitments to its customers, provide functional performance guarantees. Such guarantees may include CO<sub>2</sub> capture rates or volumes and operational uptime. Breach or non-achievement of performance guarantees may affect the financial performance of the project and Entropy negatively.

# Entropy's business relies on the experience and expertise of its senior management, as well as on its ability generally to retain existing, or hire additional, skilled personnel.

Entropy's success depends upon the continued service and performance of its senior management and experts. The loss of the services of any of these individuals could delay or prevent the continued successful implementation of its growth strategy, or could otherwise affect its ability to manage Entropy effectively and to carry out its business plan. Members of the senior management team may resign at any time and there can be no assurance that Entropy may be able to continue to retain such individuals. This may in turn result in a material adverse effect on Entropy's business, results of operations and financial results and position.

Entropy's growth and success will to a certain extent depend on its ability to attract, hire and retain additional highly qualified and skilled technical, research, managerial and finance personnel as well as experienced and skilled engineers. Competition for such skilled personnel is high and the unexpected loss of an employee with a particular skill could materially and adversely affect Entropy's operations until a replacement can be found and trained. If Entropy experiences a shortage of skilled personnel, Entropy may not be able to continue its operations. Furthermore, any failure to effectively integrate new personnel could prevent Entropy from successfully growing which in turn may have a material adverse effect on Entropy's financial condition.

#### Entropy may fail to effectively manage its growth.

Entropy is targeting a growth in its business, and Entropy's future financial performance and its ability to enter into and complete future projects will depend, in part, on its ability to manage any future growth effectively. Entropy expects to make investments to enable future growth through, among other things, new technologies and development of additional projects.

Entropy must also be prepared to expand its work force and to train, motivate and manage additional employees as the need for additional personnel and resources arises. Entropy's personnel, facilities, systems, procedures and controls may not be adequate to support its future operations, and Advantage and ABC – through agreements with Entropy - may not be able to provide such additional services and work force. Any failure to manage future growth effectively could have a material adverse effect on Entropy's business, results of operations, financial condition, cash flows and/or prospects.

### Entropy will be responsible for the long-term custody of a polluting substance.

Entropy plans to transport and dispose of carbon dioxide via pipelines and long-term geologic sequestration. In the event the carbon dioxide escapes containment and is released to the atmosphere, Entropy may face liability for such release, which may result in negative financial consequences.

#### Interruptions in information technology systems and cyber security issues could adversely affect Entropy's business.

Entropy relies on the efficient and uninterrupted operation of several information technology systems and networks to operate its business. Any significant disruptions to Entropy's systems or networks, including, but not limited to, new

system implementations, computer viruses, security breaches, cyber-attacks, facility issues, natural disasters, terrorism, war, telecommunication failures or energy blackouts could have a material adverse impact on Entropy's operations, sales and operating results.

Entropy's third-party service providers and other vendors have access to certain portions of Entropy's information technologies system. Certain failure or negligence of these service providers may cause material disruptions in Entropy's operations, which could affect Entropy's ability to perform in a timely manner. Any such failure to perform due to failure or negligence from the service providers may in turn have a material adverse effect on Entropy's cash flow, financial results and conditions.

# Entropy may in the future take on debt which in turn could limit Entropy's cash flow and limit Entropy's operational flexibility.

Entropy does not currently have any borrowings, but it may take on debt in the future. This may require Entropy to agree to restrictions and limitations on Entropy's business operations and capital structure, to force Entropy to dispose of current long-term assets or to issue additional equity, possibly on unfavourable terms, increase Entropy's vulnerability to adverse economic and industry conditions, limit Entropy's flexibility to make, or react to, changes in the business and industry, and/or place Entropy at a competitive disadvantage. Furthermore, should Entropy take on debt in the future, any fluctuations in the interest rates may affect Entropy's interest costs, which in turn may reduce its cash flows.

If Entropy enters into any debt financing, Entropy may have to comply with a number of financial and other covenants and clauses, including change of control provisions, cross default provisions and performance requirements, which could affect the operational and financial flexibility of Entropy. Such restrictions could affect, and in many respects limit or prohibit, among other things, Entropy's ability to pay dividends, create liens, sell assets, or engage in mergers or acquisitions. In addition, covenants under debt instruments may pledge Entropy's assets as collateral and any negative pledge with respect to Entropy's intellectual property could limit its ability to obtain additional debt financing on acceptable and/or commercially reasonable terms, or even at all. Any breach of covenants could result in defaults under instruments governing applicable indebtedness and cross-default provisions could be triggered in the event of default on other indebtedness and may require Entropy to repay or restructure indebtedness. Failure to make payments or comply with any covenants under future debt instruments could result in an event of default and acceleration of amounts due, and could have a material adverse effect on Entropy's business, operations, assets and/or prospects.

#### Risks Relating to Legal and Regulatory Matters in Respect of Entropy

# Entropy's business is dependent upon government approval to obtain sequestration sites for CO2.

Governments generally have the authority over the granting of access and on-going operation of possible geologic sequestration sites for CO<sub>2</sub>. With respect to storage in geological reservoirs on land in particular, public resistance may cause the government not to authorize storage sites or to cancel their authority to operate. Since the ability to store large volumes of carbon dioxide is a corollary to the provision of carbon capture services, Entropy is dependent upon the governmental as well as public support, in order to secure sufficient sequestration pore space for its projects. A lack of storage capacity will impede Entropy's business by slowing down market development and leading to materially adverse consequences for Entropy until sequestration capacity is sufficient to meet demand. Should there be periods with insufficient sequestration capacity, this may have a material adverse effect on Entropy's ability to achieve positive cash flow in its operations.

# Realization of business opportunities may be dependent upon government or other non-commercial funding, licenses, governmental approvals and various public policies, including the price on carbon emissions.

Realization of carbon capture projects, including the required infrastructure, is capital intensive and will take time to recover such costs and become profitable, dependent on prevailing carbon prices. Investments in CCS by the industry will, to a large extent, be dependent upon government support and funding, and a regulatory framework which provides for incentives for industry to invest in CCS initiatives. In the long-term, CCS must become commercially attractive without reliance on governmental support. The perceived benefit of CCS must over time exceed the customer's alternative cost, which normally relates to the price of carbon credits and offsets, local CO<sub>2</sub> tax levels, CO<sub>2</sub> tax credit schemes or other

CO<sub>2</sub> policy regimes. Should such perceived benefits not be realized, Entropy may not be able to achieve positive cash flow in its operations.

The policies for government incentives are still under development and vary in the jurisdictions in which Entropy intends to operate. Changes in the relevant authorities' policies, including targets for reduction in  $CO_2$  emissions and associated regulations, will be critical to Entropy's ability to attract clients and execute its business plan and may have a material adverse effect on Entropy's financial results and position.

Entropy is subject to a wide variety of laws and regulations and may be dependent on governmental licenses and approvals to commence and continue its operations. There is a risk that Entropy will not obtain the necessary licenses or approvals, or that obtaining such licenses or approvals will require significant resources from Entropy that in turn may have a negative effect on Entropy's financial position, operations and results. Furthermore, there is a risk that the relevant governments may change the requirements for obtaining such licenses, rendering it more expensive, difficult or even impossible for Entropy or Entropy's potential clients to obtain the necessary licenses, which in turn may have a material adverse effect on Entropy's operations, ability to execute projects and ultimately on its financial condition and ability to grow.

Entropy's business comprises handling of potentially hazardous substances which could take on fire, explode, be contaminated or lead to personal injuries, etc.

Entropy's carbon capture solutions involve controlled use of potentially harmful hazardous materials, including volatile solvents and chemicals. Entropy faces the risk of fire, explosion, contamination or injury from the use, storage, handling and disposal of these and other materials. In the event of fire, explosion, contamination or injury, Entropy could be subject to civil or criminal sanctions or fines or be held liable for damages, operating licenses could be revoked, or Entropy could be required to suspend or modify its operations. This could in turn have a material adverse effect on Entropy's financial position and its business and could ultimately lead to insolvency or bankruptcy.

Entropy's employees, as well as employees of clients at sites where carbon capture facilities are or are in the process of being installed, may from time-to-time be at risk of coming into contact with hazardous substances. This may lead to personal injuries which Entropy may be liable for. This may also be the case for individuals otherwise being exposed to hazardous substances used in the construction or operation of CCS facilities or infra-structure. In addition to human suffering, this may have an adverse effect on Entropy's financial position and its general reputation.

### **ADDITIONAL INFORMATION**

Additional information relating to the Corporation can be found on SEDAR at <a href="www.sedar.com">www.sedar.com</a> and the Corporation's website at <a href="www.advantageog.com">www.advantageog.com</a>.

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of Common Shares and securities authorized for issuance under equity compensation plans, will be contained in the Corporation's Information Circular for the most recent annual meeting of shareholders that involved the election of directors of Advantage. Additional financial information is provided for in the Corporation's Consolidated financial statements and management's discussion and analysis for the year ended December 31, 2022.

# **APPENDIX "A"**

# REPORT OF MANAGEMENT AND DIRECTORS ON OIL AND GAS DISCLOSURE (FORM 51-101F3)

# Report of Management and Directors on Reserves Data and Other Information

Management of Advantage Energy Ltd. (the "Company") are responsible for the preparation and disclosure of information with respect to the Company's oil and gas activities in accordance with securities regulatory requirements. This information includes reserves data.

An independent qualified reserves evaluator has evaluated the Company's reserves data. The report of the independent qualified reserves evaluator is presented below.

The Reserves Committee of the board of directors of the Company has:

- reviewed the Company's procedures for providing information to the independent qualified reserves evaluator;
- (b) met with the independent qualified reserves evaluator to determine whether any restrictions affected the ability of the independent qualified reserves evaluator to report without reservation: and
- (c) reviewed the reserves data with management and the independent qualified reserves evaluator.

The Reserves Committee of the board of directors has reviewed the Company's procedures for assembling and reporting other information associated with oil and gas activities and has reviewed that information with management. The board of directors has, on the recommendation of the Reserves Committee, approved:

- the content and filing with securities regulatory authorities of Form 51-101F1 containing (a) reserves data and other oil and gas information;
- (b) the filing of Form 51-101F2 which is the report of the independent qualified reserves evaluator on the reserves data, contingent resources data, or prospective resources data; and
- the content and filing of this report. (c)

Because the reserves data are based on judgements regarding future events, actual results will vary and the variations may be material.

(signed) "Michael Belenkie" Michael Belenkie

President & Chief Executive Officer

(signed) "Stephen Balog" Stephen Balog

Director

(signed) "Craig Blackwood"

Craig Blackwood

Chief Financial Officer

(signed) "Donald Clague"

**Donald Clague** 

Director

Dated the 23th day of February, 2023

# **APPENDIX "B"**

# REPORT ON RESERVES DATA BY INDEPENDENT QUALIFIED RESERVES EVALUATOR OR AUDITOR (FORM 51-101F2)

#### Report on Reserves Data by Independent Qualified Reserves Evaluator or Auditor

To the board of directors of Advantage Energy Ltd. (the "Company"):

- 1. We have evaluated the Company's reserves data as at December 31, 2022. The reserves data are estimates of proved reserves and probable reserves and related future net revenue as at December 31, 2022, estimated using forecast prices and costs.
- 2. The reserves data are the responsibility of the Company's management. Our responsibility is to express an opinion on the reserves data based on our evaluation.
- 3. We carried out our evaluation in accordance with standards set out in the Canadian Oil and Gas Evaluation Handbook as amended from time to time (the "COGE Handbook") maintained by the Society of Petroleum Evaluation Engineers (Calgary Chapter).
- 4. Those standards require that we plan and perform an evaluation to obtain reasonable assurance as to whether the reserves data are free of material misstatement. An evaluation also includes assessing whether the reserves data are in accordance with principles and definitions presented in the COGE Handbook.
- 5. The following table shows the net present value of future net revenue (before deduction of income taxes) attributed to proved plus probable reserves, estimated using forecast prices and costs and calculated using a discount rate of 10 percent, included in the reserves data of the Company evaluated for the year ended December 31, 2022, and identifies the respective portions thereof that we have evaluated and reported on to the Company's board of directors:

Independent Qualified Reserves	Location of	Net Present Value of Future Net Revenue Before Income Taxes (10% discount rate)				
Evaluator or Auditor	Effective Date of Evaluation Report	Reserves (Country)	Audited (M\$)	Evaluated (M\$)	Reviewed (M\$)	Total (M\$)
Sproule Associates Limited	December 31, 2022	Canada	-	4,745,165	-	4,745,165
Total			-	4,745,165	-	4,745,165

- 6. In our opinion, the reserves data respectively evaluated by us have, in all material respects, been determined and are in accordance with the COGE Handbook, consistently applied. We express no opinion on the reserves data that we reviewed but did not audit or evaluate.
- 7. We have no responsibility to update our reports referred to in paragraph 5 for events and circumstances occurring after the effective date of our report.
- 8. Because the reserves data are based on judgements regarding future events, actual results will vary and the variations may be material.

# **APPENDIX "B" (CONTINUED)**

EXECUTED as to our report referred to above:

Sproule Associates Limited Calgary, Alberta, Canada February 22<sup>nd</sup>, 2023 <u>Original Signed by Steven J. Golko, P. Eng.</u> Steven J. Golko, P. Eng. Senior Vice President, Reservoir Services

<u>Original Signed by Derek A. Holst, P. Eng.</u> Derek A. Holst, P. Eng. Team Lead, Engineering

# **APPENDIX "C"**

### **Audit Committee Charter**

The following is our Audit Committee Charter approved by the Board of Directors.

#### I. PURPOSE

The primary function of the Audit Committee is to assist the Board of Directors (the "Board of Directors" or "Board") of Advantage Energy Ltd. ("Advantage" or the "Corporation") in fulfilling its responsibilities by reviewing: the financial reports and other financial information provided by Advantage to any governmental body or the public; Advantage's systems of internal controls regarding finance, accounting, legal compliance and ethics that management and the Board have established; and Advantage's auditing, accounting and financial reporting processes generally. Consistent with this function, the Audit Committee should endeavour to encourage continuous improvement of, and should endeavour to foster adherence to, the Corporation's policies, procedures and practices at all levels. In performing its duties, the external auditor is to report directly to the Audit Committee. The Audit Committee's primary objectives are:

- 1. To assist directors in meeting their responsibilities (especially for accountability) in respect of the preparation and disclosure of the financial statements of the Corporation and related matters;
- 2. To review the risks that may affect Advantage and the risk management policies and procedures of the Corporation.
- 3. To provide better communication between directors and external auditors;
- 4. To assist the Board's oversight of the auditor's qualifications and independence;
- 5. To assist the Board's oversight of the credibility, integrity and objectivity of financial reports;
- 6. To strengthen the role of the outside directors by facilitating discussions between directors on the Audit Committee, management and external auditors;
- 7. To assist the Board's oversight of the performance of the Corporation's internal audit function and independent auditors;
- 8. To assist the Board's oversight of the Corporation's compliance with legal and regulatory requirements;

#### II. COMPOSITION

The Audit Committee shall be comprised of three or more directors as determined by the Board of Directors, none of whom are members of management of Advantage and all of whom are "independent" (as such term is defined in (a) National Instrument 52-110 — Audit Committees ("NI 52-110"). All of the members of the Audit Committee shall be "financially literate". The Board of Directors has adopted the definition for "financial literacy" used in NI 52-110, which definition is set forth in Schedule "A" attached hereto. Audit Committee members may enhance their familiarity with finance and accounting by participating in educational programs conducted by the Corporation or an outside consultant. In addition, at least one member of the Audit Committee must have accounting or related financial management expertise, as the Corporation's Board of Directors interprets such qualification in its business judgment.

The members of the Audit Committee shall be elected by the Board of Directors at the annual organizational meeting of the Board of Directors and remain as members of the Audit Committee until their successors shall be duly elected and qualified. Unless a Chair is elected by the full Board of Directors,

the members of the Audit Committee may designate a Chair by majority vote of the full Audit Committee membership.

In connection with the election of the members of the Audit Committee, the Board will determine whether any proposed nominee for the Audit Committee serves on the Audit Committees of more than three public companies. To the extent that any proposed nominee of the Corporation serves on the Audit Committees of more than three public companies, the Board will make a determination as to whether such simultaneous services would impair the ability of such member to effectively serve on the Corporation's Audit Committee and will disclose such determination in the Corporation's annual information circular.

#### III. MEETINGS

The Audit Committee shall meet at least four times annually, or more frequently as circumstances dictate. As part of its job to foster open communication, the Audit Committee should meet at least annually with management, internal auditors (if any) and the independent auditors in separate executive sessions to discuss any matters that the Audit Committee or each of these groups believe should be discussed privately. In addition, the Audit Committee or at least its Chair should meet with the independent auditors and management quarterly to review the Corporation's financials consistent with Section IV.4 below. The Audit Committee should also meet with management and independent auditors on an annual basis to review and discuss annual financial statements and the management's discussion and analysis of financial conditions and results of operations. Attached as Schedule "B" is an example of an annual meeting schedule/agenda.

A quorum for meetings of the Audit Committee shall be a majority of its members, and the rules for calling, holding, conducting and adjourning meetings of the Audit Committee shall be the same as those governing the Board.

#### IV. RESPONSIBILITIES AND DUTIES

To fulfill its responsibilities and duties, the Audit Committee shall endeavour to:

### **Documents/Reports Review**

- 1. Review and update this Charter periodically, at least annually, as conditions dictate.
- 2. Review and recommend to the Board the organization's annual and interim financial statements, MD&A, earnings press releases and review any reports or other financial information submitted to any governmental body or the public, including any certification, report, opinion or review rendered by the independent auditors.
- 3. Review the reports to management prepared by the independent auditors and management's responses.
- 4. Review with financial management and the independent auditors the quarterly financial statements prior to their filing or prior to the release of earnings. The Chair of the Audit Committee may represent the entire Audit Committee for purposes of this review.
- 5. Review significant findings during the year, including the status of previous significant audit recommendations.
- 6. Periodically assess the adequacy of procedures for the review of corporate disclosure that is derived or extracted from the financial statements.
- 7. Report regularly to the Board any issues that arise with respect to the quality or integrity of the Corporation's financial statements, compliance with legal or regulatory requirements,

- performance and independence of the Corporation's auditors, or performance of the internal audit function.
- 8. To prepare, if required, an Audit Committee report to be included in the Corporation's annual information form.
- 9. Preparing an annual performance evaluation of the Audit Committee.
- At least annually, obtaining and reviewing the report by the independent auditors describing the Corporation's internal quality control procedures, any material issues raised by the most recent interim quality-control review, or peer review, of the Corporation or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the firm, and any steps to deal with any such issues.

#### **Corporate Risk Management**

- 11. Review the systems that identify and manage principal business risks, including cyber security risks.
- 12. Periodically discuss guidelines and policies to govern the processes by which the Chief Executive Officer and senior management assess and manage the Corporation's exposure to risk.
- 13. Review risk management policies and procedures of Advantage (i.e., litigation and insurance).

#### **Independent Auditors**

- 14. Recommend to the Board the external auditors to be nominated for appointment by the shareholders.
- 15. Approve the compensation of the external auditors.
- 16. On an annual basis, the Audit Committee should review and discuss with the auditors all significant relationships the auditors have with the Corporation to determine the auditors' independence. In addition, the Audit Committee will ensure the rotation of the lead audit partner every seven years and, in order to ensure continuing auditor independence, consider the rotation of the audit firm itself.
- 17. Review and, as appropriate, resolve any material disagreements between management and the independent auditors and review, consider and make a recommendation to the Board regarding any proposed discharge of the auditors when circumstances warrant.
- 18. When there is to be a change in auditors, review the issues related to the change and the information to be included in the required notice to securities regulators of such change.
- 19. Periodically consult with the independent auditors, without the presence of management, about internal controls and the fullness and accuracy of the organization's financial statements.
- 20. Oversee the establishment of an internal audit function.
- 21. Periodically assess the Corporation's internal audit function, including Corporation's risk management processes and system of internal controls.
- 22. Review the audit scope and plan of the independent auditor.
- 23. Oversee the work of the external auditors engaged for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for Advantage.

- 24. Pre-approve the completion of any non-audit services by the external auditors and determine which non-audit services the external auditor is prohibited from providing. The Audit Committee may delegate to one or more members of the Audit Committee authority to pre-approve non-audit services in satisfaction of this requirement and if such delegation occurs, the pre-approval of non-audit services by the Audit Committee member to whom authority has been delegated must be presented to the Audit Committee at its first scheduled meeting following such pre-approval. The Audit Committee shall be entitled to adopt specific policies and procedures for the engagement of non-audit services if:
  - (a) the pre-approval policies and procedures are detailed as to the particular service;
  - (b) the Audit Committee is informed of each non-audit service; and
  - (c) the procedures do not include delegation of the Audit Committee's responsibilities to management.

The Audit Committee will satisfy the pre-approval requirement set forth in this paragraph 22 if:

- (a) the aggregate amount of all non-audit services that were not pre-approved is reasonably expected to constitute no more than 5% of the total amount of fees paid by Advantage and its subsidiary entities to the auditors during the fiscal year in which the services are provided;
- (b) Advantage or a subsidiary entity, as the case may be, did not recognize the services as non-audit services at the time of the engagement;
- (c) the services are promptly brought to the attention of the Audit Committee and approved, prior to completion of the audit, by the Audit Committee or by one or more of its members to whom authority to grant such approvals has been delegated by the Audit Committee; and
- 25. Review, set and approve hiring policies relating to staff of current and former auditors.

#### **Financial Reporting Processes**

- 26. In consultation with the independent auditors, annually review the integrity of the organization's financial reporting processes, both internal and external.
- 27. In consultation with the independent auditors, consider annually the quality and appropriateness of the Corporation's accounting principles as applied in its financial reporting.
- 28. Consider and approve, if appropriate, major changes to the Corporation's auditing and accounting principles and practices as suggested by the independent auditors or management.

#### **Process Improvement**

- 29. Request reporting to the Audit Committee by each of management and the independent auditors of any significant judgments made in the management's preparation of the financial statements and the view of each group as to appropriateness of such judgments.
- 30. Following completion of the annual audit, review separately with each of management and the independent auditors any significant difficulties encountered during the course of the audit, including any restrictions on the scope of work or access to required information.
- 31. Review any significant disagreements among management and the independent auditors in connection with the preparation of the financial statements.

- 32. Review with the independent auditors and management the extent to which changes or improvements in financial or accounting practices, as approved by the Audit Committee, have been implemented. (This review should be conducted at an appropriate time subsequent to implementation of changes or improvements, as decided by the Audit Committee.)
- 33. Conduct and authorize investigations into any matters brought to the Audit Committee's attention and within the Audit Committee's scope of responsibilities. The Audit Committee shall be empowered to retain and to approve compensation for any independent counsel and other professionals to assist in the conduct of any investigation.
- 34. Establish a procedure for:
  - the receipt, retention and treatment of complaints received by the Corporation regarding accounting, internal accounting controls or auditing matters; and
  - the confidential, anonymous submission by employees of Advantage of concerns regarding questionable accounting matters, auditing matters and matters set forth in Advantage's Code of Business Conduct and Ethics;

which procedure shall be set forth in a "whistle blower program" to be adopted by the Audit Committee in connection with such matters.

#### **Ethical and Legal Compliance**

- 35. Establish, review and update periodically a Code of Ethical Conduct and ensure that management has established a system to enforce this code.
- 36. Review management's monitoring of the Corporation's compliance with the organization's Code of Ethical Conduct.
- 37. In consultation with the auditors, consider the review system established by management regarding the Corporation's financial statements, reports and other financial information disseminated to governmental organizations and the public in the context of the applicable legal requirements.
- 38. On at least an annual basis, review with the Corporation's auditors or counsel, as appropriate, any legal matters that could have a significant impact on the organization's financial statements, the Corporation's compliance with applicable laws and regulations and inquiries received from regulators or government agencies.
- 39. Review with the organization's counsel legal compliance matters including the trading policies of securities.

#### Other

- 40. Perform any other activities consistent with this Charter, Advantage's by-laws and governing law, as the Audit Committee or the Board of Directors deems necessary or appropriate.
- 41. In connection with the performance of its responsibilities as set forth above, the Audit Committee shall have the authority to engage outside advisors and to pay outside auditors and advisors.

# **SCHEDULE "A"**

# AUDIT COMMITTEE OF THE BOARD OF DIRECTORS OF ADVANTAGE ENERGY LTD.

### **CHARTER**

Definitions – In this Charter:

"financially literate" means the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the issuer's financial statements.

# **SCHEDULE "B"**

# **Example of Audit Committee Meeting Agenda for Year**

As noted previously, it is important to review the completeness of the Audit Committee charter as well as the agenda established for each meeting. The following is an example of topics that could be covered in each Audit Committee meeting. This example assumes a December year-end with four audit committee meetings scheduled in connection with quarterly earnings releases.

Charter step		Scheduled Meetings			
		May	August	November	March
l.	Audit Committee Purpose				
	Conduct special investigations	*	*	*	*
II.	Audit Committee Composition and Meetings		1		
	Assess independence and financial literacy of				Χ
	Audit Committee				
	Establish number of meetings				Х
	Audit Committee Chair to establish meeting agenda				X
	Enhance financial literacy - update on current financial events	X	Х	x	Х
	Executive sessions with auditors, management, committee	Х	Х	Х	Х
III.	Audit Committee Responsibilities and Duties				
1.	Review charter, publish relevant information				X
	in proxy				
2.	Review annual financial statements - discuss with management, auditors				Χ
3.	Review internal controls, risks, and risk management policies			Х	Х
4.	Review quarterly results and findings	Х	Х	Х	
5.	Recommend appointment of auditors				Х
6.	Approve audit fees			Х	Х
7.	Discuss auditor independence				Χ
8.	Review auditor plan			Х	Χ
9.	Discuss year-end results			X	Χ
10.	Discuss quality of accounting principles	*	*	*	Χ
11.	Review legal matters with counsel and auditors		*		Х
12.	Prepare report to shareholders				Χ
13.	Perform other activities as appropriate	*	*	*	*
14.	Maintain minutes and report to Board of Directors	Х	Х	Х	Х

15.	Report on Code of Conduct and Whistleblower
	Policy

- 16. Perform self-assessment of Audit Committee performances
- 17. Review financial personnel succession planning
- 18. Review director and officer expenses and related party transactions

Х	Х	Х	Х
			Х
			Χ
			Х

X = Recommended Timing \* = As Needed