

# BIRCHCLIFF

## ENERGY

**BIRCHCLIFF ENERGY LTD.**

**Year Ended December 31, 2020**

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**ANNUAL INFORMATION FORM**

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**March 10, 2021**

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## GLOSSARY OF TERMS

In this Annual Information Form, the capitalized terms set forth below have the following meanings:

**“2019 IQRE Price Forecast”** has the meaning set forth under the heading *“Statement of Reserves Data and Other Oil and Gas Information – Reconciliation of Changes in Reserves”*.

**“2019 Regulations”** has the meaning set forth under the heading *“Industry Conditions – Land Tenure – Mineral Rights”*.

**“2020 Capital Program”** has the meaning set forth under the heading *“General Development of the Business – Three Year History – 2020”*.

**“2020 IQRE Price Forecast”** has the meaning set forth under the heading *“Statement of Reserves Data and Other Oil and Gas Information – Disclosure of Reserves Data”*.

**“2021 Capital Program”** has the meaning set forth under the heading *“General Development of the Business – Recent Developments”*.

**“2026 Agreement”** has the meaning set forth under the heading *“Description of the Business – Marketing and Risk Management – Light Oil and NGLs”*.

**“ABCA”** means the *Business Corporations Act (Alberta)*.

**“ABC Program”** has the meaning set forth under the heading *“Industry Conditions – Regulatory Authorities and Environmental Regulation – Alberta – Liability Management Rating Program”*.

**“AB LF Program”** has the meaning set forth under the heading *“Industry Conditions – Regulatory Authorities and Environmental Regulation – Alberta – Liability Management Rating Program”*.

**“AB LLR Program”** has the meaning set forth under the heading *“Industry Conditions – Regulatory Authorities and Environmental Regulation – Alberta – Liability Management Rating Program”*.

**“AB LMF”** has the meaning set forth under the heading *“Industry Conditions – Regulatory Authorities and Environmental Regulation – Alberta – Liability Management Rating Program”*.

**“AB LMR Program”** has the meaning set forth under the heading *“Industry Conditions – Regulatory Authorities and Environmental Regulation – Alberta – Liability Management Rating Program”*.

**“AB OWL Program”** has the meaning set forth under the heading *“Industry Conditions – Regulatory Authorities and Environmental Regulation – Alberta – Liability Management Rating Program”*.

**“AER”** means the Alberta Energy Regulator.

**“AltaGas”** means AltaGas Ltd.

**“Annual Information Form”** means this annual information form of the Corporation dated March 10, 2021 for the year ended December 31, 2020.

**“Bill C-15”** has the meaning set forth under the heading *“Industry Conditions – Indigenous Rights”*.

**“Bill C-69”** means Bill C-69: *An Act to enact the Impact Assessment Act and the Canadian Energy Regulator Act, to amend the Navigation Protection Act and to make consequential amendments to other Acts.*

**“Birchcliff”** or the **“Corporation”** means Birchcliff Energy Ltd.

**“Board”** means the board of directors of the Corporation.

**“Cabinet”** means the cabinet of the Federal Government.

**“CCEMA”** has the meaning set forth under the heading *“Industry Conditions – Climate Change Regulation – Alberta”*.

**“CCIR”** has the meaning set forth under the heading *“Industry Conditions – Climate Change Regulation – Alberta”*.

“**CER**” has the meaning set forth under the heading “*Industry Conditions – Exports from Canada*”.

“**CERA**” has the meaning set forth under the heading “*Industry Conditions – Exports from Canada*”.

“**CETA**” has the meaning set forth under the heading “*Industry Conditions – The USMCA and Other Trade Agreements – Other Trade Agreements*”.

“**CGL Pipeline**” has the meaning set forth under the heading “*Industry Conditions – Transportation Constraints and Market Access – Natural Gas and LNG – Specific Pipeline and Proposed LNG Export Terminal Updates*”.

“**CLA**” has the meaning set forth under the heading “*Industry Conditions – Climate Change Regulation – Alberta*”.

“**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.

“**Common Shares**” means the common shares of the Corporation.

“**condensate**” means pentanes plus (C5+).

“**COR**” means a certificate of recognition.

“**COVID-19**” means the novel coronavirus which was declared a global pandemic by the World Health Organization on March 11, 2020.

“**CPF**” has the meaning set forth under the heading “*Description of the Business – Environmental, Social and Governance – Community and Stakeholder Relations*”.

“**CPTPP**” has the meaning set forth under the heading “*Industry Conditions – The USMCA and Other Trade Agreements – Other Trade Agreements*”.

“**Credit Facilities**” has the meaning set forth under the heading “*Description of Capital Structure – Credit Facilities*”.

“**CSA Staff Notice 51-324**” means the Canadian Securities Administrators’ Staff Notice 51-324 – *Revised Glossary to NI 51-101 Standards of Disclosure for Oil and Gas Activities*.

“**CUKTCA**” has the meaning set forth under the heading “*Industry Conditions – The USMCA and Other Trade Agreements – Other Trade Agreements*”.

“**Defendants**” has the meaning set forth under the heading “*Legal Proceedings and Regulatory Actions*”.

“**Deloitte**” means Deloitte LLP, independent qualified reserves evaluators of Calgary, Alberta.

“**Deloitte Reserves Report**” has the meaning set forth under the heading “*Statement of Reserves Data and Other Oil and Gas Information – Disclosure of Reserves Data*”.

“**Directive 067**” has the meaning set forth under the heading “*Industry Conditions – Regulatory Authorities and Environmental Regulation – Alberta – Liability Management Rating Program*”.

“**Draft Directive**” has the meaning set forth under the heading “*Industry Conditions – Regulatory Authorities and Environmental Regulation – Alberta – Liability Management Rating Program*”.

“**DRIPA**” has the meaning set forth under the heading “*Industry Conditions – Indigenous Rights*”.

“**EM Program**” has the meaning set forth under the heading “*Description of the Business – Environmental, Social and Governance – Health, Safety and Environmental Programs*”.

“**ESG**” means environmental, social and governance.

“**ESTMA**” means the *Extractive Sector Transparency Measures Act* (Canada).

“**Federal Government**” means the federal Government of Canada.

“**Federal Methane Regulations**” has the meaning set forth under the heading “*Industry Conditions – Climate Change Regulation – Federal*”.

“**GAAP**” means generally accepted accounting principles for Canadian public companies which are currently IFRS.

“**GGPPA**” has the meaning set forth under the heading “*Industry Conditions – Climate Change Regulation – Federal*”.

“**GHG**” means greenhouse gas.

“**Gordondale Gas Plant**” means the deep-cut sour gas processing facility in Gordondale which is owned and operated by AltaGas.

“**Gordondale Processing Arrangement**” has the meaning set forth under the heading “*General Development of the Business – Three Year History – 2018*”.

“**H&S Program**” has the meaning set forth under the heading “*Description of the Business – Environmental, Social and Governance – Health, Safety and Environmental Programs*”.

“**HEHE Plan**” has the meaning set forth under the heading “*Industry Conditions – Climate Change Regulation – Federal*”.

“**IAA**” has the meaning set forth under the heading “*Industry Conditions – Regulatory Authorities and Environmental Regulation – Federal*”.

“**IA Agency**” has the meaning set forth under the heading “*Industry Conditions – Transportation Constraints and Market Access – Natural Gas and LNG – Specific Pipeline and Proposed LNG Export Terminal Updates*”.

“**IFRS**” means International Financial Reporting Standards as issued by the International Accounting Standards Board.

“**Inlet Liquids-Handling Facility**” has the meaning set forth under the heading “*General Development of the Business – Three Year History – 2020*”.

“**IOGA**” has the meaning set forth under the heading “*Industry Conditions – Land Tenure – Mineral Rights*”.

“**IOGC**” has the meaning set forth under the heading “*Industry Conditions – Land Tenure – Mineral Rights*”.

“**LMR**” has the meaning set forth under the heading “*Industry Conditions – Regulatory Authorities and Environmental Regulation – Alberta – Liability Management Rating Program*”.

“**Modernized Framework**” has the meaning set forth under the heading “*Industry Conditions – Royalties and Incentives – The Royalty Framework in Alberta – Crown Royalties*”.

“**Modernized IOGA**” has the meaning set forth under the heading “*Industry Conditions – Land Tenure – Mineral Rights*”.

“**Montney/Doig Resource Play**” means Birchcliff’s Montney and Doig formations resource play located northwest of Grande Prairie, Alberta.

“**NAFTA**” means the North American Free Trade Agreement between the Governments of Canada, the United States and Mexico.

“**NGTL System**” means the pipeline system owned by Nova Gas Transmission Ltd., a subsidiary of TCPL.

“**NI 51-101**” means National Instrument 51-101 – *Standards of Disclosure for Oil and Gas Activities*.

“**NI 51-102**” means National Instrument 51-102 – *Continuous Disclosure Obligations*.

“**NI 52-110**” means National Instrument 52-110 – *Audit Committees*.

“**NIT**” means Alberta Nova Inventory Transfer.

“**Notice of Redemption**” has the meaning set forth under the heading “*Description of Capital Structure – Authorized Share Capital and Securities Outstanding – Preferred Shares – Series C Preferred Shares*”.

“**OGCA**” has the meaning set forth under the heading “*Industry Conditions – Regulatory Authorities and Environmental Regulation – Alberta*”.

**“OPEC”** means the Organization of the Petroleum Exporting Countries.

**“Options”** means stock options to purchase Common Shares.

**“Order”** has the meaning set forth under the heading *“Directors and Officers – Cease Trade Orders, Bankruptcies, Penalties or Sanctions”*.

**“Orphan Fund”** has the meaning set forth under the heading *“Industry Conditions – Regulatory Authorities and Environmental Regulation – Alberta – Liability Management Rating Program”*.

**“Pan-Canadian Framework”** has the meaning set forth under the heading *“Industry Conditions – Climate Change Regulation – Federal”*.

**“Pembina Facility”** has the meaning set forth under the heading *“Description of the Business – Principal Properties – The Montney/Doig Resource Play – Key Operating Areas – Gordondale”*.

**“Performance Warrants”** means the performance warrants of the Corporation which expire on January 31, 2025, with each performance warrant providing the right to purchase one Common Share at a price of \$3.00 per Common Share.

**“Pieridae”** has the meaning set forth under the heading *“Industry Conditions – Transportation Constraints and Market Access – Natural Gas and LNG – Specific Pipeline and Proposed LNG Export Terminal Updates”*.

**“Pouce Coupe Acquisition”** means the acquisition by the Corporation of certain petroleum and natural gas properties, interests and related assets located in the Pouce Coupe area pursuant to a purchase and sale agreement dated November 2, 2018, which acquisition closed on January 3, 2019.

**“Pouce Coupe Gas Plant”** means Birchcliff’s 100% owned and operated natural gas processing plant located in the Pouce Coupe area of Alberta.

**“Preferred Shares”** means the preferred shares of the Corporation as a class.

**“Previous Framework”** has the meaning set forth under the heading *“Industry Conditions – Royalties and Incentives – The Royalty Framework in Alberta – Crown Royalties”*.

**“Prior Consolidated Reserves Report”** means the consolidated reserves report prepared by Deloitte with an effective date of December 31, 2019.

**“Redwater”** has the meaning set forth under the heading *“Industry Conditions – Regulatory Authorities and Environmental Regulation – Alberta – Liability Management Rating Program”*.

**“SEDAR”** means the System for Electronic Document Analysis and Retrieval.

**“Seismic Protocol Regions”** has the meaning set forth under the heading *“Industry Conditions – Regulatory Authorities and Environmental Regulation – Alberta”*.

**“Series A Preferred Shares”** means the cumulative redeemable preferred shares, Series A of the Corporation which were issued on August 8, 2012.

**“Series B Preferred Shares”** means the cumulative redeemable preferred shares, Series B of the Corporation which are issuable on the conversion of the Series A Preferred Shares.

**“Series C Preferred Shares”** means the cumulative redeemable preferred shares, Series C of the Corporation which were issued on June 14, 2013.

**“Series C Provisions”** has the meaning set forth under the heading *“Description of Capital Structure – Authorized Share Capital and Securities Outstanding – Preferred Shares – Series C Preferred Shares”*.

**“Steelhead”** has the meaning set forth under the heading *“Legal Proceedings and Regulatory Actions”*.

**“Steelhead Claim”** has the meaning set forth under the heading *“Legal Proceedings and Regulatory Actions”*.

“**Steelhead Patent**” has the meaning set forth under the heading “*Legal Proceedings and Regulatory Actions*”.

“**Stock Option Plan**” means the Corporation’s stock option plan, as amended and restated on December 13, 2018.

“**Syndicated Credit Facility**” has the meaning set forth under the heading “*Description of Capital Structure – Credit Facilities*”.

“**TC Energy**” means TC Energy Corporation.

“**TCPL**” means TransCanada PipeLines Limited, a subsidiary of TC Energy.

“**Temporary Service Protocol**” has the meaning set forth under the heading “*Industry Conditions – Transportation Constraints and Market Access – Natural Gas and LNG*”.

“**TIER**” and “**TIER Regulation**” have the meanings set forth under the heading “*Industry Conditions – Climate Change Regulation – Alberta*”.

“**TSX**” means the Toronto Stock Exchange.

“**UNDRIP**” has the meaning set forth under the heading “*Industry Conditions – Indigenous Rights*”.

“**UNFCCC**” has the meaning set forth under the heading “*Industry Conditions – Climate Change Regulation – Federal*”.

“**USMCA**” has the meaning set forth under the heading “*Industry Conditions – The USMCA and Other Trade Agreements – The USMCA*”.

“**Working Capital Facility**” has the meaning set forth under the heading “*Description of Capital Structure – Credit Facilities*”.

## ABBREVIATIONS AND CONVERSIONS

### Abbreviations

The abbreviations set forth below have the following meanings:

#### Oil and Natural Gas Liquids

bbl	barrel
bbls	barrels
bbls/d	barrels per day
C3+	propane plus
Mbbls	thousand barrels
NGLs	natural gas liquids

#### Natural Gas

GJ	gigajoule
GJ/d	gigajoules per day
LNG	liquefied natural gas
Mcf	thousand cubic feet
Mcf/d	thousand cubic feet per day
MMBtu	million British thermal units
MMcf	million cubic feet
MMcf/d	million cubic feet per day

#### Other

AECO	benchmark price for natural gas determined at the AECO ‘C’ hub in southeast Alberta
boe	barrel of oil equivalent
boe/d	barrel of oil equivalent per day
CO <sub>2</sub> e	carbon dioxide equivalent
DCCET	drilling, casing, completion, equipping and tie-in
km	kilometres
Mboe	thousand barrels of oil equivalent
MM\$	millions of dollars
NYMEX	New York Mercantile Exchange
WTI	West Texas Intermediate, the reference price paid in U.S. dollars at Cushing, Oklahoma, for crude oil of standard grade

## Conversions

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

<b>From</b>	<b>To</b>	<b>Multiply By</b>
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

## CONVENTIONS

Certain terms used herein are defined in NI 51-101, CSA Staff Notice 51-324 or the COGE Handbook and, unless the context otherwise requires, shall have the same meanings in this Annual Information Form as in NI 51-101, CSA Staff Notice 51-324 or the COGE Handbook, as the case may be.

Unless otherwise indicated, all information contained herein is given at or for the year ended December 31, 2020. Unless otherwise indicated, all dollar amounts are expressed in Canadian dollars and all references to "\$", "CDN\$" or "dollars" are to Canadian dollars and all references to "US\$" are to United States dollars. Except where otherwise indicated, all financial information contained in this Annual Information Form has been presented in accordance with GAAP. Words importing the singular number only include the plural, and vice versa, and words importing any gender include all genders.

## NON-GAAP MEASURES

This Annual Information Form uses "netback" and "transportation and other costs" which do not have standardized meanings prescribed by GAAP and therefore may not be comparable to similar measures presented by other companies where similar terminology is used. "Netback" is calculated by subtracting royalties, production costs and transportation and other costs from the average price received. Management believes that netback assists management and investors in assessing Birchcliff's operating results by isolating the impact of production volumes to better analyze its performance against prior periods on a comparable basis. "Transportation and other costs" denotes transportation expense plus marketing purchases minus marketing revenue. Birchcliff may enter into certain marketing purchase and sales arrangements with the objective of reducing any available transportation and/or fractionation fees associated with its take-or-pay commitments. Management believes that transportation and other costs assists management and investors in assessing Birchcliff's total cost structure related to transportation activities. For additional information regarding netbacks and transportation and other costs, please see "Non-GAAP Measures" in Birchcliff's management's discussion and analysis for the year ended December 31, 2020.

## PRESENTATION OF OIL AND GAS RESERVES

Deloitte prepared the Deloitte Reserves Report and the Prior Consolidated Reserves Report. Such evaluations were prepared in accordance with the standards contained in NI 51-101 and the COGE Handbook that were in effect at the relevant time.

With respect to any disclosure of reserves contained herein relating to portions of Birchcliff's properties, the estimates of reserves and future net revenue for individual properties may not reflect the same confidence level as estimates of reserves and future net revenue for all properties, due to the effects of aggregation. Estimates of future net revenue, whether calculated without discount or using a discount rate, do not represent fair market value.

Unless otherwise indicated, all volumes of Birchcliff's reserves presented herein are on a gross basis.



## Reserves Categories

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 the analysis of drilling, geological, geophysical and engineering data; the use of established technology; and specified economic conditions, which are generally accepted as being reasonable.

Reserves are classified according to the degree of certainty associated with the estimates:

- **“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.
- **“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.

## Levels of Certainty for Reported Reserves

The qualitative certainty levels referred to in the definitions above are applicable to “individual reserves entities”, which refers to the lowest level at which reserves calculations are performed, and to “reported reserves”, which refers to the highest level sum of individual entity estimates for which reserves estimates are presented. Reported reserves should target the following levels of certainty under a specific set of economic conditions:

- at least a 90% probability that the quantities actually recovered will equal or exceed the estimated proved reserves; and
- at least a 50% probability that the quantities actually recovered will equal or exceed the sum of the estimated proved plus probable reserves.

A quantitative measure of the certainty levels pertaining to estimates prepared for the various reserves categories is desirable to provide a clearer understanding of the associated risks and uncertainties. However, the majority of reserves estimates are prepared using deterministic methods that do not provide a mathematically derived quantitative measure of probability. In principle, there should be no difference between estimates prepared using probabilistic or deterministic methods.

## Development and Production Status of Reserves

Each of the reserves categories (proved and probable) may be divided into developed and undeveloped categories:

- **“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 (e.g., when compared to the cost of drilling a well) to put the reserves on production. The developed category may be subdivided into producing and non-producing.
  - **“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 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.
- **“Undeveloped reserves”** are those reserves expected to be recovered from known accumulations where a significant expenditure (e.g., 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 category (proved and probable) to which they are assigned.

In multi-well pools it may be appropriate to allocate total pool reserves between the developed and undeveloped categories or to subdivide the developed reserves for the pool between developed producing and developed non-

producing. This allocation should be based on the estimator's assessment as to the reserves that will be recovered from specific wells, facilities, and completion intervals in the pool and their respective development and production status.

### **Interest in Reserves, Production, Wells and Properties**

**"Gross"** means: (a) in relation to Birchcliff's interest in production or reserves, Birchcliff's working interest (operating or non-operating) share before deduction of royalties and without including any royalty interests of Birchcliff; (b) in relation to wells, the total number of wells in which Birchcliff has an interest; and (c) in relation to properties, the total area of properties in which Birchcliff has an interest.

**"Net"** means: (a) in relation to Birchcliff's interest in production or reserves, Birchcliff's working interest (operating or non-operating) share after deduction of royalty obligations, plus Birchcliff's royalty interests in production or reserves; (b) in relation to Birchcliff's interest in wells, the number of wells obtained by aggregating Birchcliff's working interest in each of its gross wells; and (c) in relation to Birchcliff's interest in a property, the total area in which Birchcliff has an interest multiplied by the working interest owned by Birchcliff.

### **Forecast Prices and Costs**

**"Forecast prices and costs"** mean future prices and costs that are: (a) generally accepted as being a reasonable outlook of the future; (b) if, and only to the extent that, there are fixed or presently determinable future prices or costs to which Birchcliff 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 paragraph (a).

## **SPECIAL NOTES TO READER**

### **Boe Conversions**

Boe amounts have been calculated by using the conversion ratio of 6 Mcf of natural gas to 1 bbl of oil. Boe amounts may be misleading, particularly if used in isolation. A boe conversion ratio of 6 Mcf to 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. Given that the value ratio based on the current price of crude oil as compared to natural gas is significantly different from the energy equivalency of 6:1, utilizing a conversion on a 6:1 basis may be misleading as an indication of value.

### **Production**

With respect to the disclosure of Birchcliff's production contained in this Annual Information Form: (i) references to "light oil" mean "light crude oil and medium crude oil" as such term is defined in NI 51-101; (ii) references to "liquids" means a combination of one or more of light oil, condensate and other NGLs; and (iii) references to "natural gas" mean "shale gas", which also includes an immaterial amount of "conventional natural gas", as such terms are defined in NI 51-101. In addition, NI 51-101 includes condensate within the product type of natural gas liquids. Birchcliff has disclosed condensate separately from other natural gas liquids as the price of condensate as compared to other natural gas liquids is currently significantly higher and Birchcliff believes presenting the two commodities separately provides a more accurate description of its operations and results therefrom.

### **Forward-Looking Statements**

Certain statements contained in this Annual Information Form constitute forward-looking statements and forward-looking information (collectively referred to as "**forward-looking statements**") within the meaning of applicable Canadian securities laws. The forward-looking statements contained in this Annual Information Form relate to future events or Birchcliff's future plans, operations, strategy, performance or financial position and are based on Birchcliff's current expectations, estimates, projections, beliefs and assumptions. Such forward-looking statements have been made by Birchcliff in light of the information available to it at the time the statements were made and reflect its experience and perception of historical trends. All statements and information other than historical fact may be forward-looking statements. Such forward-looking statements are often, but not always, identified by the use of words such as "seek", "plan", "focus", "future", "outlook", "position", "expect", "project", "intend", "believe",

“anticipate”, “estimate”, “forecast”, “guidance”, “potential”, “proposed”, “predict”, “budget”, “continue”, “targeting”, “may”, “will”, “could”, “might”, “should”, “would”, “on track” and other similar words and expressions.

By their nature, forward-looking 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. Accordingly, readers are cautioned not to place undue reliance on such forward-looking statements. Although Birchcliff believes that the expectations reflected in the forward-looking statements are reasonable, there can be no assurance that such expectations will prove to be correct and Birchcliff makes no representation that actual results achieved will be the same in whole or in part as those set out in the forward-looking statements.

In particular, this Annual Information Form contains forward-looking statements relating to the following: Birchcliff’s plans and other aspects of its anticipated future financial performance, results, operations, focus, objectives, strategies, opportunities, priorities and goals (including that Birchcliff is focused on its high-quality Montney/Doig Resource Play); statements regarding the Corporation’s 2021 Capital Program and the Corporation’s proposed exploration and development activities and the timing thereof (including: estimates of capital expenditures; the number and locations of wells to be drilled and brought on production; and that Birchcliff may adjust the program where deemed prudent); Birchcliff’s expectation that the commodity price environment and economic and industry conditions will continue to influence the general development of its business in 2021; statements regarding potential acquisitions and dispositions of assets; that the Corporation may in the future complete financings of equity or debt (which may be convertible into equity) for purposes that may include financing of acquisitions, Birchcliff’s operations and capital expenditures and the repayment of indebtedness; the performance and other characteristics of Birchcliff’s oil and natural gas properties and expected results from its assets (including: the potential of Birchcliff’s Montney/Doig Resource Play; and that the Montney/Doig Resource Play is large enough to provide Birchcliff with an extensive inventory of repeatable and low-cost drilling opportunities that the Corporation expects will provide production and reserves growth for many years); the anticipated benefits of Birchcliff’s use of multi-interval cube style drilling technology; Birchcliff’s processing, transportation and marketing arrangements, strategies and activities (including: that Birchcliff’s excess processing and transportation capacity gives it the ability to increase its natural gas production should commodity prices and economic conditions improve and also allows the Corporation’s current volumes to flow during most pipeline maintenance periods; the Corporation’s ability to mitigate the impact of production curtailments on the NGTL System; that the Corporation enters into firm service obligations for the transportation and processing of its natural gas, oil and NGLs production volumes in order to secure access to the infrastructure necessary to transport and process such volumes and renews, amends or enters into new firm service agreements from time to time; and the Corporation’s belief that it should generally secure firm transportation sufficient for its current and future growth plans); Birchcliff’s hedging activities, risk management strategy and use of risk management techniques; Birchcliff’s competitive position; the treatment under and the impact of existing and proposed governmental regulatory regimes and tax laws, including climate change and GHG legislation (including: the Corporation’s expectation that it will receive emission performance credits for 2019 in the first half of 2021; that at the present time, the operational and financial impacts of complying with applicable GHG legislation are not material to the Corporation; and the Corporation’s expectation 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 and natural gas resulting in a decrease in the Corporation’s profitability and a reduction in the value of its assets); estimates of decommissioning obligations; the information set forth under the heading “*Statement of Reserves Data and Other Oil and Gas Information*” and elsewhere in this Annual Information Form as it relates to the Corporation’s reserves (including: estimates of reserves; estimates of the net present values of future net revenue associated with Birchcliff’s reserves; forecasts for prices, inflation and exchange rates; development plans for the Corporation’s undeveloped reserves and the timing for the development of such reserves, including the number of wells forecast to be drilled and forecast facility expansions; abandonment and reclamation costs; future development costs, the anticipated funding of such costs and the Corporation’s expectation that interest or other funding costs would not make the development of any of its properties uneconomic; statements regarding wells that are currently non-producing and the anticipated timing for such wells to be brought on production; the amount of undeveloped lands on which Birchcliff expects the rights to explore, develop and exploit will expire within one year; Birchcliff’s forward contracts and transportation and processing commitments; Birchcliff’s income tax horizon and estimates of tax pools; and estimates of production); industry conditions pertaining to the oil and natural gas industry; expectations regarding commodity prices and costs and supply and demand for oil and natural gas; expectations regarding the Corporation’s ability to raise capital and to continually add to reserves through acquisitions and development; Birchcliff’s dividend policy and the payment of dividends; statements relating to the

Corporation's normal course issuer bid (including potential purchases under the bid and the cancellation of Common Shares purchased under the bid); statements regarding Birchcliff's Credit Facilities (including the timing of semi-annual reviews); and statements with respect to legal proceedings against the Corporation (including regarding the merits of the Steelhead Claim). Statements relating to reserves are forward-looking as they involve the implied assessment, based on certain estimates and assumptions, that the reserves exist in the quantities predicted or estimated and that the reserves can be profitably produced in the future. See *"Presentation of Oil and Gas Reserves"*.

With respect to the forward-looking statements contained in this Annual Information Form, assumptions have been made regarding, among other things: the degree to which the Corporation's results of operations and financial condition will be disrupted by circumstances attributable to the COVID-19 pandemic and the responses of governments and the public to the pandemic; prevailing and future commodity prices and differentials, currency exchange rates, interest rates, inflation rates, royalty rates and tax rates; the state of the economy, financial markets and the exploration, development and production business; the political environment in which Birchcliff operates; the regulatory framework regarding royalties, taxes, environmental, climate change and other laws; the Corporation's ability to comply with existing and future environmental, climate change and other laws; future cash flow, debt and dividend levels; future operating, transportation, marketing, general and administrative and other expenses; Birchcliff's ability to access capital and obtain financing on acceptable terms; the timing and amount of capital expenditures and the sources of funding for capital expenditures and other activities; the sufficiency of budgeted capital expenditures to carry out planned operations; the successful and timely implementation of capital projects and the timing, location and extent of future drilling and other operations; results of operations; Birchcliff's ability to continue to develop its assets and obtain the anticipated benefits therefrom; the performance of existing and future wells; the success of new wells drilled; reserves volumes and Birchcliff's ability to replace and expand reserves through acquisition, development or exploration; the impact of competition on Birchcliff; the availability of, demand for and cost of labour, services and materials; the ability to obtain any necessary regulatory or other approvals in a timely manner; the satisfaction by third parties of their obligations to Birchcliff; the ability of Birchcliff to secure adequate processing and transportation for its products; Birchcliff's ability to successfully market natural gas and liquids; the availability of hedges on terms acceptable to Birchcliff; and Birchcliff's natural gas market exposure. In addition to the foregoing assumptions, Birchcliff has made the following assumptions with respect to certain forward-looking statements contained in this Annual Information Form:

- With respect to estimates of 2021 capital expenditures and Birchcliff's spending plans for 2021, such estimates and plans assume that the 2021 Capital Program will be carried out as currently contemplated. Birchcliff makes acquisitions and dispositions in the ordinary course of business. Any acquisitions and dispositions completed could have an impact on Birchcliff's capital expenditures, production, cash flow, costs and debt, which impact could be material. The amount and allocation of capital expenditures for exploration and development activities by area and the number and types of wells to be drilled and brought on production is dependent upon results achieved and is subject to review and modification by management on an ongoing basis throughout the year. Actual spending may vary due to a variety of factors, including commodity prices, economic conditions, results of operations and costs of labour, services and materials.
- With respect to statements regarding future wells to be drilled and brought on production, the key assumptions are: the continuing validity of the geological and other technical interpretations performed by Birchcliff's technical staff, which indicate that commercially economic volumes can be recovered from Birchcliff's lands as a result of drilling future wells; and that commodity prices and general economic conditions will warrant proceeding with the drilling of such wells.
- With respect to statements regarding the future potential and prospectivity of properties and assets, such statements assume: the continuing validity of the geological and other technical interpretations performed by Birchcliff's technical staff with respect to such properties; and that, over the long-term, commodity prices and general economic conditions will warrant proceeding with the exploration and development of such properties.
- With respect to estimates of reserves and the net present values of future net revenue associated with Birchcliff's reserves, the key assumption is the validity of the data used by Deloitte in its independent reserves evaluation.

Birchcliff's actual results, performance or achievements could differ materially from those anticipated in the forward-looking statements as a result of both known and unknown risks and uncertainties including, but not limited to: the risks posed by pandemics (including COVID-19) and epidemics and their impacts on supply and demand and commodity prices; actions taken by OPEC and other major producers of crude oil and the impact such actions may have on supply and demand and commodity prices; general economic, market and business conditions which will, among other things, impact the demand for and market prices of Birchcliff's products and Birchcliff's access to capital; volatility of oil and natural gas prices; fluctuations in currency exchange and interest rates; stock market volatility; loss of market demand; an inability to access sufficient capital from internal and external sources on terms acceptable to the Corporation; risks associated with Birchcliff's Credit Facilities, including a failure to comply with covenants under the agreement governing the Credit Facilities and the risk that the borrowing base limit may be redetermined; fluctuations in the costs of borrowing; operational risks and liabilities inherent in oil and natural gas operations; the occurrence of unexpected events such as fires, severe weather, explosions, blow-outs, equipment failures, transportation incidents and other similar events affecting Birchcliff or other parties whose operations or assets directly or indirectly affect Birchcliff; an inability to access sufficient water or other fluids needed for operations; uncertainty that development activities in connection with Birchcliff's assets will be economic; an inability to access or implement some or all of the technology necessary to efficiently and effectively operate its assets and achieve expected future results; uncertainties associated with estimating oil and natural gas reserves; the accuracy of estimates of reserves, future net revenue and production levels; geological, technical, drilling, construction and processing problems; uncertainty of geological and technical data; horizontal drilling and completions techniques and the failure of drilling results to meet expectations for reserves or production; uncertainties related to Birchcliff's future potential drilling locations; delays or changes in plans with respect to exploration or development projects or capital expenditures, including delays in the completion of gas plants and other facilities; the accuracy of cost estimates and variances in Birchcliff's actual costs and economic returns from those anticipated; incorrect assessments of the value of acquisitions and exploration and development programs; changes to the regulatory framework in the locations where the Corporation operates, including changes to tax laws, Crown royalty rates, environmental laws, climate change laws, carbon tax regimes, incentive programs and other regulations that affect the oil and natural gas industry and other actions by government authorities; an inability of the Corporation to comply with existing and future environmental, climate change and other laws; the cost of compliance with current and future environmental laws; political uncertainty and uncertainty associated with government policy changes; dependence on facilities, gathering lines and pipelines, some of which the Corporation does not control; uncertainties and risks associated with pipeline restrictions and outages to third-party infrastructure that could cause disruptions to production; the lack of available pipeline capacity and an inability to secure adequate and cost-effective processing and transportation for Birchcliff's products; an inability to satisfy obligations under Birchcliff's firm marketing and transportation arrangements; shortages in equipment and skilled personnel; the absence or loss of key employees; competition for, among other things, capital, acquisitions of reserves, undeveloped lands, equipment and skilled personnel; management of Birchcliff's growth; environmental and climate change risks, claims and liabilities; potential litigation; default under or breach of agreements by counterparties and potential enforceability issues in contracts; claims by Indigenous peoples; the reassessment by taxing or regulatory authorities of the Corporation's prior transactions and filings; unforeseen title defects; third-party claims regarding the Corporation's right to use technology and equipment; uncertainties associated with the outcome of litigation or other proceedings involving Birchcliff; uncertainties associated with counterparty credit risk; risks associated with Birchcliff's risk management activities and the risk that hedges on terms acceptable to Birchcliff may not be available; risks associated with the declaration and payment of future dividends, including the discretion of the Board to declare dividends and change the Corporation's dividend policy; the failure to obtain any required approvals in a timely manner or at all; the failure to complete or realize the anticipated benefits of acquisitions and dispositions and the risk of unforeseen difficulties in integrating acquired assets into Birchcliff's operations; negative public perception of the oil and natural gas industry and fossil fuels, including transportation and hydraulic fracturing involving fossil fuels; the Corporation's reliance on hydraulic fracturing; market competition, including from alternative energy sources; changing demand for petroleum products; the availability of insurance and the risk that certain losses may not be insured; breaches or failure of information systems and security (including risks associated with cyber-attacks); risks associated with the ownership of the Corporation's securities; the accuracy of the Corporation's accounting estimates and judgments; and potential requirements under applicable accounting standards for the impairment or reversal of estimated recoverable amounts of the Corporation's assets from time to time.

There is significant ongoing uncertainty surrounding COVID-19 and the extent and duration of the impacts that Birchcliff may experience. While the duration and full impact of the COVID-19 pandemic is not yet known, the effect of low commodity prices as a result of reduced demand associated with the impact of COVID-19 has had, and may continue to have, a negative impact on the Corporation's business, results of operations, financial condition and the environment in which it operates. The Corporation's current expectations, estimates, projections, beliefs and assumptions underlying the Corporation's forward-looking statements, including those that pertain to the 2021 Capital Program, are subject to change in light of the COVID-19 pandemic, including potential future waves and actions taken by governments and businesses in response thereto.

Readers are cautioned that the foregoing lists of factors are not exhaustive. Additional information on these and other risk factors that could affect results of operations, financial performance or financial results are included under the heading "Risk Factors" in this Annual Information Form and in other reports filed with Canadian securities regulatory authorities.

This Annual Information Form may contain information that constitutes future-orientated financial information or financial outlook information (collectively, "FOFI") about Birchcliff's prospective financial performance, financial position or cash flows, all of which is subject to the same assumptions, risk factors, limitations and qualifications as set forth above. Readers are cautioned that the assumptions used in the preparation of such information, although considered reasonable at the time of preparation, may prove to be imprecise or inaccurate and, as such, undue reliance should not be placed on FOFI. Birchcliff's actual results, performance and achievements could differ materially from those expressed in, or implied by, FOFI. Birchcliff has included FOFI in order to provide readers with a more complete perspective on Birchcliff's future operations and management's current expectations relating to Birchcliff's future performance. Readers are cautioned that such information may not be appropriate for other purposes. FOFI contained herein was made as of the date of this Annual Information Form. Unless required by applicable laws, Birchcliff does not undertake any obligation to publicly update or revise any FOFI statements, whether as a result of new information, future events or otherwise.

Management has included the above summary of assumptions and risks related to forward-looking statements provided in this Annual Information Form in order to provide readers with a more complete perspective on Birchcliff's future operations and management's current expectations relating to Birchcliff's future performance. Readers are cautioned that this information may not be appropriate for other purposes.

The forward-looking statements contained in this Annual Information Form are expressly qualified by the foregoing cautionary statements. The forward-looking statements contained herein are made as of the date of this Annual Information Form. Unless required by applicable laws, Birchcliff does not undertake any obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

#### **Access to Documents**

Any document referred to in this Annual Information Form and described as being filed on the Corporation's SEDAR profile at [www.sedar.com](http://www.sedar.com) may be obtained free of charge from Birchcliff at Suite 1000, 600 – 3<sup>rd</sup> Avenue S.W., Calgary, Alberta T2P 0G5.

#### **CORPORATE STRUCTURE**

The Corporation was incorporated on July 6, 2004 under the ABCA as "1116463 Alberta Ltd." and on September 10, 2004, the Corporation amended its articles to change its name to "Birchcliff Energy Ltd." On January 18, 2005, the Corporation amalgamated under the ABCA with Scout Capital Corp., a public corporation, pursuant to a plan of arrangement under the ABCA to form an amalgamated corporation under the name "Birchcliff Energy Ltd." On May 31, 2005, the Corporation amalgamated under the ABCA with Veracel Inc., a private company, pursuant to a plan of arrangement under the ABCA to form an amalgamated corporation under the name "Birchcliff Energy Ltd."

On August 3, 2012, the Corporation amended its articles to create the Series A Preferred Shares and the Series B Preferred Shares. On June 13, 2013, the Corporation amended its articles to create the Series C Preferred Shares. See "Description of Capital Structure – Authorized Share Capital and Securities Outstanding – Preferred Shares".

The registered and head office of the Corporation is located at Suite 1000, 600 – 3<sup>rd</sup> Avenue S.W., Calgary, Alberta T2P 0G5. The Corporation does not have any subsidiaries.

## GENERAL DEVELOPMENT OF THE BUSINESS

### Three Year History

A description of the significant developments in the business of the Corporation over the last three completed financial years is set forth below.

#### 2018

On February 14, 2018, the Corporation announced that the Board had approved a capital budget of \$255.0 million for 2018.

On April 3, 2018, the Corporation and AltaGas announced that they had entered into a definitive agreement for a new long-term natural gas processing arrangement (the “**Gordondale Processing Arrangement**”) effective January 1, 2018 for natural gas processed at the Gordondale Gas Plant. See “*Description of the Business – Processing Arrangements – Gordondale Key Operating Area*”.

On April 27, 2018, the Corporation and its syndicate of lenders agreed to an extension of the maturity dates of each of the Syndicated Credit Facility and the Working Capital Facility from May 11, 2020 to May 11, 2021 and to the borrowing base remaining unchanged at \$950.0 million. In addition, the Corporation and the lenders agreed to increase the Working Capital Facility to \$100.0 million (from \$50.0 million), with a corresponding reduction in the Syndicated Credit Facility to \$850.0 million (from \$900.0 million).

On May 10, 2018, Mr. Larry A. Shaw ceased to be a director of the Corporation as he did not stand for re-election at the Corporation’s annual and special meeting of shareholders held on the same date.

In August 2018, Phase VI of the Pouce Coupe Gas Plant commenced operations, increasing the total processing capacity of the Pouce Coupe Gas Plant to 340 MMcf/d from 260 MMcf/d.

On November 14, 2018, the Corporation announced that it had entered into a definitive purchase and sale agreement with respect to the Pouce Coupe Acquisition, which acquisition subsequently closed on January 3, 2019. See “*General Development of the Business – Three Year History – 2019*”. The Corporation also announced an increased capital budget of \$288.0 million for 2018.

On December 14, 2018, Ms. Stacey E. McDonald was appointed as a director of the Corporation and Ms. Rebecca J. Morley resigned as a director of the Corporation.

#### 2019

On January 3, 2019, the Corporation completed the Pouce Coupe Acquisition. Pursuant to the Pouce Coupe Acquisition, the Corporation acquired 18 gross (15.1 net) contiguous sections of Montney land located between the Corporation’s existing Pouce Coupe and Gordondale properties, as well as various other non-Montney lands and other assets, for total cash consideration of \$39.0 million.

On February 13, 2019, the Corporation announced that the Board had approved a capital budget of \$204.0 million for 2019 and a quarterly cash dividend of \$0.02625 on its Common Shares for the quarter ending March 31, 2019, which represented a 5% increase over the prior quarter.

On May 10, 2019, the Corporation and its syndicate of lenders agreed to: (i) an extension of the maturity dates of each of the Syndicated Credit Facility and the Working Capital Facility from May 11, 2021 to May 11, 2022; and (ii) increase the borrowing base limit to \$1.0 billion from \$950.0 million, with the Syndicated Credit Facility being increased to \$900.0 million from \$850.0 million and the Working Capital Facility remaining at \$100.0 million.

On August 14, 2019, the Corporation announced that it had increased its capital budget for 2019 to \$242.0 million.

## **2020**

On January 22, 2020, the Corporation announced that the Board had approved a capital budget of \$340.0 million to \$360.0 million for 2020, which included the completion of the Corporation's 20,000 bbls/d (50% condensate, 50% water) inlet liquids-handling facility at the Pouce Coupe Gas Plant (the "**Inlet Liquids-Handling Facility**").

On March 11, 2020, as a result of weakening and volatile oil prices, the Corporation announced that the Board had approved a reduced capital budget of \$275.0 million to \$295.0 million for 2020 (the "**2020 Capital Program**"). The reduction in capital spending primarily related to the deferral of 10 (10.0 net) oil wells that were originally planned to be drilled and brought on production in Gordondale in 2020.

On May 11, 2020 the Corporation and its syndicate of lenders agreed to maintain the Corporation's borrowing base limit at \$1.0 billion with the Syndicated Credit Facility remaining \$900.0 million and the Working Capital Facility remaining at \$100.0 million. For additional information regarding the Credit Facilities, see "*Description of Capital Structure – Credit Facilities*".

On May 13, 2020, the Corporation announced various steps taken in response to the COVID-19 pandemic, including a reduction to its quarterly common share dividend to \$0.005 per share commencing June 30, 2020.

### **Recent Developments**

On January 20, 2021, the Corporation announced that the Board had approved a capital budget of \$210.0 million to \$230.0 million for 2021 which contemplates the drilling of 27 (27.0 net) wells and the bringing on production of 33 (33.0 net) wells during 2021 (the "**2021 Capital Program**").

### **Current Operating Environment and COVID-19**

On January 30, 2020, the World Health Organization declared the COVID-19 outbreak a public health emergency of international concern and on March 11, 2020, the World Health Organization declared it to be a pandemic. The outbreak of the COVID-19 pandemic has had a significant negative impact on global economic conditions. This included a sharp decrease in crude oil demand which, combined with other macro-economic conditions, resulted in significant volatility in oil and natural gas commodity prices, as well as increased economic uncertainty. In addition, the COVID-19 pandemic has affected the Corporation's employees, contractors, suppliers and the communities where it operates. These factors have in turn impacted the Corporation's business, results of operations, financial condition and the environment in which it operates. For further details on these risks, refer to "*Risk Factors*".

Measures to contain the spread of COVID-19, including business closures, social distancing protocols, travel restrictions, quarantines, curfews and restrictions on gatherings and events, have been and continue to be widespread and these measures are continuing to have extensive implications for the Canadian and global economy, including demand for and supply of hydrocarbons and associated products. Uncertainty regarding the supply of and the timing and rollout of vaccinations, staged and full reopening plans across Canada, as well as the introduction of new variants of the coronavirus being identified in Canada are contributing to the uncertainty about the timing of a potential decline in the impacts of COVID-19. The COVID-19 pandemic, the containment measures and the phased reopening approach taken in several regions could have longer term effects on economic and commercial activity after the COVID-19 pandemic recedes and containment measures are fully lifted.

The Corporation took decisive action in 2020 to strengthen its balance sheet and ensure liquidity and financial flexibility, including reducing its original 2020 capital budget and its common share dividend (see "*General Development of the Business – Three Year History – 2020*"). The Corporation also implemented a number of initiatives to protect the well-being of its employees and contractors, including remote work-from-home arrangements, physical distancing measures, enhanced cleaning and sanitization measures and conducting meetings through virtual means. The Corporation has established a response team to coordinate and implement initiatives relating to COVID-19 and continues to closely monitor the recommendations of applicable government and health authorities.

Birchcliff expects that the commodity price environment and economic and industry conditions will continue to influence the general development of its business in 2021. Birchcliff will continue to closely monitor economic conditions and commodity prices and will make adjustments to the 2021 Capital Plan where prudent. In addition,



the Corporation may make adjustments to its other business activities as appropriate. See “*Special Notes to Reader – Forward-Looking Statements*”.

### **Significant Acquisitions**

The Corporation did not complete any significant acquisitions during the financial year ended December 31, 2020 for which disclosure is required under Part 8 of NI 51-102.

The Corporation evaluates potential acquisitions of all types of petroleum and natural gas and other energy-related assets and/or companies as part of its ongoing business and is regularly in the process of evaluating several potential acquisitions at any one time, which individually or together could be material. Birchcliff cannot predict whether any current or future opportunities will result in one or more acquisitions for the Corporation. In addition, the Corporation may in the future complete financings of equity or debt (which may be convertible into equity) for purposes that may include financing of acquisitions, Birchcliff’s operations and capital expenditures and the repayment of indebtedness. See “*Risk Factors*”.

## **DESCRIPTION OF THE BUSINESS**

### **General**

The Corporation is an intermediate oil and natural gas company based in Calgary, Alberta that is engaged in the business of exploring for, developing and producing natural gas, light oil, condensate and other NGLs in the Western Canadian Sedimentary Basin with operations concentrated within its one core area, the Peace River Arch of Alberta.

Within the Peace River Arch, Birchcliff is focused on its high-quality Montney/Doig Resource Play and the exploration and development of its low-cost, liquids-rich natural gas and light oil assets on the play. The Corporation’s Montney/Doig Resource Play is large enough to provide it with an extensive inventory of repeatable and low-cost drilling opportunities that the Corporation expects will provide production and reserves growth for many years. Within the Montney/Doig Resource Play, the Corporation’s operations are primarily concentrated in the Pouce Coupe and Gordondale areas of Alberta where it owns large contiguous blocks of high working interest land. At December 31, 2020, the Corporation operated over 99.9% of its production. In addition, the Corporation owns and controls many of the significant facilities and infrastructure it relies upon to handle the majority of its production, including its 100% owned and operated Pouce Coupe Gas Plant.

The Common Shares, the Series A Preferred Shares and the Series C Preferred Shares are listed for trading on the TSX under the trading symbols “BIR”, “BIR.PR.A” and “BIR.PR.C”, respectively.

### **Principal Properties**

The following is a description of the Corporation’s principal oil and natural gas properties as at December 31, 2020. Unless otherwise stated, production volumes presented below are the Corporation’s average gross sales volumes for the period indicated, meaning Birchcliff’s working interest (operating or non-operating) share before the deduction of royalties and without including any royalty interests of Birchcliff.

#### ***Peace River Arch***

Birchcliff’s operations are concentrated within its one core area, the Peace River Arch, which is centred northwest of Grande Prairie, Alberta, adjacent to the Alberta/British Columbia border. The Peace River Arch is generally characterized by multiple horizons with a myriad of structural, stratigraphic and hydrodynamic traps. The Peace River Arch is highlighted by the Deep Basin hydrocarbon trapping phenomena. The Deep Basin is a hydrodynamic or permeability trap where the water in the updip position cannot travel through the fine-grained reservoirs with characteristics that include overpressured reservoirs, continuous hydrocarbon columns and low water production, with low terminal declines. The Peace River Arch provides all-season access that allows the Corporation to drill, equip and tie-in wells on an almost continuous basis.



## ***The Montney/Doig Resource Play***

### Overview

The Montney/Doig Resource Play is considered by management to be one of the premier resource plays in North America. Birchcliff's Montney/Doig Resource Play is centred approximately 95 km northwest of Grande Prairie, Alberta. At December 31, 2020, Birchcliff held 415.7 (394.6 net) sections of land that have potential for the Montney/Doig Resource Play, including 227.7 (214.1 net) largely contiguous sections in its two key operating areas, Pouce Coupe and Gordondale. The Pouce Coupe and Gordondale operating areas collectively accounted for essentially 100% of the Corporation's total annual average production in 2020. The Corporation has established two geographically-organized teams, the Pouce Coupe team and the Gordondale team, to manage these two key operating areas. Each team has a full complement of highly-skilled technical professionals, including engineers, geoscientists and landmen.

### Attributes

Birchcliff characterizes its Montney/Doig Resource Play as a regionally pervasive, continuous, low-permeability hydrocarbon accumulation or system that typically requires intensive stimulation to produce. The production characteristics of this play generally include steep initial declines that rapidly trend to much lower decline rates, yielding long-life production. The play exhibits a statistical distribution of estimated ultimate recoveries and therefore provides a repeatable distribution of drilling opportunities. Birchcliff's Montney/Doig Resource Play is ideally suited for the application of horizontal drilling and multi-stage fracture stimulation technology.

As more wells are drilled into a resource play, there is a substantial decrease in both the geological and technical risks. Over the past 16 years, Birchcliff has worked to de-risk its Montney/Doig Resource Play by drilling both vertical and horizontal exploration wells in order to develop an in-depth understanding of the oil and gas pools, rock properties and petrophysical characteristics and reservoir parameters. The Corporation designs, tests and evaluates its drilling, completion and production technologies and practices to achieve continual improvements in productivity and expected ultimate recoveries in order to drive down capital and operating costs. The Corporation's pool delineation strategy de-risks future development and helps to reduce future costs as new well pads and infrastructure are designed and built to support multiple horizontal well locations and increased production.

### Geology

The Montney/Doig Resource Play in Birchcliff's areas of operations is approximately 300 metres (1,000 feet) thick. The play has a large areal extent covering in excess of 50,000 square miles. The Montney/Doig is composed of a high percentage of hard minerals and a very low percentage of clay minerals resulting in excellent "fracability". This, combined with the current stress regime, results in the rock shattering more like glass in a complex fracture style versus a simple bi-wing style. The rock parameters also yield excellent fracture stability; the fractures stay open due to low proppant embedment. This is a key contributing factor to the low terminal declines and large estimated ultimate recoveries of the play. Unlike most shale plays that are predominantly shale, the Montney/Doig is classified by management as a hybrid resource play because it is comprised of hydrocarbon-saturated rock with both tight silt and sand reservoir rock interlayered with shale source rock. This results in relatively high permeability and productivity rates.

Hydrodynamics is another important attribute for resource plays. A large portion of the Montney/Doig Resource Play is over-pressured which reduces the potential for significant water production. The Pouce Coupe and

Gordondale areas are predominantly over-pressured which also results in higher hydrocarbons in-place. The Montney and a majority of the Doig were deposited in a lower to middle shore face environment that is regionally extensive and results in a widespread style deposit that provides for more repeatable results.

The Montney/Doig Resource Play exists in two geological formations (the Montney and the Doig) and Birchcliff has divided the geologic column in its areas of operations into six drilling intervals from the youngest (top) to the oldest (bottom): (i) the Basal Doig/Upper Montney; (ii) the Montney D4; (iii) the Montney D3; (iv) the Montney D2; (v) the Montney D1; and (vi) the Montney C. Part of Birchcliff's long-term strategy is to continue to explore and delineate the Montney/Doig Resource Play, both geographically and stratigraphically. At December 31, 2020, the Corporation has successfully drilled and cased an aggregate of 453 (449.9 net) Montney/Doig horizontal wells on the Montney/Doig Resource Play. Of these wells, an aggregate of 440 (437.7 net) wells have been completed and brought on production, consisting of 73 (71.9 net) wells in the Basal Doig/Upper Montney interval, 12 (12.0 net) wells in the Montney D4 interval, 49 (49.0 net) wells in the Montney D2 interval, 295 (293.7 net) wells in the Montney D1 interval and 11 (11.0 net) wells in the Montney C interval. To date, the Corporation has not drilled any wells in the Montney D3 interval.

### Key Operating Areas

The following is a brief description of the Corporation's two key operating areas:

#### Pouce Coupe

The Pouce Coupe key operating area is located west and northwest of Grande Prairie, Alberta and consists of the Corporation's properties in Pouce Coupe and Elmworth. At December 31, 2020, the Corporation held an aggregate of 415.4 (386.7 net) sections of land in the area. Annual average production in 2020 was 47,149 boe/d (248,951 Mcf/d of natural gas, 1,226 bbls/d of NGLs (excluding condensate), 4,401 bbls/d of condensate and 31 bbls/d of light oil). In 2020, the Pouce Coupe key operating area accounted for approximately:

- 70% of the Corporation's total capital expenditures;
- 62% of the Corporation's total corporate annual average production; and
- 71% of the Corporation's total annual average natural gas production, 1% of the Corporation's total annual average light oil production, 16% of the Corporation's total annual average NGLs production (excluding condensate) and 76% of the Corporation's total annual average condensate production.

In 2020, the Corporation drilled 26 (26.0 net) Montney/Doig horizontal natural gas wells in the Pouce Coupe area and brought 24 (24.0 net) wells on production and completed the Inlet Liquids-Handling Facility. The Corporation's 2021 Capital Program contemplates the drilling of 19 (19.0 net) wells and the bringing on production of 25 (25.0 net) wells in Pouce Coupe in 2021. See "*General Development of the Business – Recent Developments*" for further information regarding the 2021 Capital Program.

Significant infrastructure used by Birchcliff in the area includes the Pouce Coupe Gas Plant. See "*Description of the Business – Facilities*" and "*Description of the Business – Processing Arrangements*" for further information regarding the Pouce Coupe Gas Plant.

#### Gordondale

The Gordondale key operating area is located northwest of Grande Prairie, Alberta and consists of the Corporation's properties in Gordondale and Progress. At December 31, 2020, the Corporation held an aggregate of 126.5 (90.8 net) sections of land in the area. Annual average production in 2020 was 29,250 boe/d (102,119 Mcf/d of natural gas, 4,382 bbls/d of light oil, 6,424 bbls/d of NGLs (excluding condensate) and 1,424 bbls/d of condensate). In 2020, the Gordondale key operating area accounted for approximately:

- 30% of the Corporation's total capital expenditures;
- 38% of the Corporation's total corporate annual average production; and

- 29% of the Corporation's total annual average natural gas production, 99% of the Corporation's total annual average light oil production, 84% of the Corporation's total annual average NGLs production (excluding condensate) and 24% of the Corporation's total annual average condensate production.

In 2020, the Corporation drilled 8 (8.0 net) Montney horizontal oil wells in the Gordondale area and brought 10 (10.0 net) wells on production. In addition, the Corporation completed the addition of natural gas compression at both of its 100% owned and operated oil batteries and the construction of a significant trunk line to transport oil, natural gas and water to these batteries. The Corporation's 2021 Capital Program contemplates the drilling and bringing on production of 8 (8.0 net) wells in Gordondale in 2021. See "General Development of the Business – Recent Developments" for further information regarding the 2021 Capital Program.

Significant infrastructure used by Birchcliff in the area includes AltaGas' Gordondale Gas Plant and Pembina's fractionation facility at Redwater, Alberta (the "Pembina Facility"). See "Description of the Business – Processing Arrangements" for further information regarding Birchcliff's processing arrangements at these facilities.

### Other Properties

In addition to Pouce Coupe and Gordondale, the Corporation has other miscellaneous properties, none of which are material to the Corporation. Annual average production in 2020 for the Corporation's other properties represented less than 1% of the Corporation's total annual average production.

### Landholdings

The Corporation's land base primarily consists of large contiguous blocks of high working interest acreage located near facilities owned and/or operated by Birchcliff or near third-party infrastructure. The Corporation's land activities during 2020 included: (i) the acquisition of 25.8 (25.3 net) sections of Crown and third-party lands; and (ii) the disposition of 41.5 (22.7 net) sections of land pursuant to various non-core dispositions. The Corporation's undeveloped land base at December 31, 2020 was 224,149.4 (198,553.7 net) acres, or 350.2 (310.2 net) sections, with an 89% average working interest.

### Drilling Program and Technology

During 2020, Birchcliff drilled and brought on production 34 (34.0 net) wells as set forth in the table below:

Area	Total Wells Drilled in 2020	Total Wells Brought on Production in 2020 <sup>(1)</sup>
<b>Pouce Coupe</b>		
Montney D1 horizontal natural gas wells	4	4
Montney D2 horizontal natural gas wells	9	12
Montney C horizontal natural gas wells	7	8
Basal Doig horizontal natural gas wells	6	0
<b>Total – Pouce Coupe</b>	<b>26</b>	<b>24</b>
<b>Gordondale</b>		
Montney D1 horizontal oil wells	4	5
Montney D2 horizontal oil wells	4	4
Montney D4 horizontal oil wells	0	1
<b>Total – Gordondale</b>	<b>8</b>	<b>10</b>
<b>TOTAL – COMBINED</b>	<b>34</b>	<b>34</b>

(1) Does not include 6 additional wells drilled in Q4 2020 as none of these wells were brought-on production in 2020. The 2020 Capital Program included the capital associated with 6 Montney/Doig wells that were drilled in Q4 2019 and subsequently brought on production in 2020.

All wells drilled in 2020 were drilled on multi-well pads, including a 14-well pad in the Pouce Coupe Area. The 14-well pad highlights the progress the Corporation has made with its DCCET best practices. Through its many years of exploration and development, Birchcliff has acquired significant proprietary knowledge respecting all aspects of the Montney/Doig Resource Play in its areas of focus. This competitive advantage has resulted from Birchcliff's commitment to science and technology and striving for continuous performance improvement, as well as the knowledge gained from the drilling, completing and bringing on production of 440 (437.7 net) horizontal wells since its first Montney/Doig horizontal well was drilled in 2007. Building off of the success of its science and technology pad in 2018 that targeted three different intervals (the Montney D1, D2 and C), Birchcliff continues to refine its multi-interval cube-style DCCET practices to improve resource recovery and cost efficiency. This cube-style development

has various benefits, including: (i) it reduces the Corporation's environmental footprint; (ii) it allows the Corporation to fracture stimulate (complete) a large number of wells in several different intervals at once to leverage the rock mechanics and achieve better resource recovery; (iii) it helps to minimize frac-driven interaction with offsetting wells; (iv) it reduces per well costs through common well equipment and pipelines; and (v) it maximizes operational scale and repeatability.

## Facilities

The following table sets forth the major facilities in which the Corporation held an interest at December 31, 2020:

Facility Description <sup>(1)</sup>	Area and Location	Birchcliff Operated	Working Interest
Pouce Coupe Gas Plant	Pouce Coupe (03-22-78-12W6M)	Yes	100%
Oil battery	Gordondale (02-06-79-11W6M)	Yes	100%
Oil battery	Gordondale (07-29-78-11W6M)	Yes	100%

(1) The Corporation does not have a working interest in either the Gordondale Gas Plant or the Pembina Facility. Accordingly, neither of these facilities are included in the table above.

At December 31, 2020, Birchcliff also held various interests in numerous other gas plants, oil batteries, compressors, facilities and infrastructure.

The following is a more detailed description of the Pouce Coupe Gas Plant:

### ***Pouce Coupe Gas Plant***

Birchcliff's 100% owned and operated Pouce Coupe Gas Plant, which is currently licenced to process up to 340 MMcf/d of natural gas, is located in the heart of the Corporation's Montney/Doig Resource Play in the Pouce Coupe area. The strategically situated site for the Pouce Coupe Gas Plant enables the Corporation to control and operate all essential infrastructure from wellhead to sales point. The low per unit operating costs of the Pouce Coupe Gas Plant and related infrastructure give the Corporation a strong competitive advantage over other producers paying for third-party natural gas processing.

The Pouce Coupe Gas Plant was constructed in six separate phases as set forth in the table below:

Phase	Phase Capacity	Total Combined Processing Capacity	Commencement of Operations
Phase I	30 MMcf/d	30 MMcf/d	March 2010
Phase II	30 MMcf/d	60 MMcf/d	November 2010
Phase III	90 MMcf/d	150 MMcf/d	October 2012
Phase IV	30 MMcf/d	180 MMcf/d	September 2014
Phase V	80 MMcf/d	260 MMcf/d	September 2017
Phase VI	80 MMcf/d	340 MMcf/d	August 2018

In the fourth quarter of 2018, the Corporation completed the re-configuration of Phases V and VI to provide for shallow-cut capability which allows the Corporation to extract C3+ from the natural gas stream. In the third quarter of 2020, Birchcliff completed the Inlet Liquids-Handling Facility in order to handle increased condensate volumes in Pouce Coupe.

The Pouce Coupe Gas Plant meets or exceeds all AER and Alberta Environment requirements. The facility employs energy efficient equipment to optimize performance and keep operating costs low. The Pouce Coupe Gas Plant uses an amine system to remove sulphur content and refrigeration to meet pipeline dew point specifications. Acid gas is injected into a high-quality reservoir via two wells located at or adjacent to the site of the Pouce Coupe Gas Plant. See "Description of the Business – Environmental Protection Regulation and Costs – GHG Emissions" for additional information regarding the Pouce Coupe Gas Plant's environmental performance.

## **Processing Arrangements**

### ***Pouce Coupe Key Operating Area***

The vast majority of the Corporation's natural gas production from Pouce Coupe is processed at the Pouce Coupe Gas Plant, with a *de minimis* amount being processed at third-party facilities. The natural gas processed at the Pouce Coupe Gas Plant is delivered via the NGTL System to NIT. The natural gas may then be sold at AECO or it may be delivered via the NGTL System to Empress, Alberta for transport to Dawn, Ontario via TCPL's Canadian Mainline, where it may then be sold. The Corporation can also transport natural gas on the Alliance Pipeline from the Pouce Coupe Gas Plant. See "*Description of the Business – Transportation Arrangements*".

Condensate and other NGLs extracted from the natural gas stream at the Pouce Coupe Gas Plant are delivered to the Pembina Peace Pipeline by pipeline or truck.

### ***Gordondale Key Operating Area***

The vast majority of the Corporation's natural gas production from Gordondale is processed at the Gordondale Gas Plant, with a *de minimis* amount being processed at other third-party facilities. Under the Gordondale Processing Arrangement, Birchcliff is provided with up to 120 MMcf/d of natural gas processing on a firm service basis at the Gordondale Gas Plant and Birchcliff's take-or-pay obligation is 100 MMcf/d. The effective date of the Gordondale Processing Arrangement is January 1, 2018 and the term is for at least 15 years, subject to extension in accordance with the terms of the agreement. The natural gas processed at the Gordondale Gas Plant is delivered to NIT or Dawn in a similar manner as described above for Pouce Coupe.

NGLs (including condensate) extracted from the natural gas stream are primarily processed at the Pembina Facility where Birchcliff has access to and is responsible for the costs of 9,000 bbls/d of fractionation capacity.

The vast majority of the Corporation's light oil production from the Gordondale key operating area is processed at the Corporation's oil batteries and then delivered to the Pembina Peace Pipeline by pipeline or truck.

## **Transportation Arrangements**

### ***Natural Gas***

The vast majority of the Corporation's natural gas production is transported to market on either the NGTL System to NIT or Empress, Alberta or on TCPL's Canadian Mainline to Dawn, Ontario. The Corporation employs a combination of firm and interruptible receipt pipeline service to deliver such production.

For 2021, the Corporation has approximately 535 MMcf/d of firm transportation receipt service on the NGTL System. The Corporation's transportation commitments are in excess of its forecast annual average natural gas production for 2021 as a result of excess processing capacity at the Pouce Coupe Gas Plant. This excess processing and transportation capacity gives the Corporation the ability to increase its natural gas production should commodity prices and economic conditions improve. It also allows the Corporation's current volumes to flow during most pipeline maintenance periods.

In March 2017, the Corporation entered into agreements with TCPL for the firm service transportation of an aggregate of 175,000 GJ/d of natural gas on TCPL's Canadian Mainline, whereby natural gas is transported from the Empress receipt point in Alberta to the Dawn trading hub located in Southern Ontario. The toll for the Empress to Dawn portion of the service is \$0.77/GJ plus fuel. The first tranche of this service (120,000 GJ/d) became available to Birchcliff on November 1, 2017, the second tranche (30,000 GJ/d) became available on November 1, 2018 and the third tranche (25,000 GJ/d) became available on November 1, 2019. Each tranche has a 10-year term.

The Pouce Coupe Gas Plant is also tied into the Alliance Pipeline through Birchcliff's meter station located at Moose Creek, Alberta. Although the Corporation does not have transportation service on the Alliance Pipeline, this connection provides the Corporation with the ability to purchase transportation service, either from Alliance directly or other third parties, from time to time when available. Typically, such arrangements are done on a short-term basis and are subject to availability and Birchcliff being able to obtain an acceptable price for such service. These short-term arrangements can help the Corporation to mitigate the impact of production curtailments on the NGTL System.

### **Light Oil and NGLs**

The vast majority of the Corporation's light oil production is transported on the Pembina Peace Pipeline to Edmonton, Alberta. The vast majority of the Corporation's NGLs production (including condensate) is transported on the Pembina Northern Pipeline to Fort Saskatchewan, Alberta.

### **Marketing and Risk Management**

#### **Natural Gas**

The Corporation's natural gas production is primarily sold to third-party marketers at the AECO daily index price or the Dawn daily index price. Birchcliff may also enter into sales agreements with third-party marketers from time to time, when available, to sell and deliver natural gas into the Alliance Pipeline system.

#### **Light Oil and NGLs**

The Corporation's light oil production is primarily sold to third-party marketers on a monthly basis. The pricing is either based on an index price or is a netback or posted price provided by the marketer.

The majority of the Corporation's NGLs production (including condensate) is currently sold to third-party marketers under contracts that commence on April 1 of the calendar year and run for one or two years. The pricing is typically based on available index prices.

The Corporation also has in place longer-term arrangements for the sale of NGLs. The Corporation sells ethane and propane under an agreement extending to 2026 pursuant to which ethane is sold at an indexed-based price and propane is priced at the buyer's posted propane price (the "**2026 Agreement**"). Birchcliff also has an agreement to sell propane to an affiliate of AltaGas whereby 50% of Birchcliff's excess propane (as such term is defined in the agreement) is sold on a firm basis from the date of commencement of commercial operations of AltaGas' Ridley Island Propane Export Terminal in British Columbia (which commenced operations May 2019) to the expiry of the 2026 Agreement, which then increases to 1,000 bbls/d until the end of the year in which the Gordondale Processing Arrangement expires. The propane is sold at an indexed-based price.

#### **Risk Management**

The Corporation also engages in risk management using financial instruments and physical delivery sales contracts which are separate from the Corporation's marketing contracts. For further information regarding the Corporation's risk management activities, see "*Statement of Reserves Data and Other Oil and Gas Information – Other Oil and Gas Information – Forward Contracts and Transportation and Processing Obligations*" and the Corporation's audited annual financial statements and related management's discussion and analysis for the year ended December 31, 2020.

### **Petroleum and Natural Gas Production and Sales**

During 2020, the Corporation's annual average production was 76,401 boe/d and the products produced and sold by the Corporation were natural gas, light oil, condensate and other NGLs. The following table sets forth the Corporation's annual average production for the year ended December 31, 2020:

<b>Product</b>	<b>Annual Average Daily Production</b>	<b>% of Annual Average Daily Production</b>
Natural gas	351,068 Mcf/d	77%
Light oil	4,415 bbls/d	6%
Condensate	5,824 bbls/d	8%
Other NGLs	7,650 bbls/d	9%

Excluding the effects of financial instruments but including the effects of physical delivery contracts, the Corporation's average realized sales price during 2020 was \$2.49/Mcf for natural gas (2019: \$2.48/Mcf), \$42.39/bbl for light oil (2019: \$68.29/bbl), \$48.03/bbl for condensate (2019: \$68.06) and \$13.62/bbl for other NGLs (2019: \$13.76/bbl). The following table sets forth the aggregate sales for the Corporation's natural gas, light oil, condensate and other NGLs for the years ended December 31, 2020 and December 31, 2019:

<b>Product</b>	<b>2020 Sales<sup>(1)</sup></b>	<b>2019 Sales<sup>(1)</sup></b>
Natural gas	\$319,472,840	\$330,973,288
Light oil	\$68,498,476	\$118,182,161
Condensate	\$102,397,340	\$127,815,633
Other NGLs	\$38,122,802	\$36,487,749

(1) The amounts set forth in the table above for 2020 and 2019 exclude the effects of financial instruments but include the effects of physical delivery contracts.

The Corporation's revenues are highly dependent upon the prices that it receives for oil, natural gas, condensate and other NGLs and such prices are closely correlated to the benchmark prices of oil and natural gas. See *"Risk Factors – Prices, Markets and Marketing"*.

### **Competitive Conditions**

The oil and natural gas industry is highly competitive in all of its phases. The Corporation competes with numerous other entities for land, acquisitions of reserves, access to drilling and service rigs and other equipment, access to transportation and access to skilled technical and operating personnel, among other things. The Corporation's competitors include companies that have substantially greater financial resources, staff and facilities than those of the Corporation. See *"Risk Factors – Competition"*.

Management believes that the Corporation has a competitive advantage in its focus area of the Peace River Arch area of Alberta based upon the infrastructure and land base it controls. In addition, management believes that it has a competitive advantage based on the experience it has developed on the Montney/Doig Resource Play. The Corporation attempts to enhance its competitive position by operating in areas where it believes its technical personnel are able to reduce some of the risks associated with exploration, production and marketing because such personnel are familiar with the areas.

### **Seasonal and Cyclical Factors**

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. Road 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. In addition, certain oil and natural gas producing properties are located in areas that are inaccessible other than during the winter months because the ground surrounding the sites in these areas consists of swampy terrain. Further, extreme cold weather, heavy snowfall and heavy rainfall may restrict the Corporation's ability to access its properties and cause operational difficulties. Accordingly, seasonal factors and unexpected weather patterns may lead to declines in exploration and production activity and a corresponding variability in the Corporation's production. See *"Risk Factors – Climate Change"* and *"Risk Factors – Seasonality"*.

In addition, the Corporation's operational results and financial condition are highly dependent on the prices it receives for its oil and natural gas production. Oil and natural gas prices are subject to large fluctuations and have been depressed during recent years and at times, Canadian oil and natural gas prices have seen significant pricing discounts relative to global benchmark prices. Commodity prices are determined by supply and demand factors, including weather and general economic conditions, as well as egress and processing constraints and conditions in other oil and natural gas regions. Declines in commodity prices adversely affect the Corporation's business and financial condition. See *"Risk Factors – Prices, Markets and Marketing"*. The Corporation attempts to mitigate such price risk through closely monitoring the various commodity markets, diversifying its sales portfolio and engaging in risk management activities, as deemed necessary. See *"Statement of Reserves Data and Other Oil and Gas Information – Other Oil and Gas Information – Forward Contracts and Transportation and Processing Obligations"*.

### **Environmental, Social and Governance**

#### **Overview**

Birchcliff recognizes the importance of and its responsibility for environmental stewardship and one of the Corporation's primary goals is to create and preserve a safe and environmentally responsible organization. Birchcliff



strives to maintain excellence in environmental reporting and to take proactive steps to eliminate or reduce its environmental impact. As an organization that strives for continuous improvement, Birchcliff continues to identify, develop and utilize new technology, systems and processes that will help reduce its environmental footprint and create a safer work environment.

A copy of the Corporation's ESG Report, which provides additional information regarding Birchcliff's ESG initiatives and activities, is available on the Corporation's website at [www.birchcliffenergy.com](http://www.birchcliffenergy.com).

### ***Health, Safety and Environmental Programs***

Birchcliff is committed to continually evolving and improving its health and safety program (the "H&S Program") and its environmental management program (the "EM Program") and to conducting its activities in a manner that safeguards its employees, contractors and representatives, the public and the environment. Birchcliff's executives, managers, employees and others engaged on its behalf are responsible for upholding the requirements of its H&S and EM Programs.

Birchcliff's H&S Program provides a framework to safeguard its employees, contractors, visitors and the people in the communities where the Corporation operates from personal injury and health and safety hazards. Pursuant to the H&S Program, Birchcliff maintains a safe work environment with policies, processes, standards, training, equipment and emergency response procedures that meet or exceed governmental regulations and industry practices. Employees and contractors on Birchcliff's worksites are required to follow all health, safety and environmental rules and procedures outlined in the H&S Program and to participate in pertinent health and safety training.

Birchcliff's EM Program focuses on minimizing the environmental impact of its operations while meeting regulatory requirements and corporate standards. The EM Program includes: (i) a suspended well inspection program to support future development or eventual abandonment; (ii) an abandonment and decommissioning program for wells and facilities ready for abandonment; (iii) a surface reclamation program; (iv) a groundwater monitoring program; (v) a spill prevention, response and clean-up program; (vi) a fugitive emission survey and repair program; (vii) an environmental liability assessment program; (viii) a waste management program; (ix) a naturally occurring radioactive materials program; (x) a storage management program; (xi) a facility land vegetation management program; and (xii) a site planning and construction program.

### ***Emergency Response Plans***

The Corporation has developed emergency response plans in conjunction with local authorities, emergency services and the communities in which it operates in order to be prepared to effectively respond to an incident should one arise. The Corporation typically conducts a rigorous emergency response exercise for its staff on an annual basis, as compared to the regulatory requirement of once every three years.

### ***Alberta Certificate of Recognition (COR) Safety Program***

Birchcliff participates in Alberta's COR Safety Program and has received and maintained a COR certification since 2011. A COR certification demonstrates that the employer's health and safety management system has been evaluated by a certified auditor and meets provincial standards, as established by Alberta Occupational Health and Safety. Maintaining a COR certification requires a commitment to continuous improvement in health, safety and environment management practices, including sound planning and implementation. Birchcliff's H&S Program is audited externally every 3 years by an independent auditor and internally every year by a certified professional.

### ***Asset Integrity***

Birchcliff works diligently to maintain the safety and integrity of its facility and pipeline infrastructure and maintains two separate integrity programs: a pressure equipment integrity program and a pipeline integrity program. The Corporation's asset integrity group manages its pressure equipment integrity program in compliance with the Alberta Boilers Safety Association requirements and its pipeline integrity program in compliance with AER requirements. These programs are audited internally on an annual basis by a qualified professional and externally on a periodic basis by an independent auditor to evaluate their effectiveness and are updated based on the findings from such audits.

The Corporation's Chief Inspector and asset integrity group make use of databases and associated work tracking systems to ensure that all integrity tasks (inspections, pigging, etc.) are scheduled and completed according to the requirements set forth in the Corporation's programs.

#### Environmental Assessments and Audits

Environmental assessments are undertaken for new projects or when acquiring new properties or facilities in order to identify, assess and minimize environmental risks and operational exposures. The Corporation conducts audits of operations to confirm compliance with internal standards and to stimulate improvement in practices where needed. Documentation is maintained to support internal accountability and measure operational performance against recognized industry indicators to assist in achieving the objectives of its policies and programs.

#### **Community and Stakeholder Relations**

Fostering a strong relationship with the community and its stakeholders is as integral to the success of the Corporation's projects as obtaining the required regulatory approvals. The Corporation believes cooperative, sincere and responsive consultation efforts with stakeholders in the areas in which Birchcliff operates creates a solid foundation for its business. Birchcliff has an experienced team working with local stakeholders to learn their values and priorities and to resolve any issues or concerns that arise.

Birchcliff recognizes the role that communities play in its success and looks for opportunities to give back. The Corporation is a staunch supporter of the community and the business and educational initiatives of the Indigenous communities who live in the areas where Birchcliff operates. Every year, the Corporation participates in a number of community support endeavours in the areas surrounding its field operations and in Calgary. Two of Birchcliff's key ongoing campaigns are the Corporation's annual United Way of Calgary campaign and its support of STARS Air Ambulance in the Grande Prairie area. To date, Birchcliff has helped to raise over \$1.4 million and over \$1.5 million, for these programs, respectively.

Other highlights in 2020 include:

- Birchcliff sponsored a group of young adults, along with chaperones and Elders, from the Horse Lake and Sturgeon Lake First Nations for an educational visit to Calgary in order to introduce them to post-secondary educational opportunities and the career opportunities available to them in Alberta's energy industry and to provide them with tools for professional success in an urban setting.
- Birchcliff is a strong supporter of the Calgary Police Foundation (the "CPF"), with a focus on helping vulnerable and at-risk children and youth. In 2020, when schools across Alberta were closed as a result of the COVID-19 pandemic, Birchcliff, through the CPF, donated new laptop computers to students in need, who otherwise would have had significant difficulty accessing online classes and school resources.
- Birchcliff sponsored the Calgary Cares Campaign through the CPF as well as matching its employee donations to the program. The aim of the Calgary Cares Campaign was to support vulnerable children and at-risk youth within the community, by providing them with everything they needed to get through the summer months, including food and activities.

In addition, the Corporation regularly contributes to a number of local community initiatives that help to elevate and enhance the quality of life at the local level, including amateur sports, local schools, agricultural societies and fire departments. Each year, the Corporation also raises funds for the YWCA. Through Birchcliff's support of Momentum, Calgarians living in poverty learn how to achieve a sustainable livelihood. During the holiday season, Birchcliff employees "adopt" a number of families in need and donate gifts, food and decorations to help make the holidays special.

Through these activities and numerous others, Birchcliff creates and maintains long-term, positive partnerships and relationships, while promoting employee engagement in the communities in which it operates.

## **Governance**

The Board currently consists of five directors, namely A. Jeffery Tonken, Dennis A. Dawson, Debra A. Gerlach, Stacey E. McDonald and James W. Surbey. Mr. Tonken is the Chairman of the Board and Mr. Dawson is the independent lead director. The Board has four committees: the Audit Committee, the Compensation Committee, the Reserves Evaluation Committee and the Nominating Committee. See *"Directors and Officers"*. Additional information on the Corporation's corporate governance practices is contained in the Corporation's information circular for its most recent annual meeting of the holders of Common Shares, which was held on May 14, 2020.

With respect to ESG oversight, the Board has overall responsibility for ESG matters. Each quarter, the Board receives a detailed report from management on things such as the Corporation's safety performance, total recordable incident frequency, asset retirement and reclamation activities and the Corporation's LMR. In addition to the oversight provided by the Board, Birchcliff has established the following committees, which are comprised of members of management:

- Greenhouse Gas Regulatory Compliance Committee: The purpose of this committee to help ensure that there is corporate-wide awareness and compliance with the latest provincial and federal GHG legislation requirements which impact Birchcliff's operations.
- ESG Committee: The purpose of this committee is to drive continuous improvement of Birchcliff's ESG-related corporate metrics by: (i) establishing and monitoring ESG-related key performance indicators; (ii) developing and maintaining an effective strategy to communicate ESG-related key performance indicators; and (iii) identifying, prioritizing and directing initiatives to improve ESG key performance indicators within the Corporation.

## **Environmental Protection Regulation and Costs**

### **General**

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 municipal laws and regulations. Environmental legislation provides for, among other things, the initiation and approval of new oil and natural gas projects and restrictions and prohibitions on the spill, release or emission of various substances produced in association with oil and natural 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.

Compliance with environmental legislation can require significant expenditures and/or result in operational restrictions. A breach of applicable environmental legislation may result in the imposition of fines and penalties, some of which may be material. In addition, a breach may result in the suspension or revocation of necessary licences and authorizations and/or the Corporation being subject to interim compliance measures, all of which may restrict the Corporation's ability to conduct operations. Further, the Corporation could be subject to civil liability for pollution damage.

The costs of complying with existing or future environmental legislation or regulations, including those relating to climate change and GHG emissions, may have a material adverse effect on the Corporation's financial condition or results of operations. Future changes in environmental legislation could occur and result in stricter standards and enforcement, larger fines and liability and increased capital expenditures and operating costs. At December 31, 2020, the Corporation has not recorded any material costs and liabilities relating to GHG or environmental protection legislation or any material environmental incidents.

See *"Special Notes to Reader – Forward-Looking Statements"*, *"Industry Conditions"* and *"Risk Factors"*.

### **GHG Emissions**

The Corporation's exploration and production facilities and other operations and activities emit GHGs which requires the Corporation to comply with applicable GHG emissions legislation as described under the heading *"Industry Conditions – Climate Change Regulation"*.

The Pouce Coupe Gas Plant exceeded the 100,000 tonnes of GHGs per year threshold in the TIER Regulation in 2018, 2019 and 2020 and is therefore automatically subject to the TIER Regulation. In addition, the Corporation's other facilities have been accepted as an aggregate facility for the purposes of TIER and were therefore subject to the TIER Regulation in 2020 and going forward.

In 2020, the Corporation received 23,571 emission performance credits under the transitional provisions of the CCIR for the 2018 financial year. The Corporation anticipates that it will receive 2019 emission performance credits during the first half of 2021. Future emission performance credits will be determined based on the Corporation's future emission reduction performance as determined by TIER. As the Pouce Coupe Gas Plant and the Corporation's other facilities are currently subject to the TIER Regulation, such facilities are exempt from paying the federal fuel charge under the GGPPA. See *"Industry Conditions – Climate Change Regulation"*.

At the present time, the operational and financial impacts of complying with applicable GHG legislation are not material to the Corporation. The Corporation will continue to monitor and evaluate any developments in the area in order to assess the potential financial and operational implications on the Corporation. Given the multitude of variables that could cause outcomes to change, it is not currently possible to predict the future incremental compliance costs with any certainty. However, given the evolving nature of climate change policy and the control of GHG and resulting requirements, 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 and natural gas resulting in a decrease in the Corporation's profitability and a reduction in the value of its assets.

### ***Decommissioning Obligations***

As a result of its net ownership interest in oil and natural gas properties and equipment, including well sites, processing facilities and gathering systems, the Corporation incurs decommissioning obligations. The Corporation's decommissioning obligation at December 31, 2020 was \$146.2 million, calculated on a discounted fair value basis using a nominal risk-free rate of 1.26% and an inflation rate of 1.54%. See Note 8 – *Decommissioning Obligations* to the Corporation's audited annual financial statements for the year ended December 31, 2020 for additional information regarding the Corporation's decommissioning obligations.

### **Specialized Skill and Knowledge**

The Corporation employs individuals with various professional skills and knowledge in the course of pursuing its business plan. In addition, various specialized consultants are available to assist the Corporation in areas where it believes it doesn't need full-time employees. These professional skills include, but are not limited to, geology, geophysics, engineering, financial and business skills, which are generally available in the industry. Drawing on significant experience in the oil and natural gas business, the Corporation believes that its management team has a demonstrated track record of bringing together all of the key components to a successful exploration and production company: strong technical skills; expertise in planning and financial controls; the ability to execute on business development opportunities; and capital markets expertise.

### **Employees**

The following table sets forth the number of the Corporation's employees at December 31, 2020:

	<b>Number of Employees</b>
Head office employees	128
Field employees	77

In addition, the Corporation hires skilled contractors to perform drilling operations, well completions and other field service operations. See *"Risk Factors – Reliance on a Skilled Workforce and Key Personnel"*.

## STATEMENT OF RESERVES DATA AND OTHER OIL AND GAS INFORMATION

All of the Corporation's reserves are located in the Province of Alberta. Birchcliff retained Deloitte, an independent qualified reserves evaluator, to evaluate and prepare reports on 100% of Birchcliff's light crude oil and medium crude oil, conventional natural gas, shale gas and NGLs reserves.

The statement of reserves data and other oil and gas information set forth below is dated March 10, 2021. The effective date of the reserves and future net revenue information provided herein is December 31, 2020, unless otherwise indicated, and the preparation date is February 10, 2021.

The Report on Reserves Data by Deloitte in Form 51-101F2 is attached to this Annual Information Form as Appendix A and the Report of Management and Directors on Oil and Gas Disclosure in Form 51-101F3 is attached to this Annual Information Form as Appendix B.

### Disclosure of Reserves Data

The reserves data set forth below is based upon the evaluation by Deloitte with an effective date of December 31, 2020 as contained in the report of Deloitte dated February 10, 2021 (the "**Deloitte Reserves Report**"). The forecast commodity prices, inflation and exchange rates utilized in the Deloitte Reserves Report were computed using the average of forecasts from Deloitte, McDaniel & Associates Consultants Ltd., GLJ Petroleum Consultants Ltd. and Sproule Associates Limited effective January 1, 2021 (the "**2020 IQRE Price Forecast**"). See "*Statement of Reserves Data and Other Oil and Gas Information – Pricing Assumptions – Forecast Prices Used in Estimates*".

Deloitte has confirmed to the Reserves Evaluation Committee of the Board that its evaluation was prepared in accordance with the standards contained in the COGE Handbook and NI 51-101. In the course of preparing the Deloitte Reserves Report, Birchcliff provided Deloitte with basic information which included land, well and accounting (product prices and operating costs) information, reservoir and geological studies, estimates of on-stream dates for certain properties, contract information, budget forecasts and financial data. Other engineering, geological or economic data required to conduct the evaluation and upon which the Deloitte Reserves Report is based, were obtained from public records, other operators and from Deloitte's non-confidential files. The extent and character of ownership and accuracy of all factual data supplied to Deloitte was accepted by Deloitte as presented. A field inspection and environmental/safety assessment of the properties that were the subject of the reserves evaluation was not conducted.

The net present value of future net revenue attributable to the Corporation's reserves is based on the 2020 IQRE Price Forecast and is determined before provision for interest, debt servicing and general and administrative expense and after the deduction of royalties, operating costs, development costs and abandonment and reclamation costs.

The after-tax net present value of the Corporation's oil and natural gas properties reflects the income tax burden on the properties on a stand-alone basis and takes into account the Corporation's existing tax pools. It does not consider the business-entity-level tax situation or tax planning. It does not provide an estimate of the value at the level of the business entity, which may be significantly different. The Corporation's audited annual financial statements and related management's discussion and analysis for the year ended December 31, 2020 should be consulted for information at the level of the business entity.

**There are numerous uncertainties inherent in estimating quantities of oil, natural gas and NGLs reserves and the future net revenue attributed to such reserves. The reserves and associated future net revenue information set forth in this Annual Information Form are estimates only. In general, estimates of economically recoverable oil, natural gas and NGLs reserves and the future net revenue therefrom are based upon a number of variable factors and assumptions, such as historical production from the properties, production rates, ultimate reserves recovery, commodity prices, the timing and amount of capital expenditures, marketability of oil, natural gas and NGLs, royalty rates, the assumed effects of regulation by governmental agencies and future operating costs, all of which may vary materially from actual results. For these reasons, estimates of the economically recoverable oil, natural gas and NGLs reserves attributable to any particular group of properties, the classification of such reserves based on risk of recovery and estimates of future net revenue associated with reserves prepared by different engineers, or by the same engineer at different times, may vary. The Corporation's actual production, revenue, 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 undiscounted or discounted net present value of future net revenue attributable to the Corporation's reserves estimated by the Corporation's independent qualified reserves evaluator represent the fair market value of those reserves. There is no assurance that the forecast prices and costs assumptions will be attained and variances could be material. The recovery and reserves estimates of Birchcliff's oil, natural gas and NGLs reserves provided herein are estimates only and there is no guarantee that the estimated reserves will be recovered. Actual oil, natural gas and NGLs reserves may be greater than or less than the estimates provided herein and variances could be material. Estimates of reserves and future net revenue for individual properties may not reflect the same confidence level as estimates of reserves and future net revenue for all properties, due to the effects of aggregation.

NI 51-101 requires a reporting issuer to disclose its reserves in accordance with the product types contained in NI 51-101, which product types include conventional natural gas and shale gas. "Shale gas" as defined in NI 51-101 means natural gas: (i) contained in dense organic-rich rocks, including low-permeability shales, siltstones and carbonates, in which the natural gas is primarily adsorbed on the kerogen or clay minerals; and (ii) that usually requires the use of hydraulic fracturing to achieve economic production rates. With respect to Birchcliff's natural gas reserves attributable to its Montney/Doig Resource Play, such reserves would most closely fit within the category of shale gas as opposed to conventional natural gas. Birchcliff considers that its natural gas reserves attributable to the Montney/Doig Resource Play to be low permeability gas resources or "tight gas" (as such term is defined in the COGE Handbook). "Shale gas" is the NI 51-101 product type that most closely matches the natural gas from Birchcliff's Montney/Doig Resource Play.

As the tables below summarize the data contained in the Deloitte Reserves Report, they may contain slightly different numbers than the Deloitte Reserves Report due to rounding. Also, due to rounding, certain columns may not add exactly.

The information relating to the Corporation's reserves contains forward-looking statements and information, including information relating to future net revenue, forecast capital expenditures, future development plans and costs related thereto, forecast operating costs, anticipated production and abandonment and reclamation costs. See "Special Notes to Reader – Forward-Looking Statements".

For additional information, see "Presentation of Oil and Gas Reserves", "Special Notes to Reader" and "Risk Factors – Uncertainty of Reserves Estimates".

### Reserves Summary

The following table sets forth the Corporation's light crude oil and medium crude oil, conventional natural gas, shale gas and NGLs reserves at December 31, 2020, estimated using the 2020 IQRE Price Forecast:

Summary of Reserves at December 31, 2020  
(Forecast Prices and Costs)

Reserves Category	Light Crude Oil and Medium Crude Oil		Conventional Natural Gas		Shale Gas		NGLs <sup>(1)</sup>		Total Boe	
	Gross (Mbbbls)	Net (Mbbbls)	Gross (MMcf)	Net (MMcf)	Gross (MMcf)	Net (MMcf)	Gross (Mbbbls)	Net (Mbbbls)	Gross (Mboe)	Net (Mboe)
Proved										
Developed Producing	9,290.7	8,056.8	5,095.3	4,729.1	958,123.9	903,152.6	36,778.3	30,248.4	206,605.6	189,618.8
Developed Non-Producing	54.3	51.6	988.8	931.2	21,037.6	19,841.1	345.2	280.3	4,070.6	3,793.9
Undeveloped	10,223.0	9,113.8	2,379.1	2,260.2	2,530,366.6	2,380,312.2	56,043.3	47,724.2	488,390.6	453,933.3
Total Proved	19,568.0	17,222.2	8,463.2	7,920.4	3,509,528.1	3,303,305.9	93,166.8	78,252.8	699,066.8	647,346.1
Total Probable	11,776.1	9,867.4	5,268.9	4,842.9	1,619,891.4	1,508,888.9	58,774.0	48,392.8	341,410.1	310,548.9
Total Proved Plus Probable	31,344.1	27,089.6	13,732.1	12,763.3	5,129,419.6	4,812,194.8	151,940.8	126,645.7	1,040,476.9	957,895.0

(1) NGLs includes condensate.

## Net Present Values of Future Net Revenue

The following tables set forth the net present values of future net revenue attributable to Birchcliff's reserves at December 31, 2020, estimated using the 2020 IQRE Price Forecast, before and after deducting future income tax expenses and calculated at various discount rates:

Summary of Net Present Values of Future Net Revenue at December 31, 2020  
(Forecast Prices and Costs)

Reserves Category	Before Income Taxes Discounted At (%/year)					Unit Value Discounted at 10%/year (\$/boe) <sup>(1)</sup>
	0 (MM\$)	5 (MM\$)	10 (MM\$)	15 (MM\$)	20 (MM\$)	
Proved						
Developed Producing	3,094.0	2,362.3	1,869.4	1,543.5	1,318.2	9.86
Developed Non-Producing	62.0	39.1	27.0	19.8	15.1	7.12
Undeveloped	6,360.8	3,318.3	1,839.8	1,044.0	582.1	4.05
Total Proved	9,516.8	5,719.6	3,736.2	2,607.4	1,915.4	5.77
Total Probable	5,657.8	2,320.2	1,095.5	578.7	334.2	3.53
Total Proved Plus Probable	15,174.7	8,039.9	4,831.7	3,186.1	2,249.5	5.04

(1) Unit values are based on net reserves volumes.

Reserves Category	After Income Taxes Discounted At (%/year) <sup>(1)</sup>				
	0 (MM\$)	5 (MM\$)	10 (MM\$)	15 (MM\$)	20 (MM\$)
Proved					
Developed Producing	2,833.1	2,221.4	1,788.4	1,494.4	1,287.1
Developed Non-Producing	48.1	30.8	21.7	16.3	12.7
Undeveloped	4,902.4	2,506.3	1,341.2	715.8	354.6
Total Proved	7,783.5	4,758.4	3,151.3	2,226.5	1,654.5
Total Probable	4,339.6	1,762.6	814.9	418.8	234.5
Total Proved Plus Probable	12,123.1	6,521.0	3,966.2	2,645.3	1,888.9

(1) The after-tax net present value of Birchcliff's oil and natural gas properties reflects the income tax burden on the properties on a stand-alone basis and takes into account Birchcliff's existing tax pools. It does not consider the business-entity-level tax situation or tax planning. It does not provide an estimate of the value at the level of the business entity, which may be significantly different. The Corporation's audited annual financial statements and related management's discussion and analysis for the year ended December 31, 2020 should be consulted for information at the level of the business entity.

## Elements of Future Net Revenue

The following table sets forth the various elements of the Corporation's future net revenue attributable to the Corporation's reserves at December 31, 2020, estimated using the 2020 IQRE Price Forecast and calculated without discount:

Elements of Future Net Revenue (Undiscounted) at December 31, 2020  
(Forecast Prices and Costs)

Reserves Category	Revenue (MM\$)	Royalties (MM\$)	Operating Costs (MM\$)	Development Costs (MM\$)	Abandonment and Reclamation Costs (MM\$)	Future Net Revenue Before Income Taxes (MM\$)	Income Taxes (MM\$)	Future Net Revenue After Income Taxes (MM\$) <sup>(1)</sup>
Proved	17,170.6	995.9	3,414.5	2,923.5	319.8	9,516.8	1,733.3	7,783.5
Proved Plus Probable	27,481.4	1,835.4	5,660.2	4,377.0	434.1	15,174.7	3,051.6	12,123.1

(1) The after-tax net present value of Birchcliff's oil and natural gas properties reflects the income tax burden on the properties on a stand-alone basis and takes into account Birchcliff's existing tax pools. It does not consider the business-entity-level tax situation or tax planning. It does not provide an estimate of the value at the level of the business entity, which may be significantly different. The Corporation's audited annual financial statements and related management's discussion and analysis for the year ended December 31, 2020 should be consulted for information at the level of the business entity.

## Net Present Values of Future Net Revenue by Product Type

The following table sets forth by product type, in each case with associated by-products, the future net revenue attributable to the Corporation's reserves at December 31, 2020, estimated using the 2020 IQRE Price Forecast, before deducting future income tax expenses and calculated using a 10% discount rate:

Net Present Values of Future Net Revenue by Product Type at December 31, 2020  
(Forecast Prices and Costs)

Reserves Category	Product Type	Future Net Revenue Before Income Taxes (Discounted at 10%/year) (MM\$)	Unit Value Before Income Taxes (Discounted at 10%/year) (\$/boe) <sup>(1)</sup>
Proved	Light Crude Oil and Medium Crude Oil (including solution gas and other by-products)	651.4	7.46
	Conventional Natural Gas (including by-products but excluding solution gas and by-products from oil wells)	4.4	3.25
	Shale Gas (including by-products)	3,080.4	5.51
	<b>Total</b>	<b>3,736.2</b>	<b>5.77</b>
Proved Plus Probable	Light Crude Oil and Medium Crude Oil (including solution gas and other by-products)	899.7	6.24
	Conventional Natural Gas (including by-products but excluding solution gas and by-products from oil wells)	6.5	2.93
	Shale Gas (including by-products)	3,925.5	4.84
	<b>Total</b>	<b>4,831.7</b>	<b>5.04</b>

(1) Unit amounts are derived using net reserves volumes of the product type and associated by-products.

## Pricing Assumptions

### Forecast Prices Used in Estimates

The forecast commodity prices, inflation and exchange rates utilized in the Deloitte Reserves Report were computed using the average of forecasts from Deloitte, McDaniel & Associates Consultants Ltd., GLJ Petroleum Consultants Ltd. and Sproule Associates Limited effective January 1, 2021. The following table sets forth the 2020 IQRE Price Forecast:

2020 IQRE Price Forecast

Year	Crude Oil		Natural Gas <sup>(1)</sup>			NGLs				Currency Exchange Rate (US\$/CDN\$)	Price and Cost Inflation Rates (%)
	WTI at Cushing Oklahoma (US\$/bbl)	Edmonton City Gate (CDN\$/bbl)	Alberta AECO Average Price (CDN\$/Mcf)	Ontario Dawn Reference Point (CDN\$/Mcf)	NYMEX Henry Hub (US\$/Mcf)	Edmonton Ethane (CDN\$/bbl)	Edmonton Propane (CDN\$/bbl)	Edmonton Butane (CDN\$/bbl)	Edmonton Pentanes + Condensate (CDN\$/bbl)		
2021	46.88	55.13	2.75	3.47	2.80	8.51	18.30	25.76	57.75	0.77	0.0
2022	51.14	60.62	2.70	3.55	2.87	8.35	23.49	33.27	63.10	0.77	1.5
2023	54.83	64.68	2.65	3.61	2.93	8.16	26.11	40.49	67.58	0.77	2.0
2024	56.48	66.73	2.69	3.67	3.00	8.28	26.94	41.80	69.74	0.77	2.0
2025	57.62	68.11	2.74	3.75	3.05	8.45	27.50	42.66	71.15	0.77	2.0
2026	58.77	69.52	2.81	3.80	3.11	8.62	28.07	43.55	72.58	0.77	2.0
2027	59.94	70.95	2.86	3.90	3.17	8.79	28.64	44.44	74.04	0.77	2.0
2028	61.14	72.40	2.91	3.96	3.24	8.98	29.23	45.36	75.52	0.77	2.0
2029	62.36	73.89	2.97	4.05	3.30	9.16	29.82	46.28	77.03	0.77	2.0
2030	63.61	75.37	3.02	4.12	3.36	9.34	30.42	47.21	78.58	0.77	2.0
2031	64.89	76.88	3.09	4.20	3.43	9.53	31.03	48.16	80.16	0.77	2.0
2032	66.18	78.42	3.15	4.30	3.50	9.72	31.65	49.13	81.76	0.77	2.0
2033	67.50	79.98	3.21	4.40	3.57	9.91	32.29	50.11	83.39	0.77	2.0
2034	68.86	81.59	3.28	4.46	3.64	10.11	32.93	51.10	85.06	0.77	2.0
2035	70.23	83.21	3.34	4.55	3.72	10.32	33.59	52.13	86.75	0.77	2.0
2036	71.64	84.88	3.40	4.65	3.78	10.51	34.25	53.17	88.49	0.77	2.0
2037	73.07	86.57	3.48	4.74	3.87	10.72	34.94	54.23	90.26	0.77	2.0
2038	74.53	88.31	3.54	4.84	3.94	10.94	35.65	55.31	92.08	0.77	2.0
2039	76.01	90.07	3.62	4.94	4.02	11.17	36.36	56.42	93.91	0.77	2.0
2040	77.54	91.88	3.69	5.04	4.09	11.39	37.08	57.56	95.79	0.77	2.0
2041+	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	0.77	2.0

(1) 1 Mcf = 1 MMBtu.



These long-term price forecasts are subject to the many uncertainties that affect long-term future forecasts.

### Weighted Average Commodity Prices

The Corporation's weighted average realized commodity prices for the year ended December 31, 2020, excluding the effects of financial hedges but including the effects of physical delivery contracts, were as follows:

- Light Crude Oil and Medium Crude Oil: \$42.39/bbl.
- Shale Gas: \$2.49/Mcf (includes conventional natural gas, which represented less than 1% of the Corporation's total corporate natural gas production during 2020).
- NGLs: \$28.49/bbl.
  - Condensate: \$48.03/bbl.
  - Other NGLs: \$13.62/bbl.

### Reconciliation of Changes in Reserves

The following table sets forth the reconciliation of the Corporation's gross reserves at December 31, 2020 as set forth in the Deloitte Reserves Report, estimated using the 2020 IQRE Price Forecast, to the Corporation's gross reserves at December 31, 2019 as set forth in the Prior Consolidated Reserves Report, estimated using the average of forecasts from Deloitte, McDaniel & Associates Consultants Ltd., GLJ Petroleum Consultants Ltd. and Sproule Associates Ltd. effective January 1, 2020 (the "2019 IQRE Price Forecast"):

*Reconciliation of Gross Reserves from December 31, 2019 to December 31, 2020  
(Forecast Prices and Costs)*

Factors	Light Crude Oil and Medium Crude Oil (Mbbbls)	Conventional Natural Gas (MMcf)	Shale Gas (MMcf)	NGLs (Mbbbls)	Oil Equivalent (Mboe)
<b>GROSS TOTAL PROVED</b>					
<b>Opening balance December 31, 2019</b>	<b>21,053.3</b>	<b>11,466.4</b>	<b>3,580,166.0</b>	<b>89,402.5</b>	<b>709,061.2</b>
Extensions and Improved Recovery <sup>(1)</sup>	709.5	0.0	205,348.7	7,685.0	42,619.3
Technical Revisions <sup>(2)</sup>	(391.8)	(914.9)	(118,680.1)	1,697.5	(18,626.8)
Discoveries <sup>(3)</sup>	0.0	0.0	0.0	0.0	0.0
Acquisitions <sup>(4)</sup>	0.6	19.5	0.0	0.1	4.0
Dispositions <sup>(5)</sup>	(30.3)	(623.3)	(9,471.6)	(197.8)	(1,910.6)
Economic Factors <sup>(6)</sup>	(157.4)	(701.7)	(20,126.8)	(488.8)	(4,117.7)
Production <sup>(7)</sup>	(1,615.8)	(782.9)	(127,708.1)	(4,931.6)	(27,962.6)
<b>Closing balance December 31, 2020</b>	<b>19,568.0</b>	<b>8,463.2</b>	<b>3,509,528.1</b>	<b>93,166.8</b>	<b>699,066.8</b>
<b>GROSS TOTAL PROBABLE</b>					
<b>Opening balance December 31, 2019</b>	<b>12,543.4</b>	<b>8,348.4</b>	<b>1,553,306.8</b>	<b>50,314.2</b>	<b>323,133.5</b>
Extensions and Improved Recovery <sup>(1)</sup>	124.9	0.0	109,157.0	6,179.4	24,497.1
Technical Revisions <sup>(2)</sup>	(798.3)	(294.3)	(24,026.0)	2,707.0	(2,144.7)
Discoveries <sup>(3)</sup>	0.0	0.0	0.0	0.0	0.0
Acquisitions <sup>(4)</sup>	0.0	10.8	2,840.5	40.5	515.7
Dispositions <sup>(5)</sup>	(13.9)	(102.7)	(3,408.3)	(68.6)	(667.6)
Economic Factors <sup>(6)</sup>	(80.0)	(2,693.3)	(17,978.6)	(398.5)	(3,923.8)
Production <sup>(7)</sup>	0.0	0.0	0.0	0.0	0.0
<b>Closing balance December 31, 2020</b>	<b>11,776.1</b>	<b>5,268.9</b>	<b>1,619,891.4</b>	<b>58,774.0</b>	<b>341,410.1</b>
<b>GROSS TOTAL PROVED PLUS PROBABLE</b>					
<b>Opening balance December 31, 2019</b>	<b>33,596.8</b>	<b>19,814.8</b>	<b>5,133,472.7</b>	<b>139,716.7</b>	<b>1,032,194.7</b>
Extensions and Improved Recovery <sup>(1)</sup>	834.3	0.0	314,505.7	13,864.4	67,116.4
Technical Revisions <sup>(2)</sup>	(1,190.2)	(1,209.2)	(142,706.1)	4,404.5	(20,771.6)
Discoveries <sup>(3)</sup>	0.0	0.0	0.0	0.0	0.0
Acquisitions <sup>(4)</sup>	0.6	30.3	2,840.5	40.6	519.7
Dispositions <sup>(5)</sup>	(44.2)	(726.0)	(12,879.9)	(266.4)	(2,578.2)
Economic Factors <sup>(6)</sup>	(237.4)	(3,394.9)	(38,105.4)	(887.4)	(8,041.5)
Production <sup>(7)</sup>	(1,615.8)	(782.9)	(127,708.1)	(4,931.6)	(27,962.6)
<b>Closing balance December 31, 2020</b>	<b>31,344.1</b>	<b>13,732.1</b>	<b>5,129,419.6</b>	<b>151,940.8</b>	<b>1,040,476.9</b>

- (1) Additions to volumes resulting from capital expenditures for: (i) step-out drilling in previously discovered reservoirs; (ii) infill drilling in previously discovered reservoirs that were not drilled as part of an enhanced recovery scheme; and (iii) the installation of improved recovery schemes.
- (2) Positive or negative volume revisions to an estimate resulting from new technical data or revised interpretations on previously assigned volumes, performance and operating costs.
- (3) Additions to volumes in reservoirs where no reserves were previously booked.
- (4) Positive additions to volume estimates because of purchasing interests in oil and gas properties.
- (5) Reductions in volume estimates because of selling all or a portion of an interest in oil and gas properties.
- (6) Changes to volumes resulting from different price forecasts, inflation rates and regulatory changes.
- (7) Reductions in the volume estimates due to actual production.

Key highlights include the following:

### ***Extensions and Improved Recovery***

Reserves were added due to the 34 wells that were brought on production pursuant to the Corporation's successful 2020 Capital Program, which also resulted in the assignment of reserves to potential future drilling locations offsetting the new wells. In total, there were an additional 23 proved and 45 proved plus probable potential future drilling locations added, which had superior economic value at today's commodity prices and therefore replaced several previously booked locations.

### ***Technical Revisions***

- The technical revisions in all reserves categories for light and medium crude oil were mainly a result of: (i) the positive performance of the existing producing oil wells after the installation of field infrastructure improvements in Gordondale; and (ii) future well location adjustments based on offsetting existing well performance, which had higher gas to oil ratios than forecasted last year.
- The technical revisions in all reserve categories for conventional natural gas were mainly the result of the suspension of a well in Elmworth.
- The technical revisions in all reserves categories for shale gas were mainly a result of: (i) the prioritized removal of 14 proved and 12 proved plus probable locations, which were replaced with potential future locations (extensions) that had superior reserves and economic value, or where the available plant capacity precluded their development within the time frame mandated by the COGE Handbook; (ii) increased gas shrinkage as a result of higher NGLs extraction in the Pouce Coupe Gas Plant and the Gordondale Gas Plant; (iii) slight adjustments to the existing oil and gas wells and potential future oil and gas locations; and (iv) 7 proved and 9 proved plus probable locations that were removed due to field development plan changes.
- The technical revisions in all reserves categories for NGLs were mainly a result of: (i) increased condensate reserves from the 2020 drilling program and future locations in Pouce Coupe including the 14 well pad and offsetting potential future drilling locations in Pouce Coupe; and (ii) improved performance of the existing C3+ recoveries at the Pouce Coupe Gas Plant and the Gordondale Gas Plant, notwithstanding the negative revision in shale gas reserves.

### ***Acquisitions***

Changes were the result of various minor acquisitions Birchcliff completed in the Pouce Coupe area in 2020.

### ***Dispositions***

Changes were the result of a non-core disposition Birchcliff completed in Gordondale in 2020.

### ***Economic Factors***

The forecast prices for each product type were generally lower in the 2020 IQRE Price Forecast than the 2019 IQRE Price Forecast, which resulted in the economic limit at the end of a well's life being achieved earlier and therefore a reduction of the reserves volumes in all reserves categories. The reduced price forecast also resulted in the loss of reserves for 2 gross (2 net) proved undeveloped future shale gas locations, 4 gross (4 net) proved plus probable future shale gas locations and 1 gross (1 net) probable future conventional natural gas location, all in Elmworth, that did not generate a positive net present value at a 10% discount rate.

## Additional Information Relating to Reserves Data

### Undeveloped Reserves

Undeveloped reserves are attributed by Deloitte 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.

Approximately 100% of the Corporation's proved undeveloped reserves are attributed to the Montney/Doig Resource Play concentrated in the Corporation's key operating areas in Pouce Coupe and Gordondale. The Deloitte Reserves Report has attributed proved undeveloped reserves to each potential future horizontal drilling location that is proximal to an existing well to which Deloitte attributed proved developed reserves. Deloitte estimated such proved undeveloped reserves using forecast production rates that were based on a statistical analysis of production rates of existing wells operated by the Corporation or others on the Montney/Doig Resource Play in the regional area. If the development timeline went beyond five years of a major plant expansion, then these proximal locations were classified as probable undeveloped reserves.

The following table sets forth for each product type the volumes of proved undeveloped reserves and probable undeveloped reserves that were first attributed as reserves in each of the three most recent financial years:

#### Undeveloped Reserves

Year of first attribution	Proved Undeveloped Reserves				Probable Undeveloped Reserves			
	Light Crude Oil and Medium Crude Oil (Mbbls)	Conventional Natural Gas (MMcf)	Shale Gas (MMcf)	NGLs (Mbbls)	Light Crude Oil and Medium Crude Oil (Mbbls)	Conventional Natural Gas (MMcf)	Shale Gas (MMcf)	NGLs (Mbbls)
2020	642	0	127,276	3,702	762	0	267,618	11,329
2019	2,298	0	209,097	7,384	501	0	178,387	7,080
2018	4,909	0	161,072	10,345	3,742	0	147,460	7,084

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.

As at December 31, 2020, undeveloped reserves represented approximately 70% of the Corporation's total proved reserves and approximately 76% of the Corporation's total proved plus probable reserves. Birchcliff is focused on developing these undeveloped reserves in its core areas of Pouce Coupe and Gordondale where the vast majority of the undeveloped reserves are assigned and available processing capacity exists and future processing capacity expansions are forecast to take place. In the Deloitte Reserves Report, Deloitte forecast that 25 net wells and 96 net wells would be drilled in 2021 and 2022, respectively, in the proved category. In the proved plus probable category, Deloitte forecast that 34 net wells and 96.7 net wells would be drilled in 2021 and 2022, respectively. The Corporation's 2021 Capital Program contemplates the drilling of 27 (27.0 net) horizontal wells during 2021 and the bringing on production of 33 (33.0 net) wells. Birchcliff anticipates that drilling activities in 2021 and 2022 will utilize available capacity at the Pouce Coupe Gas Plant (currently 340 MMcf/d) and the Gordondale Gas Plant (currently 125 MMcf/d), as well as capacity as it becomes available from third-party processors. The Deloitte Reserves Report assumes that Birchcliff will continue to develop its proved undeveloped reserves on the Montney/Doig Resource Play over the ensuing years as Deloitte has forecast that the processing capacity at the Pouce Coupe Gas Plant will be expanded to 660 MMcf/d.

Given the Corporation's large, contiguous and concentrated land base, significant inventory of potential future drilling locations, required timing of facility and infrastructure construction and the executional pace of the Corporation's drilling programs, the timing of the development of the Corporation's proved undeveloped and probable undeveloped reserves extends past two years. Approximately 23% of the proved undeveloped locations are forecast to be drilled within the first two years. The remainder of the proved undeveloped locations are forecast to be drilled in the next five years with the addition of the forecast expansion of the Pouce Coupe Gas Plant and the ongoing resource play development in Pouce Coupe and Gordondale. Approximately 4% of the probable

undeveloped locations are forecast to be drilled within the first two years. The remainder of the probable undeveloped locations are forecast to be drilled in the next eight years with the addition of the forecast expansion of the Pouce Coupe Gas Plant and the ongoing resource play development in Pouce Coupe and Gordondale. All of the Corporation's proved and probable undeveloped reserves are forecast to be drilled in the time frames recommended by the COGE Handbook.

The pace of development of the Corporation's proved and probable undeveloped reserves is influenced by many factors, including the outcomes of the yearly drilling and reservoir evaluations, the price for oil and natural gas, and a variety of economic factors and conditions. 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).

### ***Significant Factors or Uncertainties Affecting Reserves Data***

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 natural gas prices and costs change. The reserves estimates contained in this Annual Information Form are based on production forecasts, prices and economic conditions at December 31, 2020. Factors and assumptions that affect these reserves estimates include, but are not limited to, historical production from the properties, production rates, ultimate reserves recovery, commodity prices, the timing and amount of capital expenditures, marketability of oil, natural gas and NGLs, royalty rates, the assumed effects of regulation by governmental agencies and future operating costs, all of which may vary materially from actual results.

As circumstances change and additional data becomes available, reserves estimates also change. Estimates are reviewed and revised, either upward or downward, as warranted by the new information. Revisions are often required due to changes in well performance, prices, economic conditions and governmental restrictions. Due to development time frame recommendations in the COGE Handbook, previously unbooked locations may have superior reserves and economic value than certain existing locations, and as such, those existing locations would be reclassified to a lower reserves category.

Although every reasonable effort is made to ensure that reserves estimates are accurate, reserves 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 reserves estimates can arise from changes in year-end oil and natural gas prices and reservoir performance. Such revisions can be either positive or negative.

Changes in future commodity prices relative to the forecasts described above under "*Statement of Reserves Data and Other Oil and Gas Information – Pricing Assumptions*" could have an impact on the Corporation's reserves, and in particular on the development of undeveloped reserves, unless future development costs are adjusted in parallel. The Corporation has a significant amount of proved and probable undeveloped reserves. At the forecast prices and costs used in the Deloitte Reserves Report, these development activities are expected to be economic. However, should oil and natural gas prices decrease materially, these activities may not be economic and the Corporation may defer their implementation. This deferral could result in proved reserves being reclassified as probable reserves and probable reserves being reclassified as contingent resources. In addition, reserves can be significantly affected by fluctuations in product pricing, capital expenditures, operating costs, royalty regimes, abandonment and reclamation costs and well performance that is beyond the Corporation's control and which could affect the Corporation's development decisions.

Other than the foregoing and the factors disclosed or described herein, the Corporation does not anticipate any other significant economic factors or other significant uncertainties which may affect any particular components of its reserves data. See also "*Risk Factors – Uncertainty of Reserves Estimates*".

### **Abandonment and Reclamation Costs**

In connection with its operations, the Corporation will incur abandonment and reclamation costs for surface leases, wells, gathering systems, pipelines and facilities. Abandonment and reclamation costs have been estimated by Deloitte in the Deloitte Reserves Report and include all costs associated with the process of restoring a property that has been disturbed by oil and gas activities to a standard imposed by the applicable government or regulatory authorities, including all wells with assigned proved and probable reserves and all related gathering systems, pipelines and facilities for properties that have had proved and probable reserves assigned to them. Abandonment and reclamation costs do not include the costs for the abandonment and reclamation of wells and facilities for which no reserves are attributed, including the Pouce Coupe Gas Plant and the Gordondale oil batteries.

In estimating the future net revenue disclosed in this Annual Information Form, the Deloitte Reserves Report deducted \$253.8 million (undiscounted) and \$9.4 million (10% discount) for abandonment and reclamation costs. There are no unusually significant abandonment and reclamation costs associated with the Corporation's properties.

### **Future Development Costs**

Future development costs reflect Deloitte's best estimate of what it will cost to bring the proved and proved plus probable reserves on production. Changes in forecast future development costs occur annually as a result of development activities, acquisition and disposition activities and capital cost estimates. The following table sets forth development costs deducted in the estimation of the Corporation's future net revenue attributable to the reserves categories noted below:

*Future Development Costs  
(Forecast Prices and Costs)*

	<b>Proved (MM\$)</b>	<b>Proved Plus Probable (MM\$)</b>
2021	143.0	190.3
2022	552.3	552.9
2023	496.3	496.3
2024	691.3	726.7
2025	424.0	484.6
Thereafter	616.6	1,926.2
<b>Total undiscounted</b>	<b>2,923.5</b>	<b>4,377.0</b>

The Corporation expects to be able to fund the development costs required in the future primarily from internally generated cash flow, as well as its existing Credit Facilities. Future development costs may also be funded through the proceeds realized from property dispositions and debt or equity financings. Planned activity levels vary each year due to factors such as capital availability, commodity prices, processing and transportation capacity and regulatory processes.

There can be no guarantee that funds will be available or that the Corporation will allocate funding to develop all of the reserves attributed in the Deloitte Reserves Report. Failure to develop those reserves would have a negative impact on the future production and future net revenue estimated by the Corporation's independent qualified reserves evaluator and could result in negative revisions to reserves.

Interest and other costs of external funding are not included in the estimates of reserves and future net revenue set forth herein and would reduce the reserves and future net revenue to some degree depending upon the funding sources utilized. The Corporation currently does not anticipate that interest or other funding costs would make the development of any of these properties uneconomic.

## Other Oil and Gas Information

### Oil and Gas Properties and Wells

The Corporation's important properties and facilities are described under the heading "Description of the Business". All of the Corporation's properties are located in Alberta and are onshore. None of the Corporation's important properties or facilities are subject to any material statutory or other mandatory relinquishments, surrenders, back-ins or changes in ownership.

The following table sets forth the Corporation's producing and non-producing oil and natural gas wells at December 31, 2020:

*Producing and Non-Producing Wells at December 31, 2020<sup>(1)</sup>*

	Oil Wells				Natural Gas Wells			
	Producing		Non-producing		Producing		Non-producing	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Alberta	131	124.7	19	10.7	425	413.0	181	140.3

(1) Does not include water injection wells, service wells, capped wells and wells that have not been categorized as either oil wells or natural gas wells.

The Corporation has no properties to which reserves have been attributed which are capable of production but not producing except as described herein. At December 31, 2020, the Corporation had 10 (9.5 net) wells categorized as proved developed non-producing in the Deloitte Reserves Report. These wells have been non-producing for periods ranging from 2 months to 4 years. All of these wells are near pipelines and processing facilities and consist of vertical and horizontal wells. Birchcliff expects 7 (6.5 net) of these wells to be classified as proved developed producing at the end of 2021. Of the remaining 3 wells, 1 is expected to be brought on production in 2024, 1 in 2025 and 1 in 2026.

### Undeveloped Lands

The following table sets forth the gross and net acres of undeveloped lands held by the Corporation as at December 31, 2020:

*Undeveloped Lands*

	Gross Acres	Net Acres
Alberta	224,149.4	198,553.7

When determining gross and net acreage for two or more leases covering the same lands but different rights, the acreage is reported for each lease. When there are multiple discontinuous rights in a single lease, the acreage is reported only once.

The rights to explore, develop and exploit with respect to 18,240 (18,240.0 net) acres of such undeveloped lands are expected to expire within one year of the date of this Annual Information Form. Such expiries will not materially affect the reserves attributable to Birchcliff's lands. The Corporation has no material work commitments on such undeveloped lands.

### Significant Factors or Uncertainties Relevant to Properties with No Attributed Reserves

There are several economic factors and significant uncertainties that affect the anticipated development of the Corporation's properties to which no reserves have been attributed. The Corporation will be required to make capital expenditures in order to prove, exploit, develop and produce oil, natural gas and NGLs from these properties in the future, which expenditures may be significant. If the Corporation's cash flow from operations is not sufficient to satisfy its capital expenditure requirements, there can be no assurance that additional debt or equity financing will be available to meet these requirements or, if available, that the terms will be acceptable to the Corporation. Failure to obtain such financing on a timely basis could cause the Corporation to forfeit its interest in certain properties, miss certain opportunities, reduce its pace of development or terminate its operations on such properties. An inability of the Corporation to access sufficient capital for its exploration and development purposes could have a material adverse effect on the Corporation's ability to execute its business strategy to develop its prospects.

The significant economic factors that affect the Corporation's future development of its lands to which no reserves have been attributed are:

- (i) future commodity prices for oil and natural gas (and the Corporation's outlook relating to such prices);
- (ii) the future capital costs of drilling, completing, tying in and equipping the wells necessary to develop such lands at the relevant times;
- (iii) the future costs of operating wells at the relevant times; and
- (iv) the levels of royalties applicable to productions from such lands.

The significant uncertainties that affect the Corporation's development of its lands to which no reserves have been attributed are:

- (i) the ability of the Corporation to obtain the capital necessary to fund the development of such lands at the relevant times;
- (ii) the future drilling and completion results the Corporation achieves in its development activities (e.g. with respect to the development of particular intervals or geographic areas, the uncertainty would be whether the initial drilling and completion results are sufficient to justify the development of such interval or geographic area);
- (iii) drilling and completion results achieved by others on lands in proximity to the Corporation's lands;
- (iv) transportation and processing infrastructure becoming available in a timeline consistent with proposed development plans;
- (v) the availability of regulatory approvals for development of the lands and the necessary infrastructure; and
- (vi) governmental actions and future changes to applicable regulatory or royalty regimes that affect timing or economics of proposed development activities.

All of these uncertainties have the potential to delay the development of such lands. On the other hand, uncertainty as to the timing and nature of the evolution of better exploration, drilling, completion and production technologies have the potential to accelerate development activities and enhance the economics relating to the development of such lands.

There are no unusually significant abandonment and reclamation costs associated with the Corporation's properties to which no reserves have been attributed.

See also "*Risk Factors – Uncertainty of Reserves Estimates*".

#### ***Forward Contracts and Transportation and Processing Obligations***

The Corporation has used and may continue to use various types of derivative financial instruments and physical delivery contracts to manage the risks related to fluctuating commodity prices. Subject to compliance with the Credit Facilities, the Board has authorized the Corporation to execute a risk management strategy whereby Birchcliff is authorized to enter into agreements and financial or physical transactions with one or more counterparties from time to time that are intended to reduce the risk to the Corporation from volatility in future commodity prices, foreign exchange rates and/or interest rates. A summary of the Corporation's risk management contracts can be found in Note 18 – *Risk Management* to the Corporation's audited annual financial statements for the year ended December 31, 2020 and under the heading "*Discussion of Operations – Risk Management*" in the Corporation's management's discussion and analysis for the year ended December 31, 2020. Other than as disclosed in the Corporation's audited annual financial statements for the year ended December 31, 2020, the Corporation is not bound by any agreement (including any transportation agreement), directly or through an aggregator, under which it is precluded from fully realizing, or may be protected from the full effect of, future market prices for crude oil or natural gas. See "*Risk Factors – Hedging*" for additional information on the risks and uncertainties relating to the Corporation's hedging activities.

As part of normal business operations, the Corporation enters into firm service obligations for the transportation and processing (as applicable) of its natural gas, oil and NGLs production volumes in order to secure access to the infrastructure necessary to transport and process such volumes. Accordingly, the Corporation renews, amends or enters into new firm service agreements from time to time, having consideration for its forecast capacity requirements and current and future growth plans, capacity constraints and its expectations for future transportation and processing costs.

With respect to transportation, the Corporation believes that to move its production to market over the short and long-term, it should generally secure firm transportation sufficient for its current and future growth plans. The Corporation has transportation commitments that exceed forecast production volumes of the Corporation's proved reserves in the Deloitte Reserves Report for the period from January 1, 2021 to December 31, 2022 by an average of approximately 120.5 MMcf/d. These excess commitments relate to the Corporation's firm service commitments on the NGTL System (see "Description of the Business – Transportation Arrangements"). The estimated cost of the excess transportation equates to an undiscounted total cost of approximately \$23.8 million over the period (2021: \$18.3 million; 2022: \$5.4 million). Birchcliff strives to mitigate excess NGTL transportation costs through marketing initiatives to other parties that do not have firm transportation to move natural gas volumes on the NGTL System.

With respect to processing, the Corporation has fractionation processing commitments that exceed forecast production volumes of the Corporation's proved reserves in the Deloitte Reserves Report for the period from January 1, 2021 to March 31, 2026 by an average of 1,064 bbls/d. These excess commitments relate to the Corporation's fractionation commitments for NGLs at the Pembina Facility (see "Description of the Business – Processing Arrangements"). The estimated cost of the excess fractionation equates to an undiscounted total cost of approximately \$6.8 million over the period. Birchcliff strives to mitigate excess NGLs fractionation costs through strategic marketing with third parties and other producers that are short fractionation capacity.

#### **Tax Horizon**

The Corporation was not required to pay any cash income taxes for the year ended December 31, 2020. The Corporation estimates that based on its current expenditure plans and the current price environment, no income taxes will become payable on the Corporation's income for the financial year ended December 31, 2021. As at December 31, 2020, the Corporation had accumulated tax pools and loss carry forwards of approximately \$2.2 billion which can be used to offset taxable income in future years. Based on anticipated capital investment, which further augments the tax pools, it is likely that the Corporation will not become taxable within the next five years as long as commodity prices remain consistent with today's environment.

#### **Costs Incurred**

The following table sets forth the Corporation's property acquisition costs for proved and unproved properties, exploration costs and development costs for the year ended December 31, 2020:

*2020 Property Acquisition, Exploration and Development Costs*

Property Acquisition Costs		Exploration Costs (MM\$)	Development Costs (MM\$)
Proved Properties (MM\$)	Unproved Properties (MM\$)		
0.0	0.0	6.3	281.7



## Exploration and Development Activities

The following table sets forth the gross and net exploratory and development wells that the Corporation participated in during the year ended December 31, 2020:

### 2020 Exploration and Development Activities

	Exploratory Wells <sup>(1)</sup>		Development Wells <sup>(1)</sup>		Total <sup>(1)</sup>	
	Gross	Net	Gross	Net	Gross	Net
Oil wells	0.0	0.0	8.0	8.0	8.0	8.0
Natural gas wells	0.0	0.0	26.0	26.0	26.0	26.0
Service wells	0.0	0.0	0.0	0.0	0.0	0.0
Stratigraphic test wells	0.0	0.0	0.0	0.0	0.0	0.0
Dry holes	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>34.0</b>	<b>34.0</b>	<b>34.0</b>	<b>34.0</b>

(1) Number of wells based on rig release dates.

The Corporation's exploration and development activities for 2021 will focus on the drilling of wells on the Montney/Doig Resource Play. The 2021 Capital Program contemplates the drilling of 27 (27.0 net) horizontal wells during 2021 and the bringing on production of 33 (33.0 net) wells in 2021. See "General Development of the Business – Recent Developments" for further information regarding the Corporation's 2021 Capital Program.

## Production Estimates

The following table sets forth the volume of production estimated for the year ending December 31, 2021 which is reflected in the estimates of gross proved reserves and gross probable reserves disclosed in the tables above under the heading "Statement of Reserves Data and Other Oil and Gas Information – Disclosure of Reserves Data":

### 2021 Production Volume Estimates

	Light Crude Oil and Medium Crude Oil			
	Crude Oil (Mbbbls)	Shale Gas (MMcf) <sup>(1)</sup>	NGLs (Mbbbls)	Oil Equivalent (Mboe)
Gross Proved	1,544.1	126,930.0	5,266.5	27,965.6
Gross Probable	48.9	6,794.3	383.4	1,564.8

(1) Conventional natural gas volumes have been included in the shale gas volumes as conventional natural gas volumes represented less than 1% of the volume estimates for 2021 and are therefore not considered material.

The following table sets forth the estimated production volumes for the fields that account for more than 20% of the estimated production volumes for the year ending December 31, 2021:

### 2021 Production Volume Estimates for Important Fields

Field Name	Gross Proved Reserves (Mboe)	Gross Probable Reserves (Mboe)
Pouce Coupe	17,620.4	1,280.6
Gordondale	10,292.5	283.6

## Production History

The following table sets forth, by product type, the average daily production, the average prices received, the royalties paid, the production costs incurred, the transportation and other costs incurred and the resulting netback for the periods indicated:

2020 Average Daily Production, Prices Received, Royalties, Costs and Resulting Netback

	Three months ended				Year ended
	March 31, 2020	June 30, 2020	September 30, 2020	December 31, 2020	December 31, 2020
<b>Average Daily Production<sup>(1)</sup></b>					
Light Crude Oil and Medium Crude Oil (bbls/d)	3,954	5,744	4,405	3,566	4,415
Shale Gas (Mcf/d) <sup>(2)</sup>	342,831	341,558	358,851	360,839	351,068
NGLs (bbls/d) <sup>(3)</sup>	12,486	12,280	14,164	14,943	13,474
Combined (boe/d)	73,580	74,950	78,376	78,649	76,401
<b>Average Prices Received<sup>(4)</sup></b>					
Light Crude Oil and Medium Crude Oil (\$/bbl)	53.18	25.72	48.50	49.56	42.39
Shale Gas (\$/Mcf) <sup>(2)</sup>	2.29	2.22	2.48	2.93	2.49
NGLs (\$/bbl) <sup>(3)</sup>	28.86	19.53	31.60	32.53	28.49
Combined (\$/boe)	18.41	15.27	19.80	21.88	18.90
<b>Royalties Paid</b>					
Light Crude Oil and Medium Crude Oil (\$/bbl)	7.42	1.61	3.21	4.41	3.87
Shale Gas (\$/Mcf) <sup>(2)(5)</sup>	0.06	0.01	0.03	0.08	0.05
NGLs (\$/bbl) <sup>(3)</sup>	1.72	0.20	1.14	1.80	1.22
Combined (\$/boe)	0.95	0.20	0.55	0.90	0.65
<b>Production Costs<sup>(6)</sup></b>					
Light Crude Oil and Medium Crude Oil (\$/bbl)	4.67	4.17	3.96	4.18	4.29
Shale Gas (\$/Mcf) <sup>(2)</sup>	0.48	0.45	0.43	0.48	0.46
NGLs (\$/bbl) <sup>(3)</sup>	3.77	3.30	2.98	3.36	3.34
Combined (\$/boe)	3.14	2.89	2.73	3.03	2.95
<b>Transportation and Other Costs<sup>(7)</sup></b>					
Light Crude Oil and Medium Crude Oil (\$/bbl)	4.30	4.09	3.97	3.93	4.08
Shale Gas (\$/Mcf) <sup>(2)</sup>	0.87	0.86	0.79	0.81	0.83
NGLs (\$/bbl) <sup>(3)</sup>	4.31	6.48	4.03	5.66	5.09
Combined (\$/boe)	5.00	5.34	4.49	4.94	4.93
<b>Resulting Netback<sup>(7)</sup></b>					
Light Crude Oil and Medium Crude Oil (\$/bbl)	36.79	15.85	37.36	37.04	30.15
Shale Gas (\$/Mcf) <sup>(2)</sup>	0.96	0.97	1.33	1.65	1.24
NGLs (\$/bbl) <sup>(3)</sup>	17.04	7.68	20.89	19.54	16.64
Combined (\$/boe)	9.32	6.84	12.03	13.01	10.37

(1) Before deduction of royalties and without including any royalty interests.

(2) Conventional natural gas volumes have been included in the shale gas volumes as conventional natural gas volumes represented less than 1% of the Corporation's total corporate natural gas production in 2020 and are therefore not considered material.

(3) Includes condensate.

(4) Excludes the effects of hedges using financial instruments but includes the effects of physical delivery contracts.

(5) Includes the effects of prior period gas cost allowance credits received by the Corporation.

(6) Production costs are comprised of direct costs incurred to operate wells that produce any one or more of the product types that are shown. Costs have been allocated to product production on a pro rata basis.

(7) Transportation and other costs and netback do not have any standardized meanings and should not be used for the purposes of drawing comparisons between the Corporation and other companies. For additional information, see "Non-GAAP Measures" in this Annual Information Form and in the Corporation's management's discussion and analysis for the year ended December 31, 2020.

The following table sets forth, by product type, the Corporation's average daily production volumes for the year ended December 31, 2020 for each field comprising more than 10% of the Corporation's total production:

*2020 Production Volumes By Field*

	<b>Light Crude Oil and Medium Crude Oil (bbls/d)</b>	<b>Shale Gas (Mcf/d)<sup>(1)</sup></b>	<b>NGLs (bbls/d)</b>	<b>Oil Equivalent (boe/d)</b>
Pouce Coupe	31	248,951	5,627	47,149
Gordondale	4,382	102,119	7,848	29,250

(1) Conventional natural gas volumes have been included in the shale gas volumes as conventional natural gas volumes represented less than 1% of the Corporation's total corporate natural gas production in 2020 and are therefore not considered material.

## INDUSTRY CONDITIONS

Companies carrying on business in the oil and natural gas industry in Canada 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; and with respect to the pricing and taxation of petroleum and natural gas through the legislation enacted by, and agreements among, the Federal Government and the provincial governments of Canada, all of which should be carefully considered by investors in the Western Canadian oil and natural gas industry. All current legislation is a matter of public record and the Corporation is unable to predict what additional legislation or amendments may be enacted.

The Corporation holds interests in crude oil and natural gas properties, along with related assets, in the Canadian province of Alberta. 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 of, 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) the 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.

Outlined below are some of the principal aspects of the legislation, regulations, agreements, orders, directives and a summary of other pertinent conditions that impact the oil and natural gas industry in Western Canada, specifically in the Province of Alberta, where the Corporation's assets are located. While these matters do not affect Birchcliff'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 them carefully.

### Pricing and Marketing in Canada

#### *Crude Oil*

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

Since early 2020, worldwide oversupply of crude oil, a lack of available storage capacity and decreased demand due to COVID-19 have had a significant impact on the pricing of crude oil. In an effort to stabilize global oil markets, OPEC and a number of other oil producing countries announced an agreement to cut crude oil production by approximately 10 million bbls/d in April 2020. This agreement contributed to rebalancing global oil markets by

achieving approximately 99.5% compliance with the agreed production adjustment commitments. However, economic recovery has slowed due to a resurgence of COVID-19 and newly emerging virus variants in major economies. See “*Risk Factors – Public Health Crises*” and “*Risk Factors – Prices, Markets and Marketing*”.

### **Natural Gas**

The price of natural gas sold in intra-provincial, interprovincial and international trade is determined by negotiation between buyers and sellers. The price depends, in part, on the price of competing natural gas supplies and other fuels, natural gas quality, distance to market, availability of transportation, weather conditions, supply/demand balance, the length of the contract term and other contractual terms of sale.

### **NGLs**

The price of condensate and other NGLs such as ethane, butane and propane 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 the natural gas stream 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, supply/demand balance, the length of the contract term 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* (Canada) (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**

One major constraint to the export of oil, natural gas and NGLs is the deficit of transportation capacity to transport production from Western Canada to other parts of Canada, the United States and other international markets. Although certain pipeline and other transportation and export projects are underway, many proposed projects have been cancelled or delayed due to regulatory hurdles, court challenges and economic and other 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 low commodity pricing relative to other markets over the last several years.

### **Pipelines**

Producers negotiate, bid or accept terms of commitment 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.

Under the Canadian Constitution, 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 will 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 such that, even when projects are approved, they often face delays or cancellation 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.

In the face of such regulatory uncertainty, the Canadian oil and natural gas industry has experienced significant difficulty expanding the existing network of transportation infrastructure for crude oil, natural gas and NGLs, including pipelines, rail, trucks and marine transport. Improved access to global markets, especially through the

Midwest United States and export shipping terminals on the west coast of Canada and the Gulf Coast, could help to alleviate the downward pressure on commodity prices. Several proposals have been announced to increase pipeline capacity from Western Canada to Eastern Canada, the United States, and other international markets via export terminals. While certain projects are proceeding, the regulatory approval process and other economic and socio-political factors related to transportation and export infrastructure have led to the delay, suspension or cancellation of many pipeline projects.

#### Specific Pipeline Updates

The Enbridge Line 3 Replacement from Hardisty, Alberta, to Superior, Wisconsin, previously expected to be in-service in late 2019, has faced significant delays due to permitting difficulties in the United States. However, Minnesota regulators approved the final required permit for the project in November 2020. Certain segments of the Line 3 Replacement in North Dakota and Wisconsin are currently in operation and the Canadian portion of the replaced pipeline began commercial operation in December 2019. Construction of the Line 3 Replacement in Minnesota began in early December 2020; Enbridge expects the line to be in service in the fourth quarter of 2021.

The Trans Mountain Pipeline expansion received Cabinet approval in November 2016. Following a period of sustained 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 and it is expected to be in service in late 2022.

TC Energy's Keystone XL Pipeline was expected to begin construction in the first half of 2019 but pre-construction work was halted in late 2018 when a United States Federal Court Judge determined the underlying environmental review was inadequate. The United States Department of State issued its final Supplemental Environmental Impact Statement in late 2019 and in January 2020, the United States Government announced its approval of a right-of-way that would allow the Keystone XL Pipeline to cross 74 kilometres of federal land. On March 31, 2020, TC Energy announced it would proceed with the Keystone XL Pipeline. TC Energy also announced that the Government of Alberta had made a US\$1.1 billion equity investment in the project and would guarantee a US\$4.2 billion project level credit facility. While construction on the Keystone XL Pipeline started in April 2020, the project remains subject to legal and regulatory barriers in the United States, including the revocation of a presidential permit on January 20, 2021 that permits the Keystone XL Pipeline to operate across the international border. As a result of the revocation, TC Energy has indicated that they have suspended advancement of the Keystone XL Pipeline project while it reviews the decision, assesses the implications of the decision and considers its options.

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, potentially forcing the lines comprising this segment of the pipeline system to be shut down by May 2021. Enbridge filed a federal complaint in late November 2020 in the United States District Court for the Western District of Michigan and is seeking an injunction to prevent the termination of the easement. Enbridge 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.

#### **Marine Tankers**

The *Oil Tanker Moratorium Act* (Canada), which was enacted in June 2019, imposes a ban on tanker traffic transporting certain 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.

#### **Crude Oil and Bitumen by Rail**

On February 19, 2019, the Government of Alberta announced that it would lease 4,400 rail cars capable of transporting 120,000 bbls/d of crude oil out of the province to help alleviate the transportation constraints impacting Canadian oil prices. In the spring of 2019, the Government of Alberta announced it would cancel the program and assign the transportation contracts to industry proponents. In February 2020, the Government of Alberta announced it had sold \$10.6 billion worth of crude-by-rail contracts to the private sector.

Following two train derailments that led to fires and oil spills in Saskatchewan, the Federal Government announced in February 2020 that trains hauling more than 20 cars carrying dangerous goods, including crude oil and diluted

bitumen, would be subject to reduced speed limits. The order was updated in April 2020 and replaced in November 2020. The speed limits and other requirements established in the November 2020 order will remain in place until permanent rule changes are approved.

### ***Natural Gas and LNG***

Natural gas prices in Alberta 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 in the last several years has generally been depressed relative to other markets.

Required repairs or upgrades to existing pipeline systems in Western Canada have also led to reduced capacity and apportionment of access, the effects of which have been exacerbated by natural gas storage limitations. However, in September 2019, the CER approved a policy change by TC Energy on the NGTL System to give priority to deliveries into storage (the “**Temporary Service Protocol**”). The Temporary Service Protocol stabilized supply and pricing, particularly during periods of maintenance on the system. TC Energy received Government of Canada approval for an expansion to the NGTL System in October 2020, with pipeline construction activities expected to begin in January 2021 and a target in-service date of April 2022. In February 2021 the CER denied an application to extend the Temporary Service Protocol until October 31, 2021 or until completion of the NGTL System expansion, but directed NGTL to amend its existing tariff to facilitate access to storage.

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

While a number of LNG export plants have been proposed in Canada, government decision-making, legal and regulatory 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, which will be built and operated by TC Energy (the “**CGL Pipeline**”). Pre-construction activities began in November 2018, with a completion target of 2025.

In late 2019, TC Energy announced that it would sell a 65% equity interest in the CGL Pipeline to investment companies KKR & Co Inc. and Alberta Investment Management Corporation while remaining the pipeline operator. The transaction closed in May 2020. Despite its approval and although construction is proceeding, the CGL Pipeline has faced intense 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.

In addition to LNG Canada and the CGL Pipeline projects, the following is an update on various other LNG Projects that have been proposed in Canada:

- In December 2019, the CER approved a 40-year export licence for the Kitimat LNG project, a proposed joint venture between Chevron Canada Limited and Woodside Energy International (Canada) Limited. However, both partners have indicated they are considering selling some or all of their interest in the project.
- The Woodfibre LNG Project is a small-scale LNG processing and export facility near Squamish, British Columbia owned by Woodfibre LNG Limited, a subsidiary of Singapore-based Pacific Oil and Gas Ltd. The British Columbia Oil and Gas Commission approved a project permit for the Woodfibre LNG Project in July 2019 and formal approval of the project is expected in the third quarter of 2021, with construction beginning shortly thereafter.
- GNL Québec Inc., the proponent of the Énergie Saguenay Project, is currently undergoing a federal impact assessment process for the construction and operation of an LNG facility and export terminal located on Saguenay Fjord, an inlet which feeds into the St. Lawrence River in Québec. The Énergie Saguenay Project is currently slated for completion in 2026.
- Pieridae Energy Ltd.’s (“**Pieridae**”) proposed Goldboro LNG project, located in Nova Scotia, would see LNG exported from Canada to European markets. Pieridae has agreements with Shell upstream and with Uniper,

a German utility, downstream. The Federal Government has issued Goldboro LNG a 20-year export licence, but Pieridae has delayed its final investment decision until mid-2021.

- Cedar LNG Export Development Ltd.'s Cedar LNG Project near Kitimat, British Columbia, is currently in the environmental assessment stage, with British Columbia's Environmental Assessment Office conducting the environmental assessment on behalf of the Impact Assessment Agency of Canada ("**IA Agency**").

### ***Enbridge Open Season***

In August 2019, Enbridge initiated an open season for the Enbridge mainline system, which has historically operated as a common carrier pipeline system transporting crude oil. The changes that Enbridge intends to implement include the transition of the mainline system from a common carrier to a primarily contract carrier pipeline, wherein shippers will have to commit to reserved space in the pipeline for a fixed term, with only 10% of available capacity reserved for nominations. If the service change is approved, shippers seeking firm capacity on the Enbridge system would no longer be able to rely on the nomination process and would have to enter long-term contracts for service.

Several shippers challenged Enbridge's open season and, in particular, Enbridge's ability to engage in an open season without first obtaining prior regulatory approval to implement a contract carriage model. Following an expedited hearing process, the CER decided to shut down the open season. On December 19, 2019, Enbridge applied to the CER for approval of the proposed service and tolling framework. The regulatory hearing process is currently underway and a final decision from the CER is not expected until mid-2021. If Enbridge receives CER approval, it intends to hold the open season by the end of 2021.

### ***Curtailment***

In December 2018, the Government of Alberta announced that, commencing January 1, 2019, it would mandate a short-term reduction in provincial crude oil and crude bitumen production. Under the *Curtailment Rules*, as amended the Government of Alberta can, on a monthly basis, require crude oil and crude bitumen producers producing more than 20,000 bbls/d to limit their production according to a pre-determined formula that allocates production limits proportionately amongst all operators subject to curtailment orders. The curtailment rate was set at 3.81 million bbls/d through 2020. As of January 2021, monthly oil production limits are no longer in effect. However, the *Curtailment Rules*, which were set to be repealed on December 31, 2020, have been extended such that the Government of Alberta retains the ability to impose production limits if needed.

## **The USMCA and Other Trade Agreements**

### ***The USMCA***

On November 30, 2018, Canada, Mexico and the United States signed a new trade agreement, widely referred to as the United States-Mexico-Canada Agreement (the "**USMCA**"), which replaced NAFTA when it came into force on July 1, 2020. As the United States remains Canada's primary trading partner and the largest international market for the export of crude oil, natural gas and NGLs from Canada, the implementation of the USMCA could have an impact on Western Canada's oil and natural gas industry at large, 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 other international markets.

### ***Other Trade Agreements***

Canada has also pursued a number of other international free trade agreements with other countries around the world and as a result, a number of free trade or similar agreements are in force between Canada and certain other countries. Canada and the European Union have agreed to the Comprehensive Economic and Trade Agreement ("**CETA**"), which provides for duty-free, quota-free market access for Canadian crude oil and natural gas products to the European Union. Although CETA has not received full ratification by the national legislatures in the European Union, provisional application of CETA commenced on September 21, 2017. In light of the United Kingdom's

departure from the European Union on January 31, 2020, the United Kingdom and Canada have reached an interim trade agreement, the Canada-United Kingdom Trade Continuity Agreement (the “**CUKTCA**”). On December 9, 2020, the Government of Canada introduced Bill C-18: *An Act to Implement the Trade Continuity Agreement*. CETA ceased to apply to Canada-United Kingdom trade on January 1, 2021. The CUKTCA replicates CETA on a bilateral basis and is meant to maintain the status quo of the Canada-United Kingdom trade relationship.

Canada and ten other countries have agreed on the text of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (“**CPTPP**”), which is intended to allow for preferential market access among the countries that are parties to the CPTPP. The CPTPP is in force among the first seven countries to ratify the agreement: Canada, Australia, Japan, Mexico, New Zealand, Vietnam and Singapore.

While it is uncertain what effect CETA, CPTPP, CUKTCA or any other trade agreements will have on the oil 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***

The respective provincial governments (i.e. the Crown) predominantly own the mineral rights to oil and natural gas located in Western Canada. According to Alberta Energy, the Crown owns approximately 81% of the Province of Alberta’s mineral rights. Provincial governments grant rights to explore for and produce oil and natural gas pursuant to leases, licences and permits for varying terms and on conditions set forth in provincial legislation, including requirements to perform specific work or make payments. The provincial governments in Western Canada conduct regular land sales where oil and natural gas companies bid for leases to explore for and produce oil and natural gas pursuant to mineral rights owned by the respective provincial governments. Crude oil and natural gas leases generally have a fixed term; however, a lease may generally be continued after the initial term where certain minimum thresholds of production have been reached, all lease rental payments have been paid on time and other conditions are satisfied.

The Province of Alberta has 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 lease or licence. Alberta also 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 all leases and licences issued after January 1, 2009. Shallow reversion will occur at the conclusion of the primary term of the lease or intermediate term of the licence.

In response to COVID-19, the Government of Alberta has 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. At December 31, 2020, Crown leases that would have expired between March 20, 2020 and March 31, 2021, are eligible for a one-year extension.

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 Alberta. According to Alberta Energy, approximately 19% of the mineral rights in Alberta are owned by private freehold owners and other non-Crown entities, as well as the Federal Government as discussed in further detail below. The rights to explore for and produce privately owned crude 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 oil and natural gas explorers and producers.

An additional category of mineral rights ownership includes ownership by the Federal Government of some legacy mineral lands and within Indigenous reservations designated under the *Indian Act* (Canada). Indian Oil and Gas Canada (“**IOGC**”), which is a Federal Government agency, manages subsurface and surface leases, in consultation with the applicable Indigenous peoples, for the exploration and production of oil and natural gas on Indigenous reservations.

Until recently, crude oil and natural gas activities conducted on Indian reserve lands were governed by the *Indian Oil and Gas Act* (Canada) (the “**IOGA**”) and the *Indian Oil and Gas Regulations, 1995*. In 2009, Parliament passed *An Act to Amend the Indian Oil and Gas Act*, amending and modernizing the IOGA (the “**Modernized IOGA**”); however, the amendments were delayed until the Federal Government was able to complete stakeholder consultations and



update the accompanying regulations (the “**2019 Regulations**”). The Modernized IOGA and the 2019 Regulations came into force on August 1, 2019 and further regulations are currently being developed.

### ***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.

### **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 NGLs 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.

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 the provincial governments in Western Canada create incentive programs for exploration and development. Such programs often provide for volume-based incentive programs, royalty rate reductions, royalty holidays or royalty tax credits and may be introduced when commodity prices are low to encourage exploration and development activity. In addition, incentive programs may be introduced to encourage producers to prioritize certain kinds of development or utilize new technologies that may enhance or improve the recovery of oil, natural gas and NGLs or improve environmental performance.

The Federal Government also creates incentives and other financial aid programs intended to assist businesses operating in the oil and natural gas industry. Recently, these programs, including, but not limited to, programs that provide direct financial support to companies operating in the petroleum and natural gas industry and/or targeted funding for various initiatives related to industry diversification and environmental matters, including those programs created in response to the COVID-19 pandemic, have been administered through federal agencies such as the Business Development Bank of Canada, Natural Resources Canada, Export Development Canada, Innovation, Science and Economic Development Canada and, in some cases, the Canada Revenue Agency.

#### ***The Royalty Framework in Alberta***

##### **Crown Royalties**

In Alberta, provincially-set royalty rates apply to Crown-owned mineral rights and crude oil and natural gas producers are responsible for calculating their royalty rate on an ongoing basis. 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 “**Previous Framework**”) will continue to apply to wells producing Crown-owned resources that were drilled prior to January 1, 2017 until December 31, 2026. As of January 1, 2027, these older wells will become subject to the Modernized Framework. The *Royalty Guarantee Act* (Alberta), which came into effect on July 18, 2019, provides that no major changes will be made to the current crude oil and natural gas royalty structure for a period of at least 10 years.

Royalties on production from non-oil sands wells under 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 AER, and incorporates information specific to each well such as vertical depth and lateral length.

Producers pay a flat royalty rate of 5% of gross revenue from each well that is subject to the Modernized Framework until the well reaches payout. Payout for a well is the point at which cumulative gross revenue from the well equals the drilling and completion cost allowance for the well set by the AER. After payout, producers pay an increased post-payout royalty on revenue of between 5% and 40% for oil and pentanes and 5% and 36% for methane, ethane, propane and butane, all determined by reference to the then current commodity prices of the various hydrocarbons. Similar to the Previous Framework, the post-payout royalty rate under the Modernized Framework varies with commodity prices. Once production in a mature well drops below a threshold level where the rate of production is too low to sustain the full royalty burden, its royalty rate is adjusted downward, to a minimum of 5%, as the mature well's production declines. As the Modernized Framework uses deemed drilling and completion costs in calculating the royalty and not the actual drilling and completion costs incurred by a producer, low-cost producers benefit if their well costs are lower than the drilling and completion cost allowance.

Subject to certain available incentives, royalty rates for conventional oil production subject to the Previous Framework range from a base rate of 0% to a cap of 40% and royalty rates for natural gas production under the Previous Framework range from a base rate of 5% to a cap of 36%. The Previous Framework also includes a natural gas royalty formula which provides for a reduction based on the measured depth of the well below 2,000 metres deep, as well as the acid gas content of the produced gas. Under the Previous Framework, the royalty rate applicable to NGLs is a flat rate of 40% for pentanes and 30% for butanes and propane.

#### Freehold and Other Types of Non-Crown Royalties

Royalties on production from privately-owned freehold lands are negotiated between the freehold mineral owner and the lessee under a lease or other contract. Producers and working interest participants may also pay additional royalties to other parties than the freehold mineral owner where such royalties are negotiated through private transactions.

IOGC is responsible for managing and regulating the oil and natural gas resources located on Indigenous reservations across Canada. IOGC's responsibilities include negotiating and issuing the oil and natural gas agreements between Indigenous groups and oil and natural gas companies, as well as collecting royalty revenue on behalf of Indigenous groups and depositing the revenue in their trust accounts. While certain standards exist, the exact terms and conditions of each oil and natural gas lease dictate the calculation of royalties owed, which may vary depending on the involvement of the specific Indigenous group. Ultimately, the relevant Indigenous group must approve the terms.

#### ***Incentives***

The Government of Alberta has from time to time implemented drilling credits, incentives or transitional royalty programs to encourage 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.

#### **Rental Payments and Freehold Mineral Taxes**

Currently, producers of oil and natural gas from Crown lands in Alberta are required to pay annual rental payments, at a rate of \$3.50 per hectare, and make monthly royalty payments in respect of oil and natural gas produced.

In addition to the royalties payable to the mineral owners (or to other royalty holders, if applicable), producers of crude oil and natural gas from freehold lands in each of the Western Canadian provinces are required to pay freehold mineral taxes or production taxes. Freehold mineral taxes or production taxes are taxes levied by a provincial government on oil and natural gas production from lands where the Crown does not hold the mineral rights. On average, the tax levied in Alberta is 4% of revenue reported from freehold mineral title properties. Freehold mineral taxes are in addition to any other negotiated royalty or other payment required to be paid to the owner of such freehold mineral rights.

## Regulatory Authorities and Environmental Regulation

### **General**

The Canadian oil and natural gas industry is currently 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 natural 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 for air pollution and GHG emissions (typically measured in terms of their global warming potential and expressed in terms of CO<sub>2</sub>e), may impose further requirements on operators and other companies in the oil and natural 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.

On August 28, 2019, the *Impact Assessment Act* (Canada) (the “**IAA**”) replaced the *Canadian Environmental Assessment Act, 2012* (Canada) and, as part of the regulatory transition, the IA Agency replaced the Canadian Environmental Assessment Agency. The enactment of the CERA and the IAA introduced a number of important changes to the regulation of many major projects and their associated environmental assessments. The CERA separates the CER’s administrative and adjudicative functions. A board of directors and a chief executive officer manage strategic, administrative and policy considerations while adjudicative functions fall to independent commissioners. 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 IA Agency or, in the case of certain pipelines, a joint review panel comprised of members from the CER and the IAA. 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 natural gas industry include pipelines that require more than 75 km of new right 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. The Government of Alberta has submitted a reference question to the Alberta Court of Appeal regarding the constitutionality of the IAA and the hearing is expected to take place in the first half of 2021.

## **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* (Alberta) and a number of related statutes, including the *Oil and Gas Conservation Act* (Alberta) (the “**OGCA**”), the *Oil Sands Conservation Act* (Alberta), the *Pipeline Act* (Alberta) and the *Environmental Protection and Enhancement Act* (Alberta). 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 Surface Rights Board, as well as Alberta 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 Alberta Environment and Parks, Alberta Energy, the Aboriginal Consultation Office and the Land Use Secretariat.

The Government of Alberta’s land-use policy for Alberta 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, increased seismicity 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. The Corporation routinely conducts hydraulic fracturing in its drilling and completion programs. 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 crude oil and natural gas producers working in certain areas where the likelihood of increased seismic activity 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 currently have operations in a Seismic Protocol Region. Oil and natural gas producers in each of the Seismic Protocol Regions are subject to a “traffic light” reporting system that sets thresholds on the Richter scale of earthquake magnitude. The thresholds vary among the Seismic Protocol Regions, and trigger a sliding scale of obligations from the crude oil or natural gas producers operating there. Such obligations range from no action required, to informing the AER and invoking an approved response plan, to ceasing operations and informing the AER. The AER has the discretion to suspend operations while it investigates following a seismic event until it has assessed the ongoing risk in a specific area and/or may require the operator to update its response plan. The AER may extend these requirements to other areas of Alberta if necessary, subject to the results of its ongoing province-wide monitoring.

### Liability Management Rating Program

In Alberta, the AER administers the licensee Liability Management Rating Program (the “**AB LMR Program**”). The AB LMR Program governs most conventional upstream oil and natural gas wells, facilities and pipelines. It consists of three distinct programs: the Licensee Liability Rating Program (the “**AB LLR Program**”), the Oilfield Waste Liability Program (the “**AB OWL Program**”) and the Large Facility Liability Management Program (the “**AB LF Program**”). If a licensee’s deemed liabilities in the AB LLR Program, the AB OWL Program and/or the AB LF Program exceed its deemed assets in those programs, the licensee must provide the AER with a security deposit. Failure to do so may restrict the licensee’s ability to transfer licences. This ratio of a licensee’s assets to liabilities across the three programs is referred to as the licensee’s liability management rating (“**LMR**”).

Complementing the AB LMR Program, the 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. The Orphan Fund was originally conceived to be bankrolled exclusively by licensees in the AB LLR Program and AB OWL Program who contribute to 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.

As a result of the Supreme Court of Canada's decision in *Orphan Well Association v Grant Thornton* (also known as 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 transfer when such a 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* (Alberta), 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 will come into force on proclamation.

In response to the increase in orphaned oil and gas sites and the environmental risks associated therewith, the AER amended its Directive 067: *Eligibility Requirements for Acquiring and Holding Energy Licences and Approvals* ("**Directive 067**"), which deals with licensee eligibility to operate wells and facilities, to require the provision of extensive corporate governance and shareholder information. All transfers of well, facility and pipeline licences in the province are subject to AER approval. As a condition of transferring existing AER licences, approvals and permits, all transfers are now assessed on a non-routine basis and the AER now requires all transferees to demonstrate that they have an LMR of 2.0 or higher immediately following the transfer, or to otherwise prove to the satisfaction of the AER that they can meet their abandonment and reclamation obligations, such as by posting security or reducing their existing obligations.

Both the Government of Alberta and/or the AER may make further rule changes to Alberta's liability management programs at any time. For example, on July 30, 2020, the Government of Alberta announced a new Liability Management Framework (the "**AB LMF**") that will replace the AB LMR Program and its constituent programs. Among other changes under the AB LMF, the AB LLR Program will be replaced with the Licensee Capability Assessment System, which is intended to be a more comprehensive assessment of corporate health and will consider a wider variety of factors than those considered under the AB LLR Program and will establish clear expectations for industry with regards to the management of liabilities throughout the entire lifecycle of oil and natural gas projects. Importantly, the AB LMF will also provide proactive support to distressed operators and will require mandatory annual minimum payments towards outstanding reclamation obligations in accordance with five-year rolling spending targets.

The Government of Alberta followed the announcement of the AB LMF with amendments to the *Oil and Gas Conservation Rules* and the *Pipeline Rules* in late 2020. The changes to these rules fall into three broad 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.

The AER has published a draft of an amended Directive 067 to implement some of these changes (the "**Draft Directive**"). The changes introduced by the Draft Directive include building on the AER's corporate and financial disclosure requirements for parties who wish to acquire, hold or transfer licences in Alberta, and broadening the AER's discretion to withhold or revoke licensees' privileges if they are assessed as posing an "unreasonable risk". The feedback that the AER receives will be considered in the determination of the final revised Directive 067, and the rollout of its strategy the AB LMF may require changes to other Directives as well. As a result, transactions may

be affected in this period of transition, resulting in delays for licence transfers and regulatory uncertainty as the criteria and requirements for licensees are subject to change.

To address abandonment and reclamation liabilities in Alberta, the AER implements, from time to time, programs intended to encourage the decommissioning, remediation and reclamation of inactive or marginal oil and natural gas infrastructure. Beginning in 2015, for example, the AER oversaw the Inactive Well Compliance Program, a five-year program intended to address the growing inventory of inactive and noncompliant wells in Alberta. More recently, the AER announced a voluntary area-based closure program in 2018 (the “**ABC Program**”). The ABC Program is designed to reduce the cost of abandonment and reclamation operations through industry collaboration and economies of scale. Participants seeking to participate in the program must commit to an inactive liability reduction target to be met through closure work of inactive assets.

#### Federal and Provincial Support for Liability Management

As part of an announcement of federal relief for Canada’s petroleum and natural gas industry in response to COVID-19, the Federal Government pledged \$1.72 billion to clean up orphan and inactive wells in Alberta, Saskatchewan and British Columbia. These funds are being administered by regulatory authorities in each province. In Alberta, Alberta Energy is disbursing its \$1 billion share of the funds through the Site Rehabilitation Program. In addition to the funds administered by the provincial governments, the Federal Government announced a \$200 million loan to the Orphan Fund and in early March 2020, the Government of Alberta announced an extension by up to \$100 million of an existing \$235 million loan to the Orphan Fund.

### **Climate Change Regulation**

#### **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 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. On January 20, 2021, President Biden of the United States signed an executive order to rejoin the Paris Agreement. To date, 189 of the 197 parties to the UNFCCC have ratified the Paris Agreement, including Canada. Decisions about a prospective carbon market and emissions cuts have been delayed until the next climate conference, scheduled to take place in November 2021.

The Federal Government has pledged to cut its emissions by 30% from 2005 levels by 2030, but indicated in its recent Speech from the Throne that it may implement policy changes to exceed this target. Specific details have not yet been announced. The Federal Government released the Pan-Canadian Framework on Clean Growth and Climate Change in 2016 (the “**Pan-Canadian Framework**”), which sets out a plan to meet its 2030 emissions reduction target.

On November 19, 2020, the Federal Government announced Bill C-12: *An Act respecting transparency and accountability in Canada’s efforts to achieve net-zero greenhouse gas emissions by the year 2050*. Canada joins over 120 countries in committing to net-zero emissions by 2050, including the UK, Germany, France and Japan. Once passed, Bill C-12 will legally bind the Federal Government to a process to achieve net-zero emissions by 2050. The legislation will, among other things, set rolling five-year emissions-reduction targets (starting in 2030) and require plans to reach each target on a reporting basis and enshrine greater accountability and public transparency into Canada’s plan for meeting net-zero emissions by 2050 by providing for independent third-party review by the Commissioner of the Environment and Sustainable Development.

On December 11, 2020, the Government of Canada released its Healthy Environment and a Healthy Economy Plan (the “**HEHE Plan**”) which builds on the Pan-Canadian Framework and provides a road map forward to meet Canada’s 2030 emissions reduction target and achieve net-zero emissions by 2050. The HEHE Plan includes significant investment over the next five years in new and existing Federal Government projects to reduce carbon emissions. Also of relevance to the petroleum and natural gas industry, the Federal Government has announced that it will implement a ban on certain single-use plastics in 2021.

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 for large industry

and a regulatory fuel charge imposing an initial price of \$20/tonne of 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 emissions pricing systems in place that meet the federal standards. The effect of the GGPPA is that, regardless of whether a particular province has enacted legislation of its own, there is a uniform price on emissions across the country. Under current federal plans, this price will escalate by \$10 per year until it reaches a price of \$50/tonne of CO<sub>2</sub>e in 2022. On December 11, 2020, as part of the HEHE Plan, the Federal Government announced its intention to continue the annual price increases beyond 2022, such that, commencing in 2023, the benchmark price per tonne of CO<sub>2</sub>e will increase by \$15 per year until it reaches \$170/tonne of CO<sub>2</sub>e in 2030. Starting April 1, 2021, the minimum price permissible under the GGPPA is \$40/tonne of CO<sub>2</sub>e.

Alberta, Saskatchewan, Ontario and Manitoba have challenged the constitutionality of the GGPPA. In both the Saskatchewan and Ontario references, the appellate Courts ruled in favour of the constitutionality of the GGPPA; the Alberta Court of Appeal determined that the GGPPA is unconstitutional. All three judgments have been appealed to the Supreme Court of Canada and the hearing took place in September 2020. A decision is expected in early 2021. Manitoba's judicial review application was heard by the Federal Court of Canada on December 7, 2020.

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 industry, 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, as well as ensuring 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.

As part of its efforts to provide relief to Canada's oil and natural gas industry in light of the COVID-19 pandemic, on October 29, 2020, the Federal Government launched the \$750-million Emission Reduction Fund to reduce methane and GHG emissions. The fund will provide repayable funding to eligible onshore and offshore oil and natural gas companies to support investments to reduce GHG emissions by adopting greener technologies.

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 petroleum and natural gas industry, to limit the emission of air pollutants such as nitrogen oxides and sulphur dioxide.

The Federal Government has also announced that it will implement a Clean Fuel Standard that will require producers, importers and distributors to reduce the emissions intensity of liquid fuels. It is expected that the applicable regulations will come into force in December 2022.

### **Alberta**

In November 2015, the Government of Alberta introduced a Climate Leadership Plan. Under this strategy, the *Climate Leadership Act* (Alberta) (the "**CLA**") came into force on January 1, 2017 and established a fuel charge that was compliant with federal requirements. In December 2016, the *Oil Sands Emissions Limit Act* (Alberta) 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.

In June 2019, the Government of Alberta repealed the CLA effective May 30, 2019. As a result, Alberta became a "listed province" under the federal GGPPA and the federally imposed fuel charge took effect in Alberta on January 1, 2020. In accordance with the GGPPA, the fuel charge payable in Alberta is currently \$30/tonne of CO<sub>2</sub>e and will increase to \$40/tonne on April 1, 2021.

Alberta's *Technology Innovation and Emissions Reduction Implementation Act, 2019* ("**TIER**") and accompanying regulations, the *Technology Innovation and Emissions Reduction Regulation* (the "**TIER Regulation**"), came into effect on January 1, 2020. The TIER Regulation varies Alberta's system of managing pollution caps and taxes on large emitters. Previously, large emitters were subject to a cap and trade system under the *Carbon Competitiveness Incentive Regulation* ("**CCIR**") which was enacted pursuant to the former *Climate Change and Emissions*

*Management Act* (“**CCEMA**”). Following the implementation of TIER, CCEMA was renamed the *Emissions Management and Climate Resilience Act*. On December 6, 2019, the Federal Government approved the TIER Regulation. Accordingly, the regulation of emissions from heavy industry remains subject to provincial regulation.

The TIER Regulation applies to emitters that emit more than 100,000 tonnes of CO<sub>2</sub>e per year in 2016 or any subsequent year. Emitters can apply for a facility-specific benchmark, under which their 2020 target is to reduce emissions intensity by 10% as measured against that facility’s individual benchmark, with a further 1% reduction for each subsequent year. The facility-specific benchmark does not apply to all facilities. Certain facilities, such as those in the electricity sector, 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 to ensure that the cost of ongoing compliance takes this into account. Under the TIER Regulation, facilities in high-emitting or trade exposed sectors can opt-in to the program in specified circumstances despite the fact that 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 and 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. Pursuant to this goal, the *Methane Emission Reduction Regulation* came into force on January 1, 2020, and the AER simultaneously released an updated edition of Directive 060: *Upstream Petroleum Industry Flaring, Incinerating, and Venting*. The release of the updated Directive 060 complements a previously released update to Directive 017: *Measurement Requirements for Oil and Gas Operations* that took effect in December 2018. Together, these updated Directives represent Alberta’s first step toward achieving its 2025 goal. In November 2020, the Government of Alberta and the Federal Government announced an equivalency agreement regarding the reduction of methane emissions such that the Federal Methane Regulations will not apply in Alberta.

Alberta was also the first jurisdiction in North America to direct dedicated funding to implement carbon capture and storage technology across industrial sectors. Alberta has committed \$1.24 billion through 2025 to fund two commercial-scale carbon capture and storage projects. Both projects will help reduce the CO<sub>2</sub> emissions from the oil sands and fertilizer sectors, and reduce GHG emissions by 2.76 million tonnes per year. On December 2, 2010, the Government of Alberta passed the *Carbon Capture and Storage Statutes Amendment Act, 2010* (Alberta). It deemed the pore space underlying all land in Alberta to be, and to have always been the property of the Crown and provided for the assumption of long-term liability for carbon sequestration projects by the Crown, subject to the satisfaction of certain conditions.

### **Indigenous Rights**

Constitutionally mandated government-led consultation with and, if applicable, accommodation 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 December 2020, the Federal Government introduced Bill C-15: *An Act respecting the United Nations Declaration on the Rights of Indigenous Peoples Act* (“**Bill C-15**”). Similar to British Columbia’s DRIPA, the intention of Bill C-15, if passed, is to establish a process whereby the Government of Canada will 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.

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 Bill C-15 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.



## Accountability and Transparency

In 2015, ESTMA came into effect, which imposed mandatory reporting requirements on certain entities engaged in the “commercial development of oil, gas or minerals”, including exploration, extraction and holding permits. All companies subject to ESTMA must report payments over CDN\$100,000 made to any level of a Canadian or foreign government (including Indigenous groups), including royalty payments, taxes (other than consumption taxes and personal taxes), fees, production entitlements, bonuses, dividends (other than ordinary dividends paid to shareholders), infrastructure improvement payments and other prescribed categories of payments.

## RISK FACTORS

**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. If any of the risks set out below materialize, the Corporation’s business, financial condition, results of operations, prospects, cash flow and reputation may be adversely affected, which may, in turn, reduce or restrict the Corporation’s ability to pay dividends and may materially affect the market price of the Corporation’s securities.**

### Prices, Markets and Marketing

***Various factors may adversely impact the prices and marketability of oil, natural gas and NGLs, affecting the Corporation’s revenue, production volumes, development and exploration activities, value of its reserves, cash flow and ability to access capital***

The Corporation’s revenue, operating results and financial condition depend substantially on prevailing prices for oil and natural gas and the Corporation’s ability to successfully market its oil and natural gas production from its properties. 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.

The Corporation’s ability to market its oil and natural gas may depend upon its ability to acquire capacity on pipelines that deliver natural gas, crude oil and NGLs to commercial markets or contract for the delivery of crude oil by rail (see “*Industry Conditions – Transportation Constraints and Market Access*”, “*Risk Factors – Weakness and Volatility in the Oil and Natural Gas Industry*” and “*Risk Factors – Gathering and Processing Facilities, Pipeline Systems and Rail*”). Deliverability uncertainties include the distance the Corporation’s reserves are from pipelines, railway lines, processing and storage facilities and operational problems affecting pipelines, railway lines and facilities.

Prices for oil and natural gas are subject to large fluctuations in response to relatively minor changes in the supply of and demand for oil and natural gas, market uncertainty and a variety of additional factors that are beyond the Corporation’s control. These factors include, but are not limited to, the following:

- global energy supply and demand;
- the actions taken by OPEC and other oil and natural gas exporting nations;
- political conditions, instability and hostilities;
- domestic and foreign supplies of crude oil, NGLs and natural gas;
- the level of consumer demand for different qualities and types of crude oil and NGLs, including the level of demand destruction resulting from, and the pace of recovery following the COVID-19 pandemic;
- the production and storage levels of North American natural gas and crude oil and the supply and price of imported oil;
- the ability to export crude oil, LNG and NGLs from North America;
- the availability, proximity and capacity of gathering, transportation, processing and/or refining facilities in regional or localized areas that may affect the realized prices for oil and natural gas;

- weather conditions;
- government regulations, including existing and proposed changes to such regulations;
- the effect of world-wide environmental regulations and energy conservation and GHG reduction measures;
- the price and availability of alternative energy supplies; and
- global and domestic economic conditions, including currency fluctuations.

Oil and natural gas prices are expected to remain volatile for the near future because of market uncertainties over the supply and demand of these commodities. Market events and conditions, including the current state of the world economy, OPEC actions, sanctions imposed on certain oil producing nations by other countries, ongoing credit and liquidity concerns, the impact of protectionist measures on foreign trade and public sentiment regarding fossil fuels have caused significant volatility in commodity prices. For instance, in 2020, oil prices deteriorated due to softening global demand caused by the COVID-19 pandemic. In March 2020, OPEC and Russia were unable to reach an agreement to further manage oil production volumes to support global oil prices. Saudi Arabia responded by reducing its pricing and promising to increase production to over 10 million bbls/d. These actions led to the deepest drop in crude oil prices that global markets have seen since 1991. With the rapid spread of COVID-19 and additional oil supply, oil prices and global equity markets deteriorated significantly and remain under pressure. Prices for crude oil and natural gas are also impacted by the availability of foreign markets and the ability to access such markets.

Any substantial and prolonged decline in the price of oil and natural gas would have an adverse effect on the carrying value of the Corporation's assets, borrowing capacity, revenue, profitability and cash flow from operations and may have a material adverse effect on the Corporation's business, financial condition, results of operations, prospects, its ability to pay dividends and ultimately on the market prices of the Corporation's securities.

A material decline in oil and natural gas prices could result in a reduction in 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. The Corporation might also elect not to produce from certain wells at lower prices. In addition, any prolonged period of low crude oil or natural gas prices could result in a decision by the Corporation to suspend or slow exploration and development activities or the construction or expansion of new or existing facilities or reduce its production levels.

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 the value or terms of such arrangements. Price volatility also makes it difficult to budget for and project the return on potential acquisitions, divestitures or exploitation projects.

Lower commodity prices may also affect the volume and value of the Corporation's reserves, rendering certain reserves uneconomic for development. The Corporation's reserves at December 31, 2020 are estimated using forecast prices and costs. If oil and natural gas prices stay at current levels or decrease, the Corporation's reserves may be substantially reduced as economic limits of developed reserves are reached earlier and undeveloped reserves become uneconomic at such prices. Even if some reserves remain economic at lower price levels, sustained low prices may compel the Corporation to re-evaluate its development plans and reduce or eliminate various projects with marginal economics. Any decrease in the value of the Corporation's reserves may reduce the borrowing base under the Credit Facilities, which, depending on the level of the Corporation's indebtedness, could result in the Corporation having to repay a portion of its indebtedness. See *"Risk Factors – Credit Facilities"*.

In addition, lower commodity prices restrict the Corporation's cash flow resulting in less funds from operations being available to fund the Corporation's capital expenditure programs. The Corporation's capital expenditure plans are impacted by the Corporation's cash flow. Consequently, the Corporation may not be able to replace its production with additional reserves and both the Corporation's production and reserves could be reduced on a year-over-year basis.

In addition to possibly resulting in a decrease in the value of the Corporation's economically recoverable reserves, lower commodity prices may also result in a decrease in the value of the Corporation's infrastructure and facilities,

all of which could also have the effect of requiring a write-down of the carrying value of its oil and natural gas assets on its balance sheet and the recognition of an impairment charge on its income statement.

### **Weakness and Volatility in the Oil and Natural Gas Industry**

#### ***Declining general economic, business or industry conditions may have a material adverse effect on the Corporation's results of operations, liquidity and financial condition***

Concerns over global economic conditions, fluctuations in interest rates and foreign exchange rates, stock market volatility, energy costs, geopolitical issues, OPEC actions, inflation, the availability and cost of credit, the volatility of major stock exchanges in the People's Republic of China, the deceleration of economic growth in the People's Republic of China, trade disputes between the United States and the People's Republic of China, civil unrest in Venezuela and Iran and the COVID-19 pandemic have contributed to increased economic uncertainty and diminished expectations for the global economy over the past few years. In addition, continued hostilities in the Middle East and the occurrence or threat of terrorist attacks, including attacks on oil infrastructure in oil producing nations, in the United States or other countries could adversely affect the economies of Canada, the United States and other countries.

Concerns about global economic growth have had a significant adverse impact on global financial markets and commodity prices. If the economic climate in Canada, the United States or abroad deteriorates, worldwide demand for petroleum products could diminish, which could impact the price at which the Corporation can sell its oil, NGLs and natural gas, affect the ability of the Corporation's vendors, suppliers and customers to continue operations and ultimately adversely impact the Corporation's results of operations, liquidity and financial condition.

These events and conditions have caused a significant reduction in the valuation of oil and natural gas companies and a decrease in the confidence in the oil and natural gas industry. These difficulties have been exacerbated in Canada by political and other actions resulting in uncertainty surrounding regulatory, tax, royalty changes and environmental regulation. In addition, difficulties encountered by midstream proponents to obtain the necessary approvals on a timely basis to build pipelines, LNG plants and other facilities to provide better access to markets for the oil and natural gas industry in Western Canada has led to additional downward price pressure on oil and natural gas produced in Western Canada. The resulting price differential between Western Canadian Select crude oil, Brent and WTI crude oil has created uncertainty and reduced confidence in the oil and natural gas industry in Western Canada. See "Industry Conditions".

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

#### ***The Corporation's business, operations and financial condition 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, any existing reserves the Corporation may have at a particular point in time and the production therefrom, will decline over time as such existing reserves are produced. 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 the development. 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. The success of the Corporation's business is highly dependent on its ability to acquire or discover new reserves in a cost-efficient manner as substantially all of the Corporation's cash flow is derived from the sale of the petroleum and natural gas reserves that it accumulates and develops. In order to remain financially viable, the Corporation must be able to replace reserves over time at a lesser cost on a per unit basis than its cash flow on a per unit basis.

Future oil and natural gas exploration may involve unprofitable efforts from dry wells or 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, the shutting-in of wells resulting from extreme weather conditions, insufficient storage or transportation capacity or geological and mechanical conditions. While diligent well supervision, effective maintenance operations and the development and utilization of enhanced 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 or 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 and 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 and business interruption insurance in amounts that it considers consistent with industry practice, liabilities associated with certain risks could exceed policy limits or not be covered. In either event, the Corporation could incur significant costs. See *"Risk Factors – Insurance"*.

## **Public Health Crises**

### ***Public health crises, including COVID-19, could adversely affect the Corporation's business***

The Corporation's business, operations and financial condition could be materially adversely affected by the outbreak of epidemics or pandemics or other health crises. On March 11, 2020, the World Health Organization declared the COVID-19 outbreak a pandemic, prompting governments and regulatory authorities around the world to implement measures designed to contain the COVID-19 pandemic, including widespread business closures, social distancing protocols, travel restrictions, quarantines, curfews and restrictions on gatherings and events. While a number of containment measures have been and continue to be gradually eased or lifted across some regions, additional safety precautions and operating protocols aimed at containing the spread of COVID-19 have been and continue to be instituted in line with guidance from public health authorities. In addition, the emergence of a second wave of the COVID-19 pandemic, together with the emergence of variant COVID-19 strains, has led to the imposition of containment measures in many regions within Canada and globally. The COVID-19 pandemic has had a significant negative impact on global economic conditions, including a sharp decrease in crude oil demand which, combined with other macro-economic conditions, has resulted in significant volatility in oil and natural gas commodity prices, as well as increased economic uncertainty.

There is significant ongoing uncertainty surrounding COVID-19 and the extent and duration of the impacts that Birchcliff may experience. While the duration and full impact of the COVID-19 pandemic is not yet known, the effect of low commodity prices as a result of reduced demand associated with the impact of COVID-19 has had, and may continue to have a negative impact on the Corporation's business, results of operations, financial condition and the environment in which it operates. Low prices for crude oil and natural gas will reduce Birchcliff's cash flow, impact its level of capital investment and may result in the reduction of production at certain producing properties. Further declines in commodity prices could lead to future impairments on the Corporation's properties and assets.

Furthermore, the Corporation may from time to time have restricted access to capital and increased borrowing costs. In addition to the economic impacts associated with falling commodity prices, the effects of COVID-19 may also include disruptions to production operations, challenges accessing materials and services, increased employee absenteeism from illness and temporary closures of the Corporation's facilities. COVID-19 may also increase the Corporation's third-party credit risk and the risk that counterparties default on their contractual obligations to the Corporation or declare force majeure. All of the foregoing may adversely and materially affect Birchcliff's business, results of operations, financial condition, prospects and its ability to pay dividends. The ultimate impacts will depend on future developments that are highly uncertain and cannot be predicted, including the scope, severity, duration and additional subsequent waves of the COVID-19 pandemic, as well as the effectiveness of actions and measures taken by the various levels of government. Despite recent positive vaccine developments, the ongoing evolution of the development and distribution of effective vaccines also continues to raise uncertainty.

Additionally, the COVID-19 pandemic and its effect on local and global economic conditions could aggravate the other risk factors identified in this Annual Information Form, the extent of which is not yet known.

### **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 delays and interruptions may delay expected revenue from operations. Significant project cost overruns could make a project uneconomic. The Corporation's ability to execute projects and successfully market its oil and natural gas depends upon numerous factors beyond the Corporation's control, including:

- the availability and proximity of processing and pipeline capacity;
- the availability of storage capacity;
- the availability of, and the ability to acquire, water supplies needed for drilling and hydraulic fracturing and the Corporation's ability to dispose of water used or removed from strata at a reasonable cost and in accordance with applicable environmental regulations;
- the 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;
- the availability and productivity of skilled labour; and
- the 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, and may be unable to effectively market the oil and natural gas that it produces.

### **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 produced and sold by the Corporation is subject to the accessibility, availability, proximity and capacity of these gathering and processing facilities, pipeline systems and

railway lines. The lack of firm pipeline capacity, production limits and limits on availability of capacity in gathering and processing facilities continues to affect the oil and natural gas industry and limits the ability to transport produced oil and natural gas to market. In addition, the pro-rationing of capacity on inter-provincial pipeline systems continues to affect the ability of oil and natural gas companies to export oil and natural gas and could result in the inability of the Corporation to realize the full economic potential of the produced oil or natural gas or a reduction of the price offered for the production from its properties. Unexpected shutdowns 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 and operations which may have a material adverse effect on its business and financial condition. As a result, producers have considered rail lines as an alternative means of transportation. The Federal Government and various provincial governments have been active in recent years in their support for and opposition to major infrastructure projects in Canada, leading to increased awareness of and challenges to, interprovincial and international infrastructure projects. On August 28, 2019, with the passing of Bill C-69, the CERA and the IAA came into force. See *"Industry Conditions – Regulatory Authorities and Environmental Regulation"*. The impact of the new federal regulatory scheme on the oil and natural gas industry and the timing for receipt of approvals of major projects is unclear.

The Corporation's production passes through Birchcliff owned or third-party infrastructure prior to it being ready for sale. There is a risk that should this infrastructure fail and cause a significant portion of the Corporation's production to be shut-in and unable to be sold, this could have a material adverse effect on the Corporation's available cash flow. With respect to facilities owned by third parties and over which the Corporation has no control, 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.

Further, the Corporation has certain long-term take-or-pay commitments to deliver products through third-party owned infrastructure which creates a financial liability and there can be no assurance that future volume commitments will be met which may adversely affect the Corporation's financial condition and cash flow from operations.

### **Credit Facilities**

***The Corporation's borrowing base under the Credit Facilities could be redetermined and the Corporation could fail to comply with covenants under the Credit Facilities, resulting in restricted access to capital or a requirement to repay all amounts owing thereunder***

The amount authorized under the Credit Facilities is dependent on the borrowing base determined by the Corporation's lenders. The Credit Facilities are subject to semi-annual reviews of the borrowing base limit by Birchcliff's syndicate of lenders, which limit is directly impacted by the value of Birchcliff's oil and natural gas reserves. The Corporation's lenders use the Corporation's reserves, commodity prices and other factors to determine the Corporation's borrowing base. Commodity prices continue to be depressed and have fallen dramatically since 2014. Continued depressed commodity prices or further declines in commodity prices could result in a reduction in the Corporation's borrowing base, thereby reducing the funds available to the Corporation under the Credit Facilities. As the borrowing base is determined based on the lender's interpretation of the Corporation's reserves and future commodity prices, there can be no assurance as to the amount of the borrowing base determined at each review.

In addition to the semi-annual reviews of the borrowing limit, the lenders have the right to redetermine the borrowing base limit in certain other circumstances. In the event that: (i) the Corporation, any material subsidiary of the Corporation or any of its borrowing base properties become subject to an abandonment/reclamation order by an energy regulator where the aggregate estimated current cost to the Corporation and its material subsidiaries to comply with all outstanding orders exceeds 10% of the borrowing base; or (ii) the liability management rating (as such term is defined in the agreement governing the Credit Facilities) of the Corporation or any material subsidiary is less than 2.0, then, unless agreed to by all of the lenders, a redetermination of the borrowing base shall be completed within 45 days of receipt by the Corporation or the applicable material subsidiary of such order or

demand in the case of (i) above, and of receipt by the agent of notice that the liability management rating is less than 2.0 in the case of (ii) above. Further, a majority of lenders have the right once per year to redetermine the borrowing base in between scheduled redeterminations and the borrowing base may also be reduced in connection with asset dispositions.

If, at the time of a borrowing base redetermination, the outstanding borrowings under the Credit Facilities were to exceed the borrowing base as a result of any such redetermination, the Corporation would be required to make principal repayments or otherwise eliminate the borrowing base shortfall. If the Corporation is forced to repay a portion of its indebtedness under the Credit Facilities, it may not have sufficient funds to make such repayments. If it does not have sufficient funds and is otherwise unable to negotiate renewals of its borrowings or arrange new financing, it may have to sell significant assets. Any such sale could have a material adverse effect on the Corporation's business and financial results.

The maturity date of the Credit Facilities is currently May 11, 2022. The Corporation may each year, at its option, request an extension to the maturity date of the Syndicated Credit Facility and the Working Capital Facility, or either of them, for an additional period of up to three years from May 11 of the year in which the extension request is made. In the event that either of the Credit Facilities is not extended before the maturity date, all outstanding indebtedness under such Credit Facility will be repayable at the maturity date. There is also a risk that the Credit Facilities will not be renewed for the same principal amount or on the same terms. Any of these events could adversely affect the Corporation's ability to fund its ongoing operations and to pay dividends.

The Corporation is required to comply with covenants under the Credit Facilities. 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 an event of default under the Credit Facilities, which could result in the Corporation being required to repay amounts owing thereunder and may prevent the payment of dividends to shareholders. 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 impose certain restrictions on the Corporation, including, but not limited to, restrictions on the payment of dividends, incurring of additional indebtedness, dispositions of properties and the entering into of amalgamations, mergers, plans of arrangements, reorganizations or consolidations with any person. The Credit Facilities do not currently contain any financial maintenance covenants; however, there is no assurance that the Corporation's lenders will not impose any such covenants on the Corporation in the future. Any such covenants may either affect the availability or price of additional funding.

If the Corporation's lenders require repayment of all or portion of the amounts outstanding under the Credit Facilities for any reason, including for a default of a covenant, 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 the 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 the 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.

#### **Substantial Capital and 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 anticipates that it will make substantial capital expenditures for the acquisition, exploration, development and production of oil and natural gas reserves in the future. As future capital expenditures are expected to 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.

The Corporation's cash flow from its properties may not be sufficient to fund its ongoing activities at all times and from time to time the Corporation may require additional financing. The inability of the Corporation to access sufficient capital for its operations and activities could have a material adverse effect on the Corporation's financial condition, results of operations and prospects.

Due to the conditions in the oil and natural gas industry, global economic and political conditions and the domestic landscape, the Corporation may from time to time have restricted access to capital and increased borrowing costs. The conditions in or affecting the oil and natural gas industry have negatively impacted the ability of oil and natural gas companies to access additional financing. 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.

There can be no assurance that debt or equity financing or cash generated by operations will be available or sufficient to meet the Corporation's requirements or, if debt or equity financing is available, that it will be on terms acceptable to the Corporation. 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 Corporation may be required to seek additional equity financing on terms that are highly dilutive to existing shareholders. Moreover, future activities may require the Corporation to alter its capitalization significantly.

#### **Uncertainty of 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 net revenue attributed to such reserves. The reserves and associated future net revenue information set forth in this Annual Information Form are estimates only. In general, estimates of economically recoverable oil, natural gas and NGLs reserves and the future net revenue therefrom are based upon a number of variable factors and assumptions, such as historical production from the properties, production rates, ultimate reserves recovery, commodity prices, the timing and amount of capital expenditures, marketability of oil, natural gas and NGLs, royalty rates, the assumed effects of regulation by governmental agencies and future operating costs, all of which may vary materially from actual results. For these reasons, estimates of the economically recoverable oil, natural gas and NGLs reserves attributable to any particular group of properties, the classification of such reserves based on risk of recovery and estimates of future net revenue associated with reserves prepared by different engineers, or by the same engineer at different times, may vary. The Corporation's actual production, revenue, taxes and development and operating expenditures with respect to its reserves will vary from estimates thereof 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 and such variations could be material.



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

Actual production and cash flow derived from the Corporation's reserves will vary from the estimates contained in the Corporation's independent reserves evaluation and such variations could be material. The independent reserves evaluation is based in part on the assumed success of activities the Corporation intends to take in future years. The reserves and estimated future net revenue to be derived therefrom and contained in the Corporation's independent reserves evaluation will be reduced to the extent that such activities do not achieve the level of success assumed in the evaluation.

The Deloitte Reserves Report is effective as of December 31, 2020 and, except as may be specifically stated or required by applicable securities laws, has not been updated since that date and therefore does not reflect changes since that date.

### **Political Uncertainty**

#### ***The Corporation's business may be adversely affected by recent political and social events and decisions made in Canada, the United States, Europe and elsewhere***

In the last several years, the United States and certain European countries have experienced significant political events that have cast uncertainty on global financial and economic markets. During its tenure, the former U.S. administration withdrew the United States from the Trans-Pacific Partnership and the United States Congress passed sweeping tax reforms, which, among other things, significantly reduced U.S. corporate tax rates. This has affected the competitiveness of other jurisdictions, including Canada.

In addition, the USMCA, which replaced NAFTA, was ratified on July 1, 2020 and may impact the Corporation's business. See *"Industry Conditions – The USMCA and Other Trade Agreements"*. The newly-inaugurated Biden administration in the U.S. has indicated that it will roll-back certain policies of the former administration and has revoked the presidential permit for TC Energy's Keystone XL Pipeline. While it is unclear which other legislation or policies of the former U.S. administration will be rolled-back and if such roll-backs will be a priority of the new administration in light of the ongoing COVID-19 pandemic, any future actions taken by the new U.S. administration could have a negative impact on the Canadian economy and on the businesses, financial condition, results of operations, prospects and the valuation of Canadian oil and natural gas companies, including the Corporation.

In addition to the political disruption in the United States, the impact of the United Kingdom's exit from the European Union remains to be determined. Some European countries have also experienced the rise of anti-establishment political parties and public protests held against open-door immigration policies, trade and globalization. Conflict and political uncertainty also continues in the Middle East. To the extent that certain political actions taken in North America, Europe and elsewhere in the world result in a marked decrease in free trade, access to personnel and freedom of movement could have an adverse effect on the Corporation's ability to market its products internationally, increase costs for goods and services required for the Corporation's business, reduce access to skilled labour and negatively impact the Corporation's business, financial condition, results of operations, prospects and the market value of its securities.

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. Alberta elected a new government in 2019 that is supportive of the Trans Mountain Pipeline expansion project. Although the Supreme Court of Canada unanimously rejected the Government of British Columbia's proposed regulation of the transport of heavy oil products into and through British Columbia in January 2020, tensions remain between provincial and federal governments. Continued uncertainty and delays have led to decreased investor confidence, increased capital costs and operational delays for producers and service providers operating in the jurisdictions where the Corporation's properties are located.

The Federal Government was re-elected in 2019, but in a minority position. The ability of the minority Federal Government to pass legislation will be subject to whether it is able to come to agreement with, and garner the support of, the other elected parties, most of whom are opposed to the development of the oil and natural gas industry. The minority Federal Government will also be required to rely on the support of the other elected parties to remain in power, which provides less stability and may lead to an earlier subsequent federal election. Lack of political consensus, at both the federal and provincial government level, continues to create regulatory uncertainty, the effects of which become apparent on an ongoing basis, particularly with respect to carbon pricing regimes, curtailment of crude oil production and transportation and export capacity, and may affect the business of participants in the oil and natural gas industry.

See *“Industry Conditions – Climate Change Regulation”*, *“Industry Conditions – Transportation Constraints and Market Access”* and *“Industry Conditions – The USMCA and Other Trade Agreements”*.

## **Climate Change**

***Climate change may pose varied and far ranging risks to the business and operations of the Corporation, both known and unknown, which may adversely affect its business, operations and financial condition***

Public support for climate change action has grown in recent years, as has the impetus to pursue new technologies to mitigate the effects of climate change. Governments in Canada and around the world have responded by adopting ambitious emissions reduction targets and supporting legislation, including measures relating to carbon pricing, clean energy and fuel standards, and alternative energy incentives and mandates.

The Corporation has grouped its risks related to climate change into two main categories: physical risks and transition risks. Physical risks have been further sub-divided into acute physical risks (those that are event-driven, including increased severity of extreme weather events) and chronic physical risks (those that relate to longer-term shifts in climate patterns). Transition risks have been further sub-divided into reputational, market, regulatory and policy, legal and technology risks. For a description of the climate change regulation applicable to the Corporation, see *“Description of the Business – Environmental Protection Regulation and Costs”* and *“Industry Conditions – Climate Change Regulation”*.

### *Physical Risks – Acute*

Climate change has been linked to extreme weather conditions. Extreme hot and cold weather, heavy snowfall, heavy rainfall and wildfires may restrict or interfere with the Corporation’s operations, increasing its costs and negatively impacting its production. Moreover, extreme weather conditions may lead to disruptions in the Corporation’s ability to transport its production, as well as goods and services in its supply chains. Certain of the Corporation’s properties are located in locations that are proximate to forests and rivers and a wildfire or flood, respectively, may lead to significant downtime and/or damage to such assets which may affect production. At this time, the Corporation is unable to determine the extent to which climate change may lead to increased storm or weather hazards affecting its operations.

### *Physical Risks – Chronic*

Climate change has been linked to long-term shifts in climate patterns, including sustained higher temperatures. As the level of activity in the Canadian oil and natural gas industry is influenced by seasonal weather patterns, long-term shifts in climate patterns pose the risk of exacerbating operational delays and other risks posed by seasonal weather patterns. See also *“Risk Factors – Seasonality”*.

In addition, long-term shifts in weather patterns such as water scarcity, increased frequency of storms and fires and prolonged heat waves may, among other things, require the Corporation to incur greater expenditures (time and capital) to deal with the challenges posed by such changes to its premises, operations, supply chain, transport needs, and employee safety, which may in turn have a material adverse effect on the Corporation’s business, operations and financial condition. In the event of water shortages or sourcing issues, the Corporation may not be able to, or will incur greater costs to, carry out hydraulic fracturing. See also *“Risk Factors – Hydraulic Fracturing”*.

### Transition Risks – Reputational

The Corporation's business, financial condition, operations or prospects may be negatively impacted as a result of any negative public opinion towards the Corporation or as a result of any negative sentiment towards, 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. Concerns about climate change have resulted in a number of environmental activists and members of the public opposing the continued exploitation and development of fossil fuels which has influenced investors' willingness to invest in the oil and natural gas industry. Historically, political and legal opposition to the fossil fuel industry focused on public opinion and the regulatory process. More recently, however, there has been a movement to more directly hold governments and oil and natural gas companies responsible for climate change through climate litigation. In November 2018, ENvironment JEUnesse, a Québec advocacy group, applied to the Québec Superior Court to certify all Quebecois under 35 as a class in a proposed class action lawsuit against the Government of Canada for climate-related matters. While the application was denied, the group has appealed. In January 2019, the City of Victoria became the first municipality in Canada to endorse a class action lawsuit against oil and natural gas producers for alleged climate-related harms. The Union of British Columbia Municipalities defeated the City of Victoria's motion to initiate a class action lawsuit to recover costs it claims are related to climate change. See also *"Risk Factors – Changing Investor Sentiment"*, *"Risk Factors – Public Opinion and Reputational Risk"* and *"Risk Factors – Public Opposition and Non-Governmental Organizations"*.

### Transition Risks – Market

Concerns over climate change, fossil fuels, GHG emissions and water and land-use could lead to reduced demand for the oil, natural gas and NGLs that the Corporation produces, which would have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects. See also *"Risk Factors – Alternatives to and Changing Demand for Petroleum Products"*.

### Transition Risks – Regulatory and Policy

Climate change policy is evolving at regional, national and international levels and political and economic events may significantly affect the scope and timing of climate change measures that are ultimately put in place to prevent climate change or mitigate its effects. Existing and future laws and regulations may impose significant liabilities for a failure to comply with their requirements. Concerns over climate change, fossil fuels, GHG emissions and water and land-use could lead to the enactment of more stringent laws and regulations applicable to the Corporation. Any new laws and regulations (or additional requirements to existing laws and regulations) could have a material impact on the Corporation's business, financial condition, results of operations and prospects.

Adverse impacts to the Corporation's business as a result of GHG legislation may include, but are not limited to, increased compliance costs, permitting delays, increased operating costs and capital expenditures. Given the evolving nature of climate change policy and the control of GHG and resulting requirements, 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 and natural gas resulting in a decrease in the Corporation's profitability and a reduction in the value of its assets or requiring impairments for financial statement purposes.

The Corporation's exploration and production facilities and other operations and activities emit GHGs which requires the Corporation to comply with applicable GHG emissions legislation. The Corporation is subject to TIER and may become subject to future regional, provincial and/or federal climate change regulations to manage GHG emissions. See *"Description of the Business – Environmental Protection Regulation and Costs"* for further details.

See also *"Industry Conditions – Climate Change Regulation"*, *"Risk Factors – Regulatory"*, *"Risk Factors – Environmental"*, *"Risk Factors – Evolving Corporate Governance, Sustainability and Reporting Framework"* and *"Risk Factors – Carbon Pricing Risk"*.

### Transition Risks – Legal

The Corporation may become involved in, be named as a party to or be the subject of, various legal proceedings related to climate change. See also “*Risk Factors – Litigation*”.

### Transition Risks – Technology

The adoption of new technologies by the Corporation to deal with climate change could require a significant capital investment. See also “*Risk Factors – Cost of New Technologies*”.

## **Changing Investor Sentiment**

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

A number of factors, including the effects of the use of fossil fuels on climate change, the impact of oil and natural 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 natural 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 natural gas properties or companies or are reducing the amount of their investments of such entities 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 Corporation’s Board, management and employees. 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 natural gas industry and more specifically, in the Corporation, may result in limiting Birchcliff’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 value or prospects have not changed. Additionally, these factors, as well as other related factors, may cause a decrease in the value of the Corporation’s assets which may result in an impairment charge.

## **Public Opinion and Reputational Risk**

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

The Corporation’s business, financial condition, operations and prospects may be negatively impacted as a result of any negative public opinion towards the Corporation or as a result of any negative sentiment towards, 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 licences and increased costs and/or cost overruns. See also “*Risk Factors – Public Opposition and Non-Governmental Organizations*”.

Any environmental damage, loss of life, injury or damage to property caused by the Corporation’s operations could damage its reputation. Negative sentiment towards the Corporation could result in a lack of willingness of governmental authorities to grant the necessary licences or permits for the Corporation to operate its business. In addition, negative sentiment towards the Corporation could result in the residents of the areas where the Corporation is doing business opposing further operations in the area by the Corporation. If the Corporation develops a reputation of having an unsafe workplace, this may impact its ability to attract and retain the necessary skilled employees and consultants to operate its business. Further, the Corporation’s reputation could be affected by actions and activities of other corporations operating in the oil and natural gas industry, particularly other producers, over which the Corporation has no control. In addition, 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 harm 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.

#### **Public Opposition and Non-Governmental Organizations**

##### ***The oil and natural gas industry and the Corporation may be subject to public opposition and other actions by non-governmental organizations***

The oil and natural gas industry may, at times, be subject to public opposition. 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. Such public opposition could expose the Corporation to the risk of higher costs, operational delays and disruptions or even project cancellations due to increased pressure on governments and regulators by special interest groups, which may include Indigenous groups, landowners, environmental interest groups (including those opposed to oil and natural gas production operations) and other non-governmental organizations. Potential impacts of such pressure and opposition include blockades, legal or regulatory actions or challenges, increased regulatory oversight, reduced support of the federal, provincial or municipal governments, and delays in, challenges to, or the revocation of regulatory approvals, permits and/or licences, as well as 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 significant and unanticipated capital and operating expenditures which may negatively impact the Corporation's business, financial condition, results of operations and prospects.

In addition, the Corporation's oil and natural gas properties, wells and facilities or the third-party facilities and pipelines utilized by the Corporation could be the subject of a terrorist attack. If any of such 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.

#### **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 business, 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 effect on the demand for oil and natural gas products. The Corporation cannot predict the impact of the 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 flow by decreasing the Corporation's profitability, increasing its costs, limiting its access to capital or decreasing the value of its assets.

#### **Regulatory**

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

The implementation of new regulations or the modification to existing regulations affecting the oil and natural gas industry could reduce the demand for crude oil and natural gas, increase the Corporation's costs or make certain projects uneconomic, any 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 and 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 the business of the oil and natural gas industry. See *“Industry Conditions”*.

In order to conduct oil and natural gas operations, the Corporation requires regulatory permits, licences, registrations, approvals and authorizations from various governmental authorities. There can be no assurance that the Corporation will be able to obtain all of the permits, licences, registrations, approvals and authorizations that may be required to conduct operations that it may wish to undertake in the time required or on acceptable terms and conditions. Any failure to renew, maintain or obtain required permits, licences, registrations, approvals and authorizations or the revocation or termination of existing permits, licences, registrations, approvals and authorizations may disrupt such third-party lessee and/or operator operations and could have a resulting material adverse effect on the Corporation’s business and financial condition. In addition, the Corporation may have to comply with the requirements of certain federal legislation such as the *Competition Act* (Canada) and the *Investment Canada Act* (Canada), which may adversely affect its business and financial condition and the market value of its securities or assets, particularly when undertaking, or attempting to undertake, an acquisition or disposition.

## **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 municipal laws and regulations. Environmental legislation provides for, among other things, the initiation and approval of new oil and natural gas projects and restrictions and prohibitions on the spill, release or emission of various substances produced in association with oil and natural 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. See *“Industry Conditions – Regulatory Authorities and Environmental Regulation”* and *“Industry Conditions – Climate Change Regulation”*.

Compliance with environmental legislation can require significant expenditures and/or result in operational restrictions. 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.

In addition, political and economic events may significantly affect the scope and timing of climate change measures that are put in place. The implementation of new environmental regulations or the modification of existing environmental regulations affecting the oil and natural gas industry generally could reduce demand for oil and natural gas and increase costs. See *“Risk Factors – Climate Change”*.

## **Carbon Pricing Risk**

### ***Taxes on carbon emissions affect the demand for oil and natural gas and 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 has 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 and 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 companies at an economic disadvantage with their counterparts who operate in jurisdictions where there are less costly carbon regulations. See also "Risk Factors – Climate Change" and "Risk Factors – Environmental".

### **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 finance its activities (including asset acquisitions) in whole or in part with debt, which may increase the Corporation's debt levels above industry standards for peers 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.

### **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. Similarly, the Corporation may enter into agreements to fix the differential or discount pricing gap which exists and may fluctuate between different grades of oil, NGLs and natural gas and the various market prices received for such products. 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 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;
- the counterparties to the hedging arrangements or other price risk management contracts fail to perform under those arrangements; and/or
- a sudden unexpected material event impacts crude oil and natural gas prices.

Similarly, the Corporation may enter into agreements to fix the exchange rate of Canadian dollars 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 the 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.

Further, the Corporation may enter into hedging arrangements to fix interest rates applicable to the Corporation's debt. However, if interest rates decrease as compared to the interest rate fixed by the Corporation, the Corporation will not benefit from the lower interest rate.

### **Market Prices of the Corporation's Securities**

#### ***The trading price of the Corporation's securities may be volatile and adversely affected by factors related and unrelated to the oil and natural gas industry and cannot be accurately predicted***

The market price of the Corporation's securities may be volatile, which may affect the ability of holders to sell such securities at an advantageous price. The trading price of the securities of oil and natural gas issuers, including the Corporation, 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 natural gas market. This includes, but is not limited to, changing (and in some cases negative) investor sentiment towards energy-related businesses. In recent years, the volatility of oil and natural gas commodity prices, and the securities of issuers involved in the oil and natural gas business, has increased due, in part, to the implementation of computerized trading and the decrease of discretionary commodity trading. Similarly, recent market prices in the securities of oil and natural gas issuers relative to other industry sectors have led to lower oil and natural gas representation in certain key equity market indices. The volatility, trading volume and market price of oil and natural gas issuers have been impacted by increasing investment levels in passive funds that track major indices and only purchase securities included in such indices and subsequently dispose of those securities if they are excluded from such indices. In addition, many institutional investors, pension funds and insurance companies, including government sponsored entities, have implemented investment strategies increasing their investments in low-carbon assets and businesses while decreasing the carbon intensity of their portfolios through, among other measures, divestments. These factors have impacted the volatility and liquidity of certain securities and put downward pressure on the market price of those securities.

Similarly, the market prices of the Corporation's securities could be subject to significant fluctuations in response to variations in the Corporation's operating results, financial condition, liquidity and other internal factors. In addition, market price fluctuations in the Corporation's securities may also be due to the Corporation's results failing to meet the expectations of securities analysts or investors in any quarter, downward revisions in securities analysts' estimates and material public announcements by the Corporation, along with a variety of additional factors, including, without limitation, those set forth under "*Special Notes to Reader – Forward-Looking Statements*". Accordingly, the prices at which the Corporation's securities will trade cannot be accurately predicted.

#### **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 business and financial position***

Hydraulic fracturing involves the injection of water, sand and small amounts of additives under high pressure into rock formations to stimulate the production of oil and natural gas. Specifically, hydraulic fracturing enables the production of commercial quantities of oil and natural gas from reservoirs that were previously unproductive. While hydraulic fracturing has been in use for many years, there has been increased focus on the environmental aspects of hydraulic fracturing practices in recent years. Increased regulation and attention given to the hydraulic fracturing process could lead to greater opposition (including litigation) to oil and natural gas production activities using hydraulic fracturing techniques. 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 and natural gas resources from certain formations which are not commercial without the use of hydraulic fracturing. Restrictions on hydraulic fracturing could also reduce the amount of oil and natural gas that the Corporation is ultimately able to produce from its reserves and, therefore, could adversely affect the Corporation's business, financial condition, results of operations and prospects.

Seismic events are common in certain parts of Alberta and the AER has introduced seismic monitoring and reporting requirements for hydraulic fracturing operators in the Seismic Protocol Regions. These requirements include, among others, an assessment of the potential for seismicity prior to conducting operations, the implementation of a response plan to address potential seismic events, and the suspension of operations if a seismic event above a particular threshold occurs. These requirements remain in effect as long as the AER deems them necessary. Although the Corporation does not currently have operations in a Seismic Protocol Region, the AER continues to monitor seismic activity around the province and may extend these requirements to other areas of the province if necessary.

#### **Competition**

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

The oil and natural gas industry is highly 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, including land, acquisitions of reserves, access to drilling and service rigs and other equipment, access to transportation and access



to skilled technical and operating personnel. 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.

#### **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 may negatively affect the Corporation's production revenue. Accordingly, Canadian/United States exchange rates could impact the future value of the Corporation's reserves as determined by independent reserves 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 and interest rates, there is credit risk associated with the counterparties with whom the Corporation may contract. See also "*Risk Factors – Hedging*".

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 the cash available for dividends and could negatively impact the market prices of the Corporation's securities.

#### **Availability and Cost of Equipment, Materials and Services**

##### ***Restrictions on the availability and cost of equipment, materials and services may impede the Corporation's exploration, development and operating activities***

Oil and natural gas exploration, development and operating activities are dependent on the availability and cost of specialized equipment and other materials (typically leased from third parties) and skilled personnel trained to use such equipment in the areas where such activities will be conducted. The availability of such equipment, materials and personnel is limited. An increase in demand or cost, or a decrease in the availability of, such equipment, materials or personnel may impede the Corporation's exploration, development and operating activities, which, in turn, could materially adversely affect the Corporation's business and financial condition.

#### **Potential Future Drilling Locations**

##### ***The Corporation's identified potential future drilling locations are susceptible to uncertainties that could materially alter the occurrence or timing of their drilling***

The Corporation's identified potential future drilling locations represent a significant part of the Corporation's future growth. The Corporation's ability to drill and develop these locations and the drilling locations on which the Corporation actually drills wells depends on a number of uncertainties and factors, including, but not limited to, the availability of capital, equipment and personnel, oil and natural gas prices, costs, inclement weather, seasonal restrictions, drilling results, additional geological, geophysical and reservoir information that is obtained, production rate recovery, gathering system and transportation constraints, the net price received for commodities produced, regulatory approvals and regulatory changes. As a result of these uncertainties, there can be no assurance that the potential future drilling locations that Birchcliff has identified will ever be drilled and, if drilled, that such locations will result in additional oil, NGLs or natural gas production and, in the case of unbooked locations, additional reserves. As such, the Corporation's actual drilling activities may differ materially from those presently identified, which could adversely affect the Corporation's business.

## **Seasonality**

***Oil and natural gas operations are subject to seasonal 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. Road 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. In addition, certain oil and natural gas producing properties are located in areas that are inaccessible other than during the winter months because the ground surrounding the sites in these areas consists of swampy terrain. Further, extreme cold weather, heavy snowfall and heavy rainfall may restrict the Corporation's ability to access its properties and cause operational difficulties including damage to machinery or contribute to personnel injury because of dangerous working conditions. Seasonal factors and unexpected weather patterns may lead to declines in exploration and production activity and also to volatility in commodity prices as the demand for natural gas typically fluctuates during cold winter months and hot summer months.

## **All Assets in One Area**

***All of the Corporation's properties are located in the Peace River Arch area of Alberta, making the Corporation vulnerable to risks associated with having its production concentrated in one area***

All of the Corporation's producing properties are geographically concentrated in the Peace River Arch area of Alberta. As a result of this concentration, the Corporation may be disproportionately exposed to the impact of delays or interruptions of production from that area caused by transportation capacity constraints, curtailment of production, natural disasters, availability of equipment, facilities or services, adverse weather conditions or other events which impact that area. Due to the concentrated nature of the Corporation's portfolio of properties, a number of the Corporation's properties could experience any of the same conditions at the same time, resulting in a relatively greater impact on the Corporation's results of operations than they might have on other companies that have a more diversified portfolio of properties. Such delays or interruptions could have a material adverse effect on the Corporation's financial condition and results of operations.

## **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 oil and natural gas industry is characterized by rapid and significant technological advancements and introductions of new products and services utilizing new technologies. Other oil and natural gas companies may have greater financial, technical and personnel resources that allow them to implement and benefit from new technologies before the Corporation. 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 implements 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. In such case, the Corporation's business, financial condition, results of operations and prospects could be affected adversely and materially. If the Corporation is unable to utilize the most advanced commercially available technology or is unsuccessful in implementing certain technologies, its business, financial condition, results of operations and prospects could also be adversely affected in a material way.

## **Dividends**

***The payment of dividends could vary***

The declaration and payment of future dividends (and the amount thereof) is subject to the discretion of the Board and may vary depending on a variety of factors and conditions existing from time to time, including fluctuations in commodity prices, the financial condition of Birchcliff, production levels, results of operations, capital expenditure requirements, working capital requirements, debt service requirements, operating costs, royalty burdens, foreign

exchange rates, interest rates, contractual restrictions, Birchcliff's hedging activities or programs, available investment opportunities, Birchcliff's business plan, strategies and objectives, the satisfaction of the solvency and liquidity tests imposed by the ABCA for the declaration and payment of dividends and other factors that the Board may deem relevant. Depending on these and various other factors, many of which are beyond the control of Birchcliff, the dividend policy of the Corporation may vary from time to time and, as a result, future cash dividends could be reduced or suspended entirely.

Pursuant to the ABCA, the Corporation may not declare or pay a dividend if there are reasonable grounds for believing that: (i) the Corporation is, or would after the payment be, unable to pay its liabilities as they become due; or (ii) the realizable value of its assets would thereby be less than the aggregate of its liabilities and stated capital of its outstanding shares. Additionally, pursuant to the agreement governing the Credit Facilities, the Corporation is not permitted to make any distribution (which includes dividends) at any time when an event of default exists or would reasonably be expected to exist upon making such distribution, unless such event of default arose subsequent to the ordinary course declaration of the applicable distribution.

Dividends may be reduced or suspended during periods of lower cash flow from operations. The timing and amount of Birchcliff's capital expenditures, and the ability of the Corporation to repay or refinance existing debt as it becomes due, directly affects the amount of cash dividends that may be declared by the Board. Future acquisitions, expansions of Birchcliff's assets, and other capital expenditures and the repayment or refinancing of existing debt as it becomes due may be financed from sources such as cash flow from operations, the issuance of additional shares or other securities of Birchcliff, and borrowings. Dividends may be reduced, or even eliminated, at times when significant capital or other expenditures are made. There can be no assurance that sufficient capital will be available on terms acceptable to Birchcliff, or at all, to make additional investments, fund future expansions or make other required capital expenditures. To the extent that external sources of capital, including the issuance of additional shares or other securities or the availability of additional credit facilities, become limited or unavailable on favourable terms or at all due to credit market conditions or otherwise, the ability of the Corporation to make the necessary capital investments to maintain or expand its operations, to repay outstanding debt and to invest in assets, as the case may be, may be impaired. To the extent Birchcliff is required to use cash flow from operations to finance capital expenditures or acquisitions or to repay existing debt as it becomes due, the cash available for dividends may be reduced and the level of dividends declared may be reduced or suspended entirely.

Over time, the Corporation's capital and other cash needs may change significantly from its current needs, which could affect whether the Corporation pays dividends and the amount of dividends, if any, it may pay in the future. If the Corporation continues to pay dividends at the current levels, it may not retain a sufficient amount of cash to finance external growth opportunities, meet any large unanticipated liquidity requirements or fund its activities in the event of a significant business downturn.

The market value of the Corporation's securities may deteriorate if dividends are reduced or suspended. Furthermore, the future treatment of dividends for tax purposes will be subject to the nature and composition of dividends paid by Birchcliff and potential legislative and regulatory changes.

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

##### ***An inability to recruit and retain a skilled workforce and key personnel would 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.

There is competition for qualified personnel in the oil and natural gas industry 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. 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 are senior and 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 and experience, the Corporation could be negatively impacted. In addition, the Corporation could experience increased costs to retain and recruit these professionals.

### **Earnings Volatility**

#### ***Earnings of the Corporation may fluctuate in each reporting period***

The Corporation's accounting policies conform to IFRS which constitutes generally accepted accounting principles in Canada. Accounting under IFRS may result in non-cash charges and/or write-downs of net assets in the financial statements on a quarterly basis. Similarly, non-cash gains and reversals of asset write-downs may also be recorded from time to time. Income statement volatility resulting from such non-cash gains and losses under IFRS may be viewed unfavourably by the market and could result in an inability to borrow funds and/or could result in a decline in the price of the Corporation's securities.

### **Management of Growth and Integration**

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

The Corporation may be subject to both integration and growth-related risks, including capacity constraints and pressure on its internal systems and controls. The ability of the Corporation to effectively manage growth and the integration of additional assets will require it to continue to implement and improve its operational and financial systems and to expand, train and manage its employee base. The inability of the Corporation to effectively deal with this integration and growth could have a material adverse impact on its business, financial condition, results of operations and prospects.

### **Information Technology Systems and Cyber-Security**

#### ***A disruption of information technology services or a cyber-security breach may adversely affect the Corporation***

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

In the event the Corporation is unable to regularly deploy software and hardware, effectively upgrade systems and network infrastructure and take other steps to maintain or improve the efficiency and efficacy of its information technology systems, the operation of such systems could be interrupted or result in the loss, corruption or release of data. Further, the Corporation is subject to a variety of information technology and system risks as a part of its normal course 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 its business activities or its 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.

In addition to the oversight provided by the Corporation's Information Technology Committee, there is further reporting on the Corporation's information technology and cyber-security risks to the Board. Further, the

Corporation maintains policies and procedures, including a cyber-security incident response plan, that address and implement employee protocols with respect to electronic communications and electronic devices and the Corporation periodically conducts cyber-security risk assessments. The Corporation also employs encryption protection for some of its confidential information. Despite the Corporation's efforts to mitigate such cyber-phishing attacks through education and training, 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, earnings and 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, results of operations and prospects.

To date, the Corporation has not been subject to a cyber-security attack or other breach that has had a material impact on its business or operations or resulted in material losses to the Corporation; however, there is no assurance that the measures the Corporation takes to protect its business systems and operational control systems will be effective in protecting against a breach in the future and that the Corporation will not incur such losses in the future.

#### **Insurance**

##### ***Not all risks are insurable and the occurrence of an uninsurable event may have a material adverse effect on the Corporation***

Although the Corporation maintains insurance in accordance with industry standards to address certain risks, such insurance has limitations on liability and may not be sufficient to cover the full extent of 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 for 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, could have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

#### **Litigation**

##### ***The Corporation 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 reputation***

In the normal course of the Corporation's operations, it may become involved in, be named as a party to or be the subject of, various legal proceedings, including regulatory proceedings, tax proceedings and legal actions. Such proceedings may develop in relation to personal injury (including claims resulting from exposure to hazardous substances), property damage, property taxes, land and access rights, royalty rights, environmental issues (including claims relating to contamination) and lease and contractual disputes. The outcome of outstanding, pending or future proceedings cannot be predicted with certainty and may be determined adversely to the Corporation and, as a result, could have a material adverse effect on the Corporation's business, financial condition and results of operations. Even if the Corporation 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 the Corporation's business operations, which may adversely affect the Corporation.

Due to the rapid development of oil and natural gas technology, the Corporation may become involved in, be named as a party to or be the subject of, various legal proceedings in which it is alleged that the Corporation has infringed the intellectual property rights of others or conversely, the Corporation may commence lawsuits against others who the Corporation believes are infringing upon its intellectual property rights. The Corporation's involvement in intellectual property litigation could result in significant expense, adversely affecting the development of its assets or intellectual property or diverting the efforts of its technical and management personnel, whether or not such litigation is resolved in the Corporation's favour. In the event of an adverse outcome as a defendant in any such litigation, the Corporation may, among other things, be required to: (i) pay substantial damages; (ii) cease the use

of infringing intellectual property; (iii) expend significant resources to develop or acquire non-infringing intellectual property; (iv) discontinue processes incorporating infringing technology; or (v) obtain licences to the infringing intellectual property. However, the Corporation may not be successful in such development or acquisition or such licences may not be available on reasonable terms. Any such development, acquisition or licence could require the expenditure of substantial time and other resources and could have a material adverse effect on the Corporation's business and financial results.

## **Indigenous Claims**

### ***Indigenous claims may affect the Corporation***

Indigenous peoples have claimed Indigenous rights and title in portions of Western Canada. The Corporation is not aware that any claims have been made in respect of its properties or assets; however, the legal basis of an Indigenous land claim and Indigenous rights are matters of considerable legal complexity and the impact of the assertion of such a claim, or the possible effect of a settlement of such claim, upon the Corporation cannot be predicted with any degree of certainty. In addition, no assurance can be given that any recognition of Indigenous rights or claims whether by way of a negotiated settlement or by judicial pronouncement (or through the grant of an injunction prohibiting exploration or development activities pending resolution of any such claim) would not delay or even prevent the Corporation's exploration and development activities. If a claim arose and was successful, such claim may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects. In addition, the process of addressing such claims, regardless of the outcome, is expensive and time consuming and could result in delays which could have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

In addition, claims and protests of Indigenous peoples may disrupt or delay third-party operations or new development on the Corporation's properties.

## **Credit Risk**

### ***The Corporation is exposed to credit risk through its contractual arrangements and its 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 joint venture partners, marketers of its oil and natural gas 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 generally and of joint venture partners may affect a joint venture partner's willingness or ability to participate in Birchcliff's ongoing capital development or well abandonment and site reclamation programs. This could potentially delay capital investment in an asset until the Corporation finds a suitable alternative partner, or in the case of well abandonment and site reclamation activities, require the Corporation to finance such activities. 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.

Conversely, the Corporation's counterparties may deem the Corporation to be at risk of defaulting on its contractual obligations. These counterparties may require that the Corporation provide additional credit assurance by prepaying anticipated expenses or posting letters of credit, which would decrease the Corporation's available liquidity.

## **Internal Controls**

### ***Material weaknesses in the Corporation's internal controls may negatively affect the Corporation and the market price of the Corporation's securities***

Effective internal controls are necessary for the Corporation to provide reliable financial reports and to help prevent fraud. Although the Corporation undertakes 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 negatively impact the trading prices of the Corporation's securities.

#### **Liability Management Programs**

***Liability management programs enacted by regulators may prevent or interfere with the Corporation's ability to acquire properties or require a substantial cash deposit with the regulator***

Alberta has developed the AB LMR Program which is designed to prevent taxpayers from incurring costs associated with the suspension, abandonment, remediation and reclamation of wells, facilities and pipelines in the event that a licensee or permit holder is unable to satisfy its regulatory obligations. Changes to the AB LLR Program administered by the AER or other changes to the requirements of the AB LMR Program may result in the requirement for security to be posted in the future, may result in the denial of licence or permit transfers and may result in significant increases to the Corporation's compliance obligations.

The impact and consequences of the Supreme Court of Canada's decision in the Redwater case on the AER's rules and policies, lending practices in the oil and natural gas industry and on the nature and determination of secured lenders to take enforcement proceedings are expected to evolve as the consequences of the decision are evaluated and considered by regulators, lenders and receivers/trustees. In addition, the AB LMR Program may prevent or interfere with the Corporation's ability to acquire or dispose of assets as both the vendor and the purchaser of oil and natural gas assets must be in compliance with the AB LMR Program (both before and after the transfer of the assets) for the applicable regulatory agency to allow for the transfer of such assets. See "*Industry Conditions – Regulatory Authorities and Environmental Regulation – Alberta – Liability Management Rating Program*".

#### **Title to and Right to Produce from Assets**

***Defects in the Corporation's title or rights to produce from its 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 on them 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 Licences 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 held by others. If the Corporation or the holder of the licence or lease fails to meet the specific requirements 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 may have a material adverse effect on the business, financial condition, results of operations and prospects of the Corporation.

## **Disposal of Fluids Used in Operations**

***Regulations regarding the disposal of fluids used in operations may increase costs of compliance or subject the Corporation to regulatory penalties or litigation***

The safe disposal of 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 which may impact the economics of certain projects and, in turn, impact activity levels and new capital spending on the Corporation's oil and natural gas properties.

## **Breaches 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 its business, operations or affairs. 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.

## **Operational Dependence**

***The Corporation is subject to risk as it pertains to other parties operating assets it has an interest in***

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 business, financial condition, results of operations and prospects. 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 the current low and volatile commodity price environment, 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 recourse 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 to it 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 effect on the Corporation's financial and operational results.



## **Risks Associated with Acquisitions and Dispositions**

### ***The anticipated benefits of acquisitions may not be achieved and the Corporation may dispose of certain 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 assets in the ordinary course of business. Typically, once an acquisition opportunity is identified, a review of available information relating to the assets is conducted. There is a risk that even a detailed review of records and assets may not necessarily reveal every existing or potential problem, nor will it permit the Corporation to become sufficiently familiar with the assets to fully assess their deficiencies and potential. There is no guarantee that defects in the chain of title will not arise to defeat the Corporation's title to certain assets or that environmental defects, liabilities or deficiencies do not exist or are greater than anticipated. Inspections may not always be performed on every well, and environmental problems, such as ground water contamination, are not necessarily observable even when an inspection is undertaken. Even when problems are identified, the Corporation may assume certain environmental and other risk liabilities in connection with acquired assets.

In addition, acquisitions of oil and natural gas properties or companies are based in large part on engineering, environmental and economic assessments. These assessments include a series of assumptions regarding such factors as recoverability and marketability of oil and natural gas, environmental restrictions and prohibitions regarding releases and emissions of various substances, future prices of oil and natural gas, future operating costs, future capital expenditures and royalties and other government levies which will be imposed over the producing life of the reserves. Many of these factors are subject to change and are beyond the control of the Corporation. All such assessments involve a measure of geological, engineering, environmental and regulatory uncertainty that could result in lower production and reserves or higher operating or capital expenditures than anticipated.

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 away from other strategic opportunities and operational matters.

Management continually assesses the value and contribution of the various assets within its portfolio. In this regard, certain assets may be periodically disposed of so the Corporation can focus its efforts and resources more efficiently. Depending on market conditions for such assets, there is a risk that certain assets of the Corporation could realize less than their carrying value on the Corporation's financial statements.

## **Royalty Regimes**

### ***Changes to royalty regimes may negatively impact the Corporation's cash flow***

There can be no assurance that the Government of Alberta will not adopt a new royalty regime or modify the existing royalty regime, 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 or uneconomic. See "*Industry Conditions – Royalties and Incentives*".

## **Negative Impact of Additional Sales or Issuances of Securities**

### ***The Corporation may issue additional securities, diluting current shareholders***

The Corporation may issue an unlimited number of Common Shares without any vote or action by the shareholders, subject to the rules of any stock exchange on which the Corporation's securities may be listed. The Corporation may make future acquisitions or enter into financings or other transactions involving the issuance of securities of the Corporation. If the Corporation issues additional securities, the percentage ownership of existing shareholders will be reduced and diluted and the price of the Corporation's securities could decrease.

## **Conflicts of Interest**

### ***Conflicts of interest may arise for the Corporation's directors and officers***

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 or 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*".

## **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, 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.

## **Additional Taxation Applicable to Non-Residents**

### ***Non-resident shareholders are required to pay additional taxes on their dividends***

Tax legislation in Canada may impose withholding or other taxes on the cash dividends, stock dividends or other property transferred by the Corporation to non-resident shareholders. These taxes may be reduced pursuant to tax treaties between Canada and the non-resident shareholder's jurisdiction of residence. Evidence of eligibility for a reduced withholding rate must be filed by the non-resident shareholder in prescribed form with their broker (or in the case of registered shareholders, with the transfer agent). In addition, the country in which the non-resident shareholder is resident may impose additional taxes on such dividends. Any of these taxes may change from time to time.

## **Foreign Exchange Risk for Non-Resident Shareholders**

### ***Variations in foreign exchange rates may affect the amount of cash dividends received by shareholders who receive dividends in currencies other than Canadian dollars***

The Corporation's cash dividends are declared in Canadian dollars and may be converted in certain instances to foreign denominated currencies at the spot exchange rate at the time of payment. As a consequence, non-resident shareholders and shareholders who calculate their return in currencies other than the Canadian dollar are subject to foreign exchange risk. To the extent that the Canadian dollar strengthens with respect to their currency, the amount of any dividend will be reduced when converted to the shareholder's home currency.

## **Evolving Corporate Governance, Sustainability and Reporting Framework**

### ***Evolving corporate governance, sustainability and reporting framework may increase both compliance costs and the risk of non-compliance that may have an adverse effect on the Corporation***

The Corporation's business is subject to evolving corporate governance and public disclosure regulations that have increased both compliance costs and the risk of non-compliance, which could have an adverse effect on the Corporation's costs of doing business. The Corporation is subject to changing rules and regulations promulgated by a number of governmental and self-regulated organizations, including the Canadian Securities Administrators, the TSX and the Financial Accounting Standards Board. These rules and regulations continue to evolve in scope and

complexity, making compliance more difficult and uncertain. Further, the Corporation's efforts to comply with these and other new and existing rules and regulations have resulted in, and are likely to continue to result in, increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities.

### **Social Media**

#### ***The Corporation faces compliance and supervisory challenges in respect of the use of social media as a means of communicating***

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. As social media continues to grow in influence and access to social media platforms becomes increasingly prevalent, 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.

### **Expansion into New Activities**

#### ***Expanding the Corporation's business may expose it to new risks and uncertainties***

The operations and expertise of the Corporation's management are currently focused primarily on oil and natural gas production, exploration and development in the Peace River Arch area of Alberta. In the future, the Corporation may acquire or move into new industry-related activities or new geographical areas or may acquire different energy-related assets, and as a result, the Corporation may face unexpected risks or alternatively, the Corporation's exposure to one or more existing risk factors may be significantly increased, which may in turn result in the Corporation's future operational and financial condition being adversely affected.

### **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 statements. By their nature, forward-looking statements involve numerous assumptions and 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 statements or contribute to the possibility that predictions, forecasts or projections will prove to be materially inaccurate. Additional information on the risks, assumptions and uncertainties relating to forward-looking statements is found under the heading "Special Notes to Reader – Forward-Looking Statements".

## **DIVIDEND AND DISTRIBUTION POLICY**

### **Common Shares**

The Corporation's Common Share dividend policy establishes that until changed by the Board, dividends will be paid to the holders of Common Shares for the quarters ending March 31, June 30, September 30 and December 31. The payment date for any dividends declared shall be the last day of March, June, September and December; provided that, if any such date is not a business day, the payment date shall be the next business day. The record date for determining the holders of Common Shares entitled to receive dividends is expected to be on or about the 15<sup>th</sup> day of the last month of the applicable quarter. Unless otherwise determined by the Board, all dividends shall be paid in cash. The dividend policy is periodically reviewed by the Board and no assurance or guarantee can be given that Birchcliff will maintain the dividend policy in its current form.

Birchcliff does not have a dividend reinvestment plan or stock dividend program.

## Preferred Shares – Series A and Series C Preferred Shares

The Corporation has Series A Preferred Shares and Series C Preferred Shares outstanding, on which dividends have been paid to their holders in accordance with their terms. See “Description of Capital Structure – Authorized Share Capital and Securities Outstanding – Preferred Shares”.

### Dividend History

The following tables set forth details regarding the dividends that were declared on the Common Shares, the Series A Preferred Shares and the Series C Preferred Shares during the three most recently completed financial years:

#### Common Shares

Declaration Date	Record Date	Payment Date	Type	Amount
November 25, 2020	December 15, 2020	December 31, 2020	Quarterly, Cash	\$0.005
September 1, 2020	September 15, 2020	September 30, 2020	Quarterly, Cash	\$0.005
June 2, 2020	June 15, 2020	June 30, 2020	Quarterly, Cash	\$0.005
February 26, 2020	March 16, 2020	March 31, 2020	Quarterly, Cash	\$0.02625
November 26, 2019	December 16, 2019	December 31, 2019	Quarterly, Cash	\$0.02625
September 3, 2019	September 16, 2019	September 30, 2019	Quarterly, Cash	\$0.02625
June 4, 2019	June 17, 2019	July 2, 2019	Quarterly, Cash	\$0.02625
February 13, 2019	March 15, 2019	April 1, 2019	Quarterly, Cash	\$0.02625
November 28, 2018	December 17, 2018	December 31, 2018	Quarterly, Cash	\$0.025
September 5, 2018	September 17, 2018	October 1, 2018	Quarterly, Cash	\$0.025
May 29, 2018	June 15, 2018	July 3, 2018	Quarterly, Cash	\$0.025
February 28, 2018	March 15, 2018	April 2, 2018	Quarterly, Cash	\$0.025

#### Series A Preferred Shares

Declaration Date	Record Date	Payment Date	Type	Amount
November 25, 2020	December 15, 2020	December 31, 2020	Quarterly, Cash	\$0.523375
September 1, 2020	September 15, 2020	September 30, 2020	Quarterly, Cash	\$0.523375
June 2, 2020	June 15, 2020	June 30, 2020	Quarterly, Cash	\$0.523375
February 26, 2020	March 16, 2020	March 31, 2020	Quarterly, Cash	\$0.523375
November 26, 2019	December 16, 2019	December 31, 2019	Quarterly, Cash	\$0.523375
September 3, 2019	September 16, 2019	September 30, 2019	Quarterly, Cash	\$0.523375
June 4, 2019	June 17, 2019	July 2, 2019	Quarterly, Cash	\$0.523375
February 13, 2019	March 15, 2019	April 1, 2019	Quarterly, Cash	\$0.523375
November 28, 2018	December 17, 2018	December 31, 2018	Quarterly, Cash	\$0.523375
September 5, 2018	September 17, 2018	October 1, 2018	Quarterly, Cash	\$0.523375
May 29, 2018	June 15, 2018	July 3, 2018	Quarterly, Cash	\$0.523375
February 28, 2018	March 15, 2018	April 2, 2018	Quarterly, Cash	\$0.523375

#### Series C Preferred Shares

Declaration Date	Record Date	Payment Date	Type	Amount
November 25, 2020	December 15, 2020	December 31, 2020	Quarterly, Cash	\$0.4375
September 1, 2020	September 15, 2020	September 30, 2020	Quarterly, Cash	\$0.4375
June 2, 2020	June 15, 2020	June 30, 2020	Quarterly, Cash	\$0.4375
February 26, 2020	March 16, 2020	March 31, 2020	Quarterly, Cash	\$0.4375
November 26, 2019	December 16, 2019	December 31, 2019	Quarterly, Cash	\$0.4375
September 3, 2019	September 16, 2019	September 30, 2019	Quarterly, Cash	\$0.4375
June 4, 2019	June 17, 2019	July 2, 2019	Quarterly, Cash	\$0.4375
February 13, 2019	March 15, 2019	April 1, 2019	Quarterly, Cash	\$0.4375
November 28, 2018	December 17, 2018	December 31, 2018	Quarterly, Cash	\$0.4375
September 5, 2018	September 17, 2018	October 1, 2018	Quarterly, Cash	\$0.4375
May 29, 2018	June 15, 2018	July 3, 2018	Quarterly, Cash	\$0.4375
February 28, 2018	March 15, 2018	April 2, 2018	Quarterly, Cash	\$0.4375

On February 23, 2021, the Board declared the following dividends for the quarter ending March 31, 2021: (i) a cash dividend of \$0.005 per share on the Common Shares; (ii) a cash dividend of \$0.523375 per share on the Series A Preferred Shares; and (iii) a cash dividend of \$0.4375 per share on the Series C Preferred Shares. The dividends are payable on March 31, 2021 to shareholders of record at the close of business on March 15, 2021.

The declaration and payment of dividends is subject to the discretion of the Board and may vary depending on a variety of factors and conditions existing from time to time. The payment of dividends to shareholders is not assured or guaranteed and dividends may be reduced or suspended entirely. In addition to the foregoing, the Corporation's ability to pay dividends now or in the future may be limited by covenants contained in the agreements governing any indebtedness that the Corporation has incurred or may incur in the future, including the terms of the Credit Facilities. The agreement governing the Credit Facilities provides that Birchcliff is not permitted to make any distribution (which includes dividends) at any time when an event of default exists or would reasonably be expected to exist upon making such distribution, unless such event of default arose subsequent to the ordinary course declaration of the applicable distribution. For further information regarding the risks and assumptions relating to the payment of dividends, see "Risk Factors – Dividends".

## DESCRIPTION OF CAPITAL STRUCTURE

### Authorized Share Capital and Securities Outstanding

The authorized share capital of the Corporation consists of an unlimited number of Common Shares and an unlimited number of Preferred Shares, each without par value. In addition, the Corporation also has Performance Warrants and Options that are outstanding which are exercisable into Common Shares.

The following table sets forth the securities of the Corporation that were outstanding at December 31, 2020:

Authorized Securities Outstanding	Number of Securities
Common Shares	265,942,729
Series A Preferred Shares	2,000,000
Series C Preferred Shares	1,597,180
Performance Warrants	2,939,732
Options	26,134,201

The following is a summary of the rights, privileges, restrictions and conditions which attach to the Common Shares and the Preferred Shares as a class:

#### **Common Shares**

Shareholders are entitled to receive notice of, to attend and to one vote per Common Share at all meetings of holders of Common Shares, except meetings at which only holders of a specified class of shares are entitled to vote. Shareholders are entitled to receive any dividend declared by the Corporation on the Common Shares; provided that the Corporation shall be entitled to declare dividends on the Preferred Shares or on any of such classes of shares without being obliged to declare any dividends on the Common Shares. Subject to the rights, privileges, restrictions and conditions attaching to any other class of shares of the Corporation, holders of Common Shares are entitled to receive the remaining property of the Corporation upon dissolution in equal rank with the holders of other Common Shares.

On November 19, 2019, the Corporation announced that the TSX had accepted the Corporation's notice of intention to make a normal course issuer bid pursuant to which the Corporation was permitted to purchase for cancellation up to 13,296,761 of its outstanding Common Shares. This normal course issuer bid commenced on November 25, 2019 and terminated on November 24, 2020. The Corporation purchased and cancelled 464,562 Common Shares under the bid during this period.

On November 18, 2020, the Corporation announced that the TSX had accepted the Corporation's notice of intention to make a normal course issuer bid pursuant to which the Corporation may purchase for cancellation up to 13,296,936 of its outstanding Common Shares. This normal course issuer bid commenced on November 25, 2020 and will terminate no later than November 24, 2021. All Common Shares purchased under the bid will be cancelled. The actual number of Common Shares purchased pursuant to the bid and the timing of such purchases will be determined by Birchcliff and there can be no assurance as to how many Common Shares, if any, will ultimately be acquired by the Corporation. As at the date hereof, the Corporation has not purchased any Common Shares under the bid.

## ***Preferred Shares***

The Preferred Shares may from time to time be issued in one or more series and the Board may fix from time to time before such issue the number of Preferred Shares which is to comprise each series and the designation, rights, privileges, restrictions and conditions attaching to each series of Preferred Shares including, without limiting the generality of the foregoing, any voting rights, the rate or amount of dividends or the method of calculating dividends, the dates of payment thereof, the terms and conditions of redemption, purchase and conversion, if any, and any sinking fund or other provisions.

The Preferred Shares of each series shall, with respect to the payment of dividends and the distribution of assets or return of capital in the event of liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary, or any other return of capital or distribution of the assets of Birchcliff amongst its shareholders for the purpose of winding up its affairs, be entitled to preference over the Common Shares and over any other shares of the Corporation ranking by their terms junior to the Preferred Shares of that series. The Preferred Shares of any series may also be given such other preferences, not inconsistent with the articles of the Corporation, over the Common Shares and any other Preferred Shares as may be fixed by the Board.

If any cumulative dividends or amounts payable on the return of capital in respect of a series of Preferred Shares are not paid in full, all series of Preferred Shares shall participate rateably in respect of accumulated dividends and return of capital.

In the event of the liquidation, dissolution or winding-up of the Corporation, the holders of Series A Preferred Shares, Series B Preferred Shares and Series C Preferred Shares are entitled to receive \$25.00 per share plus all accrued and unpaid dividends thereon, before any amount is paid or any property or assets are distributed to holders of the Common Shares.

### **Series A Preferred Shares and Series B Preferred Shares**

The Series A Preferred Shares and the Series B Preferred Shares are identical in all material respects other than different dividend rights, redemption rights and conversion rights attached thereto. There are currently no Series B Preferred Shares outstanding.

On August 8, 2012, the Corporation issued an aggregate of 2,000,000 Series A Preferred Shares. The holders of the outstanding Series A Preferred Shares are entitled to receive, as and when declared by the Board, fixed cumulative preferential cash dividends, payable quarterly. The dividend rate of the Series A Preferred Shares reset on September 30, 2017 and will reset every five years thereafter at a rate equal to the then current five-year Government of Canada bond yield plus 6.83%. The dividend rate for the five-year period from and including September 30, 2017 to, but excluding September 30, 2022, is 8.374% (\$2.0935 per annum or \$0.523375 quarterly).

The Series A Preferred Shares are redeemable by the Corporation on September 30, 2022 and on September 30 in every fifth year thereafter at a redemption price of \$25.00 per share, plus all accrued and unpaid dividends. In addition, subject to redemption by the Corporation and certain conditions, the holders of the Series A Preferred Shares have the right to convert their shares into an equal number of Series B Preferred Shares on September 30, 2022 and on September 30 in every fifth year thereafter. The holders of the Series B Preferred Shares will be entitled to receive quarterly floating rate cumulative preferential cash dividends, if declared by Birchcliff's Board, at a rate equal to the sum of the then current 90 day Government of Canada Treasury Bill rate plus 6.83%.

### **Series C Preferred Shares**

On June 14, 2013, the Corporation issued 2,000,000 Series C Preferred Shares. The holders of the outstanding Series C Preferred Shares are entitled to receive, as and when declared by the Board, fixed cumulative preferential cash dividends at an annual rate of \$1.75 per share, payable quarterly. Subject to the provisions of the ABCA and the provisions governing the Series C Preferred Shares (the "**Series C Provisions**"), a holder of Series C Preferred Shares may, at its option, upon giving notice in accordance with the Series C Provisions (the "**Notice of Redemption**"), redeem for cash, all or any number of Series C Preferred Shares held by such holder on the last day of a financial quarter at \$25.00 per share, together with all accrued and unpaid dividends to but excluding the date fixed for redemption.

Upon receipt of the Notice of Redemption, the Corporation may, at its option (subject, if required, to stock exchange approval), upon not less than 20 days' prior written notice, elect to convert all such Series C Preferred Shares into Common Shares. The number of Common Shares into which each Series C Preferred Share may be so converted will be determined by dividing the amount of \$25.00, together with all accrued and unpaid dividends to but excluding the date fixed for conversion, by the greater of \$2.00 and 95% of the "Current Market Price" (as determined in accordance with the Series C Provisions) of the Common Shares.

The Corporation received Notices of Redemption for 402,820 Series C Preferred Shares in 2020. The Corporation elected to settle in cash the redemption of 365,655 Series C Preferred Shares at \$25.00 per share for a total of \$9.1 million and elected to convert the remaining 37,165 Series C Preferred Shares into Common Shares and accordingly issued a total of 464,562 Common Shares.

### **Performance Warrants**

The Performance Warrants were originally granted on January 18, 2005 at the founding of the Corporation to the executive officers of Birchcliff at the time of grant. Each Performance Warrant entitles the holder thereof to purchase one Common Share at an exercise price of \$3.00. The Performance Warrants were designed to act as a long-term retention incentive for the holders and to enhance shareholder value by aligning the interests of the holders with the growth and profitability of the Corporation. The Performance Warrants were specifically designed to provide a performance-based incentive to the holders upon the trading price of the Common Shares exceeding \$6.00. Accordingly, the Performance Warrants were not exercisable unless the trading price of the Common Shares exceeded \$6.00 for a period of 20 consecutive trading days. This condition was satisfied in November 2005 and all of the Performance Warrants have been exercisable since that time.

The outstanding Performance Warrants are held by Messrs. Tonken, Geremia, Surbey and Bosman, each of whom is an executive officer and/or director of the Corporation. On May 23, 2019, the holders of Common Shares approved an amendment to the outstanding Performance Warrants to extend the expiry date of such Performance Warrants from January 31, 2020 to January 31, 2025.

### **Options**

Pursuant to the Stock Option Plan, Options may be granted from time to time to the officers, directors, employees and certain service providers of the Corporation. Options are granted by the Board who, at the time of the grant, fixes the exercise price, vesting dates and the expiry date of such Options. The maximum number of Common Shares that are issuable under Options that are issued and outstanding at any time under the Stock Option Plan shall not exceed 10% of the aggregate number of Common Shares actually issued and outstanding at that time, as determined on a non-diluted basis.

The Stock Option Plan provides that the expiry date of an Option shall be no later than 10 years from the date of grant of such Option and that the exercise price of an Option shall be determined by the Board but shall not be lower than the higher of: (i) the closing price of the Common Shares on the TSX on the first trading day immediately preceding the date of grant; or (ii) the lowest price permitted by the TSX. All of the Options granted to date under the Stock Option Plan provide for: (i) the expiry of such Options not later than the fifth anniversary of the date of grant; and (ii) the vesting of such Options with respect to one-third of the Common Shares issuable thereunder on each of the first, second and third anniversaries of the date of grant.

### **Credit Facilities**

The Corporation has extendible revolving credit facilities in the aggregate principal amount of \$1.0 billion (the "**Credit Facilities**") which are comprised of an extendible revolving syndicated term credit facility (the "**Syndicated Credit Facility**") in the amount of \$900.0 million and an extendible revolving working capital facility (the "**Working Capital Facility**") in the amount of \$100.0 million. The Credit Facilities allow for prime rate loans, LIBOR loans, U.S. base rate loans, bankers' acceptances and, in the case of the Working Capital Facility only, letters of credit.

The maturity date of each of the Syndicated Credit Facility and the Working Capital Facility is currently May 11, 2022. The Corporation may each year, at its option, request an extension to the maturity date of the Syndicated Credit Facility and the Working Capital Facility, or either of them, for an additional period of up to three years from May 11 of the year in which the extension request is made. The Credit Facilities are subject to semi-annual reviews of the

borrowing base limit by the Corporation's syndicate of lenders, which are typically completed in May and November of each year. The Credit Facilities do not contain any financial maintenance covenants.

For further information regarding the Credit Facilities, see the Corporation's audited annual financial statements and related management's discussion and analysis for the year ended December 31, 2020. See also "Risk Factors – Credit Facilities".

## MARKET FOR SECURITIES

### Trading Price and Volume

The Common Shares, the Series A Preferred Shares and the Series C Preferred Shares are listed for trading on the TSX under the trading symbols "BIR", "BIR.PR.A" and "BIR.PR.C", respectively. The following table sets forth the price ranges and trading volumes of the Common A Shares, the Series A Preferred Shares and the Series C Preferred Shares on the TSX during the year ended December 31, 2020:

Month	Common Shares			Series A Preferred Shares			Series C Preferred Shares		
	High (\$)	Low (\$)	Monthly Trading Volume	High (\$)	Low (\$)	Monthly Trading Volume	High (\$)	Low (\$)	Monthly Trading Volume
January	2.65	1.70	35,415,589	24.92	23.49	52,851	25.64	24.87	56,004
February	1.85	1.40	30,610,647	24.01	21.82	42,518	25.25	24.34	68,253
March	1.67	0.58	60,384,740	22.99	9.75	76,506	25.05	9.20	114,626
April	1.72	0.72	48,812,694	18.78	12.50	99,244	19.00	11.70	123,193
May	1.64	1.16	31,367,141	18.90	16.51	33,731	18.66	15.75	30,572
June	1.53	1.05	29,396,785	21.00	17.70	18,792	20.13	17.50	32,400
July	1.22	1.08	14,436,217	18.97	18.05	17,065	18.01	17.35	13,750
August	1.77	1.20	24,869,126	21.96	18.56	54,550	22.01	18.20	18,460
September	1.76	1.41	18,531,448	21.96	20.24	18,876	21.42	20.00	13,530
October	2.15	1.45	26,072,420	23.15	19.95	52,821	23.91	19.50	15,015
November	2.18	1.81	38,081,004	23.75	22.44	40,447	24.90	22.81	39,780
December	2.10	1.72	26,257,395	23.41	22.35	83,271	24.90	24.40	28,275

### Prior Sales

During the year ended December 31, 2020, the only securities the Corporation issued which are outstanding but are not listed or quoted on a marketplace were an aggregate of 5,403,200 Options which were granted at exercise prices ranging from \$0.78 to \$2.52 per Common Share.

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

To the Corporation's knowledge, at December 31, 2020, no securities of Birchcliff were held in escrow or subject to a contractual restriction on transfer.

## DIRECTORS AND OFFICERS

### Directors

The following table sets forth for each person who is a director of the Corporation at the date hereof: (i) their name, province and country of residence and whether they are independent; (ii) the period during which they have served as a director of the Corporation or its predecessor entities; and (iii) their principal occupation during the past five years or more:



<b>Name, Province and Country of Residence</b>	<b>Director Since</b>	<b>Principal Occupation During the Past Five Years or More</b>
<b>Dennis A. Dawson</b> <sup>(1)(2)(3)(4)</sup> Alberta, Canada Independent	May 14, 2015	Mr. Dawson is a director of Birchcliff, is the independent Lead Director and is the Chair of the Compensation Committee and the Nominating Committee. He has over 34 years of oil and natural gas experience, including nine years as General Counsel for Pan-Alberta Gas Ltd., a major Canadian natural gas export and marketing company. Mr. Dawson was the Vice-President, General Counsel and Corporate Secretary of AltaGas from December 1998 until April 2015. He first joined AltaGas as Associate General Counsel in August 1997, after consulting with AltaGas Services Inc. from July 1996. Effective July 1998, Mr. Dawson became AltaGas' General Counsel and Corporate Secretary and effective December 1998, he became Vice-President, General Counsel and Corporate Secretary. He received a Bachelor of Arts degree from the University of Lethbridge and a Bachelor of Laws degree from the University of Alberta and is a member of the Law Society of Alberta.
<b>Debra A. Gerlach</b> <sup>(1)(2)(3)(4)</sup> Alberta, Canada Independent	November 8, 2017	Ms. Gerlach is a director of Birchcliff and is the Chair of the Audit Committee. From September 1996 until September 2017, Ms. Gerlach was a partner with Deloitte LLP where she practiced in the Assurance and Advisory group. Prior thereto, she held various positions within Deloitte LLP from the time she joined the firm in August 1982. During her 35-year career with the firm, Ms. Gerlach worked with numerous public oil and natural gas companies. Ms. Gerlach is a Chartered Accountant with the Chartered Professional Accountants of Alberta and received a Bachelor of Commerce degree and a Master of Business Administration degree from the University of Calgary.
<b>Stacey E. McDonald</b> <sup>(1)(2)(3)(4)</sup> Alberta, Canada Independent	December 14, 2018	Ms. McDonald is a director of Birchcliff and has over 15 years of experience in the energy and financial sectors. From September 2016 to July 2018, Ms. McDonald was a Managing Director – Institutional Equity Research (Energy) at GMP FirstEnergy and its predecessor, GMP Securities, independent global investment banks. She joined GMP Securities in February 2006 as a research associate and began publishing independently as an Equity Analyst in 2009. Ms. McDonald received a Bachelor of Commerce degree in Finance from the University of Alberta. Ms. McDonald is a holder of the Institute of Corporate Directors' Director designation.
<b>James W. Surbey</b> <sup>(3)</sup> Alberta, Canada Non-independent	May 11, 2017	Mr. Surbey is a director of Birchcliff and is the Chair of the Reserves Evaluation Committee. He is also an employee of Birchcliff and an independent businessman. Mr. Surbey has over 43 years of experience in the oil and natural gas industry and is one of the Corporation's founders. He was the Vice-President, Corporate Development and Corporate Secretary of Birchcliff from the inception of the Corporation until June 30, 2017. Prior to joining Birchcliff, he served as the Vice-President, Corporate Development of Case Resources Inc., the Senior Vice-President, Corporate Development of Big Bear Exploration Ltd. and the Vice-President, Corporate Development of Stampeder Exploration Ltd. Mr. Surbey was previously a senior partner of the law firm Howard, Mackie (now Borden Ladner Gervais LLP). He received a Bachelor of Engineering degree and a Bachelor of Laws degree from McGill University and is a member of the Law Society of Alberta and the Society of Petroleum Engineers.
<b>A. Jeffery Tonken</b> Alberta, Canada Non-independent	July 6, 2004	Mr. Tonken is the Chairman of the Board and the President and Chief Executive Officer of the Corporation. See his biography under "Directors and Officers – Executive Officers".

(1) Member of the Audit Committee.

(2) Member of the Compensation Committee.

(3) Member of the Reserves Evaluation Committee.

(4) Member of the Nominating Committee.

The directors of the Corporation hold office until the close of the next annual meeting of shareholders of the Corporation or until their successors are elected or appointed. The next annual meeting of the shareholders of the Corporation is scheduled for May 13, 2021.

## Executive Officers

The following table sets forth for each person who is an executive officer of the Corporation at the date hereof: (i) their name, province and country of residence; (ii) their position with the Corporation; and (iii) their principal occupation during the past five years or more:

<b>Name and Province and Country of Residence</b>	<b>Current Position with Birchcliff</b>	<b>Principal Occupation During the Past Five Years or More</b>
<b>A. Jeffery Tonken</b> <i>Alberta, Canada</i>	Chairman of the Board and President and Chief Executive Officer	Mr. Tonken has been the President and Chief Executive Officer and a director of Birchcliff since the inception of the Corporation and the Chairman of the Board since May 2017. He has over 40 years of experience in the oil and natural gas industry and is one of the Corporation's founders. Prior to Birchcliff, Mr. Tonken founded and served as the President and Chief Executive Officer of Case Resources Inc., Big Bear Exploration Ltd. and Stampeder Exploration Ltd. He was previously a partner of the law firm Howard, Mackie (now Borden Ladner Gervais LLP). Mr. Tonken is also the Past Chair of the Board of Governors of the Canadian Association of Petroleum Producers (CAPP), and was the Chair in 2019. He received a Bachelor of Commerce degree from the University of Alberta and a Bachelor of Laws degree from the University of Wales and is a member of the Law Society of Alberta.
<b>Myles R. Bosman</b> <i>Alberta, Canada</i>	Vice-President, Exploration and Chief Operating Officer	Mr. Bosman has been the Vice-President, Exploration and Chief Operating Officer of Birchcliff since the inception of the Corporation. He is a Professional Geologist with over 30 years of experience in the oil and natural gas industry and is one of the Corporation's founders. Prior to joining Birchcliff, Mr. Bosman served as the Vice-President, Exploration and Chief Operating Officer of Case Resources Inc., the Exploration Manager of Summit Resources Ltd. and as an Exploration Geologist with both Numac Energy Inc. and Canadian Hunter Exploration. He received a Bachelor of Science degree in Geology from the University of Calgary and a Resource Engineering diploma from the Northern Alberta Institute of Technology and is a member of APEGA.
<b>Christopher A. Carlsen</b> <i>Alberta, Canada</i>	Vice-President, Engineering	Mr. Carlsen has been the Vice-President, Engineering of Birchcliff since July 2013 and prior thereto, he was an Asset Team Lead and Senior Exploitation Engineer with Birchcliff. He is a Professional Engineer with over 20 years of experience in the oil and natural gas industry. Prior to joining Birchcliff, Mr. Carlsen was the Senior Engineer at Greenfield Resources Ltd. and held various engineering positions at both Encana Corporation and PanCanadian Petroleum Ltd. He received a Bachelor of Science degree in Chemical Engineering from the University of Saskatchewan and is a member of APEGA.
<b>Bruno P. Geremia</b> <i>Alberta, Canada</i>	Vice-President and Chief Financial Officer	Mr. Geremia has been the Vice-President and Chief Financial Officer of Birchcliff since the inception of the Corporation. He is a Chartered Accountant with over 29 years of experience in the oil and natural gas industry and is one of the Corporation's founders. Prior to joining Birchcliff, Mr. Geremia served as the Vice-President and Chief Financial Officer of both Case Resources Inc. and Big Bear Exploration Ltd., as the Director, Commercial of Gulf Canada Resources and as the Manager, Special Projects of Stampeder Exploration Ltd. He was previously a Chartered Accountant with Deloitte & Touche LLP. Mr. Geremia received a Bachelor of Commerce degree from the University of Calgary.

Name and Province and Country of Residence	Current Position with Birchcliff	Principal Occupation During the Past Five Years or More
David M. Humphreys Alberta, Canada	Vice-President, Operations	Mr. Humphreys has been the Vice-President, Operations of Birchcliff since October 2009. He has 35 years of experience in the oil and natural gas industry. Prior to joining Birchcliff in 2009, he served as Vice-President, Operations of Highpine Oil & Gas Ltd., White Fire Energy Ltd. and Virtus Energy Ltd. and Production Manager of both Husky Oil Operations Limited and Ionic Energy. Mr. Humphreys received his Hydrocarbon Engineering Technology diploma from the Northern Alberta Institute of Technology and is a member of ASET. He also has a Professional Licensee (Engineering) designation with APEGA. Mr. Humphreys is the Chair of The Explorers and Producers Association of Canada (EPAC), a member of the Board of Directors of Energy Safety Canada (ESC) and sits on ESC's Safety Standards Council.

### Shareholdings of Directors and Executive Officers

At March 9, 2021: (i) the directors and executive officers of the Corporation, as a group, beneficially owned, or controlled or directed, directly or indirectly, 3,994,116 Common Shares, representing approximately 1.5% of the issued and outstanding Common Shares; and (ii) the executive officers of the Corporation, as a group, held Performance Warrants and Options to acquire a further 7,634,765 Common Shares.

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

Except as disclosed below, none of the directors or executive officers of the Corporation is, as at the date of this Annual Information Form, or was within 10 years before the date of this Annual Information Form, a director, chief executive officer or chief financial officer of any company including the Corporation that: (i) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under securities legislation that was in effect for a period of more than 30 consecutive days (an "Order") that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer; 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 and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

Except as disclosed below, none of the directors or executive officers of the Corporation or a shareholder holding a sufficient number of securities of the Corporation to affect materially the control of the Corporation: (i) is, as at the date of this Annual Information Form, or has been within the 10 years before the date of this Annual Information Form, a director or executive officer of any company including the Corporation that, while that 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 or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or (ii) has, within the 10 years before the date of this Annual Information Form, 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, executive officer or shareholder.

From July 8, 2010 to February 20, 2018, Mr. Geremia was a director of Manito Energy Inc., a company listed on the TSX Venture Exchange. On January 10, 2018, Manito announced that it had filed a Notice of an Intention to Make a Proposal pursuant to the provisions of the *Bankruptcy and Insolvency Act* (Canada), naming FTI Consulting Canada Inc. as the proposed trustee. Manito was unable to form a proposal with its creditors within 30 days after filing its Notice of Intention and as a result, on February 20, 2018, the Court of Queen's Bench of Alberta issued a Receivership Order placing Manito into receivership and substituting Alvarez & Marsal Canada Inc. in place of FTI as the trustee in bankruptcy. The Court also appointed Alvarez as the receiver and manager of Manito and terminated the Notice of Intention. All of the directors of Manito, including Mr. Geremia, resigned. On May 4, 2018, a cease trade order was issued against Manito under the securities legislation of Alberta and Ontario for failure to file annual audited financial statements and annual management's discussion and analysis for the year ended December 31, 2017.

None of the directors or executive officers of the Corporation or a shareholder holding a sufficient number of securities of the Corporation to affect materially the control of the Corporation 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.

### Conflicts of Interest

Directors and executive officers of the Corporation may invest in or become directors or officers of other oil and natural gas companies or entities that may provide financing to, or make equity investments in, competitors of the Corporation, which may give rise to conflicts of interest. Conflicts, if any, will be governed by the ABCA. Pursuant to the ABCA, directors and executive officers of the Corporation are required to disclose the nature and extent of any interest that they have in a material contract or material transaction, and in the case of a director, such director will refrain from voting on any matter in respect of such contract or transaction, unless otherwise provided by the ABCA.

## AUDIT COMMITTEE

### Audit Committee Charter

The Charter adopted by the Audit Committee of the Corporation is attached hereto as Appendix C.

### Composition of the Audit Committee and Relevant Education and Experience

As at the date hereof, the Audit Committee is comprised of Mr. Dennis A. Dawson, Ms. Debra A. Gerlach and Ms. Stacey E. McDonald. Ms. Gerlach is Chair of the Audit Committee. Each of the members of the Audit Committee is “independent” and “financially literate” within the meaning of NI 52-110. The following table sets forth the relevant education and experience of each member of the Audit Committee:

<u>Name</u>	<u>Independent?</u>	<u>Financially Literate?</u>	<u>Relevant Education and Experience</u>
Dennis A. Dawson	Yes	Yes	Mr. Dawson has over 34 years of oil and natural gas experience, including nine years as General Counsel for Pan-Alberta Gas Ltd., a major Canadian natural gas export and marketing company. Mr. Dawson was the Vice-President, General Counsel and Corporate Secretary of AltaGas from December 1998 until April 2015. He received a Bachelor of Arts degree from the University of Lethbridge and a Bachelor of Laws degree from the University of Alberta.
Debra A. Gerlach (Chair)	Yes	Yes	Ms. Gerlach was a partner with Deloitte LLP from September 1996 until September 2017, where she practiced in the Assurance and Advisory group. Prior thereto, she held various positions within Deloitte from the time she joined the firm in August 1982. During her 35-year career with the firm, Ms. Gerlach worked with numerous public oil and natural gas companies. Ms. Gerlach is a Chartered Accountant with the Chartered Professional Accountants of Alberta and received a Bachelor of Commerce degree and a Master of Business Administration degree from the University of Calgary.
Stacey E. McDonald	Yes	Yes	Ms. McDonald has over 15 years of experience in the energy and financial sectors. From September 2016 to July 2018, Ms. McDonald was a Managing Director – Institutional Equity Research (Energy) at GMP FirstEnergy and its predecessor, GMP Securities, independent global investment banks. Ms. McDonald joined GMP Securities in February 2006 as a research associate and began publishing independently as an Equity Analyst in 2009. Ms. McDonald received a Bachelor of Commerce degree in Finance from the University of Alberta. Ms. McDonald is a holder of the Institute of Corporate Directors’ Director designation.

## Pre-Approval Policies and Procedures

The Charter adopted by the Audit Committee provides that all non-audit services to be provided to the Corporation by the Corporation's external auditor must be pre-approved by the Audit Committee. The Audit Committee may delegate this function to one of its independent members, who shall report to the Audit Committee on any such approvals.

## External Auditor Service Fees

The following table summarizes the fees billed to the Corporation by its auditors, KPMG LLP, for external audit and other services:

Fees	2020	2019
Audit Fees <sup>(1)</sup>	\$451,350	\$336,000
Audit-Related Fees <sup>(2)</sup>	-	-
Tax Fees <sup>(3)</sup>	\$26,550	\$105,514
All Other Fees <sup>(4)</sup>	-	-
<b>Total</b>	<b>\$477,900</b>	<b>\$441,514</b>

- (1) "Audit Fees" consist of fees for the audit of the Corporation's annual financial statements and the review of the Corporation's quarterly financial statements, as well as services that are normally provided in connection with statutory and regulatory filings or engagements.
- (2) "Audit-Related Fees" consist of fees for assurance and related services that are reasonably related to the performance of the audit or the review of the Corporation's financial statements and are not reported under the heading of "Audit Fees" above.
- (3) "Tax Fees" consist of fees for professional services rendered for tax compliance, tax advice and tax planning. During 2020 and 2019, such fees related to the preparation and filing of Birchcliff's corporate income tax returns and other tax-related work.
- (4) "All Other Fees" consist of fees for products and services other than those described under the headings of "Audit Fees", "Audit-Related Fees" and "Tax Fees" above.

## LEGAL PROCEEDINGS AND REGULATORY ACTIONS

On December 9, 2020, a claim was filed in the Federal Court of Canada by Steelhead LNG (ASLNG) Ltd. and Steelhead Limited Partnership (collectively, "**Steelhead**") against Seven Generations Energy Ltd., Rockies LNG Limited Partnership, Rockies LNG GP Corp. and the Corporation (collectively, the "**Defendants**") claiming, among other things: (i) a declaration that the Defendants infringed a patent held by Steelhead (the "**Steelhead Patent**"); (ii) a declaration that either or both of Seven Generations Energy Ltd. and the Corporation induced or procured Rockies to infringe the Steelhead Patent; (iii) an injunction from further infringing the Steelhead Patent; (iv) damages or an accounting of profits; (v) reasonable compensation under Section 55(2) of the *Patent Act* (Canada); and (vi) punitive and/or exemplary damages (collectively, the "**Steelhead Claim**"). The total monetary amount claimed pursuant to the Steelhead Claim is \$250 million. The Steelhead Patent was issued to Steelhead on November 3, 2020 for a purported invention relating to a floating at-shore liquefaction facility. The Steelhead Claim alleges that the Defendants infringed the Steelhead Patent through the "design and development... and marketing" of a near-shore floating liquefaction facility. A Case Management judge was appointed to manage the Steelhead Claim on February 4, 2021. A protective and confidentiality order has been issued by the Court. The Defendants have not yet delivered a Statement of Defence as they have brought a motion for security for costs, which motion was heard on March 9, 2021.

The Corporation considers the Steelhead Claim to be without merit and intends to vigorously defend itself against it. Although no assurances can be given with respect to the outcome of such proceedings, the Corporation believes it has valid defences to the Steelhead Claim and accordingly has not recorded any related liability in its financial statements.

There are no other material legal proceedings that the Corporation is or was a party to, or that any of its property is or was the subject of, during the most recently completed financial year or that the Corporation knows to be contemplated.

During the year ended December 31, 2020, there were: (i) no penalties or sanctions imposed against the Corporation 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 the Corporation that would likely be considered important to a reasonable investor in making an investment decision; and (iii) no settlement agreements the Corporation entered into before a court relating to securities legislation or with a securities regulatory authority.

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

There is no material interest, direct or indirect, of: (i) any director or executive officer of the Corporation; (ii) any person or company that beneficially owns, or controls or directs, directly or indirectly, more than 10% of the Common Shares; or (iii) any associate or affiliate of any of the persons or companies referred to in (i) or (ii), in any transaction within the three most recently completed financial years or during the current financial year that has materially affected or is reasonably expected to materially affect the Corporation.

## **TRANSFER AGENT AND REGISTRAR**

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

## **MATERIAL CONTRACTS**

Except for contracts entered into in the ordinary course of business, the Corporation did not enter into any material contracts within the last financial year, or before the last financial year but which are still in effect.

## **INTERESTS OF EXPERTS**

### **Names of Experts**

The only persons or companies who are named as having prepared or certified a report, valuation, statement or opinion described or included in a filing, or referred to in a filing, made under NI 51-102 by the Corporation during, or relating to, the Corporation's most recently completed financial year, and whose profession or business gives authority to the report, valuation statement or opinion made by the person or company, are KPMG LLP and Deloitte.

### **Interests of Experts**

KPMG LLP performed the audit in respect of the audited annual financial statements of the Corporation as at and for the years ended December 31, 2020 and December 31, 2019. KPMG LLP has confirmed that they are independent of the Corporation within the meaning of the relevant rules and related interpretations prescribed by the relevant professional bodies in Canada.

The Corporation's independent qualified reserves evaluator, Deloitte, prepared the Deloitte Reserves Report and the Prior Consolidated Reserves Report. As at the date hereof, the designated professionals (as defined in NI 51-102) of Deloitte, as a group, beneficially own, directly or indirectly, less than 1% of the outstanding securities of the Corporation.

In addition, none of the aforementioned persons or companies, nor any partner, 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 the Corporation.

## **ADDITIONAL INFORMATION**

Additional information relating to the Corporation can be found on SEDAR at [www.sedar.com](http://www.sedar.com) and on the Corporation's website at [www.birchcliffenergy.com](http://www.birchcliffenergy.com). Additional information, including the remuneration and indebtedness of the directors and executive officers of the Corporation, the principal holders of Common Shares and the securities authorized for issuance under equity compensation plans, is contained in the information circular of the Corporation for the most recent annual meeting of the holders of Common Shares, which was held on May 14, 2020.

Additional financial information relating to the Corporation is provided in the Corporation's audited annual financial statements and related management's discussion and analysis for the year ended December 31, 2020.

**APPENDIX A**

**FORM 51-101F2**

**REPORT ON RESERVES DATA BY INDEPENDENT QUALIFIED RESERVES EVALUATOR OR AUDITOR**

To the Board of Directors of Birchcliff Energy Ltd. (the “Company”):

1. We have evaluated the Company’s reserves data as at December 31, 2020. The reserves data are estimates of proved reserves and probable reserves and related future net revenue as at December 31, 2020, 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, 2020, and identifies the respective portions thereof that we have evaluated and reported on to the Company’s Board of Directors:

Independent Qualified Reserves Evaluator or Auditor	Effective Date of Evaluation Report	Location of Reserves (Country or Foreign Geographic Area)	Net Present Value of Future Net Revenue (before income taxes, 10% discount rate)			
			Audited \$MM	Evaluated \$MM	Reviewed \$MM	Total \$MM
Deloitte LLP	December 31, 2020	Canada	-	4,831.7	-	4,831.7

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

Executed as to our report referred to above:

Deloitte LLP  
700, 850 – 2<sup>nd</sup> Street S.W.  
Calgary, Alberta  
T2P 0R8

Original signed by: “Andrew R. Botterill”  
Andrew R. Botterill, P. Eng.

Execution date: February 10, 2021

## APPENDIX B

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

Management of Birchcliff 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 will be filed with securities regulatory authorities concurrently with this report.

The Reserves Evaluation Committee of the Board of Directors of the Company has:

- (a) 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 Evaluation 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 Evaluation Committee, approved:

- (a) the content and filing with securities regulatory authorities of Form 51-101F1 containing 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; and
- (c) the content and filing of this report.

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

(signed) “*A. Jeffery Tonken*”  
President and Chief Executive Officer

(signed) “*Christopher A. Carlsen*”  
Vice-President, Engineering

(signed) “*James W. Surbey*”  
Director and Chairman of the  
Reserves Evaluation Committee

(signed) “*Dennis A. Dawson*”  
Director and Member of the  
Reserves Evaluation Committee

March 10, 2021



## APPENDIX C

### AUDIT COMMITTEE CHARTER

#### Purpose

The purpose of the Audit Committee (the “**Committee**”) of the board of directors (the “**Board**”) of Birchcliff Energy Ltd. (the “**Corporation**”) is to assist the Board in overseeing:

- (a) the preparation of the financial statements of the Corporation and the conduct of any audit thereof;
- (b) the Corporation’s compliance with applicable financial reporting requirements; and
- (c) the independence and performance of the Auditor.

#### Definitions

For the purposes of this Charter, the following terms have the following meanings:

- (a) “**Auditor**” means the auditor appointed to prepare an audit report in respect of the annual financial statements of the Corporation.
- (b) “**NI 52-110**” means National Instrument 52-110 – *Audit Committees* promulgated by the securities regulatory authorities in Canada as may be amended from time to time.

#### Composition of the Committee

- (a) Number of Members: The Committee shall be composed of a minimum of three members, each of whom shall be a member of the Board.
- (b) Independence of Members: Each member of the Committee shall be “independent” within the meaning of NI 52-110 unless the Board determines to rely on an exemption contained in NI 52-110.
- (c) Financial Literacy: Each member of the Committee shall be “financially literate” within the meaning of NI 52-110 unless the Board determines to rely on an exemption contained in NI 52-110.
- (d) Appointment and Vacancies: The members of the Committee shall be appointed by the Board and shall serve at the pleasure of the Board. Any member of the Committee may be removed or replaced at any time by the Board and shall automatically cease to be a member of the Committee as soon as such member ceases to be a director of the Corporation. The Board may fill vacancies on the Committee by appointment from among its members. If and whenever a vacancy shall exist on the Committee, the remaining members may exercise all of its powers so long as a quorum remains.
- (e) Chair: The Board shall designate one member of the Committee as the chairperson of the Committee (the “**Chair**”). The Chair shall preside over all meetings of the Committee, and in the Chair’s absence, the members of the Committee may designate from among such members the Chair for the purpose of such meeting.

#### Transaction of Business and Meetings

- (a) Transaction of Business: The Committee shall transact its business in accordance with governing corporate legislation and the provisions of the by-laws of the Corporation. To the extent not provided either therein

or in the provisions of this Charter, the Committee may determine the manner in which it will transact its business by way of resolution passed by a majority of votes cast thereon.

- (b) Number of Meetings: The Committee shall meet at least four times per year or more frequently as is necessary to carry out its duties and responsibilities.
- (c) Calling of Meetings: The Chair or any member of the Committee may at any time convene a meeting of the Committee. Upon a request from the Auditor, the Chair shall convene a meeting of the Committee to consider any matters that the Auditor desires to bring to the attention of the Committee.
- (d) Notice of Meetings: Notice of meetings shall be delivered, mailed, faxed, emailed or sent by any other form of transmitted or recorded message to each member of the Committee not less than forty-eight hours before the meeting is to take place. Notice of any meeting or any irregularity thereof may be waived by any member. Meetings may be held at any time without formal notice if all the members are present, or if a quorum is present and those members who are absent have signified their consent to the meeting being held in their absence. Any resolution passed or action taken at such a meeting shall be valid and effectual as if it had been passed or taken at a meeting duly called and constituted.
- (e) Quorum: A quorum for meetings of the Committee shall be at least two members of the Committee. No business may be transacted by the Committee at a meeting unless a quorum of the Committee is present.
- (f) Voting: All motions made at a meeting of the Committee shall be decided by a simple majority of votes cast by members of the Committee who vote on such motion. In the event of an equality of votes on any motion, the Chair shall not have a second or casting vote.
- (g) Minutes and Reporting to the Board: Minutes shall be prepared of all meetings of the Committee. A copy of such minutes shall be circulated to all members of the Committee and the Board. In addition, the Chair may report orally to the Board on any matter in his or her view requiring the immediate attention of the Board.
- (h) Attendance of Non-Members: The Committee may invite to a meeting any officers, directors or employees of the Corporation, legal counsel, advisors and other persons whose attendance it considers necessary or desirable in order to carry out its duties and responsibilities. If not a member of the Committee, such invitees shall have no voting rights at any meeting of the Committee.

### **Duties and Responsibilities**

#### ***External Auditor***

- (a) The Committee shall recommend to the Board:
  - (i) the person or firm to be nominated as Auditor for the purposes of preparing or issuing an auditor's report or performing other audit, review or attest services for the Corporation; and
  - (ii) the compensation of the Auditor.
- (b) The Committee is authorized in carrying out its duties to communicate directly with the Auditor and the Auditor shall report directly to the Committee. The Committee shall be directly responsible for overseeing the work of the Auditor engaged for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Corporation, including the resolution of disagreements between management and the Auditor regarding financial reporting.

- (c) The Committee shall review and recommend to the Board the annual audit plan of the Auditor and the terms of the Auditor's engagement, including the appropriateness and reasonableness of the Auditor's fees.
- (d) The Committee may review and evaluate the Auditor's performance.
- (e) The Committee shall review and receive assurances as to the independence of the Auditor.
- (f) The Committee shall review any reports issued by the Canadian Public Accountability Board which specifically relate to any previous audit of the financial statements of the Corporation.
- (g) The Committee shall periodically meet with the Auditor without management present to discuss the completeness and accuracy of the Corporation's financial statements.
- (h) When there is to be a change in the Auditor, the Committee shall review the issues related to the change and shall approve the information to be included in the notice of such change required to be filed with the applicable regulatory authorities.
- (i) The Committee shall pre-approve all non-audit services to be provided to the Corporation (or its subsidiary entities, if any) by the Auditor. The Committee may delegate this function to one of its independent members, who shall report to the Committee on any such approvals.

***Financial Reporting and Public Disclosure***

- (j) The Committee shall review, report to the Board on and, if deemed advisable by the Committee, recommend to the Board for approval, the Corporation's interim and annual financial statements and all related management's discussion and analysis before those materials are filed with the applicable regulatory authorities and publicly disclosed. If authorized by the Board, the Committee may approve the interim financial statements and the related management's discussion and analysis, before those materials are filed with the applicable regulatory authorities and publicly disclosed. The Committee shall receive and review any reports prepared by management of the Corporation or the Auditor that relate to any of the following:
  - (i) changes in accounting principles, or in their application, which may have a material impact on a current or future year's financial statements;
  - (ii) significant accruals, reserves or other estimates, such as ceiling test calculations;
  - (iii) the accounting treatment of significant, unusual or non-recurring transactions;
  - (iv) disclosures of commitments and contingencies;
  - (v) adjustments raised by the Auditor, whether or not included in the financial statements;
  - (vi) unresolved differences between management and the Auditor;
  - (vii) explanations of significant variances with comparative reporting periods; and
  - (viii) related party transactions and ensuring that the nature and extent of such transactions are properly disclosed.
- (k) The Committee shall review, report to the Board on and, if deemed advisable by the Committee, recommend for approval by the Board, the Corporation's annual and interim earnings press releases before the Corporation publicly discloses this information.

- (l) As it relates to financial information that is extracted or derived from the Corporation's financial statements, the Committee shall review, report to the Board on and, if deemed advisable by the Committee, recommend for approval by the Board, all annual reports, annual information forms, information circulars, business acquisition reports, prospectuses and other securities offering documents (excluding, for greater certainty, the Corporation's corporate presentations) before such documents are publicly disclosed and, if applicable, filed with the applicable regulatory authorities.
- (m) The Committee shall ensure that adequate procedures are in place for the review of the Corporation's public disclosure of financial information extracted or derived from the Corporation's financial statements and shall periodically assess the adequacy of those procedures.

#### ***Internal Controls***

- (n) The Committee shall oversee management's reporting on internal controls and shall advise the Board of any material failures of the internal controls.
- (o) The Committee shall establish procedures:
  - (i) for the receipt, retention and treatment of complaints received by the Corporation regarding accounting, internal accounting controls, or auditing matters; and
  - (ii) for the confidential, anonymous submission by employees of the Corporation of concerns regarding questionable accounting or auditing matters.

#### ***Other Duties and Responsibilities***

- (p) The Committee shall review management's reports regarding the certification of annual and interim financial reports in accordance with applicable securities legislation.
- (q) The Committee shall review and approve:
  - (i) the Corporation's hiring policies regarding partners, employees and former partners and employees of the present and former Auditor; and
  - (ii) the employment by the Corporation of any current or former partner or employee of the present and former Auditor.
- (r) The Committee shall review, at least annually, this Charter and recommend to the Board any amendments to this Charter that the Committee considers necessary or advisable.
- (s) The Committee shall bring to the attention of the Board such other issues as are necessary to carry out its mandate and shall make recommendations to the Board with respect to the foregoing. In addition, the Committee shall review and report to the Board on any other matters as may be delegated to it by the Board from time to time.

#### **Access to Information and Advisors**

- (a) In discharging its role, the Committee shall have full access to all books, records, facilities and personnel of the Corporation to the extent that the same relate to matters that are the responsibility of the Committee under this Charter. The Committee may require the Auditor or any director, officer or employee of the Corporation to appear before it to discuss the accounts and records and/or financial position of the Corporation. Members of the Committee may rely upon the accuracy of any statement or report prepared by the Auditor or upon any other statement or report including any appraisal report prepared by a qualified

person and shall not be responsible or held liable for any loss or damage in respect of any action taken on the basis of such statement or report.

- (b) The Committee has the authority to engage such advisors (including independent legal counsel) as it considers necessary or desirable to assist it in fulfilling its duties and responsibilities as provided in this Charter and to set the compensation to be paid thereto, such engagement to be at the Corporation's expense. The Corporation shall be responsible for all other expenses of the Committee that are deemed necessary or desirable by the Committee in order to fulfil its duties and responsibilities as provided for in this Charter.

Approved and Adopted: March 14, 2018.