# A Progressive Montney Producer for the New Energy Market

# ADVANTAGE ENERGY LTD. \*

## **Investor Presentation**

TSX: AAV 52-week trading Shares Outstanding (basic) Market Cap / EV (\$ Millions) \$1.51 to \$4.71 191 million \$850 / \$1,065

July 2021

# Corporate Strategy – The Path To Growing Shareholder Value

Maintain Strong Foundations





Enhance Resilience and Scale



• Reduce net debt/AFF to 1x

• Grow production

5-10%/year

- Focus on top tier economics
- Establish: ENTROPY

- Liquids growth to balance gas weighting
- Diversify into carbon revenue, cleantech
- Acquisitions creating efficiencies and scale
- Net-zero "blue gas"

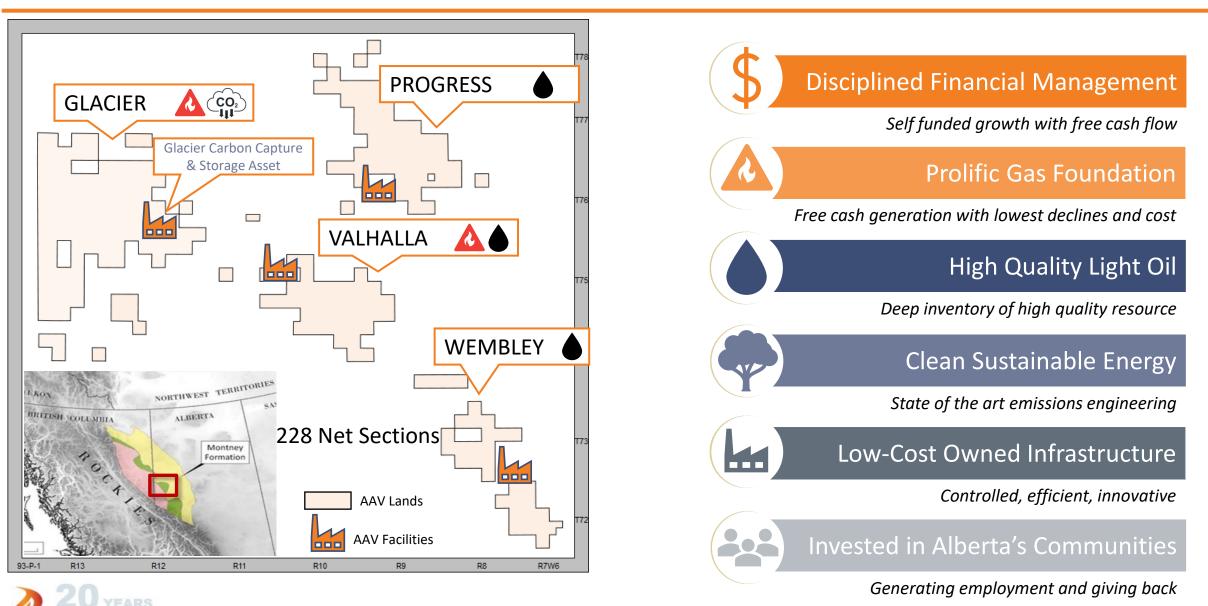
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Notes:

## World Class Assets, Operational Excellence, Environmental Leadership



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# Strong Foundations Create a Launchpad into the New Energy Markets

## **Financial Stability**

Recent 2021 guidance revision – capital down 9%, production up 3%<sup>(1)</sup>

Moderate growth and FCF generation

Debt reduction on-track

## Asset Quality

87% increase in new well productivity

Q1 2021 production outperformance

Infrastructure dominance facilitates Q1 2021 'tuck-in' land acquisitions









## Evolving Competitively

Entropy Inc. – Modular Carbon Capture and Storage (MCCS)

\$8,500/boe/d capital efficiency 2021<sup>(1)</sup>

120% PDP production replacement, \$8.41/boe F&D cost 2020



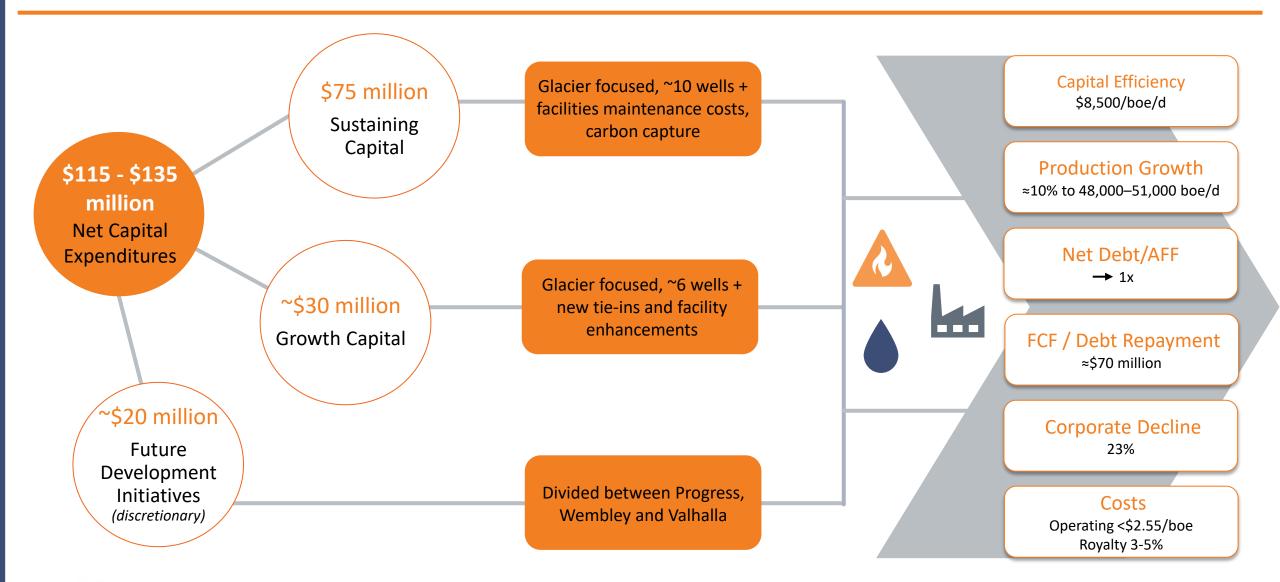
20% to 50% commodity hedges

Diversified sales markets and low commitments

Ultra-low liability management ratio

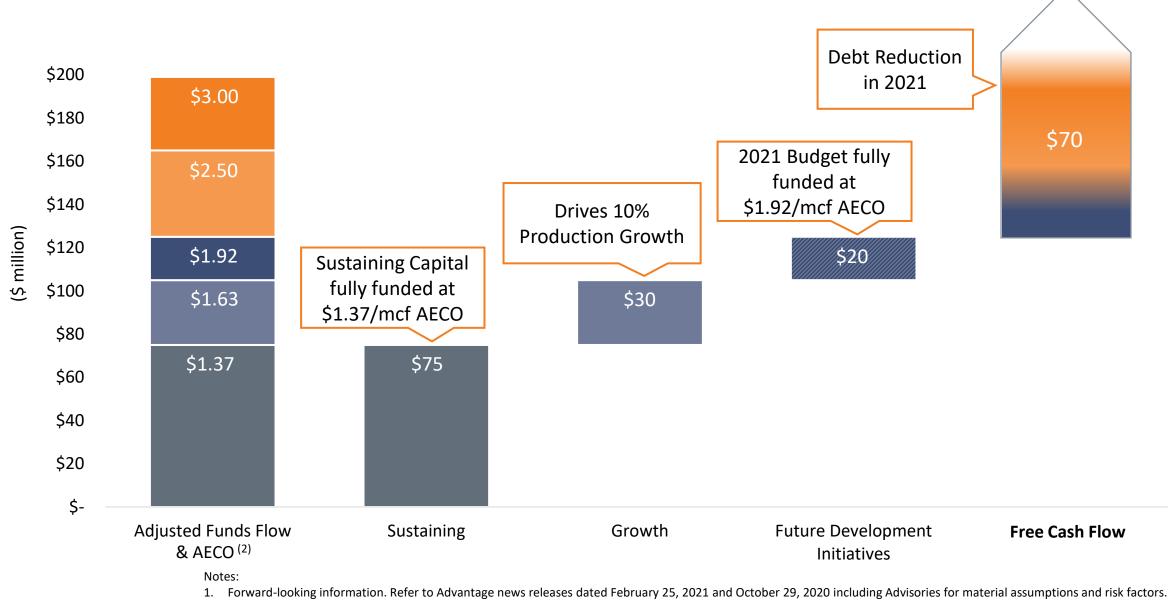


## 2021 Capital Investment Thesis Generates Significant FCF and Growth <sup>(1)</sup>



S Notes:

## 2021 Capital Program Fully Funded at Lower Prices with FCF<sup>(1)</sup>

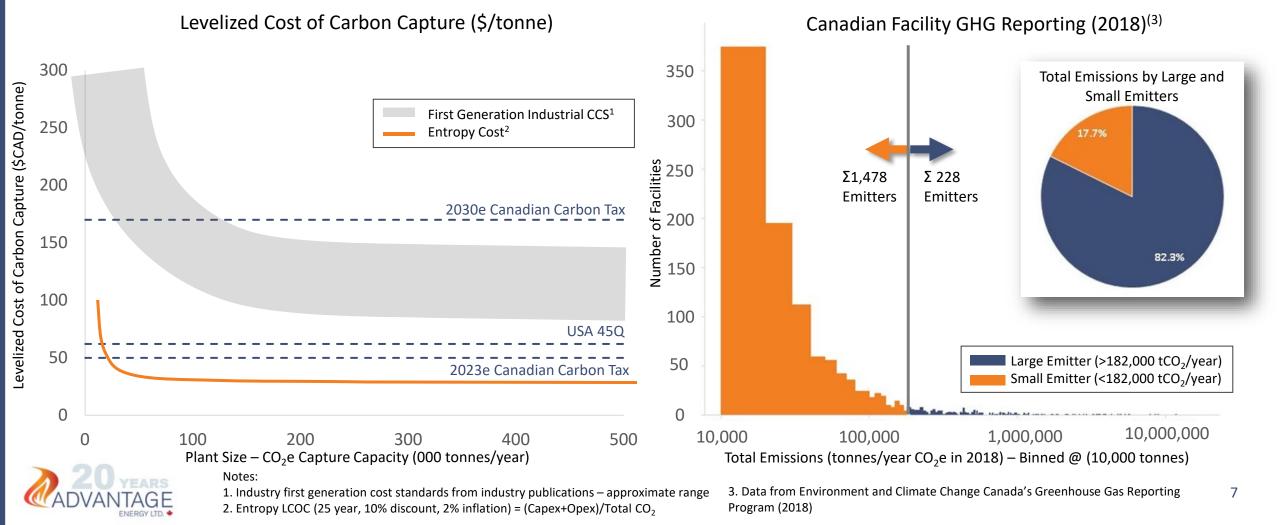


2. AECO price assumptions in C\$/mcf. Other 2021 price assumptions include US\$58/bbl WTI, US\$0.63/mmbtu AECO Basis, 0.79 FX and hedging.

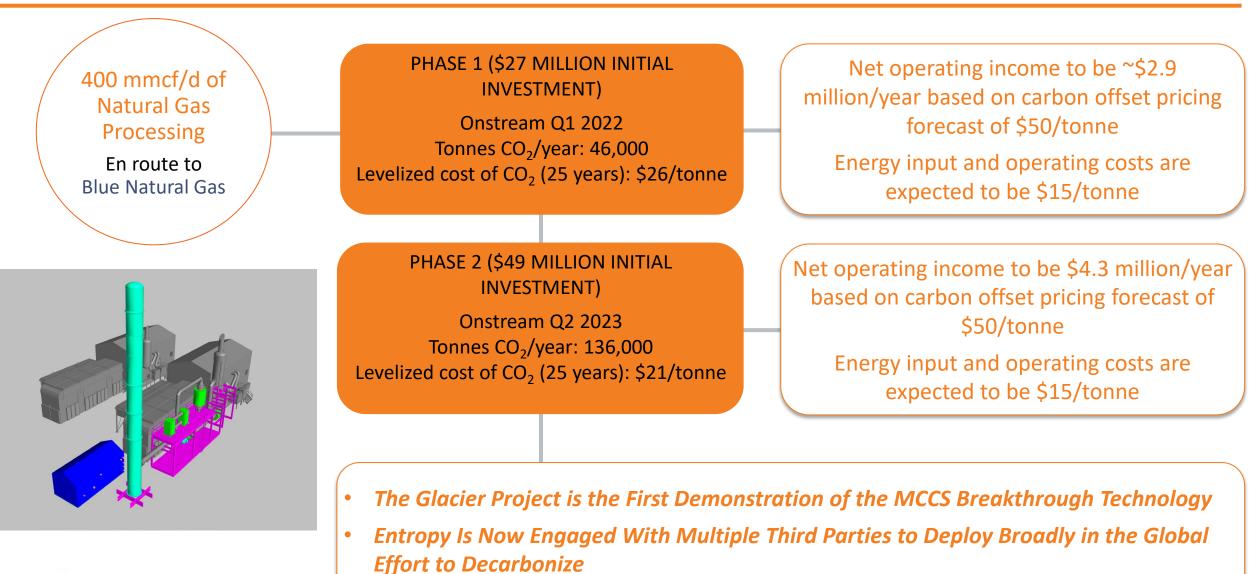
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# Introducing Entropy Inc. – Modular Carbon Capture for \$26/Tonne, Today

- Advantage and ABC Engineering have partnered to develop breakthrough carbon capture technology
- Entropy Inc designs, builds and manages Modular CCS projects that are profitable at today's carbon pricing for large and small industrial emitters.

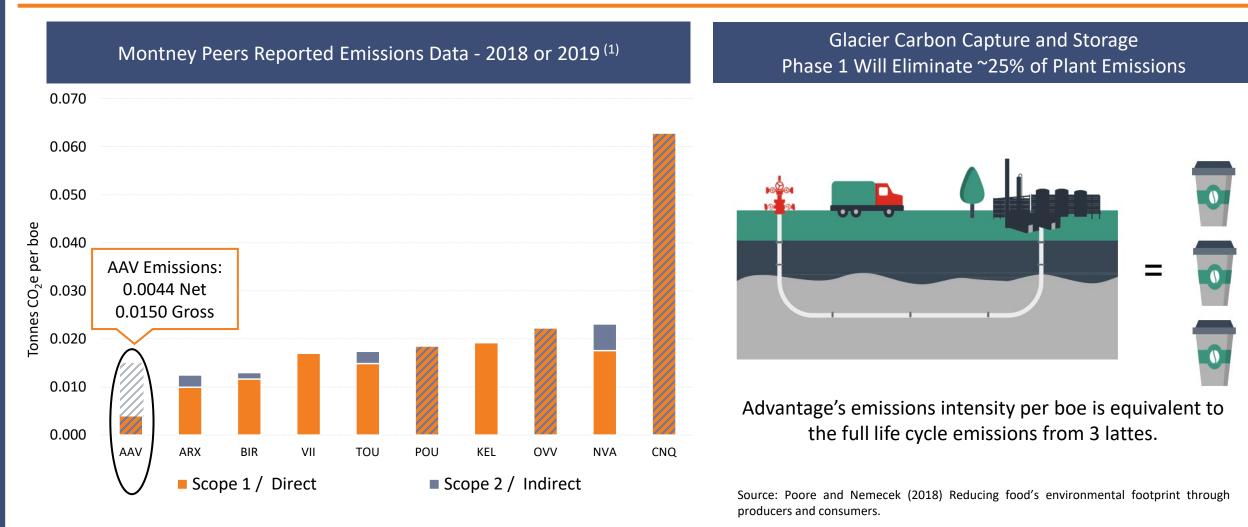


## First Commercial MCCS Project Underway: Glacier Gas Plant





## Environmental Leadership – The Path to Net Zero is Underway



Source: Company Reports; Scotiabank GBM.

Notes:

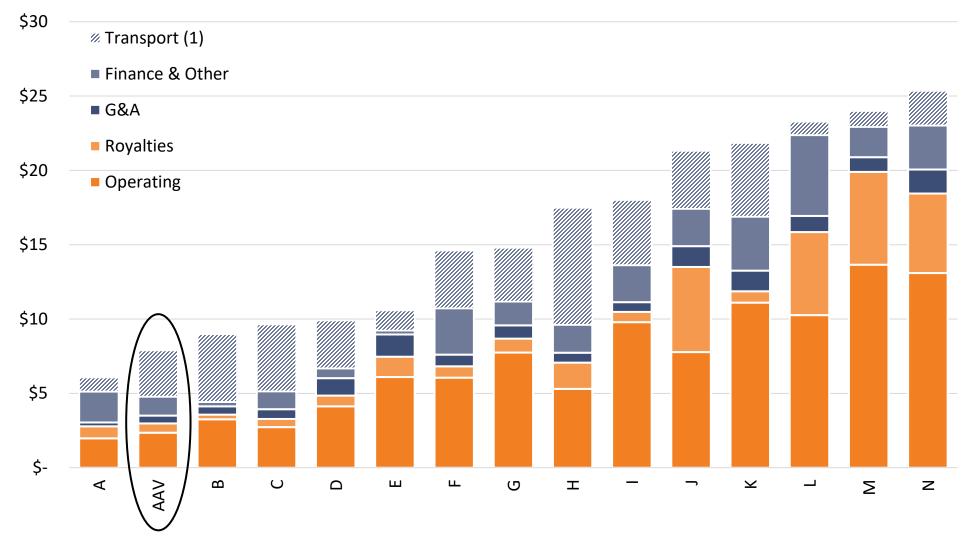


\*Scope 1 + 2 GHG emissions intensity for WCP is -0.0194 tonnes of  $CO_2e$  per boe net of sequestration activities;

1. TOU & OVV data was reported in 2018, data for all others was reported in 2019; 2. Hatched bars indicate that the company has reported emissions from both 1 & 2

scopes as a combined number; 3. Scope 1 and 2 emissions do not include applicable third party natural gas processing emissions (typically 0.01 t/boe to 0.03 t/boe).

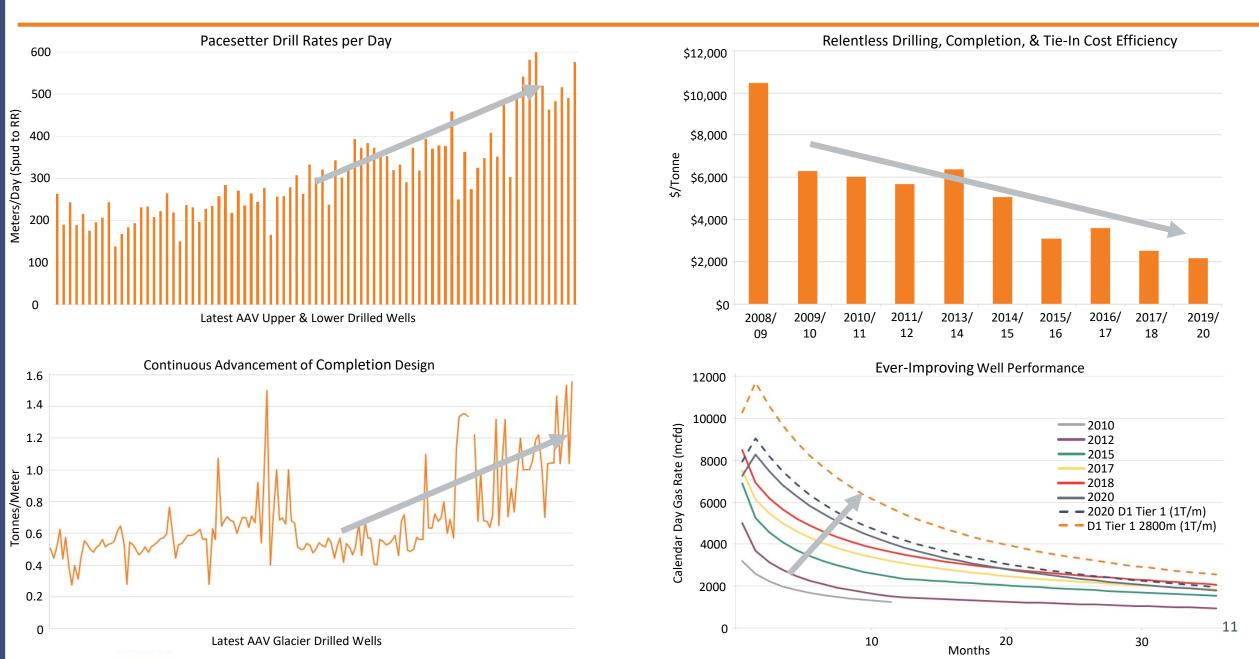
## Low-Cost Structure – A Key Factor in FCF Generation Capacity



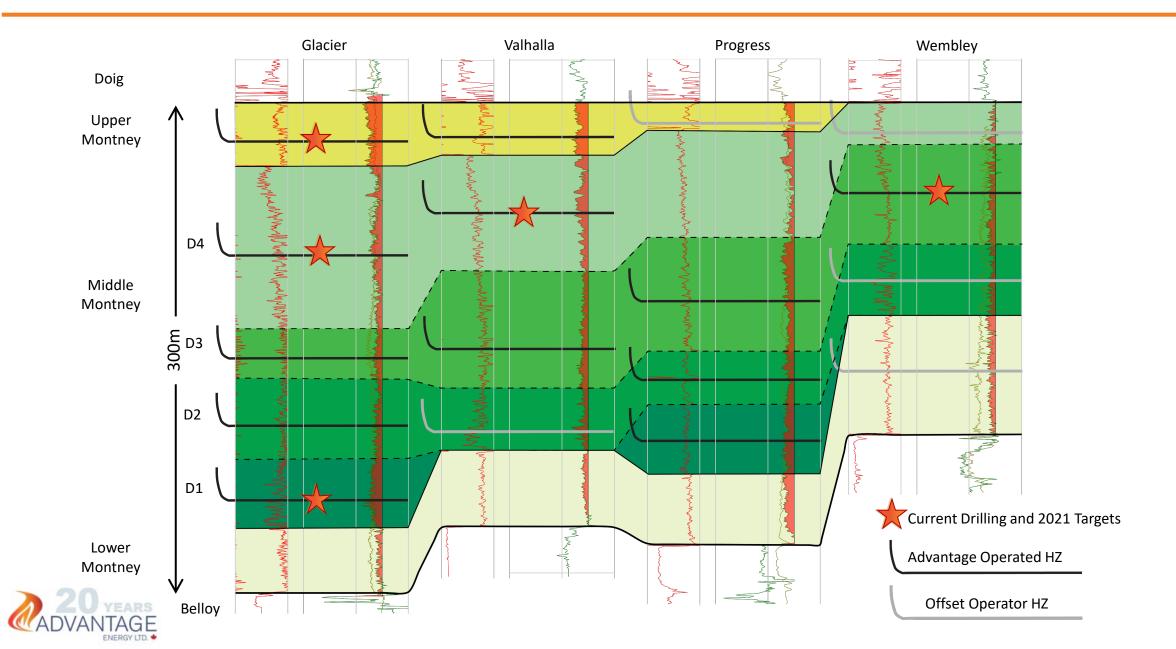


ENERGY LTD. +

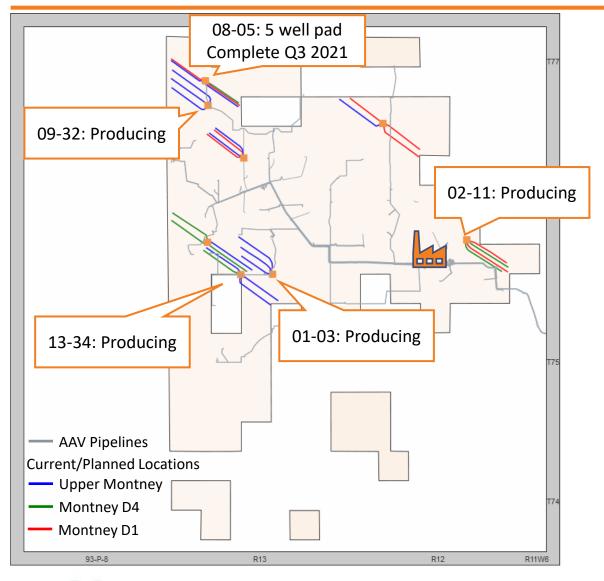
## Track Record of Enhancing Efficiency and Performance



## Advantage Montney Assets – Multizone Oil, Liquids and Gas Throughout



## Glacier – Foundational Asset Setting a New Standard



• 14 new wells now onstream, producing >110 mmcf/d

- New wells on production include nine D1, three D4 and two Upper wells early performance exceeding type curve expectations
- 08-05 pad (two D1, two Upper and one D4 wells) averaged 9 days spud to RR, completions scheduled for Q3 2021
- <u>Achievements from H2 2020 program</u>
  - ✓ Total well costs reduced 10%
  - ✓ Revised frac designs and geologic targeting
  - Non-productive time required for equipping reduced to 3 days vs ~21 days in prior programs
- All wells will produce into existing plant capacity at negligible incremental operating cost

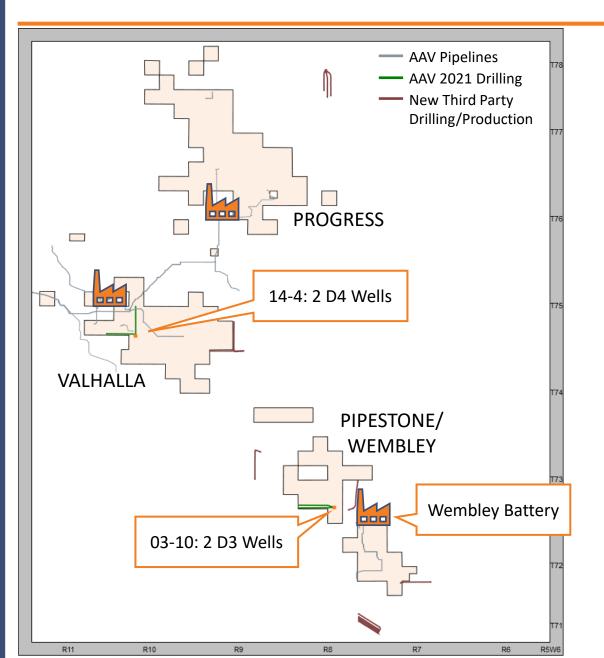
#### Montney D1 Tier 1 Half-cycle Economics<sup>(1)</sup> (Feb 22 Strip; 2021 avg AECO C\$2.80/gj & US\$59/bbl WTI)

| Type Well              | Rate of Return | Payout    |
|------------------------|----------------|-----------|
| 10.1 Bcf, 7.9 bbl/mmcf | 145%           | 1.0 years |

#### Notes:

1. Management estimates. Rate of Return is assuming initial capital of \$4.5 million per well DCE+T

# Oil & Liquids Rich Gas – Progress/Wembley/Valhalla



#### PROGRESS

- 6 wells on production
- Inventory of acquired pads and licenced locations ready to execute
- Progress competitive with Pipestone/Wembley, and higher netbacks

### VALHALLA

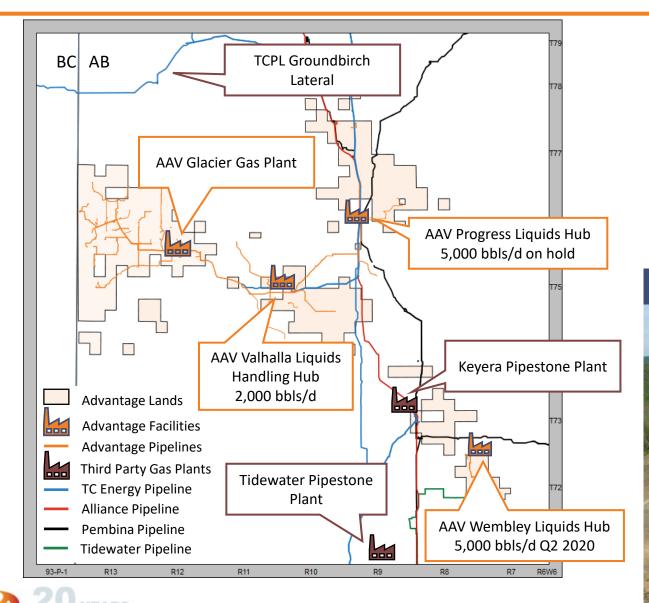
- Facility running at capacity with strong performance of initial AAV wells
- 2 well pad planned to maintain volumes and build out development footprint

#### PIPESTONE/WEMBLEY

- 8 Montney wells producing at stabilized rate of 2,775 boe/d, 40% liquids after ~1 year
- Advantage oil battery operational since Q2 2020 with onsite water disposal capable of up to 4,000 bbls/d injection
- Pads acquired to facilitate range of development options; next 2 well pad to be drilled late 2021

### *Competitor activity throughout 2020 offsetting undeveloped lands* <sup>14</sup>

## Strategic Infrastructure Control, Flexible Pipeline Access

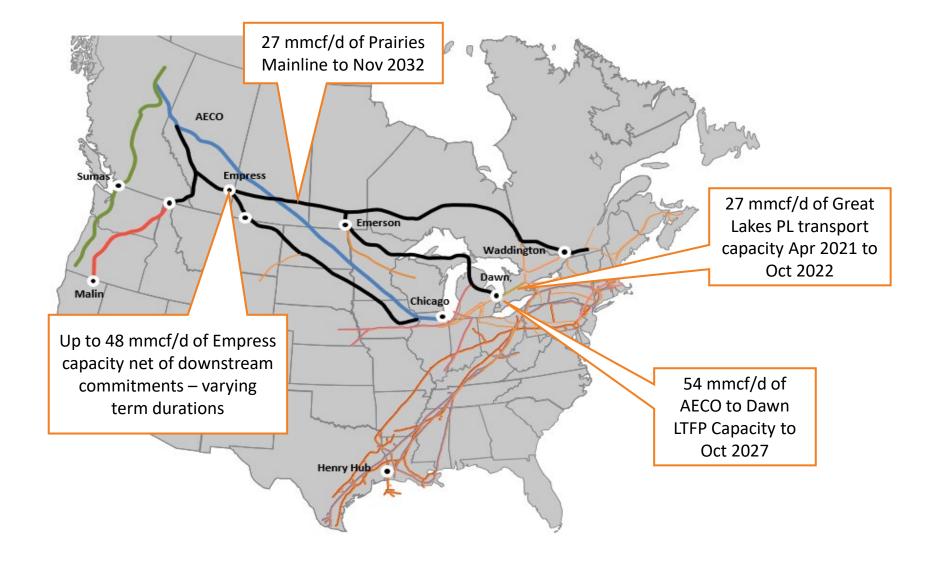


- 400 mmcf/d + 6,800 bbl/d capacity Glacier Gas Plant;
  >130 mmcf/d surplus capacity available
- 45 mmcf/d + 2,000 bbl/d Valhalla hub
- 35 mmcf/d + 5,000 bbl/d Wembley hub
- 25 mmcf/d + 5,000 bbl/d Progress hub on hold



#### Advantage Glacier Gas Plant

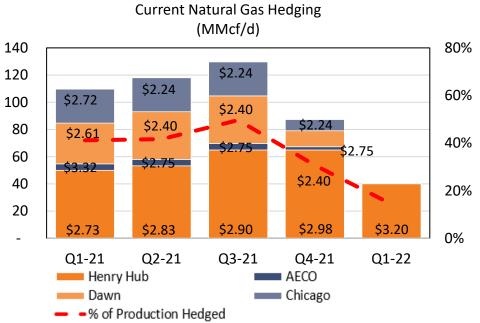
## Natural Gas Transportation Portfolio



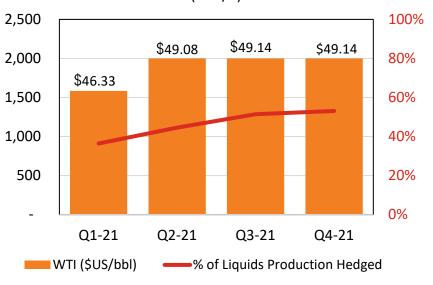


## Market Hedging Activities

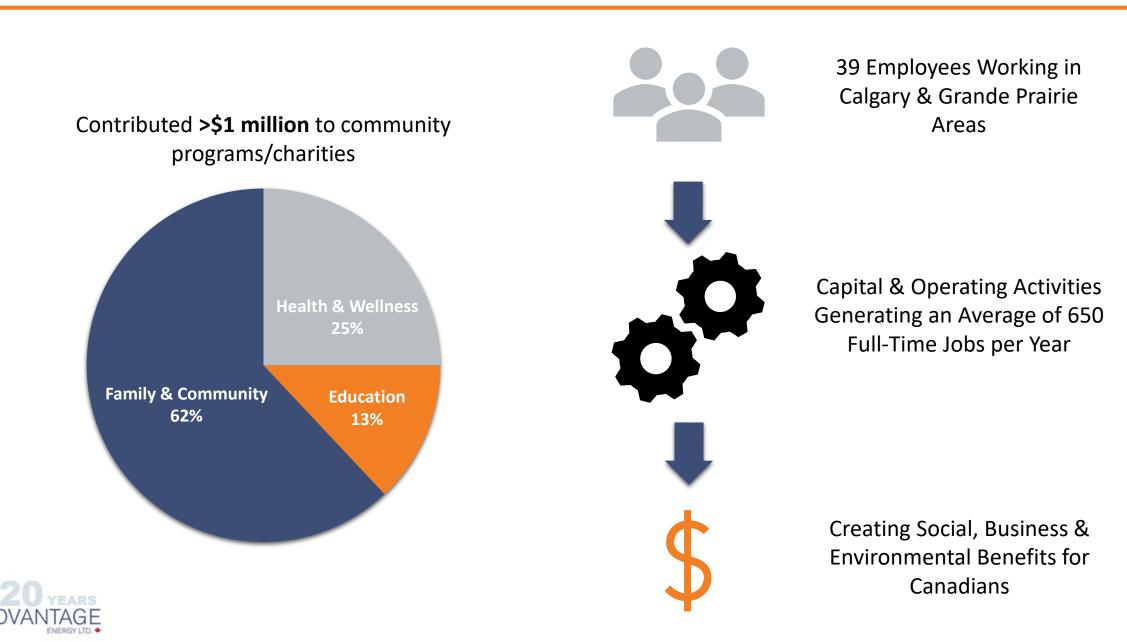
| Physical Flows                 | Q1-21 | Q2-21 | Q3-21 | Q4-21 | 2022 | 2023-2027 |
|--------------------------------|-------|-------|-------|-------|------|-----------|
| AECO                           | 30%   | 37%   | 30%   | 38%   | 41%  | 30% - 50% |
| Empress                        | 10%   | 9%    | 10%   | 16%   | 18%  | 10% - 20% |
| Emerson (TC Prairies Mainline) | 10%   | 0%    | 0%    | 0%    | 1%   | 10% - 20% |
| Dawn                           | 22%   | 29%   | 32%   | 30%   | 28%  | 15% - 20% |
| U.S. Midwest                   | 28%   | 25%   | 28%   | 16%   | 12%  | 5% - 20%  |



#### Crude Oil & Liquids Hedging (bbls/d)



## Invested in the Communities Where We Work



## Advantage Contact Information



Advantage Glacier Gas Plant

**Investor Relations** 

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Listed on TSX: AAV

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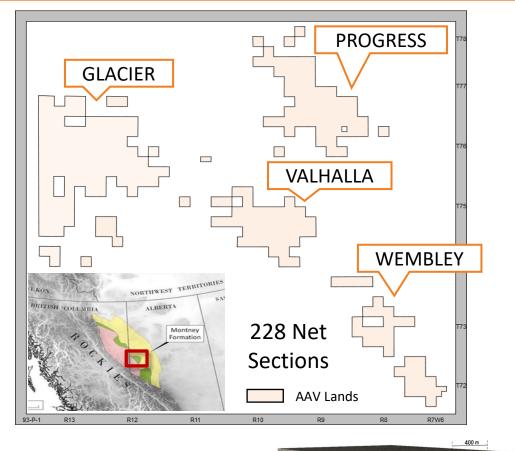
| Andy Mah, P.Eng.         | Director, Chief Executive Officer   |
|--------------------------|-------------------------------------|
| Mike Belenkie, P.Eng.    | President & Chief Operating Officer |
| Craig Blackwood, CPA, CA | Chief Financial Officer             |
|                          |                                     |



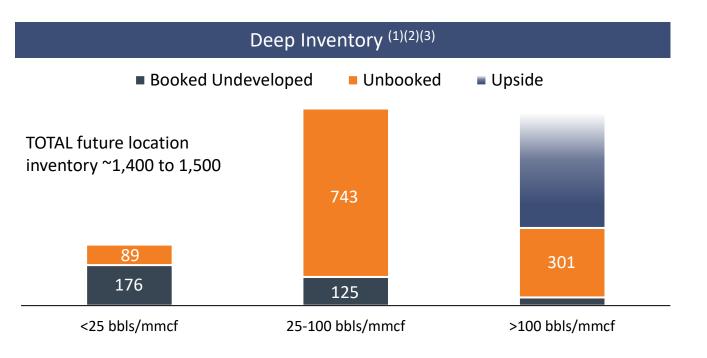
# Financial Discipline Operationally Nimble Returns Focus

# APPENDIX

## Area Overview – Deep Inventory of Gas, NGLs and Oil



Liquids-rich Middle Montney



- Total of ~228 net sections (145,920 net acres)
- Middle Montney is liquids-rich throughout (25 to 280 bbls/mmcf)
- Only 80 liquids-rich wells drilled to date 5% of inventory
- Glacier Gas Plant
  - 400 mmcf/d raw gas capacity, 6,800 bbls/d liquids handling

1. Management Estimates. Refer to Advisory.

- 2. Based on Sproule December 31, 2020 Reserves Report.
- 3. C<sub>3</sub>+ shallow cut recoveries.

#### Forward-Looking Information and Statements

The information in this presentation contains certain forward-looking information and forward-looking statements (collectively, "forward-looking statements") within the meaning of applicable securities laws relating to the Corporation's plans and other aspects of its anticipated future operations, management focus, strategies, financial, operating and production results and business opportunities. These statements relate to future events or our future intentions or performance. All statements other than statements of historical fact may be forward-looking statements. The statements have been prepared by management to provide an outlook of the Corporation's activities and results and may not be appropriate for other purposes. Forwardlooking statements are often, but not always, identified by the use of words such as "seek", "anticipate", "plan", "continue", "estimate", "guidance", "demonstrate", "expect", "may", "can", "will", "project", "predict", "potential", "target", "objectives", "intend", "could", "might", "should", "believe", "would" and similar expressions and include statements relating to, among other things, Advantage's focus, strategy and development plans; timing for wells to come on-stream; number of wells planned for the remainder of 2021; the anticipated timing of wells being brought on production; the anticipation that the Valhalla compressor and liquids hub will be full for the remainder of 2021; developing additional operational and infrastructure capability and how this will be achieved; annual liquids and gas production and the anticipated amount thereof; the Corporation's estimated net capital expenditures for 2021, including the expected allocation and timing of such expenditures and the anticipated effect of such expenditures on revenue and adjusted funds flow; Advantage's estimates of base decline rate and sustaining capital; Advantage's ability to grow 2021 adjusted funds flow based on current natural gas futures pricing; the expected amount of adjusted funds flow; anticipated debt repayment amount for 2021 and net debt to adjusted funds flow by the end of 2021; Advantage's ability to reduce its net debt to adjusted funds flow in 2021; royalty rate; operating expense; transportation expense and G&A/Finance expense for 2021; resource development potential of the Corporation's assets and the Corporation's future drilling inventory; the Corporation's plans to continue to be a low-cost supplier of natural gas, increase free cash flow generation and strengthen netback margins; the Corporation's hedging activities and the benefits to be derived therefrom and other matters. Advantage's actual decisions, activities, results, performance or achievement could differ materially from those expressed in, or implied by, such forward-looking statements and accordingly, no assurances can be given that any of the events anticipated by the forward-looking statements will transpire or occur or, if any of them do, what benefits that Advantage will derive from them.

With respect to the forward-looking statements contained in this presentation, Advantage has made a number of material assumptions regarding, but not limited to: conditions in general economic and financial markets; the impact and duration thereof that the COVID-19 pandemic will have on (i) the demand for crude oil, NGLs and natural gas, (ii) the supply chain including the Corporation's ability to obtain the equipment and services it requires, and (iii) the Corporation's ability to produce, transport and/or sell its crude oil, NGLs and natural gas; effects of regulation by governmental agencies; current and future commodity prices; the Corporation's current and future hedging program; future exchange rates; future production and composition including natural gas and liquids; royalty regimes and future royalty rates; future operating costs; future transportation costs and availability of product transportation capacity; future general and administrative costs; the estimated well costs including frac stages and lateral lengths per well; the number of new wells required to achieve the objectives of the 2021 calendar year; that the Corporation will have sufficient adjusted funds flow, debt or equity sources or other financial resources required to fund its capital and operating expenditures and requirements as needed.



## Advisory

Management has included the summary of assumptions and risks related to forward-looking information in order to provide shareholders with a more complete perspective on Advantage's future operations and such information may not be appropriate for other purposes. Advantage's actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking statements and, accordingly, no assurance can be given that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do so, what benefits that Advantage will derive therefrom. Readers are cautioned that the foregoing lists of factors are not exhaustive. The Corporation and management believe that the statements have been prepared on a reasonable basis, reflecting management's best estimates and judgments. However, because this information is highly subjective and subject to numerous risks including the risks discussed above, it should not be relied on as necessarily indicative of future results. These forward-looking statements are made as of the date of this presentation and Advantage disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise, other than as required by applicable securities laws.

These statements involve substantial known and unknown risks and uncertainties, certain of which are beyond Advantage's control, including, but not limited to: changes in general economic, market and business conditions; industry conditions; impact of significant declines in market prices for oil and natural gas; actions by governmental or regulatory authorities including increasing taxes and changes in investment or other regulations; changes in tax laws, royalty regimes and incentive programs relating to the oil and gas industry; the effect of acquisitions; Advantage's success at acquisition, exploitation and development of reserves; failure to achieve production targets on timelines anticipated or at all; unexpected drilling results; risk and assumptions used in estimating the 2021 calendar year financial and operating results, including commodity prices, timing of expenditures and the focus of such expenditures, change from current expectations; risk that the Corporation does not achieve the anticipated increases to production and revenues expected from the 2021 net capital expenditures; changes in commodity prices, currency exchange rates, net capital expenditures, reserves or reserves estimates and debt service requirements; the occurrence of unexpected events involved in the exploration for, and the operation and development of, oil and gas properties, including hazards such as fire, explosion, blowouts, cratering, and spills, each of which could result in substantial damage to wells, production facilities, other property and the environment or in personal injury; changes or fluctuations in production levels; individual well productivity; lack of available capacity on pipelines; delays in anticipated timing of drilling and completion of wells; delays in completion of infrastructure; lack of available capacity on pipelines; individual well productivity; competition from other producers; the lack of availability of qualified personnel or management; credit risk; changes in laws and regulations including the adoption of new environmental laws and regulations and changes in how they are interpreted and enforced; our ability to comply with current and future environmental or other laws; stock market volatility and market valuations; liabilities inherent in oil and natural gas operations; uncertainties associated with estimating oil and natural gas reserves; competition for, among other things, capital, acquisitions of reserves, undeveloped lands and skilled personnel; incorrect assessments of the value of acquisitions; geological, technical, drilling and processing problems and other difficulties in producing petroleum reserves; ability to obtain required approvals of regulatory authorities; and ability to access sufficient capital from internal and external sources. Many of these risks and uncertainties and additional risk factors are described in the Corporation's Annual Information Form dated February 25, 2021 which is available at www.sedar.com and www.advantageog.com.



#### Oil and Gas Information

Barrels of oil equivalent ("boe") and thousand cubic feet of natural gas equivalent ("mcfe") may be misleading, particularly if used in isolation. Boe and mcfe conversion ratios have been calculated using a conversion rate of six thousand cubic feet of natural gas equivalent to one barrel of oil. A boe and mcfe conversion ratio of 6 mcf: 1 bbl is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. 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.

This presentation discloses drilling inventory in three categories: (i) proved locations; (ii) probable locations; and (iii) unbooked locations. Proved locations and probable locations are derived from Sproule Associates Limited reserves evaluation effective December 31, 2020 and account for drilling locations that have associated proved and/or probable reserves, as applicable. Unbooked locations are internal estimates based on our prospective acreage and an assumption as to the number of wells that can be drilled per section based on industry practice and internal review. Unbooked locations do not have attributed reserves or resources. Of the 1,400 to 1,500 total drilling locations identified herein, 299 are proved locations, 38 are probable locations and 1,063 to 1,163 are unbooked locations. Unbooked locations have been identified by management as an estimation of our multi-year drilling activities based on evaluation of applicable geologic, seismic, engineering, production and reserves information. There is no certainty that the Corporation will drill all unbooked drilling locations and if drilled there is no certainty that such locations will result in additional oil and gas reserves, resources or production. The drilling results, additional reservoir information that is obtained and other factors. While certain of the unbooked drilling locations have been de-risked by drilling existing wells in relative close proximity to such unbooked drilling locations, other unbooked drilling locations are graved drilling locations are graved drilling locations and other factors. While certain of the unbooked drilling locations have been de-risked by drilling existing wells in relative close proximity to such unbooked drilling locations, other unbooked drilling locations are graved wells will be drilled in such locations and if drilled there is more uncertainty whether wells will be drilled in additional oil and gas reserves, resources or production.

References in this presentation to production test rates, initial production rates, IP30 rates, flow rates, yields and other short-term production rates are useful in confirming the presence of hydrocarbons; however, such rates are not determinative of the rates at which such wells will commence production and decline thereafter and are not indicative of long-term performance or of ultimate recovery. Additionally, such rates may also include recovered "load oil" fluids used in well completion stimulation. While encouraging, readers are cautioned not to place reliance on such rates in calculating the aggregate production of Advantage. Advantage cautions that the test results should be considered to be preliminary.

Advantage has presented certain type curves and well economics for its Montney areas. The type curves presented are based on Advantage's historical production. Such type curves and well economics are useful in understanding management's assumptions of well performance in making investment decisions in relation to development drilling in the Montney area and for determining the success of the performance of development wells; however, such type curves and well economics are not necessarily determinative of the production rates and performance of existing and future wells and such type curves do not reflect the type curves used by our independent qualified reserves evaluator in estimating our reserves volumes. The type curves differ as a result of varying horizontal well length, stage count and stage spacing. The type curves represent the average type curves expected. In this presentation, estimated ultimate recovery represents the estimated ultimate recovery associated with the type curves presented; however, there is no certainty that Advantage will ultimately recover such volumes from the wells it drills.



## Advisory

In presenting such type curves, inputs and economics information and in this presentation generally, Advantage has used a number of oil and gas metrics which do not have standardized meanings and therefore may be calculated differently from the metrics presented by other oil and gas companies. Such metrics include DCE+T, "EUR", "NPV10", "payout", "rate of return" or "ROR", "half cycle ROR", "operating netback", "sustaining capital", "growth capital", and "base decline rate." EUR represents the estimated ultimate recovery of resources associated with the type curves presented. NPV10 represents the anticipated net present value of the future net revenue discounted at a rate of 10% associated with the type curves presented. Payout means the anticipated years of production from a well required to fully pay for the DCE+T of such well. ROR means the rate of return of a well or the discount rate required to arrive at a NPV equal to zero. Half cycle ROR means the rate of return of a well or the discount rate required to arrive at a NPV equal to zero when taking into account "half cycle" costs, which include drilling, completion, equip and tie-in capital expenditures. Base decline rate is Management's estimated annual reduction in corporate production from currently producing wells that is expected to occur in the subsequent year. Sustaining capital is Management's estimate of the capital required to drill, complete, equip and tie-in new wells to existing infrastructure thereby offsetting the corporate base decline rate and maintain production at existing levels.

Production estimates contained herein are expressed as anticipated average production over the calendar year. In determining anticipated production for the year 2021 Advantage considered historical drilling, completion and production results for prior years and took into account the estimated impact on production of the Corporation's 2021 expected drilling and completion activities.

#### **Non-GAAP Measures**

The Corporation discloses several financial and performance measures that do not have any standardized meaning prescribed under International Financial Reporting Standards ("IFRS" or "GAAP"). These financial and performance measures include "net capital expenditures", "adjusted funds flow", "adjusted funds flow per share", "net debt", "net debt to adjusted funds flow" and "free cash flow". Such financial and performance measures should not be considered as alternatives to, or more meaningful than measures determined in accordance with GAAP including "net income", "comprehensive income", "cash provided by operating activities", or "cash used in investing activities". Management believes that these measures provide an indication of the results generated by the Corporation's principal business activities and provide useful supplemental information for analysis of the Corporation's operating performance and liquidity. Advantage's method of calculating these measures may differ from other companies, and accordingly, they may not be comparable to similar measures used by other companies. "Net capital expenditures" include total capital expenditures related to property, plant and equipment and exploration and evaluation assets incurred during the period. Management considers this measure reflective of actual capital activity for the period as it excludes changes in working capital related to other periods. The Corporation considers "adjusted funds flow" to be a useful measure of Advantage's ability to generate cash from the production of natural gas and liquids, which may be used to settle outstanding debt and obligations, and to support future capital expenditures plans. Changes in non-cash working capital are excluded from adjusted funds flow as they may vary significantly between periods and are not considered to be indicative of the Corporation's operating performance as they are a function of the timeliness of collecting receivables or paying payables. Expenditures on decommissioning liabilities are excluded from the calculation as the amount and timing of these expenditures are unrelated to current production, highly variable and discretionary. "Net debt" is the total of bank indebtedness and working capital deficit. "Net debt to adjusted funds flow" is a ratio calculated as net debt divided by adjusted funds flow for the previous four quarters. Net debt to adjusted funds flow is considered by management to be a useful measure as it is commonly used to evaluate the leverage of a company and the ability to settle outstanding debt and obligations with cash generated from operations. Free cash flow is a useful measure of Advantage's ability to settle outstanding debt and obligations. Refer to the Corporation's most recent Management's Discussion and Analysis, which is available at www.sedar.com and www.advantageog.com, for additional information about certain financial measures, including reconciliations to the nearest GAAP measures, as applicable.



#### Abbreviations

The following abbreviations used in this presentation have the meanings set forth below.

| bbl       | barrel                                                                                                                                        |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| bbl/d     | barrel per day                                                                                                                                |
| bbls/d    | barrels per day                                                                                                                               |
| bbls/mmcf | barrels per million cubic feet                                                                                                                |
| boe       | barrels of oil equivalent of natural gas, on the basis of one barrel of oil or natural gas liquids for six thousand cubic feet of natural gas |
| boe/d     | barrels of oil equivalent per day                                                                                                             |
| GJ        | Gigajoule                                                                                                                                     |
| mcf       | thousand cubic feet                                                                                                                           |
| mcfe      | thousand cubic feet equivalent on the basis of six thousand cubic feet of natural gas for one barrel of oil or natural gas liquids            |
| mmcf/d    | million cubic feet per day                                                                                                                    |
| mmcfe/d   | million cubic feet equivalent per day                                                                                                         |
| NGL       | natural gas liquids                                                                                                                           |
| DCE+T     | drill, complete, equip and tie-in                                                                                                             |
| C3+       | propane plus                                                                                                                                  |
| C5+       | pentanes plus                                                                                                                                 |

