



Cenovus Energy Inc.

Supplementary Information – Oil and Gas Activities (unaudited)

For the Year Ended December 31, 2018

(Canadian Dollars)

DISCLOSURES ABOUT OIL AND GAS PRODUCING ACTIVITIES TOPIC 932 "EXTRACTIVE ACTIVITIES – OIL AND GAS" (unaudited)

The following select disclosures of Cenovus Energy Inc.'s ("Cenovus" or the "Company") reserves and other oil and gas information have been prepared in accordance with United States ("U.S.") Financial Accounting Standards Board ("FASB") Topic 932, "Extractive Activities – Oil and Gas" and the U.S. disclosure requirements of the Securities and Exchange Commission ("SEC").

All amounts pertaining to Cenovus's audited Consolidated Financial Statements are prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). Unless otherwise noted, all dollars are in millions of Canadian dollars. All references to C\$ or \$ are to Canadian dollars and references to US\$ are to U.S. dollars.

RESERVES DATA

The SEC Modernization of Oil and Gas Reporting final rules require that proved after royalty reserves be estimated using existing economic conditions (constant pricing). Cenovus's results have been calculated using the average of the first-day-of-the-month prices for the prior twelve-month period. This same twelve-month average price is also used in calculating the aggregate amount of (and changes in) future cash inflows related to the standardized measure of discounted future net cash flows. Future fluctuations in prices, production rates, or changes in political or regulatory environments could cause Cenovus's share of future production from Canadian reserves to be materially different from that presented.

The reserves disclosed are effective December 31, 2018, and were prepared by the independent, qualified reserves evaluators McDaniel & Associates Consultants Ltd. and GLJ Petroleum Consultants Ltd. There are significant differences between reserves evaluated under the SEC requirements and those presented in the Company's Annual Information Form filed under National Instrument 51-101 "Standards of Disclosure for Oil and Gas Activities" ("NI 51-101"). NI 51-101 requires disclosure of before royalties reserves and the associated values using forecasted prices and costs.

The reserves presented in this supplemental information are estimates only. There are numerous uncertainties inherent in estimating quantities of reserves, including many factors beyond the Company's control. In general, estimates of economically recoverable bitumen, crude oil, natural gas liquids and natural gas reserves and the future net cash flows derived therefrom are based upon a number of variable factors and assumptions, including but not limited to: product prices; future operating and capital costs; historical production from the properties and the assumed effects of regulation by governmental agencies, including with respect to environmental regulations, royalty payments and taxes; initial production rates; production decline rates; and the availability, proximity and capacity of oil and gas gathering systems, pipelines and processing facilities, all of which may vary considerably from actual results.

All such estimates are to some degree uncertain and classifications of reserves are only attempts to define the degree of uncertainty involved. For those reasons, estimates of the economically recoverable bitumen, crude oil, natural gas liquids and natural gas reserves attributable to any particular group of properties, classification of such reserves based on risk of recovery and estimates of future net revenues expected therefrom, prepared by different engineers or by the same engineers at different times, may vary substantially. Cenovus's actual production, sales, royalty payments, taxes and development and operating expenditures with respect to its reserves may vary from current estimates and such variances may be material.

Estimates with respect to reserves that may be developed and produced in the future are often based upon volumetric calculations and upon analogy to similar types of reserves, rather than upon actual production history. Subsequent evaluation of the same reserves based upon production history will result in variations, which may be material, in the estimated reserves.

Canadian provincial royalties are determined based on a graduated percentage scale which varies with prices and production rates. Canadian reserves, as presented on a net basis, assume royalty rates in existence at the time the estimates were made.

The reserves data contained herein is dated February 12, 2019 with an effective date of December 31, 2018.

OIL AND GAS RESERVES INFORMATION

All of Cenovus's reserves are located in Alberta and British Columbia, Canada.

Net Proved Reserves (Cenovus Share After Royalties)⁽¹⁾⁽²⁾ Average Fiscal-Year Prices

	Bitumen (MMbbls) ⁽³⁾	Crude Oil (MMbbls) ⁽³⁾	Natural Gas Liquids (MMbbls) ⁽³⁾	Natural Gas (Bcf) ⁽³⁾	Total (MMBOE) ⁽³⁾
2017					
Beginning of year	1,905	126	1	406	2,100
Revisions and improved recovery	73	5	-	102	95
Extensions and discoveries	129	-	1	33	135
Purchase of reserves in place	1,959	12	85	1,559	2,316
Sale of reserves in place	-	(104)	(1)	(73)	(117)
Production	(100)	(15)	(6)	(233)	(160)
End of year	<u>3,966</u>	<u>24</u>	<u>80</u>	<u>1,794</u>	<u>4,369</u>
Developed	664	23	51	1,390	970
Undeveloped	3,302	1	29	404	3,399
Total	<u>3,966</u>	<u>24</u>	<u>80</u>	<u>1,794</u>	<u>4,369</u>
2018					
Beginning of year	3,966	24	80	1,794	4,369
Revisions and improved recovery	155	(2)	(10)	(170)	116
Extensions and discoveries	112	6	11	175	158
Sale of reserves in place	-	(14)	(27)	(553)	(133)
Production	(118)	(2)	(8)	(187)	(160)
End of year	<u>4,115</u>	<u>12</u>	<u>46</u>	<u>1,059</u>	<u>4,350</u>
Developed	667	8	37	860	856
Undeveloped	3,448	4	9	199	3,494
Total	<u>4,115</u>	<u>12</u>	<u>46</u>	<u>1,059</u>	<u>4,350</u>

(1) Definitions:

- (a) "Net" reserves are the remaining reserves attributable to Cenovus, after deduction of estimated royalties and including royalty interests.
- (b) "Proved" oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible from a given date forward, from known reservoirs and under existing economic conditions, operating methods and government regulations, i.e., prices and costs as of the date the estimate is made.
- (c) "Developed" oil and gas reserves are reserves that can be expected to be recovered through existing wells with existing equipment and operating methods in which the cost of the required equipment is relatively minor compared to the cost of a new well.
- (d) "Undeveloped" reserves are reserves of any category that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion.
- (2) Estimates of total net proved bitumen, crude oil, natural gas liquids, or natural gas reserves are not filed by Cenovus with any U.S. federal authority or agency other than the SEC.
- (3) "Million barrels" is abbreviated as MMbbls, "billion cubic feet" is abbreviated as Bcf, and "million barrel of oil equivalent" is abbreviated as MMBOE.

Changes to Reserves

The explanation of significant year-over-year changes in the Company's net proved reserves for the year ended December 31, 2017 and December 31, 2018 is set forth below.

Year ended December 31, 2017

The changes to the Company's net proved bitumen reserves in 2017 are explained as follows:

- *Purchase of reserves in place:* The Company concluded a material transaction to acquire its partner's 50 percent interest in the Christina Lake, Foster Creek, and Narrows Lake properties ("FCCL"), increasing net proved reserves by 1,959 million barrels.
- *Revisions and improved recovery:* The year-over-year increase in average bitumen price restored economic viability to the Narrows Lake property, increasing net proved reserves by 243 million barrels. The increase was partially offset by decreased net proved reserves of 144 million barrels, which resulted from increased royalty rates caused by higher WTI benchmark prices at the Company's Foster Creek and Christina Lake properties. The remaining difference is attributable to technical revisions.
- *Extensions and discoveries:* In 2017, the Alberta Energy Regulator approved development area expansions at the Foster Creek and Narrows Lake properties, increasing the Company's net proved reserves by 129 million barrels.

The changes to the Company's net proved crude oil, natural gas liquids and natural gas reserves in 2017 are explained as follows:

- *Purchase of reserves in place:* The Company acquired significant assets in Alberta and British Columbia (the "Deep Basin Assets"). This added net proved reserves of 12 million barrels of crude oil, 85 million barrels of natural gas liquids, and 1,559 billion cubic feet of natural gas.
- *Sale of reserves in place:* The Company sold its Palliser, Pelican Lake and Saskatchewan properties, reducing its net proved reserves of crude oil and natural gas by 104 million barrels and 73 billion cubic feet, respectively.
- *Revisions and improved recovery:* Improved performance at Suffield and Athabasca Gas identified net proved natural gas reserves additions of 102 billion cubic feet.

Year ended December 31, 2018

The changes to the Company's net proved bitumen reserves in 2018 are explained as follows:

- *Revisions and improved recovery:* Improved performance for the Christina Lake, Foster Creek, and Narrows Lake properties, increased net proved reserves by 69 million barrels. In addition, lower bitumen prices decreased royalties payable for the Company's Christina Lake, Foster Creek and Narrows Lake properties and resulted in increased net proved reserves of 86 million barrels.
- *Extensions and discoveries:* The recognition of lower continuous net pay thickness cut-offs for the Christina Lake, Foster Creek and Narrows Lake properties increased reserves by 98 million barrels. In 2018, the Alberta Energy Regulator approved an area expansion at the Foster Creek property, increasing the Company's net proved reserves by 14 million barrels.

The changes to the Company's net proved reserves of crude oil, natural gas liquids and natural gas in 2018 are explained as follows:

- *Sale of reserves in place:* The Company sold its Suffield property and Cenovus Pipestone Partnership, reducing its net proved reserves of crude oil, natural gas liquids and natural gas by 14 million barrels, 27 million barrels and 553 billion cubic feet, respectively.
- *Revisions and improved recovery:* The year-over-year decrease in natural gas price decreased reserves of natural gas and associated natural gas liquids by 82 billion cubic feet and three million barrels, respectively. Technical revisions attributable to the re-allocation of Deep Basin development spend decreased net proved reserves of natural gas liquids and natural gas of seven million barrels and 88 billion cubic feet, respectively.
- *Extensions and discoveries:* Successful Deep Basin development identified net proved reserves of natural gas liquids and natural gas of 11 million barrels and 175 billion cubic feet, respectively.

STANDARDIZED MEASURE OF DISCOUNTED FUTURE NET CASH FLOWS AND CHANGES THEREIN

In calculating the standardized measure of discounted future net cash flows, the average of the first-day-of-the-month prices for the prior twelve-month period and cost assumptions were applied to Cenovus's annual future production from net proved reserves to determine cash inflows. Future production and development costs do not include any cost inflation and assume the continuation of existing economic, operating and regulatory conditions. Future income taxes are calculated by applying statutory income tax rates to future pre-tax cash flows after provision for the tax cost of the oil and natural gas properties based upon existing laws and regulations. The discount was computed by application of a 10 percent discount factor to the future net cash flows. The calculation of the standardized measure of discounted future net cash flows is based upon the discounted future net cash flows prepared by independent qualified reserves evaluators in relation to the reserves they respectively evaluated, and adjusted to the extent provided by contractual arrangements such as price risk management activities, in existence at year end and to account for asset retirement obligations and future income taxes.

Cenovus cautions that the discounted future net cash flows relating to proved oil and gas reserves are an indication of neither the fair market value of Cenovus's oil and gas properties, nor the future net cash flows expected to be generated from such properties. The discounted future net cash flows do not include the fair market value of exploratory properties and probable or possible oil and gas reserves, nor is consideration given to the effect of anticipated future changes in crude oil, natural gas liquids and natural gas prices, development, asset retirement and production costs and possible changes to tax and royalty regulations. The prescribed discount rate of 10 percent may not appropriately reflect future interest rates. The computation also excludes values attributable to Cenovus's enhancing the netback price of the Company's proprietary production.

Computation of the standardized measure of discounted future net cash flows relating to proved oil and gas reserves were based on the following average of the first-day-of-the-month benchmark prices for the twelve-month period before the end of the year:

	Crude Oil and Natural Gas Liquids				Natural Gas	
	WTI ⁽¹⁾				Henry Hub Louisiana	AECO ⁽⁴⁾
	Cushing Oklahoma	WCS ⁽²⁾	Edmonton MSW ⁽³⁾	Edmonton C5+		
	(US\$/bbl)	(C\$/bbl)	(C\$/bbl)	(C\$/bbl)	(US\$/MMBtu)	(C\$/MMBtu)
2018	65.56	48.59	68.92	79.61	3.10	1.67
2017	51.34	50.69	63.70	68.10	2.98	2.31

(1) WTI is an abbreviation for West Texas Intermediate.

(2) WCS is an abbreviation for Western Canadian Select.

(3) MSW is an abbreviation for Mixed Sweet Blend.

(4) AECO is an abbreviation for Alberta Energy Company Operations.

Standardized Measure of Discounted Future Net Cash Flows Relating to Proved Oil and Gas Reserves

(\$ millions)	2018	2017
Future cash inflows	106,744	147,064
Less future:		
Production costs	42,399	48,064
Development costs	24,895	22,850
Asset retirement obligation payments ⁽¹⁾	1,900	2,464
Income taxes	8,163	17,713
Future net cash flows	29,387	55,973
Less 10 percent annual discount for estimated timing of cash flow	18,436	36,263
Discounted future net cash flow	10,951	19,710

(1) Includes future abandonment and reclamation costs associated with existing and future wells having attributed reserves. The estimate of future abandonment and reclamation costs excludes asset retirement obligations and reclamation costs relating to non-reserves wells and gathering systems, batteries, plants and processing facilities. The incremental asset retirement obligation not included in the disclosure of estimated future net revenue is \$213 million (2017 - \$459 million) on a discounted basis and \$1,604 million (2017 - \$1,428 million) on an undiscounted basis.

Changes in Standardized Measure of Discounted Future Net Cash Flows Relating to Proved Oil and Gas Reserves

(\$ millions)	2018	2017
Balance, beginning of year	19,710	3,632
Changes resulting from:		
Sales of oil and gas produced during the period	(1,435)	(2,885)
Extensions, discoveries and improved recovery, net of related cost	482	826
Purchases of proved reserves in place	-	13,819
Sales of proved reserves in place	(442)	(571)
Net change in prices and production costs	(13,221)	8,060
Revisions to quantity estimates	263	1,293
Accretion of discount	2,551	420
Previously estimated development costs incurred net of change in future development costs	405	(5)
Other	(638)	354
Net change in income taxes	3,276	(5,233)
Balance, end of year	10,951	19,710

OTHER FINANCIAL INFORMATION

Results of Operations

(\$ millions)	2018	2017
Oil and gas sales to external customers, net of royalties, transportation and blending and realized risk management	2,332	4,071
Intersegment sales	517	443
	2,849	4,514
Less:		
Operating costs, production and mineral taxes, and accretion of asset retirement obligations	1,474	1,755
Depreciation, depletion and amortization	1,851	1,753
Exploration expense	2,123	890
Operating income	(2,599)	116
Income taxes	(702)	31
Results of operations	(1,897)	85

Capitalized Costs ⁽¹⁾

(\$ millions)	2018	2017
Proved oil and gas properties	28,379	28,776
Unproved oil and gas properties ⁽²⁾	785	3,719
Total capital cost ⁽³⁾	29,164	32,495
Accumulated depreciation, depletion and amortization	4,251	2,435
Net capitalized costs	24,913	30,060

(1) In connection with the acquisition of Cenovus's partner's 50 percent interest in FCCL in 2017, Cenovus was deemed to have disposed of its pre-existing interest (net capitalized cost of \$9.7 billion) and re-acquired it at fair value (\$12.3 billion) as required by IFRS 3, "Business Combinations" effectively resetting accumulated depreciation, depletion and amortization to zero.

(2) Unproved oil and gas properties include exploration and evaluation assets for which no proved reserves have been recognized.

(3) Includes assets held for sale.

Costs Incurred

(\$ millions)	2018	2017
Acquisitions		
Unproved ⁽¹⁾	16	3,372
Proved ^{(2) (3)}	325	15,016
Total acquisitions	341	18,388
Exploration costs	55	147
Development costs	1,043	1,257
Total costs incurred	1,439	19,792

(1) An unproved property is a property to which no proved or probable reserves have been specifically attributed.

(2) A proved property is a property to which proved and probable reserves have been specifically attributed.

(3) Asset retirement costs are included in the year of acquisition.