CARDINAL ENERGY LTD.

2020
MANAGEMENT DISCUSSION & ANALYSIS

MANAGEMENT'S DISCUSSION AND ANALYSIS

This management's discussion and analysis ("MD&A") is a review of operations, financial position and outlook for Cardinal Energy Ltd. ("Cardinal" or the "Company") for the three months and year ended December 31, 2020 and is dated March 16, 2021. The MD&A should be read in conjunction with Cardinal's audited financial statements for the years ended December 31, 2020 and 2019. Financial data presented has been prepared in accordance with International Financial Reporting Standards ("IFRS" or, alternatively, "GAAP"), unless otherwise indicated. Certain prior period amounts have been reclassified to conform to current period presentation.

All figures in tables are stated in thousands of Canadian dollars (except operational and per share amounts or as noted).

DESCRIPTION OF BUSINESS

Cardinal is engaged in the acquisition, development, optimization and production of crude oil and natural gas in the provinces of Alberta and Saskatchewan.

Non-GAAP Measures

The terms "funds flow", "adjusted funds flow", "adjusted funds flow per share", "adjusted funds flow per diluted share", "adjusted working capital", "development capital expenditures", "net operating expenses", "netback", "net debt", "net debt to adjusted funds flow", "net bank debt", and "total payout ratio" in this MD&A are not recognized under GAAP. Management believes that in addition to earnings and cash flow from operating activities as defined by GAAP, these terms are useful supplemental measures to evaluate operating performance. Users are cautioned however, that these measures should not be construed as an alternative to earnings or cash flow from operating activities determined in accordance with GAAP as an indication of Cardinal's performance and may not be comparable with the calculation of similar measurements by other entities.

Management utilizes "adjusted funds flow" as a key measure to assess the ability of the Company to generate the funds necessary for financing activities, operating activities, and capital expenditures. Adjusted funds flow excludes the change in non-cash working capital, decommissioning expenditures, and transaction costs since Cardinal believes the timing of collection, payment or incurrence of these items involves a high degree of discretion and variability. Expenditures on decommissioning obligations vary from period to period depending on the maturity of the Company's operating areas and availability of adjusted funds flow and are viewed as part of the Company's capital budgeting process. Funds flow excludes the change in non-cash operating working capital. Funds flow and adjusted funds flow are not intended to represent net cash provided by (used in) operating activities calculated in accordance with IFRS. The following table reconciles cash flow from operating activities to funds flow and adjusted funds flow:

	Three months ended			Year ended		
	Dec 31, 2020	Dec 31, 2019	Change %	**Dec 31, 2020**	Dec 31, 2019	Change %
Cash flow from operating activities	**12,810**	31,714	(60)	**43,525**	119,979	(64)
Change in non-cash working capital	**202**	(5,784)	(103)	**(2,547)**	(4,740)	(46)
Funds flow	**13,012**	25,930	(50)	**40,978**	115,239	(64)
Decommissioning expenditures	**596**	2,934	(80)	**2,849**	6,571	(57)
Adjusted funds flow	**13,608**	28,864	(53)	**43,827**	121,810	(64)

"Adjusted funds flow per share" is calculated using adjusted funds flow divided by the weighted average basic shares outstanding adjusted for shares held in treasury.

"Adjusted funds flow per diluted share" is calculated using adjusted funds flow divided by the weighted average diluted shares outstanding adjusted for shares held in treasury.

"Adjusted working capital" is calculated as current liabilities less current assets (adjusted for the warrant liability, fair value of financial instruments, current decommissioning obligation and current lease liabilities). Adjusted working capital is used by Cardinal to monitor its capital structure, liquidity, and its ability to fund current operations. The following table reconciles working capital to adjusted working capital:

	As at		
	Dec 31, 2020	Dec 31, 2019	Change %
Working capital	**(25,690)**	(84,895)	(70)
Liability component of convertible debentures	**-**	44,158	(100)
Lease liabilities	**1,687**	1,850	(9)
Decommissioning obligation	**3,280**	6,450	(49)
Fair value of financial instruments, net	**6,909**	3,146	120
Warrant liability	**3,530**	-	n/m
Adjusted working capital deficiency	**(10,284)**	(29,291)	(65)

"Development capital expenditures" represents expenditures on property, plant and equipment (excluding capitalized G&A, other assets and net acquisitions) as shown in the *Capital Expenditures* section below.

"Net operating expenses" is calculated as operating expense less processing and other revenue primarily generated by processing third party volumes at processing facilities where the Company has an ownership interest, and can be expressed on a per boe basis. As the Company's principal business is not that of a midstream entity, management believes this is a useful supplemental measure to reflect the true cash outlay at its processing facilities by utilizing spare capacity through processing third party volumes.

"Netback" is calculated on a boe basis and is determined by deducting royalties, net operating expenses, and transportation expenses from petroleum and natural gas revenue in accordance with the Canadian Oil and Gas Evaluation ("COGE") Handbook. Netback is utilized by Cardinal to better analyze the operating performance of its petroleum and natural gas assets against prior periods.

The term "net debt" is not recognized under GAAP and is calculated as bank debt plus the principal amount of convertible unsecured subordinated debentures ("convertible debentures"), secured notes and adjusted working capital. Net debt is used by management to analyze the financial position, liquidity and leverage of Cardinal.

"Net debt to adjusted funds flow" is calculated as net debt divided by adjusted funds flow for the trailing twelve month period. The ratio of net debt to adjusted funds flow is used to measure the Company's overall debt position and to measure the strength of the Company's balance sheet. Cardinal monitors this ratio and uses this as a key measure in making decisions regarding financing, capital expenditures and shareholder returns.

"Net bank debt" is calculated as net debt less the principal amount of convertible debentures and secured notes. Net bank debt is used by management to analyze the financial position, liquidity, leverage and borrowing capacity on Cardinal's bank line.

"Total payout ratio" represents the ratio of the sum of dividends declared plus development capital expenditures divided by adjusted funds flow. Total payout ratio is another key measure to assess Cardinal's ability to fund financing activities, operating activities, and capital expenditures.

51-101 Advisory

In accordance with S*tandards for Disclosure of Oil and Gas Activities* ("NI 51-101"), natural gas volumes have been converted to barrels of oil equivalent using a conversion rate of six thousand cubic feet of natural gas to one barrel of oil. This ratio is based on an energy equivalency conversion method primarily applicable at the burner tip. It does not represent a value equivalency at the wellhead and is not based on either energy content or current prices. The term "boe" is useful for comparative measures and observing trend, it does not accurately reflect individual product value and may be misleading, particularly if used in isolation. Based on the current price of crude oil to natural gas, using a 6:1 conversion ratio may be misleading as an indication of value.

ANNUAL AND FOURTH QUARTER 2020 HIGHLIGHTS

- Fourth quarter adjusted funds flow of $13.6 million funded a conservative capital program of $3.6 million with the residual prioritizing debt repayment;
- Average production increased 5% over the prior quarter to average 18,625 boe per day as the Company reactivated production shut-in earlier in the year;
- Fourth quarter net operating expenses per boe decreased 17% over the same period in 2019 averaging $16.84 per boe while annual net operating expenses decreased by $37.9 million or 24% over 2019 to average $17.39 per boe;
- Fourth quarter 2020 general and administrative ("G&A") costs per boe decreased 27% over the fourth quarter of 2019 to average $1.64 per boe;
- Net debt at December 31, 2020 of $246.8 million decreased $27 million or 10% from the high point of the year at the end of the first quarter of 2020;
- During the fourth quarter, we completed the extension of our syndicated credit facility with a maturity in May 2022 and exchanged $16.8 million of 2020 maturing convertible debentures with new secured notes which mature in 2022;
- In the fourth quarter of 2020 a reversal of prior non-cash impairment charges of $122.4 million demonstrated a recovery in forward oil prices and an improved financial position.

OPERATIONS

PRODUCTION

	Three months ended			Year ended		
	Dec 31, 2020	Dec 31, 2019	Change %	**Dec 31, 2020**	Dec 31, 2019	Change %
Light oil (bbl/d)	**6,929**	8,100	(14)	**7,173**	8,069	(11)
Medium / heavy oil (bbl/d)	**8,220**	8,657	(5)	**8,093**	8,722	(7)
Crude oil (bbl/d)	**15,149**	16,757	(10)	**15,266**	16,791	(9)
Natural gas (mcf/d)	**13,653**	15,459	(12)	**13,585**	15,576	(13)
NGL (bbl/d)	**1,200**	893	34	**911**	932	(2)
boe/d	**18,625**	20,227	(8)	**18,442**	20,319	(9)
% Crude oil and NGL production	**88%**	87%	1	**88%**	87%	1

Fourth quarter 2020 production decreased 8% over the same period in 2019 as a portion of the Company's production that was shut-in during the second quarter remained offline until economics justify reactivating. During the fourth quarter of 2020, the Company has also deferred certain well reactivation costs resulting in lower oil production as compared to the same period in 2019. NGL production increased 34% in the fourth quarter of 2020 over the same period in 2019 due to higher liquids yields from a third party processing facility in the Grande Prairie area.

Production for the year ended December 31, 2020 decreased 9% over 2019. Due to the effects of the coronavirus pandemic ("COVID-19") on demand for oil and the resulting effect on the oil prices, late in the first quarter of 2020, the Company shut-in higher cost production and chose to delay full production of the wells from Cardinal's first quarter 2020 drilling program to retain the long term value of the reserves. As the oil price slowly recovered, the Company reactivated certain lower cost production in the second half of 2020; however, approximately 10% of the Company's oil production remains shut-in until the reactivation economics justify bringing the production back online.

PETROLEUM AND NATURAL GAS REVENUE

	Three months ended			Year ended		
	Dec 31, 2020	Dec 31, 2019	Change %	**Dec 31, 2020**	Dec 31, 2019	Change %
Light oil	**28,811**	46,547	(38)	**104,256**	188,116	(45)
Medium / heavy oil	**31,943**	42,281	(24)	**104,546**	185,826	(44)
Crude oil	**60,754**	88,828	(32)	**208,802**	373,942	(44)
NGL	**2,183**	1,547	41	**5,988**	6,012	(0)
Natural gas	**3,128**	2,897	8	**8,441**	9,017	(6)
Petroleum and natural gas revenue	**66,065**	93,272	(29)	**223,231**	388,971	(43)
Cardinal average prices						
Light oil ($/bbl)	**45.20**	62.46	(28)	**39.71**	63.87	(38)
Medium / heavy oil ($/bbl)	**42.24**	53.08	(20)	**35.29**	58.37	(40)
Natural gas ($/mcf)	**2.49**	2.04	22	**1.70**	1.59	7
Equivalent ($/boe)	**38.56**	50.12	(23)	**33.07**	52.45	(37)
Benchmark prices						
Crude oil - WTI (US $/bbl)	**42.66**	56.96	(25)	**39.40**	57.03	(31)
Crude oil - Edmonton light (Cdn $/bbl)	**49.98**	67.99	(26)	**45.18**	69.05	(35)
Crude oil - WCS (Cdn $/bbl)	**43.42**	54.30	(20)	**35.59**	58.77	(39)
Natural gas - AECO Spot (Cdn $/gj)	**2.50**	2.35	6	**2.11**	1.67	26
Exchange rate - (US/Cdn)	**0.77**	0.76	1	**0.75**	0.75	(0)

Petroleum and natural gas revenue decreased 29% in the fourth quarter of 2020 as compared to the same period in 2019 due to a 23% decrease in realized commodity prices combined with decreased production. In the fourth quarter of 2020, the Company's Edmonton light benchmark price decreased 26% as compared to a 28% decrease in the Company's light oil price while Cardinal's medium/heavy oil Western Canadian Select ("WCS") benchmark price decreased 20% which was equivalent to the 20% decrease in Cardinal's medium/heavy oil price. The Company's fourth quarter 2020 natural gas price increased 22% over the same period in 2019, as compared to the AECO benchmark increase of 6% due to the Company ending its lower priced Chicago based natural gas sales contract in the fourth quarter of 2020.

For the 2020 year, revenue has decreased 43% over the same period in 2019 due to a 37% decrease in commodity prices combined with decreased production. The Company's light and medium heavy oil prices have decreased 38% and 40%, respectively, which approximates the Edmonton light and WCS benchmark decreases of 35% and 39%, respectively, for the year ended December 31, 2020 as compared to 2019. Cardinal's realized natural gas price increased 7% in 2020 compared to 2019 versus a 26% increase in the AECO benchmark due to the Company selling a portion of its natural gas through a Chicago based price contract, which was lower than the AECO pricing, during the majority of 2020.

FINANCIAL INSTRUMENTS - COMMODITY

	Three months ended			Year ended		
	Dec 31, 2020	Dec 31, 2019	Change %	**Dec 31, 2020**	Dec 31, 2019	Change %
Realized loss - commodity contracts	**(6,131)**	(1,476)	n/m	**(495)**	(14,664)	(97)
Unrealized loss - commodity contracts	**(2,418)**	(1,543)	57	**(6,593)**	(15,695)	(58)

Managing the variability in funds flow and adjusted funds flow is an integral component of Cardinal's business strategy. Changing business conditions are monitored regularly and reviewed with our Board of Directors to establish risk management guidelines used by management in carrying out the Company's risk management program. The risk exposure inherent in movements in the price of crude oil, natural gas and foreign exchange rates are proactively managed by Cardinal through the use of derivatives with investment-grade counterparties. The Company considers these derivative contracts to be an effective means to manage cash flow from operating activities, and adjusted funds flow.

Cardinal utilizes a variety of derivatives including swaps, collars and puts to protect against downward commodity price movements and foreign exchange fluctuations and avoids entering into more complex derivative structures. Contracts settled in the period result in realized gains or losses based on the market price compared to the contract price. Changes in the fair value of the contracts, as measured at the balance sheet date, are reported as unrealized gains or losses in the period as the forward markets for commodities and currencies fluctuate and as new contracts are executed. For commodities, Cardinal's risk management program allows for hedging a forward profile of three years, of up to 75% of average forecasted 12 months of gross production and up to 50% and 30% of the following 12 and 24 months, respectively.

As of the date of this MD&A Cardinal had the following commodity derivatives, referenced to WTI, WCS, MSW and AECO outstanding:

Commodity	Financial Instrument	Period	Average Volume			Average Strike Price
Crude Oil						
	CDN WTI Swap	Jan 2021	1,000	bbl/d		$ 43.80
		Jan - Mar 2021	1,500	bbl/d		$ 58.07
		Jan - Jun 2021	1,500	bbl/d		$ 58.20
		Jan - Sep 2021	1,000	bbl/d		$ 59.00
		Jan - Dec 2021	1,500	bbl/d		$ 55.83
		Apr - Jun 2021	500	bbl/d		$ 58.55
	USD WTI Swap	Jan - Mar 2021	1,000	bbl/d	USD	$ 42.30
		Jan - Jun 2021	1,000	bbl/d	USD	$ 42.80
	CDN WTI Collar	Jan - Mar 2021	1,000	bbl/d	Floor	$ 50.00
					Ceiling	$ 60.20
		Jan - Jun 2021	500	bbl/d	Floor	$ 50.00
					Ceiling	$ 65.00
	CDN WCS Differential Swap	Jan - Jun 2021	1,500	bbl/d		$ (16.42)
	USD WCS Differential Swap	Jan - Jun 2021	500	bbl/d	USD	$ (12.20)
		Apr - Jun 2021	1,500	bbl/d	USD	$ (12.33)
Natural Gas						
	AECO Swap	Jan - Dec 2021	11,000	gj/d		$ 2.52

ROYALTIES

	Three months ended			Year ended		
	Dec 31, 2020	Dec 31, 2019	Change %	**Dec 31, 2020**	Dec 31, 2019	Change %
Royalties	**10,109**	17,419	(42)	**33,246**	65,759	(49)
Percent of revenue	**15.3%**	18.7%	(18)	**14.9%**	16.9%	(12)
$/boe	**5.90**	9.36	(37)	**4.93**	8.87	(44)

Royalties are either paid or taken in kind and are owed to land and mineral rights owners and to provincial governments. The terms of the land and mineral rights owner agreements and provincial royalty regimes impact Cardinal's overall corporate royalty rate.

Royalties and royalties as a percentage of revenue decreased during the fourth quarter and for the year ended December 31, 2020 as compared to the same periods in 2019 due to the significant oil price decrease and the effect it had on Cardinal's crown royalty rate. As certain royalties are calculated using a sliding scale, royalty percentages and consequently royalties paid are lower when commodity prices decrease.

NET OPERATING EXPENSES

	Three months ended			Year ended		
	Dec 31, 2020	Dec 31, 2019	Change %	**Dec 31, 2020**	Dec 31, 2019	Change %
Operating expenses	**29,870**	38,366	(22)	**120,600**	157,949	(24)
Less: Processing and other revenue	**(1,024)**	(564)	82	**(3,224)**	(2,630)	23
	28,846	37,802	(24)	**117,376**	155,319	(24)
$/boe	**16.84**	20.31	(17)	**17.39**	20.94	(17)

During the fourth quarter of 2020, net operating expenses and net operating expenses per boe were 24% and 17% lower, respectively, than the same period in 2019. Lower workover and reactivation costs, reduced labor costs and government subsidies combined with decreased electricity costs were the primary drivers in the $9.0 million decrease in net operating expenses. In response to the significant decline in oil prices, Cardinal has significantly reduced its well reactivation program and reduced its labor costs throughout the Company's operations. In addition, power generation initiatives completed in 2019 and early 2020 have assisted in reducing Cardinal's power grid usage by 15% during the fourth quarter of 2020 compared to 2019. Cardinal continues to look for opportunities to maximize the output of its underutilized facilities as evidenced by the 82% increase in third party processing and other fees during the fourth quarter of 2020 compared to the same period in 2019.

For the year ended December 31, 2020, operating costs and operating costs per boe have decreased 24% and 17%, respectively, over 2019 due to reduced labor costs and decreased well servicing and reactivation costs as the Company has chosen to keep higher cost production shut-in until a recovery in oil prices occurs. In addition, the Company has reduced its annual power grid usage by 13% leading to a 15% or $0.76/boe decrease in 2020 power costs.

TRANSPORTATION EXPENSES

	Three months ended			Year ended		
	Dec 31, 2020	Dec 31, 2019	Change %	**Dec 31, 2020**	Dec 31, 2019	Change %
Transportation expenses	**436**	499	(13)	**1,937**	2,432	(20)
$/boe	**0.25**	0.27	(7)	**0.29**	0.33	(12)

Transportation costs and transportation costs per boe slightly decreased in the fourth quarter and for the year ended December 31, 2020 as compared with the same periods in 2019 as the Company's clean oil trucking decreased due to reduced higher cost oil production which requires additional trucking costs.

NETBACK

	Three months ended			Year ended		
	Dec 31, 2020	Dec 31, 2019	Change %	**Dec 31, 2020**	Dec 31, 2019	Change %
Petroleum and natural gas revenue	**38.56**	50.12	(23)	**33.07**	52.45	(37)
Royalties	**5.90**	9.36	(37)	**4.93**	8.87	(44)
Net operating expenses	**16.84**	20.31	(17)	**17.39**	20.94	(17)
Transportation expenses	**0.25**	0.27	(7)	**0.29**	0.33	(12)
Netback [1]	**15.57**	20.18	(23)	**10.46**	22.31	(53)

(1) See non-GAAP measures.

Cardinal's fourth quarter 2020 and annual 2020 netback decreased 23% and 53%, respectively, over the same periods in 2019 due to lower oil prices partially offset by reduced royalties and net operating expenses.

GENERAL AND ADMINISTRATIVE ("G&A")

	Three months ended			Year ended		
	Dec 31, 2020	Dec 31, 2019	Change %	**Dec 31, 2020**	Dec 31, 2019	Change %
Gross G&A	**3,565**	5,563	(36)	**16,412**	20,929	(22)
Capitalized G&A and overhead recoveries	**(747)**	(1,364)	(45)	**(3,139)**	(5,068)	(38)
G&A	**2,818**	4,199	(33)	**13,273**	15,861	(16)
$/boe	**1.64**	2.26	(27)	**1.97**	2.14	(8)

In the fourth quarter of 2020, G&A costs and G&A costs per boe were 33% and 27% lower, respectively, than the same period in 2019. In response to COVID-19, Cardinal has been proactive in reducing compensation costs throughout the Company by reducing Board retainers and executive and office salaries and bonuses. The Company has also received government subsidies which have reduced G&A costs by $0.5 million during the fourth quarter.

For 2020, gross G&A costs decreased 22% over 2019 while net G&A costs decreased 16% over the same period in 2019. Reduced compensation costs were partially offset by reduced capitalized G&A and overhead recoveries due to reduced capital activity in 2020 compared to 2019. In addition, government subsidies due to COVID-19 lowered gross G&A by approximately $2.0 million during 2020.

SHARE-BASED COMPENSATION ("SBC")

	Three months ended			Year ended		
	Dec 31, 2020	Dec 31, 2019	Change %	**Dec 31, 2020**	Dec 31, 2019	Change %
Gross SBC	**916**	2,027	(55)	**4,264**	8,217	(48)
Capitalized SBC	**(116)**	(263)	(56)	**(519)**	(1,057)	(51)
SBC	**800**	1,764	(55)	**3,745**	7,160	(48)
$/boe	**0.47**	0.95	(51)	**0.55**	0.97	(43)

SBC expense decreased in the fourth quarter and for 2020 as compared to the same periods in 2019 due to a decrease in the grant fair value of restricted awards ("RAs") outstanding.

As at December 31, 2020, Cardinal had 4.0 million RAs and 0.8 million performance awards (“PAs”) outstanding.

FINANCE

	Three months ended			Year ended		
	Dec 31, 2020	Dec 31, 2019	Change %	**Dec 31, 2020**	Dec 31, 2019	Change %
Interest - bank debt	**2,955**	2,060	43	**8,903**	9,280	(4)
Other finance charges, net	**316**	243	30	**1,123**	999	12
Interest - convertible debentures	**779**	617	26	**2,745**	2,475	11
Interest - secured notes	**13**	-	-	**13**	-	-
Interest - capital leases	**66**	94	(30)	**306**	372	(18)
Accretion	**2,137**	2,407	(11)	**8,806**	9,458	(7)
Unrealized foreign exchange (gain) loss	**-**	23	(100)	**(23)**	23	n/m
Finance	**6,266**	5,444	15	**21,873**	22,607	(3)
$/boe	**3.66**	2.91	26	**3.24**	3.05	6
Average bank debt	**206,448**	196,529	5	**205,702**	209,286	(2)
Interest rate - bank debt	**5.7%**	4.2%	36	**4.3%**	4.4%	(2)

In the fourth quarter, higher average bank debt levels and bank fees increased the interest on bank debt by 43% over the same period in 2019. In addition, increased interest on convertible debentures was the result of the Company's new issuance of 8% convertible debentures in the third quarter of 2020.

For 2020, lower average bank debt levels and interest rates decreased bank debt interest over 2019. This was partially offset by higher convertible debenture interest leading to a 3% decrease in the Company's finance costs over 2019.

DEPLETION AND DEPRECIATION ("D&D")

	Three months ended			Year ended		
	Dec 31, 2020	Dec 31, 2019	Change %	**Dec 31, 2020**	Dec 31, 2019	Change %
Depletion and depreciation	**15,185**	23,732	(36)	**67,080**	92,082	(27)
$/boe	**8.86**	12.75	(31)	**9.94**	12.42	(20)

Depletion is calculated based on capital expenditures incurred since inception of the Company, future development costs associated with proved and probable reserves, production rates, and proved and probable reserves. In addition to depletion, Cardinal records depreciation on other capital equipment and right-of-use assets not directly associated with proved and probable reserves.

D&D costs and D&D costs per boe decreased 36% and 31%, respectively, in the fourth quarter of 2020 due to a lower property, plant and equipment depletable base from the Company's impairment charge taken in the first quarter of 2020. A significant decrease in forecasted oil prices caused by COVID-19 forced the Company to take an impairment charge of $343 million in the first quarter of 2020 as described below in the Impairment section.

D&D costs per boe decreased 20% in 2020 as compared to 2019 due to the aforementioned decrease in the depletable base of the Company's asset from the impairment charge in the first quarter of 2020.

IMPAIRMENT AND IMPAIRMENT REVERSAL

	Three months ended			Year ended		
	Dec 31, 2020	Dec 31, 2019	Change %	**Dec 31, 2020**	Dec 31, 2019	Change %
Impairment (impairment reversal)	**(122,369)**	23,400	n/m	**220,631**	23,400	n/m

2020:
As a result of assessments of internal and external indicators of impairment or impairment reversal, the Company performed impairment tests for its CGUs in 2020.

The estimated recoverable value of the Company's CGUs was estimated as the value in use based on the net present value of before tax cash flows from proved and probable oil and gas reserves discounted between 12% and 20% depending on the reserves composition. The estimated recoverable amount of each CGU involves significant estimates including the estimate of proved and probable oil and gas reserves and the discount rates. The estimate of proved and probable oil and gas reserves includes significant assumptions related to forecasted oil and gas commodity prices, forecasted production, forecasted operating costs, forecasted royalty costs and forecasted future development costs. In determining the appropriate discount rate, Cardinal considered various characteristics and risks of the assets.

Impairment reversal is recognized to the extent that impairment had been previously recorded, but are limited to the net book value that would exist had the original impairment never been recorded, including estimates for depletion.

December 31, 2020
The Company identified an indicator of reversal at December 31, 2020 for all CGUs. At December 31, 2020, Cardinal determined that the estimated recoverable amounts of the Alberta Central, Alberta South, and Alberta North CGUs exceeded the carrying amounts of $116.7 million, $90.7 million, and $222.9 million, respectively. Accordingly, an aggregate non-cash impairment reversal of $122.7 million was recorded. The impairment reversal was the result of a partial recovery of the forecasted oil and gas commodity prices, increased economic stability, and certainty in the

oil and gas industry. The estimated recoverable amounts were based on proved and probable oil and gas reserves as evaluated by the Company's independent third party reserve evaluators as at December 31, 2020.

The following table outlines forecasted oil and gas commodity prices and exchange rates used in the Company's impairment test at December 31, 2020. The forecasted oil and gas commodity prices are based on the average used by three independent third party reserve evaluators at December 31, 2020 and are a significant assumption in assessing the estimated recoverable amount.

		WTI (USD $/bbl)[2]		WCS (CAD $/bbl)[2]		AECO (CAD $/mmbtu)[2]	Exchange rate (US/CAD)
2021	$	47.17	$	44.63	$	2.78	0.77
2022	$	50.17	$	48.18	$	2.70	0.77
2023	$	53.17	$	52.10	$	2.61	0.76
2024	$	54.97	$	54.10	$	2.65	0.76
2025	$	56.07	$	55.19	$	2.70	0.76
Thereafter (inflation percentage and exchange rate)		2.0%		2.0%		2.0%	0.76

(1) Three Consultants' average, GLJ Ltd., McDaniel & Associates Consultants, and Sproule Associates price forecasts, effective December 31, 2020.

March 31, 2020

The Company identified an indicator of impairment at March 31, 2020 for all CGUs. At March 31, 2020, Cardinal determined that the carrying amounts of the Alberta Central, Alberta South, and Alberta North CGUs exceeded the estimated recoverable amounts of $131.4 million, $103.4 million, and $250.4 million, respectively. Accordingly, an aggregate non-cash impairment loss of $343.0 million was recorded. The impairment recognized was the result of a significant decline in forecasted oil and gas commodity prices due to oil demand issues caused by COVID-19. The estimated recoverable amounts were based on proved and probable oil and gas reserves as evaluated by the Company's independent third party reserve evaluators as at December 31, 2019 and updated by internal reserve evaluators to March 31, 2020.

The following table outlines forecasted oil and gas commodity prices and exchange rates used in the Company's impairment test at March 31, 2020. The forecasted oil and gas commodity prices are based on the average used by three independent third party reserve evaluators at March 31, 2020 and are a significant assumption in assessing the estimated recoverable amount.

		WTI (USD $/bbl)[1]		WCS (CAD $/bbl)[1]		AECO (CAD $/mmbtu)[1]	Exchange rate (US/CAD)
2020	$	29.17	$	19.21	$	1.74	0.71
2021	$	40.45	$	34.65	$	2.20	0.73
2022	$	49.17	$	46.34	$	2.38	0.75
2023	$	53.28	$	51.24	$	2.45	0.75
2024	$	55.66	$	54.28	$	2.53	0.75
Thereafter (inflation percentage and exchange rate)		2.0%		2.0%		2.0%	0.75

(2) Three Consultants' average, GLJ Ltd., McDaniel & Associates Consultants, and Sproule Associates price forecasts, effective March 31, 2020.

As a result, the Company has recorded an aggregate non-cash impairment loss of $220.3 million related to the CGUs for the year ended December 31, 2020.

The independent third party reserve evaluators also assess many other financial assumptions regarding forecasted production, forecasted royalty costs, forecasted operating costs and forecasted future development costs along with several other non-financial assumptions that affect reserve volumes. Management considered these assumptions for the impairment tests in 2020, however, it should be noted that all estimates are subject to uncertainty.

2019:
At December 31, 2019 Cardinal determined that the carrying value of the Alberta Central CGU exceeded the estimated recoverable amount and recorded an impairment loss of $23.4 million. The impairment loss recognized was the result of lower forecasted oil and gas commodity prices and higher forecasted costs within the Company's Alberta Central CGU. The estimated recoverable amount of Cardinal's impaired CGU at December 31, 2019 was $299.6 million. The Company did not identify any further indicators of impairment or impairment reversals for its other CGUs.

DEFERRED TAXES

During the first quarter of 2020, the Company derecognized its deferred tax asset resulting in an expense of $102.9 million for 2020. With the significant decrease in forecast prices caused by the demand reduction as a result of COVID-19, Cardinal did not feel there was sufficient certainty regarding the future utilization of all of its tax pools.

As show below, the Company has approximately $1.4 billion of tax pools ($1.3 billion are unrestricted) available to be applied against future income for tax purposes. Based on available pools and current commodity prices, Cardinal does not expect to pay current income taxes until 2026 or beyond. Any potential taxes payable beyond 2026 would be affected by commodity prices, capital expenditures and production.

		As at December 31		
Tax Pool Balance	**Maximum Annual Claim**	**2020**	2019	Change %
COGPE	10%	**522,425**	579,254	(10)
CEE and non-capital losses	100%	**627,724**	537,628	17
CDE	30%	**139,026**	144,166	(4)
Undepreciated capital cost	25%	**119,788**	148,520	(19)
Other	20%	**2,197**	4,570	(52)
Total		**1,411,160**	1,414,138	-

During the year ended December, 31, 2020, Cardinal received a proposal letter from the Canada Revenue Agency ("CRA") wherein the CRA stated that it proposed to reduce certain non-capital loss tax pools of approximately $192 million carried forward in the tax return filed for the year ended December 31, 2015. Cardinal disagrees with CRA's position and firmly believes it will be successful in defending its position. Prior to the proposal letter, Cardinal had derecognized these tax assets and therefore no related deferred tax asset is recognized in the financial statements as at December 31, 2020.

EARNINGS (LOSS), CASH FLOW FROM OPERATING ACTIVITIES, ADJUSTED FUNDS FLOW AND PAYOUT RATIOS

	Three months ended			Year ended		
	Dec 31, 2020	Dec 31, 2019	Change %	**Dec 31, 2020**	Dec 31, 2019	Change %
Earnings (loss)	**119,988**	(15,094)	n/m	**(363,160)**	(34,340)	n/m
$/share						
Basic	**1.06**	(0.13)	n/m	**(3.20)**	(0.30)	n/m
Diluted	**1.04**	(0.13)	n/m	**(3.20)**	(0.30)	n/m
Cash flow from operating activities	**12,810**	31,714	(60)	**43,525**	119,979	(64)
Adjusted funds flow	**13,608**	28,864	(53)	**43,827**	121,810	(64)
$/share						
Basic and diluted	**0.12**	0.25	(52)	**0.39**	1.06	(63)
Total payout ratio	**24%**	86%	(72)	**77%**	67%	15

In the fourth quarter and year ended December 31, 2020, decreased oil demand due to COVID-19 caused a significant reduction in oil prices reducing the Company's revenue in comparison with the same periods in 2019. In addition, in the first quarter of 2020, a reduction in forecast pricing caused the Company to record a $343 million impairment of its property, plant and equipment and derecognize its deferred tax asset resulting in an expense of $102.9 million for the first nine months of 2020. In the fourth quarter of 2020, a partial recovery in forecasted future prices increased the recoverable amount of certain CGUs and the Company reversed $122.7 million of previous impairments.

CAPITAL EXPENDITURES

In the fourth quarter of 2020, the Company continued with its conservative capital expenditure program in response to low oil prices caused by reduced demand. Capital expenditures were limited to required CO_2 expenditures for the Company's enhanced oil recovery ("EOR") project at Midale, Saskatchewan and expenditures on infrastructure and pipeline integrity. There were no wells drilled during the fourth quarter of 2020.

For 2020, 70% of the Company's capital expenditures were spent in the first quarter prior to COVID-19. In the final three quarters of 2020, Cardinal executed a conservative capital program of $9.4 million restricted to CO_2 expenditures for the Company's Midale EOR project, minor infrastructure and pipeline integrity projects and the completion of one land earning well at Bantry, Alberta.

	Three months ended			Year ended		
	Dec 31, 2020	Dec 31, 2019	Change %	**Dec 31, 2020**	Dec 31, 2019	Change %
Land	**35**	91	(62)	**470**	744	(37)
Drilling and completion	**562**	8,961	(94)	**16,234**	28,152	(42)
Equipment, facilities and pipelines	**2,728**	10,569	(74)	**13,689**	34,707	(61)
Total development capital expenditures (1)	**3,325**	19,621	(83)	**30,393**	63,603	(52)
Capitalized G&A	**233**	379	(39)	**985**	1,512	(35)
Other assets	**9**	18	(50)	**128**	153	(16)
Acquisitions, net	**-**	112	(100)	**-**	396	(100)
Total capital expenditures (2)	**3,567**	20,130	(82)	**31,506**	65,664	(52)

(1) Represents the total of exploration and evaluation and property, plant and equipment expenditures from the statements of cash flows less amounts recorded for capitalized G&A and other assets (included in the table of expenditures above).
(2) Expenditures exclude expenditures for the decommissioning obligation and non-cash capitalized share-based compensation.

The Company's Board of Directors has approved a 2021 capital budget of $27 million which has taken into consideration the decrease in commodity prices as a result of COVID-19.

DECOMMISSIONING OBLIGATION

Due to the significant decline in global oil prices and increased levels of market volatility, the Company's credit-adjusted discount rate increased to 9% in 2020 (2019 – 7%) while the inflation rate decreased to 1% (2019 – 2%). Reflecting these rate changes, the discounted decommissioning obligation decreased to $82.8 million from $113.8 million at the end of 2019. In addition, the Company has revised the decommissioning obligation related to the timing of expenditures expected to be incurred. In the fourth quarter of 2020, the Company benefitted from government subsidies received through its service providers and reduced our future decommissioning obligations by $4.6 million. During 2020, the Company also settled $2.8 million of decommissioning obligations, incurred $0.1 million of future liabilities and increased the liability with $7.9 million of accretion.

WARRANT LIABILITY

On December 30, 2020, as part of a private placement, Cardinal issued 8,122,000 units consisting of one common share and one warrant at $0.50 per unit for net proceeds of $4.0 million. The warrants are exercisable at $0.55 per warrant for one common share. The warrants vest six months subsequent to the issuance date and have been classified as a current liability and expire on December 30, 2023. The warrants issued were classified as a financial liability as a result of a cashless exercise provision. In no event will Cardinal be required to settle the warrants through a cash payment.

LIQUIDITY AND CAPITAL RESOURCES

Capitalization table	As at Dec 31, 2020	Dec 31, 2019	Change %
Net bank debt [1]	**202,399**	202,599	-
Convertible debentures	**28,207**	45,000	(37)
Secured notes	**16,217**	-	n/m
Common shares, outstanding	**121,348,705**	113,657,247	7
Market price at end of period ($ per share)	**$ 0.82**	$ 2.60	(68)
Market capitalization	**99,506**	295,509	(66)
Total capitalization	**346,329**	543,108	(36)

(1) See non-GAAP measures.

CAPITAL FUNDING

Bank debt

The Company's reserves-based revolving credit facility of $225 million is comprised of a $205 million syndicated term credit facility and a $20 million non-syndicated operating line credit facility (the "Facilities"). The Facilities are available on a revolving basis until May 31, 2021 and may be extended for a further 364 day period, subject to approval by the syndicate. If not extended, the Facilities will cease to revolve, the applicable margins will increase by 0.5% and all outstanding advances will be repayable on May 31, 2022. There are no financial covenants related to the Facilities, provided that Cardinal is not in default of the terms of the Facilities. Cardinal was in compliance with the terms of the Facilities at December 31, 2020 and remains in compliance at the date of this MD&A.

The available lending limits of the Facilities are reviewed semi-annually based on the syndicate's interpretation of the Company's reserves, future commodity prices and costs. As the available lending limit of the Facilities is based on the syndicate's interpretation of the Company's reserves and future commodity prices and costs, there can be no assurance that the amount of the Facilities will not decrease at the next scheduled review.

Advances under the Facilities are available by way of either prime rate loans, which bear interest at the banks' prime lending rate plus 2.0 to 5.5% and bankers' acceptances, which are subject to fees and margins ranging from 3.0 to 6.5%. Interest and standby fees on the undrawn amounts of the Facilities depend upon certain ratios. The Facilities are secured by a general security agreement over all of the Company's assets.

Convertible debentures

On August 5, 2020, Cardinal exchanged $28.2 million of its existing 5.5% debentures for new 8% convertible debentures with a maturity date of December 31, 2022. The convertible debentures have a conversion price of $1.25 per common share and bear interest at 8% per annum, payable in equal instalments semi-annually, in arrears, on June 30 and December 31 in each year. The 8% debentures can be redeemed without penalty subsequent to December 31, 2020. The debentures are convertible at the option of the holder and repayable by the Company in cash or common shares at the Company's discretion.

The normal course issuer bid ("NCIB") to purchase convertible debentures was announced in 2018 and renewed in 2019. In 2020, the Company repurchased and cancelled convertible debentures with a face value of $0.5 million (2019 - $5.0 million) for $0.2 million, an average rate of $31.07 per $100 of face value.

On February 4, 2021, Cardinal issued a notice of redemption for all of the outstanding 8% debentures with a principal amount of $28.2 million, effective March 11, 2021. Prior to the redemption date, Cardinal issued 22,410,000 common shares upon the voluntary conversion of $28.0 million of principal amount of the 8% debentures representing approximately 99.3% of the outstanding debentures. The redemption of the remaining $0.2 million principal amount of the 8% debentures was funded through the Company's credit facility.

Secured Notes
On December 30, 2020, Cardinal entered into a subscription agreements for a non-brokered private placement ("Private Placement") of $16.9 million principal amount of second lien secured notes ("Secured Notes") issued at a 4% discount for net proceeds of $16.2 million. The proceeds were utilized to repay the maturing 5.5% convertible debentures. As part of the offering, each subscriber was also required to subscribe for a pro rata number of units ("Units") totaling 8,122,000 Units, at a subscription price of $0.50 per Unit for net proceeds of $4.0 million. See Share Capital section.

The Secured Notes bear interest at 12% per annum, with interest compounded and accrued semi-annually and added to the principal amount outstanding, payable on maturity. The Secured Notes mature on June 30, 2022, and contain an extension provision, exercisable by either Cardinal or the holders on 30 days' prior written notice, to extend the maturity date to November 30, 2022.

CAPITAL STRUCTURE

Cardinal manages its capital to provide a flexible structure to support production maintenance, capital programs and other operational strategies. Maintaining a strong financial position enables Cardinal to enhance business opportunities and supports Cardinal's strategy of providing shareholder return through growth of the business and reducing its cost structure.

One of the key measures that the Company utilizes in evaluating its capital structure is the credit available from the syndicate in relation to the Company's budgeted capital expenditure program and the ratio of net debt to adjusted funds flow (see non-GAAP measures).

To manage its capital structure, Cardinal considers its net debt to adjusted funds flow ratio, its capital expenditures program, the current level of credit available from the Facilities, the level of credit that may be attainable due to changes in petroleum and natural gas reserves and new equity if available on favourable terms. The Company prepares an annual capital expenditure budget, which is monitored monthly and updated as necessary.

	Twelve months ended	
	Dec 31, 2020	Dec 31, 2019
Bank debt	**$ 192,115**	$ 173,308
Secured notes	**$ 16,217**	-
Principal amount of Convertible Debentures	**28,207**	45,000
Adjusted working capital deficiency (1)	**10,284**	29,291
Net debt (1)	**$ 246,823**	$ 247,599
Cash flow from operating activities	**$ 43,525**	$ 119,979
Change in non-cash working capital	**(2,547)**	(4,740)
Funds flow (1)	**$ 40,978**	$ 115,239
Decommissioning obligation expenditures	**2,849**	6,571
Adjusted funds flow (1)	**43,827**	121,810
Net debt to adjusted funds flow (1)	**5.6**	2.0

(1) See non-GAAP measures

Cardinal's ratio of net debt to adjusted funds flow as at December 31, 2020 was 5.6 to 1, higher than the ratio at December 31, 2019 of 2.0 to 1 due to lower adjusted funds flow from reduced oil prices experienced since the second quarter of 2020. Due to the oil demand reduction and impact on oil prices from COVID-19, adjusted funds flow is significantly lower than previously experienced. In response to this, Cardinal has taken numerous steps to mitigate the impact including reducing capital expenditures, operating and G&A costs. During the fourth quarter of 2020, the Company also strengthened its debt position and extended its credit facility. Since COVID-19 began its impact on Cardinal in the first quarter of 2020, the Company has reduced its net debt position by $27.0 million. In 2021, Cardinal has also reduced its net debt by $28 million due to the conversion of the convertible debentures. As the oil price partially recovered in the fourth quarter and continues into 2021, Cardinal expects the net debt to adjusted funds flow ratio to continue to be reduced throughout the year.

As discussed below in the *Liquidity* section, the Company currently has available capacity on its Facilities to satisfy its capital and asset retirement obligations for 2021 however the preparation of financial forecasts is challenging in the current environment. The Company will continue to monitor this ratio and endeavors to return to a level of a 2.0 to 1 target ratio.

LIQUIDITY

The Company relies on cash flow from operating activities, the unused portion of the Facilities and equity issuances to fund its capital requirements and provide liquidity. Cardinal had sufficient credit capacity to cover its adjusted working capital deficiency of $10.3 million and continues to have sufficient available capacity as at the date of this MD&A.

The Company believes that it is positioned to take advantage of its internally developed opportunities funded through its currently available Facilities combined with anticipated cash flow from operating activities. Present sources of capital are anticipated to be sufficient to satisfy the Company's capital program and decommissioning obligations for the 2021 fiscal year and beyond.

Since the second quarter of 2020, the Company's reduced cost structure and higher oil prices have provided for increased cash flow from operating activities through the remainder of 2020 and currently expected into 2021. In December 2020, the extension of our Facilities to May 31, 2022 maturity, combined with the replacement of maturing convertible debentures with longer term Secured notes alleviated liquidity concerns.

At December 31, 2020, the Company remains in compliance with all terms of our Facilities and based on current available information, management expects to comply with all terms during the subsequent 12 month period.

DIVIDENDS

	Three months ended			Year ended		
	Dec 31, 2020	Dec 31, 2019	Change %	**Dec 31, 2020**	Dec 31, 2019	Change %
Dividends declared	-	5,325	(100)	**3,511**	17,923	(80)
Dividends declared per share	$ -	$ 0.045	(100)	**$ 0.030**	$ 0.150	(80)

In March 2020, due to the effect of the effect of COVID-19 which caused a collapse in the price of crude oil, Cardinal has elected to suspend its dividend. The Company will continue to evaluate market conditions to determine when we could reinstate a dividend in the future.

SHARE CAPITAL

The Company has a bonus award plan whereby RAs and PAs may be granted to directors, officers, employees and other service providers. In the case of PAs, the award value is adjusted for a payout multiplier which can range from 0.0 to 1.5 and is dependent on the performance of the Company relative to pre-defined corporate performance measures for a particular period. Awards are adjusted for dividends declared, either with a cash payment or incremental common shares, and may be settled in cash, common shares issued from treasury or common shares acquired by an independent trustee in the open market for such purposes. The trustee purchased 679,436 treasury shares in 2020 (2019 – 2,253,357) at an average price of $1.55 (2019 - $2.84) for the potential settlement of vesting RAs and PAs while settling the payment of 1,146,394 RAs (2019 – 437,275) with shares held by the trustee. At December 31, 2020, the trustee held a remaining balance of 1,349,124 (December 31, 2019 – 1,816,082) treasury shares.

In 2020, Cardinal granted 1.7 million RAs and 0.8 million PAs to officers, directors and employees pursuant to the Company's bonus award plan.

On December 30, 2020, as part of the Private Placement, Cardinal issued 8,122,000 Units consisting of one common share and one warrant at $0.50 per unit for net proceeds of $4.0 million. Refer to Warrant Liability section.

In the third quarter of 2019, the Company announced that the Toronto Stock Exchange ("TSX") accepted the Company's intention to commence an NCIB. Pursuant to the NCIB, the Company was permitted to purchase up to 11,128,148 common shares (representing approximately 10% of its public float as of July 23, 2019) between August 2, 2019 and August 2, 2020. In 2020, the Company repurchased and cancelled 897,500 common shares at average price of $2.77 per common share, for a total cost of $2.5 million. The NCIB expired in August 2020.

Equity Instruments as at	Mar 16, 2021	Dec 31, 2020	Dec 31, 2019
Common shares, issued	145,108,229	122,697,829	115,473,329
Treasury shares	(1,246,595)	(1,349,124)	(1,816,082)
Convertible debentures	-	22,565,600	4,285,715
Warrants	8,122,000	8,122,000	-
RAs	3,812,231	3,992,659	4,613,495
PAs	846,369	846,369	-

OFF BALANCE SHEET ARRANGEMENTS

Cardinal does not have any special purpose entities nor is it a party to any arrangements that would be excluded from the balance-sheet.

CONTRACTUAL OBLIGATIONS

At December 31, 2020, the Company had contractual obligations as follows:

	2021	**2022**	**2023**	**2024**	**2025**	**Thereafter**
Trade and other payables	42,421	-	-	-	-	-
Lease liabilities	1,877	1,306	1,045	9	-	-
Bank debt (1)	-	192,115	-	-	-	-
Secured notes	-	20,156	-	-	-	-
Convertible debentures	2,257	30,464	-	-	-	-
Total contractual obligations	**$ 46,555**	**$ 244,041**	**1,045**	**9**	**-**	**-**

(1) Amount excludes interest

ADDITIONAL INFORMATION

CRITICAL ACCOUNTING ESTIMATES

Cardinal's significant accounting policies including the use of judgments and key sources of estimation uncertainty are disclosed in note 3 to the December 31, 2020 financial statements. Certain accounting policies require that management make appropriate decisions with respect to the formulation of estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Cardinal continuously refines its management and reporting systems to ensure that accurate, timely and useful information is gathered and disseminated. Cardinal's financial and operating results incorporate certain estimates including the following:

- Estimated accruals for revenues, royalties and operating expenses where actual revenues and costs have not been received;
- Estimated capital expenditures where actual costs have not been received or for projects that are in progress;
- Estimated depletion is based on estimates of oil and gas reserves that Cardinal expects to recover in the future. As a key component in the D&D calculation, the reserve estimates have a significant impact on net

earnings and the Company's financial results could differ if there is a revision in our estimate of reserve quantities;

- Estimated future recoverable value of property, plant and equipment and any related impairment charges or recoveries are assessed for impairment when circumstances suggest the carrying amount may exceed its recoverable amount. The recoverable amount calculation requires the use of estimates which are subject to change as new information becomes available. Changes in assumptions used in determining the recoverable amount could affect the carrying value of the related assets;
- Estimated fair values of derivative contracts which are used to manage commodity price and foreign exchange risk on borrowings are determined using valuation models which require assumptions regarding the amount and timing of future cash flows and discount rates. As the Company's assumptions rely on external market data, the resulting fair value estimates may not be indicative of the amounts realized or settled and are therefore subject to market uncertainty;
- Estimated fair value of warrant liability is calculated based on assumptions including volatility and risk-free interest rate which are external market data, the resulting fair value estimates may not be indicative of the amounts realized or settled and are therefore subject to market uncertainty;
- The decommissioning obligation is based on assumptions which take into consideration current economic factors and experience to date which we believe are reasonable. The actual cost of the Company's decommissioning obligation may change in response to numerous factors; and
- Estimated deferred income tax assets and liabilities are based on current tax interpretations, regulations and legislation which are subject to change. As a result, there are usually a number of tax matters under review and therefore income taxes are subject to measurement uncertainty.

Past estimates are reviewed and analyzed regularly to improve the accuracy of future estimates. New information and changed circumstances may result in actual results or changes to estimate amounts that differ materially from current estimates.

RISKS

Financial Risk

Financial risk is the risk of loss or lost opportunity resulting from financial management and market conditions that could have a positive or negative impact on Cardinal's business. Financial risks the Company is exposed to include: marketing production at an acceptable price given market conditions; finding and producing reserves at a reasonable cost; volatility in market prices for oil and natural gas; fluctuations in foreign exchange and interest rates; stock market volatility; debt service which may limit timing or amount of dividends as well as market price of shares; the continued availability of adequate debt and equity financing and funds flow to fund planned expenditures; sufficient liquidity for future operations; lost revenue or increased expenditures as a result of delayed or denied environmental, safety or regulatory approvals; cost of capital risk to carry out the Company's operations; and uncertainties associated with credit facilities and counterparty credit risk.

Operational Risk

Operational risk is the risk of loss or lost opportunity resulting from operating and capital activities that, by their nature, could have an impact on the Company's ability to achieve objectives. Operational risks that Cardinal is exposed to include: uncertainties associated with estimating oil and natural gas reserves; incorrect assessments of the value of acquisitions and exploration and development programs; failure to realize the anticipated benefits of acquisitions; uncertainties associated with partner plans and approvals; operational matters related to non-operated properties; inability to secure adequate product transportation; delays in business operations, pipeline restrictions, blowouts; unforeseen title defects; increased competition for, among other things, capital, acquisitions of reserves and undeveloped lands; competition for and availability of qualified personnel or management; loss of key personnel; unexpected geological, technical, drilling, construction and processing problems; availability of insurance; competitive action by other companies; the ability of suppliers to meet commitments and risks; and uncertainties related to oil and gas interests and operations on tribal lands.

Safety, Environmental and Regulatory Risks
Safety, environmental and regulatory risks are the risks of loss or lost opportunity resulting from changes to laws governing safety, the environment, royalties and taxation. Safety, environmental and regulatory risks that Cardinal is exposed to include: aboriginal land claims; uncertainties associated with regulatory approvals; uncertainty of government policy changes; the risk of carrying out operations with minimal environmental impact; changes in or adoption of new laws and regulations or changes in how they are interpreted or enforced; obtaining required approvals of regulatory authorities and stakeholder support for activities and growth plans.

The oil and gas industry has a number of environmental risks and hazards and is subject to regulation by all levels of government. Environmental legislation includes, but is not limited to, operational controls, site restoration requirements and restrictions on emissions of various substances produced in association with oil and natural gas operations. Compliance with such legislation could require additional expenditures and a failure to comply may result in fines and penalties which could, in the aggregate and under certain unlikely assumptions, become material. Operations are continuously monitored to minimize the environmental impact and capital is allocated to reclamation and other activities to mitigate the impact on the areas in which we operate.

Information Systems
Our operations rely heavily on information technology, such as computer hardware and software systems, to properly operate our business. These systems could be damaged, corrupted or interrupted by natural disasters, telecommunications failures, power loss, malicious acts or code, computer viruses, physical or electronic security breaches, user misuse or user error. A system disruption or breach could adversely impact our reputation, financial condition, results of operations and cash flows.

Risk Management
Cardinal is committed to identifying and managing its risks in the near term, as well as on a strategic and longer term basis at all levels in the organization. Issues affecting, or with the potential to affect, our assets, operations and/or reputation, are generally of a strategic nature or are emerging issues that can be identified early and then managed, but occasionally include unforeseen issues that arise unexpectedly and must be managed on an urgent basis.

Cardinal takes a proactive approach to the identification and management of issues that can affect the Company's assets, operations and/or reputation. Specific actions to ensure effective risk management include: employing qualified professional and technical staff; concentrating in a limited number of areas with low cost exploitation and development objectives; utilizing the latest technology for finding and developing reserves; constructing quality, environmentally sensitive and safe production facilities; adopting and communicating sound policies governing all areas of our business; maximizing operational control of drilling and production operations; strategic hedging of commodity prices and foreign exchange rates on borrowings; adhering to conservative borrowing guidelines; and monitoring counterparty creditworthiness.

Additional information regarding risk factors is available in our Annual Information Form, which is available on the SEDAR website at www.sedar.com.

DISCLOSURE CONTROLS AND PROCEDURES

Disclosure controls and procedures ("DC&P"), as defined in National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings* ("NI 52-109"), are designed to provide reasonable assurance that material information required to be disclosed in the Company's annual filings, interim filings or other reports filed, or submitted by the Company under securities legislation is recorded, processed, summarized and reported within the time periods specified under securities legislation and include controls and procedures designed to ensure that information required to be so disclosed is accumulated and communicated to management, including the Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO"), as appropriate, to allow timely decisions regarding required disclosure.

The CEO and the CFO have evaluated the effectiveness of Cardinal's disclosure controls and procedures as at December 31, 2020 and have concluded that such disclosure controls and procedures are effective. The assessment was based on the framework in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO 2013").

INTERNAL CONTROLS OVER FINANCIAL REPORTING

Internal control over financial reporting ("ICOFR"), as defined in NI 52-109, includes those policies and procedures that: a) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets of Cardinal; b) are designed to provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS and that receipts and expenditures of the Company are being made in accordance with authorizations of management and Directors of Cardinal; and c) are designed to provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

The CEO and the CFO have designed, or caused to be designed under their supervision, internal controls over financial reporting as defined in NI 52-109, in order to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. The CEO and the CFO have evaluated the design and operating effectiveness of Cardinal's ICOFR as at December 31, 2019 and have concluded that such internal controls over financial reporting are designed and operating effectively. The control framework Cardinal's officers used to design the Company's ICOFR is COSO 2013.

There were no changes in Cardinal's ICOFR during the quarter ended December 31, 2020 that materially affected, or are reasonably likely to materially affect, the Company's ICOFR.

Due to their inherent limitations, internal controls over financial reporting may not prevent or detect misstatements. In addition, projections of any evaluation relating to the effectiveness in future periods are subject to the risk that controls may become inadequate as a result of changes in conditions, or that the degree of compliance with policies and procedures may deteriorate. It should also be noted that a control system, including the Company's DC&P and ICOFR, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objective of the control system is met and it should not be expected that the DC&P and ICOFR will prevent all errors or fraud.

OUTLOOK

After a difficult and challenging 2020, Cardinal is looking forward to the start of 2021. Global optimism around COVID-19 vaccines and an economic recovery have created positive market sentiment and stability in oil prices leading to a significantly improved outlook for the Company. With the recently completed $28.2 million conversion of the 8% debentures and our continued debt repayment strategy, our financial position continues to be strengthened.

The Company released its 2021 budget in January which focused on a conservative capital program and debt repayment which will be reviewed in the second quarter as certainty over commodity pricing continues. Cardinal plans to continue with its debt repayment strategy in 2021 while optimizing our existing assets.

QUARTERLY DATA

	Dec 31, 2020	Sep 30, 2020	Jun 30, 2020	Mar 31, 2020
Production				
Oil (bbl/d)	**15,149**	14,582	14,251	17,093
Natural gas (mcf/d)	**13,653**	13,448	12,873	14,368
NGL (bbl/d)	**1,200**	834	772	836
Oil equivalent (boe/d)	**18,625**	17,657	17,169	20,323
Financial				
Revenue	**66,065**	61,982	31,711	63,473
Earnings (loss)	**119,988**	(4,659)	(27,546)	(450,944)
Basic per share ($)	**1.06**	(0.04)	(0.24)	(3.98)
Diluted per share ($)	**1.04**	(0.04)	(0.24)	(3.98)
Cash flow from operating activities	**12,810**	18,950	(10,276)	22,041
Adjusted funds flow[(1)]	**13,608**	13,206	2,065	14,948
Basic and diluted per share ($)	**0.12**	0.12	0.02	0.13
Adjusted working capital deficiency[(1)]	**(10,284)**	(10,898)	(5,012)	(35,909)
Total assets	**749,133**	633,024	676,560	703,401
Bank debt	**192,115**	204,018	217,206	192,965
Principal amount of convertible debentures	**28,207**	44,451	44,451	44,931
Secured notes	**16,217**	-	-	-
Total long-term liabilities[(2)]	**316,952**	102,579	115,559	306,973
Shareholders' equity	**372,848**	251,859	253,804	280,608
Common shares outstanding, net (000's)[(3)]	**121,349**	113,496	113,382	113,354
Diluted shares outstanding, net (000's)[(3)(4)]	**134,310**	118,490	118,712	118,797

	Dec 31, 2019	Sep 30, 2019	Jun 30, 2019	Mar 31, 2019
Production				
Oil (bbl/d)	16,757	16,624	16,997	16,788
Natural gas (mcf/d)	15,459	15,022	15,906	15,930
NGL (bbl/d)	893	932	939	964
Oil equivalent (boe/d)	20,227	20,059	20,587	20,407
Financial				
Revenue	93,272	95,483	106,166	94,050
Earnings (loss)	(15,094)	359	(3,099)	(16,506)
Basic and diluted per share ($)	(0.13)	-	(0.03)	(0.14)
Cash flow from operating activities	31,714	24,836	35,923	27,506
Adjusted funds flow[(1)]	28,864	27,571	35,736	29,639
Basic and diluted per share ($)	0.25	0.24	0.31	0.25
Adjusted working capital deficiency[(1)]	(29,291)	(10,325)	(9,159)	(6,729)
Total assets	1,149,827	1,186,151	1,190,950	1,218,439
Bank debt	173,308	192,435	195,468	206,151
Principal amount of convertible debentures	45,000	45,000	45,000	45,000
Total long-term liabilities[(2)]	284,251	359,809	362,500	372,245
Shareholders' equity	737,902	758,263	763,655	771,674
Common shares outstanding, net (000's)[(3)]	113,657	114,333	115,203	116,617
Diluted shares outstanding, net (000's)[(3)(4)]	118,271	119,088	120,220	121,669

(1) See non-GAAP measures
(2) Includes lease liabilities and decommissioning obligation.
(3) Net of treasury shares
(4) Excludes the impact of convertible debentures

Since the first quarter of 2019, production has been relatively consistent but fluctuations in commodity prices have resulted in revenue variances. In the second quarter of 2020, reduced oil demand due to concerns over the effect of COVID-19 has significantly impacted oil pricing and revenue. The Company shut-in higher cost production in the second quarter of 2020 and has subsequently brought back on certain production with supporting economics. Reduced production and low commodity prices significantly impacted revenue, cash flow from operating activities and adjusted funds flow in 2020.

Cardinal's quarterly earnings and losses have varied significantly due to non-cash unrealized gains and losses on risk management contracts. The Company's earnings also fluctuate with non-cash impairment charges and reversals of previous impairments on its assets as shown with a $23.4 million impairment charge in the fourth quarter of 2019 and an impairment charge of $343 million in the first quarter of 2020. A portion of this impairment charge was reversed in the fourth quarter of 2020 when forecasted oil prices partially recovered which positively impacted earnings by $122.7 million. In the second quarter of 2019, the Company's deferred tax expense increased by $16.5 million as the deferred tax asset was reduced due to the Alberta governments decrease in tax rates from 12% to 8% over the next four years. As the Company did not have sufficient certainty regarding future utilization of all of its tax pools, Cardinal derecognized its deferred tax asset and recognized an expense of $102.9 million in the first quarter of 2020.

ANNUAL DATA

	2020	2019	2018
Production			
Oil (bbl/d)	**15,266**	16,791	17,325
Natural gas (mcf/d)	**13,585**	15,576	16,579
NGL (bbl/d)	**911**	932	770
Oil equivalent (boe/d)	**18,442**	20,319	20,858
Financial			
Revenue	**223,231**	388,971	379,254
Earnings (loss)	**(363,160)**	(34,340)	60,544
Basic per share ($)	**(3.20)**	(0.30)	0.53
Diluted per share ($)	**(3.20)**	(0.30)	0.52
Cash flow from operating activities	**43,525**	119,979	88,767
Adjusted funds flow	**43,827**	121,810	85,221
Basic and diluted per share ($)	**0.39**	1.06	0.74
Dividends per share ($)	**0.030**	0.15	0.40
Adjusted working capital deficiency(1)	**(10,284)**	(29,291)	(8,246)
Total assets	**749,133**	1,149,827	1,206,336
Bank debt	**192,115**	173,308	211,443
Principal amount of convertible debentures	**28,207**	45,000	50,000
Secured notes	**16,217**	-	-
Total long-term liabilities	**316,952**	284,251	376,651
Shareholders' equity	**372,848**	737,902	792,622
Weighted average shares - basic (000's)	**113,415**	115,315	114,641
Weighted average shares - diluted (000's)	**113,415**	115,315	115,679

(1) – See non-GAAP measures

In 2019, Cardinal's oil production was restricted by the Alberta government's production curtailment program and in 2020 the Company voluntarily shut-in production in response to the low oil prices experienced due to COVID-19. Revenue has also varied due to volatility in commodity prices.

Adjusted funds flow increased in 2019 due to increased Canadian oil prices however dramatically decreased in 2020 due to the oil price decrease. Cardinal's earnings (loss) varied significantly due to changes in realized gains and unrealized losses on commodity contracts, a reversal of previous impairment in 2018 of $76 million, an impairment of $23.4 million in 2019 and an impairment charge of $220.3 million in 2020. In addition, during the first quarter of 2020, the Company derecognized its deferred tax asset resulting in a $102.9 million impact to earnings in 2020.

FORWARD LOOKING STATEMENTS

This MD&A contains certain forward-looking statements and forward-looking information (collectively referred to herein as "forward-looking statements") within the meaning of applicable Canadian securities laws. All statements other than statements of present or historical fact are forward-looking statements. Forward-looking information is often, but not always, identified by the use of words such as "anticipate", "believe", "plan", "intend", "objective", "continuous", "ongoing", "estimate", "expect", "may", "will", "project", "should", or similar words suggesting future outcomes. In particular, this MD&A contains forward-looking statements relating, but not limited to**:**

- the effect of COVID-19 on the Company’s results;
- the Company's COVID-19 response plans;
- plans to maximize the output of underutilized facilities;
- estimated tax pools, future taxability and future taxable income;
- the renewal of the Company’s Facilities and the amount of such Facilities;
- that the Company will continue to comply with all of the terms of its Facilities;
- plans to manage liquidity and continue to reduce debt;
- future cash flow from operating activities;
- 2021 capital expenditure plans;
- Cardinal's business strategy, goals and management focus;
- Cardinal's dividend plans;
- targeted net debt to adjusted funds flow ratio and plans to monitor this ratio;
- Cardinal's risk management strategy including the mitigation of our exposure to commodity price risk, medium crude oil differentials, foreign exchange risk on borrowings and the benefits to be obtained therefrom;
- sources of funds for the Company's operations, capital expenditures, and decommissioning obligations;
- plans to provide shareholders return through a growth in the business and reducing its cost structure;
- plans to minimize the environmental impact of our operations;
- abandonment and reclamation spending plans including the timing thereof;
- anticipated costs of compliance with environmental legislation;
- future liquidity and the Company's access to sufficient debt and equity capital;
- the Company’s ability to generate income and cash flows in the future;
- Cardinal's asset base;
- expectations regarding the business environment, industry conditions, future commodity prices and differentials;
- Cardinal's capital management strategies;
- future capital expenditures; and
- treatment under governmental and other regulatory regimes and tax, environmental and other laws.

Forward-looking statements regarding Cardinal are based on certain key expectations and assumptions of Cardinal concerning the impact of COVID-19; anticipated financial performance, business prospects, strategies, regulatory developments, current and future commodity prices and exchange rates, applicable royalty rates, tax laws, production shut-ins, future well production rates and reserve volumes, future operating costs, the performance of existing and future wells, the success of our exploration and development activities, the sufficiency and timing of budgeted capital expenditures in carrying out planned activities, the timing and success of our cost cutting initiatives, the renewal of the Facility and level of liquidity, the availability and cost of labor and services, the impact of increasing competition, conditions in general economic and financial markets, availability of drilling and related equipment, effects of regulation by governmental agencies, the ability to obtain financing on acceptable terms which are subject to change based on commodity prices, market conditions, and drilling success .

These forward-looking statements are subject to numerous risks and uncertainties, certain of which are beyond Cardinal's control. Such risks and uncertainties include, without limitation: the impact of general economic conditions; volatility in market prices for crude oil and natural gas; impact of COVID-19 and the ability of the Company to carry on operations as contemplated in light of COVID-19; the renewal of our Facility and level of liquidity; determinations by OPEC and other countries as to production levels; industry conditions; currency fluctuations; imprecision of reserve estimates; liabilities inherent in crude oil and natural gas operations; environmental risks; incorrect assessments of the value of acquisitions and exploration and development programs; competition from other producers; the lack of availability of qualified personnel, drilling rigs or other services; changes in income tax laws or changes in royalty rates and incentive programs relating to the oil and gas industry including government curtailment programs; hazards such as fire, explosion, blowouts, and spills, each of which could result in substantial damage to wells, production facilities, other property and the environment or in personal injury; and ability to access sufficient capital from internal and external sources.

Management has included the forward-looking statements above and a summary of assumptions and risks related to forward-looking statements provided in this MD&A in order to provide readers with a more complete perspective on Cardinal's future operations and such information may not be appropriate for other purposes. Cardinal'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 Cardinal will derive there from. Readers are cautioned that the foregoing lists of factors are not exhaustive. These forward-looking statements are made as of the date of this MD&A and Cardinal 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.

Supplemental Information Regarding Product Types

This MD&A includes references to 2018, 2019 and 2020 production. The Company discloses crude oil production based on the pricing index that the oil is priced off of. The following table is intended to provide the product type composition as defined by NI 51-101.

	LIGHT/MEDIUM CRUDE OIL	HEAVY OIL	NGL	CONVENTIONAL NATURAL GAS	TOTAL (BOE/D)
Q4/20	55%	26%	7%	12%	18,625
Q3/20	56%	27%	5%	12%	17,657
Q2/20	57%	27%	4%	12%	17,169
Q1/20	56%	28%	4%	12%	20,323
Q4/19	56%	27%	4%	13%	20,227
Q3/19	54%	29%	5%	12%	20,059
Q2/19	54%	29%	4%	13%	20,587
Q1/19	54%	28%	5%	13%	20,407
2020	57%	26%	5%	12%	18,442
2019	55%	28%	4%	13%	20,319
2018	56%	27%	4%	13%	20,858

Frequently Used Terms

Term or abbreviation	
"bbl"	Barrel(s)
"bbl/d"	Barrel(s) per day
"boe"	Barrel(s) of oil equivalent
"boe/d"	Barrel(s) of oil equivalent per day
"COGE Handbook"	Canadian Oil and Gas Evaluation Handbook
"GJ"	Gigajoule

"gj/d"	Gigajoule(s) per day
"m" preceding a volumetric measure	1,000 units of the volumetric measure
"mcf"	Thousand cubic feet
"mcf/d"	Thousand cubic feet per day
"NGL"	Natural gas liquids
"n/m"	Not meaningful ie. absolute value greater than 300%
"US"	United States
"USD"	United States dollars
"WCS"	Western Canadian Select
"WTI"	West Texas Intermediate