CARDINAL
ENERGY LTD.

TSX: CJ

February 2022

Corporate Update

Cardinal Energy

1. Scope one negative for carbon emissions
2. Lowest production decline among conventional producers
3. Business Model undergoing significant de-risking in 2022
4. Begin significant returns to shareholders in 2022

Cardinal Snapshot

Diluted Shares Outstanding	166 MM
Net Debt December 31, 2021(unaudited)	$178 MM
Net Bank Debt December 31, 2021 (unaudited)	$165 MM
Forecast Production Average 2022	20,500 BOEPD
Production Decline	+/- 10%
Adjusted Funds Flow Estimate 2022 ($80 WTI)	$270 MM
Budgeted Capital Expenditures 2022	$75 MM
Adjusted Funds Flow Sensitivity ($1 WTI)	+/- $5.6 MM
Tax Pools	~$1.4 Billion
2022 Hedging	Unhedged

Midale – CCS EOR Simplified

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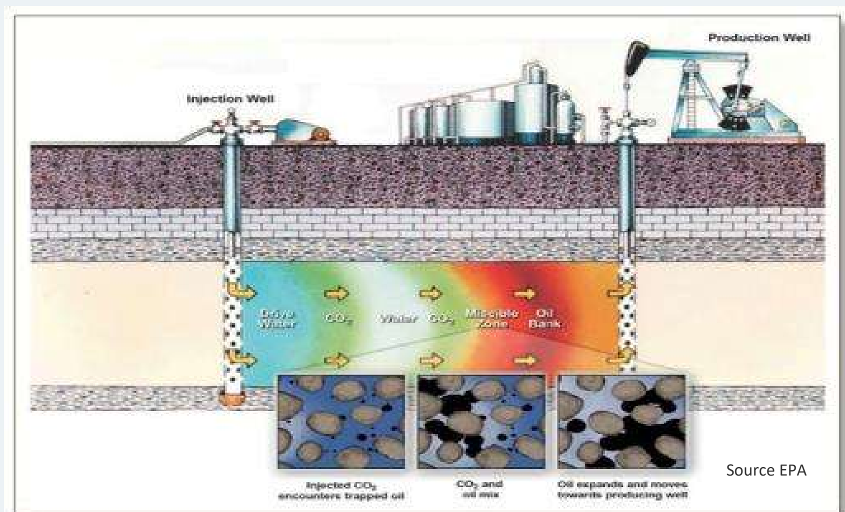
Utilizing CCS EOR reduces emissions while still contributing a low carbon source of energy



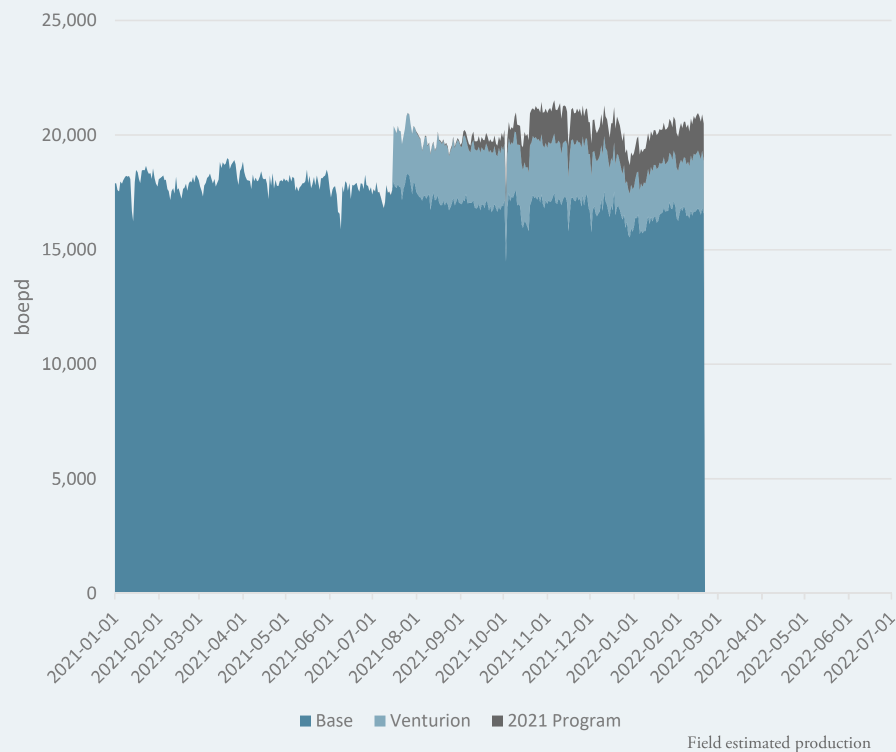
- CO_2 is injected into the reservoir combines with residual oil and then a portion is produced along with the recovered oil, with the balance remaining safely sequestered in the reservoir
- CO_2 produced is captured at surface and re-injected into the reservoir

- Midale CO_2EOR project has sequestered over 5 million tonnes of CO_2 over its lifetime making it currently the 6th largest storage site in the world[3]
- Fully utilized Midale has the potential to store ~50 million tonnes of CO_2
- Current Midale operation sequesters more CO_2e than total Cardinal corporate CO_2e direct (scope 1) emissions
- Sequestration volumes increased >50% in 2021 2H

- Midale is one of 26 active CCS/CCUS projects in the world.
- Each WAG injector is forecast to inject over 200,000 tonnes of CO_2 over its life time, the equivalent of:
  - Removing ~45,000 cars off the road for a year[1] or;
  - Planting ~250,000 trees[2]

1. Source: EPA ~4.6T/yr per typical passenger vehicle
2. Source: TreeCanada estimate of 225kg C per tree
3. Source: Publicly available information

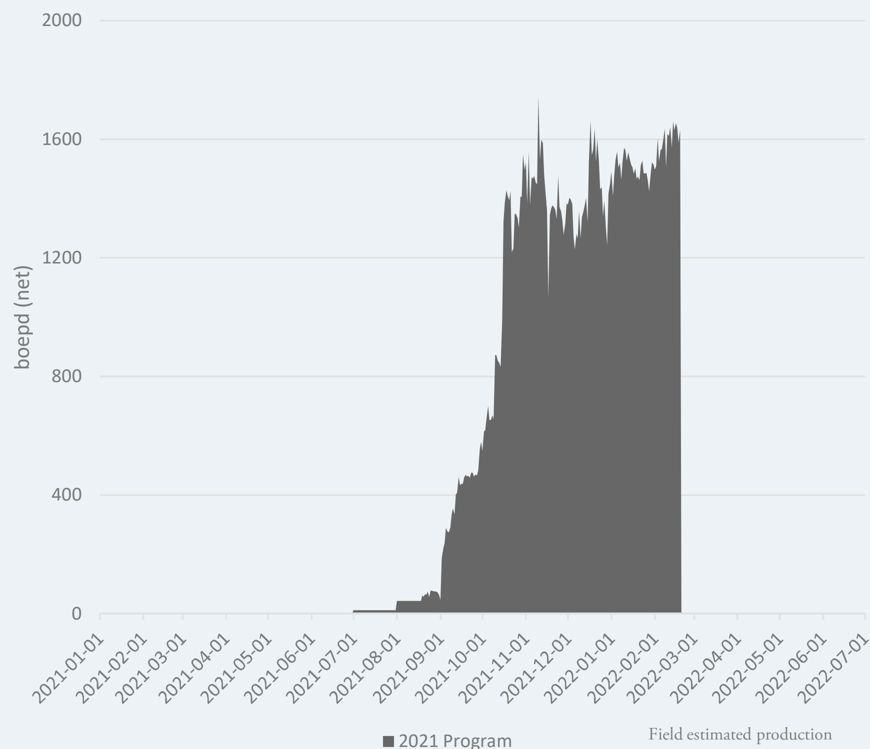
Corporate Production



Field estimated production

- Current production ~20,500 boepd
- Base decline ~ 10%
- Majority of production under established secondary or tertiary recovery schemes
- 84% oil, 4% NGLs, 12% natural gas
- Venturion assets integrated, performing to expectation
- Extreme cold impacted late December early January production - recovered
- Current performance above budget forecast

2021 Drilling Program



Field estimated production

- 8 producers, 2 WAG injectors drilled
- Drill, complete, equip & tie-in costs ~$15MM (net)
- Net current production ~1600 boepd (90% liquids)
- On average performing above expectation
- Average IP90 capital efficiency <$8500/boepd (producers)
- Earlier and stronger response than forecast from legacy producers offsetting WAG injectors
- Complete program expected to payout in Q2 2022

2021 YE Reserves Highlights

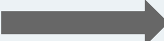
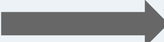
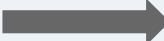
Category	Reserves[1]	Annual Change	NPV10	Annual Change	FD&A	Recycle Ratio[2]
	MMBoe		$MM		$/boe	
Proved Developed Producing ("PDP")	74.4	+16%	$1,050	+75%	$5.66	5.2
Total Proved	83.3	+11%	$1,100	+77%	$6.49	4.6
Total Proved Plus Probable	110.4	+11%	$1,376	+70%	$5.17	5.7

- Strong production replacement (2.5x on PDP)
- Ongoing positive technical revisions associated with outperformance of water flood and EOR assets
- Improved pricing led to positive economic revisions
- Strong drill results
- All complemented by strategic, opportunistic acquisitions

(1) Gross working interest reserves
(2) Recycle Ratio calculated based upon 2021 annual estimated netback of $29.68/boe

Our Business Model

Cash Flow

	2022 ($80 WTI)
Amount of capital required to maintain our assets and keep production flat/growth ($30 MM drilling in 2022)	$75 MM
Amount of capital required to fulfill our commitment to operating our business in a responsible manner	$9 MM
Capital available to our shareholders	$186 MM

Sustainability: Drilling Inventory Breakdown

Cardinal Growth/Maintenance Drilling

- Multiple oil targeted play types across asset base
- All tier 1 development 1 year or less payout at $75US WTI
- Multiple years of inventory to maintain current production levels
- Significant tier 2 contingent inventory

District	Primary Plan	Tier 1 Potential Inventory
South	Ellerslie, Glauc, Arcs	40
Central	Infills, secondary zones	25
North	Dunvegan, Clearwater, Swan Hills, Charlie Lake	35
SK-Midale	CO_2 EOR focused, water flood focused	35
TOTAL		135

Returns to Shareholders

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Phase One: Protect the Business

- 100% of our Free Cash Flow will go toward repayment of Bank Debt until Bank Debt is reduced to $100 MM (increases Net Asset Value per share by $0.50).

Phase Two: Deliver direct returns to shareholders

- Upon reaching our Phase One Bank Debt milestone, our Free Cash Flow will be allocated, 50% to further Debt repayment and 50% to a regular monthly Dividend.

Phase Three: Increase returns to shareholders

- Once Bank Debt is reduced to $50 MM, we will alter allocations, increasing amount allocated to Dividends and also adding allocation to larger ARO and ESG projects.

Free Cash Flow Forecast – No Dividend

WTI ($USD/bbl)	$65	$70	$75	$80	$85	$90
2022 Cash flow ($MM)	$174	$207	$239	$270	$304	$337
Capex/ARO ($MM)	$85	$85	$85	$85	$85	$85
Free cash flow ($MM)	$89	$122	$154	$185	$219	$252
Closing net debt/(Cash) ($MM)(1)	$83	$55	$23	($12)	($42)	($74)

1. Excluding potential dividend

Estimated Second Half 2022 Dividend Level Scenarios

The dividend rate is expected to be fixed at the prevailing oil price at the time Phase One debt level is achieved. Below assumes that level is reached July 1, 2022.

WTI ($USD/bbl)	$65	$70	$75	$80	$85	$90
2H 2022 Dividend ($MM)	$15	$30	$40	$50	$60	$70
Div/share/month ($MM)	$0.01	$0.03	$0.04	$0.05	$0.06	$0.07
Closing net debt ($MM)	$98	$85	$63	$40	$18	-
% of 2H FCF to Dividend	18%*	42%	45%	48%	49%	51%

*lower % as Phase one debt level not reached until later in year

Advisory

Note Regarding Forward Looking Statements

This presentation contains forward-looking statements and forward-looking information (collectively "forward-looking information") within the meaning of applicable securities laws relating to Cardinal's plans and other aspects of Cardinal's anticipated future operations, management focus, objectives, strategies, financial, operating and production results. Forward-looking information typically uses words such as "anticipate", "believe", "project", "expect", "goal", "plan", "intend", " may", "would", "could" or "will" or similar words suggesting future outcomes, events or performance. The forward-looking statements contained in this presentation speak only as of the date thereof and are expressly qualified by this cautionary statement.

Specifically, this presentation contains forward-looking statements relating to: our business goals, strategies, plans and objectives, drilling inventory and future locations, expected future drilling and operating costs, production decline rates, expected realized pricing, the benefits of our risk management program, future free cash flow, plans to increase sustainability and reduce risk by, among other things, improving our ability to replace production, lowering operating costs and increasing netbacks, and by reducing debt, ARO exposure and reliance on third parties and variable costs, our capital budget and the allocation thereof, our drilling and optimization plans, plans to reduce our electricity demand, power generation costs and economics, targeted debt to cash flow, and plans with respect to use of future free cash flow.

Forward-looking statements regarding Cardinal are based on certain key expectations and assumptions of Cardinal concerning anticipated financial performance, business prospects, strategies, regulatory developments, production curtailments, current and future commodity prices and exchange rates, applicable royalty rates, tax laws, 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 availability and cost of labor and services, the impact of 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, drilling success and potential timing delays.

In addition, information and statements relating to reserves are deemed to be forward-looking statements, as they involve implied assessment, based on certain estimates and assumptions, that the reserves described exist in quantities predicted or estimated, and that the reserves can be profitably produced in the future.

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 commodity prices and differentials; power costs; 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; changes in 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 presentation 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 presentation 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.

Oil and Gas Advisories

The term "boe" or barrels of oil equivalent may be misleading, particularly if used in isolation. A boe conversion ratio of six thousand cubic feet of natural gas to one barrel of oil equivalent (6 Mcf: 1 bbl) is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. Additionally, given that the value ratio based on the current price of crude oil, as compared to natural gas, is significantly different from the energy equivalency of 6:1; utilizing a conversion ratio of 6:1 may be misleading as an indication of value.

Any references in this presentation to initial production rates are useful in confirming the presence of hydrocarbons, however, such rates are not determinative of the rates at which such wells will continue production and decline thereafter. While encouraging, readers are cautioned not to place reliance on such rates in calculating the aggregate production for Cardinal.

Advisory

This presentation contains metrics commonly used in the oil and natural gas industry which have been prepared by management, such as "netback“, "operating netback“, “capital efficiency”, “FD&A costs” and “recycle ratio”. These terms do not have standardized meaning and may not be comparable to similar measures presented by other companies and, therefore, should not be used to make such comparisons. Management uses these oil and gas metrics for its own performance measurements and to provide shareholders with measures to compare Cardinal’s operations over time.

"Capital efficiency" means the development cost divided by the production added over a defined period of time. "FD&A costs" are calculated as the sum of development costs plus net acquisition costs plus the change in FDC for the period when appropriate, divided by the change in reserves within the applicable reserves category, inclusive of changes due to acquisitions and dispositions. "Recycle ratio" is calculated by dividing an unaudited operating netback for 2021 of $29.68/boe by FD&A costs per boe for the year.

Readers are cautioned that the information provided by these metrics, or that can be derived from metrics presented in this presentation, should not be relied upon for investment or other purposes. Refer below to the Non-GAAP Measures section of this presentation for additional disclosure on "operating netback" or "netback".

Drilling Locations

This presentation discloses Cardinal's approximate 135 identified Tier 1 Potential Inventory drilling locations, of which 59 net are booked proved undeveloped locations, 19 net are booked probable undeveloped locations and 63 are unbooked. The booked locations are derived from the report prepared by GLJ evaluating Cardinal's reserves as of December 31, 2021.

Unbooked locations do not have attributed reserves. Unbooked locations have been identified by management as an estimation of the Company's multi-year drilling activities based on evaluation of applicable geologic, seismic, engineering, production and reserves information. There is no certainty that the Company will drill all unbooked drilling locations and if drilled there is no certainty that such locations will result in additional oil and gas reserves, resources or production. The drilling locations on which the Company will actually drill wells, including the number and timing thereof is ultimately dependent upon the availability of funding, regulatory approvals, seasonal restrictions, oil and natural gas prices, costs, actual drilling results, additional reservoir information that is obtained and other factors. While a certain number of the unbooked drilling locations have been derisked by drilling existing wells in relative close proximity to such unbooked drilling locations, the majority of other unbooked drilling locations are farther away from existing wells where management has less information about the characteristics of the reservoir and therefore there is more uncertainty whether wells will be drilled in such locations and if drilled there is more uncertainty that such wells will result in additional oil and gas reserves, resources or production.

Non-GAAP measures

This presentation contains the terms "adjusted funds flow", "free cash flow", "net debt", "net debt to adjusted funds flow, "net bank debt", "net operating expenses" and "netback" which do not have a standardized meaning prescribed by International Financial Reporting Standards ("IFRS" or, alternatively, "GAAP") and therefore may not be comparable with the calculation of similar measures by other companies. Cardinal uses "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. "Free cash flow" is calculated as adjusted funds flow less development capital expenditures less dividends. "Development capital expenditures" represents expenditures on property, plant and equipment. "Net debt" 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. "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). "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. "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, transportation costs and net operating 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 our petroleum and natural gas assets as compared to prior periods.