

# JERICHO ENERGY VENTURES INC. MANAGEMENT DISCUSSION AND ANALYSIS ("MD&A") For the year ended December 31, 2022 (Expressed in U.S. dollars unless otherwise indicated)

The following Management's Discussion and Analysis ("MD&A") of the financial condition and results of operations of Jericho Energy Ventures Inc. ("Jericho" or "the Company") for the three months and year ended December 31, 2022 is dated May 1, 2023 and should be read in conjunction with the Company's audited consolidated financial statements for the years ended December 31, 2022 and 2021. The audited consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS" or "GAAP") as issued by the International Accounting Standards Board.

#### INTRODUCTION

Jericho was incorporated on October 21, 2010 under the Laws of British Columbia and was listed on the TSX Venture Exchange after completion of its initial public offering on May 29, 2012. The Company's name was changed from Dakar Resource Corp. to Jericho Oil Corporation in 2014, and to Jericho Energy Ventures in March 2021. The Company trades on the TSX Venture Exchange under the symbol "JEV", and on the United States OTC exchange under the symbol "JROOF".

Jericho's head office, principal address and records office of the Company are located at Suite 2100, 1055 West Georgia Street, Vancouver, British Columbia, Canada, V6E 3P3. The Company owns and operates its energy interests through various subsidiaries.

Consistent with the Company's name change in March 2021, Jericho began expanding its energy portfolio to advance the global low-carbon energy transition with investments in hydrogen technologies, energy storage, carbon capture and new energy systems. Jericho's first step to diversify its business into clean energy was executed with the acquisition of the assets of California-based Hydrogen Technologies Inc. during the first quarter of 2021. For further discussion of the Company's diversification efforts, see the Overview and Results of Operations and the *2022 Operations* in this MD&A.

Jericho's legacy business is a traditional, independent oil and natural gas company engaged in the exploration, development and production of crude oil and natural gas. Jericho's operations are primarily focused on exploration and development activities in the Hunton, Mississippi Lime, Woodford Shale and the Anadarko Basin STACK Play formations in Oklahoma where it holds approximately 52,000 net acres of developed and undeveloped acreage.

## Change in Reporting Currency

As discussed in Note 2 (b) Basis of Presentation, to the audited consolidated financial statements, in the fourth quarter of 2022 the Company elected to change its reporting currency from Canadian dollars to U.S. dollars. The change in reporting currency has been applied retrospectively in the consolidated financial statements.

#### **OVERVIEW AND RESULTS OF OPERATIONS**

World markets have shown signs of recovery from the global pandemic experienced in 2020 throughout 2021 and in early 2022. However, the military conflict between Russia and Ukraine, inflation, and supply chain challenges continue weighing on markets in 2022. Spot prices for commodity products have been volatile throughout 2022, and have risen to multi-year highs, but uncertainty still weighs on forward pricing. Jericho's results of operations for the twelve months ended December 31, 2022, reflect the impact of higher commodity prices, and greater costs incurred for operations and corporate overhead and diversifying its clean energy assets.

The following table summarizes the results of operations for Jericho for the three and twelve months ended December 31, 2022, compared with the same periods of 2021.

	Three Mo Decem	Year Ended December 31,			
Expressed in U.S. dollars	2022	2021	2022	2021	
Net product revenue	\$ 305	\$ 8,390	\$ 23,326	\$ 47,985	
Operating expenses					
Production costs	6,106	4,813	17,729	31,776	
Depletion, depreciation and amortization	139,943	403,534	563,134	407,632	
Accretion of decommissioning liabilities	_	55	50	220	
General and administrative expenses	1,492,747	1,075,264	6,152,208	4,781,849	
Total operating expenses	1,638,796	1,483,666	6,733,121	5,221,477	
Share of income from equity investments	2,149,479	255,269	2,932,406	446,781	
Operating loss	510,988	(1,220,007)	(3,777,389)	(4,726,711)	
Other income (loss)					
Interest expense	(156,166)	_	(634,141)	_	
Other income (loss)	10	(18)	(733)	19,451	
Gain/ (loss) on disposal of petroleum properties	(103,042)	_	(103,042)	79,203	
Write-off of prepayment on investment	· -	_		(312,665)	
	(259,198)	(18)	(737,916)	(214,011)	
Net Income (Loss)	\$ 251,790	\$ (1,220,025)	\$ (4,515,305)	\$ (4,940,722)	

## **OVERVIEW AND RESULTS OF OPERATIONS (continued)**

#### Net loss for the years and periods presented

The Company experienced unfavorable operating results for the three and twelve months ended December 31, 2022 compared to the same periods in 2021. The Company has experienced higher general and administrative expenses in 2022 since the acquisition of Hydrogen Technologies Inc. in 2021. In addition, unfavorable results include higher non-cash interest expense due to the issuance of convertible debentures in early 2022.

#### Depletion, depreciation, and amortization

Depletion, depreciation, and amortization expense decreased for the three months ended December 31, 2022 compared to the same period in 2021 due to a full year amortization of intangible assets acquired in 2021 in the three months ended December 31, 2021.

## General and administrative expenses

General and administrative expense increased by \$1.4 million in 2022 primarily due to higher share-based compensation expense, combined with increased activity related to expanding our clean energy business, including new personnel and greater legal fees.

#### Share of income (loss) from equity investments

The Company's share of income (loss) from equity investments was higher for the twelve months ended December 31, 2022, primarily due to higher realized commodity prices experienced in 2022 and net impairment reversals recorded by our joint ventures.

## Interest expense

The Company experienced higher non-cash interest expense due to the issuance of CAD\$ 5.7 million of convertible debentures in early 2022.

# Oil and Gas Operations

Jericho conducts its oil and gas operations through its subsidiaries and various joint arrangements in the state of Oklahoma. The Company classifies its interests in joint arrangements as either joint operations (if Jericho has rights to the assets and obligations for the liabilities relating to an arrangement), or joint ventures (if Jericho has rights only to the net assets of an arrangement).

In the case of a joint operation, the Company combines its share of the joint operations' individual income and expenses, assets and liabilities and cash flows on a line-by-line basis with similar items in the Company's consolidated financial statements. Jericho's oil and gas interests in Kansas were considered joint operations and therefore it recorded its proportionate share of revenues, expenses, assets and liabilities in its consolidated financial statements. The Company divested its remaining properties in Kansas earlier in 2021, and the remaining property in Oklahoma in 2022.

## **OVERVIEW AND RESULTS OF OPERATIONS (continued)**

In the case of a joint venture whereby the participating parties have joint control and only rights to the net assets of the arrangement, the Company accounts for its interests using the equity method. Under the equity method of accounting, the carrying amount of the investment reflected on the consolidated statement of financial position as equity investments is adjusted to recognize changes in Jericho's share of net assets of each joint venture since the acquisition date less distributions received or any impairments. Jericho's share of the results of operations of its joint ventures and associates is reflected on the consolidated statement of comprehensive income (loss) as share of income (loss) from equity investments.

As of year-end 2022 and 2021, Jericho's oil and gas operations accounted for using the equity method were held through ownership in the following joint ventures and associates in Oklahoma as presented below:

	December 31, 2022	December 31, 2021
Eagle Road Oil, LLC ("Eagle Road")	50 %	50 %
Lurgan Oil, LLC ("Lurgan")	50 %	50 %
Jericho Buckmanville Oil, LLC ("Buckmanville")	50 %	50 %
RSTACK Walnut, LLC ("Walnut")	26.5 %	26.5 %
Cherry Rancher, LLC ("Cherry Rancher")	31 %	31 %

The following discussion will summarize the results of operations for Jericho and its related joint arrangements in Oklahoma.

## Joint Venture and Equity Investment Operating Statements to December 31, 2022

The following tables present a reconciliation of 100% joint venture partners' income to Jericho's share of income (loss) from equity investments for the year ended December 31, 2022 and 2021 based on IFRS. Please also refer to the Company's share of investment in the Joint Ventures under IFRS in Note 6 of the annual financial statements. Amounts are in U.S. dollars:

								Cherry	
Year Ended December 31, 2022	Eagle Road		Lurgan	Вι	uckmanville	Walnut		Rancher	Total
100% Net income (loss)	4,221,536		863,928	(828,602)		2,194,232		153,239	6,604,333
Jericho's ownership	50 9	%	50 %	6	50 %	26.5 %	ó	31 %	ó
Jericho's share of net income (loss)	\$ 2,110,768	\$	431,964	\$	(414,301)	\$ 581,471	\$	47,504	\$ 2,757,406
Basis difference adjustment	_		_		175,000	_		_	175,000
Jericho's share of net income (loss)	\$ 2,110,768	\$	431,964	\$	(239,301)	\$ 581,471	\$	47,504	\$ 2,932,406

									Cherry		
Year Ended December 31, 2021	Ea	agle Road		Lurgan	Bud	kmanville		Walnut	Rancher		Total
100% Net income (loss)		293,958		56,094		570,991		(170,207)	101,176		852,012
Jericho's ownership		50 9	%	50 %	ó	50 %	)	26.5 %	31	%	
Jericho's share of net income (loss)	\$	146,979	\$	28,047	\$	285,496	\$	(45,105)	31,364	\$	446,781

# Results for the three and twelve-month periods ended December 31, 2022

Results of operations for the Company's joint venture interests during the twelve months ended December 31, 2022 were favorable compared to 2021. Improved results of operations for the Company's joint venture interests during the twelve months ended December 31, 2021 were primarily driven by higher operating revenues from higher commodity sales prices, partially offset by increased operating costs. The joint ventures results were also impacted by impairment reversals and impairments as described below.

For the three months ended December 31, 2022, results were lower due to higher operating expenses, higher loan interest expenses and a loss on extinguishment of debt, and the absence of a gain on loan forgiveness recorded in the fourth quarter of 2021.

## **Impairment and Impairment Reversal 2022**

The Company identified indicators of impairment and impairment reversal at December 31, 2022, related to a sustained improvement in realized commodity prices, expected higher future commodity prices, global external factors, and internal factors including estimated oil and gas reserves. As a result of the Company's impairment tests, impairment reversals were recorded in the Eagle Road, Lurgan and Walnut joint venures and associates, and an impairment loss was recorded in the Buckmanville joint venture, as reflected in the summary results of operations for the year ended December 31, 2022. The impairment reversals were primarily driven by higher forecasted prices for Lurgan and Walnut, and higher prices combined with increased reserves from drilling in Eagle Road. The impairment loss in Buckmanville was driven by lower proved reserves.

The presentation below reflects the operations in U.S. dollars, the currency in which revenue prices are denominated. It also presents the combined joint ventures and equity Investments as viewed by investors, lenders, and American readers of the financial performance of the combined operations.

	Three Months Ended December 31,					Year Ended December 31,			
		2022		2021		2022		2021	
Oil (BBL)	<u> </u>	22,991		21,943		91,254		93,558	
Natural gas (MCF)		55,354		58,227		228,335		221,508	
NGL (BBL)		8,176		9,009		31,044		31,605	
Total sales (BOE)		40,393		40,656		160,354		162,081	
Average daily sales (BOE/d)		439		442		439		444	
Average daily sales (BOE/d) net to JEV		195		197		195		196	
Operating Results Per BOE:									
Oil sales (\$/BBL)	\$	81.61	\$	76.21	\$	94.37	\$	66.22	
Natural gas sales (\$/MCF)		5.64		5.46		6.36		4.29	
NGL sales (\$/BBL)		34.69		41.32		40.83		34.68	
Total sales (\$/BOE)		61.20		58.11		70.66		50.85	
Lease operating expenses (\$/BOE)	\$	27.39	\$	22.52	\$	26.63	\$	20.01	

# **OVERVIEW AND RESULTS OF OPERATIONS (continued)**

# Statement of 100% Joint Venture and Equity Investment Income

	Three Mor		Year Ended		
	Decem			ber 31,	
	2022	2021	2022	2021	
Operating Results:					
Oil sales	\$ 1,876,335	\$ 1,672,333	\$ 8,611,579	\$ 6,195,378	
Natural gas sales	311,926	317,834	1,452,131	950,940	
NGL sales	283,592	372,219	1,267,416	1,096,133	
Product revenues	2,471,853	2,362,386	11,331,126	8,242,451	
Lease operating expenses	1,106,473	915,711	4,270,061	3,242,896	
Production taxes and deductions	261,334	248,209	1,168,280	886,535	
Depreciation, depletion, and amortization	467,652	477,015	1,838,307	1,999,686	
Accretion expense	32,695	19,030	130,105	76,140	
General and administrative	588,789	471,776	1,963,976	1,694,806	
Other operating expense	14,237	(3,121)	29,680	(10,137)	
Total operating costs and expenses	2,471,180	2,128,620	9,400,409	7,889,926	
Operating income	673	233,766	1,930,717	352,525	
Impairment (reversal) expense	(5,223,100)	_	(5,223,100)	_	
Deferred income tax recovery	_	(83,000)	_	(83,000)	
Interest income	(1,368)	(220)	(3,114)	(1,334)	
Interest expense	109,062	61,373	319,034	225,364	
Loan forgiveness	_	(310,457)	_	(640,517)	
Loss on extinguishment of debt	233,564		233,564		
Joint venture net income as reported	\$ 4,882,515	\$ 566,070	\$ 6,604,333	\$ 852,012	
Joint venture net income as reported	\$ 4,882,515	\$ 566,070	\$ 6,604,333	\$ 852,012	
Depreciation, depletion, and amortization	467,652	477,015	1,838,307	1,999,686	
Accretion, plus	32,695	19,030	130,105	76,140	
Deferred income tax recovery	_	(83,000)	_	(83,000)	
Impairment (reversal) expense	(5,223,100)	_	(5,223,100)	_	
Interest expense	109,062	61,373	319,034	225,364	
Loan forgiveness	_	(310,457)	_	(640,517)	
Loss on extinguishment of debt	233,564	_	233,564	_	
Payments on lease obligations	(38,473)	(45,891)	(153,367)	(170,842)	
Non-cash adjustments, plus	(4,765)	(88,726)	(120,621)	(37,098)	
Total adjusted joint venture income (1)	\$ 459,150	\$ 595,414	\$ 3,628,255	\$ 2,221,745	

<sup>(1)</sup> Adjusted joint venture income is a "Non-GAAP" measure. Refer to section entitled "NON-GAAP MEASURES" at the end of this MD&A.

## **OVERVIEW AND RESULTS OF OPERATIONS (continued)**

#### 2022 Operations

For Jericho's oil and gas assets, we increased well workover activity during 2022 and commenced development drilling in order to capture higher commodity prices. The first well in the drilling program was placed on production in December. A second well spud in the fourth quarter was completed in first quarter 2023. In the fourth quarter, Jericho's joint venture associate, RSTACK Walnut, LLC, "Walnut", sold undeveloped acreage in Blaine county for USD \$1.37 million. Walnut retained an overriding royalty interest in the acreage, and will receive additional proceeds if the new operator does not drill one horizontal well on the acreage over the next two years depending on future oil prices.

For our low-carbon energy activities, we continue evaluating additional novel clean energy opportunities with a focus on the hydrogen value chain and the necessary resources to build and support the portfolio. Future acquisitions will primarily focus on commercial-ready clean energy technologies with large addressable markets that are cost competitive with fossil fuel solutions currently offered in the market and may include the use of fossil fuels in lower to no emission solutions.

During 2022, Jericho has led a Seed-Series fundraising round for Supercritical Solutions, Ltd. ("Supercritical"), a company focused on developing its new class of water electrolyzer for the production of low-cost clean hydrogen. Jericho invested USD \$1.8 million of a total USD \$3.6 million raised to develop its electrolyzer technology designed to eliminate or significantly reduce the need for costly gaseous compression needed to pressurize clean hydrogen for most industrial use cases. Jericho holds a board position and owns approximately an 11% interest in the ordinary and seed shares of the company.

Throughout 2022, Jericho's wholly-owned subsidiary, Hydrogen Technologies ("HT") has been retained by several multi-national corporations to provide feasibility studies for the utilization or our zero-emission hydrogen boiler technology. Hydrogen Technologies recently participated in several Hydrogen Hub proposals currently applying for grants as part of the US Department of Energy's \$7 billion USD Clean Hydrogen Initiative.

The Company also participated in an additional round of Series-A financing for H2U Technologies, Inc. ("H2U"), and invested USD \$225,000 in preferred shares of H2U, giving Jericho approximately a 6.65% interest in the combined preferred and common shares of the company. The investment is a strategic positioning of the Company into the process of making and using "green" hydrogen. Hydrogen has always been a part of the energy value chain, but in recent years the focus has shifted to green hydrogen and zero-emission energy solutions using hydrogen as a fuel.

As the domestic and global regulatory environment moves to tax or ban the use or generation of fossil fuels, the Company will continue to build its portfolio of lower-carbon and carbonless energy technologies. This strategy will not materially impact near-term revenue as the recently acquired assets of HT are pre-revenue with first unit sales orders expected in the near term.

In December 2021, we initiated a non-brokered convertible debenture private placement financing which closed in early 2022, raising gross proceeds of approximately USD \$4.4 million.

At our annual general and special meeting of shareholders held on June 23, 2022, the Company's shareholders approved a reorganization of the Company's share capital structure (the "Share Amendments"). The Share Amendments allow for Jericho to maintain its status as a foreign private issuer in the United States and to reduce compliance costs. See Share Capital Update in this report for further discussion of the reorganized share capital structure.

## 2023 Outlook

We believe that our efforts to diversify our energy portfolio with the addition of low-carbon energy acquisitions, combined with our oil and natural gas assets, prepare Jericho to be well-positioned in the global energy market for 2023 and beyond.

For 2023, we expect to add additional novel clean energy technologies with a focus on the hydrogen value chain and the necessary resources to build and support the portfolio. Future acquisitions will primarily focus on commercial-ready clean energy technologies with large addressable markets that are cost competitive with fossil fuel solutions currently offered in the market.

For our oil and gas operations, we plan to continue investing from a mixture of cash flow and drilling partnerships in our successful development drilling activities focused on seismic defined in-field proved undeveloped inventory and prospects. We will remain opportunistic and continue to evaluate production assets that compliment Jericho's existing portfolio and technical expertise.

See Liquidity and Capital Resources for additional disclosure regarding completed and planned financing during 2022.

#### **ENVIRONMENTAL LIABILITIES**

We recognize that there are concerns over the potential environmental effects of developing oil and gas projects. We are researching methods to improve extraction and processing to enhance the sustainability of our projects. We accrue environmental and reclamation obligations over the life of our oil and gas production operation.

#### **OFF-BALANCE-SHEET ARRANGEMENTS**

As of the date of the MD&A, the Company does not have any off-balance-sheet arrangements that have, or are reasonably likely to have, a current or future effect on the results of operations or financial condition of the Company, including, and without limitation, such considerations as liquidity and capital resources.

#### **SELECTED FINANCIAL INFORMATION**

#### **SUMMARY OF QUARTERLY RESULTS**

Quarter								
Ended	12/31/202	9/30/2022	6/30/2022	3/31/2022	12/31/2021	9/30/2021	6/30/2021	3/31/2021
Net product								
revenue	\$ 305	\$ 6,036	\$ 8,081	\$ 8,904	\$ 8,390	\$ 8,375	\$ 13,978	\$ 17,242
Loss for the								
period	251,790	(984,389)	(1,251,197)	(2,531,509)	(1,220,025)	(1,083,135)	(1,029,911)	(1,607,651)
Basic and								
diluted loss								
per share	\$ —	\$ —	\$ (0.01)	\$ (0.01)	\$ (0.01)	\$ (0.01)	\$ —	\$ —

#### 2022

During the fourth quarter of 2022, the Company recorded income of \$0.3 million. For the period, higher general and administrative expense including stock compensation expense of \$0.7 million, was more than offset by an increase in share of income/loss from equity investments due to impairment reversals recorded by the Company's joint ventures.

During the third quarter of 2022, the Company recorded a loss of \$1.0 million. The Company had a \$0.3 million decrease in general and administrative expense, compared to the three months ended June 30, 2022, primarily due to decreases of \$0.1 million in consulting fees, \$0.1 million in investor relations, and \$0.1 million in legal fees.

During the second quarter of 2022, the Company recorded a loss of \$1.3 million. The Company had a \$1.3 million decrease in general and administrative expense, compared to the three months ended March 31, 2022, primarily due to \$1.3 million in share based payment expense during the first quarter of 2022.

During the first quarter of 2022, the Company recorded a loss of \$2.5 million. The Company had a \$1.4 million increase in general and administrative expense, compared to the three months ended December 31, 2021, primarily due to \$1.3 million in share based payment expense during the first three months of 2022.

#### 2021

During the fourth quarter of 2021, the Company recorded a loss of \$1.2 million. The loss includes amortization of \$0.4 million related to the Company's intangible acquisition costs.

During the third quarter of 2021, the Company recorded a loss of \$1.1 million. The Company continues to invest in business development activity, including marketing and legal costs associated with the expansion of its energy portfolio into the low-carbon energy transition. In addition, the Company expensed approximately \$0.3 million of acquisition-related costs for a potential acquisition that the Company determined was not likely to consummate. The Company's loss for the period was offset by \$0.3 million share of income from equity investments resulting primarily from an increase in the realized price per barrel of oil equivalent.

During the second quarter of 2021, the Company recorded a loss of \$1.0 million. The Company continues to invest in business development activity, marketing and legal costs associated with the expansion of its energy portfolio into the low-carbon energy transition. The Company's loss for the period was offset by approximately \$0.1 million in gain on disposal of the Kansas properties.

During the first quarter of 2021, the Company recorded a loss of \$1.6 million. The Company had a \$0.8 million increase in general and administrative expense, compared to the three months ended December 31, 2020, primarily due to greater business development activity and marketing costs associated with the expansion of its energy portfolio into the low-carbon energy transition. In addition, the Company had \$0.6 million in shared based payment expense during the first three months of 2021.

#### **2022 SELECTED ANNUAL INFORMATION**

The following table shows selected financial information of Jericho for the years ended December 31, 2022, 2021, and 2020:

	Year ended	Year ended	Year ended
	2022	2021	2020
Revenue	\$ 23,326	\$ 47,985	\$ 41,145
Net loss for the year	(4,515,305)	(4,940,722)	(14,977,799)
Net loss per share	(0.02)	(0.02)	(0.10)
Cash	349,638	4,896,074	2,782,234
Total assets	21,835,622	22,386,252	15,434,736
Total current financial liabilities	\$ 1,160,315	\$ 867,688	\$ 316,897

#### LIQUIDITY AND CAPITAL RESOURCES

#### **Going Concern**

This report has been prepared on the assumption that the Company is a going concern that will continue in operation for the foreseeable future and will be able to realize its assets and settle its obligations in the normal course of operations.

At December 31, 2022, the Company had a working capital deficiency of \$712,651, incurred a net loss of \$4,515,305 and had negative cash flows from operations of \$3,689,149 in the year ended December 31, 2022. These factors indicate the existence of a material uncertainty that may cast significant doubt over the Company's ability to continue as a going concern.

The Company's ability to continue as a going concern is dependent on achieving profitable operations and/or management's ability to raise the necessary funding through future equity issuances or debt issuances. There

is no assurance that any necessary future financing will be sufficient to sustain operations until such time that the Company can generate sufficiently profitable operations to support its requirements.

These consolidated financial statements do not reflect adjustments that would be necessary if the going concern assumption were not appropriate. If the going concern assumption were not appropriate, adjustments would be necessary to the recoverability and classification of recorded asset amounts and classification of liabilities. Such adjustments could be material.

See Subsequent Events in this report for a discussion of a fully subscribed, non-brokered private placement raising approximately CAD \$2 million which closed in March 2023.

In January 2022, the Company closed a non-brokered convertible debenture private placement financing and issued approximately \$4.4 million of convertible debentures (the "2022 Convertible Debentures"). Subscribers to the private placement purchased the debentures with principal amount of CAD \$0.70 that mature 36 months after the closing date of the financing. In addition, for each debenture purchased the Company issued one share purchase warrant entitling the holder to purchase one additional common share (a "warrant share") at an exercise price of CAD \$1.00 per warrant share for a period of three years after issuance of the debenture. The unsecured debentures bear interest of four percent per annum commencing on the first anniversary of the closing date. The principal amounts of the debentures are convertible at CAD \$0.70 per common share and any accrued and unpaid interest is convertible at the market price per common share on the date of any conversion of interest.

During 2021, approximately CAD\$5.2 million was raised through the exercise of warrants and options throughout the year.

## TRANSACTIONS WITH RELATED PARTIES

Key management are the officers and directors of the Company. The aggregate value of transactions and outstanding balances relating to key management personnel and entities over which they have control or significant influence were as follows:

	Dece	December 31, 2022					
Management fees	\$	362,064	\$	474,981			
Directors' fees		75,000		_			
Share-based payments		1,212,791		162,861			
	\$	1,649,855	\$	637,842			

At December 31, 2022, included in accounts payable and accrued liabilities is an amount of \$6,600 receivable from a joint venture partner of the Company (2021 – payable of \$2,424).

At December 31, 2022, the Company had \$Nil in advances and \$759,181 in accounts payable to equity investments as described in Note 6 (2021 – \$Nil and \$324,655).

Accounts payable and accrued liabilities to related parties are non-interest bearing, due on demand and with no specific terms of repayment.

#### **NEW ACCOUNTING STANDARDS**

None.

#### **CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS**

The preparation of consolidated financial statements in accordance with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts within the consolidated financial statements. Judgments, estimates and underlying assumptions are reviewed on a continuous basis and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Changes to these judgments and estimates could have a material effect on the Company's financial statements and financial position.

Significant accounting policies and critical accounting estimates used during the years ended December 31, 2022 and 2021 are disclosed in Notes 3 and 4 of the 2022 audited annual consolidated financial statements.

Significant judgments made by management in the preparation of the consolidated financial statements relate to the following areas:

#### Joint arrangements

The Company may be a party to an arrangement in which it does not have control. Judgment is required in determining whether joint control over such arrangements exists and if so, which parties have joint control and whether each arrangement is a joint venture or joint operation, depending on the rights and obligations of the parties to the arrangement.

In assessing whether joint control exists over an arrangement, management considers the relevant activities of the arrangement. If unanimous consent is required over the decisions about such activities, the parties whose consent is required would have joint control over the arrangement. Judgment is required to determine which activities are considered relevant to the arrangement, which may include approval of budgets, appointment of key management personnel, representation on the board of directors and other factors. Joint operations arise when the Company has rights to the assets and obligations for the liabilities of the arrangement. The Company recognizes its share of assets, liabilities, revenues and expenses of a joint operation. Joint ventures arise when the Company has rights to the net assets of the arrangement. Joint ventures are accounted for under the equity method.

## Cash generating unit (CGU)

The Company's assets are aggregated into cash-generating units ("CGUs"), based on the unit's ability to generate independent cash inflows. The determination of the Company's CGUs is based on management's judgments regarding shared infrastructure, geographical proximity, resource type and materiality. Based on management's assessment, the Company's properties historically held in Eastern Kansas (Note 5) formed one CGU, and the Company's properties in Oklahoma each form separate CGUs.

The areas in the consolidated financial statements that require significant estimates are set out in the following paragraphs:

## Oil and gas — reserves

The process of estimating reserves is complex. It requires significant estimates based on available geological, geophysical, engineering and economic data. To estimate the economically recoverable crude oil reserves and related future net cash flows, management incorporates many factors and assumptions including the expected reservoir characteristics, future commodity prices and costs and assumed effects of regulation by governmental agencies. Reserves are used to calculate the depletion of the capitalized petroleum properties and for impairment purposes as described in Note 3(c).

#### Petroleum properties

The Company evaluates exploration and evaluation assets and petroleum properties for impairment if indicators exist. Cash flow estimates for impairment assessments require assumptions and estimates about the following primary elements—future prices, future operating and development costs, remaining recoverable reserves and discount rates. In assessing the carrying values of unproved properties, management makes assumptions about future plans for those properties, the remaining terms of the leases and any other factors that may be indicators of potential impairment.

## Impairment testing

Impairment testing is based on discounted cash flow models prepared by experts with assistance from thirdparty advisors when required. The inputs used are based on management's best estimates of what an independent market participant would consider appropriate and are reviewed by senior management. Changes in these inputs may alter the results of impairment testing, the amount of the impairment charges recorded in the consolidated statement of comprehensive income (loss) and the resulting carrying values of assets.

# Decommissioning provisions

In estimating the Company's future asset retirement obligations, the Company makes assumptions about activities that occur many years into the future including the cost and timing of such activities. The ultimate financial impact is not clearly known as asset removal and remediation techniques and costs are constantly

changing, as are legal, regulatory, environmental, political, safety and other such considerations. In arriving at amounts recorded, numerous assumptions and estimates are made on ultimate settlement amounts, inflation factors, discount rates, timing and expected changes in legal, regulatory, environmental, political and safety environments.

# Share-based payments

Management uses judgment when applying the Black-Scholes Option Pricing Model to determine the fair value of the options granted during the period and forfeiture rates. Volatility is calculated using historical trading data of the Company. The zero-coupon bond yield per the bank of Canada is used as the risk-free rate.

#### **MANAGEMENT OF CAPITAL**

The Company's objective when managing capital is to safeguard the Company's ability to continue as a going concern. The Company is not subject to any externally imposed capital requirements. As of December 31, 2022, the Company considers capital to consist of all components of shareholders' equity and convertible debentures. The Company manages the capital structure and adjusts it based on changes in economic conditions and the risk characteristic of the underlying assets. To maintain or adjust the capital structure, the Company may attempt to issue common shares, or dispose of assets to increase the amount of cash on hand. The Company does not pay out dividends at this stage of the Company's development to maximize ongoing development efforts.

To facilitate the management of its capital requirements, the Company prepares annual expenditure budgets that are updated as necessary depending on various factors, including successful capital deployment and general industry conditions. The annual and updated budgets are approved by the Board of Directors.

The Company's investment policy is to invest its cash in highly liquid short-term interest-bearing instruments with maturities of 90 days or less from the original date of acquisition.

The Company expects its current capital resources to be sufficient to carry its exploration and development plans through the next twelve months, but expects to need additional financing for its corporate overhead, its commercial deployment of its hydrogen boiler, and any acquisition opportunities and business development efforts related to its clean energy diversification efforts. See additional discussion of liquidity and capital needs previously disclosed in Liquidity and Capital Resources – Going Concern.

#### FINANCIAL INSTRUMENTS AND RISK

As at December 31, 2022 and 2021, the Company's financial instruments consist of cash, accounts receivable, investments, accounts payable, and subscriptions received for convertible debentures.

	Dece	mber 31, 2022	Dece	ember 31, 2021
Financial Assets:				_
Fair value through profit or loss	\$	349,638	\$	4,896,074
Fair value through other comprehensive income		3,491,874		1,517,383
Amortized cost		30,000		_
Financial Liabilities:				
Amortized cost	\$	4,027,548	\$	4,520,582

IFRS 7 Financial Instruments – Disclosures, establishes a fair value hierarchy based on the level of independent, objective evidence surrounding the inputs used to measure fair value. A financial instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. IFRS 7 prioritizes the inputs into three levels that may be used to measure fair value:

Level 1 – Unadjusted quoted prices in active markets that are accessible at the measurement date for identical unrestricted assets or liabilities. The Company considers its cash and cash equivalents to be at fair value using Level 1 inputs.

Level 2 – Inputs that are observable, either directly or indirectly, but do not qualify as Level 1 inputs (i.e. quoted prices for similar assets or liabilities).

Level 3 – Prices or valuation techniques that are not based on observable market data and require inputs that are both significant to the fair value measurement and unobservable.

Financial assets and liabilities measured at fair value on a recurring basis are presented on the Company's consolidated statement of financial position as of December 31, 2022 as follows:

	uoted Prices in Si	Prices in Significant Other				
			Act	tive Markets for	Observable	Unobservable
	Ва	alance as at	lo	dentical Assets	Inputs	Inputs
	De	cember 31,		(Level 1)	(Level 2)	(Level 3)
Financial Assets:						
Cash	\$	4,896,074	\$	4,896,074 \$	<b>-</b> 9	<b>;</b> –
Investment in equity securities		1,517,383		_	_	1,517,383
December 31, 2021	\$	6,413,457	\$	4,896,074 \$	<u> </u>	\$ 1,517,383
Cash	\$	349,638	\$	349,638 \$	<b>-</b> ;	\$ —
Investment in equity securities		3,491,874		_	_	3,491,874
December 31, 2022	\$	3,841,512	\$	349,638 \$	<u> </u>	3,491,874

The Company believes that the recorded value of accounts receivable and accounts payable approximate their current fair values because of their nature and relatively short maturity dates or durations and current market rates for similar instruments.

The Company thoroughly examines the various financial instrument risks to which it is exposed and assesses the impact and likelihood of those risks. Where material, these risks are reviewed and monitored by management. There have not been any significant changes from the previous year as to how these risks are reviewed and monitored by management. The types of financial instrument risk exposures and the objectives and policies for managing these risks exposures are described below:

#### Credit risk

Credit risk is the risk of an unexpected loss if a customer or third party to a financial instrument fails to meet its contractual obligations.

The Company's cash is held at a large Canadian financial institution in interest-bearing accounts. The Company has no investments in asset-backed commercial paper. The Company's accounts receivable consists mainly of oil sales and purchase taxes remitted from the Government of Canada. The Company is exposed to a significant concentration of credit risk with respect to its trade accounts receivable balance because all its oil sales are with one counterparty. However, the Company has not recorded any allowance against its trade receivables because historically all balances owed have been settled in full when due (typically within 60 days of submission).

# Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due.

The Company manages liquidity risk through its management of capital as outlined in Note 14 to the consolidated financial statements. The Company had cash at December 31, 2022 in the amount of \$349,638 (2021 - \$4,896,074) to meet short-term business requirements, and strategic investments.

At December 31, 2022, the Company had current liabilities of \$1,160,315 (2021 - \$867,688). Accounts payable and accrued liabilities are due within the current operating period. Contractual undiscounted cash flow requirements for financial liabilities as at December 31, 2022 are as follows:

	<1 year	2-3 Years	4-5 Years	Thereafter	Total
Accounts payable and accrued liabilities	\$ 1,130,803 \$	_ \$	<del>-</del> \$	_	\$ 1,130,803
Loans	29,512	_	_	_	29,512
Convertible debentures and interest	_	4,712,997	_	_	4,712,997
	\$ 1,160,315 \$	4,712,997	<del>-</del> \$	_	\$ 5,873,312

#### Market risk

Market risk consists of interest rate risk, foreign currency risk and price risk. These are discussed further below.

#### Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The risk that the Company will realize a loss because of lower interest rates is insignificant.

## Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in foreign exchange rates.

The Company is exposed to foreign currency risk to the extent that the following monetary assets and liabilities are denominated in Canadian dollars at December 31, 2022:

Cash	CAD\$	54,687
Receivables		33,223
Accounts payable and accrued liabilities		(132,934)
Net exposure	CAD\$	(45,024)
U.S. dollar equivalents	USD\$	(61,026)

The result of sensitivity analysis shows an increase or decrease of 10% in USD\$ exchange rate, with all other variables held constant, could have increased or decreased the net loss and comprehensive loss by approximately \$6,103 (2021 - \$43,503).

#### OTHER RISKS RELATED TO OPERATIONS

#### Volatility of Commodity Prices

The Company's financial performance is impacted by prices for commodities, including crude oil and natural gas. The prices of these commodities can be influenced by global and regional supply and demand factors, which are factors that are beyond the Company's control and can result in a high degree of price volatility.

Crude oil prices are also affected by, among other things, global economic health (particularly in emerging markets), market access constraints, regional and international supply and demand imbalances, political developments and government action, decisions by The Organization of Petroleum Exporting Countries ("OPEC") regarding quotas on its members, compliance or non-compliance with quotas agreed upon by OPEC members and other countries, and weather. Many of the factors that can cause volatility have been, and may continue to be, affected by the impacts of the COVID-19 pandemic. Natural gas prices in North America are affected by, among other things, supply and demand, inventory levels, weather and prices for alternative energy sources. Volatility in commodity prices could have a material adverse effect on the Company's business, financial condition, reserves and results of operations.

## Exploration, Development, and Production Risks

The long-term commercial success of the Company depends on its ability to find, acquire, develop, and commercially produce oil and natural gas reserves. There is no certainty that prospects will produce oil or natural gas or commercial quantities of oil or natural gas. Oil and natural gas operations involve many risks that even experience, knowledge and careful evaluation may not be able to overcome.

Without the continual addition of new reserves, any existing reserves the Company may have at any time, and the production there from, will decline over time as such existing reserves are exploited. No assurance can be given that the Company will be able to continue to locate satisfactory properties for acquisition or participation, or that such acquisitions or participaction would be economically advantageous to the Company. Many environmental factors exist which may affect the Company's ability to produce oil and natural gas, including ground water, impenetrable substances, various clays and lack of porosity and permeability. Additionally, delays in or hindrances to production may be caused by factors such as poor weather conditions or lack of ability to lay pipeline or transport product. While diligent field operations and effective maintenance operations can contribute to maximizing production rates over time, production delays and declines from normal field operating conditions cannot be eliminated and can be expected to adversely affect revenue and cash flow levels to varying degrees.

The acquisition of leasehold interests and the selection of prospects for oil and natural gas drilling, the drilling, ownership and operation of oil and natural gas wells, and the ownership of non-operating interests in oil and

natural gas properties is highly speculative. There is no certainty that prospects will produce oil or natural gas or commercial quantities of oil or natural gas. Additionally, the amount of time it will take to recover any oil or gas is unpredictable. Oil and natural gas operations involve many risks that even experience, knowledge and careful evaluation may not be able to overcome. The long-term commercial success of the Company depends on its ability to find, acquire, develop, and commercially produce oil and natural gas reserves.

Without the continual addition of new reserves, any existing reserves the Company may have at any time, and the production there from, will decline over time as such existing reserves are exploited. A future increase in the Company's reserves will depend not only on its ability to explore and develop properties it may have from time to time, but also on its ability to select and acquire suitable producing properties and prospects. No assurance can be given that the Company will be able to continue to locate satisfactory properties for acquisition or participation. Moreover, if such acquisitions or participations are identified, management of the Company may determine that current markets, terms of acquisitions and participation or pricing conditions make such acquisitions or participations uneconomic.

There is no assurance commercial quantities of oil and natural gas will be discovered or acquired by the Company. Further, completion of a well does not assure a profit on the investment or recovery of drilling, completion and operating costs. Delays and added expenses may also be caused by poor weather conditions affecting, among other things, the ability to lay pipelines or otherwise transport or market hydrocarbons. In addition, ground water, impenetrable substances, various clays and lack of porosity and permeability may hinder or restrict production or even make production impractical or impossible. While diligent field operations and effective maintenance operations can contribute to maximizing production rates over time, production delays and declines from normal field operating conditions cannot be eliminated and can be expected to adversely affect revenue and cash flow levels to varying degrees.

#### Global Economic Uncertainty

The Company's operations are influenced by general economic and consumer trends beyond the Company's control. There can be no assurance that the Company's business and corresponding financial performance will not be adversely affected by general economic or consumer trends. In particular, global economic conditions remain constrained or uncertain, and if such conditions continue, recur or worsen, this may have a material adverse effect on the Company's business, financial condition and results of operations.

Furthermore, such economic conditions have produced downward pressure on stock prices and on the availability of credit for financial institutions and corporations. If current levels of market disruption and volatility continue, the Company might experience reductions in business activity, increased funding costs and funding pressures, as applicable, a decrease in the market price of the common shares, a decrease in asset values, additional write-downs and impairment charges and lower profitability.

In February 2022, Russian military forces launched a full-scale military invasion of Ukraine. In response, Ukrainian military personal and civilians are actively resisting the invasion. Many countries throughout the world have provided aid to Ukraine in the form of financial aid and in some cases military equipment and weapons to assist in their resistance to the Russian invasion. The North Atlantic Treaty Organization ("NATO") has also mobilized forces to NATO member countries that are close to the conflict as deterrence to further Russian aggression in the region. The outcome of the conflict is uncertain and is likely to have wide ranging consequences on the peace and stability of the region and the world economy. Certain countries including Canada and the United States, have imposed strict financial and trade sanctions against Russia and such sanctions may have far reaching effects on the global economy. As Russia is a major exporter of oil and natural gas, the disruption of supplies of oil and natural gas from Russia could cause a significant worldwide supply shortage of oil and natural gas and significantly impact pricing of oil and gas worldwide. A lack of supply and high prices of oil and natural gas could have a significant adverse impact on the world economy. Volatility in commodity prices could have a material adverse effect on the Company's business, financial condition, reserves and results of operations. In addition, both Russia and Ukraine have historically been large exporters of steel products. The invasion of Ukraine and the resulting sanctions imposed on Russia are anticipated to have an impact on global steel demand and price, both of which could have a material adverse effect on the Company's ability to conduct its operations and its financial condition. The long-term impacts of the conflict and the sanctions imposed on Russia remain uncertain.

## Regulatory

Oil and natural gas operations (exploration, production, pricing, marketing and transportation) are subject to extensive controls and regulations imposed by various levels of government, which may be amended from time to time. Governments may regulate or intervene with respect to price, taxes, royalties and the exportation of oil and natural gas. Such regulations may be changed from time to time in response to economic or political conditions. The implementation of new regulations or the modification of existing regulations affecting the oil and natural gas industry could reduce demand for crude oil and natural gas and increase the Company's costs, any of which may have a material adverse effect on the Company's business, financial condition, results of operations and prospects. To conduct oil and gas operations, the Company will require licenses from various government authorities. There can be no assurance that the Company will be able to obtain all the licenses and permits that may be required to conduct operations that it may wish to undertake.

#### **Environmental**

All phases of the oil and natural gas business present environmental risks and hazards and are subject to environmental regulation pursuant to a variety of federal laws, local laws and regulations. Environmental legislation provides for, among other things, restrictions and prohibitions on spills, releases or emissions of various substances produced in association with oil and natural gas operations. The legislation also requires that wells and facility sites be operated, maintained, abandoned and reclaimed to the satisfaction of applicable regulatory authorities. Compliance with such legislation can require significant expenditures and a breach of applicable environmental legislation may result in the imposition of fines and penalties, some of which may be material. Environmental legislation is evolving in a manner expected to result in stricter

standards and enforcement, larger fines and liability and potentially increased capital expenditures and operating costs. The discharge of oil, natural gas or other pollutants into the air, soil or water may give rise to liabilities to governments and third parties and may require the Company to incur costs to remedy such discharge. Although the Company believes that it is in material compliance with current applicable environmental regulations no assurance can be given that environmental laws will not result in a curtailment of production or a material adverse effect on the Company's business, financial condition, results of operations and prospects. Given the evolving nature of the debate related to climate change and the control of greenhouse gases and resulting requirements, it is not possible to predict the impact on the Company and its operations and financial condition.

#### Intellectual Property Risks

In 2021, the Company acquired all the intellectual property related to HTI's cleanH2steam DCC<sup>™</sup> boiler and will continue to develop and sell its systems. The Company depends on exclusive patents related to HTI's cleanH2steam DCC<sup>™</sup> boiler in addition to certain trademarks and trade secrets to protect its products and brands. The Company actively monitors intellectual property owned by others on an ongoing basis in order to avoid intellectual property infringements.

# Product Development and Commercialization Risks

The Company cannot guarantee that it will be able to develop commercially viable hydrogen-related products (including the hydrogen boiler) on the timetable anticipated, or at all. Selling products on a commercially viable basis requires technological advances to improve the durability, reliability and performance of these products, and to develop commercial volume manufacturing processes for these products. The Company cannot guarantee that it will be able to internally develop the technology necessary to sell its products on a commercially viable basis. These risks also apply to the products being developed by the Company's portfolio companies.

The Company's and its portfolio companies' products exist in emerging markets, and the Company has no guarantee as to end-user demand. In such emerging markets, demand and market acceptance for recently introduced products and services are subject to a high level of uncertainty and risk. The development of a mass market for the Company's and its portfolio companies' products may be affected by many factors, some of which are beyond the Company's control, including the emergence of newer, more competitive technologies and products, the cost of fuels used by the products, regulatory requirements, consumer perceptions of the safety of its products and end-user reluctance to buy a new product. If a mass market fails to develop, or develops more slowly than the Company anticipates, it would have a material adverse effect on the Company's operations and financial condition.

# **POTENTIAL CLAIMS**

The Company reported that in November 2016, Eagle Road Oil, LLC (Eagle Road), a joint venture entity in which its U.S subsidiary JEV OK, LLC, owns a 50% interest, was named as one of 27 defendants in a class action

petition filed in the district court of Pawnee County Oklahoma. These claims have all been settled or dismissed.

#### **OUTLOOK**

The Company's long-term goal is to focus on the development and growth of its clean energy portfolio, including commercializing HTI's Patented Hydrogen Fueled Steam Generation Technology, evaluate and develop oil and gas properties, to seek partners for some of its properties as market conditions permit, and to continue to seek out new energy-related opportunities. There is no guarantee that the Company will discover or successfully develop such properties.

#### **PROPOSED TRANSACTIONS**

None.

## **SUBSEQUENT EVENTS**

In March 2023, the Company closed a fully subscribed non-brokered private placement of 8,662,745 units at a price of CAD \$0.26 per unit for gross proceeds of approximately CAD \$2,252,000. Each unit is comprised of one common share and one warrant with each warrant exercisable for one additional common share at a price of CAD \$0.50 per share for a period of 24 months from the date of issuance.

Through April 2023, 325,000 options were issued with an exercise price of \$0.35 per share, with the options exercisable for a period of three years; and 100,000 options were issued with an exercise price of \$0.27 per share and exercisable for a period of three years.

## **SHARE CAPITAL UPDATE**

As at the date of this report, the Company had the following share capital outstanding:

Share Capital	\$ 51,742,094
Total voting shares issued <sup>(1)</sup>	234,914,914
Stock options outstanding	20,491,000
Warrants outstanding	29,977,060
Total share capital outstanding	285,382,974

<sup>(1)</sup> At March 31, 2023, 54,982,129 common shares were outstanding and 179,932,785 variable voting shares were outstanding.

#### **DIRECTORS AND OFFICERS**

The Company's directors and officers as at the date of this report are:

Directors	Officers	Officer Tittle
Brian Williamson	Brian Williamson	Chief Executive Officer and President
Allen Wilson	Benjamin Holman	Chief Financial Officer and Secretary
Nicholas Baxter		
Markus Seywerd		
Carolyn Hauger		

#### **NON-GAAP MEASURES**

Adjusted joint venture income is a Non-GAAP measure not recognized under Canadian generally accepted accounting principles ("GAAP") and does not have a standardized meaning prescribed by GAAP. Management believes the measure presents the combined joint ventures and Equity Investments as viewed by investors and lenders of the financial performance of the combined joint ventures, while reflecting the operations in the currency in which revenue and prices are denominated. The Company's Non-GAAP measures may differ from similar computations as reported by other organizations and, accordingly, may not be comparable to non-GAAP measures as reported by such organizations. The Company's Non-GAAP measures should not be construed as alternatives to net income, cash flows related to operating activities, working capital or other financial measures determined in accordance with GAAP, as an indicator of the Company's performance.

#### FORWARD-LOOKING STATEMENTS

This MD&A contains or incorporates, by reference, forward-looking statements. All statements other than statements of historical fact included or incorporated by reference and that address activities, events or developments that we expect or anticipate may or will occur in the future are forward-looking statements. While any forward-looking statements, and any assumptions upon which they are based, are made in good faith and reflect our current judgment regarding the direction of our business; actual results may vary, sometimes materially, from any estimates, predictions, projections, assumptions or other suggestions of future performance herein. Undue reliance should not be placed on these forward-looking statements, which are based upon our assumptions and are subject to known and unknown risks and uncertainties and other factors, some of which are beyond our control, which may cause actual results, levels of activity and achievements to differ materially from those estimated or projected and expressed in or implied by such statements. We undertake no obligation to update publicly or revise any forward-looking statements contained herein, and such statements are expressly qualified by this cautionary statement.

# **ADDITIONAL INFORMATION**

Additional information relating the Company is available on SEDAR at www.sedar.com

**Board Approval** 

The contents of this management's discussion and analysis have been approved and its filing has been authorized by the Board of Directors of the Company.

On Behalf of the Board of Directors

/s/ Brian Williamson

Brian Williamson