



## MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE THREE AND SIX MONTHS ENDED JUNE 30, 2024

This Management's Discussion and Analysis ("MD&A") should be read in conjunction with CVW CleanTech Inc.'s ("CVW CleanTech", "we", "us", "our" or the "Company") condensed interim financial statements and notes thereto for the three and six months ended June 30, 2024. This MD&A has been prepared as of August 13, 2024. CVW CleanTech is a development stage company whose common shares are listed on the TSX Venture Exchange under the symbol "CVW". The Company's shares are also quoted on the OTCQX under the symbol "CVWFF". This MD&A and the condensed interim financial statements and comparative information have been prepared and approved by the Board of Directors of the Company in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS Accounting Standards"). Unless otherwise noted, all financial measures presented in this MD&A are expressed in Canadian dollars.

Additional information and the above referenced material is available on CVW CleanTech's website at [www.CVWCleanTech.com](http://www.CVWCleanTech.com) or on SEDAR+ at [www.sedarplus.ca](http://www.sedarplus.ca).

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## Nature of Business

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CVW CleanTech's vision is to support innovative technologies which provide returns linked to commodities and which operate in a sustainable manner, helping accelerate the world's transition to net zero. The Company has invested over \$100 million and 18 years developing its 100% owned Creating Value from Waste™ ("CVW™") technology which allows oil sands mining operators to extract valuable commodities from froth treatment tailings, reduce greenhouse gas ("GHG") emissions, and enhance tailings management. The Company is currently diversifying its technology portfolio to address a significant opportunity to provide its shareholders with positive returns by investing in clean technologies through royalty financing structures to support the decarbonized and circular economy. Diversifying the Company presents an opportunity to accelerate cash flow generation, accelerate growth, and create shareholder value.

### Clean Technology Royalty Platform

CVW CleanTech has actively developed a strategy and originated opportunities to diversify its technology portfolio. The Company's management team and Board of Directors have identified a significant market opportunity for the Company to partner with clean technology operators and provide strategic financing via royalty structures to create a leading clean technology platform as the sector benefits from strong macroeconomic tailwinds.

Commodities continue to form the key inputs into a variety of production processes as well as the energy transition. As such, the Company is keen to broaden its exposure to technologies that can provide investors with returns that are linked to commodities or commodity-like products. The Company has identified three sectors to specifically target:

- Hydrocarbons: this includes technologies which can lower emissions of oil and gas production, decarbonize the production of transportation fuels, and deliver the fuels of the future.
- Materials and Metals: this includes technologies enabling the production of minerals critical to the clean transition, the extraction of materials from mining waste, and the recycling of spent materials.
- Agriculture: this includes the conversion of agricultural waste into commodities, sustainable food production, and decarbonization of the agriculture value chain.

These are sectors in which CVW CleanTech's management and Board of Directors possess significant experience and deep networks, making the Company well-positioned to evaluate technologies within these areas for potential royalty investments.

To evaluate potential counterparties for suitability, the Company utilizes an in-depth diligence process to understand the technology and its technical merits, the market opportunity, and other commercial considerations. A key consideration for the Company is the availability of confirmed feedstock and/or offtake agreements, the existence of which provides the Company with greater comfort over the availability of supply and saleability of the technology's output. The Company is keen to partner with technologies considered a Technology Readiness Level 8 (TRL-8) or above. This includes technologies which are commercially ready to deploy, and technologies already in commercial production yet require capital for expansion or other commercial purposes.

CVW CleanTech believes that technology meeting these key criteria offer the Company's shareholders attractive risk adjusted returns. At scale, the Company can become a diversified technology platform for investors, who can utilize the Company's expertise in selecting appropriate royalty counterparties within the Company's focus areas.

#### Creating Value From Waste™ Technology

The Company's 100% owned CVW™ technology can recover bitumen, solvents, and water from the existing froth treatment tailings stream on oil sands mining sites to provide incremental revenue and cost savings, increasing oil sands mining profitability. Critical minerals, such as titanium and zircon, may also be recovered from froth treatment tailings, providing a new source of revenue for operators. These minerals have been highlighted by the Alberta and Canadian governments as critical to the development of Canada's low carbon economy.<sup>1,2</sup> This technology has the opportunity to become a Tier 1 royalty for CVW CleanTech.

The recovery of valuable products from waste streams will result in important and timely environmental and economic benefits for the oil sands mining industry. Environmental benefits include a reduction in GHG emissions at the host oil sands mining operator site. When residual amounts of hydrocarbons biodegrade in a tailings pond, GHG emissions (primarily methane and volatile organic compounds) are released. Methane is known to have a global warming potential 28-36 times as potent as carbon dioxide when considering its impact over 100 years<sup>3</sup>. By recovering bitumen and solvents that otherwise would be lost in tailings waste, methane emissions from tailings ponds can be significantly reduced. Canada's oil and gas industry has set ambitious net zero targets to address these issues and the CVW™ technology can help them achieve their objectives. Remediation of oil sands mining tailings is a priority for all stakeholders,

including industry, community members, Indigenous groups, government, regulators, and investors. CVW CleanTech's technology enhances tailings management and delivers environmental benefits by producing a lower volume of tailings with a cleaner composition for deposition allowing industry to move away from the use of tailings ponds for froth treatment tailings. When implemented at a representative oil sands mining site which produces 250,000 barrels of synthetic crude oil equivalents per day, the CVW™ technology could provide the following economic and environmental benefits:

- Recover 2.2 million barrels per annum of hydrocarbons (1.9 million barrels per annum of bitumen and 0.3 million barrels per annum of solvent);
- Produce 243,000 tonnes per year of critical minerals in titanium and zircon concentrates;
- Abate between 380,000 – 850,000 tonnes of CO<sub>2</sub>e, primarily methane, annually;
- Eliminate up to 5,000 tonnes of volatile organic compounds annually (VOCs – considered toxic substances by Environment and Climate Change Canada);
- Recover and re-use over 2.8 million m<sup>3</sup> water and 1.9 million GJ of heat annually;
- Reduce land-use impacts by over 19 hectares per annum, and
- Enable the oil sands mining industry to potentially eliminate the use of tailings ponds for froth treatment tailings consistent with the Alberta Energy Regulator's ("AER") Directive 85.

According to the Company's independent economic impact assessment<sup>4</sup> published in February 2024, implementation of the CVW™ technology at a single site could:

- Create up to 16,500 person-years of employment in Alberta and 24,000 person-years of employment Canada wide over a 24-year period;
- Provide the Government of Alberta and the Government of Canada with up to \$1.4 and \$1.5 billion dollars of revenue respectively in total over a 24-year period, and
- Generate up to \$6.9 billion in additional GDP within Alberta, and up to \$7.9 billion for Canada as a whole.

## Select Quarterly and Year-to-date Information

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The following table presents a summary of selected condensed interim financial information in accordance with IFRS Accounting Standards:

	Three months ended June 30,		Six months ended June 30,	
	2024	2023	2024	2023
Net loss	\$1,230	\$1,052	\$2,181	\$2,100
Net loss per share (basic and diluted)	\$0.01	\$0.01	\$0.02	\$0.02

All figures in thousands, except per share amounts.

Cash used in operating activities totalled \$591,000 for the three months ended June 30, 2024 (June 30, 2023 - \$539,000). Cash used in financing activities was \$43,000 for the three months ended June 30, 2024 (June 30, 2023 - cash generated from financing activities of \$200,000).

The Company reported a net loss of \$1,230,000 for the three months ended June 30, 2024 (June 30, 2023 - net loss of \$1,052,000). Loss per share was \$0.01 for both three months ended June 30, 2024 and 2023. Non cash charges recognized for stock-based compensation expense totalled \$593,000 during the three months ended June 30, 2024 (June 30, 2023 - \$580,000).

Cash used in operating activities totalled \$1,332,000 for the six months ended June 30, 2024 (six months ended June 30, 2023 - \$1,110,000). Cash used in financing activities was \$43,000 for the six months ended June 30, 2024 (six months ended June 30, 2023 - cash generated from financing activities of \$776,000).

The Company reported a net loss of \$2,181,000 for the six months ended June 30, 2024 (six months ended June 30, 2023 - \$2,100,000). Loss per share was \$0.02 for both the six months ended June 30, 2024 and 2023. Non cash charges recognized for stock-based compensation expense totalled \$906,000 during the six months ended June 30, 2024 (six months ended June 30, 2023 - \$1,133,000).

## Select Quarterly and Year-to-Date Highlights

A key priority for the business and a continuing focus is to ensure that commercial scale deployment of the CVW™ technology moves ahead to deliver value to CVW CleanTech's shareholders. We are pleased to report that during the six month period ended June 30, 2024 we had engagement with the oil sands mining operators to highlight our technology's alignment with their business and ESG objectives. We have highlighted the meaningful role that the CVW™ technology can play in the fight to reduce GHG emissions and to be a key contributor on the path to net zero. During these discussions, management has also emphasized the proven tailings management benefits including the reduction in tailings volume, the improvement of final deposition characteristics, and the improvement of water quality for recycling and/or water treatment processing.

As the future development of a CVW™ oil sands facility will require strategic partners, it is essential that these relationships are established and advanced. During the first quarter of 2024, the Company held productive discussions with Tier 1 engineering, procurement, and construction management (“EPCM”) firms. This culminated in the reception of expressions of interest for construction of the CVW™ technology, subject to certain conditions including definitive scope documentation. Feedback from the EPCM firms indicates that there will be an opportunity to lock-in favourable EPCM and construction contracts that will deliver cost certainty to our stakeholders. As discussed with the EPCM firms, contingencies would be reduced as project definition is enhanced through the detailed engineering process, offering CVW CleanTech the potential to obtain fixed price agreements within Association for the Advancement of Cost Engineering (“AACE”) cost estimation accuracy ranges.

During the first quarter of 2024, the Company successfully received a non-binding indication for technology performance insurance (“TPI”). This completes a key pillar in our de-risking activities and could provide debt partners and other stakeholders with comfort over cash flows during start-up and ongoing operations. TPI is a specialty insurance product which transfers specific risks related to start-up and ongoing operational performance from project stakeholders to insurers. The insurance could cover debt repayment obligations, operating costs, and fixed costs, and may pay for necessary repairs, modifications, or replacement of equipment that is underperforming due to design or engineering issues.

During 2023 the Company commissioned an economic impact assessment report which identified the socio-economic benefits which Albertans and Canadians could expect from the implementation of the Company’s CVW™ technology. The report was published in February 2024 and can be accessed on the Company’s website.

On February 14, 2024, the Company completed an upgrade to the OTCQX Best Market. This upgrade has increased access to the Company’s stock for U.S. based investors. As part of the same process, the Company updated its OTC symbol from “TITUF” to “CVWFF”.

During the period, CVW CleanTech continued its engagement with Indigenous groups in the Treaty 8 region. The Company has had the honour of presenting the CVW™ technology to Indigenous communities who rely on the lands and the natural environment which are most impacted by oil sands operations. We believe our technology can deliver important social, environmental, and economic benefits to communities in the region. In June 2024, the Company signed a non-binding framework agreement with four First Nation and Métis communities from the Treaty 8 region. This landmark agreement presents a step towards reconciliation by fostering meaningful partnerships and empowering Indigenous communities in the

implementation and management of CVW CleanTech's tailings reprocessing technology. Through the framework agreement, the CVW™ technology can bring substantial economic benefits to Indigenous communities. The matters contemplated by the framework agreement are non-binding and remain subject to execution of definitive agreements and receipt of applicable regulatory approvals, including that of the TSX Venture Exchange. CVW CleanTech remains actively engaged with other Indigenous communities with the goal of broadening the partnership.

The Company continues to monitor opportunities for government grants and similar funding opportunities that promote development of our commercial applications. Should the Company obtain a commercial agreement with an oil sands mining operator, we expect to apply for government funding with the Strategic Innovation Fund, including the Net Zero Accelerator, the Sustainable Technology Development Fund and Emissions Reduction Alberta. The more recently announced Canada Growth Fund and the clean technology fund with the Business Development Bank of Canada are exciting possible future partners which we will be investigating further. We are also exploring how the recently announced Clean Technology Investment Tax Credits proposed by the Government of Canada could apply to future CVW™ projects. Our existing funding and relationships with many of these agencies and the Clean Growth Hub are expected to help streamline future application processes. These agencies are expected to play a role in helping to provide further sources of low cost and/or non repayable capital as we move the CVW™ technology from development stage to full scale commercial operations. We expect that these government grants will be a material source of capital as we look to develop our first project.

During the period, the Company participated in productive and valuable discussions with the Governments of Alberta and Canada. These discussions serve to raise awareness within government of the Company's ready-to-deploy technology and potentially lead to favourable policy decisions. This included meetings at the federal level with senior representatives at the Department of Finance, the Privy Council Office, Natural Resources Canada, Environment and Climate Change Canada, Innovation, Science, Economic Development, the House of Commons Standing Committee on Environment and Sustainable Development, and the Standing Committee on Natural Resources. We also had the opportunity to meet with senior representatives at the provincial level from the Premier's Office, Alberta Energy, and the Ministry of Indigenous Relations.

In July 2024, the Company announced a joint research project with the University of Alberta to advance the recovery of rare earth elements from oil sands waste. The partnership will apply mineral separation research and processing technology to capitalize on this abundant source of critical minerals which is



currently being lost to tailings ponds. The project is funded by the Natural Sciences and Engineering Research Council of Canada (NSERC) and carried out in partnership with InnoTech Alberta. The project will take place over three years with early results on critical mineral concentrate expected within the first year.

In seeking to create value for our investors and provide line of sight to cash flow generation, CVW CleanTech evaluated different strategies to diversify and position the Company as a leader in the clean technology commodity space. Alongside the immense value we expect to create through the commercialization of our proprietary CVW™ technology, the Company has identified a significant market opportunity to deliver clean technology exposure to its shareholders by providing strategic financing via royalty structures to create a leading, diversified, clean technology platform in a sector with strong macroeconomic tailwinds.

To execute on its strategy, the Company has identified over 30 different potential technologies which deliver a more sustainable commodities sector and are complementary to our own technology and branding. Subsequent to the period ended June 30, 2024, the Company announced that it had entered into its first royalty financing agreement with Northstar Clean Technologies Inc. (“Northstar”). Northstar has developed a patented, proprietary process to recover liquid asphalt (effectively bitumen), aggregate, and fiber from end-of-life and waste asphalt shingles, which would otherwise be destined for landfills. The Company has agreed to purchase a five-year, \$14 million, 10% convertible debenture of Northstar (the “Convertible Debenture”), which will be convertible into a revenue royalty on Northstar’s next two asphalt shingle reprocessing facilities (the “Transaction”). Upon conversion of the Convertible Debenture, and pursuant to the terms of the royalty agreement, the Company is entitled to receive recurring royalty payments based on revenues at Northstar’s next two facilities, which will be no less than 12% of such revenues. Subsequent to the period ended June 30, 2024, CVW CleanTech made an initial payment to Northstar in the amount of \$1.5 million. The Transaction is expected to close on or around September 30, 2024. At the same time, the Company announced that it had entered into a commercially reasonable efforts private placement offering (the “Offering”) in the amount of \$15,000,000. Capital raised through the Offering will fund the Transaction and associated due diligence costs.

## Select Quarterly and Year-To-Date Financial Highlights

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The following table summarizes the Company’s financial results for most recently completed quarterly periods in accordance with IFRS Accounting Standards:

	Q2 June 30, 2024	Q1 March 31, 2024	Q4 December 31, 2023	Q3 September 30, 2023
Net loss	\$1,230	\$951	\$437	\$1,165
Net loss per share (basic and diluted)	\$0.01	\$0.01	\$0.01	\$0.01

All figures in thousands, except per share amounts. Per share amounts will not total to annual value due to rounding.

	Q2 June 30, 2023	Q1 March 31, 2023	Q4 December 31, 2022	Q3 September 30, 2022
Net loss	\$1,052	\$1,047	\$1,224	\$517
Net loss per share (basic and diluted)	\$0.01	\$0.01	\$0.01	\$0.01

All figures in thousands, except per share amounts. Per share amounts will not total to annual value due to rounding.

For the three month period ended June 30, 2024, the Company reported a net loss of \$1,230,000, consisting of an operating loss of \$1,409,000 and net interest and other income of \$178,000. This compares to a net loss of \$1,052,000 for the quarter ended June 30, 2023. The net loss per share was \$0.01 for both Q2 2024 and 2023. The increase in net loss for the three months ended June 30, 2024 as compared to the same period in 2023 is primarily a result of increased compensation and benefits due to the Company having a full staffing complement, and professional and consulting fees incurred to perform due diligence on the transaction with Northstar. The increase in expenses is partially offset by the receipt of a rebate under the SR&ED tax incentive program.

The net loss for the six month period ended June 30, 2024 amounted to \$2,181,000 consisting of an operating loss of \$2,429,000 and net interest and other income of \$248,000. This compares to a net loss of \$2,100,000 for the six month period ended June 30, 2023, which consisted of operating expenses of \$2,243,000 and net interest income and other income of \$144,000. The increase in loss for the six month period ended June 30, 2024 as compared to the same period in 2023 is primarily a result of compensation and benefits due to the Company having a full staffing complement, and professional and consulting fees incurred to perform due diligence on the transaction with Northstar. The increase in expenses is partially offset by the receipt of a rebate under the SR&ED tax incentive program.

## Operating Expenditures

### *Three months ended June 30, 2024 and 2023*

Operating Expenses	June 30, 2024	June 30, 2023	Increase (decrease)
	\$	\$	\$
Compensation and benefits	310	233	77
Professional fees	184	89	95
Consulting fees	107	45	62
Investor communications and marketing	64	34	30
Office and administration	52	32	20
Director fees	39	58	(19)
Engineering and analysis	34	2	32
Transfer agent and regulatory fees	24	52	(28)
Stock-based compensation	593	579	14
Amortization	2	2	-
<b>Total operating expenses</b>	<b>1,409</b>	<b>1,126</b>	<b>283</b>

All figures in thousands.

The largest components of operating loss for the three months ended June 30, 2024 were compensation and benefits expense of \$310,000, and stock-based compensation expense of \$593,000. The net loss for the three months ended June 30, 2023 included stock-based compensation expense of \$579,000 and compensation and benefits expense of \$233,000.

Compensation and benefits expenses increased by \$77,000 compared to the quarter ended June 30, 2023 due to the Company having a more complete staffing complement for the quarter ended June 30, 2024.

Professional fees increased by \$95,000 compared to the three months ended June 30, 2023. The Company engaged a legal firm during the quarter to support the review of the Transaction with Northstar which increased professional fees by \$81,000. The remaining increase in professional fees relates to the hiring of a tax consultant to support the Company's 2022 SR&ED claim.

Consulting fees for the three months ended June 30, 2024 increased by \$62,000 as compared to the three months ended June 30, 2023. The Company retained the services of a government relations firm which increased consulting fees by \$41,000 compared to the quarter ended June 30, 2023. In addition, the Company engaged a consultant to support the Transaction with Northstar and other business development activities, which resulted in a net increase of \$23,000 as compared to the quarter ended June 30, 2023.

Engineering and analysis expenses for the three month period ended June 30, 2024 increased by \$32,000 compared to the three month period ended June 30, 2023 as the Company hired an engineering firm to support the technical diligence required for the Northstar Transaction.

In February 2024, CVW CleanTech granted stock options and RSUs to its employees as part of the Company's annual performance evaluation process. In March 2024, the Company granted stock options and RSUs to an officer of the Company as part of their employment agreement. The effect of the issuance of new grants in 2024 was partially offset by the accelerated vesting and reversals of expenses from employee turnover, resulting in a net increase of \$14,000 as compared to the three months ended June 30, 2023.

### *Six months ended June 30, 2024 and 2023*

Operating Expenses	June 30, 2024 \$	June 30, 2023 \$	Increase (decrease) \$
Compensation and benefits	690	492	198
Professional fees	240	166	74
Consulting fees	197	89	108
Investor communications and marketing	112	90	22
Office and administration	90	72	18
Director fees	78	113	(35)
Engineering and analysis	34	2	32
Transfer agent and regulatory fees	78	84	(6)
Stock-based compensation	906	1,133	(227)
Amortization	4	2	2
<b>Total operating expenses</b>	<b>2,429</b>	<b>2,243</b>	<b>186</b>

All figures in thousands.

The largest components of operating loss for the six months ended June 30, 2024 were compensation and benefits expense of \$690,000 and stock-based compensation expense of \$906,000. The net loss for the six months ended June 30, 2023 included stock-based compensation expense of \$1,133,000 and compensation and benefits expense of \$492,000.

Compensation and benefits expenses increased by \$198,000 compared to the six month period ended June 30, 2023, due to the Company having a more complete staffing complement for the six months ended June 30, 2024.

Professional fees increased by \$74,000 during the six month period ended June 30, 2024 compared to 2023. The Company engaged a legal firm during to support the review of the Transaction with Northstar

which increased professional fees by \$81,000. A tax consultant was retained to support the Company's 2022 SR&ED claim. The gross cost increase from these activities is partially offset by a reduction in other legal expenses.

Consulting fees for the six months ended June 30, 2024 increased by \$108,000 compared to the six months ended June 30, 2023. The Company retained the services of a government relations firm which increased consulting fees by \$82,000 compared to the six months ended June 30, 2023. In addition, the Company engaged a consultant to support the Transaction with Northstar and other business development activities, which resulted in a net increase of \$23,000 as compared to the six months ended June 30, 2023.

Engineering and analysis expenses for the six month period ended June 30, 2024 increased by \$32,000 compared to the six month period ended June 30, 2023 as the Company hired an engineering firm to support the technical diligence required for the Northstar Transaction.

In February 2024, CVW CleanTech granted stock options and RSUs to its employees as part of the Company's annual performance evaluation process. In March 2024, the Company granted stock options and RSUs to an officer of the Company as part of their employment agreement. In the first quarter of 2024, the Company also adjusted the expected vesting dates of some stock options which utilize non-market based performance vesting criteria which resulted in a lengthening of the vesting period of those stock options. The net effect of these activities, and the accelerated vesting and reversals of expenses from employee turnover, resulted in a net decrease of stock-based compensation expense of \$227,000 as compared to the six month period ended June 30, 2023.

## Liquidity and Capital Resources

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CVW CleanTech held cash and cash equivalents of \$4,626,000 as at June 30, 2024 (December 31, 2023 - \$6,003,000). During the six months ended June 30, 2024, \$1,332,000 in cash was used for operating activities (six months ended June 30, 2023 - \$1,110,000).

Interest income of \$130,000 was earned for the six months ended June 30, 2024 (June 30, 2023 - \$145,000). The Company's cash balances are held in major Canadian financial institutions with credit ratings of Aa or higher and are available upon demand. During the three month period ended June 30, 2024, the Company also received \$120,000 (three month period ended June 30, 2023 - nil) in reimbursements under the SR&ED tax incentive program.

Additional sources of capital will be required to fund the commercial deployment of the Company's CVW™ technology and to fund royalty financing transactions. Sources of capital to fund a CVW™ deployment include, but are not limited to, government grants, government debt, commercial debt, strategic partnerships, and equity raises.

The Company anticipates funding royalty financing transactions through future equity raises. To this effect, on August 7, 2024, the Company announced that it had entered into a commercially reasonable efforts private placement offering in the amount of \$15,000,000. Capital raised through the Offering will fund the Transaction with Northstar and associated due diligence costs.

Subject to a commercial deployment of the Company's CVW™ technology and/or completing additional royalty transactions, our liquidity position is strong and will meet day-to-day operating needs for the forthcoming year. The Company's current base of cash-on-hand can help provide a ready source of early-stage capital where upfront spending may be required at the outset of a commercial endeavor with an oil sands mining operator, or for diligence expenses when royalty financing opportunities arise. Initial expenditures may be required in areas such as detailed engineering, project assessments and/or for due diligence exercises.

The Company reviews its capital management approach on an ongoing basis and believes that its current approach is appropriate.

## Market Opportunity

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### Clean Technology Royalty Market

The clean technology market is significant and growing, with the global clean technology market funding flows projected to have exceeded \$2.8 trillion in 2023<sup>5</sup>. Over 135 countries including all G7 nations have committed to be net zero by 2050<sup>6</sup>. These substantial funding flows have created significant momentum in the creation of novel technologies with the ability to meet global environmental commitments. There has been an increase in the number of patent applications globally from 8,400 patent applications in 1990 to 44,000 patents in 2021. Annually, more technologies are created which have the ability to increase efficiencies, displace legacy processes, and contribute towards a more sustainable economy.

Materials and metals are critical to ensuring a sustainable economy in the long term. The commodities which are required for clean energy technologies and otherwise are expected to be in significant shortage over both the medium and long term. Additionally, the primary production of many critical materials and

metals is often located in volatile jurisdictions. More recently, technologies have been developed with the ability to produce urgently required commodities through the re-use of waste and other spent material. These technologies do not necessarily need to be located exactly where traditionally mining resources are found – rather, these can be strategically placed near large metropolitan areas considered to be Tier 1 jurisdictions.

OPEC currently predicts oil demand to grow over the next few years and remain at current consumption levels well into the future<sup>7</sup>. As can be seen with the continued use of coal despite a focus on developing energy sources with lower carbon intensities, the world will continue to require many forms of energy including hydrocarbons to provide energy to a growing population during the transition to net zero. Additionally, liquefied natural gas has been identified as a critical transition fuel with global demand estimated to rise significantly by 2040. Reduction in the carbon intensity of hydrocarbons is essential to achieve net zero.

By 2050 the global population is estimated to reach 10 billion which will require an estimated 56% increase in the current levels of food production<sup>8</sup>. Ensuring food security for a growing population is arguably the most critical human challenge. The need to increase food production has created significant commercial opportunities. Agricultural innovations make growing practices more efficient, safe, and less environmentally damaging. The re-use of biomass, generated by the increase in food production, has created opportunities to more sustainably generate heat and power.

#### Creating Value From Waste™ Technology

The Company believes that economic, political, social, and regulatory forces favouring the adoption of our technology are intensifying as industry and various levels of government position the country for a net zero goal by 2050. Widely accepted science-based studies describe the importance of moving to a carbon neutral society and the risks of failing to achieve globally agreed 2050 targets. The scientific community has communicated the climate risks specific to methane, which CVW™ actively abates from the environment. Today, the oil sands industry is focused on the Pathways Alliance’s foundational carbon capture and storage project. This solution has the potential to deliver significant carbon reductions however will require substantial federal and provincial funding for the construction and ongoing operation with a timeline of being operational at the end of the decade.

Oil sands tailings remain one of, if not the largest, environmental liabilities in Canada. In May of 2024 the Government of Alberta created the Oil Sands Mine Water Steering Committee to “look at options to speed up oil sands mine water management and tailings ponds reclamation.” The Company believes that its

CVW™ technology can assist the government and industry in meeting the above stated objectives and certain regulatory requirements of the AER's Directive 85. This legislation requires oil sands mining operators to minimize fluid tailings accumulation through ongoing treatment and progressive reclamation. CVW™ technology can eliminate the need for tailings ponds for froth treatment tailings and meet the "ready-to-reclaim" criteria outlined in Directive 85.

In particular, the Company's technology has the potential to address several aspects of the AER's Directive 85 sub-objective 2 which focuses on circumstances where oil sands operators may propose management strategies that control specific water movement such as drainage control systems, or management of risks associated with deposit characteristics such as treated froth fluid fine tailings, acidification, specific additives, or gas formation. CVW™ can substantially mitigate these risks through the treatment of froth fluid fine tailings, helping move the industry away from the use of tailings ponds.

In March of 2022 the Government of Canada provided guidelines to address climate change for various sectors of the economy, with stringent targets for the oil and gas sector. In particular, the current federal government has set targets for the oil and gas industry in Canada to reduce its GHG emissions by 75% of 2012 levels by 2030.<sup>9</sup> The Government of Canada has also proposed the introduction of a cap on emissions generated by the oil and gas sector to transition towards lower-carbon sources of fossil fuels.<sup>10</sup>

The federal government has established a number of mechanisms to support the transition to cleaner energy, including up to \$8 billion for the Strategic Innovation Fund's Net Zero Accelerator. This fund aims to support projects that reduce GHG emissions including through the scale-up of cleantech businesses which reduce the environmental footprint of current production by utilizing new technologies. In November 2022, the federal government announced the establishment of the \$15 billion Canada Growth Fund to accelerate the deployment of technologies required to decarbonize and grow the economy which includes direct equity and debt investments as well as contract for differences structures related to factors such as carbon pricing<sup>11</sup>.

Additional government initiatives which may be favorable to the commercialization of our technology include the Canadian Minerals and Metals Plan ("CMMP"), which aims to position Canada as a global supplier for strategic and critical minerals. The Province of Alberta introduced a similar strategy and action plan with legislation in November 2021. Alberta's Bill 82 aligns the province's mineral development policies with the CMMP. These critical minerals, which include titanium and zircon, are seen as vital to make the transition to net zero.



Key economic drivers that support the adoption of CVW CleanTech's technology include: the commodity value of recovered bitumen and solvents currently lost to tailings ponds; the value of recovered critical minerals including titanium and zircon concentrates; the value of emissions abatement under current and future regulatory regimes; energy cost reductions on site due to hot process water recapture and reuse; potential cost reductions related to enhanced tailings remediation; and potential cost savings related to acid rock drainage mitigation. In addition, our studies suggest that tailings that have been processed through the CVW™ technology dewater more effectively in subsequent tailings management operations, which meets the Government of Alberta regulations requiring reductions in the volume of tailings. The removal of bitumen and solvents could also enable the direct reuse of hot froth treatment tailings water in other mineable oil sands services, reducing energy costs, river water usage, and GHGs related to reheating cold water used in the bitumen extraction process.

There is widespread acceptance that innovation and new technologies will be the principal source of solutions for reducing both environmental impacts and operating costs in Canada's oil sands industry. Through a disciplined collaborative approach, with the cooperation of industry and governments, the Company believes that it has successfully developed unique, practical technology solutions for oil sands froth treatment tailings that offer significant improvements to technologies currently used, and address environmental, operational, and economic challenges. There is optimism that CVW CleanTech, other clean technology companies, industry partners, and government can collaborate to meaningfully address climate change.

## Financial Instruments and Financial Risk Factors

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The Company has for accounting purposes, designated its cash and cash equivalents and accounts receivable as loans and receivables. Accounts payable and accrued liabilities are classified as other financial liabilities for accounting purposes.

As of June 30, 2024 and December 31, 2023, the Company estimates that both the carrying and fair value amounts of the Company's financial instruments are approximately equivalent because of the short-term nature of the assets and liabilities.

### *a. Financial risk*

The Company's activities expose it to a variety of financial, credit, liquidity, and market risks, including interest rate and foreign exchange rate risks.

Financial risk management is carried out by the Company's management team with guidance from the Audit Committee and the Board of Directors. The Board of Directors also provides guidance for enterprise risk management.

*b. Credit risk*

Credit risk is the risk of loss associated with a counterparty's inability to fulfill its payment obligations. The Company's credit risk is primarily attributable to cash and cash equivalents, recovery of project costs, along with related holdbacks and receivables. Cash and cash equivalents are held with Canadian financial institutions with credit rating no lower than As. Management believes that the credit risk concentration with respect to cash is minimal. The recovery of project costs and related holdbacks receivable is dependent on the Company meeting milestone obligations under contribution agreements. Management believes that credit risk associated with funding commitments from government grant programs is low due to project governance, credit quality of participants, reporting requirements to achieve milestones and a strong history of collection.

*c. Liquidity risk*

Liquidity risk is the risk that the Company will not have sufficient cash resources to meet its financial obligations as they come due. The Company's approach to managing liquidity risk is to ensure that it will have sufficient liquidity to meet liabilities when due by monitoring actual and projected cash flows. The Board of Directors reviews and approves the operating plan as well as material transactions outside the ordinary course of business. This oversight process is also supplemented by a continuous and detailed cash forecasting process. The Company is dependent on raising funds through the issuance of shares, loan facilities, government grants and/or attracting partners to undertake further development and commercialization of its technology. As at June 30, 2024, the Company had an aggregate cash balance of \$4,626,000 to settle current liabilities of \$482,000 (December 31, 2023 - cash \$6,003,000; current liabilities \$675,000). Most of the Company's financial liabilities have contractual terms of 30 days or less.

*d. Market risk*

Market risk is the risk of loss that may arise from changes in market factors such as interest rates and foreign exchange rates.

*1. Interest rate risk*

The Company's current policy is to invest excess cash in interest bearing cash accounts, bankers' acceptances and guaranteed investment certificates issued by Canadian banks with

Credit ratings of As or higher. The Company periodically monitors its investments and the creditworthiness of the banks it holds investments in.

*II. Foreign exchange currency risk*

The Company's reporting and functional currency is the Canadian dollar, and most purchases are transacted in Canadian dollars. The Company does not hold any significant balances in foreign currencies which may give rise to exposure to foreign exchange risk. Any impact from fluctuations in foreign exchange rates would be minimal and therefore the Company does not hedge its foreign exchange risk.

*e. Capital management*

The Company considers its equity as its capital. At June 30, 2024, the Company had total equity of \$4,294,000 (December 31, 2023 – \$5,612,000). The Company does not have any bank debt or externally imposed capital requirements. The Company's capital management objectives are to manage its cash and cash equivalents prudently; to minimize the expenditures to ensure funds are available to continue to advance the commercialization of the CVW™ technology; to support diligence expenditures for royalty financing opportunities; and to access available funding for commercialization.

Additional sources of capital will be required to fund the commercial deployment of the Company's CVW™ technology and to fund royalty financing transactions. Sources of capital to fund a CVW™ deployment include, but are not limited to, government grants, government debt, commercial debt, strategic partnerships, and equity raises. The Company anticipates funding royalty financing transactions through equity raises. The Company reviews its capital management approach on an ongoing basis and believes that its current approach is appropriate.

## Related Party Transactions

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Key management personnel include those persons having authority and responsibility for planning, directing, and controlling the activities of CVW CleanTech as a whole. Compensation to directors, officers, and other insiders of the Company is summarized below.

### Three months ended June 30, 2024 and 2023

Corporate Officers	June 30, 2024 \$	June 30, 2023 \$	Increase (decrease) \$
Compensation and benefits	310	233	77
Consulting fees	53	29	24
Stock-based compensation	593	579	14
Total	956	841	115

All figures in thousands.

Board of Directors	June 30, 2024 \$	June 30, 2023 \$	Increase (decrease) \$
Director fees	39	58	(19)
Stock-based compensation	-	-	-
Total	39	58	(19)

All figures in thousands.

### Six months ended June 30, 2024 and 2023

Corporate Officers	June 30, 2024 \$	June 30, 2023 \$	Increase (decrease) \$
Compensation and benefits	690	492	198
Consulting fees	82	58	24
Stock-based compensation	906	1,132	(226)
Total	1,678	1,682	(4)

All figures in thousands.

Board of Directors	June 30, 2024 \$	June 30, 2023 \$	Increase (decrease) \$
Director fees	78	113	(35)
Stock-based compensation	-	-	-
Total	78	113	(35)

All figures in thousands.

Accounts payable and accrued liabilities as at June 30, 2024 included \$61,500 due to corporate insiders and directors (December 31, 2023 - \$70,000).

Under the terms of a consulting agreement, a company controlled by the Company's former CEO will continue to provide services to the Company at a fee of \$115,000 per annum. The contract is in place until February 2025.

One member of the Board of Directors is a partner in a law firm which provides legal services to the Company. Legal fees charged by this law firm during the six months ended June 30, 2024 were \$14,000 (six months ended June 30, 2023 - \$94,000).

## Off Balance Sheet Arrangements

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As of the date of this MD&A the Company does not have any off-balance sheet arrangements.

## Additional Disclosure for Venture Issuers Without Significant Revenue

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During the six months ended June 30, 2024 and 2023, CVW CleanTech has not capitalized any research and development costs. All amounts that have been expensed as operating expenses are disclosed in the Company's condensed interim financial statements and in this MD&A. The Company has not established any deferred development costs and has not incurred any costs related to exploration activities.

## Discussion of Risks

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Current and prospective shareholders should specifically consider various risk factors and uncertainties including but not limited to the risks outlined in our December 31, 2022 Annual Information Form and, as regards the completion of the Offering and closing of the Transaction upon the terms described herein, or at all, the news release of the Company dated August 7, 2024. Should one or more of those risks or uncertainties, including the risks listed within this MD&A, or a risk that is not currently known to us materialize, or should assumptions underlying those forward-looking statements prove incorrect, actual results may vary materially from those described herein.

The Company will also be subject to additional risks and uncertainties as a result of its clean technology royalty strategy, and upon the successful completion of the Offering and the closing of the Transaction when the Company will have purchased the Convertible Debenture. The risks and uncertainties include but are not limited to uncertainties in the business of the underlying technologies, that the royalties are not honoured by the operator of a technology, disagreements in the exact calculation of royalty payments, delay or failure of royalty payments, that the Company's due diligence may not reveal all relevant facts, and that there may be increased competition for royalty interests. The Company may provide additional risk disclosure concerning the Transaction, as the same proceeds, in accordance with best practices and applicable securities laws.

## Material Accounting Policies and Changes in Accounting Policies

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The preparation of condensed interim financial statements in conformity with IFRS Accounting Standards requires management to make estimates and assumptions concerning the future. It also requires management to exercise judgment in applying the Company's accounting policies and the reported amounts of assets and liabilities, revenue and expenses, and related disclosures. Estimates and judgments are continually evaluated and are based on current facts, historical experience, and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Accounting estimates will, by definition, seldom equal the actual results. The significant judgments made by management in applying the Company's accounting policies and the key sources of estimation uncertainty are described in the December 31, 2023 annual audited financial statements.

## Outstanding Share Data

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Outstanding Share Data - as of August 13, 2024	
Common shares issued and outstanding:	125,591,635
Common share awards granted and outstanding:	
Options	8,548,532
DSUs	370,739
RSUs	1,716,080
Number of warrants outstanding:	11,824,164

## Internal Controls Over Financial Reporting

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The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting. Any system of internal control over financial reporting, no matter how well designed, has inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

The Company has controls and procedures in place to ensure that information required to be disclosed by the Company under securities legislation is recorded, processed, summarized, and reported within the appropriate time periods and that required information is accumulated and communicated to the Company's management so that decisions can be made about the timely disclosure of that information.

## Forward Looking Information or Statements and Cautionary Factors That May Affect Future Results

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Certain statements contained in the foregoing MD&A constitute forward-looking statements (within the meaning of the Canadian securities legislation and the U.S. Private Securities Litigation Reform Act of 1995) that involve risks and uncertainties. Forward-looking statements are frequently, but not always, identified by words such as “expects”, “anticipates”, “believes”, “intends”, “estimates”, “potential”, “possible” and similar expressions, or statements that events, conditions, or results “will”, “may”, “could” or “should” occur or be achieved. The forward-looking statements contained herein may include statements regarding the anticipated benefits of the adoption and commercialization of CVW™ technologies, the chemical, material, financial, economic, operational, environmental and any other anticipated results of the adoption thereof, potential diversification strategies and the implementation and results thereof, expectations regarding future development, funding (including necessity, sources, and expected structure of the same) and contracted work, expectation as to the timeline on which certain performance criteria will be met and any acceleration of the same as a result of any prior criteria being met, expectations regarding the key economic and policy drivers supporting the adoption of CVW CleanTech’s technology, CVW CleanTech’s research and development and commercialization plans, the advantages of the Company’s technology, the Company’s ongoing engagement with stakeholders, including business development activities, the development of networks with strategic partners, and the development of Company’s relationships with Indigenous communities and any potential benefits for the same, potential financing opportunities, including grant and financing opportunities from applicable government programs and non-governmental organizations, entering into funding agreements related thereto, and any expected timeline for the same, any expected next steps for the Company, timelines, strategic plans, the scope of any activities that will be undertaken, the Company’s future liquidity situation and the market prices of commodities or other statements that are not statement of fact. Forward-looking statements are statements about the future and are inherently uncertain, and actual achievements of the Company may differ materially from those reflected in forward-looking statements due to a variety of risks, uncertainties, and other factors. For the reasons set forth above, investors should not place undue reliance on forward-looking statements. Important factors that could cause actual results to differ materially from the Company’s expectations include uncertainties involved in disputes and litigation, fluctuations in interest rates, commodity prices and currency exchange rates; changes in the availability, and cost, of technical labour required for the success of the Company’s products and services; price escalation and/ or inflationary pressures affecting the cost of equipment and material required to

commercialize the same; the uncertainty of estimates of capital and operating costs; the need to obtain additional financing and uncertainty as to the availability and terms of future financing; the impact on the Company of increasing inflation; any change in government policy, programs, and funding opportunities, whether provincial, national, or international which could negatively affect the Company, and any failure of the same to continue to evolve in accordance with Company's expectations; and other risks and uncertainties disclosed in other information released by the Company from time to time and filed with the appropriate regulatory agencies.

All forward looking statements are based on the Company's beliefs and assumptions which are based on information available at the time these assumptions are made. In addition to other assumptions as set out in this MD&A, the Company has made the following assumptions in relation to the forward-looking statements in this MD&A: the expected environmental and economic benefits to be achieved from CVW™ technologies; the ability of the Company to successfully access various government funding programs; the details of government funding programs and that such programs will be implemented (and not change) as expected; that the Company will continue to be able to protect its intellectual property; that counterparties will continue to satisfy their contractual obligations to the Company; assumptions as to commodity prices and exchange rates and the impacts on the Company; assumptions as to various market and commercial opportunities for the Company and its technologies; and the ability of the Company to continue to develop and commercialize its technologies.

Although management believes that the expectations represented by such forward-looking information or statements are reasonable, there is significant risk that the forward-looking information or statements may not be achieved, and the underlying assumptions thereto will not prove to be accurate.

Actual results or events could differ materially from the plans, intentions and expectations expressed or implied in any forward-looking information or statements, including the underlying assumptions thereto, as a result of numerous risks, uncertainties and factors including: the possibility that opportunities will arise that require more cash than the Company has or can reasonably obtain; dependence on key personnel; dependence on corporate collaborations; potential delays; uncertainties related to early stage of technology and product development; uncertainties as to fluctuation of the stock market; uncertainties as to future expense levels and the possibility of unanticipated costs or expenses or cost overruns; and other risks and uncertainties which may not be described herein. The Company has no policy for updating forward looking information beyond the procedures required under applicable securities laws. The forward-looking statements contained herein are as of May 21, 2024 and are subject to change after this date, and the



Company assumes no obligation to publicly update or revise the statements to reflect new events or circumstances, except as may be required pursuant to applicable laws.

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<sup>1</sup> Government of Canada - Critical Mineral Strategy.

<https://www.canada.ca/en/campaign/critical-minerals-in-canada/canadian-critical-minerals-strategy.html>

<sup>2</sup> Government of Alberta - Minerals Strategy and Action Plan.

<https://www.alberta.ca/minerals-strategy-and-action-plan.aspx>

<sup>3</sup> International Panel on Climate Change, as quoted by the International Energy Agency.

<https://www.iea.org/reports/methane-tracker-2021/methane-and-climate-change>

<sup>4</sup> CVW CleanTech Inc. - Independent Economic Impact Assessment.

<https://cvwtechnology.com/sustainability/economic-impact/>

<sup>5</sup> Bloomberg NEF – Energy transition investment trends 2024. <https://about.bnef.com/energy-transition-investment/>

<sup>6</sup> Net Zero Tracker – Net zero figures by country. <https://zerotracker.net/>

<sup>7</sup> Reuters - OPEC sees no peak oil demand long term. <https://www.reuters.com/markets/commodities/opec-sees-no-peak-oil-demand-long-term-secretary-general-says-2024-06-13/>

<sup>8</sup> World Resources Institute - How to sustainably feed 10 billion people. <https://www.wri.org/insights/how-sustainably-feed-10-billion-people-2050-21-charts>

<sup>9</sup> Government of Canada - Update on Path Forward for Oil and Gas Sector Methane Mitigation.

<https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/reducing-methane-emissions/update-oil-gas-sector-methane-mitigation.html>

<sup>10</sup> Government of Canada - Oil and Gas Emissions Cap.

<https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/oil-gas-emissions-cap.html>

<sup>11</sup> Government of Canada - Budget 2023, Canada Growth Fund Technical Explainer.

<https://www.budget.canada.ca/fes-eea/2022/doc/gf-fc-en.pdf>