

## **Aether Catalyst Solutions, Inc.**

### **MANAGEMENT'S DISCUSSION AND ANALYSIS Period ended September 30, 2023**

#### **GENERAL**

This management's discussion and analysis ("MD&A") of financial position and the results of operations is prepared as at November 29, 2023 and should be read in conjunction with the unaudited condensed interim consolidated financial statements of Aether Catalyst Solutions, Inc. ("the Company") for the period ended September 30, 2023 and 2022 and related notes thereto.

These condensed interim consolidated financial statements were prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). All dollar amounts included therein and in the following MD&A are in Canadian dollars except where noted. These documents and other information relevant to the Company's activities are available for viewing on SEDAR+ at [www.sedarplus.ca](http://www.sedarplus.ca).

#### **FORWARD-LOOKING STATEMENTS**

Certain statements contained in this MD&A may constitute "forward-looking statements". Such term is defined in applicable securities laws. The forward-looking information includes, without limitation, the success of research and development activities and other similar statements concerning anticipated future events, conditions or results that are not historical facts. These statements reflect management's current estimates, beliefs, intentions and expectations; they are not guarantees of future performance. The Company cautions that all forward-looking information is inherently uncertain and that actual performance may be affected by a number of material factors, many of which are beyond the Company's control. Such factors include, among others, risks relating to research and development; the Company's intellectual property applications being approved, the Company's ability to protect its proprietary rights from unauthorized use or disclosure, the ability of the Company to obtain additional financing; the Company's limited operating history; the need to comply with environmental and governmental regulations; fluctuations in currency exchange rates; operating hazards and risks; competition; and other risks and uncertainties. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking information, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. Accordingly, actual future events, conditions and results may differ materially from the estimates, beliefs, intentions and expectations expressed or implied in the forward-looking information. All statements are made as of the Report Date and, except as required by law, the Company is under no obligation to update or alter any forward-looking information.

#### **DESCRIPTION OF BUSINESS**

Aether Catalyst Solutions, Inc. ("Aether" or the "Company") was incorporated under the British Columbia Business Corporations Act ("BCBCA") on July 8, 2011.

The Company is a research and development company that is engaged in the development and potential subsequent commercialization of catalytic materials, initially for use in gasoline engine automotive emissions abatement, but with other possible applications (including, for instance, diesel, stationary power and volatile organic compounds).

The catalytic converter can be effective at reducing automotive emissions, but that performance comes at a cost. Generally, the catalytic converters that have been developed to date utilize expensive materials, including precious metals and rare earth metals. In order to continue to meet escalating emissions standards, absent further and more cost-effective technologies, the only route is to increase the loading of these materials. These expensive materials increase the cost of catalytic converters to the extent that they have become a significant cost component of vehicles.

The Company has developed a low-cost, high-performance three-way catalyst to replace the more costly precious metal-based catalysts used in today's automotive catalytic converters. The Company's patent-pending technology does not contain any platinum, palladium, or Rhodium. Further, the Company has third party testing to validate internal performance tests of its catalysts.

The Company's technology makes use of inexpensive base metals. Base metal catalysts typically have a lower activity than precious metals and are more susceptible to hydrothermal instability when exposed to the severe environment of the automobile's exhaust. Typically, the Company's catalysts are active and stable at high temperatures.

The Company's technology has been developed to overcome the aging robustness issues that are typically seen in other low-cost catalyst technology. Specifically, the Company has tested hundreds of sub-scale catalyzed plugs, and has developed a unique formulation that allows for aging temperatures of up to 900 C in a range of environments.

The company is currently engaged in three areas of business activity:

1. **SMALL MOTORS:** In February of 2021, the company announced the Urban Small Motors Emissions Abatement Project ("USMEAP"), and in March of 2021, the City of Burnaby signed on as a test partner, allowing Aether to equip several of its riding mowers with Aether catalysts. USMEAP is finishing its third year, and has proven very successful – during the 2023 growing season, the mowers equipped with Aether catalysts have continued to reduce 100% of NOx with between 193 and 277 hours of use at the time of testing (October 16, 2023). Having proven the viability of equipping small motors with catalysts, Aether is actively seeking a partner amongst the small motors OEMs.
2. **LARGE COMMERCIAL VEHICLES:** In October 2021, the Company entered into a Non-Disclosure Agreement (the "NDA") with a large US fleet operator ("Fleetco") to begin the evaluation and development of the Company's catalyst for use in their fleet of over 150,000 vehicles.
3. **AUTOMOTIVE:** In April 2023, the company announced that it has entered into a Joint Development Agreement (the "JDA") with a special materials company (the "**Company**") that operates multiple manufacturing facilities globally. The aim of the JDA is to integrate one of Aether's catalysts into the Company's existing novel catalyst substrate to produce a catalytic device for the automotive and commercial vehicle market. The Company will be responsible for all costs and expenses associated with marketing, validation, and commercialization of the final product. Upon completion of the JDA and the determination that there is a final product, the parties will negotiate a technology license agreement.

The company has, subsequent to the second quarter, entered into an NDA with an Asian based global tier-1 automotive components company to investigate the use of Aether catalysts in an underserved Asian market.

While the Company's primary activities currently involve conducting research, the Company's current areas of business offer pathways to commercialization.

## OVERALL PERFORMANCE

The Company has no revenues, so its ability to ensure continued operations is its ability to obtain the necessary funding to complete development of its base metal catalytic material.

### First Quarter Highlights

- Announced year two results of the Urban Small Motors Emissions Abatement Project (USMEAP) with the City of Burnaby, and its extension for year three.
- Entered into a Joint Development Agreement with a special materials company that operates multiple manufacturing facilities globally.

### Second Quarter Highlights

- Initial Testing of Mowers at start of Year 3 of USMEAP showed all units remain at 100% NOx conversion, with no degradation despite sitting unused through the winter.
- Kick-off of JDA involving technical meetings and the setting of standards for the formatting of catalytic materials to be supplied by Aether.

### Third Quarter Highlights

- Completed work supporting the Company's PCT Patent Application.
- Shipped first batch of catalyst to the Company's JDA partner.
- Began formal discussions with an Asian Tier-1 automotive components supplier (subsequently executed NDA).
- Began outreach to small motors OEMs

The head and registered offices of the Company are located at Unit 104, 8337 Eastlake Drive, Burnaby, British Columbia, V5A 4W2.

## QUARTERLY INFORMATION

Quarter Ended	2023	2023	2023	2022
	September 30	June 30	March 31	December 31
Total assets	\$ 83,818	\$ 164,543	\$ 135,869	\$ 221,003
Working capital deficit	(162,737)	(58,283)	(134,283)	(20,956)
Net income (loss) for the quarter	(177,766)	(163,425)	(132,196)	50,822
Net income (loss) per share (basic and diluted)	(0.00)	(0.00)	(0.00)	0.00

<b>Quarter Ended</b>	<b>2022</b>		<b>2021</b>	
	<b>September 30</b>	<b>June 30</b>	<b>March 31</b>	<b>December 31</b>
Total assets	\$ 336,610	\$ 835,559	\$ 657,569	\$ 762,416
Working capital	132,046	79,954	289,135	530,245
Net loss for the quarter	88,001	(462,259)	(213,791)	(133,671)
Net loss per share (basic and diluted)	0.00	(0.01)	(0.00)	(0.00)

During the quarter ended September 30, 2023, the net loss increased to \$177,766 compared to net loss of \$163,425 for the quarter ended June 30, 2023. The increase in loss is primarily due to increase in share-based compensation of \$70,762 (June 30, 2023 - \$1,065).

During the quarter ended June 30, 2023, the net loss increased to \$163,425 compared to net loss of \$132,196 for the quarter ended March 31, 2023. The increase in loss is primarily due to increase in professional fees of \$33,112 (March 31, 2023 - \$11,350), and office, supplies, and miscellaneous expenses of \$19,467 (March 31, 2023 - \$10,085).

During the quarter ended March 31, 2023, the net loss increased to \$132,196 compared to net income of \$50,822 for the quarter ended December 31, 2022. The increase in loss is primarily due to net gain from discontinued operations of \$50,000 that was recorded in the prior period.

During the quarter ended December 31, 2022, the net income decreased to \$50,822 compared to net income of \$88,001 for the quarter ended September 30, 2022. The decrease was primarily due to consulting of \$21,700 (September 30, 2022 - \$24,450), wages and benefits of \$41,333 (September 30, 2022 - \$19,307), and professional fees of \$11,633 (September 30, 2022 - \$10,430).

During the quarter ended September 30, 2022, the net income increased to \$88,001 compared to net loss of \$462,259 for the quarter ended June 30, 2022. The increase was primarily due to wages and benefits of \$19,307 (June 30, 2022 - \$367,699), depreciation of \$44,642 (June 30, 2022 - \$30,089), professional fees of \$10,430 (June 30, 2022 - \$25,909) and gain on sale of subsidiary of \$919,901 (June 30, 2022 - \$28,750) arising primarily from the divestiture of the Company's subsidiary Cap Clean.

During the quarter ended June 30, 2022, the net loss increased to \$462,259 compared to \$213,791 for the quarter ended March 31, 2022. The increase was primarily due to wages and benefits of \$367,699 (March 31, 2022 - \$158,197), depreciation of \$30,089 (March 31, 2022 - \$14,511) and professional fees of \$25,909 (March 31, 2022 - \$17,704). Increases are primarily due to increased activities in its subsidiary, Cap Clean.

During the quarter ended March 31, 2022, the net loss increased to \$213,791 compared to \$133,671 for the quarter ended December 31, 2021. The increase was primarily due to an increase in wages and benefits of \$158,197 (December 31, 2021 - \$60,657).

## **RESULTS OF OPERATIONS**

### **Nine months ended September 30, 2023**

During the nine months ended September 30, 2023, the Company recorded a net loss of \$473,387 (2022 - \$616,799). Significant fluctuations include the following:

- i) Amortization decreased to \$48,971 (2022 - \$89,242) as a result of the declining asset base to amortize for the property, plant and equipment during the current period.
- ii) Consulting fee decreased to \$67,050 (2022 - \$76,100) due to fewer consultants engaged during the current period.
- iii) Interest and accretion decreased to \$4,957 (2022 - \$18,151) due to accretion of interest from the right-of-use assets on Cap Clean premises was no longer included during the current period.
- iv) Office expenses decreased to \$45,189 (2022 - \$75,454) due to less supplies used in the business operations during the current period as a result of the sale of the Company's subsidiary Cap Clean.
- v) Share-based compensation decreased to \$74,293 (2022 - \$676,700) as the result of fewer stock options granted and vested during the current period.
- vi) Shareholder communication decreased to \$1,347 (2022 - \$32,862) as the result of the Company's cost-saving efforts during the current period.
- vii) Wages and benefits decreased to \$169,099 (2022 - \$545,203) as the result of fewer payroll employees after sale of the Company's subsidiary Cap Clean.
- viii) Grants and government tax credit decreased to \$16,000 (2022 - \$50,079) as the result of the ending of our IRAP in the comparative period.
- ix) Gain on sale of interest in subsidiary decreased to \$Nil (2022 - \$919,901) as the result of selling the Company's interest in its subsidiary, Cap Clean, resulting in a gain on sale of subsidiary of \$919,901 in the comparative period.

### **Three months ended September 30, 2023**

During the three months ended September 30, 2023, the Company recorded a net loss of \$177,766 (2022 - income of \$88,001). Significant fluctuations include the following:

- i) Amortization decreased to \$2,551 (2022 - \$44,642) as a result of the declining asset base to amortize for the property, plant and equipment during the current period.
- ii) Consulting fee decreased to \$18,150 (2022 - \$24,450) due to fewer consultants engaged during the current period.
- iii) Interest and accretion decreased to \$1,563 (2022 - \$10,391) due to accretion of interest from the right-of-use assets on Cap Clean premises was no longer included during the current period.

- iv) Share-based compensation decreased to \$70,762 (2022 - \$676,700) as the result of fewer stock options granted and vested during the current period.
- v) Shareholder communication decreased to \$1,229 (2022 - \$32,862) as the result of company's cost-saving efforts during the current period.
- vi) Wages and benefits increased to \$57,084 (2022 - \$19,307) as the result of additional employees hired during the current period.
- vii) Gain on sale of interest in subsidiary decreased to \$Nil (2022 - \$919,901) as the result of selling the Company's interest in its subsidiary, Cap Clean, resulting in a gain on sale of subsidiary of \$919,901 in the comparative period.

## **LIQUIDITY AND CAPITAL RESOURCES AND GOING CONCERN**

Working capital deficiency at September 30, 2023 was \$162,737 (December 31, 2022 – \$20,956). This was primarily a result of increased accounts payables, accrued liabilities and loan payables during the current period.

During the period ended September 30, 2023, the Company had the following cash flows:

- i) cash used in operating activities was \$238,233 (2022 - \$497,175) relating to the statement of loss and comprehensive loss adjusted for non-cash items.
- ii) cash used in investing activities was \$Nil (2022 - \$232,204) relating to proceeds from purchase of property, plant and equipment.
- iii) cash provided by financing activities was \$179,903 (2022 – \$261,442) primarily related to loan received and lease payments for right of use asset.

The condensed interim consolidated financial statements were prepared using accounting policies consistent with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board (“IASB”), with the assumption that the Company will be able to realize its assets and discharge its liabilities in the normal course of business rather than through a process of forced liquidation for the foreseeable future. The operations of the Company were primarily funded by the issue of share capital and loans. The continued operations of the Company are dependent on its ability to develop a sufficient financing plan, receive continued financial support from related parties and lenders, complete sufficient public equity financing, or generate profitable operations in the future. These condensed interim consolidated financial statements do not include any adjustments to the amounts and classification of assets and liabilities that might be necessary should the company be unable to continue in business.

The Company is in the business of research and development that by its nature involves a high degree of risk. There can be no assurance that the Company's business and strategy will enable it to become profitable or sustain profitability in future periods. The Company's information technology systems are subject to disruption, damage or failure from a number of sources. This may result in a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects. Additionally, the Company estimates that it will need additional capital to operate for the upcoming year. These material uncertainties may cast significant doubt on the Company's ability to continue as a going concern.

## OFF-BALANCE SHEET ARRANGEMENTS

There are no off-balance sheet arrangements or obligations that are not disclosed in the condensed interim consolidated financial statements.

## RELATED PARTY TRANSACTIONS

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	Period ended September 30, 2023	Period ended September 30, 2022
<b>Transactions with Key Management Personnel</b>		
Consulting fees paid to a director, officers, a company with common directors and a company owned by a director and officer	\$ 45,000	\$ 45,000
Wages paid to officers	\$ 74,191	\$ -
Wages accrued to directors and officers of the subsidiary	\$ -	\$ 345,531

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As at September 30, 2023, receivables include \$9,200 (December 31, 2022 – \$35,400) owing from companies with common directors.

As at September 30, 2023, the accounts payable included \$6,260 (December 31, 2022 – \$Nil) owing to officers and a company controlled by a director of the Company.

## CHANGES IN ACCOUNTING STANDARDS

Please refer to the September 30, 2023 unaudited condensed interim consolidated financial statements on [www.sedarplus.ca](http://www.sedarplus.ca) for accounting policy pronouncements.

## FINANCIAL INSTRUMENTS

Please refer to the September 30, 2023 unaudited condensed interim consolidated financial statements on [www.sedarplus.ca](http://www.sedarplus.ca) for risks and financial instruments.

## OUTSTANDING SHARE DATA

As at November 29, 2023, the Company had the following securities issued and outstanding:

	Number	Exercisable	Exercise Price	Expiry Date
Common shares	<b>54,282,794</b>			
Options	1,050,000	1,050,000	\$0.20	November 28, 2024
	350,000	350,000	\$0.10	November 4, 2025
	1,400,000	1,400,000	\$0.10	July 14, 2026
	<b>2,800,000</b>	<b>2,800,000</b>		
Warrants	1,532,500	1,532,500	\$0.100	April 14, 2024
	467,500	467,500	\$0.100	April 24, 2024
	<b>2,000,000</b>	<b>2,000,000</b>		