



TARGETED
MICROWAVE
SOLUTIONS

Management's Discussion and Analysis

For the three and six months ended June 30, 2021 and 2020

MANAGEMENT'S DISCUSSION AND ANALYSIS

This Management's Discussion and Analysis ("MD&A") of Targeted Microwave Solutions Inc. (the "Company") provides analysis of the Company's financial results for the period ended June 30, 2021. The following information should be read in conjunction with the accompanying condensed interim consolidated financial statements and notes for the period ended June 30, 2021 prepared in accordance with International Accounting Standard 34, *Interim Financial Reporting*, and the audited consolidated financial statements and accompanying notes for the year ended December 31, 2020. These condensed interim consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"). The Board of Directors of the Company have approved the information and disclosures contained in this MD&A. This MD&A is dated as at August 26, 2021, and as of this date, there were 128,024,439 common shares issued and outstanding, no stock options outstanding and no warrants outstanding. All figures are in United States dollars unless otherwise noted. References to "C\$" are to Canadian dollars. Additional information relating to the Company is available on SEDAR at www.sedar.com.

FORWARD-LOOKING STATEMENTS

Except for statements of historical fact contained herein, the information presented in this MD&A constitutes "forward-looking statements" or "information" (collectively "forward-looking statements"). These statements relate to analyses and other information that are based upon forecasts of future results, estimates of amounts not yet determinable and assumptions of management.

Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often, but not always, using words or phrases such as "expects" or "does not expect", "is expected", "anticipates" or "does not anticipate", "plans", "estimates" or "intends", or stating that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved) are not statements of historical fact and may be "forward-looking statements". Such forward-looking statements include, but are not limited to, those with respect to: the benefits of and development and commercialization, if at all, of the Company's microwave technology; financial information regarding the Company and/or its availability and use of funds; the Company's research into the drying potential of its microwave application to natural mineral aggregates, other naturally occurring raw materials and processed feedstock; demand for electricity generation; the status of environmental and other regulation; the timing, completion or benefits of any joint venture or similar arrangement; the effectiveness of new improvements in the Company's Generation 2.0 reactors and the Company's new Generation 3.0 reactors; and other factors and events described herein.

Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual plans, results, performance or achievements of the Company to be materially different from any future plans, results, performance or achievements expressed or implied by such forward-looking statements. Such risks and other factors include, among others: limited operating history; financing risks; shareholder influence; technical issues and delays; commercial viability of processed industrial materials; negative results of technology testing and development; commercial acceptance; construction of commercial plants; management of growth; joint ventures; relationships with strategic partners; foreign operations; foreign subsidiaries and repatriation of earnings; technology and protection of intellectual property; invalidation of patents; intellectual property infringement; environmental and safety regulations and risks; dependence on key management personnel, employees and consultants; anti-bribery and anti-corruption; capital cost estimates; increased demand for services and equipment; competition; currency fluctuations; natural and human caused disasters; litigation; possible conflicts of interest of directors and officers of the Company; market price and listing of common shares; regulatory risks; tax exposures; changes in laws and regulations; uninsurable risks; current global financial conditions; and other factors discussed under the heading "Risk Factors" in the Company's MD&A for the year ended December 31, 2020. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in the forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements contained in this MD&A.

Forward-looking statements are made based upon Management's beliefs, estimates and opinions on the date the statements are made, and the Company undertakes no obligation to update any forward-looking statement if these beliefs, estimates and opinions or other circumstances should change, except as may be required by applicable law.

COMPANY BACKGROUND AND DESCRIPTION OF THE BUSINESS

The Company is a microwave process developer specializing in clean emission, high-throughput industrial drying solutions. Industrial drying is a vital manufacturing process used by heavy industry to transform bulk aggregates such as minerals, biomass and fossil fuels into finished commercial products. The prevailing industrial drying technology in the market today is the fossil-fuel combustion rotary kiln. This technology generates heat by combusting fossil fuels such as coal, bunker fuel and natural gas, which results in the production of polluting carbon emissions. It is generally accepted that increasingly stringent environmental regulations are having a dramatic impact on the competitiveness and profitability of the industrial sector worldwide. The Company believes that the market for a clean emission, digital drying technology represents a global economic opportunity.

The Company's microwave drying technology represents a challenge to the dominance of fossil-fuel combustion dryers in the market. Unlike rotary kilns for example, the Company's drying technology generates minimal to no fossil fuel combustion emissions. Instead, the Company uses digital microwave heating processes within a proprietary, vertical chamber system, to dry industrial materials on a continuous basis being developed to perform at a high throughput capacity. The Company believes that its technology has the potential to deliver a safer, higher efficiency and more controllable drying process that will allow the heavy industrial sector to challenge the mainstream narrative that large-scale industry is incompatible with responsible, environmental policy.

The core of the Company's technology is a proprietary microwave delivery and process control system designed to achieve uniform moisture reduction across a wide range of industrial aggregates, including those with challenging bulk densities, particle sizes and flow characteristics. Unlike conventional thermal drying technologies, the Company's process generates heat within the input material, as opposed to wasting energy by first heating the environment around the target material. This unique approach allows for significantly cooler ambient temperatures during processing, which helps substantially mitigate combustion risk and prevents the unwanted release of volatile gases that generate polluting greenhouse emissions. In initial continuous trials conducted at the Company's commercial demonstration facility in King William, Virginia (the "King William Plant"), the Company's system has shown heat transfer efficiency rates better than competing conventional thermal drying technologies. Additionally, the Company's microwave drying solutions use power only when needed and can be turned on or off almost instantaneously, making the process compatible for automatic control and real-time calibration based on key control factors, such as moisture targets, microwave power levels and feed rate.

The Company's current "Generation 3.0" system, which was installed at the King William Plant in November 2016, is designed to occupy a small footprint and integrate easily into a variety of manufacturing operations and can deliver up to 2,500 kilowatts of concentrated 0.915 gigahertz microwave power to a variety of target feedstocks (such as industrial minerals, low-rank coal and wood chips) on a continuous feed basis. Despite its light-industrial characteristics, the Company's Generation 3.0 system can achieve processing throughput rates traditionally associated with heavy industrial equipment by utilizing a proprietary vertical processing design and in-house processing controls software. The Company has run a variety of processing trials of low-rank coal, wood biomass, and industrial clay and aims to work with industry partners in an effort to commercialize its technology.

Currently, the Company has suspended all operations (including research and testing at the King William Plant), closed its U.S. offices, terminated all employee personnel and disposed of the King William Plant.

Due to the Company's current challenges, the Company will continue to prioritize the restructuring and settlement of the Company's debt and liabilities. As part of this process, securing access to capital will continue to drive the Company's decision-making process with respect to go-forward business opportunities. In 2021,

the Company will be looking outside its traditional core focus area of microwave drying in order to pursue potential sources of revenue and funding partners.

SIGNIFICANT ACCOUNTING POLICIES

A complete summary of the Company's significant accounting policies is provided in the consolidated financial statements for the year ended December 31, 2020. The accounting policies in the unaudited condensed interim consolidated financial statements for the three and six months ended June 30, 2021 are consistent with those applied in the consolidated financial statements for the year ended December 31, 2020.

CRITICAL JUDGEMENTS AND ESTIMATES

The preparation of the condensed interim consolidated financial statements requires that the Company's Management to make assumptions and estimates of effects of uncertain future events on carrying amounts of the Company's assets and liabilities at the end of the reporting period. Actual future outcomes could differ from present estimates and assumptions, potentially having material future effects on the Company's consolidated financial statements. Estimates are reviewed on an ongoing basis and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable in the circumstances. Revisions to estimates and the resulting effects on the carrying amounts of the Company's assets and liabilities are accounted for prospectively. The Company is also required to make critical judgements in applying certain accounting policies.

The critical judgements and estimates applied in the preparation of the Company's condensed interim consolidated financial statements for the three and six months ended June 31, 2021 are consistent with those applied and disclosed in its audited consolidated financial statements for the year ended December 31, 2020.

RESULTS OF OPERATIONS: THREE AND SIX-MONTH RESULTS

The table below summarizes selected financial information from the Company's condensed interim consolidated financial statements for the three and six-month period ended June 30, 2021, compared to the three and six months ended June 30, 2020.

	Three months ended June 30		Six months ended June 30	
	2021	2020	2021	2020
	\$	\$	\$	\$
Operating expenses	13,766	11,925	20,337	15,412
Other expenses	-	-	-	-
Net loss and comprehensive loss	13,766	11,925	20,337	15,412
Net loss attributable to shareholders of the company	13,766	11,925	20,337	15,412
Loss per share	(0.00)	(0.00)	(0.00)	(0.00)

During the six months ended June 30, 2021, the Company's primary focus was on reducing Company overhead, pursuing financing options and formulating potential go-forward strategies for the Company.

Operating Expenses

Operating expenses for the three and six-month period ended June 30, 2021 compared to the three and six months ended June 30, 2020 are as follows:

	Three months ended June 30		Six months ended June 30	
	2021	2020	2021	2020
	\$	\$	\$	\$
Foreign exchange loss (gain)	4,779	1,409	2,165	(1,863)
Office, rent and other	3,534	4,870	7,724	8,366
Investor relations, filing and compliance fees	2,179	3,155	3,993	5,135
Professional fees	3,274	2,491	6,455	3,774
Total	13,766	11,925	20,337	15,412

Foreign Exchange Loss/Gain

The foreign exchange loss increased by \$3,370 to \$4,779 for the three-month period ended June 30, 2021 from a loss of \$1,409 for the comparable period in 2020. The foreign exchange loss increased by \$4,028 to \$2,165 for the six-month period ended June 30, 2021 from a gain of \$(1,863) for the comparable period in 2020. The changes in foreign exchange gain/loss for the three and six months ended June 30, 2021 compared to the same periods in the prior year is primarily attributable to the change in the Canadian/U.S. foreign exchange rates on vendor balances owing and accruals, Canadian sales tax receivables, as well as Canadian dollar denominated bank balances.

Office, Rent and Other

Office, rent and other expenses decreased by \$1,336 to \$3,534 for the three-month period ended June 30, 2021 from \$4,870 for the comparable period in 2020. Office, rent and other expenses decreased by \$642 to \$7,724 for the six-month period ended June 30, 2021 from \$8,366 for the comparable period in 2020. The decrease in these expenses for the three and six months ended June 30, 2021 compared to the same periods last year is due to decreased spending on internal accounting and bookkeeping due to decreased business activity.

Investor Relations, Filing and Compliance Fees

Investor relations, filing and compliance fees decreased by \$976 to \$2,179 for the three-month period ended June 30, 2021 from \$3,155 for the comparable period in 2020. Investor relations, filing and compliance fees decreased by \$1,142 to \$3,993 for the six-month period ended June 30, 2021 from \$5,135 for the comparable period in 2020. The decrease in these fees for the three and six months ended June 30, 2021 compared to the same periods in the prior year is primarily attributable to overall reduced spending on public disclosure fees incurred in the three and six months ended June 30, 2021.

Professional Fees

Professional fees increased by \$783 to \$3,274 for the three-month period ended June 30, 2021 from \$2,491 for the comparable period in 2020. Professional fees increased by \$2,681 to \$6,455 for the six-month period ended June 30, 2021 from \$3,774 for the comparable period in 2020. The increase in these fees for the three and six months ended June 30, 2021 compared to the same periods last year is primarily attributable the reversal of over accrued professional fees incurred in 2019 (reversed in Q1 2020).

Net Loss

Due to the factors set forth above, net loss increased by \$1,841 to \$13,766 for the three months ended June 30, 2021 from \$11,925 in the comparable period last year. For the six months ended June 30, 2021, net loss increased by \$4,925 to \$20,337 from \$15,412 for the same six-month period last year.

Net Loss Attributable to Shareholders of the Company

Due to the factors set forth above, net loss attributable to shareholders of the Company increased by \$1,841 to \$13,766 for the three months ended June 30, 2021 from \$11,925 in the comparable period last year. For the six months ended June 30, 2021, net loss attributable to shareholders of the Company increased by \$4,925 to \$20,337 from \$15,412 for the same six-month period last year.

Net Loss Attributable to Non-Controlling Interests

The net loss attributable to non-controlling interests for the three and six months ended June 30, 2021 was \$nil and \$nil, respectively, for the 49% non-controlling interest in Targeted Microwave Solutions Hong Kong Limited not held by the Company's shareholders.

QUARTERLY INFORMATION

The following table presents the unaudited summarized financial information for the last eight quarters:

	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
	F2021	F2021	F2020	F2020	F2020	F2020	F2019	F2019
	\$	\$	\$	\$	\$	\$	\$	\$
Operating expenses	13,766	6,571	21,159	11,951	11,925	3,487	9,792	28,519
Other expenses	-	-	-	-	-	-	12,881	-
Loss before income taxes	13,766	6,571	21,159	11,951	11,925	3,487	22,673	28,519
Income taxes	-	-	-	-	-	-	-	-
Net loss	13,766	6,571	21,159	11,951	11,925	3,487	22,673	28,519
Non-controlling interest	-	-	-	-	-	-	-	-
Net loss attributable to shareholders of the Company	13,766	6,571	21,159	11,951	11,925	3,487	22,673	28,519
Loss per share	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)

The quarterly fluctuations in net loss are generally correlated with the Company's restructuring activities associated with Company financing and potential go-forward strategies. Net loss is also impacted by the non-cash fluctuations in the fair value of derivative liabilities in the period, share based compensation, interest associated with Company debt and the Company's corporate costs associated with investor relations and executive compensation (among other operating expenses).

LIQUIDITY AND CAPITAL RESOURCES

The Company generally manages its liquidity risk by preparing cash flow forecasts and anticipating investing and financing activities. Management and the Board are involved in the review, planning and approval of budgets and significant expenditures and commitments (refer to section below on liquidity risk).

As at June 30, 2021, the Company had a consolidated cash balance of \$151 (December 31, 2020 - \$2,071). At present, the Company is actively seeking additional financing in the form of debt or equity (or both) to fund potential go forward options and to settle existing obligations. Should the Company be unsuccessful in raising funds, it may not be able to fund future growth or satisfy the existing financial obligations as noted in note 2(b) of the condensed interim consolidated financial statements.

Cash Flows

The table below sets forth a summary of cash flow activity and should be read in conjunction with the Company's cash flow statements:

	Three months ended June 30		Six months ended June 30	
	2021	2020	2021	2020
	\$	\$	\$	\$
Cash outflow from operating activities	(1,881)	(3,002)	(1,920)	(35,015)
Cash inflow (outflow) from financing activities	-	-	-	(5,712)
Increase (decrease) in cash during the period	(1,881)	(3,002)	(1,920)	(40,727)
Cash, beginning of period	2,032	5,746	2,071	43,471
Cash, end of period	151	2,744	151	2,744

The cash flow deficit from operating activities improved by \$1,121 to \$(1,881) for the three-month period ended June 30, 2021 from \$(3,002) for the same comparable period last year. The cash flow deficit from operating activities for the six months ended June 30, 2021 improved by \$33,095 to \$(1,920) compared to \$(35,015) for the six months ended June 30, 2020. The cash flow deficit from operating activities represents cash flows from net losses, excluding expenses not affecting cash, principally net changes in non-cash balances relating to operations.

Cash outflows generated from financing activities decreased by \$5,712 to \$nil for the six-month period ended June 30, 2021 from \$5,712 for the same comparable period last year. During the six months ended June 30, 2020, the Company made loan repayments of \$5,712 to Claredon Capital Corp ("Claredon"), a related party.

TRANSACTIONS WITH RELATED PARTIES

Related Party Transactions

The Company's related parties include its subsidiaries, key management personnel and entities owned by shareholders. At June 30, 2021, the Company owed a total of \$67,754 (December 31, 2020 - \$49,219) to an officer of the Company which was included in accounts payable. These amounts were unsecured, non-interest bearing and have no fixed terms of repayment.

The Company received loans from related parties and owed a total \$150,460 of principal and accrued interest at June 30, 2021 (December 31, 2020 - \$150,460). The loan is held by Claredon.

Compensation of Directors and Other Key Management Personnel

Compensation paid or payable to the Company's directors and key management for services provided during the period ended June 30, 2021 was \$nil (June 30, 2020 - \$nil). Key management is defined by the Company as the Chief Executive Officer ("CEO"), Chief Financial Officer ("CFO"), Chief Operating Officer ("COO") and their controlled companies.

FINANCIAL INSTRUMENTS RISK AND EXPOSURE

The Company's risks related to financial instruments, including credit risk, liquidity risk, currency risk and interest rate risk, including the Company's strategy to manage those risks, are described in note 10 of the Company's consolidated financial statements for the year ended December 31, 2020. As at the date hereof, the Company believes that there were no significant changes to those risks during the six months ended June 30, 2021. Further, the Company's interest rate risk primarily pertains to its loans with related parties.

Liquidity Risk

The Company manages its liquidity risk by preparing and reviewing forecasted expenditure and cash flow budgets. As noted above, the Company had a consolidated cash balance of \$151 as at June 30, 2021 (December 31, 2020 - \$2,071) with a working capital deficit of \$329,351 (December 31, 2020 - working capital deficit of \$309,014). This working capital deficit balance includes the Company's loan payable balance of \$150,460 as at June 30, 2021. As such, the Company is exposed to significant liquidity risk. In order to address this liquidity risk, the Company is actively seeking additional financing in the form of debt or equity (or both).

Should the Company be unsuccessful in raising funds, it may not be able to satisfy its existing financial obligations or fund future growth.

The following table summarizes the remaining contractual maturities of the Company's financial obligations as at June 30, 2021:

	Within 1 year	2 to 5 years	Over 5 years	June 30, 2021	December 31, 2020
Accounts payable	\$ 143,382	\$ -	\$ -	\$ 143,382	\$ 131,384
Accrued liabilities	37,135	-	-	37,135	31,598
Loan repayments	150,460	-	-	150,460	150,460
	\$ 330,977	\$ -	\$ -	\$ 330,977	\$ 313,442

Currency Risk

During the six months ended June 30, 2021 and 2020, the Company recognized a net foreign exchange loss of \$2,165 and a gain of \$1,863, respectively. The Company's net foreign currency exposures at June 30, 2021 have remained relatively consistent with the December 31, 2020 year-end and are primarily related to Canadian dollar sales tax receivables, Canadian dollar accounts payable and accrued liabilities, as well as Canadian dollar denominated bank balances. As at June 30, 2021, the Company has foreign exchange exposure to the Canadian dollar as a result of these Canadian dollar denominated balances noted above, which the Company does not expect significant foreign exchange gains or losses to result.

OTHER RISKS FACTORS AND UNCERTAINTIES

A comprehensive discussion of risk factors is included in the Company's MD&A for the year ended December 31, 2020, a copy of which is available on SEDAR at www.sedar.com.

OFF-BALANCE SHEET ARRANGEMENTS

As at June 30, 2021, the Company did not have any off-balance sheet arrangements.