



MANAGEMENT'S DISCUSSION & ANALYSIS

For the Quarter Ended August 31, 2020

Introduction

This Management Discussion and Analysis (MD&A) explains the material changes in Thermal Energy International Inc.'s ("Thermal Energy" or the "Company") financial position and financial performance for the first quarter of Fiscal Year 2021, ended August 31, 2020 (or "Q1 2021"), and compares the Q1 2021 financial results to the previous quarter ended August 31, 2019 (or "Q1 2020"). The unaudited condensed consolidated interim financial statements and accompanying notes constitute an integral part of the discussion and should be read in conjunction with this MD&A. Unless otherwise indicated, all comparisons to the first quarter of FY 2021 are against the first quarter of FY 2020. Additional information relating to the Company is available on SEDAR at www.sedar.com.

Currency

All financial information in this report is stated in Canadian Dollars, which is both the presentation and functional currency of the Company. Approximately 38% of our operations, assets and liabilities are denominated in British Pound Sterling and 34% in US Dollar. As such, foreign currency fluctuations affect the reported values of individual lines on our statement of financial position and income statement. When the Canadian dollar strengthens, the reported values decrease, and the opposite occurs when the Canadian dollar weakens.

Review and Approval by the Board of Directors

The Board of Directors, on recommendation of the Audit Committee, approved the content of this MD&A on October 22, 2020. Disclosure contained in this document is current to October 28, 2020, unless otherwise stated.

Forward-Looking Statements

This MD&A may include statements that are forward-looking. These statements are not guarantees of future performance and are subject to risks and uncertainties that could cause actual results to differ materially from those in the forward-looking statements. We discuss the principal risks of our business in Section 9 of this MD&A. We cannot provide any assurance that forecasted financial or operational performance will actually be achieved. If it is achieved, we cannot provide assurance that it will result in an increase in our share price. See Section 10 entitled "Forward-Looking Information".

Table of Contents

	<u>Page</u>
1. Our Business	2
1.1 Company Overview	2
1.2 Core Businesses	2
1.3 Strategy	3
2. Performance Measures	3
2.1 EBITDA	3
2.2 Order Backlog	4
3. Performance	4
3.1 Summary of First Quarter Results	4
3.2 Liquidity and Capital Resources	6
3.3 Segmentation Information	7
3.4 Quarterly Financial Information	10
4. Related Party Transactions	11
5. COVID-19 Update	12
6. Business Outlook	12
7. Summary of Outstanding Shares and Dilutive Instruments	13
8. Critical Accounting Estimates and Changes in Accounting Standards	14
9. Risk Factors and Risk Management	15
10. Forward-Looking Information	17
11. Management's Responsibility for Financial Reporting	17

1. Our Business

1.1 Company Overview

Thermal Energy, established in 1991, is a global provider of proprietary and proven energy and water efficiency and emission reduction products and solutions to the industrial, commercial, and institutional markets. The Company is headquartered in Ottawa, Canada, with offices in the U.K., Italy, Germany, and U.S.

Thermal Energy engages clients through a unique mix of process, energy, environmental and financial expertise to save our customers money and improve their bottom lines by reducing their fuel use and carbon emissions. The Company's award-winning products have an excellent track record of longevity, proven reliability and performance and have been shown to provide: significant energy savings; improved water efficiency; reduced greenhouse gas emissions; lowered maintenance costs; improved product quality; and increased production efficiency. Thermal Energy's products are effective in a wide range of industries and applications.

More information on Thermal Energy can be found at www.thermalenergy.com. **GEM™**, **FLU-ACE®**, **THERMALONox™** and **DRY-REX™** are trademarks of Thermal Energy.

1.2 Core Businesses

The Company operates primarily in North America and Europe but also sells its products and services through representative agents throughout the rest of the world. The Company markets, sells, engineers, fabricates, constructs, installs and supports two technology lines – heat recovery solutions, including direct contact heat recovery solutions (e.g. **FLU-ACE®**), indirect contact heat recovery solutions (**HEATSPONGE** and **SIDEKICK**), and condensate return system solutions (**GEM™** steam traps). The Company is also developing several other technology lines, including low temperature biomass drying systems (**DRY-REX™**).

Management Discussion and Analysis for the Quarter Ended August 31, 2020

In 2008, the Company acquired Gardner Energy Management Limited, which owns, manufactures and sells the GEM™ steam traps throughout the world. As part of this transaction, the Company also acquired the 67% share of GEMchem Ltd, a UK-based water treatment company providing services within the UK only. On June 29, 2018, the Company acquired Boilerroom Equipment Inc., a company based in the U.S., which owns, manufactures and sells HEATSPONGE and SIDEKICK indirect contact heat recovery units.

The Company has two primary operational bases of operation, one in Ottawa, Canada covering North America (“Thermal Energy Ottawa”), and the other in Bristol, United Kingdom, covering Europe and the rest of the world (“Thermal Energy Bristol”). Although the Thermal Energy Ottawa is considered to be the center of excellence for heat recovery engineering and technical support, and Thermal Energy Bristol the center of excellence for GEM™ steam traps and condensate return systems engineering and technical support, continuous cross-training means that both Ottawa and Bristol have expertise across both major product lines.

Although the Company markets its products throughout the world, most sales are from within North America and Europe where the Company has direct sales and engineering staff. While North American and European markets continue to be the Company’s strategic focus, the Company also continues to look for new agents and distributors in other regions deemed to have potential.

1.3 Strategy

The Company’s mission is to be a best-in-class provider of return on investment-driven thermal energy efficiency technology and solutions to the industrial, institutional, and commercial sectors, helping our clients around the world improve their bottom line, move towards sustainable operations and reduce their environmental and carbon footprint. The Company’s products and services are best-in-class with world-wide application in a broad range of sectors.

The Company has representation in 28 countries around the world with a current focus on the key markets of North America and Europe. Thermal Energy’s penetration in these markets remains low and therefore the Company plans to continue growing its sales and distribution capabilities in these markets, while at the same time, building its business in other energy-intensive markets around the world.

We have sold our proprietary and proven products to hundreds of companies and institutions, including approximately 50 large companies in the pharmaceutical, food and beverage, pulp and paper, chemical and petrochemical sectors.

With an established global sales and distribution network, the Company is looking to develop and/or acquire additional complementary products and services that can be distributed through its existing network.

2. Performance Measures

The Company believes the following performance measures provide useful information to both management and investors to better understand the financial performance and financial position of the Company.

2.1 EBITDA

Management believes that EBITDA (earnings before interest, taxation, depreciation, amortization, impairment of intangible assets, and share-based compensation expense) is a useful performance measure as it approximates cash generated from operations, before tax, capital expenditures and changes in working capital, and excludes impairment of intangible assets. EBITDA also assists comparison among companies as it eliminates the differences in earnings due to how a company is financed. EBITDA does not have a standardized meaning prescribed by International Financial Reporting Standards (“IFRS”) and therefore may not be comparable to similar measures presented by other companies. There is no direct comparable IFRS measure for EBITDA. A reconciliation of net income (loss) to EBITDA is shown in section 3.4 Quarterly Financial Information.

Management Discussion and Analysis for the Quarter Ended August 31, 2020

2.2 Order Backlog

Order backlog is a useful performance measure that Management uses as an indicator of the short-term future revenue of our Company resulting from already recognized orders. The Company includes in “order backlog” any purchase orders that have been received by the Company but have not yet been reflected as revenue in the Company’s published financial statements. It is important to note that once an order or partial order is recorded as revenue, the order backlog is reduced by the amount of the newly reported revenue. Order backlog does not have a standardized meaning prescribed by International Financial Reporting Standards and therefore may not be comparable to similar measures presented by other companies.

3. Performance

3.1 Summary of First Quarter Results

	Q1 2021	Q1 2020
	\$	\$
Revenue	2,827,862	4,965,789
Cost of sales	1,503,659	2,775,271
Gross profit	1,324,203	2,190,518
Expenses:		
Administration, selling, marketing and business development	1,441,823	1,835,969
Research and development	17,486	54,092
	1,459,309	1,890,061
Operating income (loss)	(135,106)	300,457
Finance costs	(99,245)	(83,277)
Finance revenue	-	3,033
Income (loss) before income taxes	(234,351)	220,213
Income taxes recovery	16,251	21,048
Net income (loss) for the period	(218,100)	241,261
Exchange differences on translation of overseas operations	175,698	(161,056)
Total comprehensive income (loss) for the period	(42,402)	80,205
EBITDA for the quarter ¹	14,998	471,786
Order backlog as at August 31	6.0 million	12.8 million
Order backlog as at reporting date	9.6 million	14.6 million

1. A reconciliation of net income (loss) to EBITDA is shown in section 3.4 Quarterly Financial Information.

Management Discussion and Analysis for the Quarter Ended August 31, 2020

Revenues and Gross Profits

Revenues were \$2,827,862 in the first quarter ended August 31, 2020, representing a decrease of \$2,137,927, or 43.1%, compared to \$4,965,789 in the quarter ended August 31, 2019. The decrease of revenue in the first quarter of FY 2021 was mainly due to the delay in the delivery of heat recovery systems. The COVID-19 pandemic caused significant delays on heat recovery projects because customers' sites were either closed or our technical team and the subcontractors could not travel to site due to the travel restrictions.

The gross profit of \$1,324,203 in the quarter ended August 31, 2020 represented a decrease of \$866,315, or 39.5%, from the \$2,190,518 in the quarter ended August 31, 2019 due to the decrease in the revenues of heat recovery systems. Gross profit expressed as a percentage of revenue was 46.8% in the first quarter of FY 2021 compared with 44.1% in the same quarter of FY 2020. The increase was due to the change in the product split.

Expenses

Administration, selling, marketing and business development expenses ("Operating Expenses") in the quarter ended August 31, 2020, totaled \$1,441,823 compared to \$1,835,969 in the quarter ended August 31, 2019, a decrease of \$394,146, or 21.5%. The Company received funding from various government bodies as COVID-19 wage subsidies. During the first quarter of FY 2021, the company recognized \$408,563 related to COVID-19 wage subsidies as a reduction to operating expenses. As a result, the operating expenses decreased in the first quarter of FY 2021.

Research and development ("R&D") related to expenditures on various research and development programs. The Company receives tax credits and government funding on various research programs related to product development. The tax credits and government funding are accounted as a reduction of research and development expenses. The total expenses in the first quarter of FY 2021 was \$17,486, compared to \$54,092 in the first quarter of FY 2020.

Finance costs and finance revenue: Finance costs include interest expense on the long-term debt, amortization of deferred financing cost, and interest accretion on lease obligations. The first quarter of FY 2021 incurred a finance cost of \$99,245. The cost was higher than the first quarter of FY 2020 by \$15,968 due to the higher interest rate on the long-term debt. The interest rate is reassessed annually.

Loss before income taxes for the quarter ended August 31, 2020 was \$234,351, compared to an income of \$220,213 in the same quarter of the previous year. Income before income taxes decreased by \$454,564 mainly due to the decreased revenues caused by the delay in the delivery of heat recovery systems as a result of COVID-19. The gross profit decreased by \$866,315. However, the Company's operating expenses were \$394,146 lower due to the wage subsidies of \$408,563 recognized as a reduction to the operating expenses.

Income tax recovery in the first quarter of FY 2021 was \$16,251, as compared to a recovery of \$21,048 in the first quarter of FY 2020, a decrease of \$4,797.

Net loss for the first quarter of FY 2021 was \$218,100, compared to a net income of \$241,261 in the same quarter of the previous year, representing a decrease of \$459,361. The decrease in net income was mainly due to the decrease of gross profit of \$866,315 offset by the decrease in the operating expenses of \$394,146.

Comprehensive loss was \$42,402 for the first quarter of FY 2021, compared to a comprehensive income of \$80,205 for the first quarter of FY 2020. The increased comprehensive loss was mainly due to net losses incurred of \$218,100, offset by the translation gains of \$ 175,698 earned in Q1 2021.

EBITDA was \$14,998 for the first quarter of FY 2021, compared to a \$471,786 for the same quarter of the previous year, representing a decrease of \$456,788. The decrease was mainly due to the decrease in gross profit of \$866,315 offset by the reduction of operating expenses of \$394,146.

Management Discussion and Analysis for the Quarter Ended August 31, 2020

3.2 Liquidity & Capital Resources

Current assets decreased by \$125,541 to \$7,938,009 at August 31, 2020, compared to \$8,063,550 at May 31, 2020. The decrease was mainly due to the decrease in cash and cash equivalents of \$185,247 offset by the increase in trade and other receivables of \$118,161. Current liabilities decreased by \$993,253 to \$4,198,761, mainly due to the decrease in trade payable and accrued liabilities of \$1,618,700, offset by the increase in deferred revenue of \$430,890 and current portion of long-term debt of \$206,242.

Working capital increased by \$867,712 to \$3,739,248 at August 31, 2020, compared to \$2,871,536 at May 31, 2020. The increase was mainly due to the significant decrease in trade payables and accrued liabilities of \$1,618,700, offset by the decrease in cash and cash equivalents of \$185,247, the increase in deferred revenue of \$430,890 and current portion of long-term debt of \$206,242 at August 31, 2020. On July 23, 2020, the Company received \$1,000,000, the first tranche of the proceeds, from the Working Capital - COVID-19 loan. The Company was able to pay off a significant amount of trade payables and other liabilities with the loan proceeds received. In addition, during the first quarter of FY2021, the Company received two significant heat recovery orders, see Section 6 Business Outlook for more details. As a result, the Company received upfront deposit from the customers which increased deferred revenue balance as at August 31, 2020. Deferred revenue is recorded when the Company receives cash deposit before it delivers products or services to a customer. Deferred revenue decreases when the Company delivers the work to the customer and revenue is recognized.

The Company's working capital position over the last eight quarters can be summarized as follows:

	Nov 30, 2018 \$	Feb 28, 2019 \$	May 31, 2019 \$	Aug 31, 2019 \$	Nov 30, 2019 \$	Feb 29, 2020 \$	May 31, 2020 \$	Aug 31, 2020 \$
Current Assets	7,244,731	7,337,334	7,984,367	9,544,737	9,574,004	8,646,798	8,063,550	7,938,009
Current Liabilities	5,178,449	8,816,994	5,956,544	7,423,040	7,129,049	5,859,669	5,192,014	4,198,761
Working Capital	2,066,282	(1,479,660)	2,027,823	2,121,697	2,444,955	2,787,129	2,871,536	3,739,248

The Company's cash position was \$4,589,333 as at August 31, 2020, compared to \$4,774,580 at May 31, 2020, representing a decrease of \$185,247. The decrease was mainly due to net cash used in operating activities of \$1,181,027 and the exchange loss on cash and cash equivalents of \$50,636 offset by the cash generated in financing activities of \$1,051,089.

The net cash used in the operating activities included the net loss of \$218,100, the negative change in working capital of \$1,298,167, the interest paid on long-term debt of \$69,774, offset by the addbacks of non-cash items of \$405,014. The Company's cash position fluctuates based on the timing of long-term projects. Cash increases at the beginning of a project because the Company receives upfront deposit before a project is started. The cash position decreases when a project is near the end because the Company has collected from its customer and needs to make full payments to suppliers and subcontractors. A few heat recovery projects were completed or close to completion as at May 31, 2020, which resulted in a higher balance of trade payables and accrued liabilities at the year-end. With the receipt of the loan proceeds, the Company paid off a significant amount of trade payables and accrued liabilities in Q1 2021, which resulted in a negative change in working capital of \$1,298,167.

The Company invested \$4,673 in property, plant and equipment during the quarter ended August 31, 2020.

The Company entered into two COVID-19 related term loans sponsored by the Canadian and the UK government in the total amount of \$1,082,760, and made the repayments for lease obligations in the amount of \$31,671 in Q1 2021, which contributed to the total cash provided by financing activities of \$1,051,089.

Management Discussion and Analysis for the Quarter Ended August 31, 2020

The Company's trade and other receivables have been reviewed for indicators of impairment. At August 31, 2020, \$86,487 (5.4%) of the Company's trade receivables balance was over 90 days past due. \$61,853 of the past due balance was impaired at August 31, 2020.

At May 31, 2020, \$189,442 (10%) of the Company's trade receivables balance was over 90 days past due. \$61,120 of the past due balance was impaired at May 31, 2020. \$6,318 of trade receivables that was not over 90 days past due was also impaired.

No additional provisions were made for the quarter ended August 31, 2020 or 2019. For the quarter ended August 31, 2020, \$5,585 (\$nil – August 31, 2019) of the allowance for doubtful accounts was released due to the collection.

The following table presents the contractual undiscounted cash flows for lease obligations as of August 31, 2020:

Less than one year	\$ 125,958
One to five years	290,655
Six to ten years	267,000
Total undiscounted lease obligations	683,613
Less: impact of present value	(174,789)
Less: current portion	(91,465)
Long term portion	\$ 417,359

During the quarter ended August 31, 2020, the interest expense on lease obligations was \$9,648 and total cash outflow for leases was \$68,838, including \$27,519 for short-term leases. During the quarter ended August 31, 2019, the interest expense on lease obligations was \$3,374 and total cash outflow for leases was \$57,803, including \$30,247 for short-term leases.

The Company's ability to realize its assets and discharge its liabilities depends on its ability to generate sufficient cash from operations or its ability to arrange debt or equity financing.

On June 9, 2020, the Company entered into a Working Capital – COVID-19 loan with a lending institution for a total amount of \$2,300,000. The amounts advanced under the financing is expected to support internal working capital needs related to operations and to assist with a degree of continuity of operations of the Company during the current economic environment. This loan bears interest at the institution's floating base rate less a variance of 1.10% and is repayable over the next 3 years. The institution's floating base rate was at 4.55% on August 31, 2020. The first tranche of the proceeds in the amount of \$1,000,000 was received by the Company on July 23, 2020. The remaining amount of \$1,300,000 is expected to be received in two separate tranches by February 2021, subject to meeting certain conditions in accordance with this term loan.

Management is of the opinion that there is sufficient cash to support the Company's operations for the next 12 months. Once the COVID-19 pandemic ends, the Company will be generating sufficient cash by achieving profitable operations through continuing to manage expenditures, concentrating on building upon revenue levels experienced from FY 2016 to FY 2020.

3.3 Segmentation Information

In the quarters ended August 31, 2020 and August 31, 2019, the Company operated in the energy efficiency industry in North America, Europe, and Rest of the World. The Company markets, sells, engineers, fabricates, constructs, installs and supports two technology lines - heat recovery solutions and condensate return system solutions. The Company is also developing a third technology line - low temperature biomass drying systems. Assets are located in Canada and Europe.

Management Discussion and Analysis for the Quarter Ended August 31, 2020

Management reporting comprises analysis of revenue and gross profit within two distinct geographical areas. All other items of revenue and expenses are considered on a geographical and/or global basis in making strategic decisions regarding the Company's future. The Company has two operational bases ("reporting units"), one in Ottawa, Canada covering North America, and the other in Bristol, UK, covering Europe and the rest of the world. These areas are determined by proximity of the region to the reporting unit, plus the location of the contracts in existence with agents and distributors in the respective areas and the historical relationships with those agents and distributors. Corporate costs that cannot easily be attributed to either of the two reporting units are included in reconciling items. The chief operating decision maker focuses on revenues and costs by geographical segments, but manages assets and liabilities on a global basis.

Segment information for the quarter ended August 31, 2020 and the comparative period are detailed in the table below:

	Thermal Energy Ottawa		Thermal Energy Bristol		Reconciling Items		Total	
	2020	2019	2020	2019	2020	2019	2020	2019
	\$	\$	\$	\$	\$	\$	\$	\$
Total revenue	1,550,737	3,762,692	1,277,125	1,203,097	-	-	2,827,862	4,965,789
Cost of sales	(836,330)	(2,244,034)	(667,329)	(531,237)	-	-	(1,503,659)	(2,775,271)
Gross profit	714,407	1,518,658	609,796	671,860	-	-	1,324,203	2,190,518
Other expenses	(337,815)	(817,837) ¹	(567,522)	(806,408) ¹	(553,972)	(265,816) ¹	(1,459,309)	(1,890,061)
Net finance (costs) income	(7,770)	2,624 ²	(1,880)	(2,965) ²	(89,595)	(79,903) ²	(99,245)	(80,244)
Income (loss) before taxation	368,822	703,445	40,394	(137,513)	(643,567)	(345,719)	(234,351)	220,213
Tax recovery (expense)	2,231	2,196	(4,958)	-	18,978	18,852	16,251	21,048
Net income (loss)	371,053	705,641	35,436	(137,513)	(624,589)	(326,867)	(218,100)	241,261
Attributable to:								
Owners of the parent	371,053	710,604	28,462	(137,801)	(624,589)	(326,867)	(225,074)	245,936
Non-controlling interest	-	(4,963)	6,974	288	-	-	6,974	(4,675)

1. Other expenses related to depreciation of right-of-use assets of \$25,693 for the three months ended August 31, 2019 were reclassified from "Reconciling Items" to "Thermal Energy Ottawa" and "Thermal Energy Bristol" in the amount of \$3,736 and \$21,957, respectively, to conform to the current period presentation.
2. Finance costs related to interest accretion on lease obligations of \$3,374 for the three months ended August 31, 2019 were reclassified from "Reconciling Items" to "Thermal Energy Ottawa" and "Thermal Energy Bristol" in the amount of \$409 and \$2,965, respectively, to conform to the current period presentation.

Reconciling items comprise the following:

	Three months ended August 31	
	2020	2019
	\$	\$
Corporate admin costs	123,980	149,914
Share-based compensation	50,230	51,666
Professional fees	93,692	58,887
Depreciation of property, plant and equipment	29,586	21,754
Amortization of intangible assets	70,288	69,183
Acquisition costs	10,100	-
Foreign exchange loss (gain)	176,096	(85,588)
Total	553,972	265,816

Corporate administration costs include directors' fees, all costs relating to both the CEO and CFO, directors' and officers' insurance, corporate legal costs, public relations costs, professional fees relating to group tax planning and corporate filing costs as well as the Annual General Meeting.

Finance costs within the reconciling items include interest and deferred financing charge on the long-term debt, and interest accretion on lease obligations.

Management Discussion and Analysis for the Quarter Ended August 31, 2020

Material Segmentation Variances

Thermal Energy Ottawa:

Revenue for the quarter ended August 31, 2020 of \$1,550,737, represented a decrease of \$2,211,955, or 58.8%, from \$3,762,692 in the same quarter of previous year. The decrease was mainly due to the reduced revenues in both heat recovery systems and condensate return systems in North America due to COVID-19.

Gross profit for the quarter ended August 31, 2020 decreased by \$804,251 over the last year. The decrease in gross profit was mainly due to the decreased revenues. As a percentage of revenue, gross profit was 46.1% for the quarter ended August 31, 2020, compared to 40.4% achieved in last year. The increase in gross margin was mainly due to product split.

Other expenses in this segment decreased by \$480,022 (58.7%) for the quarter ended August 31, 2020 compared to same quarter last year. The decrease was mainly due to the cost savings achieved through cost control measures and the government wage subsidies of \$328,310 recognized as a reduction to operating expenses in Q1 2021.

For the quarter ended August 31, 2020, income before tax of \$368,822 was achieved, represented a decrease of \$334,623, or 47.6%, from the same quarter of previous year. The decrease was mainly due to the decrease of gross profit of \$804,251 because of the decreased revenues, offset by the decrease in other operating expenses of \$480,022.

Thermal Energy Bristol:

Revenue for the quarter ended August 31, 2020 of \$1,277,125, represented an increase of \$74,028, or 6.2%, over the \$1,203,097 achieved in the previous quarter. The revenue increase for the quarter ended August 31, 2020 was mainly due to increased sales in the condensate return systems, offset by the decreased sales in the heat recovery systems. The heat recovery projects were delayed due to travel restrictions and limited access to sites since March 2020. In Q1 2021, most travel restrictions were lifted and the customers' sites were reopen. Hence, the Company was able to resume the heat recovery projects in Q1 2021.

Despite of the increased revenue, gross profit decreased in Q1 2021, by \$62,064, compared to Q1 2020. The decrease in gross profit was mainly due to the lower gross margin achieved than that of Q1 2020 from heat recovery projects. As a percentage of revenue, gross profit was 47.7% in the Q1 2021, compared to 55.8% achieved in the Q1 2020.

Other expenses decreased by \$238,886 or 29.6% for the quarter ended August 31, 2020, compared to quarter ended August 31, 2019. The decrease was mainly due to the cost savings achieved through cost control measures and the government wage subsidies of \$80,253 received during the first quarter of FY2021.

The resulting pre-tax income was \$40,394 for the quarter ended August 31, 2020, as compared to a loss of \$137,513 for the quarter ended August 31, 2019, an increase of \$177,907. The pre-tax income increase was mainly due to the decrease of \$238,886 in operating expenses, offset by the decrease of gross profit of \$62,064.

Reconciling Items:

Other expenses within Reconciling items, which incorporates all costs not specifically attributable to either regional operational center, increased by \$288,156 to \$553,972, compared to the quarter ended August 31, 2019. The increase in other expenses was mainly due to the increase of foreign exchange loss of \$261,684.

Management Discussion and Analysis for the Quarter Ended August 31, 2020

3.4 Quarterly Financial Information (unaudited)

For the eight quarters ended August 31, 2020:

Quarter ended	30-Nov-19 \$	29-Feb-20 \$	31-May-20 \$	31-Aug-20 \$
Revenue	7,848,096	5,811,626	2,790,664	2,827,862
Gross Profit	2,918,357	2,417,450	1,427,728	1,324,203
Gross Profit Percentage	37.2%	41.6%	51.2%	46.8%
EBITDA ⁽¹⁾	709,182	709,115	31,412	14,998
Total net income (loss)	385,181	429,787	(2,953,186)	(218,100)
Income (loss) per share, basic and diluted	0.002	0.003	(0.019)	(0.001)

Quarter ended	30-Nov-18 \$	28-Feb-19 \$	31-May-19 \$	31-Aug-19 \$
Revenue	5,193,092	3,114,757	5,974,546	4,965,789
Gross Profit	1,834,770	1,143,104	3,117,297	2,190,518
Gross Profit Percentage	35.3%	36.7%	52.2%	44.1%
EBITDA ⁽¹⁾	(67,995)	(734,366)	1,029,103	471,786
Total net income (loss)	(112,122)	(889,481)	599,958	241,261
Income (loss) per share, basic and diluted	(0.001)	(0.006)	0.004	0.002

(1) EBITDA represents earnings before interest, taxation, depreciation, amortization, impairment of intangible assets, and share-based compensation expense.

A reconciliation of net income (loss) to EBITDA is shown below for the quarters ended August 31:

	2019 \$	2020 \$
Total net income (loss) attributable to owners of the parent	245,936	(225,074)
Total net income (loss) attributable to non-controlling interest	(4,675)	6,974
Interest charge	83,277	99,245
Taxation	(21,048)	(16,251)
Depreciation and amortization	116,630	99,874
Share based compensation	51,666	50,230
EBITDA	471,786	14,998

4. Related Party Transactions

Options outstanding for Directors (excluding the CEO) as at August 31, 2020 were 1,000,000, of which 500,000 were exercisable. There were no warrants outstanding for Directors.

Options outstanding for Senior Management (including the CEO) as at August 31, 2020 were 5,758,360, of which 2,800,027 were exercisable. There were no warrants outstanding for Senior Management.

Directors and Senior Management Compensation

During the quarter ended August 31, 2020 compensation arrangements for directors were as follows:

\$13,500 per annum per Director plus an additional \$8,100 per annum payable to the Chairman of the Board, \$5,400 per annum payable to the chairperson of the Audit Committee, \$5,400 per annum payable to the chairperson of the Ethics Committee, and \$1,000 payable for each in-person meeting.

For the period from April 16, 2020 to September 15, 2020, the Company temporarily reduced the compensation to directors by 15%.

During the quarter ended August 31, 2020, total directors' fees were \$14,343. Fees to the Chairperson of the Audit Committee were \$1,148; fees to the Chairperson of the Ethics, Governance and Compliance Committee were \$1,148; fees paid to the Chairman were \$1,721.

Compensation paid to directors and officers during the quarter ended August 31, 2020 (inclusive of the amounts described above but excluding share-based compensation) was as follows:

	Salaries and fees		Incentives		Other short-term benefits		Total	
	2020	2019	2020	2019	2020	2019	2020	2019
	\$	\$	\$	\$	\$	\$	\$	\$
Directors								
M. Williams	2,869	4,375	-	-	-	-	2,869	4,375
J. Kelly	4,590	6,400	-	-	-	-	4,590	6,400
W. Ollerhead	4,016	5,725	-	-	-	-	4,016	5,725
D. Spagnolo	4,016	5,725	-	-	-	-	4,016	5,725
W. White	2,869	4,375	-	-	-	-	2,869	4,375
Total	18,360	26,600	-	-	-	-	18,360	26,600
Senior Management								
W. Crossland	51,000	60,000	-	-	-	-	51,000	60,000
R. Triebe	38,463	45,250	-	-	681	880	39,144	46,130
S. Mawby ⁽¹⁾	32,693	37,558	-	-	7,159	6,062	39,852	43,620
J. Zhang	26,563	31,250	-	-	681	1,055	27,244	32,305
Total	148,719	174,058	-	-	8,521	7,997	157,240	182,055
Total Related Party Transactions	167,079	200,658	-	-	8,521	7,997	175,600	208,655

Other short-term benefits include cash payments for social security costs, employee benefits, and payments made into defined contribution pension plans of the Company's U.K. based subsidiaries.

(1) Mr. Mawby is compensated in UK Pound sterling. Average exchange rate to Canadian dollar was 1.7152 and 1.6428 in Q1 2021 and Q1 2020, respectively.

5. COVID-19 Update

On March 11, 2020, COVID-19 was declared a global pandemic by the World Health Organization. The Company has been closely monitoring the impact of COVID-19 on all aspects of its business. COVID-19 has had disruptive effects in countries in which the Company operates including Canada, US and the UK.

We are conducting business with substantial modifications to employee travel and employee work locations. The travel restrictions have decreased business development and sales activities. While most of our customers are essential businesses and continue to operate, the pandemic also has impacts on many of them, including adapting their operation to include physical distancing, limiting site visits, delays in making purchasing decisions and the temporary suspension of on-going projects.

The Company has taken proactive measures to cope with the impact from COVID-19 including the deployment of video conferencing tools, the development of remote working and file-sharing capabilities, a temporary reduction in non-essential expenditures, and the application of government sponsored emergency loans and salary subsidy programs. Despite the COVID-19 slowdown, the Company has maintained its pre-pandemic staff levels and has maintained its full production and project development capabilities.

Currently, we are unable to estimate the long-term impact of COVID-19 on our businesses, financial position, results of operations, and cash flows. We expect COVID-19 to continue to affect our results of operations in the next 12 months.

6. Business Outlook

Governments around the world are taking unprecedented action, including increasing regulations, to reduce carbon emissions. Energy efficiency can make the transition toward a clean energy economy faster and cheaper than other initiatives, and therefore is an important element in energy policies around the world. As such, the industrial sector has begun to feel the pressing need to adopt measures that can improve the energy efficiency of internal processes and operations, thus contributing to an increased demand for energy efficiency products, solutions and services globally.

Other than our order backlog, we do not provide specific financial performance guidance. However, we believe that we are well positioned to benefit from this increased demand, particularly in our key markets of North America, the United Kingdom, and the European Union. As mentioned in Section 2.2 earlier, Management uses order backlog as an indicator of the short-term future revenue of our Company resulting from already recognized orders.

The Company's order backlog as at August 31, 2020 was approximately \$6 million. As at October 28, 2020, the Company had an order backlog of approximately \$9.6 million.

	2018 \$ million	2019 \$ million	2020 \$ million
Order backlog as at August 31	7.3	12.8	6.0
Order backlog as at October reporting date	9.5	14.6	9.6

- On October 27, 2020, the Company announced that it had been commissioned by a leading hospital group to supply two heat recovery systems to reduce fuel use and carbon emissions. The systems, valued at \$1,530,000, will be installed at two facilities. The systems are expected to deliver an annual fuel saving of \$410,600 and reduce carbon emissions by over 2,300 tonnes per year.
- On October 6, 2020, the Company announced that it had been commissioned by a multinational food products corporation to install a second turn-key, energy-saving heat recovery system to increase the efficiency of the site's dryer. The project is valued at \$840,000, delivering its estimated annual energy savings of over \$310 thousand, the new dryer efficiency solution will provide the customer

Management Discussion and Analysis for the Quarter Ended August 31, 2020

with a simple payback on investment of just under 3 years. Carbon emissions are also expected to be reduced by up to 1,304 tonnes by the site's second FLU-ACE®, resulting in a reduction of end-of-pipe particulate matter emissions by between 50% and 90%.

- On August 18, 2020, the Company announced that it had been commissioned by one of Europe's largest food and drink groups to supply a turnkey heat recovery system designed to reduce fuel use and carbon emissions, while also minimizing particulate matter, and NOx emissions. The project, valued at approximately \$920,000, will be installed at a canning and pouch packaging facility in the UK. At the heart of the system will be Thermal Energy's proprietary direct contact heat recovery technology, FLU-ACE®. Once commissioned, the system is expected to deliver an annual fuel saving of \$383,300 and reduce the site's carbon emissions by 2,868 tonnes a year.
- On June 10, 2020, the company announced that it had been commissioned by a leading consumer protein company to supply energy efficient equipment and engineering for a plant upgrade project. This equipment, valued at approximately \$950,000, will be used to heat process water for the plant operation producing up to 2,700 US gallons per minute of water heated from 85°F to 140°F. The project was about 12% complete at the quarter-end.
- On August 7, 2019, the company announced that it had been commissioned by a leading European brewer to install a high-efficiency heat recovery system. The FLU-ACE® heat recovery project, valued at over \$650,000, is designed to optimize efficiency at the UK production facility, helping the site to reach its sustainability goals. Preliminary analysis shows the initiative will provide an expected utility saving of \$400,000 per year. The project was about 58% complete at the quarter-end.
- On March 27, 2019, the Company announced that it had been commissioned by a leading multinational animal nutrition and agricultural products company to improve energy efficiency at one of its European facilities. The project, valued at approximately \$2.3 million, will see the Company install two of its proprietary FLU-ACE® heat recovery systems to delivery greater fuel efficiency. The project was about 81% complete at the quarter-end.
- On March 11, 2019, the Company announced that it had been commissioned by a major US dairy group to design and implement an extensive heat recovery project. This project, valued at \$1.8 million, will utilize the Company's recently acquired HEATSPONGE technology to heat boiler feed and process water. It is the first project between the Company and the dairy group. The project was 69% complete at the quarter-end.

7. Summary of Outstanding Shares and Dilutive Instruments

The Company currently has the following shares and dilutive instruments outstanding:

Shares:

160,152,616 class A common shares.

Options:

Range of exercise prices	Options outstanding		Options exercisable		
	Number outstanding August 31, 2020	Weighted average remaining contractual life	Weighted average exercise price	Number exercisable at August 31, 2020	Weighted average exercise price
0.05-0.07	2,739,583	0.75	0.05	2,739,583	0.05
0.08-0.10	14,831,693	2.84	0.08	5,838,360	0.08
0.11-0.12	250,000	1.24	0.12	250,000	0.12
	17,821,276	2.49	0.07	8,827,943	0.07

8. Critical Accounting Estimates and Changes in Accounting Standards

Critical Accounting Estimates

The preparation of financial statements requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities, income and expenses. The judgements, estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of the valuation of assets and liabilities that are not readily apparent from other sources. The judgements, estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates and assumptions are recognized in the year in which they are revised and in any future periods affected. Actual results may differ from these estimates, judgements and assumptions.

The COVID-19 outbreak began to impact the Company's operations in the latter half of March 2020. Management believes the extent of the COVID-19 pandemic's adverse impact on the Company's operating results and financial condition will be driven by many factors, most of which are beyond management's control and ability to forecast. Such factors include, but are not limited to, the scope and duration of past and potential future stay-at-home policies and business closures, travel restrictions, and the willingness of customers to allow outside contractors onsite. Because of these and other uncertainties, management cannot estimate the length or severity of the impact of the pandemic on the business. Decreases in cash flows and results of operations may have an impact on the inputs and assumptions used in significant accounting estimates, including management's assessment of future compliance with financial covenants and potential impairments of intangible and long-lived assets.

The following components of the financial statements depend most heavily on such management estimates, assumptions and judgment, and any changes in which may have a material impact on the Company's financial condition or results of operations. For more information about certain assumptions and risks that may affect these estimates, assumptions and judgments, please see the "Forward Looking Information" section of this MD&A.

Valuation intangible assets and asset impairment

Intangible assets are tested annually for impairment, or earlier if circumstances indicate an impairment.

An impairment loss is recognized for the amount by which an asset's carrying amount exceeds its recoverable amount. To determine the recoverable amount, management estimates expected future cash flows from each asset and determines a suitable interest rate in order to calculate the present value of those cash flows. In the process of measuring expected future cash flows, management makes assumptions an applicable royalty rate. These assumptions relate to future events and circumstances. The actual results may vary and may cause significant adjustments to the Company's assets within the next financial period.

In most cases, determining the applicable discount rate involves estimating the appropriate adjustment to market risk and the appropriate adjustment to asset-specific risk factors.

Assumptions used in the Black-Scholes fair value calculations

The estimation of share-based payment expense requires the selection of an appropriate valuation model and consideration as to the inputs necessary for the valuation model chosen. In calculating the share-based payment expense, key estimates such as the rate of forfeiture of options granted, the expected life of the option, the volatility of the Company's stock price, and the risk-free interest rate are used.

Management Discussion and Analysis for the Quarter Ended August 31, 2020

Expected credit loss

The valuation of allowances for uncollectable trade receivables requires assumptions including estimated credit losses based on the Company's knowledge of the financial conditions of its customers, historical experience, and general economic conditions.

Revenue recognition relating to contracts for heat recovery solutions

The stage of completion of any heat recovery solutions contract is assessed by management by taking into consideration all information available at the reporting date. In this process, management exercises significant estimate about milestones, actual work performed, and the estimated costs to complete work.

Deferred tax assets

Deferred tax assets are recognized for unused tax losses, tax credits, and deductible temporary differences, to the extent that it is probable that future taxable income will be available against which they can be utilized. These estimates are reviewed at every reporting date. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of the reversal of existing differences, future taxable income, and future tax planning strategies.

There has been no change in accounting standards since we issued our last consolidated annual financial statements for the year ended May 31, 2020.

9. Risk Factors and Risk Management

Management is confident about our long-term prospects, but does recognize that the company is exposed to a number of risks in the normal course of business that could negatively impact the financial condition of the Company.

Operational risks of the company include the ability to continue to secure and implement sales contracts for its GEM™ and FLU-ACE® technology solutions.

Financial risks and uncertainties of the Company include:

- The impact of major global pandemics;
- The Company's history of operating losses and uncertainty of future profitability;
- The ability to grow sales through the establishment of new cooperative partnerships and strategic alliances;
- The ability to grow sales through the licensing of the corporation's technologies;
- The ability to secure and maintain the required outside working capital financing;
- The ability to achieve profitable operations through increased sales;
- Reliance on third party collaborations and license arrangements;
- Reliance on proprietary technology;
- Competition in the energy conservation and environmental compliance solutions;
- Product liability claims and insurance;
- Reliance on key personnel;
- The past litigation with a former President & CEO;
- The ability to control costs and achieve a positive gross margin on projects;
- The effect of a continuing prolonged recession in Canada, U.S. and Europe to the financial markets in securing project financing and in particular to industrial and commercial customers in committing capital to projects; and
- The impact of the departure from the European Union by the U.K.

Management Discussion and Analysis for the Quarter Ended August 31, 2020

Management's addressing of the risks:

FY 2012 saw the Company's first ever net profit, which was the result of increased revenues and strict cost control. FY 2013, however, produced an operating loss of \$844,328, resulting from diminished revenues and increased costs. Despite further cost increases as management continued to build the sales force, FY 2014 produced the company's best ever post-tax income of \$634,023 as well as an increase in cash balance of \$742,022. However, this was again followed by a net loss of \$2,154,817, accompanied by a cash decrease of \$1,331,074 in FY 2015. FY 2016 and FY 2017 saw a return to profitability and an increase in cash balances of \$427,805 and \$1,806,992, respectively. This was followed in FY 2018 by another profitable year which saw cash balances increase by \$336,334. In FY 2019, sales increased by 21.1% due to the increased revenue in heat recovery systems and the acquisition of Boilerroom Equipment Inc. In FY 2020, despite the COVID-19 pandemic, the Company maintained the same sales level as FY 2019, completed the year with higher gross margins and record operating income before impairment of \$1,275,708. The Company reported a loss for FY2020 because of the impairment write-down of \$3,061,200 recognized on intangible assets and goodwill.

The Company actively protects its proprietary technology through registered trademarks and confidentiality agreements.

The Company maintains adequate forms of general liability insurance including product liability and errors and omission coverage.

Management still believes that competition against its core technologies is limited at this time and believes that the marketplace is sufficiently large enough to mitigate the risk of stronger competition in the future.

On June 23, 2016, a referendum was held in the U.K., resulting in the decision to leave the European Union ("EU"). The withdrawal of the UK from the EU is also called "Brexit". As at January 31, 2020, UK was no longer a member of the European Union. Even though Brexit happened on January 31, 2020, both the UK and the EU still need to work out the specific rules for their new relationship. This includes everything from trade, immigration, aviation, security and access to fishing waters. These rules must be negotiated and signed off by the EU and UK Parliaments during the 11 months transition period ending on December 31, 2020. When the transition period ends, the UK will automatically drop out of the EU's main trading arrangements (i.e. the single market and the customs union). The single market means that countries share the same rules on product standards and access to services, whereas the customs union is an agreement between EU countries not to charge taxes and tariffs on each other's goods. If a new trade deal is not ready by December 31, 2020, then tariffs and border checks would be applied to UK goods travelling to the EU. The UK could also do this to EU goods, if it chose to. Tariffs would make UK goods more expensive and harder to sell in the EU, while full border checks could cause long delays at ports. Even if a trade deal is reached, it would not eliminate all border checks. Negotiations regarding how trade will continue after December 31, 2020 are ongoing, the outcome of which is difficult to predict. In the meantime, business continues as normal and the UK still follows EU rules. Management continues to monitor the situation, and is exploring alternative solutions to minimize the potential negative impact from Brexit on our business.

Management continues to focus on strengthening relationships with key customers, as well as securing new relationships with multi-site organizations, which is anticipated to provide repeat business into the foreseeable future. Management continually monitors costs and cash flow to ensure that the Company has sufficient funds for operations while providing for future growth.

10. Forward-Looking Information

This MD&A contains certain “forward-looking statements.” All statements, other than statements of historical fact, that address activities, events or developments that the Company believes, expects or anticipates will or may occur in the future (including, without limitation, statements regarding financial and business prospects and financial outlook) are forward looking statements. These forward-looking statements reflect the current expectations or beliefs of Management, based on information currently available to the Company. Forward-looking statements are subject to a number of risks, uncertainties and assumptions that may cause the actual results of the Company to differ materially from those discussed in the forward-looking statements and, even if such actual results are realized or substantially realized, there can be no assurance that they will have the expected consequences to, or effects on the Company. Factors that could cause actual results or events to differ materially from current expectations include, among other things, changes in general economic and market conditions, changes to regulations affecting the Company’s activities, and uncertainties relating to the availability and costs of financing needed in the future. Any forward-looking statement speaks only as at the date on which it is made and, except as may be required by applicable securities laws, the Company disclaims any intent or obligation to update any forward-looking statement, whether as a result of new information, future events or results or otherwise. Although Management believes that the assumptions inherent in the forward-looking statements are reasonable, forward-looking statements are not guarantees of future performance and, accordingly, undue reliance should not be put on such statements due to the inherent uncertainty therein.

11. Management’s Responsibility for Financial Reporting

In compliance with the Canadian Securities Administrators’ National Instrument 52-109 (“NI 52-109”), the Company has filed with applicable Canadian securities regulatory authorities, certificates signed by its Chief Executive Officer (“CEO”) and Chief Financial Officer (“CFO”) that, among other things, report on the design and effectiveness of disclosure controls and procedures, and the design of internal controls over financial reporting.

Under the supervision of the CEO and CFO, the Company maintains systems of internal accounting and administrative controls to provide reasonable assurance that the financial information is relevant, reliable, and accurate, and that transactions are authorized, assets are safeguarded, and proper records are maintained. Internal controls over financial reporting, no matter how well designed, have inherent limitations, and may not prevent or detect all misstatements. There were no changes to the Company’s internal control over financial reporting during the quarter ended August 31, 2020 that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting.

The Board of Directors is responsible for ensuring that management fulfills its responsibility principally through its Audit Committee.