



**MANAGEMENT'S DISCUSSION & ANALYSIS**

**For the Quarter Ended November 30, 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 second quarter of Fiscal Year 2021, ended November 30, 2020 (or "Q2 2021"), and compares the Q2 2021 financial results to the previous quarter ended November 30, 2019 (or "Q2 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 second quarter of FY 2021 are against the second quarter of FY 2020. Additional information relating to the Company is available on SEDAR at [www.sedar.com](http://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 35% of our operations, assets and liabilities are denominated in British Pound Sterling and 26% 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 January 21, 2021. Disclosure contained in this document is current to January 21, 2021, 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

|  | Page |
|--|------|
| 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 Second Quarter Results                                | 4    |
| 3.2 Summary of Year to Date Results                                  | 6    |
| 3.3 Liquidity and Capital Resources                                  | 8    |
| 3.4 Segmentation Information   | 10   |
| 3.5 Quarterly Financial Information                                  | 13   |
| 4. Related Party Transactions  | 14   |
| 5. COVID-19 Update   | 15   |
| 6. Business Outlook  | 16   |
| 7. Summary of Outstanding Shares and Dilutive Instruments            | 17   |
| 8. Critical Accounting Estimates and Changes in Accounting Standards | 17   |
| 9. Risk Factors and Risk Management                                  | 19   |
| 10. Forward-Looking Information                                      | 20   |
| 11. Management's Responsibility for Financial Reporting              | 21   |

## 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](http://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 November 30, 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 3.5 Quarterly Financial Information.

## Management Discussion and Analysis for the Quarter Ended November 30, 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 Second Quarter Results

|   | Q2 2021     | Q2 2020     |
|---|-------------|-------------|
|   | \$          | \$          |
| Revenue   | 5,019,682   | 7,848,096   |
| Cost of sales   | 2,589,440   | 4,929,739   |
| Gross profit  | 2,430,242   | 2,918,357   |
| Expenses:   |             |             |
| Administration, selling, marketing and business development | 1,786,678   | 2,439,342   |
| Research and development                                    | 3,922       | (130)       |
|   | 1,790,600   | 2,439,212   |
| Operating income  | 639,642     | 479,145     |
| Finance costs   | (71,504)    | (106,134)   |
| Finance revenue   | -           | 2,111       |
| Income before income taxes                                  | 568,138     | 375,122     |
| Income taxes recovery                                       | 12,287      | 10,059      |
| Net income for the period                                   | 580,425     | 385,181     |
| Exchange differences on translation of overseas operations  | 195         | 169,388     |
| Total comprehensive income for the period                   | 580,620     | 554,569     |
| EBITDA for the quarter <sup>1</sup>                         | 788,471     | 709,182     |
| Order backlog as at November 30                             | 5.5 million | 8.2 million |
| Order backlog as at reporting date                          | 7.2 million | 9.1 million |

1. A reconciliation of net income (loss) to EBITDA is shown in section 3.5 Quarterly Financial Information.

## Management Discussion and Analysis for the Quarter Ended November 30, 2020

### *Revenues and Gross Profits*

Revenues were \$5,019,682 in the second quarter ended November 30, 2020, representing a decrease of \$2,828,414, or 36%, compared to \$7,848,096 in the quarter ended November 30, 2019. The decrease of revenue in the second quarter of FY 2021 was mainly due to the decrease of the revenue from heat recovery systems, offset by the increase in the revenues from condensate return 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 and the additional costs associated with the quarantine requirements. Despite the fact that the Company received a couple of significant heat recovery orders in Q2 FY 2021, the Company's heat recovery revenue and order backlog had not recovered to the pre-Covid level at the end of the second quarter of FY 2021. However, the GEM production and delivery was not significantly impacted by the pandemic. The Company's GEM revenue increased in the second quarter of FY 2021 by 60% compared to the same quarter of the prior year.

The gross profit of \$2,430,242 in the quarter ended November 30, 2020 represented a decrease of \$488,115, or 16.7%, from the \$ 2,918,357 in the quarter ended November 30, 2019. The decrease was mainly due to the decrease in the revenues of heat recovery systems, offset by the increase in the revenues from GEM products. Gross profit expressed as a percentage of revenue was 48.4% in the second quarter of FY 2021 compared with 37.2% 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 November 30, 2020, totaled \$1,786,678 compared to \$2,439,342 in the quarter ended November 30, 2019, a decrease of \$652,664, or 26.8%. During the quarter ended November 30, 2020, the Company continued applying for funding from various government bodies and received wage subsidies totaled \$212,109. Furthermore, the Covid-19 related travel restrictions limited our business development activities. As a result, business development and related traveling costs decreased significantly in the second quarter of FY 2021 compared to the same quarter of FY 2020. The Company also implemented cost control measures during the Covid period. The savings from the decreased business development costs and the cost control measures accounted for \$163,074 of the decrease of the operating expenses. The remaining decrease of the operating expenses arose from the decreased foreign exchange loss of \$162,723 and the decreased credit loss provision of \$114,758. In the second quarter of the previous year, the Company incurred a foreign exchange loss of \$155,959, but in the second quarter of the current year, the Company recognized a foreign exchange gain of \$6,764. In the second quarter of the prior year, the Company had to recognize a credit loss provision against an overdue lease receivable in the amount of \$102,142.

**Research and development ("R&D")** related to expenditures on various research and development programs. The total expense in the second quarter of FY 2021 was \$3,922, compared to a credit of \$130 in the second 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 second quarter of FY 2021 incurred a finance cost of \$71,504. The cost was lower than the second quarter of FY 2020 by \$34,630 due to the lower interest rate and the reduced principal amount on the long-term debt compared to the second quarter of the prior year. The interest rate is reassessed annually around October.

**Net income before income taxes** for the quarter ended November 30, 2020 was \$568,138, compared to an income of \$375,122 in the same quarter of the previous year. Income before income taxes increased by \$193,016 mainly due to the savings achieved in operating expenses, the receipt of wage subsidies and the decreased foreign exchange loss offset by the decreased gross profit as a result of the decreased revenues.

**Income tax recovery** in the second quarter of FY 2021 was \$12,287, as compared to a recovery of \$10,059 in the second quarter of FY 2020, a decrease of \$2,228.

## Management Discussion and Analysis for the Quarter Ended November 30, 2020

**Net income for the second quarter** of FY 2021 was \$580,425, compared to a net income of \$385,181 in the same quarter of the previous year, representing an increase of \$195,244. The increase in net income was mainly due to the receipt of the wage subsidies of \$212,109, reduction in operating expenses by \$277,832 and the decrease in foreign exchange loss of \$162,723, offset by a decrease of \$488,115 in gross profit due to the decreased revenue.

**Comprehensive income** was \$580,620 for the second quarter of FY 2021, compared to a comprehensive income of \$554,569 for the second quarter of FY 2020, an increase of \$26,051. The increase was due to the higher net income achieved offset by the decrease in translation gain of \$169,193 compared to the second quarter of FY 2020.

**EBITDA** was \$788,471 for the second quarter of FY 2021, compared to a \$709,182 for the same quarter of the previous year, representing an increase of \$79,289. The increase was mainly due the increase in income before taxes of \$193,016, offset by the reduction in impairment write-down of \$45,848, the decrease of interest charge of \$34,630, and the decrease in depreciation and amortization expense of \$31,813.

### 3.2 Summary of Year to Date Results

|   | Q2 2021     | Q2 2020     |
|---|-------------|-------------|
|   | \$          | \$          |
| Revenue   | 7,847,544   | 12,813,885  |
| Cost of sales   | 4,093,099   | 7,705,010   |
| Gross profit  | 3,754,445   | 5,108,875   |
| Expenses:   |             |             |
| Administration, selling, marketing and business development | 3,228,501   | 4,275,311   |
| Research and development                                    | 21,408      | 53,962      |
|   | 3,249,909   | 4,329,273   |
| Operating income  | 504,536     | 779,602     |
| Finance costs   | (170,749)   | (189,411)   |
| Finance revenue   | -           | 5,144       |
| Income before income taxes                                  | 333,787     | 595,335     |
| Income taxes recovery                                       | 28,538      | 31,107      |
| Net income for the period                                   | 362,325     | 626,442     |
| Exchange differences on translation of overseas operations  | 175,893     | 8,332       |
| Total comprehensive income for the period                   | 538,218     | 634,774     |
| EBITDA <sup>1</sup>   | 803,469     | 1,180,968   |
| Order backlog as at November 30                             | 5.5 million | 8.2 million |
| Order backlog as at reporting date                          | 7.2 million | 9.1 million |

1. A reconciliation of net income (loss) to EBITDA is shown in section 3.5 Quarterly Financial Information.

## Management Discussion and Analysis for the Quarter Ended November 30, 2020

### *Revenues and Gross Profits*

Revenues were \$7,847,544 in the six months ended November 30, 2020, representing a decrease of \$4,966,341, or 38.8%, from the \$12,813,885 recognized in the six months ended November 30, 2019. The decrease in revenues was mainly due to the decreased revenue from heat recovery systems. The COVID-19 pandemic caused significant delays on heat recovery projects. The heat recovery revenue decreased by \$5,428,411 compared to the same quarter of the previous year. The revenues from condensate return systems (i.e. GEM products) increased by \$701,737 in the first two quarters of FY 2021 compared to the same period of FY 2020. The Company achieved higher revenues from GEM product sales in both North America and Europe for the six months ended November 30, 2020.

The gross profit of \$3,754,445 in the first two quarters of FY 2021 represented a decrease of \$1,354,430, or 26.5%, from the \$5,108,875 achieved in the same period of FY 2020. The decrease was mainly due to the decreased revenues from heat recovery projects offset by the increase in the revenues from GEM product sales. Gross profit expressed as a percentage of sales was 47.8% in the first two quarters of FY 2021 compared with 39.9% in the same period of FY 2020. The increase in gross profit percentage was mainly due to change in the product mix.

### *Expenses*

**Administration, selling, marketing and business development expenses (“Operating Expenses”)** in the six months ended November 30, 2020 totaled \$3,228,501 compared to \$4,275,311 in the six months ended November 30, 2019, representing a decrease of \$1,046,810, or 24.5%. The decrease was mainly due to reduction in administration, selling and marketing expenses of \$347,109, the recognition of wage subsidy of \$620,672 as a reduction to the operating expenses, the decrease in credit loss provision and loss from lease write-down of \$177,990 that was related to one customer from the previous year, offset by the increase in foreign exchange loss of \$98,961. The operating expenses as a percent of revenue was 41.1% in the first six months of FY 2021 compared to 33.4% in the same period of the previous year.

**Research and development expenses** in the first half of FY 2020 were \$21,408, compared to \$53,962 in the same period of FY 2019. 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 decrease was due to the fact the Company claimed its R&D tax credits in the amount of \$32,554 in the first half of the previous year, which did not occur in the first half of the current year.

**Finance costs and finance revenue:** in the six months ended November 30, 2020, finance costs decreased by \$18,662 from \$189,411 to \$170,749. The decrease was mainly due to the decreased interest rate on the long-term debt and repayment of long-term debt.

**Income before income taxes** for the six months ended November 30, 2020 was \$333,787 compared to \$595,335 in the same period of the previous year, representing a decrease of \$261,548. The decrease was mainly due to the reduction in gross profit by \$1,354,430, offset by the decrease in operating expenses by \$1,046,810.

**Income tax recovery** in the first half of FY 2021 was \$28,538, compared to \$31,107 in the first half of FY 2020. Both the U.K. and the U.S. entities are subject to tax charges. Fluctuations in the tax charges are the result of changing profitability in those entities.

**Net income** for the six months ended November 30, 2020 was \$362,325 compared to \$626,442 in the same period of the previous year, representing a decrease of \$264,117. The decrease was mainly due to the reduction in the income before taxes of \$261,548.

**Comprehensive income** was \$538,218 for the first half of FY 2021, compared to \$634,774 for the first six months of FY 2020, a decrease of \$96,556. The decrease was due to the decrease in net income of \$264,117 offset by the increase in translation gain of \$167,561.

## Management Discussion and Analysis for the Quarter Ended November 30, 2020

**EBITDA** was \$803,469 for the first six months of FY 2021 compared to \$1,180,968 for the same quarter of the previous year, representing a decrease of \$377,499. The decrease was mainly due to the reduction in income before taxes of \$261,548, the decrease in depreciation and amortization expense of \$48,569, the elimination of the lease write-down of \$45,848 that occurred in the previous year.

### 3.3 Liquidity & Capital Resources

Current assets increased by \$920,552 to \$8,984,102 at November 30, 2020, compared to \$8,063,550 at May 31, 2020. The increase was mainly due to the increase in cash and cash equivalents of \$128,743 and trade and other receivables of \$850,733. Current liabilities decreased by \$435,057 to \$4,756,957, mainly due to the decrease in trade payable and accrued liabilities by \$1,242,034, offset by the increase in deferred revenue of \$389,506, current portion of long-term debt of \$360,835 and pensions and other employer obligations of \$74,199.

Working capital increased by \$1,355,609 to \$4,227,145 at November 30, 2020, compared to \$2,871,536 at May 31, 2020. On July 23, 2020, the Company received \$1,000,000 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. The current portion of this long-term debt was \$238,971 with the remaining balance sitting within non-current liabilities as at November 30, 2020. Hence, \$761,029 of the working capital improvement was directly related to the proceeds received. In addition, during the first and second quarter of FY 2021, the Company received a few significant heat recovery orders, see Section 6 Business Outlook for more details. As a result, the Company's trade and other receivables increased significantly by \$850,733 while the deferred revenue increased by \$389,506, which contributed to a net increase of \$461,227 to the working capital. In a nutshell, the increase was mainly due to the loan proceeds received and the net increase in trade receivables and deferred revenue as a result of the new orders received.

Specifically, the increase in working capital was due to the decrease in trade payables and accrued liabilities of \$1,242,034, the increase in cash and cash equivalents of \$128,743 and trade and other receivables of \$850,733, offset by the increase in deferred revenue of \$389,506, current portion of long-term debt of \$360,835, pensions and other employer obligations of \$74,199 at November 30, 2020.

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

|                     | Feb 28,<br>2019 \$ | May 31,<br>2019 \$ | Aug 31,<br>2019 \$ | Nov 30,<br>2019 \$ | Feb 29,<br>2020 \$ | May 31,<br>2020 \$ | Aug 31,<br>2020 \$ | Nov 30,<br>2020 \$ |
|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Current Assets      | 7,337,334          | 7,984,367          | 9,544,737          | 9,574,004          | 8,646,798          | 8,063,550          | 7,938,009          | 8,984,102          |
| Current Liabilities | 8,816,994          | 5,956,544          | 7,423,040          | 7,129,049          | 5,859,669          | 5,192,014          | 4,198,761          | 4,756,957          |
| Working Capital     | (1,479,660)        | 2,027,823          | 2,121,697          | 2,444,955          | 2,787,129          | 2,871,536          | 3,739,248          | 4,227,145          |

The Company's cash position was \$4,903,323 as at November 30, 2020, compared to \$4,774,580 at May 31, 2020, representing an increase of \$128,743. The increase was mainly due to cash generated from financing activities of \$944,579 mainly because of the proceeds received from the Working Capital - COVID-19 loan as mentioned earlier, offset by cash used in operating activities of \$753,520, exchange loss on cash and cash equivalents of \$57,112 and the cash used in investing activities of \$5,204.

The net cash used in the operating activities included the negative change in working capital of \$1,541,821, the interest paid on long-term debt of \$214,334, income taxes paid of \$3,298, offset by the net income of \$362,325 and the addbacks of non-cash items of \$643,608. The Company's cash position fluctuates based on the timing of long-term projects. 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 during the first and second quarter of FY 2021, which contributed to a negative change in trade payables and other liabilities of \$1,120,892.

## Management Discussion and Analysis for the Quarter Ended November 30, 2020

The Company invested \$5,204 in property, plant and equipment during the six months ended November 30, 2020.

During the six months ended November 30, 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. The company made repayment of long-term debts in the amount of \$66,643 and of lease obligations in the amount of \$63,035, and the Company paid dividends of \$8,503, which contributed to the total cash provided by financing activities of \$944,579.

At November 30, 2020, \$206,096 (7.6%) of the Company's trade receivables balance was over 90 days past due. \$48,698 of the past due balance was impaired at November 30, 2020. \$19,139 of trade receivables that was not over 90 days past due was also impaired.

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.

The Company's trade and other receivables have been reviewed for indicators of impairment. For the six months ended November 30, 2020, provisions of \$17,384 were made as expected credit losses and recorded under administrative expense on the condensed consolidated interim statements of comprehensive income (\$132,142 – November 30, 2019). For the six months ended November 30, 2020, \$15,583 (\$nil – November 30, 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 November 30, 2020:

|                                      |            |
|--------------------------------------|------------|
| Less than one year                   | \$ 111,361 |
| One to five years                    | 292,754    |
| Six to ten years                     | 252,375    |
| <hr/>                                |            |
| Total undiscounted lease obligations | 656,490    |
| <hr/>                                |            |
| Less: impact of present value        | (167,004)  |
| Less: current portion                | (77,726)   |
| <hr/>                                |            |
| Long term portion                    | \$ 411,760 |

During the six months ended November 30, 2020, the interest expense on lease obligations was \$18,678 and total cash outflow for leases was \$135,119, including \$53,406 for short-term leases.

During the six months ended November 30, 2019, the interest expense on lease obligations was \$13,845 and total cash outflow for leases was \$116,515, including \$60,612 for short-term leases.

For the six months ended November 30, 2020 and 2019, expenses for leases of low-dollar value items are not material. Extension options are included in the measurement of lease obligations when the Company is reasonably certain to exercise that option.

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

## Management Discussion and Analysis for the Quarter Ended November 30, 2020

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 November 30, 2020. The first tranche of the proceeds in the amount of \$1,000,000 was received by the Company on July 23, 2020. According to the agreement, the remaining amount of \$1,300,000 can be drawn later, subject to meeting certain conditions in accordance with this term loan. A standby fee of 1.50% per annum will be charged on the portion of the amount which has not been advanced or cancelled by February 2021.

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, and concentrating on building upon revenue levels experienced from FY 2016 to FY 2020.

### 3.4 Segmentation Information

In the six months ended November 30, 2020 and November 30, 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 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 November 30, 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                    | <b>3,334,287</b>      | 5,542,554   | <b>1,685,395</b>       | 2,305,542   | -                 | -         | <b>5,019,682</b>   | 7,848,096   |
| Cost of sales                    | <b>(1,775,974)</b>    | (3,677,044) | <b>(813,466)</b>       | (1,252,695) | -                 | -         | <b>(2,589,440)</b> | (4,929,739) |
| Gross profit                     | <b>1,558,313</b>      | 1,865,510   | <b>871,929</b>         | 1,052,847   | -                 | -         | <b>2,430,242</b>   | 2,918,357   |
| Other expenses <sup>(1)</sup>    | <b>(637,986)</b>      | (968,518)   | <b>(785,498)</b>       | (882,678)   | <b>(367,116)</b>  | (588,016) | <b>(1,790,600)</b> | (2,439,212) |
| Net finance costs <sup>(2)</sup> | <b>(7,468)</b>        | (6,019)     | <b>(1,563)</b>         | (2,341)     | <b>(62,473)</b>   | (95,663)  | <b>(71,504)</b>    | (104,023)   |
| Income (loss) before taxation    | <b>912,859</b>        | 890,973     | <b>84,868</b>          | 167,828     | <b>(429,589)</b>  | (683,679) | <b>568,138</b>     | 375,122     |
| Tax recovery (expense)           | <b>1,212</b>          | -           | <b>(7,538)</b>         | (10,563)    | <b>18,613</b>     | 20,622    | <b>12,287</b>      | 10,059      |
| Net income (loss)                | <b>914,071</b>        | 890,973     | <b>77,330</b>          | 157,265     | <b>(410,976)</b>  | (663,057) | <b>580,425</b>     | 385,181     |
| Attributable to:                 |                       |             |                        |             |                   |           |                    |             |
| Owners of the parent             | <b>914,036</b>        | 891,575     | <b>66,279</b>          | 142,040     | <b>(410,976)</b>  | (663,057) | <b>569,339</b>     | 370,558     |
| Non-controlling interest         | <b>35</b>             | (602)       | <b>11,051</b>          | 15,225      | -                 | -         | <b>11,086</b>      | 14,623      |

(1) Other expenses related to depreciation of right-of-use assets of \$33,364 for the quarter ended November 30, 2019 were reclassified from "Reconciling Items" to "Thermal Energy Ottawa" and "Thermal Energy Bristol" in the amount of \$10,811 and \$22,553, respectively, to conform to the current period presentation.

(2) Finance costs related to interest accretion on lease obligations of \$10,471 for the quarter ended November 30, 2019 were reclassified from "Reconciling Items" to "Thermal Energy Ottawa" and "Thermal Energy Bristol" in the amount of \$8,130 and \$2,341, respectively, to conform to the current period presentation.

## Management Discussion and Analysis for the Quarter Ended November 30, 2020

Segment information for the six months ended November 30 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                    | <b>4,885,024</b>      | 9,305,246   | <b>2,962,520</b>       | 3,508,639   | -                  | -           | <b>7,847,544</b>   | 12,813,885  |
| Cost of sales                    | <b>(2,612,304)</b>    | (5,921,078) | <b>(1,480,795)</b>     | (1,783,932) | -                  | -           | <b>(4,093,099)</b> | (7,705,010) |
| Gross profit                     | <b>2,272,720</b>      | 3,384,168   | <b>1,481,725</b>       | 1,724,707   | -                  | -           | <b>3,754,445</b>   | 5,108,875   |
| Other expenses <sup>(1)</sup>    | <b>(975,801)</b>      | (1,786,355) | <b>(1,353,020)</b>     | (1,689,086) | <b>(921,088)</b>   | (853,832)   | <b>(3,249,909)</b> | (4,329,273) |
| Net finance costs <sup>(2)</sup> | <b>(15,238)</b>       | (3,395)     | <b>(3,443)</b>         | (5,306)     | <b>(152,068)</b>   | (175,566)   | <b>(170,749)</b>   | (184,267)   |
| Income (loss) before taxation    | <b>1,281,681</b>      | 1,594,418   | <b>125,262</b>         | 30,315      | <b>(1,073,156)</b> | (1,029,398) | <b>333,787</b>     | 595,335     |
| Tax recovery (expense)           | <b>3,443</b>          | -           | <b>(12,496)</b>        | (10,563)    | <b>37,591</b>      | 41,670      | <b>28,538</b>      | 31,107      |
| Net income (loss)                | <b>1,285,124</b>      | 1,594,418   | <b>112,766</b>         | 19,752      | <b>(1,035,565)</b> | (987,728)   | <b>362,325</b>     | 626,442     |
| Attributable to:                 |                       |             |                        |             |                    |             |                    |             |
| Owners of the parent             | <b>1,285,089</b>      | 1,599,983   | <b>94,741</b>          | 4,239       | <b>(1,035,565)</b> | (987,728)   | <b>344,265</b>     | 616,494     |
| Non-controlling interest         | <b>35</b>             | (5,565)     | <b>18,025</b>          | 15,513      | -                  | -           | <b>18,060</b>      | 9,948       |

(1) Other expenses related to depreciation of right-of-use assets of \$59,057 for the six months ended November 30, 2019 were reclassified from "Reconciling Items" to "Thermal Energy Ottawa" and "Thermal Energy Bristol" in the amount of \$14,547 and \$44,510, respectively, to conform to the current period presentation.

(2) Finance costs related to interest accretion on lease obligations of \$13,845 for the six months ended November 30, 2019 were reclassified from "Reconciling Items" to "Thermal Energy Ottawa" and "Thermal Energy Bristol" in the amount of \$8,539 and \$5,306, respectively, to conform to the current period presentation.

Reconciling items comprise the following:

|   | Three months ended<br>November 30 |         | Six months ended<br>November 30 |         |
|---|-----------------------------------|---------|---------------------------------|---------|
|   | 2020                              | 2019    | 2020                            | 2019    |
|   | \$                                | \$      | \$                              | \$      |
| Corporate admin costs                         | <b>145,736</b>                    | 188,737 | <b>269,716</b>                  | 338,651 |
| Stock-based compensation                      | <b>50,230</b>                     | 51,666  | <b>100,460</b>                  | 103,332 |
| Professional fees                             | <b>75,954</b>                     | 94,606  | <b>169,646</b>                  | 153,493 |
| Depreciation of property, plant and equipment | <b>29,662</b>                     | 27,849  | <b>59,248</b>                   | 49,603  |
| Amortization of intangible assets             | <b>68,937</b>                     | 69,199  | <b>139,225</b>                  | 138,382 |
| Acquisition costs                             | <b>3,361</b>                      | -       | <b>13,461</b>                   | -       |
| Foreign exchange differences                  | <b>(6,764)</b>                    | 155,959 | <b>169,332</b>                  | 70,371  |
| Total   | <b>367,116</b>                    | 588,016 | <b>921,088</b>                  | 853,832 |

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 November 30, 2020

### *Material Segmentation Variances*

#### **Thermal Energy Ottawa:**

Revenue for the quarter ended November 30, 2020 of \$3,334,287, represented a decrease of \$2,208,267, or 39.8%, from \$5,542,554 in the same quarter of previous year. The decrease was mainly due to the reduced revenues in heat recovery systems by \$3,045,800, offset by the increase in revenue from condensate return system of \$837,533.

Revenue for the six months ended November 30, 2020 of \$4,885,024, represented a decrease of \$4,420,222, or 47.5%, from the \$9,305,246 achieved in the first half of the previous year. The decrease was due to the decrease in heat recovery revenue achieved in the first half of FY 2021 by \$4,958,430, offset by increase in condensate return systems by \$538,208.

Gross profit for the quarter ended November 30, 2020 decreased by \$307,197 compared to the same period from the previous year. The decrease in gross profit was mainly due to the decreased revenue from the heat recovery projects, which was offset by the increased revenue from condensate return systems which carry a higher gross margin. As a percentage of revenue, gross profit was 46.7% for the quarter ended November 30, 2020, compared to 33.7% achieved in the same period of last year. Despite the decrease in revenue, the gross profit as a percentage of revenue improved due to the change in product mix. As condensate return systems carry a higher margin than heat recovery systems, the higher revenue achieved from condensate return systems in Q2 FY 2021 resulted in an overall higher gross margin.

Gross profit for the six months ended November 30, 2020 decreased by \$1,111,448 over the same period of last year mainly due to the significant decrease in revenue by \$4,420,222. The gross profit as a percentage of revenue for the first half of FY 2021 was 46.5% as compared to 36.4% achieved in the first half of FY 2020. The increase in gross margin was mainly due to the change in the product mix.

Other expenses in this segment decreased by \$330,532 or 34.1% for the quarter ended November 30, 2020 compared to same quarter last year. Whereas other expenses for the six months ended November 30, 2020 reduced by \$810,554 to \$975,801 compared to the same period last year. The decrease was mainly due to cost savings achieved through cost control measures implemented, the government wage subsidies received and recognized as a reduction to operating expenses, and the decreased business development and travelling expenses as a result of reduced business development activities caused by travel restrictions and quarantine requirements.

For the quarter ended November 30, 2020, income before tax of \$912,859 was achieved, represented an increase of \$21,886, or 2.5%, from the same quarter of last year. The increase was mainly due to the reduced other expenses of \$330,532, offset by the decrease in gross profit of \$307,197.

Income before tax for the six months period was \$1,281,681, a decrease of \$312,737, compared to \$1,594,418 achieved in the same period of prior year. Despite the significant cost reduction of \$810,554 achieved in the first half of the FY 2021, the decrease in gross profit of \$1,111,448 as a result of the significantly decreased revenue compared to the same period of last year still contributed to a lower amount of income before tax for the six months ended November 30, 2020.

#### **Thermal Energy Bristol:**

Revenue for the quarter ended November 30, 2020 of \$1,685,395, represented a decrease of \$620,147, or 26.9%, from the \$2,305,542 achieved in the same period of the previous year. The decrease in revenue was mainly due to decreased sales in heat recovery systems and condensate return systems. The heat recovery projects were delayed due to travel restrictions and limited access to sites since March 2020. Revenue for the six months ended November 30, 2020 was \$2,962,520, a decrease of \$546,119, or 15.6%, from the \$3,508,639 achieved in the first half of the previous year. The decrease for the six months ended November

## Management Discussion and Analysis for the Quarter Ended November 30, 2020

30, 2020 was mainly due to decreased revenue in heat recovery systems, offset by the increase of 9.6% in revenue from condensate return systems.

Gross profit decreased in the second quarter of FY 2021 by \$180,918, compared to the same quarter last year. The decrease in gross profit was mainly due to the decreased revenue of \$620,147. Gross profit as a percentage of revenue in the second quarter of FY 2021 was 51.7%, an increase of 6% from 45.7% in same quarter of prior year. The increase in gross margin was mainly due to improved margin in condensate return systems. Gross profit for the six months ended November 30, 2020 decreased by \$242,982 over the same period of last year mainly due to the decreased revenue in heat recovery projects in Europe.

Other expenses decreased by \$97,180 or 11% for the quarter ended November 30, 2020, compared to quarter ended November 30, 2019. Other expenses for the six months ended November 30, 2020 is \$1,353,020, a decrease of \$336,066 or 19.9%, compared to the same period of FY 2020. The decrease for the quarter and the six months ended November 30, 2020 was mainly due to cost savings achieved through cost control measures, the government wage subsidies received and decreased costs in business development activities.

The resulting pre-tax income was \$84,868 for the quarter ended November 30, 2020, compared to \$167,828 for the quarter ended November 30, 2019. The pre-tax income decreased by \$82,960 due to decrease in gross profit of \$180,918 as a result of decreased revenues, offset by decrease in other expenses of \$97,180. The pre-tax income for the six months ended November 30, 2020 increased to \$125,262 from \$30,315 achieved in same period of the previous year, an increase of \$94,947. The increase was mainly due to reduced operating expenses of \$336,066 offset by the decrease in gross profit of \$242,982.

### Reconciling Items:

Other expenses within Reconciling items, which incorporates all costs not specifically attributable to either regional operational center. For the six months ended November 30, 2020, the other expenses within reconciling items increase from \$853,832 to \$921,088, an increase of \$67,256, compared to the same period ended November 30, 2019. The increase was mainly due to the increase in foreign exchange loss of \$98,961 and professional fees of \$16,153, offset by the decrease in corporate admin costs of \$68,935 as a result of the deferral of non-essential expenditures and travel arrangements during the period.

### 3.5 Quarterly Financial Information (unaudited)

For the eight quarters ended November 30, 2020:

| Quarter ended                              | 29-Feb-20<br>\$ | 31-May-20<br>\$ | 31-Aug-20<br>\$ | 30-Nov-20<br>\$ |
|--|-----------------|-----------------|-----------------|-----------------|
| Revenue                                    | 5,811,626       | 2,790,664       | 2,827,862       | 5,019,682       |
| Gross Profit                               | 2,417,450       | 1,427,728       | 1,324,203       | 2,430,242       |
| Gross Profit Percentage                    | 41.6%           | 51.2%           | 46.8%           | 48.4%           |
| EBITDA <sup>(1)</sup>                      | 709,115         | 31,412          | 14,998          | 788,471         |
| Total net income (loss)                    | 429,787         | (2,953,186)     | (218,100)       | 580,425         |
| Income (loss) per share, basic and diluted | 0.003           | (0.019)         | (0.001)         | 0.004           |

## Management Discussion and Analysis for the Quarter Ended November 30, 2020

| Quarter ended                              | 28-Feb-19<br>\$ | 31-May-19<br>\$ | 31-Aug-19<br>\$ | 30-Nov-19<br>\$ |
|--|-----------------|-----------------|-----------------|-----------------|
| Revenue                                    | 3,114,757       | 5,974,546       | 4,965,789       | 7,848,096       |
| Gross Profit                               | 1,143,104       | 3,117,297       | 2,190,518       | 2,918,357       |
| Gross Profit Percentage                    | 36.7%           | 52.2%           | 44.1%           | 37.2%           |
| EBITDA <sup>(1)</sup>                      | (734,366)       | 1,029,103       | 471,786         | 709,182         |
| Total net income (loss)                    | (889,481)       | 599,958         | 241,261         | 385,181         |
| Income (loss) per share, basic and diluted | (0.006)         | 0.004           | 0.002           | 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 November 30:

|  | Three months ended    |                       | Six months ended      |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
|  | Nov 30,<br>2020<br>\$ | Nov 30,<br>2019<br>\$ | Nov 30,<br>2020<br>\$ | Nov 30,<br>2019<br>\$ |
| Total net income (loss) attributable to owners of the parent     | <b>569,339</b>        | 370,558               | <b>344,265</b>        | 616,494               |
| Total net income (loss) attributable to non-controlling interest | <b>11,086</b>         | 14,623                | <b>18,060</b>         | 9,948                 |
| Interest charge  | <b>71,504</b>         | 106,134               | <b>170,749</b>        | 189,411               |
| Taxation   | <b>(12,287)</b>       | (10,059)              | <b>(28,538)</b>       | (31,107)              |
| Depreciation and amortization                                    | <b>98,599</b>         | 130,412               | <b>198,473</b>        | 247,042               |
| Share based compensation   | <b>50,230</b>         | 51,666                | <b>100,460</b>        | 103,332               |
| Net write-down of lease  | -                     | 45,848                | -                     | 45,848                |
| EBITDA   | <b>788,471</b>        | 709,182               | <b>803,469</b>        | 1,180,968             |

### 4. Related Party Transactions

Options outstanding for Directors (excluding the CEO) as at November 30, 2020 were 1,250,000, of which 750,000 were exercisable. There were no warrants outstanding for Directors.

Options outstanding for Senior Management (including the CEO) as at November 30, 2020 were 6,125,000, of which 3,041,667 were exercisable. There were no warrants outstanding for Senior Management.

#### *Directors and Senior Management Compensation*

During the quarter ended November 30, 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 April 15, 2020 to September 15, 2020, the Directors elected to reduce their compensation by 15% in support of the Company's cost control initiatives.

During the quarter ended November 30, 2020, total directors' fees were \$16,454. In addition, fees to the Chairperson of the Audit Committee were \$1,316; fees to the Chairperson of the Ethics, Governance and Compliance Committee were \$1,316; fees paid to the Chairman were \$1,974.

Compensation paid to directors and officers during the quarter ended November 30, 2020 (inclusive of the amounts described above but excluding share-based compensation) was as follows:

## Management Discussion and Analysis for the Quarter Ended November 30, 2020

|                                  | Salaries and fees |                | Incentives |          | Other short-term benefits |              | Total          |                |
|----------------------------------|-------------------|----------------|------------|----------|---------------------------|--------------|----------------|----------------|
|                                  | 2020              | 2019           | 2020       | 2019     | 2020                      | 2019         | 2020           | 2019           |
|                                  | \$                | \$             | \$         | \$       | \$                        | \$           | \$             | \$             |
| <b>Directors</b>                 |                   |                |            |          |                           |              |                |                |
| M. Williams                      | 3,291             | 4,375          | -          | -        | -                         | -            | 3,291          | 4,375          |
| J. Kelly                         | 5,264             | 7,400          | -          | -        | -                         | -            | 5,264          | 7,400          |
| W. Ollerhead                     | 4,607             | 6,725          | -          | -        | -                         | -            | 4,607          | 6,725          |
| D. Spagnolo                      | 4,607             | 6,725          | -          | -        | -                         | -            | 4,607          | 6,725          |
| W. White                         | 3,291             | 5,375          | -          | -        | -                         | -            | 3,291          | 5,375          |
| <b>Total</b>                     | <b>21,060</b>     | <b>30,600</b>  | <b>-</b>   | <b>-</b> | <b>-</b>                  | <b>-</b>     | <b>21,060</b>  | <b>30,600</b>  |
| W. Crossland                     | 58,500            | 60,000         | -          | -        | -                         | -            | 58,500         | 60,000         |
| R. Triebe                        | 44,120            | 45,250         | -          | -        | 826                       | 880          | 44,946         | 46,130         |
| S. Mawby <sup>(1) (2)</sup>      | 20,136            | 38,191         | -          | -        | 6,178                     | 6,170        | 26,314         | 44,361         |
| J. Zhang                         | 30,469            | 31,250         | -          | -        | 826                       | 880          | 31,295         | 32,130         |
| <b>Total</b>                     | <b>153,225</b>    | <b>174,691</b> | <b>-</b>   | <b>-</b> | <b>7,830</b>              | <b>7,930</b> | <b>161,055</b> | <b>182,621</b> |
| Total Related Party Transactions | 174,285           | 205,291        | -          | -        | 7,830                     | 7,930        | 182,115        | 213,221        |

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 1.7178 and 1.6705 in Q2 2021 and Q2 2020, respectively.
- (2) Mr. Mawby was on paternity leave for the period October 19, 2020 to November 30, 2020.

### 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, the 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 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 6 to 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 November 30, 2020 was approximately \$5.5 million. As at January 21, 2021, the Company had an order backlog of approximately \$7.2 million.

|  | 2018<br>\$ million | 2019<br>\$ million | 2020<br>\$ million |
|--|--------------------|--------------------|--------------------|
| Order backlog as at November 30            | 4.9                | 8.2                | 5.5                |
| Order backlog as at January reporting date | 10.4               | 9.1                | 7.2                |

- On January 19, 2021, the Company announced that it had been commissioned by a Canadian hospital to supply heat recovery equipment to reduce fuel use and carbon emissions. The systems, valued at \$770,000, are expected to deliver an annual fuel saving of \$198,000 and reduce carbon emissions by 1,115 metric tonnes per year.
- 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 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%. The project was about 13% complete at the quarter-end.
- 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. The project was about 50% complete at the quarter-end.
- 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

## Management Discussion and Analysis for the Quarter Ended November 30, 2020

operation producing up to 2,700 US gallons per minute of water heated from 85°F to 140°F. The project was about 92% 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 70% 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 95% 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 64% 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 November 30, 2020 | Weighted average remaining contractual life | Weighted average exercise price | Number exercisable at November 30, 2020 | Weighted average exercise price |
| 0.05-0.07                | 2,625,000                            | 0.50  | 0.05                            | 2,625,000                               | 0.05                            |
| 0.08-0.10                | 15,873,000                           | 2.37  | 0.08                            | 6,181,667                               | 0.08                            |
| 0.11-0.12                | 250,000                              | 0.99  | 0.12                            | 250,000                                 | 0.12                            |
|                          | 18,748,000                           | 2.09  | 0.08                            | 9,056,667                               | 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.

## Management Discussion and Analysis for the Quarter Ended November 30, 2020

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.

### *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

## Management Discussion and Analysis for the Quarter Ended November 30, 2020

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 (see section 5 Covid-19 Update for more details);
- 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'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 FY 2020 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.

## Management Discussion and Analysis for the Quarter Ended November 30, 2020

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”. On December 24, 2020, a week away from the end of the exit transition period, a post-Brexit trade deal was reached between the EU and the UK. This deal ensures that Britain can continue to trade in goods with EU countries without tariffs or quotas in the post-Brexit era, although the deal does not completely eliminate the possibility of tariffs in the future. Also, the UK is no longer following the EU’s rules on product standards. This means there could be more paperwork required, which could cause problems and delays if businesses turned up at ports unprepared. It appears that the deal may allow service suppliers to travel on short term visits without the need for work permits and it may allow the recognition of UK qualifications. At this moment, the most prominent post-Brexit concern for our business is related to potential shipping delays on product sales to EU countries. The Company has implemented new processes to adapt to the changes, including changing shipping terms to cover additional costs arising post-Brexit (i.e. taxes, custom clearing fees, etc.) to avoid shipping delays, and registering sales taxes in EU countries to be in compliance with local sales tax rules. It is still too early to see the full spectrum of impact from Brexit and the Company will continue monitoring new requirements arising as a result of Brexit.

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 November 30, 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.