



UGE INTERNATIONAL LTD.

Management's Discussion and Analysis

Three and Nine months ended September 30, 2019

The following Management's Discussion and Analysis ("MD&A") is prepared as of November 14, 2019 and is intended to assist in understanding the results of operations and financial condition of UGE International Ltd. (the "Company" or "UGE"). Throughout the MD&A, reference to the Company or UGE is on a consolidated basis. This MD&A should be read in conjunction with the unaudited condensed consolidated financial statements for the nine months ended September 30, 2019 and the audited consolidated financial statements for the year ended December 30, 2018, both of which are expressed in United States dollars ("USD") and prepared in accordance with International Financial Reporting Standards ("IFRS"). The functional currency of the Company is Canadian dollars ("CAD"). All amounts in this MD&A are expressed in USD, unless otherwise indicated.

Forward-Looking Information

This MD&A contains forward-looking information that involves material assumptions and known and unknown risks and uncertainties, certain of which are beyond the Company's control. Such assumptions, risks and uncertainties include, without limitation, those associated with, loss of markets, expected sales, future revenue recognition, currency fluctuations, the effect of global and regional economic conditions, industry conditions, changes in laws and regulations, and changes in how they are interpreted and enforced, the lack of qualified personnel or management, fluctuations in foreign exchange or interest rates, demand for the Company's services, and availability of funding. The Company's performance could differ materially from those expressed in, or implied by, this forward-looking information and, accordingly, no assurances can be given that any of the events anticipated by the forward-looking information will transpire or occur, or if they do so, what benefits the Company will derive there from. The forward-looking information is made as of the date of this MD&A, and the Company does not undertake any obligation to update publicly or to revise any of the included forward-looking information, whether as a result of new information, future events or otherwise, except as may be required by applicable securities laws. Actual events or results could differ materially from the Company's expectations and projections.

Corporate Profile

UGE is a solar and renewable energy solutions company, focused on providing commercial and industrial clients with energy solutions that deliver cheaper, more reliable, and cleaner electricity. We develop, engineer, deploy, and finance projects around the world, to organizations large and small.

UGE began as an energy solutions company, packaging together clean technologies to solve the needs of commercial and industrial clients. Over our history, we have developed expertise in solar, battery storage, and the financing of renewable energy projects, which we leverage to deploy energy systems for our clients, designed to provide them immediate economic benefit, such as through cheaper electricity costs or lease payments for real estate upon which solar is installed.

On February 22, 2016, we acquired UGE Canada Ltd. ("UGE Canada", formerly Endura Energy Project Corp Ltd.), which strengthened our market position in Canada and added additional engineering and deployment experience. On September 6, 2016, we divested our former wind energy operations, UGE Holdings Ltd. ("UGE Holdings") and its subsidiaries, which we had identified as non-core to our strategic plan. On April 3, 2017, we purchased substantially all the assets of Carmanah Solar Power Corp. ("CSPC"), further strengthening our project deployment capabilities.

Today, UGE provides complete turnkey solutions to organizations within our key markets: the Northeast US, Canada, and the Philippines, as well as engineering and consulting services to clients worldwide. Our focus is on leveraging the low cost of distributed solar energy to provide our clients more affordable energy.

Non-GAAP Measures

This MD&A presents certain non-GAAP (“GAAP” refers to Generally Accepted Accounting Principles) financial measures to assist readers in understanding the Company’s performance. These non-GAAP measures do not have any standardized meaning and therefore are unlikely to be comparable to similar measures presented by other issuers and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with GAAP. Management uses these non-GAAP measures to supplement the analysis and evaluation of operating performance.

Throughout this MD&A, the following terms are used, which are not found in the Chartered Professional Accountants of Canada Handbook and do not have a standardized meaning under GAAP.

EBITDA (Earnings before Interest, Taxes, Depreciation, and Amortization)

- “EBITDA” represents net income or loss from continuing operations excluding net finance income or expense, income tax or recovery, depreciation, and amortization.
- “Adjusted EBITDA” represents EBITDA adjusted to exclude stock-based compensation, costs associated with one-time transactions (such as acquisitions) or write-downs, impairment losses recognized on long-live assets such as goodwill and plant and equipment, and the gain (loss) on sale of assets and investments.
- “Adjusted EBITDA margin” represents Adjusted EBITDA as a percentage of revenue.

Order Backlog

The Company believes it is important to provide an analysis of order backlog as a measure of our potential to earn revenues in the upcoming quarters. Our backlog is made up of two components:

1. Committed: in the normal course of securing contracts, the customer often makes a form of pre-contract commitment to UGE, such as through a Letter of Intent, a signed term sheet, or an award letter in response to a Request for Proposal. We identify such projects as “Committed” until they are fully contracted.
2. Contracted: projects eventually reach the stage of being fully contracted, at which point there is a binding contract with the client and a deployment schedule has been identified.

As at September 30, 2019, our order backlog was \$31.1 million (December 31, 2018 - \$26.0 million), including \$6.5 million of Contracted Projects and \$24.6 million of Committed Projects. The Committed Projects had an estimated average gross margin of 21.4%. 60% of backlog was attributable to projects in the US, 32% to the Philippines, and 6% to a combination of Canada and rest of world.

The timing of the conversion of backlog to revenue can vary significantly on a project by project basis. A Contracted Project will typically start to convert to revenue in either the quarter the contract was signed or the quarter thereafter, with full deployment typically occurring within six to 15 months. A Committed Project can often delay one to six quarters, pending completion of contract negotiations and scheduling of work. A Committed Project may potentially fail to secure final contracting for various reasons and therefore may not convert to revenue.

1. Selected Quarterly Financial Information

	Three months ended Sept 30,		Nine months ended Sept 30,	
	2019	2018	2019	2018
Revenue	\$ 496,404	\$ 4,166,708	\$ 3,505,927	\$ 13,654,866
Cost of sales	(405,340)	(3,629,087)	(2,500,919)	(11,818,949)
Gross profit	91,064	537,621	1,005,008	1,835,917
Gross profit margin	18%	13%	29%	13%
Expenses				
Selling, general, and administrative	(769,697)	(1,145,585)	(2,347,237)	(3,609,489)
Project-related gain (loss)	-	(159,115)	-	(809,293)
Share-based compensation	(15,873)	-	(142,125)	-
Loss from operating activities	\$ (694,506)	\$ (767,079)	\$ (1,484,354)	\$ (2,582,865)
Impairment loss	-	-	-	(2,981,198)
Bad Debts	(70,834)	-	(170,838)	
Other income	68,989	-	190,026	
Gain on conversion of debt to equity	37	939,534	25,124	939,534
Accretion Expense	(17,732)	-	(53,108)	
Net finance costs	(101,534)	(126,521)	(199,911)	(648,914)
Income (loss) before income taxes	\$ (815,580)	\$ 45,934	\$ (1,693,061)	\$ (5,273,443)
Income tax recovery (expense)	72,153	66,880	(4,809)	(48,652)
Net income (loss) for the period	\$ (743,427)	\$ 112,814	\$ (1,697,870)	\$ (5,322,095)
Adjusted EBITDA	(570,178)	(671,183)	\$ (1,109,849)	\$ (1,668,078)
Adjusted EBITDA margin	-115%	-16%	-32%	-12%
Loss per share - basic and diluted	\$ (0.01)	\$ -	\$ (0.02)	\$ (0.13)

Assets and Non-Current Financial Liabilities

	September 30, 2019	December 31, 2018
Total assets	\$ 3,189,688	\$ 5,220,521
Total non-current financial liabilities	\$ 1,745,863	\$ 1,579,470

Management Discussion

In the third quarter of 2019, UGE continued to emerge from its transition towards the US and Philippines markets. As discussed in recent quarters, UGE is focused on growth in its US and Philippines markets, while deemphasizing the Canadian market after it experienced negative policy changes in 2018 which significantly impacted the Company's results.

The third quarter showed significant progress in the Company realizing this transition, with several projects commencing construction, while several others neared that state. In the US, 17 projects had entered the early stages of deployment, as well as 10 in the Philippines, strong indicators that revenue numbers will start to accelerate in the immediate future. In total, the Company procured 4.6 MW of solar panels in Q3 which make up the core component in projects that will be constructed in the remainder of 2019 and early 2020. The Company expects to procure a similar volume of equipment for additional projects in the next three months.

In the early stages of project deployment, recognized revenue is usually marginal as the Company completes engineering, permitting, and interconnection. It is after these early stages, when equipment is procured and installed, that we recognize the vast majority of project revenue. UGE expects to take possession of recently procured equipment throughout Q4 and early 2020, and to see a corresponding increase in revenue recognition, as well.

The shift in backlog towards the US and Philippines, which now account for over 90% of backlog, highlights the Company's progress towards its goals, and is on top of a series of improvements as described in the following Results of Operations section:

- Gross margins have shown consistent improvement throughout 2019; through the first nine months of the year the Company achieved gross margins of 29%, compared with 13% in the same nine months of 2018
- Continued spending discipline has seen a decrease in SG&A of 35% year over year after the Company downsized certain areas of the Company in late 2018.
- Net finance costs decreased 69% in the comparable nine-month period, driven by the Company's move to convert \$5.25 million of debt to equity in late 2018.

Despite significantly lower revenue, EBITDA has improved by 34%; positive EBITDA results require the Company's revenue to increase, which management expects to occur in the final three months of 2019 and throughout 2020. UGE's net loss for the first nine months of the year has decreased 68% due to its cost cutting measures and focus on more profitable projects.

Results of Operations for the three and nine months ended September 30, 2019

Revenue for the nine months ended September 30, 2019 was \$3,505,927, a 74% decrease from the same period of the prior year, as the Company wrapped up past engineering, procurement and construction ("EPC") projects from our Canadian entities and worked through the early stages of deployment on a significant number of new projects in the US and the Philippines, 27 in total across these two key regions.

The gross profit margin for the nine months ended September 30, 2019 increased to 29%, compared with 13% in the comparable time period. Revenue quality showed significant improvements, both in terms of the results of closing out past EPC projects, and in the higher margins expected from new projects in our growth markets. The expected average gross margin on our backlog continues to be approximately 23%, in line with our goals for positive EBITDA in the near future.

SG&A expenses for the nine months ended September 30, 2019 were \$2,347,237, compared with \$3,609,489 in the same period of the prior year, a decrease of 35%. The decrease is attributable to the Company's move to proactively decrease costs in less profitable business units in late 2018 as we work

towards achieving sustainable profitability through increased revenue and higher margins in our growth markets.

Adjusted EBITDA for the nine months ended September 30, 2019 was negative \$1,109,011, compared with negative \$1,668,078 in the prior year comparative period, a 34% improvement despite the decrease in revenue as the Company commences deployment of new projects in the US and Philippines. UGE is focused on returning to positive Adjusted EBITDA by the end of 2019 by scaling revenue and maintaining higher gross profit margins, while closely managing SG&A expenses, through our focus on growth in higher margin, self-developed projects in the US and Philippines.

For the nine months ended September 30, 2019, the Company's net loss was \$1,697,870 compared with \$5,322,095 in the same period of the prior year, a decrease of 68%. The vastly improved results were due to the impairment loss recorded in the second quarter of 2018, as well as the Company's efforts to decrease costs and increase margins as it works towards achieving sustainable profitability in the near future.

Summary of Quarterly Results

All amounts in 000's, except per share figures

	Dec 31 2017 Q4	Mar 31 2018 Q1	Jun 30 2018 Q2	Sep 30 2018 Q3	Trailing four quarters	Dec 31 2018 Q4	Mar 31 2019 Q1	Jun 30 2019 Q2	Sep 30 2019 Q3	Trailing four quarters
Operations:										
Revenue	\$ 4,158	\$ 6,060	\$ 3,428	\$ 4,167	17,813	\$ 3,537	\$ 2,065	\$ 944	\$ 496	7,042
Net income (loss) from operations	215	(455)	(1,361)	(767)	(2,368)	(2,178)	(440)	(473)	(595)	(3,686)
Net income (loss)	(97)	(801)	(4,634)	113	(5,419)	(821)	(511)	(406)	(743)	(2,481)
Net loss from operations per share										
basic and diluted	0.01	(0.01)	(0.03)	(0.02)	(0.06)	(0.04)	(0.01)	(0.01)	(0.01)	(0.06)
Net income (loss) per share										
basic	(0.00)	(0.02)	(0.11)	0.00	(0.13)	(0.01)	(0.01)	(0.01)	(0.02)	(0.04)
diluted	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Quarter to quarter comparisons in the financial results are not necessarily meaningful and should not be relied upon as an indication of future performance. The quarterly information is unaudited, but reflects all adjustments of a normal recurring nature, which are, in the opinion of management, necessary to present a fair statement of results of operations for the periods presented. Revenues and earnings may fluctuate from quarter to quarter. A number of factors could cause such fluctuations, including the timing of substantial orders. Because operating expenses are incurred based on anticipated sales, and are incurred throughout each fiscal quarter, any of the factors listed above could cause significant variations in revenues and earnings in any given quarter. The financial data has been presented in accordance with International Financial Reporting Standards in the presentation currency of US dollars, as opposed to the functional currency for the Company, which is the Canadian dollar.

See below for the calculation of Adjusted EBITDA for the most recent eight quarters:

	2017 Q4	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3
Net income (loss) from operations	\$ (97)	\$ (801)	\$ (4,634)	\$ 113	\$ (821)	\$ (511)	\$ (366)	\$ (816)
Add/(deduct):								
Net finance expense	162	242	281	127	179	53	46	102
Income tax expense (recovery)	(140)	104	11	(67)	45	36	41	(72)
Accretion expense	-	-	-	-	-	18	17	18
Depreciation and amortization	200	14	12	4	2	13	13	12
Share-based compensation	65	(13)	67	(148)	371	103	23	16
Acquisition related expenses	-	-	-	-	-	-	-	-
Goodwill impairment	-	-	2,981	-	-	-	-	-
Other one-time or non-recurring items	48	385	354	(700)	(1,448)	-	(25)	170
Adjusted EBITDA ⁽¹⁾	\$ 238	\$ (69)	\$ (928)	\$ (671)	\$ (1,672)	\$ (288)	\$ (251)	\$ (570)

(1) A non-GAAP measure defined above

Liquidity and Capital Resources

Cash flow from operations

The source of cash flows for the Company includes operations as well as debt and equity financings. The primary use of cash is on operating expenses, including cost of sales and working capital.

During the nine months ended September 30, 2019, the Company generated negative cash flow from operating activities of \$860,723 and a net loss of \$1,697,870. In addition, as at September 30, 2019, the Company had a working capital deficiency of \$4,111,010, which is expected to be settled through the course of operations and raising additional capital.

During recent quarters, the Company has decreased expense levels and focused on closing new projects with higher margins, and moving them into the deployment phase, with the goal of strengthening our financial position. However, to the extent that the Company does not generate positive cash flows from operations in the future, or financing is not available on reasonable terms, reductions in expenditures may be required or the Company may not be able to continue as a going concern. Certain conditions discussed above and in the Business Risks section of the MD&A raise significant doubt about our ability to continue as a going concern.

Financing activities

On February 8, 2019, the Company completed a non-brokered private placement of 4,053,333 units ("Units"), with each such Unit consisting of one common share in the capital of the Company (the "Common Shares") and half of one common share purchase warrant (each whole warrant, a "Unit Warrant") at an issuance price of \$CAD 0.15 per Unit for aggregate gross proceeds of \$CAD 608,000 (the "Offering"). Each Unit Warrant entitles the holder to purchase one Common Share at an exercise price of \$CAD 0.20 per share for a period of 24 months from the date of issuance.

On February 12, 2019, the Company converted four accounts payable balances totaling \$98,432 at a price of CAD\$0.15 per share resulting in the issuance of 871,112 common shares. In particular, two officers of the Company, including its Chief Executive Officer, elected to receive certain bonuses owed in the form of equity, which accounted for the majority of the conversion.

On June 10, 2019, the Company converted seven accounts payable balances totaling \$83,345 to common shares of the Company at a price of CAD\$0.15 per share resulting in the issuance of 555,632 common shares.

Contractual commitments

As of September 30, 2019, the Company has contractual commitments as follows:

	Carrying amount	Contractual cash flows	Within 1 year	1 to 2 years	2 to 5 years	5+ years
Accounts payable and accrued liabilities	\$ 4,385,323	\$ 4,385,323	\$ 4,385,323	\$ -	\$ -	\$ -
Loans payable	3,179,473	3,652,679	1,661,460	153,068	1,838,151	-
Lease commitments	-	93,521	55,736	37,785	-	-
	\$ 7,564,796	\$ 8,131,523	\$ 6,102,519	\$ 190,853	\$ 1,838,151	\$ -

Capital management

The objective in managing capital is to safeguard our ability to continue as a going concern and to sustain future development of the business. In the management of capital, the Company include shareholders' equity, excluding accumulated other comprehensive income and to maintain or adjust our capital structure, management may issue shares. The Board of Directors does not establish quantitative return on capital criteria for management. UGE is not subject to any externally imposed capital requirements.

Financial Instruments and other instruments

The Company's risk exposures and the impact on our financial instruments are summarized below:

Credit risk

Credit risk is the risk of loss associated with a counterparty's inability to fulfill its payment obligations. The Company manages credit risk by requiring payment from customers prior to delivery, where possible. However, the Company does have trade receivables outstanding with several customers.

Liquidity risk

Our objective in managing liquidity risk is to ensure sufficient liquidity to meet financial obligations when due by maintaining sufficient cash and cash equivalents to settle current liabilities and meet anticipated working capital requirements. As at September 30, 2019, the Company had cash of \$29,073, restricted cash of \$356,957, a working capital deficiency of \$4,111,010 and shareholders' deficiency of \$5,744,964. Discussion regarding our ability to manage our liabilities is outlined in the Liquidity and Capital Resources section. The Company plans to realize our assets, increase revenues and gross profit margins, and raise further capital as necessary, to maintain sufficient liquidity. If the Company is unable to achieve some or all of these plans within a reasonable timeframe, the Company may not be able to continue as a going concern.

Market risk

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

(a) Interest rate risk

The Company has cash balances and the majority of debt with fixed interest rates and therefore is not significantly exposed to fluctuating interest rates. Our current policy is to invest excess cash in a savings account at our banking institution.

(b) Foreign currency risk

The Company enters into transactions denominated in USD, CAD and Filipino Pesos, for which the related revenue, expenses, trade receivables and accounts payable balances are subject to exchange rate fluctuations. As of this time, the Company does not hedge our exposure to foreign currency risk using financial instruments.

Changes in Accounting Policies

IFRS 16, Leases (“IFRS 16”)

On January 1, 2019, the Company adopted IFRS 16, which was issued in January 2016 and it replaces IAS 17 “Leases”, IFRIC 4 “Determining Whether an Arrangement Contains a Lease”, SIC-15 “Operating Leases-Incentives” and SIC-27 “Evaluating the Substance of Transactions Involving the Legal Form of a Lease”.

This standard introduces a single lessee accounting model and requires a lessee to recognize assets and liabilities for all leases with a term of more than 12 months unless the underlying asset is of low value. A lessee is required to recognize a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. This standard substantially carries forward the lessor accounting requirements of IAS 17, while requiring enhanced disclosures to be provided by lessors. Other areas of the lease accounting model have been impacted, including the definition of a lease.

IFRS 9, Financial Instruments (“IFRS 9”)

On January 1, 2018 the Company adopted IFRS 9, Financial Instruments, which sets out the accounting standards for the classification and measurement of financial instruments. IFRS 9 became effective for the annual periods beginning on or after January 1, 2018, and replaces IAS 39, Financial Instruments: Recognition and measurement. The new standard provides a model for the classification and measurement of financial instruments, a single forward-looking “expected loss” impairment model, and a reformed approach for hedge accounting. As most of the requirements in IAS 39 for classification and measurement of financial liabilities were carried forward into IFRS 9, the Company’s accounting policy with respect to financial liabilities is unchanged.

IFRS 15, Financial Instruments (“IFRS 15”)

On January 1, 2018 the Company adopted IFRS 15, Revenue from Contract sand Customers, which sets out the accounting standards for the classification and measurement of revenue. IFRS 15 became effective for the annual periods beginning on or after January 1, 2018. The new standard provides a revenue model that has five steps: (i) Identify the contract with a customer; (ii) Identify all the individual performance obligations within the contract; (iii) Determine the transaction price; (iv) Allocate the price to the performance obligations; & (v) Recognize revenue as the performance obligations are fulfilled.

IFRIC 23, Uncertainty Over Income Tax Treatments (“IFRIC 23”)

IFRIC 23 was issued in June 2017 and clarifies the accounting for uncertainties in income taxes. The interpretation committee concluded that an entity shall consider whether it is probable that a taxation authority will accept an uncertain tax treatment. If an entity concludes it is probable that the taxation authority will accept an uncertain tax treatment, then the entity shall determine taxable profit (tax loss), tax bases, unused tax losses and credits or tax rates consistently with the tax treatment used or planned to be used in its income tax filings. If an entity concludes it is not probable that the taxation authority will accept an uncertain tax treatment, the entity shall reflect the effect of uncertainty in determining the related taxable profit (tax loss), tax bases, unused tax losses and credits or tax rates. IFRIC 23 is effective for annual periods beginning on or after January 1, 2019.

Business Risks

Going concern risk

These consolidated interim financial statements have been prepared assuming the Company will continue as a going concern, notwithstanding that the Company has a working capital deficiency, has incurred losses from operations, and is in discussions with its bank regarding its revolving credit facility as of the date of this MD&A. During the nine months ended September 30, 2019, the Company had a net loss of \$1,697,870. As at September 30, 2019, the Company had cash of \$29,073, restricted cash of \$356,957, a working capital deficiency of \$4,111,010, and shareholders' deficiency of \$5,744,964. The Company has incurred losses as the Company develops and expand our operations and revenues have not been sufficient to cover all costs and may not be sufficient in future quarters.

The Company's ability to continue as a going concern and realize its assets and discharge its liabilities in the normal course of business is dependent upon achieving and maintaining profitability and the ability to raise additional debt or equity financing to fund its current and any future working capital needs. There are various risks and uncertainties affecting the Company's operations including, but not limited to, the market acceptance and rate of commercialization of the Company's offerings, the ability of the Company to successfully execute its business plan and changes thereof, the public policy environment for renewable energy solutions, the Company's ability to raise sufficient equity and/or debt financing, the ability of the Company to work with bank partners on any defaults of its loan agreement as they may arise, and general global economic conditions, certain of which are beyond the Company's control. The Company's strategy to mitigate these risks and uncertainties is to execute a business plan aimed at continued focus on renewable energy solutions, revenue growth, improving overall gross profit, managing operating expenses and working capital requirements, and securing additional financing, as needed.

To date the Company has funded losses with private placements, a short form prospectus offering, and debt. To the extent that the Company is unable to complete any additional financing, the Company may need to seek strategic alternatives. Management is confident that adequate funding will be obtained for the Company to carry on as a going concern, but there can be no guarantees that such financing will be obtained.

The directors are of the opinion that it is appropriate to prepare the consolidated interim financial statements for the nine months ended September 30, 2019 on a going concern basis, which do not include any adjustments or disclosures that would be required if assets are not realized and liabilities and commitments are not settled in the normal course of operations. If the Company is unable to continue as a going concern, then the carrying value of certain assets and liabilities would require revaluation to a liquidation basis, which could differ materially from the values presented in the consolidated interim financial statements.

Customer concentration risk

The Company derives a significant portion of revenue from sales to a relatively limited number of customers. If any of our more significant prospective customers fail to purchase our solutions, or our existing customers discontinue their relationship with us for any reason, our revenue may be substantially reduced. To mitigate this risk, the Company has implemented quality control measures and aim to provide superior customer service. Our sales programs also address a large base of potential customers and at any given time the Company is pursuing a significant number of sales opportunities.

Sales risk

Our sales efforts target medium and large organizations and the Company spends significant time and resources educating prospective customers about the features and benefits of our solutions. Our sales cycle usually ranges from six to 12 months and sales delays could cause our operating results to vary. The Company balances this risk by continuously assessing the condition of our backlog and pipeline and making the appropriate adjustments as far in advance as possible. Our strategy also includes a comprehensive

program to build and improve relationships with our customers to better understand their needs and proactively manage incoming business levels effectively.

Major Shareholders

The following entities and individuals each have significant shareholdings of the Company:

Junfei Liu holds 19,952,261 Common Shares, representing 26% of the issued and outstanding Common Shares on a non-diluted basis; Xiangrong Xie holds 12,691,936 Common Shares representing 16% of the issued and outstanding Common Shares on a non-diluted basis and also holds 460,000 Special Warrants exercisable for Common Shares; Castel Qihua Hi-Tech Investments Limited ("Castel") holds 5,159,770 Common Shares, representing 7% of the issued and outstanding Common Shares on a non-diluted basis. The Major Shareholders collectively own more than 25% of the Company and will have significant influence in determining the outcome of any corporate transaction or other matter submitted to the shareholders for approval, including mergers, consolidations and the sale of all or substantially all of the Company's assets, election of directors and other significant corporate actions. Major Shareholders may also have the power to prevent or cause a change in control. In addition, without the consent of one or more of the Major Shareholders, the Company could be prevented from entering into transactions that may otherwise be beneficial to the Company.

Dependence on Management and Ability to Hire and Retain Key Personnel

The Company depends on the business and technical expertise of its management. The contributions of the existing management team to the immediate and near-term operations of the Company are likely to be of central importance. In addition, the competition for qualified personnel in the industry is competitive and there can be no assurance that the Company will be able to continue to attract and retain all personnel necessary for the development and operation of its business. Investors must rely upon the ability, expertise, judgment, discretion, integrity and good faith of the management of the Company.

The Company's success will also depend in large measure on certain key personnel. The loss of the services of such key personnel may have a material adverse effect on the Company's business, financial condition, financial performance, and prospects. To support growth, the Company must hire, train, deploy, manage and retain a number of skilled employees. In particular, the Company must continue to expand and optimize its sales infrastructure to grow its customer base and the Company plans to expand its sales force. Identifying and recruiting qualified personnel and training them requires significant time, expense and attention. It can take several months before a new salesperson is fully trained and productive. If the Company is unable to hire, develop and retain talented sales personnel or if new sales personnel are unable to achieve desired productivity levels in a reasonable period of time, the Company may not be able to realize the expected benefits of this investment or grow its business.

Enforcing Judgments Internationally

Certain directors and officers, including the Chief Executive Officer, reside outside of Canada and substantially all of the assets of these persons are located outside of Canada. It may not be possible for shareholders to effect service of process against the Company's directors and officers who are not resident in Canada. In the event a judgment is obtained in a Canadian court against one or more of the Company's directors or officers for violations of Canadian securities laws or otherwise, it may not be possible to enforce such judgment against those directors and officers not resident in Canada. Additionally, it may be difficult for an investor, or any other person or entity, to assert Canadian securities law claims or otherwise in original actions instituted in the USA. Courts in these jurisdictions may refuse to hear a claim based on a violation of Canadian securities laws or otherwise on the grounds that such jurisdiction is not the most appropriate forum to bring such a claim. Even if a foreign court agrees to hear a claim, it may determine that the local law, and not Canadian law, is applicable to the claim. If Canadian law is found to be applicable, the content of applicable Canadian law must be proven as a fact, which can be a time-consuming and costly process. Certain matters of procedure will also be governed by foreign law.

Limited Business History

The Company has not paid any dividends and it is unlikely the Company will pay any dividends in the immediate or foreseeable future. The success of the Company will depend entirely on the expertise, ability, judgment, discretion, integrity and good faith of its management.

The Company has limited financial resources and there is no assurance that additional funding will be available to the Company for further operations or to fulfil its obligations under applicable debt and supplier agreements. There is no assurance that the Company can operate profitably, or provide a return on investment, or that it will successfully implement its plans.

Additionally, the Company cannot assure that it will be successful in generating substantial revenue from new products or services or from any additional energy-related products and services it may introduce in the future. In addition, the Company only has limited insight into emerging trends that may adversely impact its business, prospects and operating results. As a result, the Company's limited operating history may impair the Company's ability to accurately forecast future performance.

Additional Financing

To date, the Company has funded losses by issuing additional equity and loans. To the extent that the Company does not achieve or maintain positive cash flows from operations in the future, or financing is not available or not available on reasonable terms, reductions in expenditures will be required or the Company may not be able to continue as a going concern. These conditions raise significant doubt about the ability of the Company to continue as a going concern. If the Company is unable to continue as a going concern, then the carrying value of certain assets and liabilities would require revaluation to a liquidation basis, which could differ materially from the values presented in the Company's financial statements.

In order to achieve profitability, make further investments, or take advantage of future opportunities, the Company will require additional financing. The ability of the Company to arrange such financing in the future will depend in part upon prevailing capital market conditions, as well as upon the business success of the Company. There can be no assurance that the Company will be successful in its efforts to arrange additional financing on terms satisfactory to the Company. If additional financing is raised by the issuance of shares or other forms of convertible securities from treasury, control of the Company may change, and shareholders may suffer additional dilution. If adequate funds are not available, or are not available on acceptable terms, the Company may not be able to take advantage of opportunities, or otherwise respond to competitive pressures and remain in business.

Negative Cash Flows and Profitability

During the nine months ended September 30, 2019, the Company had negative cash flow and since its inception has not been profitable. There is no assurance that the Company will earn profits in the future, or that profitability will be sustained. There is no assurance that future revenues will be sufficient to generate the funds required to continue the Company's business development and marketing activities. If the Company does not have sufficient capital to fund its operations, it may be required to reduce its sales and marketing efforts or forego certain business opportunities.

Significant Competition

There are companies in competition with us in each of the markets that the Company or its subsidiaries operate in. Some of these companies may be better financed or have larger sales teams and marketing budgets than the Company. There can be no guarantee that the Company will be able to effectively compete in the marketplace with such competition.

The renewable energy industry is competitive and continually evolving as participants strive to distinguish themselves within their markets. The Company's competitors can be expected to continue to develop

competitive advantages and could cause a decline in market acceptance of the Company's services. In addition, the Company's competitors could cause a reduction in the prices for some services as a result of intensified price competition.

Also, the Company may be unable to effectively anticipate and react to new entrants in the marketplace competing with the Company's services.

Third Party Suppliers

The Company's product suppliers and subcontractors including, without limitation, installers and solar panel, inverter, and racking manufacturers, may run into funding, supply chain, technical, and/or other difficulties. As a result, they could be unable to deliver essential services or components in time and could cause significant delays in the delivery of the Company's projects. Any significant delivery delays could negatively impact the Company's future revenue and may have a material adverse effect on the business, financial position or results of operations of the Company. In addition, it is possible that certain vendors may face high demand for their services or products and not be able to supply the Company with what it needs, and/or when it needs it. Trade barriers, such as tariffs imposed by governments on import, also have the potential to disrupt the Company's supply chain, necessitating the Company to find other suppliers, sometimes on short notice. Such tariffs could also impose additional costs on the Company, negatively impacting its profitability.

The declining cost of solar panels has been a driver in the pricing of the Company's projects and customer adoption of this form of renewable energy. If solar panel prices increase or do not continue to decline, the Company's growth could slow, and the Company's financial results could suffer. Such events could harm the Company's financial results by requiring it to pay higher prices.

Warranty

The Company's business exposes it to potential liability risks. The Company sometimes provides warranty for its services, often for one year or more after the service is completed. If the Company experiences a greater number of warranty claims than budgeted in the normal course, the Company's gross margins could be negatively affected.

Bonding

Our ability or inability to obtain project bonding may limit or restrict the nature and size of contracts the Company may be awarded and hence have an impact on our plans to achieve positive cash flow and profitability.

Commercial and Industrial Customers

Projects with commercial and industrial customers may create concentrated operating and financial risks. The effect of recognizing revenue or other financial measures on the sale of a larger project, or the failure to recognize revenue or other financial measures as anticipated in a given reporting period because a project is not yet completed under applicable accounting rules by period end, may materially impact the Company's quarterly or annual financial results. In addition, if operational issues arise on a larger project, or if the timing of such projects unexpectedly shifts for other reasons, such issues could have a material impact on the Company's financial results. If the Company is unable to successfully manage these significant projects in multiple markets, including related internal processes and external construction management, or if the Company is unable to continue to attract such significant customers and projects in the future, the Company's financial results would be harmed.

Management of Growth

The Company may be subject to growth-related risks including capacity constraints and pressure on its

internal systems and controls. The ability of the Company to manage growth effectively will require it to continue to implement and improve its operational and financial systems and to expand, train and manage its employee base. The inability of the Company to deal with this growth may have a material adverse effect on the Company's business, financial condition, results of operations and prospects.

Dilution

The Company may make future acquisitions or enter into financings or other transactions involving the issuance of securities of the Company which may be dilutive to the existing shareholders.

Damage to Reputation

The Company depends significantly on its reputation for high-quality products, services, engineering abilities and exceptional customer service to attract new customers and grow its business. If the Company fails to continue to deliver its solutions within planned timelines, if products and services do not perform as anticipated, or if the Company damages any of its customers' properties or cancels projects, its brand and reputation could be significantly impaired. In addition, if the Company fails to deliver, or fails to continue to deliver, high-quality services to customers through long-term relationships, the Company's customers will be less likely to purchase future services from the Company, which is a key strategy to achieve desired growth. The Company also depends on referrals from existing customers for growth, in addition to other marketing efforts. Therefore, the Company's inability to meet or exceed current customers' expectations would harm the Company's reputation and growth through referrals.

Resale of Shares

The continued operation of the Company will be dependent upon its ability to generate profitable operations and to procure additional financing. There can be no assurance that any such profits can be generated or that other financing can be obtained. If the Company is unable to generate such profits or obtain such additional financing, any investment in the Company may be lost. In such event, the probability of resale of the Company Shares would be diminished.

Fluctuating Results of Operations

The Company's quarterly operating results are difficult to predict and may fluctuate significantly in the future. Given that the Company is an early-stage company operating in a rapidly growing industry, fluctuations may be masked by recent growth rates and thus may not be readily apparent from historical operating results. As such, past quarterly operating results of the Company may not be good indicators of future performance.

In addition to the other risks described in this "Risk Factors" section, the following factors could cause the Company's operating results to fluctuate:

- significant fluctuations in customer demand for the Company's offerings;
- market acceptance of the Company's new or existing offerings;
- the Company's ability to complete installations in a timely manner;
- the Company's ability to continue to expand operations, and the amount and timing of expenditures related to this expansion;
- announcements by the Company or its competitors of significant acquisitions, strategic partnerships, joint ventures or capital-raising activities or commitments;

- changes in the Company's pricing policies or terms, or those of its competitors, including electric utilities; and
- actual or anticipated developments in the competitive landscape.

For these or other reasons, the results of any prior quarterly or annual periods of the Company should not be relied upon as indications of the Company's future performance. In addition, actual revenue, key operating metrics and other operating results in future quarters may fall short of the expectations of investors and financial analysts, which could have a severe adverse effect on the trading price of the Company's shares.

International Operations

The Company has a customer base internationally. Risks inherent to international operations include the following:

- inability to work successfully with third parties with local expertise to co-develop or build international projects;
- multiple, conflicting and changing laws and regulations, including export and import restrictions, tax laws and regulations, labour laws and other government requirements, approvals, permits and licenses;
- changes in general economic and political conditions in the countries where the Company operates, including changes in government incentives relating to power generation;
- political and economic instability, including wars, acts of terrorism, political unrest, boycotts, curtailments of trade and other business restrictions;
- difficulties and costs in recruiting and retaining individuals skilled in international business operations;
- financial risks, such as longer sales and payment cycles and greater difficulty collecting accounts receivable; and
- inability to obtain, maintain or enforce intellectual property rights, including inability to apply for or register material trademarks in foreign countries.

Doing business in foreign markets requires the Company to be able to respond to rapid changes in market, legal, and political conditions in these countries. The success of the Company's business depends, in part, on its ability to succeed in differing legal, regulatory, economic, social and political environments.

The Company will continually and selectively consider new international markets. In other instances, the Company may rely on the efforts and abilities of foreign business partners in such markets. Certain international markets may be slower than domestic markets in adopting the Company's products and services, and operations in international markets may not develop at a rate that supports the Company's level of investment.

Existing Industry Regulations

Federal, state, provincial, and local government regulations and policies concerning the electric utility industry, and internal policies and regulations promulgated by electric utilities, heavily influence the market for electricity generation products and services. These regulations and policies often relate to electricity pricing and the interconnection of customer-owned electricity generation. Governments and utilities continuously modify these regulations and policies. These regulations and policies could deter customers

from purchasing solar solutions.

In addition, any changes to government or internal utility regulations and policies that favour electric utilities could reduce the Company's competitiveness and cause a significant reduction in demand for its products and services.

Drop in Retail Price of Utility-Generated Electricity and Improved Infrastructure

The Company believes that a customer's decision to implement a renewable energy solution is driven largely by its desire to reduce its cost of electricity. A customer's decision may also be affected by the cost of other renewable energy sources. Decreases in the retail prices of electricity from the utilities or from other renewable energy sources or improved distribution of electricity would harm the Company's ability to offer competitive pricing and could harm its business. The price of electricity from utilities could decrease as a result of:

- the construction of a significant number of new power generation plants, particularly in emerging markets, including nuclear, coal, natural gas or renewable energy;
- the construction of additional electric transmission and distribution lines which improve access, reliability and/or cost of electricity;
- a reduction in the price of natural gas or other fossil fuels; and
- development of new renewable energy technologies that provide less expensive energy.

If the retail price of energy available from utilities were to decrease due to any of these reasons, or others, or the distribution of electricity is improved as a result of improved infrastructure, the Company may be at a competitive disadvantage, limiting growth.

Conflicts of Interest

Certain directors of the Company are also directors of other companies and as such may, in certain circumstances, have a conflict of interest requiring them to abstain from certain decisions.

Dividends

The Company has not paid any dividends on its outstanding shares. Any payments of dividends on the Company's shares will be dependent upon the financial requirements of the Company to finance future growth, the financial condition of the Company and other factors which the Company's board of directors may consider appropriate in the circumstance. It is unlikely that the Company will pay dividends in the immediate or foreseeable future.

Issuance of Debt

From time to time, the Company may enter into transactions to acquire assets or the shares of other organizations or seek to obtain additional working capital. These transactions may be financed in whole or in part with debt, which may increase the Company's debt levels above industry standards for companies of similar size. Depending on future plans, the Company may require additional equity and/or debt financing that may not be available or, if available, may not be available on favourable terms to the Company. Neither the Company's articles nor its by-laws limit the amount of indebtedness that the Company may incur. As a result, the level of the Company's indebtedness from time to time, could impair its ability to obtain additional financing on a timely basis to take advantage of business opportunities that may arise.

Price Volatility of Publicly Traded Securities

In recent years, the securities markets in the USA and Canada have experienced a high level of price and volume volatility, and the market prices of securities of many companies have experienced wide fluctuations in price. There can be no assurance that continuing fluctuations in price will not occur. It may be anticipated that any quoted market for the Company's shares will be subject to market trends generally, notwithstanding any potential success of the Company in creating revenues, cash flows or earnings. The value of the Company's shares will be affected by such volatility. A public trading market in the Company Shares having the desired characteristics of depth, liquidity and orderliness depends on the presence in the marketplace of willing buyers and sellers of Company Shares at any given time, which presence is dependent on the individual decisions of investors over which the Company has no control. There can be no assurance that an active trading market in securities of the Company will be established and sustained. The market price for the Company's securities could be subject to wide fluctuations, which could have an adverse effect on the market price of the Company. The stock market has, from time to time, experienced extreme price and volume fluctuations, which have often been unrelated to the operating performance, net asset values or prospects of particular companies. If an active public market for the Company's shares does not develop, or does not continue to develop, the liquidity of a shareholder's investment may be limited, and the share price may decline.

No Guarantee of Active Liquid Market

There may not be an active, liquid market for the Common Shares. There is no guarantee that an active trading market for the Common Shares will be maintained on the TSX Venture Exchange ("TSXV"). Investors may not be able to sell their Common Shares quickly, on satisfactory terms or at the latest market price if trading in the Common Shares is not active.

Issues Related to Acquisitions

With acquisitions there is a risk that integration will result in challenges that were not anticipated, such as key staff departures, diversion of management time and resources, or projected revenues that do not materialize. Should the future projected revenue attributed to any acquisition not materialize, the Company's overall revenues will be negatively impacted, which may have a material adverse effect on the Company's revenues going forward. The Company may not be able to successfully overcome these risks and this may adversely affect the Company's financial condition, and ability to execute its business plan.

Government Policies

The Company is subject to policies, laws, and regulations established by various levels of government and government agencies. These are subject to change by the government or their agencies or the courts and are administered by agencies that may have discretion in their interpretation. Future legal and regulatory changes or interpretations may have a material adverse effect on the Company.

Currency Exchange Risk

The Company currently operates in Canada, USA and the Philippines where the revenues and expenses at times are in different currencies making the margins on projects sensitive to exchange rate risk. Sudden increases in the value of the US dollar or reductions in the value of the Canadian dollar can have a negative impact on the cash-flow of the Company and the feasibility of certain projects.

Management's Report on Disclosure Controls and Procedures and Internal Control over Financial Reporting

Management is committed to delivering timely and accurate disclosure of all material information.

Disclosure controls and procedures ensure that reporting requirements are satisfied, and that material information is disclosed in a timely manner. Due to the limitation on the ability of the officers to design and implement cost-effective policies for disclosure controls and procedures and internal control over financial reporting, the officers are not making representations that such controls and procedures would identify and allow for reporting material information on a timely basis, nor are they representing that such procedures are in place that provide reasonable assurance regarding the reliability of financial reporting.

However, as permitted for TSX Venture issuers, the CEO and CFO individually have certified that after reviewing the condensed consolidated interim financial statements for the nine months ended September 30, 2019 and this MD&A of the Company, there are no material misstatements or omissions, and the filing materially presents the consolidated financial position and consolidated results of operations and cash flows for the nine months ended September 30, 2019 and all material subsequent activity up to November 14, 2019.

Other

As of the date of this MD&A, the Company has 81,001,762 common shares issued and outstanding. In addition, there are 3,276,667 share purchase warrants which may be exercised for one common share each at a fixed exercise price, and stock options that have been granted to purchase an additional 5,273,272 common shares.

Additional information and other publicly filed documents relating to the Company are available through the internet on the Canadian Securities Administrators' System for Electronic Document Analysis and Retrieval ("SEDAR"), which can be accessed at www.sedar.com.