

# **Management Discussion and Analysis**

For The 6 Months Ended March 31, 2015

The following discussion and analysis as of June 1, 2015 should be read in conjunction with the consolidated financial statements of Eguana Technologies Ltd. ("Eguana", or the "Company") and notes for the three months ended March 31, 2015.

Additional information relating to the Company including our consolidated financial statements, management discussion and analysis, news releases, and other required filing documents is available on SEDAR at <a href="www.sedar.com">www.sedar.com</a> and on our website at <a href="www.eguanatech.com">www.eguanatech.com</a>. The aforementioned documents are issued and made available in accordance with legal requirements but are not incorporated by reference into this MD&A.

#### FORWARD LOOKING INFORMATION

This management discussion and analysis ("MD&A,") especially but not limited to this section, contains certain forward-looking statements within the meaning of securities legislation relating but not limited to our operations, anticipated financial performance, business prospects and strategies. Forward-looking information includes statements that are not statements of historical fact and address activities, events or developments that the Company expects or anticipates will or may occur in the future, including such things as investment objectives and strategy, the development plans, the Company's intentions, results of operations, levels of activity, future capital and other expenditures (including the amount, nature and sources of funding thereof), business prospects and opportunities, construction timetable, extent of solar resources and future growth and performance. When used in this MD&A, statements to the effect that the Company or its management "believes", "expects", "expected", "plans", "may", "will", "projects", "anticipates", "estimates", "would", "could", "should", "endeavours", "seeks", "predicts" or "intends" or similar statements, including "potential", "opportunity", "target" or other variations thereof that are not statements of historical fact should be construed as forward-looking information. These statements reflect management's current beliefs with respect to future events and are based on information currently available to management of the Company. The Company believes the expectations reflected in such forward-looking information are reasonable, but no assurance can be given that these expectations will prove to be correct and such forward-looking information should not be unduly relied upon.

In particular we include: statements concerning the value of our Bi-Direx power control and conversion systems ("PCS"), statements concerning growth potential for energy storage in European and North American markets; statements concerning the economic drivers of distributed energy storage; statements concerning our business strategy; statements concerning plans to roll out new products in 2015; and statements concerning factors which we believe may be relevant in assessing whether our plans are achievable.

Our assumptions and the conclusions that we draw represent forward-looking information. While valuable in assessing our future prospects, forward-looking information is not a guarantee of future performance and involves a number of risks and uncertainties, only some of which are described herein. Many factors could cause the Company's actual results, performance or achievements, or future events or developments, to differ materially from those expressed or implied by the forward-looking information.

Should one or more of these risks or uncertainties materialize, or should assumptions underlying the forward-looking statements prove incorrect, actual results, performance or achievement may vary materially from those expressed or implied by the forward-looking information contained in this MD&A. These factors should be carefully considered and readers are cautioned not to place undue reliance on forward-looking information, which speaks only as of the date of this MD&A. All subsequent forward-looking information attributable to the Company herein is expressly qualified in their entirety by the cautionary statements contained in or referred to herein. The Company does not undertake any obligation to release publicly any revisions to forward-looking information contained in this MD&A to reflect events or circumstances that occur after the date of this MD&A or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

# BUSINESS OVERVIEW: HISTORY, VISION AND STRATEGY, AND CORE BUSINESS

A detailed overview of Eguana's business, including a summary of our history, business strategy, industry outlook, and core business is provided in the MD&A for the financial year ended September 30, 2014 which may be found, together with all our public documents, at www.sedar.com.

# MANAGEMENT DISCUSSION OF FIRST 6 MONTH RESULTS

#### **Operations**

Product sales revenues during the first half of the 2015 fiscal year totaled \$3,097,800 by comparison to \$885,706 for the same period in 2014. Revenues for the 2<sup>nd</sup> Quarter were \$1,545,575 up from \$396,357 in 2014 and roughly the same as Q1. Approximately 94% of Q2 revenues were from sales for European residential self-consumption markets. Demand in the current Quarter is tracking to increase revenues by approximately 40%, with continued growth forecast the balance of the calendar year.

One-time expenses incurred during the first half of the fiscal year reduced standard gross margins from 7% to negative 23%. The one-time costs consist of retrofits (\$321,068) to products shipped in FY 2014 and returned during Q1 due to faulty magnetic components supplied by one of our suppliers and costs incurred to expedite delivery (\$206,358) of magnetic components from Asia to ensure a steady production ramp to meet customer demand. Component quality issues were rectified before the end of FY 2014 and products shipped since early September 2014 are showing less than a ½ of 1% return rate. Expediting has been eliminated and is now limited to customer requests with the customer bearing all or a portion of the costs.

During this period we moved to restructure our supply chain to reduce manufactured cost and improve supplier reliability. On May 29 we announced a new partnership with Asteelflash a global electrical manufacturing services ("EMS") firm with negotiated reductions in cost of power electronics circuits of 13% and have replaced the supplier of magnetic components supplier with a larger firm reducing costs of these components by 4%. We have also negotiated price increases with our largest customer which will take effect on May 1 and will increase across the summer of this year.

Margins on the current Quarter are expected to be a single digit percent of sales and should exceed 20% by the end of the September Quarter.

We began shipping Bi-Direx products in small volumes to US customers during Q2. Product pricing is much better than under our agreements in Germany due to higher value added and the unique value in the North American market, and we are achieving better margins.

### Operating Costs

Operating costs have remained steady and on plan. Total operating costs for Q2 2015 were \$862,306 by comparison to \$980,376 for the same period last year. Quarterly fixed operating costs have averaged \$948,593 over the past five quarters during which we increased quarterly revenues by more than three times. We have designed our model to maintain a very flat operating cost structure even with significantly increased volumes. Fixed operating costs will increase somewhat through the current

year to reflect an increased investment in new product development but we do not expect this to change materially going forward.

The Net Operating Loss after adjusting for non-cash items was (\$1,188,844) by comparison (\$660,416) for the same period last year reflecting primarily the impact of the negative margin during this quarter.

# **New Product Development**

During fiscal Q1 2015 we completed transitioning the European residential Bi-Direx power control system ("PCS") to meet North American UL certification standards. We have demand from multiple sources in the US for the UL certified Bi-Direx PCS and we expect to begin shipping UL certified residential Bi-Direx PCS to US customers during the current fiscal guarter.

On April 22 of this year we announced an agreement with LG Chem to co-market a 5kW/10kWh residential AC Battery globally. We have had good interest in this product and we expect to be able to announce North American distribution agreements over the coming weeks. The LG Chem AC Battery will be rolled out in June of this year at the Grid Edge Conference in San Diego California and at the Inter-solar Europe conference in Munich Germany.

The AC Battery is a turn-key energy storage system which requires only a grid connection and a dispatch signal to provide a fully functional and durable energy storage installation to the consumer. The only additional hardware required by the customer is the control and communications solution for dispatch and remote control and monitoring. These requirements vary from market to market and application to application and the control and communications system is the primary means by which our customers differentiate themselves from each other.

We also announced earlier this year that we have been working with another Tier 1 Lithium Battery supplier to develop a 15kW/30 kWh AC Battery for the commercial demand charge market. In this market energy storage systems are deployed to shave spikes in power consumption and reduce utility demand charges based on the highest peak demand during a billing period. In some markets the demand charges can amount to 50% - 60% of the total utility bill making energy storage very economic. Roll out of this product is planned for the next Quarter.

#### **Financial**

Working capital at the end of the period was \$156,660. In addition the Company has an operating line of credit in the amount of \$1.5 million. Accounts receivable from Sonnenbatterie at the end of the period totaling \$1,048,529 have been significantly reduced since that time and are current. Other large accounts receivable are for GST and VAT and a receivable in respect of excess charges by the Company's contract manufacturer in Germany. Accounts payable represent payables to the Company's component suppliers and are subject to reduction for claims in respect of warranty expenses and excess charges.

## **Outlook and Priorities**

We expect to see continued steady growth in demand for the Bi-Direx sub-assembly in Europe as demand for solar self-consumption continues to rise. There is some indication that Italy may be a very large market over the next 2-3 years beginning later this year.

We had expected to begin first deliveries of the LG Chem AC Battery through our partner E-Gear in Hawaii this Quarter for a share of 1,000 demonstration projects planned by the Hawaiian Electric Company ("HECO") to validate the capability of distributed storage to address power quality issues arising out of high levels of solar penetration. Last month the Hawaiian regulators directed HECO to move directly to implement the residential storage program resulting in a delay of one or two months.

We expect to begin shipping UL certified Bi-Direx PCS in relatively small volumes during the current fiscal quarter and in higher volumes during the third quarter. We continue to believe that Hawaii will lead demand in the US market and will set the standard for California and other States.

We are on track to bring the 5kW/10KwH LG Chem AC Battery to the market during the current Quarter and expect to be in a position to begin commercial shipments early in the next Quarter. We are well advanced in development of the 15kW/30KwH AC Battery for commercial markets and are optimistic that we will secure distribution agreements for this product in the coming weeks.

## MANAGEMENT DISCUSSION OF FINANCIAL RESULTS

Summary of Significant Accounting Policy Choices

Our significant accounting policies have been disclosed in note 4 of the annual audited consolidated financial statements.

Net Loss and Comprehensive Loss

Our net loss for the three months ended March 31, 2015 was \$1,328,286, an increase of \$839,000 over a loss of \$489,286 in the same quarter ended March 31, 2014. The principal cause of the increased loss were the non-recurring warranty costs and expedited shipping costs. Excluding the non-cash items, the net loss for the quarter ended March 31, 2015 was \$1,188,844.

Non-cash items impacting the Net Loss were

- i. Under IFRS accounting standards notional interest is accrued or "accreted" on the participating royalty debenture using by a complex formula aimed at identifying the value of embedded derivatives based on the Company's forecast revenues. The amount accreted for the six months ended March 31, 2015 was \$316,164 (\$214,154 at March 31, 2014) although the actual interest paid for the six month period, including the percentage paid based upon revenue, was in fact \$111,021 (March 31, 2014 \$56,044).
- ii. A gain of \$77,132 was recognized in the three months ended March 31, 2015 (\$nil at March 31, 2014) to account for the change in value of the debentures and the embedded derivatives.
   The gain resulted from a delay in the estimated call date of the debentures.
- iii. Accrued non cash interest on the Energy Northwest obligation was \$8,127 for the six months ended March 31, 2015 as compared to \$6,693 for the six months ended March 31, 2014.
- iv. Amortization of capital assets and capitalized development costs of \$29,830 for the six months ended March 31, 2015 (\$28,129, 2014).
- v. Share based payments expense increased the net loss by \$16,517 at March 31, 2015; whereas there was a reduction of \$75,150 for the same six month period in 2014.

#### Sales and Gross Margin

Total revenue from product sales and services increased from \$885,706 in the six months ended March 31, 2014 to \$3,087,080 for the same period in 2015. By comparison, our revenue from product sales and services for the year ended September 30, 2014 was \$2,284,764. Gross margins for the six months were negative at (\$408,070) due to a number of factors described earlier which increased costs of sale to \$3,495,150.

# Summary of Quarterly Results

	2015	2015	2014	2014	2014	2014	2013	2013
	Qtr 2	Qtr 1	Qtr 4	Qtr 3	Qtr 2	Qtr 1	Qtr 4	Qtr 3
Sales	1,545,575	1,541,505	921,639	477,419	396,357	489,349	243,778	15,819
Net loss	(1,917,554)	(1,577,596)	(3,070,391)	(1,536,377)	(489,286)	(2,051,222)	(3,497,288)	(1,843,602)
Per share  - basic  and  diluted	(.02)	(.03)	(0.06)	(0.05)	(0.02)	(0.08)	(0.16)	(0.09)

#### Liquidity and Capital Resources

Liquidity, as measured by working capital, at the end of the quarter was \$156,660. The change from fiscal Q2 2014 (\$965,678) was primarily attributable to conversion of First Preferred Shares and an equity raise of \$5.131 million during Q1, 2015.

The components of working capital are cash: \$412,594; accounts receivable: \$2,377,211, component inventory: \$1,228,394, prepaid expenses and deposits: \$316,913. Accounts payable and accrued liabilities at March 31, 2015 were \$2,638,364 compared to \$2,143,965 at March 31, 2014.

The Company has an operating line with HSBC Canada in the amount of \$1.5 million which is secured by a standby equity agreement commitment by Doughty Hanson. As of March 31, 2015 the outstanding balance on the operating line was \$55,252 (\$955,104 at March 31, 2014). Interest on the operating line is HSBC prime rate plus 3% effective December 1, 2012.

#### Off Balance Sheet Items

The Company has no off-balance sheet financial commitments other than the commitments for operating leases for premises, consulting and service agreements which have been disclosed in note 20 to the financial statements.

## Disclosure of Outstanding Share Data

As at March 2, 2015, 84,005,213 common shares were outstanding. In addition, common share purchase warrants, representing the right to acquire 17,570,706 common shares at an average exercise price of \$0.38 per share (See Note 12 of the consolidated financial statements for additional information). The Company has employee stock options outstanding entitling the holders thereof to acquire up to 5,372,946 common shares of which options to acquire common shares, up to 1,366,730 had vested. The weighted average exercise price of the vested options is \$0.30 per share.

In December 2014, all outstanding series of First Preferred Shares, except one Series 8 First Preferred share were converted to common shares (See Note 9 of the consolidated financial statements for additional information). The one Series 8 First Preferred share is held by Doughty Hanson Technology Ventures ("DHTV") pursuant to the Investor Rights Agreement between the Company and DHTV.

# Financing Costs

Amortization of the financing costs associated with the standby equity agreement with DHTV was \$49,562 compared to \$108,419 for the six months ended March 31, 2014. Accretion of the obligation to repay government contributions to research and development was \$6,072 compared to \$24,754 for the six months ended March 31, 2014. Interest on the Energy Northwest obligation was \$8,127 for the six months ended March 31, 2015, compared to \$6,693 for the six months ended March 31, 2014.

The debentures and the government grant obligation are adjusted on a quarterly basis to reflect the Company's current forecast and the result that has on the amounts payable under these agreements. As a result of a delay in the planned call date of the debentures, during the second quarter of 2015, a gain of \$78,132 was recognized to reflect the change in fair value of the derivatives and embedded derivatives. Interest on bank debt was \$20,356 for the six months ended March 31, 2015 as compared to \$13,248 for the same period in 2014.

#### Foreign Exchange

Our contract manufacturing is priced in US dollars and in Euros, as is the custom in the electronics industry but our sales are priced in Canadian dollars, Euros and US dollars. As a result we are exposed to fluctuations in the Canadian dollar value relative to the US dollar and the Euro. We do not hedge these exchange risks but will revisit the issue during this Quarter.

#### Risks and Uncertainties

Our risks and uncertainties are detailed in the annual MD&A filed on SEDAR on January 27, 2015 and have not materially changed since that time.