

# **Management Discussion and Analysis**

For The Three Months Ended December 31, 2014

The following discussion and analysis as of March 2, 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 December 31, 2014.

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 QUARTER RESULTS

#### **Operations**

We continued to grow revenue in fiscal 2015. Product sales revenue for fiscal Q1 2015 was slightly behind plan at \$1,541,505 due to supply chain disruptions in the second half of December 2015. Q1 revenues represented approximately 68% of total revenues for fiscal year 2014.

Total cost of goods was however \$1,577,596 for the period resulting in negative gross margin of (\$36,091). Higher than normal costs are primarily attributable to normal start up issues including the cost of expediting components from Asia and the cost of reworking components from new suppliers but also to a much higher US\$/Euro exchange rate affecting some component costs.

Additional working capital from the equity financing in December will allow us to stabilize the supply chain and eliminate extraordinary costs like these. The increasing value of the US dollar relative to the Canadian dollar and EURO is a concern, however, for European sales, (which are denominated in Euros) since it impacts approximately 35% of our component costs.

Average margins are also lower due to unexpected changes in the mix of products towards the lower power rating and a decline in the value of the Euro relative to the Canadian dollar since entering into the Supply Contract with pricing committed until January 31, 2015. We expect to be in a position to restore Canadian dollar adjusted margins to a reasonable industry standard for European products with the introduction of the next iteration of a higher value added and lower cost Bi-Direx PCS in the lower power ratings in Q3 2015. Longer term we expect to cut significant cost of the Bi-Direx PCS platform through identified design changes.

We do not currently hedge either the revenue or cost side of product sales but we will revisit strategies to reduce our exposure to a higher US dollar to Euro value.

The negative impact of the rising US dollar value on European margins has a positive impact on margins for sales to US markets which are just beginning. Also, the pricing structure for our US products is more favorable. While European sales will dominate our revenues during the current fiscal year ending September 30, 2015 we expect this to change in Eguana's favor as US sales begin to grow over the next two quarters.

Operating costs have remained steady and on plan. Total operating costs for Q1 2015 were \$1,022,713 by comparison to \$1,046,551 for the same period last year. Quarterly fixed operating costs have averaged \$985,442 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 (\$929,196) by comparison (\$749,573) 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 quarter.

During fiscal Q1 we began development of a single phase residential AC battery and have since begun development of a commercial scale AC Battery, both of which will be based on an upgraded Bi-Direx PCS platform.

An 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. It expands on the core power controls and conversion functionality of the Bi-Direx PCS and is preintegrated and certified with a particular battery. 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.

Our model for the AC Battery is to provide a complete certified solution supporting battery modules from selected lithium battery suppliers to integrators and fleet operators. Customers who are developing their own unique battery chemistries or are using non-standard format batteries will continue to take the Bi-Direx PCS and will use it to either deliver their own AC Battery to established channels or to vertically integrate and deliver a complete package through their own channels.

We expect all channels to prefer the AC Battery for the value of a single point of accountability for the integrated and certified solution and the lower overall manufactured cost that comes from a single point of assembly of the finished product.

## **Financial Changes**

During fiscal Q1 2015, we restructured and strengthened our balance sheet. First Preferred Shares representing a total value \$14,066,138 million were converted to common shares at an average value of \$0.50 per common share. The conversion represented a significant endorsement of the future value of Eguana by our largest shareholders. At the end of fiscal Q1 we also completed an equity raise of \$5.1 million to net approximately \$3.9 million. The high costs of the financing were attributable mainly to unexpectedly high legal fees and very difficult market conditions in the Canadian capital markets during the latter part of December 2014.

#### **Outlook and Priorities**

We see continued growth in demand for the European PCS product although it will continue to be volatile on a month to month basis given the early stage of the market. We expect to see continued growth in demand for solar self-consumption in Europe as electricity prices continue to rise and the cost of solar energy and batteries continue to decline. This month, the Bavarian tax authorities ruled that purchasers of solar energy storage systems would be able to claim a refund of the VAT associated with solar energy storage reducing the cost of the system by 19%.

Priority #1 for us is to restore product margins to reasonable industry standards. The single biggest factor affecting margins is the volatility of demand which has required rapid adjustments to

procurement and very high costs of expediting shipments of heavy magnetic components. The additional working capital secured in December has thus far allowed us to respond to volatility without expediting shipments and we are working with our customer to provide more stability in deliveries. The lower margins are also the result of a change in product mix resulting in delivery of a much higher proportion of products in the lower power ratings and a general decline in the value of the Euro relative to the Canadian dollar.. We believe that we will be able to address costs of our current Bi-Direx PCS platform through identified short term costs reduction and other measures and to bring our margins into line with industry standards. We intend to introduce an enhance version of Bi-Direx PCS in during Q3 with a different price structure.

Notwithstanding the unsatisfactory margins, the growth in European sales has been very valuable in establishing our core value propositions, moving to a high volume production and building a track record in advance of our entry into the much larger US energy storage market. Total shipments are more than 3,300 units over the past 20 months and we believe we are shipping more grid connected energy storage power control systems than any other company in the world. The impressive track record is gaining recognition from a wide range of potential customers in the US and in Asia.

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 could be the standard for California and other States. Last month, Hawaiian Electric Company ("HECO") announced its intention to support 1,000 demonstration solar storage projects on the Islands to validate the capability of distributed storage to address power quality issues arising out of high levels of solar penetration.

Our product development team is on plan to bring a certified residential AC battery to the market during fiscal Q3 and to bring a certified commercial three phase AC battery to market during fiscal Q4. We have visibility on good levels of demand for both products from market leaders. We believe we are ahead of plan in establishing Eguana as a technology leader for distributed energy storage among battery manufactures.

#### 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 December 31, 2014 was \$1,496,142 a decrease of \$555,080 over a loss of \$2,051,555 in the same quarter ended December 31, 2013. Excluding the non-cash items, the net loss for the guarter ended December 31, 2014 was \$929,196.

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 three months ended December 31, 2014 was \$169,951 (\$107,054 at December 31, 2013) although the actual interest paid, including the percentage paid based upon revenue, was in fact \$45,100 (December 31, 2013 \$22,358).
- ii. An adjustment of the value of embedded derivatives the calculation of which is mandated by IFRS Accounting Standards resulting in a non-cash loss of \$211,760 during quarter ended December 31, 2014.

- iii. Accrued non cash interest on the Energy Northwest obligation was \$3,994 for the quarter ending December 31, 2014 as compared to \$3,374 for the guarter ended December 31, 2013.
- iv. Amortization of capital assets and capitalized development costs of \$15,735 for the quarter ended December 31, 2014 (\$136,103, 2013).
- v. Share based payments expense increased the net loss by \$10,117 at December 31, 2014; whereas there was a reduction of \$67,350 for the same period in 2013.

#### Sales and Gross Margin

Total revenue from product sales and services increased from \$489,349 in Q1 2014 to \$1,541,505 in Q1 2015 (December 31). By comparison, our revenue from product sales and services for the year ended September 30, 2014 was \$2,284,764. Gross margins were negative at (\$36,091) due to a number of factors described earlier which increased costs of goods to \$1,577,596

#### Summary of Quarterly Results

	2015		2014				2013	
	Qtr 1	Qtr 4	Qtr 3	Qtr 2	Qtr 1	Qtr 4	Qtr 3	Qtr 2
Sales	1,541,505	921,639	477,419	396,357	489,349	243,778	15,819	46,768
Net loss	(1,577,596)	(3,070,391)	(1,536,377)	(489,286)	(2,051,222)	(3,497,288)	(1,843,602)	(1,276,247)
Per share  – basic  and  diluted	(.03)	(0.06)	(0.05)	(0.02)	(0.08)	(0.16)	(0.09)	(0.06)

#### Liquidity and Capital Resources

Liquidity, as measured by working capital, at the end of the quarter was \$2,164,120. The change from fiscal Q1 2014 (\$9,680,015) was primarily attributable to conversion of First Preferred Shares in December and an equity raise of \$5.131 million during the quarter. At the end of fiscal Q1 2014 the current liability in respect of the mandatory redemption of First Preferred Shares was \$9,421,151 which terminated in fiscal Q3 2014 on removal of the mandatory redemption feature.

The components of working capital are cash: \$2,401,813; accounts receivable: \$1,829,887, component inventory: \$1,115,931, prepaid expenses and deposits: \$407,953. Accounts payable and accrued liabilities at December 31, 2014 were \$2,640,246 compared to \$1,745,134 at December 31, 2013.

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 December 31, 2014 the outstanding balance on the operating line was \$Nil (\$456,690 at December 31, 2013). 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 3,079,519 common shares of which options to acquire common shares, up to 1,372,705 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 \$34,135 compared to \$73,284 for the quarter ended December 31, 2013. Accretion of the obligation to repay government contributions to research and development was \$12,052 compared to \$12,157 for the quarter ended December 31, 2013. Interest on the Energy Northwest obligation was \$3,994 for the quarter ending December 31, 2014, compared to \$3,374 for the quarter ended December 31, 2013.

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 more positive future forecast post 2014, the fair value of the embedded derivative associated with the debentures has increased resulting in a loss of \$9,881 to the Company. Interest on bank debt was \$15,689 for the quarter ending December 31, 2014 as compared to \$10,816 for the same period in 2013. This increase of \$4,873 is as a result of an increased amount outstanding on the bank debt.

### 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.